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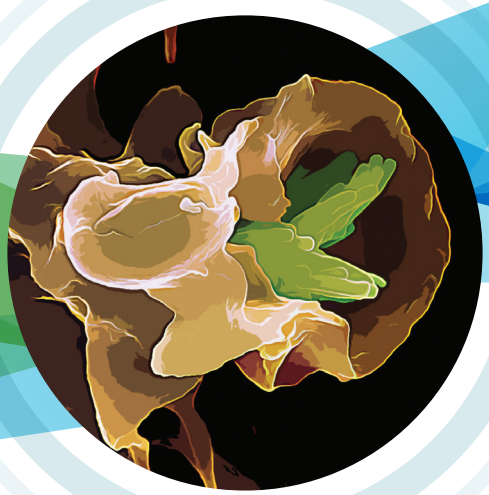

# Tuberculosis surveillance and monitoring in Europe

## 2022

2020 data

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## 2022

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# Abstract

This report provides an overview of the latest tuberculosis (TB) epidemiological situation and is published jointly by the WHO Regional Office for Europe and the European Centre for Disease Prevention and Control (ECDC). It finds a sharp 24% drop in notified new and relapse TB cases between 2019 and 2020 which is due, in part, to decreased case detection and reporting as a result of the public health and social measures introduced by countries in response to the COVID-19 pandemic. Despite the potential issues of underdiagnosis and underreporting in 2020, 163 602 incident TB cases were notified in the European Region. The epidemic patterns and trends vary widely, with European Union/European Economic Area countries approaching the low incidence level of below 10 per 100 000 population, while the Region has nine of the 30 countries with the highest multidrug-resistant TB burden in the world.

Keywords
TUBERCULOSIS – EPIDEMIOLOGY
TB – EPIDEMIOLOGY
TB SURVEILLANCE

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[1] All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

# Abbreviations

| | |
|---|---|
| **ART** | antiretroviral therapy |
| **CI** | confidence interval |
| **DRS** | drug-resistance surveillance |
| **DST** | drug-susceptibility testing |
| **(E)** | European (indicator) |
| **ECDC** | European Centre for Disease Prevention and Control |
| **EEA** | European Economic Area |
| **EQA** | external quality assessment |
| **ERLTB-Net** | European Reference Laboratory Network for Tuberculosis |
| **EU** | European Union |
| **EU/EEA** | European Union/European Economic Area |
| **(G)** | global (indicator) |
| **HPCs** | high-priority countries (Armenia, Azerbaijan, Belarus, Bulgaria, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, the Republic of Moldova, Romania, the Russian Federation, Tajikistan, Turkey, Turkmenistan, Ukraine and Uzbekistan) |
| **ICD** | International Classification of Diseases |
| **LTBI** | latent tuberculosis infection |
| **MDR** | multidrug resistance |
| **MDR-TB** | multidrug-resistant tuberculosis |
| **MTB/RIF** | *Mycobacterium tuberculosis* (MTB) and resistance to rifampin (RIF) |
| **PLHIV** | people living with HIV |
| **pre-XDR** | pre-extensive drug resistance |
| **pre-XDR-TB** | pre-extensively drug-resistant tuberculosis |
| **RR** | relative risk |
| **RR-TB** | rifampicin-resistant tuberculosis |
| **RR/MDR** | rifampicin resistance/mutidrug resistance |
| **RR/MDR-TB** | rifampicin-resistant or multidrug-resistant tuberculosis |
| **TB** | tuberculosis |
| **TESSy** | The European Surveillance System |
| **TME** | (WHO) Tuberculosis Monitoring and Evaluation (platform) |
| **WRD** | WHO-recommended rapid diagnostics (tests) |
| **XDR** | extensive drug resistance |
| **XDR-TB** | extensively drug-resistant tuberculosis |

# Executive summary/Резюме

# The WHO European Region

The data in this report present tuberculosis (TB) notifications through to the end of 2020, the period of the global COVID-19 pandemic. Although 2020 data are compared to those for previous years, the rates and trends should be interpreted with caution due to the potential impact of the public health and social measures introduced by countries in response to the COVID-19 pandemic on TB detection and reporting.

## TB burden

The estimated number of TB cases in the WHO European Region has been decreasing consistently since 2000. During the period 2011–2020, the average annual decline in the TB incidence rate was 5.2%, with 6.4% achieved between 2019 and 2020, which is notably higher than the global rate of decline for TB incidence (1.9%) and the fastest decline in the world compared to other regions. The cumulative reduction for the period 2015–2020 was 25%, indicating that the Region exceeded the 2020 End TB Strategy milestone to reduce the TB incidence rate in 2020 by 20% against the 2015 baseline, and achieved the regional action plan target of a 25% reduction in the TB incidence rate *(1)*.

An estimated 21 000 TB deaths occurred among HIV-negative people in the European Region in 2020, equivalent to 2.3 deaths per 100 000 population (range 2.2–2.4). Between 2011 and 2020, the TB mortality rate at regional level fell cumulatively by 54%, from 4.9 to 2.3 deaths per 100 000 population, which on average is a decline of 8.3% per year. TB mortality in the Region plateaued for the first time over the last two decades between 2019 and 2020 as a consequence of undiagnosed and untreated TB and associated increased death due to disruptions to TB services caused by the COVID-19 pandemic. As a result, the reduction in the absolute numbers of TB deaths in 2020 compared to 2015 was only 26% versus the 35% target of the regional action plan.

In 2020, there was an estimated 69 000 new cases of rifampicin-resistant or multidrug-resistant TB (RR/MDR-TB) in the Region, with 37 000 estimated among notified bacteriologically confirmed pulmonary TB patients. The proportion of RR/MDR-TB among new and previously treated TB cases in the Region also significantly exceeds the global average, with 18% in new and 53% in previously treated cases compared to 4% and 21% respectively *(2)*.

HIV prevalence in incident TB cases was estimated to be 12% in 2020, another year of halted growth after an unprecedented increase from 4% to 12% during the period 2007–2016. There was an estimated 29 000 HIV-positive TB cases in the Region, with almost 80% of cases estimated in the Russian Federation (55%) and Ukraine (24%).

## TB disease notification and treatment outcomes

In 2020, 163 602 incident TB cases were notified in 51 of the 53 countries in the Region,[2] amounting to 71% of the estimated new and relapse cases. A sharp 24% drop in notified new and relapse TB cases between 2019 and 2020 represents clear discontinuity in the downward trend in TB notifications (reflecting an underlying decline in TB incidence) in the Region and is due to the impact of the COVID-19 pandemic on the detection and reporting of TB cases.

The impact was more severe in the early days of the pandemic, when countries introduced strict public health and social measures in response to COVID-19. A survey conducted by the WHO Regional Office for Europe showed an average 36% decrease in TB notifications observed in April–June 2020 compared to the same period in 2019, with a correlation between the level of stringency of domestic movement restrictions implemented by countries and the decrease in TB notifications *(3)*.

A total of 135 521 patients with pulmonary TB (82.8%) were notified among incident TB cases, 66.8% of which were laboratory-confirmed. Among bacteriologically confirmed pulmonary TB cases, 92% were tested for rifampicin resistance.

Overall, 34.3% of pulmonary TB patients who were reported as having tested for drug susceptibility had RR/MDR-TB. Prevalence of RR/MDR-TB among new and previously treated bacteriologically confirmed pulmonary TB cases was 23.1% and 55.2% respectively.

Data on drug-susceptibility testing (DST) to fluoroquinolones were available for 94.3% of all notified pulmonary RR-TB cases. Overall, 32.9% of pulmonary RR/MDR-TB cases with DST results to fluoroquinolones had pre-extensively drug-resistant TB (pre-XDR-TB) in 2020. Among pre-XDR-TB patients tested for any other Group A drugs, the prevalence of extensively drug-resistant TB (XDR-TB) was 6.5% at regional level.

Of new and relapse TB patients notified from countries reporting HIV testing data, 92.6% were screened for HIV. A total of 19 663 TB cases were detected with HIV-positive status, which is 15% of those tested, representing an increase compared to 2019 (when it was 14.3%).

A total of 14 351 (74.3%) HIV-positive patients are reported to have received antiretroviral therapy (ART). ART coverage has been increasing over the last five years but is still far below the WHO target of universal ART coverage for TB/HIV coinfected patients.

[2] Latvia and San Marino did not report any data.

The treatment success rate in the Region remains below the respective regional targets of 85% and 75%. Successful treatment outcome for both incident TB and RR/MDR-TB cohorts were 76.5% and 55.9% respectively, which is comparable with the previous year's results.

### Conclusions

The remarkable progress in containing the burden of TB in the Region observed between 2015 and 2019 was halted in 2020 by the COVID-19 pandemic. As a result, in 2020, the downward trend in TB mortality and incidence slowed, far fewer people were diagnosed and treated for TB and, consequently, fewer people were tested for drug resistance and enrolled into RR/MDR-TB treatment. Despite these challenges, progress made before the pandemic was good enough to enable the regional action plan target of a 25% reduction in TB incidence rate in 2020 compared to 2015 to be reached, meaning the Region overachieved the End TB Strategy milestone of a 20% reduction of TB incidence compared to the 2015 baseline.

For the first time in over two decades, the downward trend in number of TB deaths was halted in 2020 as a consequence of delay in, or lack of, TB diagnosis due to disruption to TB services, leading to increased severity of disease and an associated increase in deaths. This compromised the achievement of the End TB Strategy milestone on reduction of number of TB deaths. The actual reduction in absolute number of TB deaths in 2020 compared to 2015 was only 26% against the targeted 35%. Other noticeable impacts of the COVID-19 pandemic in the Region included a 17.7% reduction in the number of RR/MDR-TB patients detected and enrolled into treatment in 2020 compared to 2019. The treatment outcomes for new and relapse TB patients remained comparable with previous years, with no evidence of significant reduction in treatment success rates.

Although slow improvement has been seen, the treatment success rates for new and relapse cases and RR/MDR-TB patients are still below regional and global targets. Despite the efforts made, the burden in relation to RR-TB and TB/HIV remains considerable, underlining the need to introduce more innovative and effective approaches to the diagnosis and treatment of TB and MDR-TB.

## European Union and European Economic Area countries

### Epidemiology and treatment outcome

In 2020, 33 148 cases of TB were reported in 29 European Union and European Economic Area (EU/EEA) countries (Latvia did not report any case-based data), resulting in a notification rate of 7.3 per 100 000 population in the EU/EEA. The overall notification rate and the rates in most countries have been decreasing over the last five years. The rates for 2020 should be interpreted with caution due to the potential impact of measures implemented to mitigate the COVID-19 pandemic on data collection and access to health services.

Of all notified TB cases, 24 139 (72.8%) were newly diagnosed and 22 301 (67.3%) were confirmed by culture, or smear and nucleic acid amplification test. In 2020, adults aged between 25 and 64 years accounted for 64.8% of all new and relapse TB cases, while children under 15 years made up 3.8%. Malta reported the highest notification rates among children, with 16.7 cases per 100 000 population aged between 0 and 4 years. In 2020, new and relapse TB cases were more frequently reported in males than females, with a male-to-female ratio of 2 : 1. One third (33%) of TB cases reported in the EU/EEA in 2020 were of foreign origin.

Of 14 997 cases with DST results for at least rifampicin, 649 (4.3%) were RR-TB and 566 (3.8%) had MDR-TB. The countries with the highest proportion of MDR-TB cases among those with DST results (excluding France) were Estonia (19.4%) and Lithuania (16.7%). Pre-XDR-TB was reported for 115 (27.6%) of the 417 RR/MDR-TB cases tested for fluoroquinolone susceptibility. Among pre-XDR cases, 82 (71.3%) were tested for susceptibility to any other Group A drug and 37 (45.1%) met the XDR-TB definition.

In 2020, 19 countries reported data on HIV coinfection. The number of countries reporting data on HIV coinfection peaked at 23 in 2016 and 2017, decreased to 21 in 2018 and dropped again to 19 in 2019. Of the 12 327 TB cases with known HIV status, 515 (4.2%) were reported as HIV-positive.

TB in prisons remains poorly reported. For the 13 EU/EEA countries reporting data, the notification rate was 137 new and relapse TB cases per 100 000 prison population, and prisoners had a relative risk of 9.3 compared to the general population in the same countries.

Of all 28 985 TB cases notified in 2019 with a treatment outcome reported in 2020, 71.8% were treated successfully, 7.6% died and 0.8% experienced treatment failure. Of 927 RR/MDR-TB cases notified in 2018 with a treatment outcome reported in 2020, 52.4% were treated successfully, 14.5% died and 10.5% experienced treatment failure. Treatment success was reported only for 10 (38.5%) of the 26 XDR-TB cases notified in 2017, while 15.4% of cases were reported to have died and 3.8% experienced treatment failure.

### Conclusions

In 2020, 29 of 30 EU/EEA countries reported TB notification data. There was a further decline in the overall TB notification rate (7.3 per 100 000 population), continuing the trend observed since 2002, but the decline between 2019 and 2020 data must be interpreted with caution due to the possible impact of measures implemented to mitigate COVID-19. Significant work needs to be done to achieve the United Nations Sustainable Development Goal 3 target notification rate at EU/EEA level of 2.4 per 100 000 population by 2030. Reassuringly, the number of reported MDR-TB and XDR-TB cases continued to decline in EU/EEA countries in 2020 and accounted for a very small proportion of all reported TB cases in 2020.

Across all cohorts, reported treatment success remains well below WHO targets. Of all TB cases notified in 2019 with a treatment outcome reported in 2020, only 71.8% were treated successfully. Treatment success was lower for RR/MDR-TB cases at 24 months (52.4%) and lower still among XDR-TB cases at 36 months (38.5%), while the proportion of deaths for these cohorts was 14.5% and 15.4% respectively.

Across the EU/EEA, further efforts are needed to improve reporting of HIV coinfection and TB in prisons, and for treatment outcomes.

## Monitoring progress towards TB elimination

The final year covered by the *Tuberculosis action plan for the WHO European Region 2016–2020 (4)* was 2020. Twenty of 26 WHO regional action plan indicators were effectively monitored and evaluated using routine surveillance data. Nine of the 20 targets monitored were achieved at regional level. Progress in reducing the TB incidence rate was particularly impressive, with most high-priority countries and the Region as a whole achieving the 2020 milestone of the global End TB Strategy and the regional action plan target. The Region was very close to reaching the target for reduction in number of TB deaths by 35% against the 2015 baseline, but the existing downward trend in TB mortality halted in 2020 due to the COVID-19 pandemic, which ultimately compromised achievement of the target. Additional achievements include a substantial increase in HIV testing and ART coverage over the past few years and an increase in coverage with WHO-recommended rapid diagnostics.

Unfortunately, the Region fell short of achieving 11 targets, including those for the TB case-detection rate, the percentage of RR/MDR-TB among new and previously treated TB cases, prevalence of HIV among new and relapse TB cases, TB preventive treatment (TPT) coverage among children under 5 years, and treatment success rate among new and relapse TB patients and among cohorts of RR/MDR-TB and TB patients in prison. Despite the efforts made, the burden related to RR-TB and TB/HIV continues to increase, indicating the need to introduce more innovative and effective approaches to address the issues. The treatment success rate of new and relapse TB cases and RR/MDR-TB cases are still below the global and regional targets, but when data collected between 2016 and 2020 are compared, a slow but sustainable increase can be seen among both cohorts. Prevention efforts, including contact tracing, coverage with TPT and ART among people living with HIV, need to be intensified.

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[3] All references were accessed on 12 February 2022.

# Европейский регион ВОЗ

Данные, представленные в этом отчете, отражают ситуацию с регистрацией случаев туберкулеза (ТБ) за период до конца 2020 г. – время глобальной пандемии COVID-19. Хотя данные за 2020 г. сравниваются с данными за предыдущие годы, показатели и тенденции следует интерпретировать с осторожностью из-за потенциального влияния на деятельность по выявлению и регистрации ТБ со стоны мер общественного здравоохранения и социальных мер, введенных странами в ответ на пандемию COVID-19.

## Бремя туберкулеза

Расчетное число случаев заболевания ТБ в Европейском регионе ВОЗ последовательно сокращается с 2000 г. В период с 2011 по 2020 гг. среднегодовое снижение уровня заболеваемости ТБ составило 5,2%, а в 2019–2020 гг. – 6,4%, что значительно превышает глобальные темпы снижения заболеваемости ТБ (1,9%) и является примером самых быстрых темпов снижения в мире по сравнению с другими регионами. Совокупное сокращение за период 2015 – 2020 гг. составило 25%, что свидетельствует о том, что Регион превысил контрольный показатель Стратегии по ликвидации туберкулеза 2020 г., предусматривающий снижение уровня заболеваемости туберкулезом в 2020 г. на 20% по сравнению с исходным уровнем 2015 г., и достиг целевого ориентира Регионального плана действий по снижению уровня заболеваемости туберкулезом на 25% *(1)*.

Согласно оценкам, в 2020 г. в Европейском регионе ВОЗ число смертей от ТБ среди ВИЧ-отрицательных людей составило 21 000, что соответствует показателю в 2,3 смертей на 100 000 населения (диапазон 2,2–2,4). В период с 2011 по 2020 гг. показатель смертности от ТБ на региональном уровне в совокупности снизился на 54,0% – с 4,9 до 2,3 смертей на 100 000 населения, что в среднем составляет сокращение на 8,3% в год. Смертность от ТБ в Регионе впервые за последние два десятилетия вышла на плато в период с 2019 по 2020 гг. Такая ситуация стала результатом наличия недиагностированных и нелеченных случаев ТБ и связанного с этим роста смертности из-за перебоев в работе противотуберкулезных служб на фоне пандемии COVID-19. Таким образом, снижение абсолютного числа смертей от ТБ в 2020 г. по сравнению с 2015 г. составило всего 26% против 35%, предусмотренных Региональным планом действий.

В 2020 г. в Регионе было зарегистрировано 69 000 расчетных новых случаев ТБ с устойчивостью к рифампицину и множественной лекарственной устойчивостью возбудителя (РР/МЛУ-ТБ), в том числе 37 000 расчетных случаев среди зарегистрированных больных легочным ТБ с бактериологически подтвержденным диагнозом. Доля РР/МЛУ-ТБ среди новых и ранее леченных случаев ТБ в Регионе также значительно превышает среднемировой показатель: 18% среди новых и 53% среди ранее леченных случаев по сравнению с 4% и 21% соответственно *(2)*.

Распространенность ВИЧ-инфекции среди больных ТБ, по оценкам, составила 12% в 2020 г. – это еще один год приостановленного роста после беспрецедентного увеличения с 4% до 12% в период с 2007 по 2016 гг. Расчетное число ВИЧ-положительных случаев ТБ в Регионе составило 29 000, причем почти 80% случаев приходилось на Российскую Федерацию (55%) и Украину (24%).

## Регистрация случаев и результаты лечения ТБ

В 2020 г. было зарегистрировано 163 602 новых случая и рецидивов ТБ в 51 из 53 стран Региона[4], что составляет 71% от предполагаемых новых и рецидивных случаев. Резкое сокращение на 24% числа зарегистрированных новых случаев и рецидивов ТБ в период с 2019 по 2020 гг. является явным отражением прерывания отрицательной динамики регистрации случаев ТБ (свидетельство базового снижения заболеваемости ТБ) в Регионе и объясняется влиянием пандемии COVID-19 на деятельность по выявлению и регистрации случаев ТБ.

Это воздействие было более значительным в первые дни пандемии, когда страны ввели строгие меры в области общественного здравоохранения и социальной защиты в ответ на распространение COVID-19. Исследование, проведенное Европейским региональным бюро ВОЗ, показало, что в апреле – июне 2020 г. наблюдалось сокращение регистрации случаев ТБ в среднем на 36% по сравнению с тем же периодом 2019 г., при этом прослеживалась корреляция между уровнем строгости ограничений на передвижение внутри страны и сокращением регистрации случаев ТБ *(3)*.

Среди новых случаев и рецидивов ТБ было зарегистрировано в общей сложности 135 521 случай ТБ легких (82,8%), из которых 66,8% имели лабораторное подтверждение диагноза. Среди бактериологически подтвержденных случаев ТБ легких 92,0% были протестированы на устойчивость к рифампицину.

В целом 34,3% больных ТБ легких, у которых, по имеющимся данным, были проведены тесты на лекарственную чувствительность, имели РР/МЛУ-ТБ. Распространенность РР/МЛУ-ТБ среди новых и ранее

[4] Латвия и Сан-Марино не предоставили данных.

леченных бактериологически подтвержденных случаев легочного ТБ составила 23,1% и 55,2% соответственно.

Данные о тестировании на лекарственную чувствительность (ТЛЧ) к фторхинолонам были в наличии для 94,3% всех зарегистрированных случаев легочного РР-ТБ. В целом 32,9% легочных случаев РР/МЛУ-ТБ с результатами ТЛЧ к фторхинолонам имели ТБ с пред-широкой лекарственной устойчивостью (пред-ШЛУ-ТБ) в 2020 г. Среди пациентов с пред-ШЛУ-ТБ, прошедших тестирование лекарственной устойчивости к любым другим препаратам группы А, распространенность ШЛУ-ТБ на региональном уровне составила 6,5%.

Среди новых случаев и рецидивов ТБ, зарегистрированных в странах, предоставивших данные о тестировании на ВИЧ, 92,6% были обследованы на ВИЧ. Всего было выявлено 19 663 случая ТБ с ВИЧ-положительным статусом, что составило 15,0% от числа прошедших тестирование – это прирост по сравнению с 2019 г. (когда эта доля составляла 14,3%).

В общей сложности 14 351 (74,3%) ВИЧ-положительных пациентов получили антиретровирусную терапию (АРТ). За последние пять лет охват АРТ увеличился, но еще остается значительно ниже целевого ориентира ВОЗ по всеобщему охвату пациентов с сочетанной инфекцией ТБ/ВИЧ антиретровирусной терапией.

Показатель успешного лечения в Регионе остается ниже соответствующих региональных целевых ориентиров в 85% и 75%. Успешные результаты лечения в когортах новых случаев и рецидивов ТБ и РР/МЛУ-ТБ составили 76,5% и 55,9% соответственно, что сопоставимо с результатами предыдущего года.

### Выводы

Заметный прогресс в сдерживании роста бремени ТБ в Регионе, наблюдавшийся в период с 2015 по 2019 гг., был приостановлен в 2020 г. пандемией COVID-19. В результате в 2020 г. тенденция снижения смертности и заболеваемости ТБ замедлилась, гораздо меньшее число людей проходили диагностику и лечение ТБ и, соответственно, меньшее число людей проходило тестирование на лекарственную устойчивость и было включено в программу лечения РР/МЛУ-ТБ. Несмотря на эти проблемы, успехи, достигнутые до пандемии, были достаточно значительными для достижения целевого ориентира Регионального плана действий – снижения уровня заболеваемости ТБ на 25% в 2020 г. по сравнению с 2015 г., что означает, что Регион перевыполнил задачу Стратегии по ликвидации туберкулеза по сокращению заболеваемости ТБ на 20% по сравнению с исходным уровнем 2015 г.

Впервые за более чем два десятилетия тенденция снижения числа смертей от ТБ приостановилась в 2020 г. вследствие задержки или отсутствия диагностики ТБ из-за нарушения работы противотуберкулезных служб, что привело к увеличению тяжести заболевания и соответствующему увеличению числа смертей. Это поставило под угрозу достижение важной задачи Стратегии по ликвидации туберкулеза – сокращения числа смертей от ТБ. Фактическое снижение абсолютного числа смертей от ТБ в 2020 г. по сравнению с 2015 г. составило лишь 26% против запланированных 35%. Другие заметные последствия пандемии COVID-19 в Регионе включают сокращение на 17,7% числа пациентов с РР/МЛУ-ТБ, выявленных и включенных в программу лечения в 2020 г., по сравнению с 2019 г. Результаты лечения новых случаев и рецидивов ТБ оставались сопоставимыми с предыдущими годами, без признаков значительного снижения показателей успешного лечения.

Несмотря на медленное улучшение ситуации, показатели успешного лечения новых случаев и рецидивов ТБ, а также случаев с РР/МЛУ-ТБ все еще ниже региональных и глобальных целевых ориентиров. Несмотря на предпринимаемые усилия, бремя РР-ТБ и ТБ/ВИЧ остается значительным, что подчеркивает необходимость внедрения более инновационных и эффективных подходов в сферу диагностики и лечения ТБ и МЛУ-ТБ.

## Европейский Союз и страны Европейской экономической зоны

### Эпидемиологическая ситуация и результаты лечения

В 2020 г. в 29 странах Европейского союза и Европейской экономической зоны (ЕС/ЕЭЗ) было зарегистрировано 33 148 случаев заболевания туберкулезом (Латвия не предоставила данных о случаях заболевания), таким образом, показатель заболеваемости составил 7,3 на 100 000 населения в ЕС/ЕЭЗ. Общий показатель регистрации и показатели в большинстве стран снижались в течение последних пяти лет. Показатели за 2020 г. следует интерпретировать с осторожностью из-за потенциального влияния мер, предпринятых для смягчения последствий пандемии COVID-19, на процессы сбора данных и доступность услуг здравоохранения.

Из всех зарегистрированных случаев ТБ, 24 139 (72,8%) были впервые диагностированными случаями заболевания, а 22 301 (67,3%) имели подтверждение диагноза результатами исследования посева или мазка и теста на амплификацию нуклеиновых кислот. В 2020 г. взрослые в возрасте от 25 до 64 лет составили 64,8% всех новых случаев и рецидивов ТБ, а дети до 15 лет – 3,8%. Мальта сообщила о самых высоких показателях регистрации среди детей: 16,7 случаев на 100 000 населения в возрасте от 0 до 4 лет. В 2020 г. новые случаи и рецидивы ТБ чаще регистрировались среди мужчин, чем у женщин, соотношение мужчин и женщин составило 2,0. Одна треть (33,0%) случаев ТБ, зарегистрированных в ЕС/ЕЭЗ в 2020 г., была иностранного происхождения.

Из 14 997 случаев с результатами ТЛЧ как минимум к рифампицину, 649 (4,3%) имели РР-ТБ и 566 (3,8%) – МЛУ-ТБ. Странами с самой высокой долей случаев МЛУ-ТБ среди больных с результатами ТЛЧ (за исключением Франции) были Эстония (19,4%) и Литва (16,7%). Пред-ШЛУ-ТБ был зарегистрирован у 115 (27,6%) из 417 случаев РР/МЛУ-ТБ, протестированных на чувствительность к фторхинолонам. Среди случаев пред-ШЛУ-ТБ 82 (71,3%) были протестированы на чувствительность к любому другому препарату группы А, а 37 (45,1%) соответствовали определению ШЛУ-ТБ.

В 2020 г. данные о сочетанной инфекции ВИЧ предоставили 19 стран. Число стран, предоставивших данные о сочетанной инфекции ВИЧ, достигло максимума в 2016 и 2017 гг. – 23, за которым последовало снижение до 21 в 2018 г. , а затем до 19 в 2019 г. Из 12 327 случаев ТБ с известным ВИЧ-статусом, 515 (4,2%) были зарегистрированы как ВИЧ-положительные.

О туберкулезе в тюрьмах по-прежнему сообщается мало. В 13 странах ЕС/ЕЭЗ, предоставивших свои данные, показатель регистрации составил 137 новых случаев и рецидивов ТБ на 100 000 заключенных, а относительный риск для заключенных в тех же странах составил 9,3 по сравнению с населением в целом.

Из всех 28 982 случаев ТБ, зарегистрированных в 2019 г. с результатами лечения, полученными в 2020 г., 71,8% были успешно пролечены, 7,6% умерли и 0,8% имели безуспешный результат лечения. Из 927 случаев РР/МЛУ-ТБ, зарегистрированных в 2018 г., о результатах лечения которых было сообщено в 2020 г., 52,4% были пролечены успешно, 14,5% умерли и 10,5% имели безуспешный результат лечения. Успешный результат терапии был достигнут лишь у 10 (38,5%) из 26 случаев ШЛУ-ТБ, зарегистрированных в 2017 г., в то время как в 15,4% случаев сообщалось о смерти, а в 3,8% – о неудачном лечении.

### Выводы

В 2020 г. 29 из 30 стран ЕС/ЕЭЗ предоставили данные о регистрации случаев ТБ. Наблюдалось дальнейшее снижение общего показателя регистрации ТБ (7,3 на 100 000 населения) с продолжением тенденции, наблюдаемой с 2002 г., однако снижение, отмеченное между данными 2019 и 2020 гг., следует интерпретировать с осторожностью из-за возможного влияния мер, принятых для смягчения последствий COVID-19. Необходимо проделать значительную работу, чтобы к 2030 г. достичь целевого ориентира по показателям регистрации, установленного ООН в рамках задачи 3 Целей в области устойчивого развития, на уровне ЕС/ЕЭЗ – 2,4 на 100 000 населения. Обнадеживает то, что в 2020 г. число зарегистрированных случаев МЛУ-ТБ и ШЛУ-ТБ в странах ЕС/ЕЭЗ продолжало снижаться и составило очень небольшую долю от всех зарегистрированных случаев ТБ в 2020 г.

Во всех когортах зарегистрированные результаты лечения остаются значительно ниже целевых ориентиров ВОЗ. Из всех случаев ТБ, зарегистрированных в 2019 г., о результатах лечения которых было сообщено в 2020 г., успех в лечении был достигнут лишь у 71,8%. Показатель успешного лечения был ниже для случаев РР/МЛУ-ТБ на 24 месяце (52,4%) и еще ниже для случаев ШЛУ-ТБ на 36 месяце (38,5%), а доля смертей для этих когорт составила 15,2% и 15,4% соответственно.

Во всех странах ЕС/ЕЭЗ необходимы дальнейшие усилия для улучшения отчетности о случаях сочетанной инфекции ВИЧ и ТБ в тюрьмах, а также о результатах лечения.

## Мониторинг прогресса на пути к ликвидации ТБ

Последним годом, охваченным мероприятиями *Плана действий по борьбе с туберкулезом для Европейского региона ВОЗ на 2016–2020 гг. (4),* был 2020 г. Двадцать из 26 индикаторов Регионального плана действий ВОЗ были эффективно отслежены и оценены с использованием данных регулярного эпиднадзора. Девять из 20 отслеживаемых целевых ориентиров были достигнуты на региональном уровне. Особенно впечатляющим был прогресс в снижении уровня заболеваемости ТБ: большинство стран высокого приоритета в отношении ТБ и Регион в целом достигли контрольного уровня 2020 г. глобальной Стратегии по ликвидации туберкулеза и целевого ориентира Регионального плана действий. Регион был очень близок к достижению целевого ориентира по снижению числа смертей от ТБ на 35% по сравнению с базовым уровнем 2015 г., однако существующая тенденция снижения смертности от ТБ остановилась в 2020 г. из-за пандемии COVID-19, что, в конечном итоге, поставило под угрозу достижение поставленной цели. Дополнительные достижения включают значительное увеличение охвата тестированием на ВИЧ и АРТ за последние несколько лет, а также увеличение охвата тестированием с использованием быстрых методов, рекомендованных ВОЗ.

К сожалению, Региону не удалось достичь 11 целевых ориентиров, в том числе в отношении показателя выявления случаев ТБ, процента РР/МЛУ-ТБ среди новых и ранее лечившихся больных ТБ, распространенности ВИЧ среди новых случаев и рецидивов ТБ, охвата профилактическим лечением ТБ (ПЛТ) детей в возрасте до 5 лет, а также показателей успешного лечения среди новых случаев и рецидивов ТБ, когорт больных РР/МЛУ-ТБ и больных ТБ в тюрьмах. Несмотря на предпринимаемые усилия, бремя, связанное с РР-ТБ и ТБ/ВИЧ, продолжает расти, что указывает на необходимость внедрения более инновационных и эффективных подходов для решения этих проблем. Показатели успешного лечения новых случаев и рецидивов ТБ и случаев РР/МЛУ-ТБ остаются ниже глобальных и региональных целевых ориентиров, однако при сравнении данных, собранных в период с 2016 по 2020 гг., можно отметить медленный, но устойчивый рост в обеих когортах. Необходимо активизировать усилия, направленные профилактику,

в том числе на отслеживание контактов, увеличение охвата ПЛТ и АРТ среди людей, живущих с ВИЧ.

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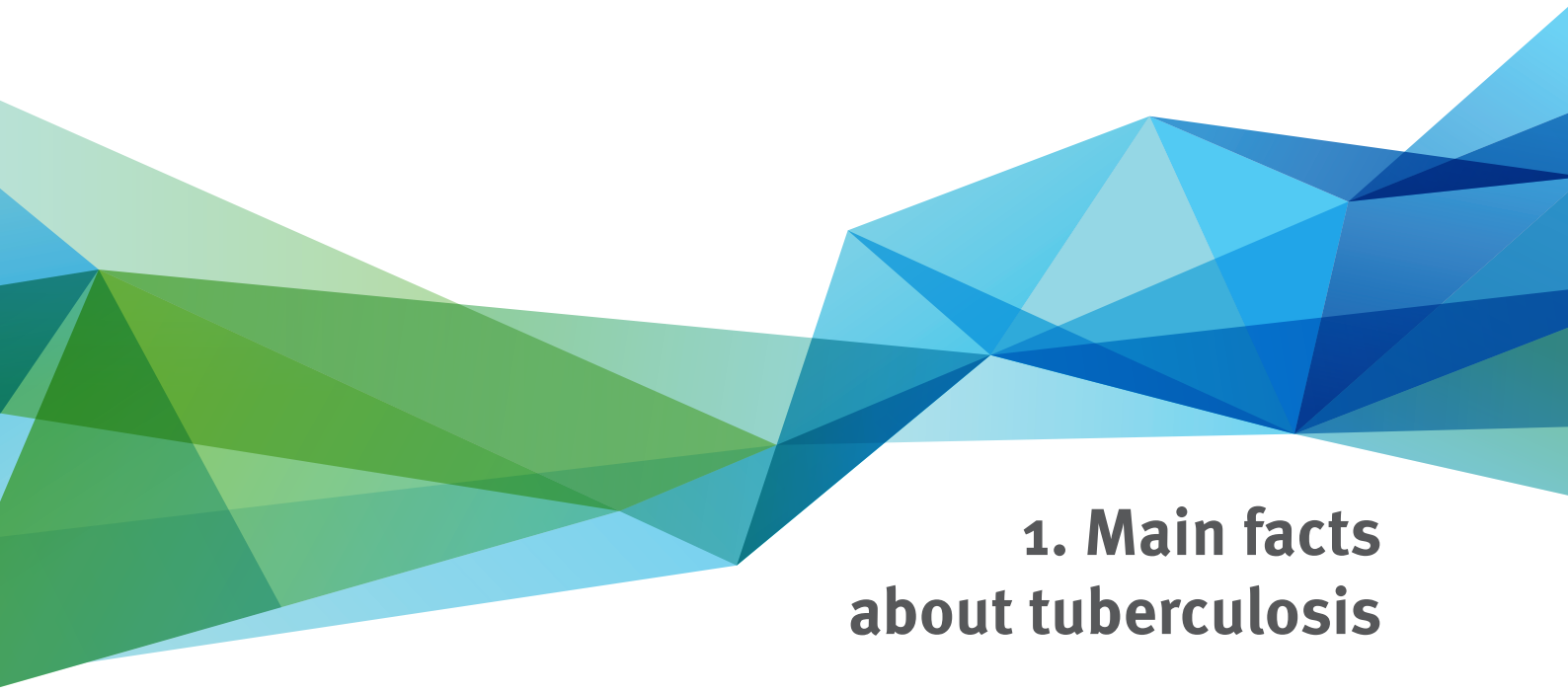
[5] Все веб-ссылки были просмотрены 12 февраля 2022.



# 1. Main facts about tuberculosis

Tuberculosis (TB) is an infectious disease caused by a group of *Mycobacterium* species called the *Mycobacterium tuberculosis (M. tuberculosis)* complex *(1)*. Globally, TB is the leading cause of death by an infectious disease *(2)*. Although TB typically affects the lungs (pulmonary TB), it can cause disease in any organ (extrapulmonary TB). TB is transmitted from person to person when, for example, an individual with pulmonary TB expels bacteria into the air by coughing.

Approximately 25% of the world's population is infected with *M. tuberculosis (3),* but only a small proportion of people infected with TB (≈ 10%) will develop TB disease during their lifetime; the risk is much higher among immunocompromised individuals (such as people infected with HIV).

Sputum-smear microscopy has been the most common initial TB diagnostic method worldwide, but culture remains the gold standard, while the use of rapid molecular testing is increasing.

Standard treatment of non-resistant TB consists of a six-month regimen of four first-line drugs (isoniazid, rifampicin, ethambutol and pyrazinamide), with success rates usually above 85% *(4)*. Multidrug-resistant TB (MDR-TB), pre-extensively drug-resistant TB (pre-XDR-TB) and extensively drug-resistant TB (XDR-TB) require longer treatments with more drugs and are associated with lower success rates.

WHO estimated that 9.9 million people fell ill with TB in 2020. Most cases were thought to have occurred in the WHO South-East Asia Region (43%), the WHO African Region (25%) and the WHO Western Pacific Region (18%). Smaller proportions of cases were estimated for the WHO Eastern Mediterranean Region (8%) and the WHO Region of the Americas (3%). The WHO European Region accounted for 2% of all cases *(4)*.

Overall, this report shows that in countries of the European Union/European Economic Area (EU/EEA), TB remains a public health issue. Most EU/EEA countries, however, are low-incidence countries (with a notification rate below 10 per 100 000) in which TB predominantly affects vulnerable populations such as migrants, prison inmates and people coinfected with HIV.

The overall aim of TB surveillance is to help inform public health action. The annual TB surveillance and monitoring report presents key figures and trends and provides an overview of the TB situation in the EU/EEA and the WHO European Region.

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# 2. Technical note

Between 1996 and 2007, TB surveillance data from the European Region were collected and analysed annually under the EuroTB project.

Since 1 January 2008, the European Centre for Disease Prevention and Control (ECDC) and the WHO Regional Office for Europe have jointly coordinated the collection and analysis of TB surveillance data in Europe, aiming to ensure data standardization and high quality across the WHO European Region. The underlying standards and definitions have been agreed by leading European experts. The definitions used in this report are in line with the latest WHO revised definitions *(1,2)*. In the EU/EEA, reporting follows European Union (EU) case definitions *(3)*.

The report covers the 53 countries of the WHO European Region and Liechtenstein. These are collectively referred to as the European Region. Although the United Kingdom was part of the EU/EEA until 31 January 2020, for ease of reporting the 2020 United Kingdom data and historical data are shown in the non-EU/EEA section of the tables.

Data published in the report may differ from figures in national reports due to variations in reporting periods and the deadlines for data collection. The deadline for updating the data used in this report was 4 October 2020.

## 2.1 Data-reporting and analysis

Designated experts within national surveillance, infectious disease or public health institutes submitted TB surveillance and control programme management data for 2020 electronically to the ECDC/WHO Regional Office for Europe Joint TB Information System via a common portal *(4)*. TB surveillance data from the EU/EEA countries were later submitted to The European Surveillance System (TESSy) platform hosted by ECDC (Annex 1). Surveillance data from non-EU/EEA countries and areas and programme management data from the entire European Region were processed through the WHO Tuberculosis Monitoring and Evaluation (TME) platform in aggregated format. In all, 29 of 30 EU/EEA Member States reported case-based data. All countries in the European Region were also asked to provide updates for 2017, 2018 and 2019 to allow for the exclusion of duplicate cases or those found later not to have TB, and for the reporting of treatment outcomes in previously notified cases.

The TESSy variable list for collection of the 2020 data (Annex 2) has not undergone changes compared to the previous year.

Reporting completeness (Annexes 3 and 4) varied among countries and areas due to differences in legislation, specifics of national surveillance systems and TB case ascertainment. Readers should be cautious when making comparisons across countries and areas, even though the quality and comparability of reported data have improved in recent years and the reporting completeness is generally high in the EU/EEA, with a few exceptions, such as HIV status and drug-susceptibility testing (DST) data.

Estimates of TB disease burden presented in Tables 1, 2, I and II are provided by WHO using a methodology developed by the Global Task Force on TB Impact Measurement. Estimates are updated annually using the latest available data and analytical methods *(5)*. Population denominators were obtained from United Nations Population Division statistics *(6)* for the calculation of rates in these tables.

For the calculation of notification rates, country total population denominators by age group and gender were obtained from Eurostat *(7)* (9 April 2021) for the EU/EEA countries and from United Nations Population Division statistics for all other countries and areas.

Reported data were analysed using the main epidemiological (time, place, gender, age and patient origin) and case management (history of previous anti-TB treatment, localization of disease, laboratory results, HIV status and treatment outcome) variables. If indicated, associations between variables were quantified as relative risk (RR) and their 95% confidence intervals (CI), and results were considered significant if the CI did not include 1.

### 2.1.1 TB/HIV coinfection

Case-based HIV status for 2020 was reported by Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Greece, Hungary, Ireland, Lithuania, Luxembourg, the Netherlands, Norway, Portugal, Romania, Slovakia, Slovenia and Spain. The proportion of TB/HIV coinfection was expressed as a percentage of reported TB cases with known HIV status. HIV status had to be available for more than 50% of all TB cases to be considered complete in the country profiles. For the reported new and relapse TB cases with known HIV status in 2020, start or continuation on antiretroviral therapy (ART) was reported by six EU/EEA Member States.

### 2.1.2 Laboratory network performance and drug resistance

Results of DST from initial isolates of *M. tuberculosis* have been collected for isoniazid and rifampicin since the reporting year 1998. EU/EEA countries have also reported susceptibility to ethambutol and streptomycin, with 79% of EU/EEA countries reporting the latter for the last six years (2015–2020). Data on second-line drug resistance to amikacin, capreomycin, kanamycin, ciprofloxacin and ofloxacin have been reported via TESSy since 2008 and via the Centralized Information System for Infectious Diseases/TME since 2009. Data on ciprofloxacin are no longer collected in TESSy (since 2017), as ciprofloxacin is no longer recommended for treatment of drug-susceptible

or drug-resistant TB. Data on resistance to gatifloxacin, levofloxacin and moxifloxacin were added in 2013, bedaquiline and delamanid in 2016 and pyrazinamide in 2017. Case-based information on DST is collected in countries/areas where DST results are linked to TB case notifications (28 of 29 countries in 2020).

Where individual DST data are not available, data have been obtained from WHO's TME platform in aggregated format, when possible and deemed adequate. Information on the organization and laboratory practices for anti-TB DST in the country/area is collected using the TME module of the joint TB surveillance system. Since 2019, when collecting data to report resistance to anti-TB drugs, EU/EEA Member States have been required to report the resistance pattern used on initiation of the treatment to TESSy, irrespective of the method used for DST or resistance prediction. Drug-resistance surveillance (DRS) methods vary across countries and areas. Initial DST results may be collected routinely for all culture-positive TB cases notified, or only for cases included in specific surveys or diagnosed in/referred to selected laboratories. DRS data were considered complete if:

- they were collected nation-/area-wide; or
- culture results were available for 90% or more of all cases; and
- more than 50% of all cases were culture-positive; and
- more than 75% of all culture-positive cases had DST results available for isoniazid and rifampicin; and
- at least 95% of the external quality assessment (EQA) results were confirmed by a supranational reference laboratory.

DRS data were not reported (or are considered incomplete) for Albania, Andorra, Bosnia and Herzegovina, Italy, Georgia, Latvia, Liechtenstein, Monaco, Serbia, Switzerland and Turkmenistan. France reported complete national DRS data only for rifampicin-resistant TB (RR-TB) cases.

EQA systems are essential for ensuring accurate diagnosis of TB and drug-resistant TB. Implementing EQA by organizing regular EQA rounds and identifying training needs is one of the key activities of the European Reference Laboratory Network for Tuberculosis (ERLTB-Net) *(8)*. The EQA test results for 2020 are published in Annex 5.

Percentages of laboratory-confirmed drug-resistant cases were calculated using cases with known DST results (for at least isoniazid and rifampicin) as the denominator. The results of DST for second-line drugs were analysed only for MDR-TB cases.

### 2.1.3 Treatment outcome monitoring

EU/EEA countries have provided treatment outcome data since the reporting year 2002 through the submission of an updated dataset for cases notified one year prior to the year of reporting. The same applies to rifampicin-resistant or multidrug-resistant TB (RR/MDR-TB) and pre-XDR-TB treatment outcome for cases reported two years earlier and XDR-TB treatment outcome for cases reported three years earlier. As part of the 2021 data call, for 2020 data, outcome data were collected for TB cases reported in 2019, rifampicin-resistant, multidrug-resistant and pre-XDR-TB cases in 2018 and XDR-TB cases in 2017. Non-EU/EEA countries and areas have reported aggregated treatment outcome data following the same principle since 2013.

If enrolment for treatment is taken into account for treatment outcome monitoring analysis, two types of TB cases are included: cases enrolled for treatment and cases with no indication of enrolment for treatment. For countries and areas reporting case-based data, the most recently updated information was used. This may result in denominators differing from the number of notified cases reported in the previous year's report. For countries and areas reporting aggregate outcome data, completeness of cohorts is assessed by comparing the total number of cases included in treatment outcome monitoring cohorts with those initially notified as pulmonary and culture- or smear-positive, depending on the type of cohort.

### 2.1.4 Geographical areas

The following 30 EU/EEA countries are presented separately in tables and in Chapter 3: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia (case-based data not reported for 2020), Luxembourg, Liechtenstein, Lithuania, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain and Sweden.

The 24 remaining (non-EU/EEA) countries in the WHO European Region are Albania, Andorra, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Georgia, Israel, Kazakhstan, Kyrgyzstan, the Republic of Moldova, Monaco, Montenegro, North Macedonia, the Russian Federation, San Marino, Serbia, Switzerland, Tajikistan, Turkey, Turkmenistan, Ukraine, the United Kingdom and Uzbekistan.

Data from Serbia include TB cases reported from Kosovo[7] and these are also stratified in tables to reflect United Nations Security Council Resolution 1244 (1999).

Data from the 18 high-priority countries (HPCs) identified in the *Plan to stop TB in 18 high-priority countries in the WHO European Region, 2007–2015 (9)* are presented in italics and as subtotals alongside the subtotals for the EU/EEA countries and non-EU/EEA countries and areas. The 18 HPCs in the WHO European Region are: Armenia, Azerbaijan, Belarus, Bulgaria, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia (did not report case-based data for 2020), Lithuania, the Republic of Moldova, Romania, the Russian Federation, Tajikistan, Turkey, Turkmenistan, Ukraine and Uzbekistan.

TB notifications from France include overseas territories. TB notifications from Greenland are not included in the report.

[7] All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

## 2.2 Definitions

### 2.2.1 TB case definition for surveillance

Information from EU/EEA countries was collected to enable the classification of cases according to the case definition approved by EU Member States and published by the European Commission *(3)*. This classifies cases as "possible", "probable" or "confirmed". Possible cases meet clinical criteria only. Probable cases meet the clinical criteria as well as at least one of the laboratory criteria for a probable case: detection of acid-fast bacilli by microscopy; detection of *M. tuberculosis* complex by nucleic acid amplification testing; or histological appearance of granulomata. In addition to meeting clinical criteria, confirmed cases require isolation of *M. tuberculosis* complex by culture or detection of both acid-fast bacilli by microscopy and *M. tuberculosis* complex by nucleic acid amplification testing.

Data from all countries and areas in the European Region also follow the WHO-recommended definitions (2013 revision) *(1)*. These define a "case of tuberculosis" as a patient in whom TB has been confirmed by bacteriology or diagnosed by a clinician. A "bacteriologically confirmed TB case" is one from whom a biological specimen is positive by smear microscopy, culture or WHO-recommended rapid diagnostics (WRD) such as Xpert MTB/RIF (*Mycobacterium tuberculosis* (MTB) and resistance to rifampin (RIF)). A "clinically diagnosed TB case" is one that does not fulfil the criteria for bacteriological confirmation but has been diagnosed with active TB by a clinician or other medical practitioner who has decided to give the patient a full course of TB treatment.

Cases discovered postmortem as having gross pathological findings consistent with active TB, which would have indicated anti-TB treatment had the patient been diagnosed before dying, also fit the clinical criteria and are included.

### 2.2.2 Previous anti-TB treatment status

**New cases** have never been treated for TB or have taken anti-TB drugs for less than one month. For EU/EEA countries, cases diagnosed before 1951 are analysed as new cases.

**Previously treated patients** have received one month or more of anti-TB drugs in the past. They are further classified by the outcome of their most recent course of treatment as follows:

- **relapse:** patients have previously been treated for TB, were declared cured or to have completed their treatment at the end of their most recent course of treatment, and are now diagnosed with a recurrent episode of TB (either a true relapse or a new episode of TB caused by reinfection);
- **treatment after failure:** patients who have previously been treated for TB and whose treatment failed at the end of their most recent course of treatment;
- **treatment after loss to follow-up:** patients who have previously been treated for TB and were declared lost to follow-up at the end of their most recent course of treatment (these were previously classified as "treatment after default"); and
- **other previous treatment:** patients who have previously been treated for TB but whose outcome after their most recent course of treatment is unknown or undocumented.

Patients with an unknown previous TB treatment history do not fit any of the categories listed above.

New and relapse cases of TB are **incident TB cases.**

### 2.2.3 Site of disease

**Pulmonary TB** refers to any bacteriologically confirmed or clinically diagnosed case of TB involving the lung parenchyma or the tracheobronchial tree (laryngeal TB is classified as pulmonary). A patient with both pulmonary and extrapulmonary TB is classified as a case of pulmonary TB.

**Extrapulmonary TB** refers to any bacteriologically confirmed or clinically diagnosed case of TB involving organs or anatomical sites other than the lungs (such as pleura, lymph nodes, abdomen, genitourinary tract, skin, joints and bones, or meninges).

### 2.2.4 Notes on the definition

The above TB case definition and the definition of previous anti-TB treatment status and site of disease are in accordance with the European Commission's approved definitions for TB surveillance.

All possible, probable and confirmed cases are reported to the joint European surveillance database. For countries and areas with laboratory-based reporting where no clinical information is available, laboratory-confirmed cases should be reported.

Cases should be notified only once in a given 12-month period, but a case should be reported again if the diagnosis of confirmed TB is made following completion of anti-TB treatment (relapse), even if this occurs within 12 months of reporting the initial disease episode.

Cases that have never been treated are commonly referred to as new cases, although this term should not be considered to indicate incidence in the strict epidemiological sense.

Among re-treated cases, relapses are included in notifications from all countries, but cases re-treated after failure or loss to follow-up and chronic cases are not included, or further defined, by Belgium, Cyprus, Denmark, France, Luxembourg, Malta, Norway, Spain and the United Kingdom.

DST data were analysed for laboratory-confirmed cases.

### 2.2.5 Origin of cases

The geographical origin of a TB case is classified according to the place of birth of a person with TB disease (that is, born in the country/born outside of the country) for Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia,

Finland, France, Germany, Iceland, Ireland, Israel, Italy, Kyrgyzstan, Latvia (did not report case-based data for 2020), Liechtenstein, Lithuania, Luxembourg, Malta, the Netherlands, North Macedonia, Norway, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Tajikistan, Turkey, the United Kingdom and Uzbekistan. For Albania, Andorra, Armenia, Austria, Belarus, Belgium, Bosnia and Herzegovina, Georgia, Greece, Hungary, Kazakhstan, the Republic of Moldova, Montenegro, Poland, the Russian Federation, Serbia, Turkmenistan and Ukraine, origin is classified according to citizenship (citizen/non-citizen). Azerbaijan, Georgia, Kyrgyzstan, Monaco and Turkmenistan did not report information on origin. In Denmark, the birthplace of the parents is also used to classify origin (similarly, for cases born in the Netherlands the birthplace of parents is also notified for case management purposes). The country of origin is included in case-based data.

The term "native" as used in this report refers to cases born in or having citizenship (nationality) of the reporting country. "Foreign origin" refers to cases born in (or citizens of) a country different to the reporting country.

## 2.2.6 Drug resistance

**Resistance among cases never treated (new TB cases)** indicates primary drug resistance due to infection with resistant bacilli.

**Resistance among cases previously treated** usually indicates acquired drug resistance emerging during treatment following selection of drug-resistant mutant bacilli. It can also result from exogenous reinfection with resistant bacilli.

**Multidrug resistance (MDR)** refers to resistance to at least isoniazid and rifampicin.

**Pre-extensive drug resistance (pre-XDR)** refers to resistance to: (i) at least rifampicin (that is, rifampicin resistance/mutidrug resistance (RR/MDR)) and (ii) any fluoroquinolone.

**Extensive drug resistance (XDR)** refers to resistance to: (i) at least rifampicin (that is, rifampicin resistance/mutidrug resistance (RR/MDR)); (ii) a fluoroquinolone; and (iii) at least one additional Group A drug *(1,2)*. The drugs currently included in Group A are levofloxacin, moxifloxacin, bedaquiline and linezolid.

**Rifampicin resistance** refers to resistance to rifampicin detected using phenotypic or genotypic methods, with or without resistance to other anti-TB drugs. This includes any resistance to rifampicin, whether monoresistance, MDR, polydrug resistance, pre-XDR or XDR.

## 2.2.7 Treatment outcome

### 2.2.7.1 Cohorts

A cohort is defined as all TB cases notified in the calendar year of interest, after exclusion of cases with a final diagnosis other than TB, or cases found to have been reported more than once.

In accordance with the WHO treatment outcome definitions *(1)*, this report distinguishes between two types of cases:

- patients treated for drug-susceptible TB; and
- patients treated for RR-TB – for non-EU/EEA countries and areas this includes those placed on second-line treatment (defined as combination chemotherapy for drug-resistant TB).

The two groups are mutually exclusive. For EU/EEA countries, the case types are based on DST results. Any patient reported as having RR-TB is assumed to be on second-line treatment and is excluded from the drug-susceptible TB outcome cohort.

### 2.2.7.2 Period of observation

All cases are observed until the first outcome assessment up to a maximum of 12 months after the start of treatment. For RR/MDR-TB and pre-XDR-TB cases in EU/EEA countries, treatment outcome after 24 months should be reported if treatment lasts longer than 12 months and the reported 12-month outcome is coded as "still on treatment".[8] For XDR-TB cases in EU/EEA countries, treatment outcome after 36 months should be reported if treatment lasts longer than 24 months and the reported 12-month and 24-month outcomes are coded as "still on treatment".[9] Non-EU/EEA countries and areas evaluate treatment outcomes according to the WHO definition.

### 2.2.7.3 Treatment outcome categories

All outcome categories but one apply to the entire Region and follow the WHO recommendations in *Definitions and reporting framework for tuberculosis – 2013 revision (1)*. The additional category "still on treatment" applies only to EU/EEA Member States. The categories are as follows.

**Cured** – a pulmonary TB patient with bacteriologically confirmed TB at the beginning of treatment who was smear- or culture-negative in the last month of treatment and on at least one previous occasion.

**Cured of MDR-TB, pre-XDR-TB and XDR-TB** – treatment completed, as recommended under national policy without evidence of failure AND three or more consecutive cultures taken at least 30 days apart are negative after the intensive phase.

**Treatment completed** – treatment completed but does not meet the criteria to be classified as cured or treatment failed.

**Treatment failed** – a TB patient whose sputum smear or culture is positive at month five or later during treatment.

**Treatment failed for MDR-TB, pre-XDR-TB and XDR-TB case** – treatment terminated or the need for permanent regimen change of at least two anti-TB drugs because of:

[8] The degree of adherence to the 12-month limit is unknown, and a number of countries are known to exceed it.

[9] The degree of adherence to the 24-month limit is unknown.

- lack of conversion by the end of the intensive phase; or
- bacteriological reversion in the continuation phase after conversion to negative; or
- evidence of additional acquired resistance to fluoroquinolones or second-line injectable drugs; or
- adverse drug reactions.

**Died** – a TB patient who dies for any reason before starting, or during the course of, treatment.

**Lost to follow-up** – a TB patient who did not start treatment or whose treatment was interrupted for two consecutive months or more (defined in previous reports as "defaulted").

**Still on treatment**[10] – a patient reported as still on treatment at 12 months without any other outcome during treatment, or a patient reported as still on treatment at 12 months and still on treatment at 24 months without any other outcome.

**Not evaluated** – a TB patient for whom no treatment outcome is assigned; this includes cases "transferred out" to another treatment unit and cases for whom the treatment outcome is unknown to the reporting unit.

In this report, **success** is the sum of "cured" and "treatment completed".

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[10] This definition is applicable to EU/EEA countries only.

[11] All references accessed on 16 February 2022.

# 3. Commentary

# 3.1 The WHO European Region

## 3.1.1 TB burden estimates (incidence and mortality, HIV and RR/MDR)

An estimated 231 000 new and relapse TB cases (range 201 000–264 000) occurred in countries and areas of the WHO European Region in 2020, equivalent to an average incidence of 25 cases (range 22–28) per 100 000 population. This represents about 2.3% of the total burden of TB in the world.

The absolute number of incident TB cases in the WHO European Region fell by 16 000 in 2020 compared to the previous year. About 84% of the estimated TB cases in the Region occurred in the 18 HPCs, where estimated TB incidence was 47 cases per 100 000 population, which is almost five times higher than the EU/EEA average. The six countries with the absolute highest number of incident TB cases over 10 000 were the Russian Federation (68 000), Ukraine (32 000), Uzbekistan (22 000), Turkey and Kazakhstan (13 000 each), and Romania (12 000). The number relative to population (incidence rate) was highest in Kyrgyzstan (105 per 100 000 population), followed by Tajikistan (84 cases), the Republic of Moldova (74 cases). Ukraine (73 cases) and Georgia (70 cases) (Table II).

The estimated number of TB cases in the Region has been decreasing consistently since 2000. During the period 2011–2020, the average annual decline in the TB incidence rate was 5.2%, with 6.4% between 2019 and 2020, which is notably higher than the global rate of decline for TB incidence (1.9%) and the fastest decline in the world compared to other regions *(1)*. The cumulative reduction for the period 2015–2020 was 25%, indicating that the Region exceeded the 2020 End TB Strategy milestone to reduce the TB incidence rate in 2020 by 20% against the 2015 baseline, and also achieved the regional action plan target of a 25% reduction in the TB incidence rate. This was mostly driven by the decline in the Russian Federation, where incidence fell by 6% per year between 2011 and 2020. It should nevertheless be emphasized that most of the HPCs in the Region have also experienced a decline in the TB incidence rate. During the period 2011–2020, the HPCs with the highest annual rate of decline were Estonia (–9.7%), Armenia (–9.2%), Belarus (–9.2%), Lithuania (–8.6%), Azerbaijan (–8.2%), Latvia (–7.6%) and Kazakhstan (–7.2%).

An estimated 21 000 TB deaths occurred among HIV-negative people in the European Region in 2020, equivalent to 2.3 deaths per 100 000 population (range 2.2–2.4). Between 2011 and 2020, the TB mortality rate at regional level fell cumulatively by 54%, from 4.9 to 2.3 deaths per 100 000 population, which on average is a decline of 8.3% per year (Table I). TB mortality in the Region plateaued between 2019 and 2020 for the first time in the last two decades. This was a consequence of undiagnosed and untreated TB and an associated increase in deaths due to disruptions to TB services caused by the COVID-19 pandemic. As a result, the reduction in the absolute numbers of TB deaths in 2020 compared to 2015 was only 26% versus the 35% target of the regional action plan and the End TB Strategy *(1)*. Considerable variation was seen across the Region, ranging from fewer than one TB death per 100 000 population in western European countries up to 10 per 100 000 in HPCs. The TB mortality rate was highest in Turkmenistan (10 deaths per 100 000), followed by Tajikistan (9.6) and Ukraine (9.4). Together, the 18 HPCs accounted for over 86% of TB deaths in the Region.

An estimated 12% (range 9.2–16%) of incident TB cases in 2020 were coinfected with HIV (Table 2). The proportion of TB cases coinfected with HIV was highest in the Russian Federation (24%), Turkmenistan and Ukraine (22% each), followed by the Republic of Moldova (13%) and Armenia (11%). The top five countries with the highest absolute number of TB/HIV coinfection cases were the Russian Federation (16 000) and Ukraine (7000), representing 79% of the total number of cases, followed by Kazakhstan (850), Uzbekistan (690) and Turkmenistan (630).

Nine of the 30 countries with the highest RR/MDR-TB burden in the world are in the WHO European Region.[12] In 2020, the WHO European Region had an estimated 37 000 incident cases of RR/MDR-TB among notified bacteriologically confirmed pulmonary TB cases, with MDR-TB accounting for 88% (Table 2). An estimated 18% (95% CI: 17–20%) of newly diagnosed patients and 53% (95% CI: 45–60%) of previously treated patients had RR/MDR-TB. Overall, an estimated 69 000 (range 54 000–86 000) incident cases of RR/MDR-TB occurred in the Region in 2020.

## 3.1.2 TB notification and trends

In 2020, 199 700 TB patients were reported from 51 countries and areas[13] in the WHO European Region. Of these, 163 602 were incident TB patients (Table 3, Table III). This represents an unprecedented 24.4% drop in the number of notified TB patients compared to 2019, due to the impact of the COVID-19 pandemic on access to TB diagnostic and treatment services. This translates into TB treatment coverage of 71% (95% CI: 62–81%) in 2020 (approximated as notifications divided by incidence), down from 88% (95% CI: 77–100%) in 2019. Among the HPCs, the sharpest drop was observed in Armenia and the Republic of Moldova (37% each), Romania (35%), Belarus (31%), Kyrgyzstan

[12] The nine countries from the WHO European Region included in the global list of 30 countries with highest RR/MDR-TB burden are (in alphabetical order): Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, the Republic of Moldova, the Russian Federation, Tajikistan, Ukraine and Uzbekistan.

[13] Latvia and San Marino did not report, and Monaco reported zero cases in 2020.

and Lithuania (32% each), and Ukraine and Tajikistan (30% each).

The notification rate of new and relapse cases in 2020 varies widely among countries, from zero (Monaco) to 65 (Kyrgyzstan) per 100 000 population (Map 1 and Table III). Thirty-eight countries, mainly located in the western and central part of the Region, had low notification of new and relapse cases (fewer than 20 cases per 100 000) in 2020. Twelve reported new and relapse case rates of between 20 and 50 per 100 000 population and two reported over 50 cases per 100 000 population (Kyrgyzstan (65) and Kazakhstan (51.1)). The new and relapse case notifications from the 18 HPCs account for about 83% of the regional burden. Over a third of new and relapse cases (58 723) come from the Russian Federation, even though the Russian Federation accounts for only 16% of the Region's population.

The notification rate of new and relapse cases in the 18 HPCs is almost twice as high as for the Region overall (33 cases per 100 000, compared to 18 for the Region) and almost five times higher than the rate in the EU/EEA (seven cases per 100 000 population) (Fig. 3.1.1).

### 3.1.3 Previous treatment history

In 2020, previously treated cases represented 10.4% and 34.3% in the EU/EEA and non-EU/EEA, respectively (Table 4). The average in the 18 HPCs was 34.5%, which is above the pan-European average of 30.3%. Previously treated cases accounted for 15% or more of all TB cases in 13 countries: Azerbaijan (48.7%), the Russian Federation (44.2%), Turkmenistan (38.6%), Belarus (34.1%), Kazakhstan (30.8%), Kyrgyzstan (27.7%), Ukraine (27.5%), the Republic of Moldova (27.3%), Uzbekistan (22.9%), Romania (21.8%), Georgia (19.4%), Lithuania (18.6%) and Armenia (16.9%). Reasons for the high percentage of previously treated cases include clinical failure or poor treatment adherence in previous treatment episodes, and possible reinfection and misclassification during the current treatment episode.

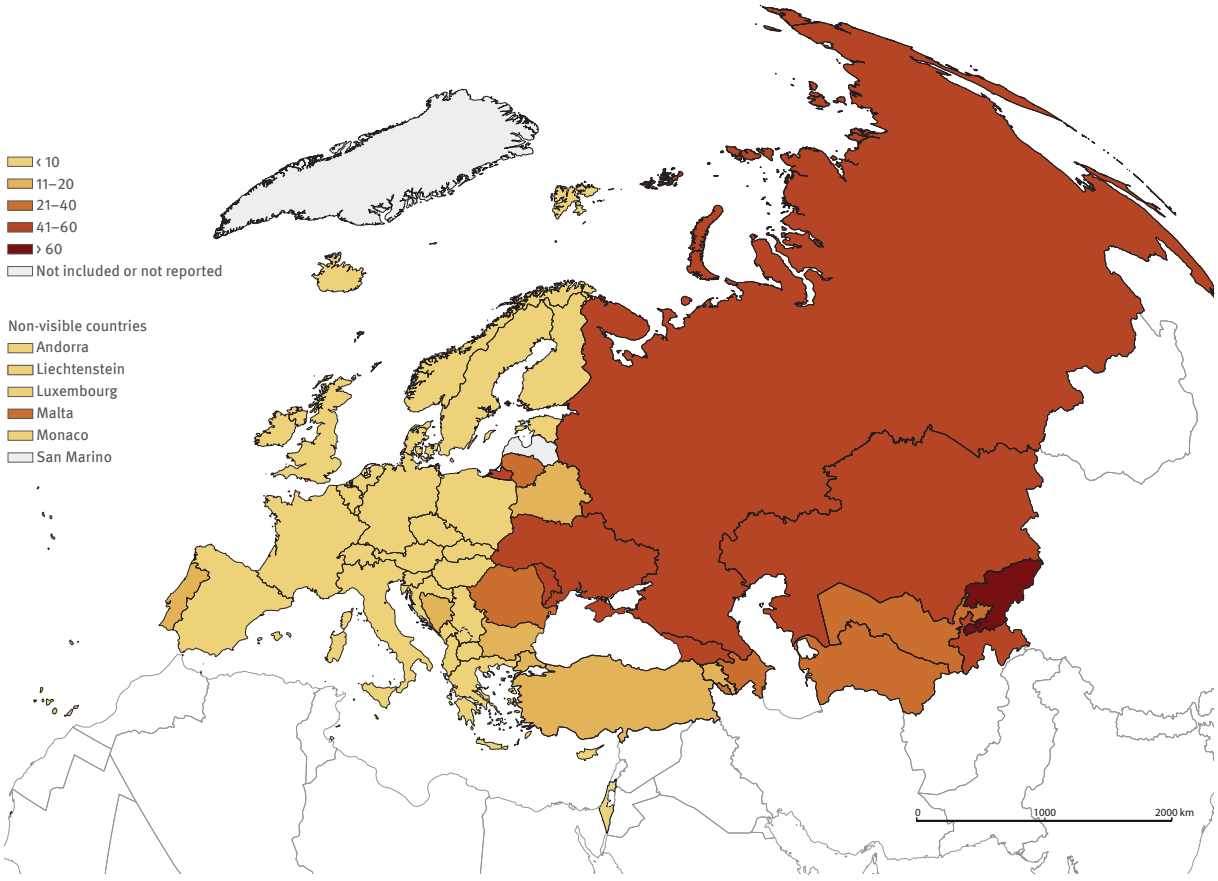
### 3.1.4 Disease localization

Pulmonary localization was notified in 82.8% of the incident TB cases in the Region in 2020 (Table 6). The proportion of patients with pulmonary localization in the non-EU/EEA countries and areas was higher than in the EU/EEA. Extrapulmonary TB was notified on average for 17.2% of all incident TB cases in the Region. Thirteen countries reported more than 30% of their TB cases having extrapulmonary localization: Andorra, Belgium, Finland, France, Lichtenstein, the Netherlands, Norway, Portugal, Sweden, Tajikistan, Turkey, the United Kingdom and Uzbekistan.

### 3.1.5 Bacteriological confirmation

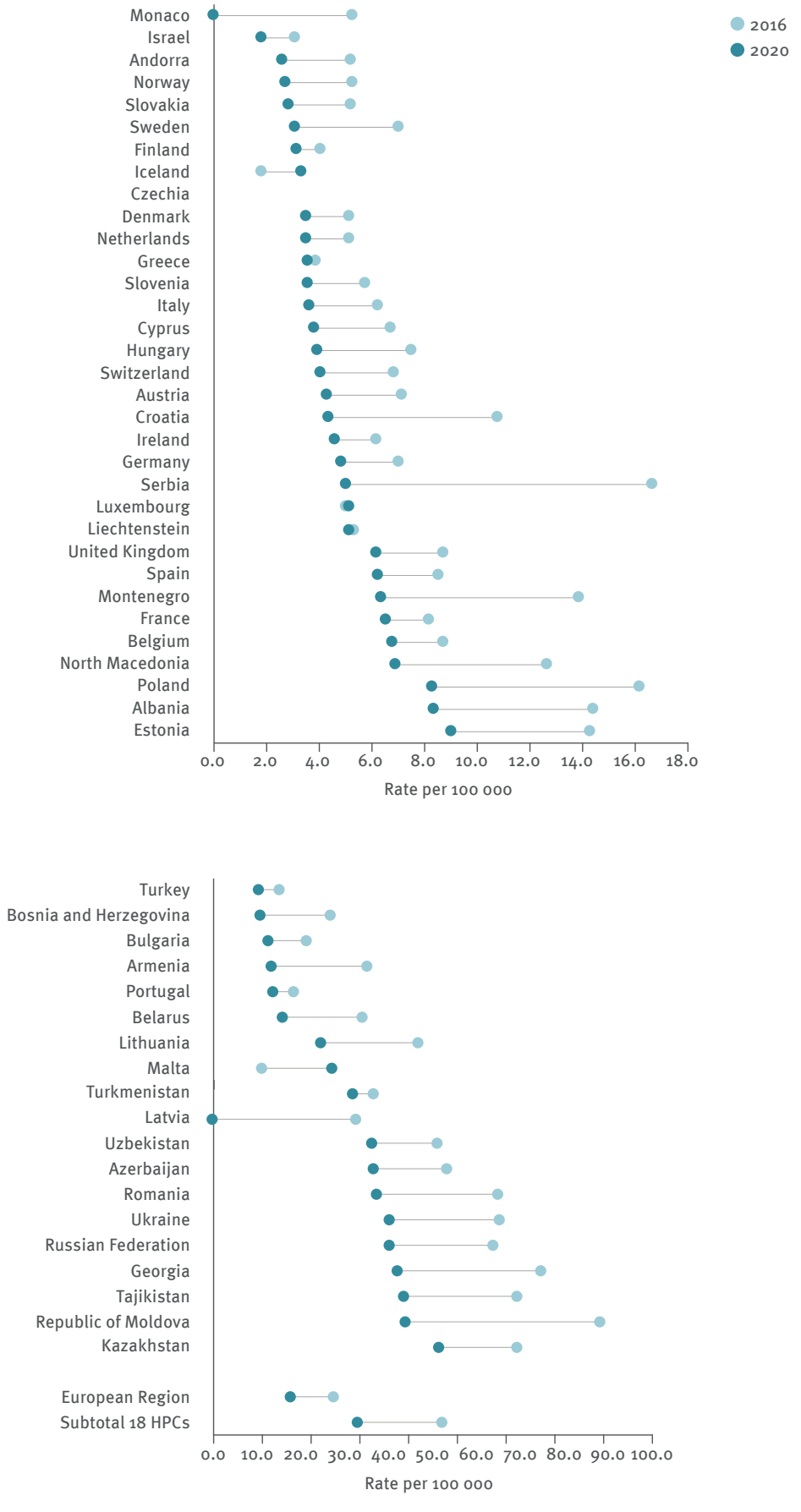
Bacteriological confirmation of TB diagnosis was reported for 90 549 (66.8%) of all 135 521 new and relapse pulmonary

**Map 1. TB notification rates of new TB cases and relapses per 100 000 population, European Region, 2020**




*Sources:* 2020 data from the European Surveillance System (TESSy) and 2020 data from the WHO global TB data-collection system. Map production: © WHO.

**Fig. 3.1.1. Trend of TB notification rate per 100 000 between 2016 and 2020 in countries below 10 cases per 100 000 (upper panel) and 10 cases and over per 100 000 (lower panel) in the WHO European Region**




*Note*: Latvia did not report data in 2020 and is excluded.

cases in the Region (Table 6). Testing of patients using WRD (such as Xpert MTB/RIF) was much lower in the EU/EEA countries (33.7%) than in the non-EU/EEA countries and areas (82.3%). The five-year trend nevertheless shows a continuing increase in usage of WRDs across the Region, from 55.5% in 2016 to 72.3% in 2020 (Fig. 3.1.2 and Table XIV). Testing also varied considerably among countries and areas, from 0.2% in Bulgaria to 96% in Kazakhstan. Bacteriological confirmation of new and relapse pulmonary cases was below 60% in seven countries, underlining the need to strengthen diagnostics: Serbia (45.7%), Turkmenistan (46.9%), Malta (52.5%), Hungary (53%), the Russian Federation (53.4%), Iceland (55.6%) and Slovakia (56.9%). In 34 countries, bacteriological confirmation of new and relapse pulmonary cases was 75% and above.

### 3.1.6 Age and sex

There is wide variation in the distribution of age- and sex-specific notification rates across countries and areas (Table 8). Notification rates in eastern European countries are highest in young adults (25–44 years) and subsequently decline with increasing age, while in central Asia and in Turkey, the notification rates either increase with age or are relatively constant across adult age groups.

In the group of 18 HPCs, the rate of TB in children under 5 years was lower than the notification rate among children aged 5–14 years, indicating that detection of TB remains particularly challenging in young children.

In countries and areas with at least 100 new and relapse TB cases, the proportion of TB cases notified in children (0–14 years) varied from below 1% (Bosnia and Herzegovina, Belarus, Czechia and Estonia) to 22.9% (Slovakia) of all new and relapse cases. The difference in proportions of childhood TB cases across the countries and areas may reflect differences in case-finding practice (such as contact tracing), population age structure and under/overdiagnosis or reporting of childhood TB. The average percentage of new and relapse TB patients under 15 years in the Region is 4%.

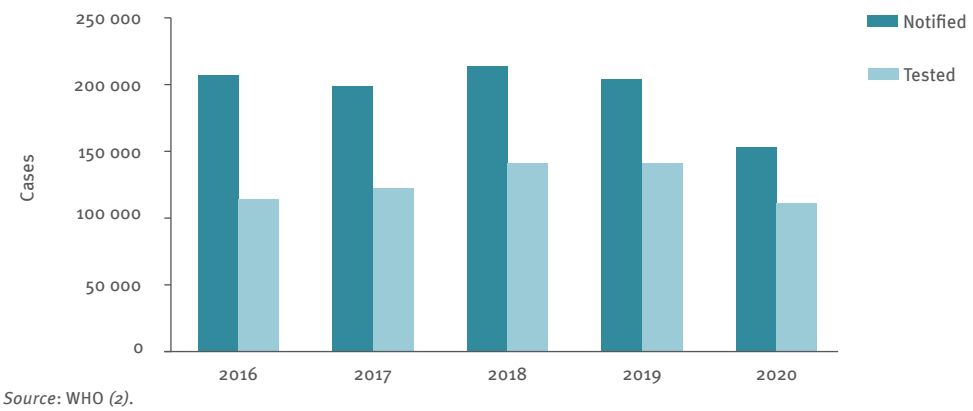
There were about twice as many males as females reported among all incident TB cases, but large variation was observed for male predominance in the sex distribution of TB cases, ranging from almost even distribution to over three times greater in Armenia and the Republic of Moldova. The exceptions were Norway and Serbia, where the number of female TB patients outnumbered those of males. In most countries and areas, gender differences in notification rates appear to be more significant among middle-aged and older adults. TB rates in males and females seem more similar in children and younger adults (0–14 and 15–24 years). This gender difference in TB case notification most probably reflects the overrepresentation of males in the various TB risk groups, notably homeless people, prisoners, seasonal migrant workers and people living with HIV (PLHIV).

### 3.1.7 Drug resistance

Fifty countries in the Region reported test results for rifampicin resistance in 2020. Overall, DST coverage in the Region, at least for rifampicin among bacteriologically confirmed pulmonary TB cases, was 92%, with 41 countries achieving coverage of 85% or higher. Only in two countries was the coverage less than 50% (Spain (46.8%) and France (3.4%)). The percentage of confirmed RR-TB cases among 64 608 new pulmonary TB cases tested for rifampicin resistance in the Region was 23.1% (Map 2, Fig. 3.1.3, Table 11 and Table V). While 18 countries reported no RR-TB or less than 1% among new TB cases, the rate was over 20% in eight countries (Table 11). Overall, for EU/EEA countries, the prevalence of RR-TB cases among all confirmed new pulmonary TB cases tested for rifampicin resistance was 2.8%, but among previously treated pulmonary cases, the RR-TB proportion was higher at 12.8% (Fig. 3.1.4).

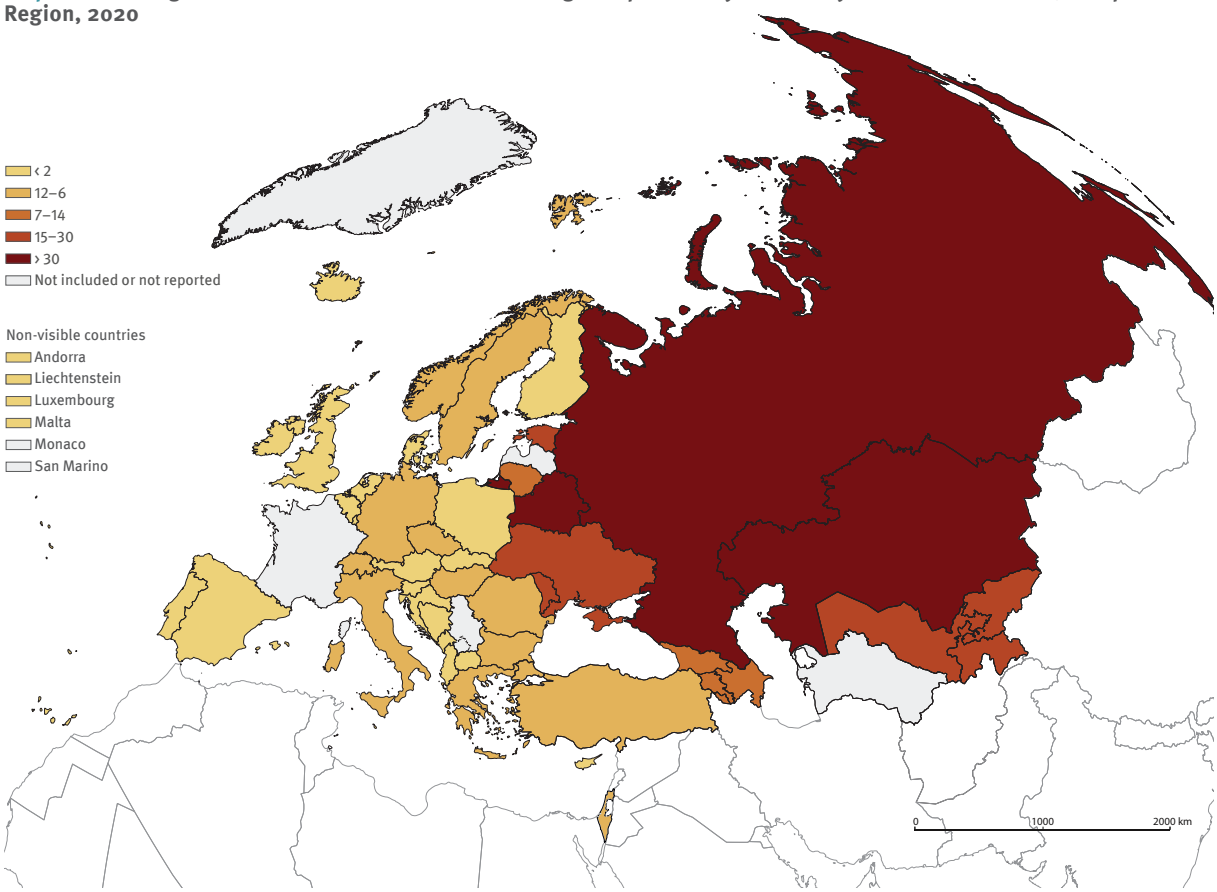
Six HPCs had an RR/MDR-TB prevalence ranging from 10% to 19% among new cases tested for rifampicin resistance: Uzbekistan (18.3%), Estonia (18%), Armenia (14.1%), Lithuania (12.4%), Azerbaijan (12%) and Georgia (10.7%). Four had 20–29% RR/MDR-TB among new cases (Ukraine (28.6%), Kyrgyzstan (28.3%), the Republic of Moldova (26%) and Tajikistan (24.2%)) and three had an RR/MDR-TB prevalence over 30% (Belarus (39.5%), the Russian Federation (36.3%) and Kazakhstan (36.2%)). The percentage of RR/MDR-TB reported for France is misleading, as DST results are documented for RR-TB cases only.

**Fig. 3.1.2. New and relapse TB cases tested using WRD such as Xpert MTB/RIF, European Region, 2016–2020**




*Source*: WHO *(2)*.

**Map 2. Percentage of notified TB cases with MDR among new pulmonary laboratory-confirmed TB cases, European Region, 2020**




*Sources:* 2020 data from the European Surveillance System (TESSy) and 2020 data from the WHO global TB data-collection system. Map production: © WHO.

The percentage of confirmed RR/MDR-TB cases among 35 961 previously treated pulmonary bacteriologically confirmed TB cases whose isolates were tested for first-line DST was 55.2% (Fig. 3.1.3, Table 11 and Table VI).

Fourteen countries/areas had between 15% and 49% RR/MDR-TB among previously treated TB cases tested for first-line DST. The rate was even higher in some HPCs: Belarus (74.5%), the Russian Federation (68.4%), Kyrgyzstan (54%), the Republic of Moldova (53.1%) and Armenia (50%) (Fig. 3.1.5, Table 11).

The rates of RR/MDR-TB notification among new and previously treated patients in 2020 at regional level was 1.6 and 2.2 per 100 000 respectively (Table V, Table VI). A sharp decline in RR/MDR-TB notifications compared to the previous year is the result of the overall drop in TB notifications due to the COVID-19 pandemic.

Trends in the rifampicin-resistant percentage among new bacteriologically confirmed pulmonary TB cases and trends in the notification rate per 100 000 population have differed by country in recent years (Table V). At subregional level, the proportion of rifampicin resistance among new pulmonary TB cases remained stable in the EU/EEA over the last five years, ranging between 2.6% and 2.8%. Similarly, the rate of notified RR/MDR-TB cases remained stable at around 0.1 case per 100 000 population. The rifampicin-resistant percentage among new bacteriologically confirmed pulmonary TB cases in the non-EU/EEA countries and areas increased slightly from 25.7% to 27.8%. Before the pandemic, the RR/MDR-TB notification rate among new TB patients ranged between 3.8 and 4.0 per 100 000 population, with no sign of a decreasing trend. In 2020, the RR/MDR-TB notification rate per 100 000 population declined to 3.1 per 100 000 population during the same period.

Forty-four countries reported on DST data to fluoroquinolones among pulmonary RR/MDR-TB patients in 2020. Data on DST to fluoroquinolones were available for about 94.3% of all notified pulmonary RR/MDR-TB cases. Of the 32 851 pulmonary RR/MDR-TB cases subjected to DST to fluoroquinolones, 10 819 (32.9%) were pre-XDR-TB (Table 12).

Nineteen countries additionally reported DST results for any other Group A drugs among the pre-XDR-TB patients. Of 3898 pre-XDR-TB patients tested for resistance against any other Group A drugs, the prevalence of XDR-TB was 6.5% at regional level (Table 12). In EU/EEA countries, where 71.3% of pre-XDR-TB cases were tested for Group A drugs, the prevalence of XDR among pre-XDR cases was 45.1%, while in non-EU/EEA countries and areas where DST coverage to other Group A drugs was only 35.7%, the XDR prevalence among pre-XDR patients was 5.7%. Among

**Fig. 3.1.3.** Percentages of RR/MDR-TB among laboratory-confirmed pulmonary TB cases, European Region, 2016–2020

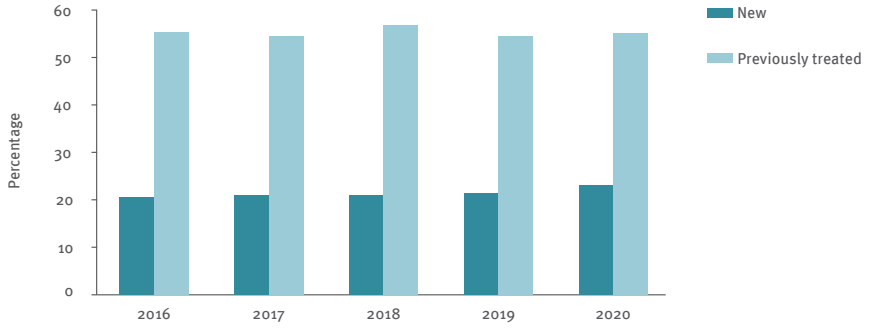



**Fig. 3.1.4.** Percentages of RR/MDR-TB among laboratory-confirmed pulmonary TB cases by previous treatment history, EU/EEA, 2016–2020

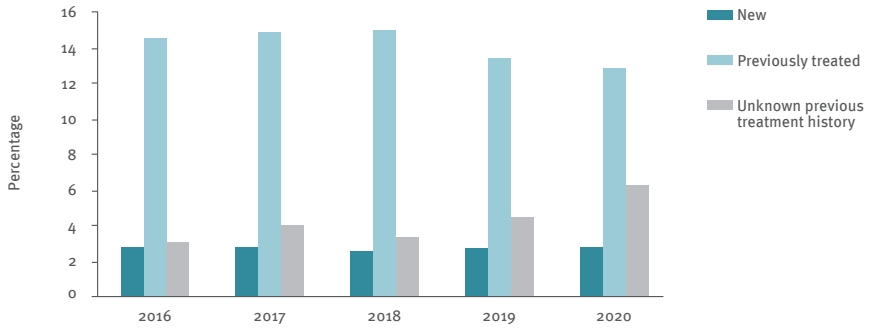
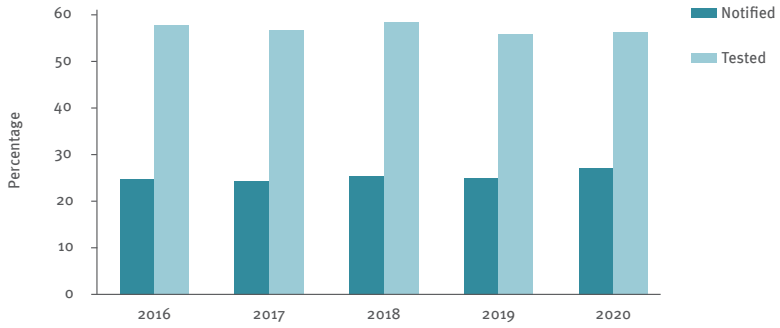



**Fig. 3.1.5.** Percentages of RR/MDR-TB among laboratory-confirmed pulmonary TB cases, 18 HPCs, 2016–2020




countries and areas reporting at least 30 pre-XDR cases with Group A DST results, three reported over 20% XDR prevalence among pre-XDR-TB cases: Lithuania (35.3%), Georgia (28.6%) and Tajikistan (25.6%).

There is no clear trend in relation to pre-XDR-TB prevalence in countries and areas with a long history of DST surveillance for fluoroquinolones among pulmonary RR/MDR-TB cases. In most, the pre-XDR percentage varies widely from year to year, but at regional level, pre-XDR prevalence among RR/MDR-TB cases slightly increased over the past four years, from 25.6 in 2017 to 32.9% (Table VIII).

A total of 32 544 RR/MDR-TB and 11 979 pre-XDR-TB patients were enrolled in respective treatment programmes. The number of cases starting RR/MDR-TB treatment in 2020 exceeded the total number of patients notified during the same period, as many of the HPCs have reported higher numbers of cases enrolled than detected. The reasons for such discrepancies include incomplete reporting, backlogs of RR/MDR-TB patients, frequent treatment failures and treatment interruptions leading to re-enrolment of the same patients in the same yearly cohort, and weakness of surveillance. Four HPCs reported a gap of over 5% between the number of RR/MDR-TB patients diagnosed

and the number enrolled in RR/MDR-TB treatment (treatment coverage): Tajikistan (82%), Azerbaijan (89.3%), Kyrgyzstan (93.7%) and Belarus (94%) (Table 13).

In 2020, access to XDR-TB treatment at regional level was 83.5%. Seven HPCs (Azerbaijan, Belarus, Estonia, Georgia, Kyrgyzstan, the Russian Federation and Tajikistan) reported an over-5% gap in XDR-TB treatment coverage.

### 3.1.8 TB/HIV coinfection

Thirty-nine countries/areas provided surveillance data on TB/HIV coinfection (Table 14). Of the 141 960 new and relapse TB patients notified in the reporting countries/areas, 131 428 (92.6%) were screened for HIV. Twelve HPCs achieved a testing level above 90%: Armenia, Azerbaijan, Belarus, Estonia, Kazakhstan, Kyrgyzstan, Lithuania, the Republic of Moldova, the Russian Federation, Tajikistan, Ukraine and Uzbekistan. A total of 19 663 TB cases were detected with HIV-positive status, representing 15% of those tested, compared with 14.3% recorded in 2019.

Among countries/areas reporting representative HIV testing (above 50% HIV testing coverage), four documented a significant overlap in the HIV and TB epidemics by exceeding 10% HIV prevalence among new and relapse TB cases (Table 14): the Russian Federation (24.2%), Ukraine (21.8%), the Republic of Moldova (12.9%) and Armenia (10.6%). Six countries with representative routine surveillance had 5–10% HIV prevalence among TB patients: Portugal (9.9%), Spain (9.7%), Estonia (9.7%), Israel (9.5%), Belarus (8.9%) and Kazakhstan (6.5%).

Twenty-six countries/areas in the Region provided information on ART enrolment among TB cases with HIV-positive status in 2020. Of 19 312 HIV-positive TB cases, 14 351 (74.3%) had received ART. This is slightly lower than in 2019 (75.8%) and still below the WHO target of universal ART coverage. Eight HPCs achieved ART coverage of over 90%: Azerbaijan, Belarus, Bulgaria, Estonia, Georgia, Kazakhstan, Tajikistan and Ukraine.

### 3.1.9 Country of origin

TB patients of foreign origin represent 9.4% of all TB cases notified Region-wide: 33% in EU/EEA countries and 4.3% in non-EU/EEA countries and areas (Table 9, Fig. 3.1.6). TB patients of foreign origin represent a large majority in several countries: Liechtenstein (100%), Malta (97.9%), Iceland (91.7%), Sweden (86.6%), Cyprus (86.1%), Luxembourg (85.3%), Israel (84.8%), Norway (81.3%), the Netherlands (72.4%), Denmark (72.1%), Switzerland (71.3%) and the United Kingdom (70.1%).

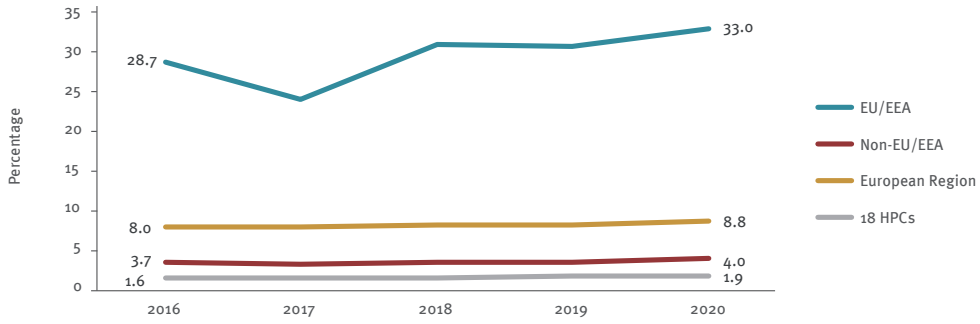
### 3.1.10 TB in prisons

Twenty-three countries/areas in the Region provided information on TB case detection and treatment in prisons during 2020 (Table 15). Overall, 6887 (5.6%) of new and relapse TB cases in the Region were reported from prisons, with 6723 (97.6%) of these in the HPCs. The proportion of TB cases in prisons represented about 0.9% of the country total in EU/EEA countries; in non-EU/EEA countries and areas, the proportion was 6.2%. The notification rate in prisons in the non-EU/EEA countries and areas was 735 new TB cases per 100 000 population, which is over five times higher than in the EU/EEA subregion (137 per 100 000). The overall notification rate for new TB cases in prisons in the WHO European Region was 628 per 100 000 population. The TB notification rate exceeded 1000 cases per 100 000 detainees in three countries: the Republic of Moldova, the Russian Federation and Ukraine. The highest TB-related risks in prison (relative to incidence in the general population) are calculated to be in Ukraine (RR 27.6) followed by the Russian Federation (RR 27.1), the Republic of Moldova (RR 25.2) and Azerbaijan (RR 19.0).

### 3.1.11 Treatment outcome

The treatment success rate among 162 955 new and relapse TB cases having started treatment with first-line drugs in 2019 was 76.5% (Table 16). In the HPCs, the average rate of cases cured or for whom treatment was completed was 78.2%. The treatment success rate was lower in the EU/EEA countries than in non-EU/EEA countries and areas (71.8% versus 77.5%), both showing results comparable with the previous year. Only 13 countries achieved an 85% treatment success rate in this treatment cohort. Another 11 were close to the target, with success rates of 80–85%. Eight countries had treatment success rates below 60%, with a very high proportion of cases not being evaluated.

**Fig. 3.1.6. TB cases of foreign origin, 2016–2020**



A total of 13 265 (8.1%) cases were reported to have died in the same cohort, 4.7% to have been lost to follow-up and 3.7% to have had treatment that failed. These unfavourable outcomes were lower in the EU/EEA countries than in the rest of the Region, exemplified by the proportion of patients with failed treatment – 0.8% in the EU/EEA versus 4.3% in non-EU/EEA countries and areas (Table 16). Countries reporting fatal outcomes in excess of 10% were Slovenia (22.4%), Andorra (20%), Estonia (16.7%), Hungary (13.2%), Croatia (11.9%), Czechia (11.2%) and the Russian Federation (10.9%).

The treatment success rate among the 5007 child TB cases (aged 0–14 years) in the 2019 cohort was 88.8% (Table 18). The treatment success rate in EU/EEA countries was remarkably lower than in the non-EU/EEA countries and areas (77% versus 92.8%). Among child TB cases in the Region, 1% died, another 1% failed and 1% were lost to follow-up.

Of the 17 490 TB/HIV coinfected patients who started treatment throughout the Region in 2019, only 9587 (54.8%) had a successful treatment outcome (Table 20).

In the 2018 cohort, treatment outcome was notified for 47 707 laboratory-confirmed RR/MDR-TB cases reported by 42 countries (Table 22). The treatment success rate for the whole Region was 55.9%, which is slightly lower than the 58.6% rate reported for the 2017 RR/MDR-TB treatment cohort. The treatment success rate for RR/MDR-TB patients was higher in non-EU/EEA countries and areas than in the EU/EEA (56% versus 52.4%). In the Region as a whole, 14.5% of RR/MDR-TB cases died, 12.8% failed and 11.3% were lost to follow-up.

### 3.1.12 Conclusions for the WHO European Region

Analysis of 2020 routine surveillance data indicated that the remarkable progress in containing the burden of TB in the Region observed between 2015 and 2019 was halted in 2020 by the COVID-19 pandemic. As of December 2020, the WHO European Region has been the global epicentre of the COVID-19 pandemic, accounting for 31% of COVID-19 cases and deaths *(3)*. TB services were disrupted because diagnostic and clinical services were repurposed and health workers reallocated to COVID-19. In addition, there were changes in patients' health-care-seeking behaviour influenced by the restrictions on movement imposed by authorities, concerns about the risks of going to health facilities during the pandemic and stigma associated with similarities in symptoms between TB and COVID-19. As a result, the pace of decline in TB mortality and TB incidence slowed, far fewer people were diagnosed and treated for TB and remarkably fewer people were tested for drug resistance and enrolled into RR/MDR-TB treatment.

Despite these challenges, the progress made over the first four years of the action plan were sufficient for the Region to achieve the regional action plan target of reducing the TB incidence rate in 2020 by 25% and achieving the End TB Strategy milestone of reduction of TB incidence by 20% against the 2015 baseline *(4)*.

For the first time in over two decades, the downward trend in the number of TB deaths was halted in 2020 as a consequence of delay in, or lack of, TB diagnosis due to disruption to TB services, leading to increased severity of disease and an associated increase in deaths. This compromised the achievement of the End TB Strategy milestone on reduction of number of TB deaths. The actual reduction in absolute number of TB deaths in 2020 compared to 2015 was only 26% against the targeted 35%. Modelling projections suggest that the impact of disruptions caused by the pandemic on the number of people developing TB and dying from the disease could be much worse in 2021 and 2022 *(5,6)*. Detailed analysis of the status of the action plan indicators against the target is provided in Chapter 4.

Other impacts associated with the COVID-19 pandemic in the Region include a 17.7% reduction in the number of RR/MDR-TB patients detected and enrolled into treatment. On a more positive note, treatment outcome of new and relapse TB patients remained comparable in the 2019 cohort compared to the 2018 cohort and there was no evidence of a significant reduction in treatment success. This was enhanced by adaptation of service delivery modes to mitigate the pandemic impact, including reducing frequency of outpatient visits for treatment monitoring or collection of anti-TB drugs, allowing TB patients to take a one-month (or longer) supply of anti-TB drugs home, expanded use of remote advice and support, and home delivery of anti-TB drugs *(7)*.

There is a need to introduce and/or scale up innovative and adaptive models of care to address the challenges posed by the COVID-19 pandemic and ensure quality and timely TB services are provided despite the ongoing pandemic. Actions and innovative solutions need to be implemented to reverse the impact of the COVID-19 pandemic to restore provision of diagnostic, treatment and preventive services to pre-pandemic levels. National health programmes and health authorities need to work with community representatives and partners to maintain TB diagnostic, treatment and preventive services and build synergies between COVID-19 and TB services. Revamping political commitment, allocating adequate national and international resources and implementing innovative approaches are crucial to avoiding losing the gains of the past decade.

## 3.2 EU/EEA countries

### 3.2.1 Data completeness

TB notification data for 2020 were reported by 29 of 30 countries (there were no data from Latvia for 2020). The reporting of non-mandatory variables in 2020 was complete or near complete (above 95%) for age, gender, TB site and variables defining the origin of a case (Annex 3). Overall, previous treatment history was available for 83.2% of cases reported in 2020, but completeness ranged from below 70% in six countries (Croatia 4.4%, France 54.2%, Iceland 0%, Ireland 52.1%, Liechtenstein 50% and Spain 64.9%) to 100% in 12 countries (Annex 3).

Among TB cases reported in 2020, 81% had culture results reported (Annex 3), which was a similar proportion to that reported in 2019 (81.1%). Eight countries had fewer than 75% of cases with culture results reported: France (52.7%), Iceland (50%), Ireland (74.6%), Italy (66%), Liechtenstein (50%), Malta (30.7%), Portugal (65.3%) and Spain (72.5%). Reporting completeness for microscopy in 2020 (82.8%) was comparable to 2019 data (83%) and ranged from 36.3% in Ireland to 100% in Lithuania and Liechtenstein. For 2020, drug-susceptibility reporting completeness was 71.4% for first-line drugs (isoniazid and rifampicin). Completeness of DST reporting for at least one second-line drug (including bedaquiline, moxifloxacin and levofloxacin) was 100% for the 22 countries that reported at least one RR/MDR-TB case (Annex 3).

The number of countries reporting HIV status remained constant, with only 19 (of 29) reporting HIV status in both 2020 and 2019. This is a decline compared to 2018, when there were 21 (of 30) reporting and 2017, when there were 23 (of 31). HIV status was available for only 39.3% of all TB cases reported in 2020, but 12 countries reported HIV status for more than 75% of their TB cases (Annex 3).

### 3.2.2 Time and place

In 2020, 33 148 cases of TB were reported in 29 EU/EEA countries (Table 3). The number of cases reported in Romania (7698) accounted for 23.2% of all TB cases reported in 2020.

The EU/EEA notification rate in 2020 was 7.3 per 100 000 population (Table 3), continuing the downward trend observed since the launch of European enhanced TB surveillance in 1996 (Fig. 3.2.1). During the period 2016–2020, the average annual decline in the notification rate was 11.6% (Table 3).

As reported for previous years, country-specific notification rates differed considerably in 2020, ranging from 2.9 per 100 000 population in Slovakia to 39.8 per 100 000 in Romania (Table 3). Rates were below 10 per 100 000 in 24 countries, but above 25 per 100 000 in three: Lithuania 26.0 per 100 000, Malta 27.2 and Romania 39.8.

Compared with 2016, notification rates have fallen in 26 countries (Table 3). The annual rate of decrease exceeded 10% in 16 countries, with the downward trend being particularly pronounced in Croatia, Hungary, Lithuania and Sweden, where the average annual rate of decrease exceeded 15%.

### 3.2.3 Previous treatment, laboratory confirmation and TB site

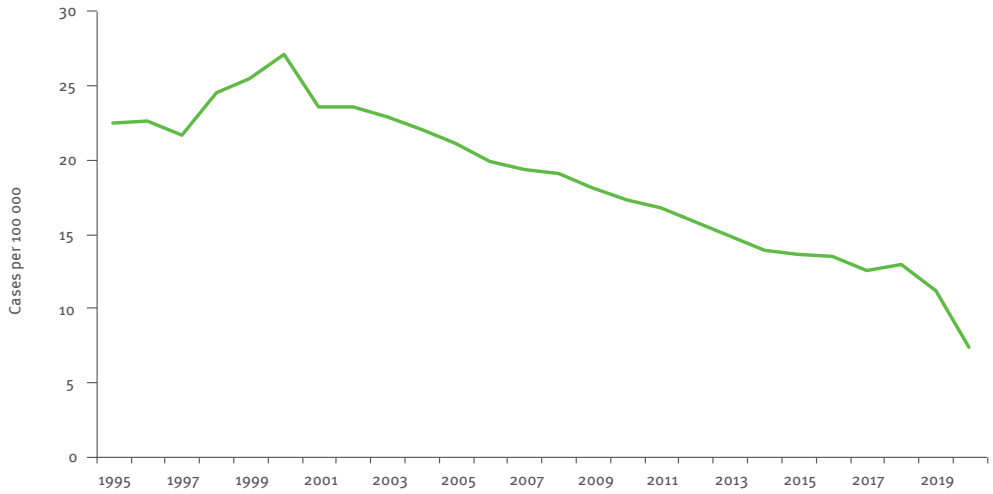
The distribution of cases by previous treatment history was similar in 2020 to that reported in previous years: 24 139 (72.8%) of 33 148 TB cases reported in 2020 were newly diagnosed, 3451 (10.4%) had previously been treated for TB and 5558 (16.8%) had unknown previous treatment status (Table 4). The proportion of previously treated cases was over 10% in eight countries: Bulgaria, Estonia, Hungary, Lithuania, Norway, Poland, Romania and Slovakia.

Of all 33 148 TB cases reported in 2020, 23 640 (71.3%) were diagnosed with pulmonary TB, 7117 (21.5%) with extrapulmonary TB, 2116 (6.4%) with a combination and 275 (0.8%) had no TB site reported (Table 5). The proportion of extrapulmonary TB was above 30% in eight countries: Belgium (30.8%), Finland (32.2%), France (30.9%), Liechtenstein (100%), the Netherlands (45.6%), Norway (38.1%), Portugal (30.2%) and Sweden (36.9%).

Of 24 618 new and relapse pulmonary TB cases reported in 2020, 20 191 (82%) were confirmed by culture and/or smear and nucleic acid amplification test (Table 6). Over 30% of reported new and relapse pulmonary TB cases were diagnosed clinically in five countries: Bulgaria (38.1%), Hungary (47%), Iceland (44.4%), Malta (47.5%) and Slovakia (43.1%).

According to the EU case definition, 22 301 (67.3%) of 33 148 TB cases reported in 2020 are classified as confirmed, 3691 (11.1%) as probable and 7156 (21.6%) as

**Fig. 3.2.1. TB notification rate per 100 000 population by year of reporting, EU/EEA, 1995–2020**




*Source:* ECDC *(3)*.

possible cases (Table 7). The proportion of laboratory-confirmed TB cases remained stable in 2020 compared to 2019 (67.1%) and 2018 (68.2%). Country-specific proportions of laboratory-confirmed cases ranged from 30.7% in Malta to 94.8% in Slovenia, but over 75% of reported cases were laboratory-confirmed in 15 countries. Conversely, six countries reported over 40% of their TB cases as possible cases (that is, only clinically diagnosed): Bulgaria (43.1%), France (40.8%), Hungary (48.3%), Iceland (50%), Malta (51.4%) and Slovakia (41.1%). The high proportion of clinically diagnosed cases may reflect underreporting of laboratory results to national surveillance systems in these countries, or could indicate that TB may be overdiagnosed in these countries.

### 3.2.4 Age and sex

Of 31 551 new and relapse TB cases reported in 2020, 20 448 (64.8%) were aged between 25 and 64 years and 6152 cases (19.5%) were in adults aged over 64 years (Table 8). Notification rates were similar among the 15–24 and 45–64 years age groups (7.8 and 7.9 per 100 000 population, respectively), slightly higher among the 25–44 years age group (9.0 per 100 000 population) and slightly lower among those aged over 64 years (6.6 per 100 000 population).

There was variation in the age distribution of cases between countries. In most, the cases were predominantly aged between 25 and 64 years, but cases were younger in Malta (42.9% were aged between 15 and 24 years) and older in Croatia, Estonia, Finland and Slovenia (where over 30% of cases were aged over 64 years (Table 8)).

Children under 15 years accounted for 1218 (3.8%) of 31 551 new and relapse TB cases reported in 2020 (Table 8). Children aged between 5 and 14 years had the lowest notification rate of all age groups, at 1.5 per 100 000 population. Malta reported the highest notification rates among children under 15 years: 16.7 cases per 100 000 children aged 0–4, and 6.6 cases per 100 000 aged between 5 and 14 (Table 8).

In 2020, the male-to-female ratio in new and relapse TB cases was 2 : 1. (Table 8), which was higher than the ratio reported in (male-to-female ratio was 1.8 : 1). In 26 of 29 EU/EEA Member States, more new and relapse TB cases were reported among males than females. Norway reported slightly more female than male cases (male-to-female ratio was 0.8 : 1), while Liechtenstein and Iceland reported an equal ratio. For children under 15 years, the male-to-female ratio among new and relapse cases was almost equal.

### 3.2.5 Origin of cases

Of the 33 148 TB cases notified in 2020, 20 991 (63.3%) were born in, or were citizens of, the reporting country (referred to as “native”), 10 942 (33%) were of foreign origin and 1215 (3.7%) were of unknown origin (Table 9). Of the 10 942 cases of foreign origin in 2020, 71.6% (7839) were reported by only four countries (France, Germany, Italy and Spain). Country-specific proportions of foreign-origin TB cases ranged from below 1% in three countries (Bulgaria, Croatia and Romania) to above 85% in six (Cyprus, Iceland, Liechtenstein, Luxembourg, Malta and Sweden). The overall proportion of native TB cases increased slightly from 62.8% in 2019 to 63.3% in 2020 (Table 9).

### 3.2.6 Drug resistance

Annex 5 displays participation and performance in an EQA scheme for DST by Member State.

Of 19 190 bacteriologically confirmed TB cases notified in 2020, 14 997 (78.2%) had DST results reported for at least rifampicin (Table 10). The proportion of cases with DST results reported for at least rifampicin varied by country, ranging from 3.4% in France to 100% in nine countries (Cyprus, Denmark, Estonia, Iceland, Lithuania, Malta, Norway, Slovenia and Sweden). Among the pulmonary cases with rifampicin DST results, 649 (4.3%) were RR-TB and 566 (3.8%) were reported as MDR-TB.

The proportion of MDR-TB cases varied by country (Table 10). Eight countries reported no MDR-TB cases in 2020, while a further 11 reported that the proportion of MDR-TB cases (among cases with DST results) was below 2%. France reported 100% of cases with DST results as RR/MDR-TB, but DST results are only reported for RR/MDR-TB cases in France. The highest proportion of MDR-TB cases (among cases with DST results) was reported by Estonia and Lithuania, with 19.4% and 16.7% reported as MDR-TB, respectively.

The proportion of RR/MDR-TB among all bacteriologically confirmed pulmonary TB cases with DST results for rifampicin was 4.2% (595 of 14 134 (Table 11)). When the data were analysed by previous treatment history, the proportion of RR/MDR-TB was higher among previously treated cases (12.8%, 260 of 2035) than new cases (2.8%, 335 of 12 099).

In 2020, 64.3% of RR/MDR-TB cases (417 of 649) had DST results for any fluoroquinolone (Table 12). Among these, 115 (27.6%) met the definition for pre-XDR. Of all pre-XDR cases, the majority were reported by Lithuania (32.7%, 34 cases) and Romania (28.1%, 27 cases). The majority (71.3%, 82 of 115) of pre-XDR cases had DST results reported for at least one other Group A drug (Table 12). Among these cases, 37 (45.1%) met the new XDR case definition. All XDR-TB cases were reported by only eight EU/EEA countries: Belgium (2.7%, one case), Czechia (10.8%, four), Estonia (16.2%, six), Germany (16.2%, six), Lithuania (32.4%, 12), Poland (10.8%, four), Romania (5.4%, two) and Sweden (5.4%, two).

### 3.2.7 TB/HIV coinfection

HIV status was reported for 12 327 (73.4%) of 16 804 TB cases reported from the 19 countries that reported HIV status of TB cases (Table IX). Of the cases with known HIV status, 515 (4.2%) were reported as HIV-positive. Among the 15 countries with at least 50% reporting completeness for HIV status, the proportion of coinfected cases was highest in Estonia (9.7%), Hungary (11.8%) and Portugal (9.9%). The trend in the proportion of HIV-coinfected TB cases decreased from 4.5% in 2016 to 4.2% in 2020, but

the proportion of coinfected cases in 2020 was higher than in 2019 (3.9% (Table IX)).

### 3.2.8 TB in prisons

For 2020, 13 EU/EEA countries reported 266 new and relapse TB cases in prisons, resulting in a notification rate of 137 per 100 000 prison population and a RR of 9.3 compared to the general population in the same countries (Table 15). Overall, TB cases in prisons accounted for 0.9% of all new and relapse cases notified in the 13 reporting EU/EEA countries, with the proportion being highest in Luxembourg (3.3%).

### 3.2.9 Treatment outcome

Of all 28 985 new and relapse TB cases notified in 2019 with a treatment outcome reported in 2020, 20 797 (71.8%) were treated successfully, 2192 (7.6%) died, 230 (0.8%) experienced treatment failure, 1069 (3.7%) were lost to follow-up, 667 (2.3%) were still on treatment in 2020 and 4030 cases (13.9%) were not evaluated (Table 16). Among the 23 countries that reported treatment outcome for the 2019 cohort, eight reported successful treatment for over 80% of cases: Belgium (80.8%), Bulgaria (81.8%), Iceland (100%), Lithuania (87.1%), the Netherlands (86.3%), Norway (84.6%), Romania (83.7%) and Slovakia (93.8%). In contrast, five countries reported death as the outcome for over 10% of cases: Croatia (11.9%), Czechia (11.2%), Estonia (16.7%), Hungary (13.2%), and Slovenia (22.4%) (Table 16).

Treatment success among the 1021 previously treated TB cases notified in 2019 was 51.2% (Table 17), which was lower than the treatment success among new and relapse cases. A higher proportion of previously treated cases were reported to have treatment failure (7%) or to have died (8.8%) compared to new and relapse cases.

Treatment outcome at 12 months was also reported for 639 HIV-positive TB cases who were notified in 2019 (Table 20). Of these, 352 (55.1%) were reported as successfully treated, 59 (9.2%) died, four (0.6%) experienced treatment failure, 44 (6.9%) were lost to follow-up, 51 (8%) were still on treatment in 2020 and 129 (20.2%) were not evaluated (Table 20).

Of 927 RR/MDR-TB cases notified in 2018 with a treatment outcome reported in 2020, 486 (52.4%) were treated successfully, 134 (14.5%) died, 97 (10.5%) experienced treatment failure, 109 (11.8%) were lost to follow-up, 51 (5.5%) were still on treatment in 2020 and 66 (7.1%) were not evaluated (Table 22). Only five of the 18 countries that had reported RR/MDR-TB cases in 2018 and treatment outcomes in 2020 had treatment success above the target of 75%: Austria (83.3%), Belgium (77.8%), the Netherlands (83.3%), Norway (83.3%) and Sweden (100%). The 24-month treatment success rate for RR/MDR-TB was higher among the 2018 cohort (52.4%) than in previous cohorts: treatment success was below 50% for cases reported between 2014 and 2017 (Table XI).

Among the 211 cases categorized as pre-XDR-TB notified in 2018 with treatment outcome at 24 months reported in 2020, 70 cases (33.2%) were reported as having treatment success, while 42 (19.9%) were reported to have died and 43 (20.4%) had treatment failure (Table 23). Treatment success among the pre-XDR-TB cohort over the previous five years (2014–2018) had been below 35% each year (Table XII).

In 2020, treatment outcome at 36 months for XDR-TB cases notified in 2017 was reported by seven countries, with a total of 26 XDR-TB cases. Fourteen countries reported zero XDR-TB cases in 2017. Among the 26 XDR-TB cases, 10 (38.5%) were treated successfully, four (15.4%) died, one (3.8%) experienced treatment failure, two (7.7%) were lost to follow-up and nine (34.6%) were not evaluated (Table 24).

### 3.2.10 WHO disease burden estimates

According to WHO, the estimated TB incidence in the EU/EEA overall (excluding Liechtenstein) was 9.5 per 100 000 population in 2020 (Table 1 and Table II). Of the 29 countries with estimates, 22 had an estimated incidence of fewer than 10 per 100 000 population (Table 1 and Table II). The overall number of estimated TB deaths, excluding HIV deaths in people who were HIV-positive, was 3800 for the EU/EEA in 2020, the same as estimated for 2019 (3800) and a reduction of approximately 25% on the 5100 estimated for 2011 (Table I).

### 3.2.11 Conclusions for the European Union/ European Economic Area

In 2020, 29 of 30 EU/EEA countries reported TB notification data and a total of 33 148 TB cases. There was a further decline in the overall TB notification rate to 7.3 per 100 000 population, which continued the decreasing trend observed since 2002. As in previous years, a few countries reported a large proportion of the total number of cases, including Romania, which reported almost a quarter of all TB cases in 2020.

The decline in total case numbers and notification rates in 2020 should be interpreted with caution, given the potential impact of measures put in place to mitigate the COVID-19 pandemic on TB clinical services and surveillance across the EU/EEA. A survey was conducted alongside the 2020 TB data submission, asking EU/EEA Member States about the impact of the COVID-19 pandemic specifically on the 2020 TB surveillance data collection. Of the 26 EU/EEA Member States that responded, five countries indicated that there was, or may have been, a change in the representativeness of 2020 surveillance data within their countries due to the impact of lockdowns and other measures on TB clinical services. A reduction in completeness of TB data was reported by four countries in the survey. Three respondents indicated that TB data collection could not be prioritized over COVID-19 clinical work, which particularly impacted collection of treatment outcome variables. The analysis of data completeness (presented in Annex 3) indicated decreased completeness across 11 of the 17 variables in 2020 compared with 2019, most notably for previous treatment history, diagnosis antemortem, DST for first-line drugs, enrolment in treatment and outcome at 12 months.

The diversion of TB resources, whether clinical, laboratory or public health (including surveillance and contact tracing), to COVID-19 activities was the key issue identified in the survey when Member States were asked about the general impact of the pandemic on TB clinical services and surveillance data collection. It was suggested by some Member States that difficulties in patients accessing clinical services, either due to lockdown/movement restrictions or overburdened health services, alongside fear of contracting COVID-19, may have resulted in delayed presentation and/or diagnosis of some TB cases during 2020. Delayed diagnosis may have resulted in more severe illness at time of diagnosis for some cases. In addition, delayed treatment of pulmonary cases, along with decreased contact-tracing resources for TB, may have led to more TB transmission. As such, it is hypothesized that there may be an increase in the number and clinical severity of cases in the coming years.

If the decline in TB incidence during 2020 was real and not just an artefact of the COVID-19 pandemic, it would indicate ongoing progress towards reaching the United Nations Sustainable Development Goal 3 target of an 80% reduction in the TB incidence rate in 2030 compared to 2015. The target at EU/EEA level is a notification rate of 2.4 per 100 000 population (based on an 80% reduction of the 2015 TB notification rate of 11.9 per 100 000 population). The decline observed in 2020 would indicate progress is being made, but at the current rate of decline, most EU/EEA countries are still not on track to reach the 80% reduction target by 2030 or the elimination target by 2050 *(8)*. Additional resources may be required to accelerate progress towards achieving these goals and to counteract any increase in TB cases resulting from the impact of the COVID-19 pandemic on TB services.

The number of drug-resistant TB cases in the EU/EEA continued to decrease in 2020, despite the high number of drug-resistant TB cases in the European Region HPCs bordering the EU/EEA. DST results for first-line drugs were only reported for approximately 70% of laboratory-confirmed TB cases in 2020. This shows a decline from almost 75% of laboratory-confirmed TB cases in 2019, indicating considerable room for improvement in DST testing. The definitions of "drug-resistant TB" changed in 2020, with the introduction of a "pre-XDR-TB" definition and a change to that for "XDR-TB", although "MDR-TB" remained unchanged *(9)*. Pre-XDR-TB is defined as TB that fulfils the definition of RR/MDR-TB (resistance to at least rifampicin) and which is also resistant to any fluoroquinolone. The new definition for XDR-TB includes cases that meet the definition for pre-XDR-TB (resistance to rifampicin and any fluoroquinolone) as well as having resistance to any other Group A drug. Changes to these definitions, along with the updated WHO treatment guidelines for drug-resistant TB *(10)*, emphasize the need for DST against second-line drugs, particularly fluoroquinolones, bedaquiline and linezolid.

Overall, it is reassuring that TB incidence continued to decline across the EU/EEA in 2020 and that a low proportion of drug-resistant cases was reported, but there is still considerable work ahead to achieve the United Nations Sustainable Development Goals target. With the disruption caused by the COVID-19 pandemic during 2020, it is now critical that TB services are prioritized and appropriately resourced to support intensified public health measures against TB. ECDC remains committed to supporting EU/EEA countries in ending the TB epidemic.

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# 4. Commentary – monitoring

# 4.1 WHO European Region

The final year covered by the *Tuberculosis action plan for the WHO European Region 2016–2020* was 2020. The plan was developed by the WHO Regional Office for Europe in close consultation with representatives from countries, experts and communities and was endorsed at the 65th meeting of the WHO Regional Committee for Europe through resolution EUR/RC65/17 *(1)*. The monitoring report summarizes the status of the indicators of the action plan according to the targets set by the monitoring and evaluation framework that was established to monitor the performance of the action plan's areas of intervention. A selection of indicators was harmonized with the End TB Strategy's recommended top 10 global indicators. The action plan will be superseded by the new TB action plan for the WHO European Region 2023–2030 that will be submitted to the 72nd session of the WHO Regional Committee for Europe in 2022.

## 4.1.1 Monitoring of indicators

### Indicator 1.A.1 Coverage of population at risk with systematic screening for active TB and latent TB infection

The WHO global TB database collects information only on coverage of TB screening outcomes among the household contacts of bacteriologically confirmed TB cases. In 2020, 19 countries reported on coverage of TB screening among household contacts. Overall, 98% of household contacts were screened for TB. All 10 HPCs that provided data achieved the targeted 80% of screening coverage.

### Indicator 1.B.1 Percentage of newly notified TB patients diagnosed using WHO-recommended rapid tests (G)[15]

No baseline data were available. The target was first set to 30% and later updated to 90%, based on the global targets for the End TB Strategy. In 2020, 45 countries reported data on the proportion of newly notified patients diagnosed using WRD. As is shown in Fig. 4.1.1, the target at regional level has not been achieved: only 72% of new and relapse cases were diagnosed using WRD. This figure was higher for the 18 HPCs, reaching 81%. Of these, five met the target, 11 did not meet the target and two (Latvia and Turkey) did not provide information. At EU/EEA subregional level, only 34% of cases were diagnosed using rapid tests (Fig. 4.1.1).

### Indicator 1.B.2 First-line DST coverage (%) among all bacteriologically confirmed TB cases (G)

The action plan aimed to ensure provision of DST for all bacteriologically confirmed TB cases. In 2020, 50 countries/areas reported routine surveillance data on DST. Coverage of DST among all bacteriologically confirmed TB cases was 92%. In all, 14 of 16 HPCs had DST coverage above 90% (Fig. 4.1.2). Latvia and Turkmenistan did not report complete routine drug-resistance surveillance data.

### Indicator 1.B.3 RR/MDR-TB case-detection rate (%) (G)

In 2020, 34 832 RR/MDR-TB cases were detected among bacteriologically confirmed pulmonary TB patients notified in the WHO European Region. This is 94% of all estimated cases, indicating comprehensive RR/MDR case detection among notified patients at regional level. However, considering that on average 45 000 RR-TB/MDR-TB patients were enrolled in treatment annually in the WHO European Region between 2015 and 2019 without any sign of a decreasing trend, the substantial drop in the number of RR/MDR-TB patients is one of most worrying impacts of the COVID-19 pandemic on overall TB detection in the Region.

### Indicator 1.B.4 TB notification rate per 100 000 population (E)[16]

The regional action plan aims to reduce the TB incidence rate by 25% by 2020 against the 2015 baseline. Before 2020, the trend in TB notification rates was considered a good proxy of TB incidence in the Region. During the period 2015–2019, notification of new and relapse TB cases in the Region declined by 5.1% per year on average. This trend was in line with the annual decrease in the WHO estimated TB incidence for the Region (5.1%), resulting in a 19% reduction in the TB incidence rate between 2015 and 2019, which was the highest decline observed among all WHO regions and on target to meet the 2020 End TB Strategy milestone.

Due to severe disruption to health services caused by the COVID-19 pandemic, however, TB notifications at regional level dropped by 24.6% in 2020 compared to 2019, meaning that many people with TB were not detected by health systems or reported by surveillance systems. Among HPCs, the highest drop was observed in Armenia and the Republic of Moldova (37% each), followed by Romania (34.7%) (Fig. 4.1.3). In this context, the observed decline in TB notifications is no longer relevant for the assessment of performance against the target for this indicator. The impact of COVID-19 resulted in a slowing of the annual decline of TB burden and modelling studies suggested that negative impacts would become much worse in 2021 and beyond *(2)*.

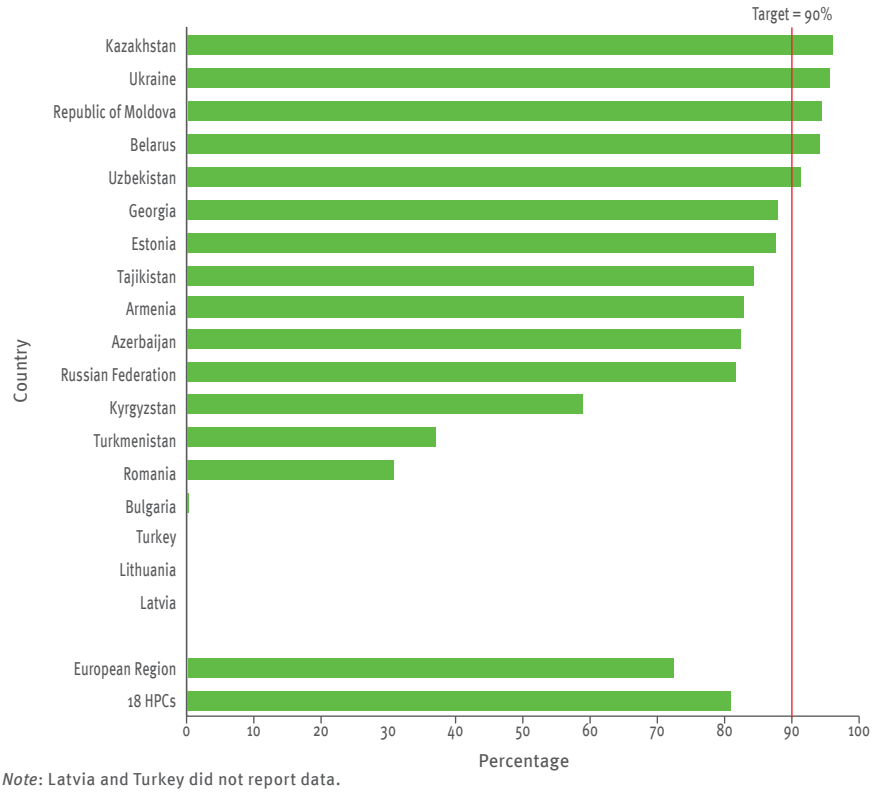
### Indicator 1.B.5 TB case-detection rate (%)

In 2020, 163 602 incident TB cases were notified in 52 countries/areas across the WHO European Region, compared with an estimated 231 000 cases (range: 201 000–264 000). This represents a case-detection rate of 71% (95% CI: 62–81%), which is remarkably lower than the 87%

[15] G (Global) indicates that this indicator belongs to the End TB Strategy's recommended top 10 global indicators.

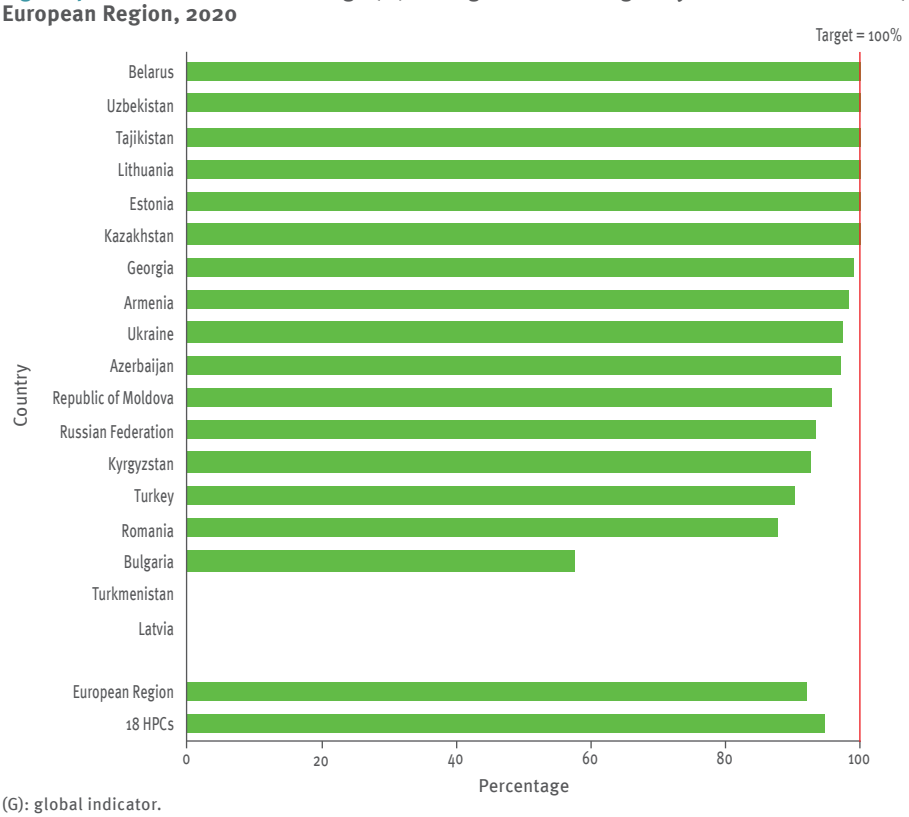
[16] (E) represents a European-level indicator.

**Fig. 4.1.1. Percentage of new and relapse TB patients notified in 2020 who were diagnosed using WRD in 18 HPCs and WHO European Region, 2020**




*Note*: Latvia and Turkey did not report data.

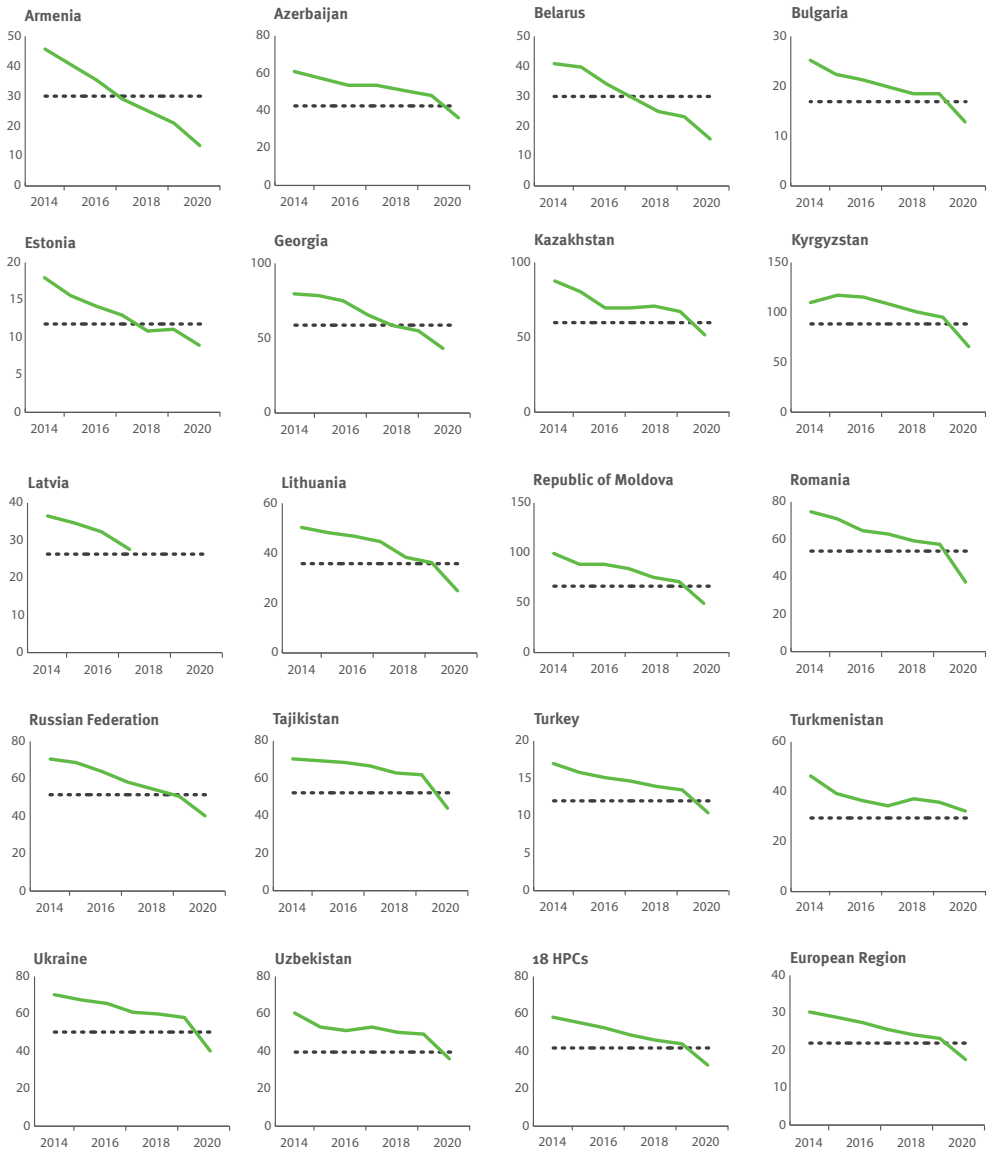
**Figure 4.1.2. First-line DST coverage (%) among all bacteriologically confirmed TB cases (G) by 18 HPCs and WHO European Region, 2020**




(G): global indicator.

*Note*: Latvia and Turkmenistan did not report data.

**Fig. 4.1.3. Trend in new and relapse TB notification rate per 100 000 population (E) for 18 HPCs and WHO European Region, 2014–2020**




Trend for new and relapse TB notification rates

..... The 2020 milestone target of 25% reduction in TB incidence against the 2015 baseline, assuming that notification is the proxy of TB estimated incidence

(E): European indicator.

(95% CI: 72–100%) baseline measured in 2014. Before the COVID-19 pandemic, most of the countries had successfully improved case detection and were on track to increase the number of TB cases detected, but in 2020, the case-detection rate was above 75% in only three of the 18 HPCs.

### Indicator 1.B.6 Percentage of RR/MDR-TB among new TB patients (E)

The regional action plan aims to reduce RR/MDR prevalence among new TB cases. At regional level, the prevalence of RR/MDR-TB among 64 608 new pulmonary TB cases tested with DST results to rifampicin was 23.1%. This is higher than the 18.8% observed in 2015, suggesting that rifampicin resistance is still increasing in the Region. The Region therefore is not on track to reduce the percentage of rifampicin resistance among new TB patients.

In 12 of the 16 HPCs reporting DST data, RR/MDR prevalence among new pulmonary TB cases was higher than, or comparable to, 2015 data. Armenia, Azerbaijan, Romania and Turkey have shown a declining trend in RR/MDR percentage over the past five years. Large year-to-year variation and missing data in several countries indicated that routine drug-resistance surveillance in these countries is challenging and that additional efforts are required to produce quality data (Fig. 4.1.4).

### Indicator 1.B.7 Percentage of RR/MDR-TB among previously treated TB patients

In 2020, the percentage of confirmed RR/MDR-TB cases among previously treated TB patients tested at least for rifampicin was 55.2%, which is higher than the 2015 rate

**Fig. 4.1.4. Trend in RR/MDR percentage among new pulmonary TB cases (E) for 18 HPCs and WHO European Region, 2014–2020**

(E): European indicator.

(46.3%), indicating that the Region is not on track to reduce the RR/MDR-TB burden among previously treated patients.

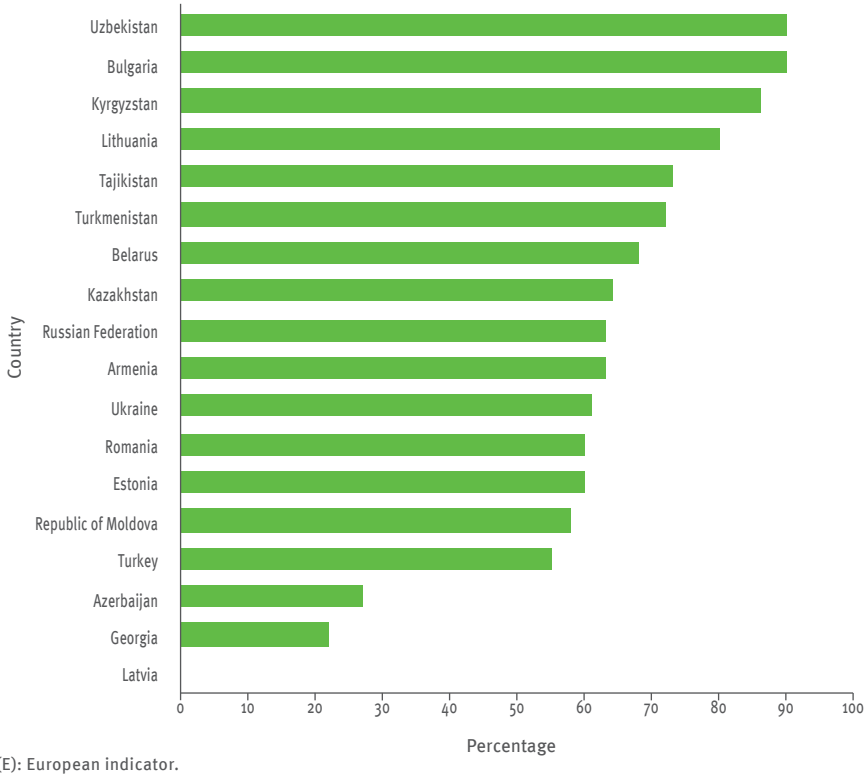
### Indicator 1.C.1 Percentage of hospitalization among new TB patients (E)

In 2020, 32 countries provided information on the percentage of hospitalization among TB patients enrolled in first- and second-line treatment. Hospitalization rates for first-line TB treatment ranged from 22% (Georgia) to 90% (Bulgaria and Uzbekistan). These data suggest that hospitalization remains high in most countries/areas in the Region and additional efforts are required to change the model of care (Fig. 4.1.5).

### Indicator 1.C.2 Percentage of detected RR/MDR-TB enrolled in treatment (G)

Achieving universal second-line treatment coverage for all detected RR/MDR-TB patients is a fundamental requirement for reducing TB transmission in the community and TB-related deaths. The number of cases starting RR/MDR-TB treatment in 2020 was computed to be above 100%, as many HPCs reported higher numbers of cases enrolled in treatment than detected. The reasons for such discrepancies include incomplete reporting, backlogs of RR/MDR-TB patients, frequent treatment failures and treatment interruptions leading to re-enrolment of the same patients in the same yearly cohort, and weakness of TB surveillance. At country level, only four HPCs reported a gap of over 5% between the number of patients enrolled and the number diagnosed: Azerbaijan (89.3%), Belarus (94%), Kyrgyzstan

**Fig. 4.1.5. Proportion of TB patients hospitalized (%) (E) for 18 HPCs, 2020**




(E): European indicator.
*Note*: Latvia did not report data.

(93.7%) and Tajikistan (82%). The other 13 demonstrated universal treatment coverage.

### Indicator 1.C.3 Treatment success rate (%) among all new and relapsed TB patients (G)

Effective TB treatment is essential to prevent death and cut transmission. The treatment success rate serves as a key indicator for monitoring progress towards the End TB Strategy. According to the action plan, the WHO European Region needs to increase the treatment success rate for new and relapse TB cases to at least 85%.

In 2019, the treatment success rate for new and relapse patients enrolled in treatment at regional level was 76.5%, compared to the baseline rate of 73%. Only six of the 17 HPCs reporting data achieved the targeted level of an 85% treatment success rate. Another six HPCs showed a trend towards improvement in treatment success (Fig. 4.1.6).

### Indicator 1.C.4 Treatment success rate (%) in the MDR-TB treatment cohort (G) (E)

Treatment success rate is an indicator of high-quality TB care. Despite the treatment success rate having increased from 48.7 to 55.9% over the past five years, it remains far below the 75% target set in the action plan. Of the 18 HPCs, only Kazakhstan and Estonia achieved the benchmark of having a treatment success rate of at least 75% for RR/MDR-TB patients (Fig. 4.1.7.). Another 10 HPCs increased their RR/MDR-TB treatment success rate significantly but did not achieve the 2020 target (75% treatment success rate for RR/MDR-TB cases) (Fig. 4.1.7).

### Indicator 1.C.5 TB mortality rate (International Classification of Diseases (ICD) A15-19) (G) (E)

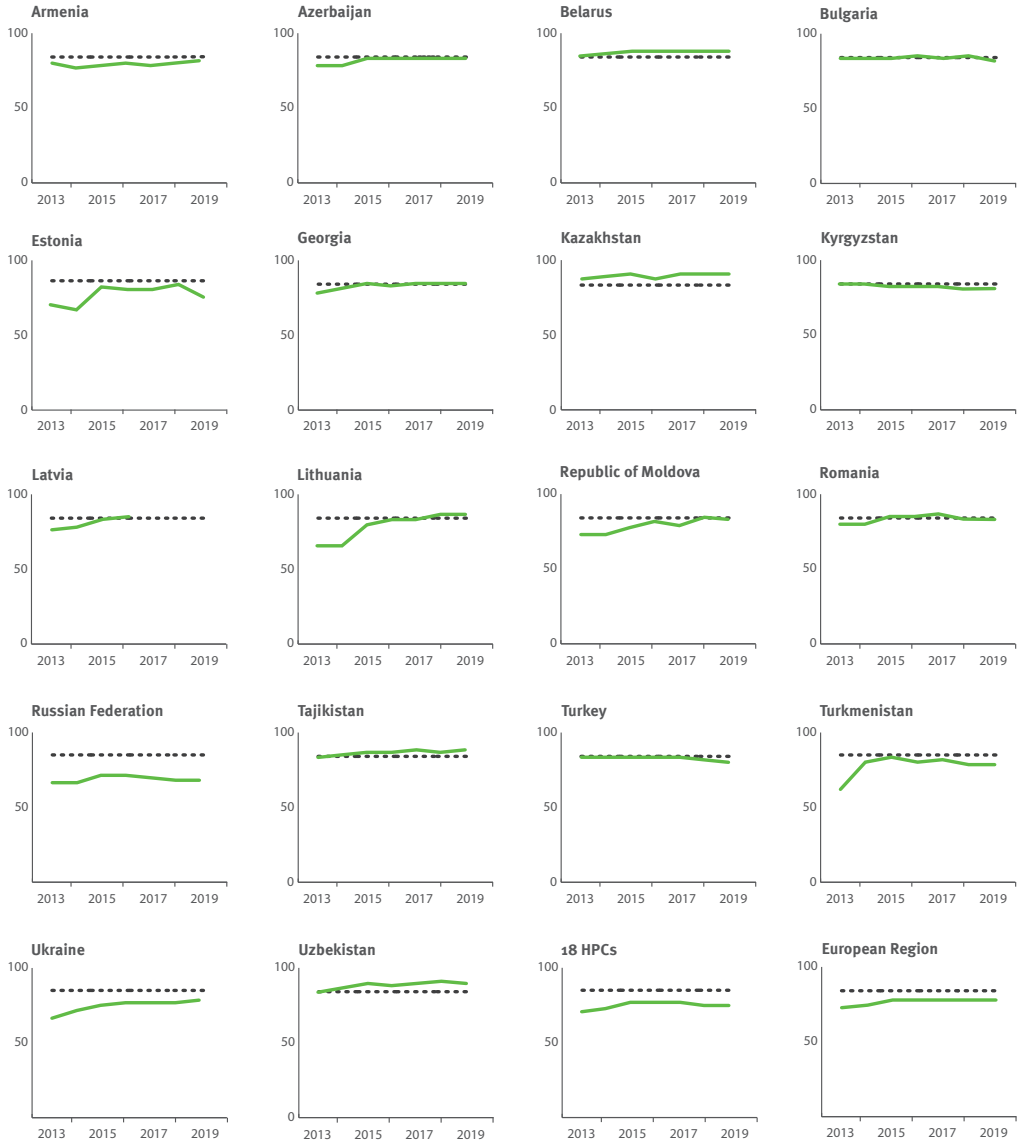
The TB action plan for the WHO European Region aimed to reduce the number of TB deaths in 2020 by 35% compared to 2015. As shown in Fig. 4.1.8, with the exception of Azerbaijan and Turkmenistan, the HPCs showed a rapid decline in TB mortality between 2015 and 2019. However, for the first time in recent decades, Georgia, Tajikistan and Ukraine reported an increase in TB mortality between 2019 and 2020, which was a consequence of the large drop in the number of people diagnosed with TB due to the COVID-19 pandemic. The sharp decline in TB mortality observed in the rest of the countries before the pandemic in 2020 either slowed or plateaued.

Despite the challenges in 2020, overall, the regional target has been achieved. In eight HPCs (Armenia, Belarus, Estonia, Kazakhstan, Kyrgyzstan, the Republic of Moldova, the Russian Federation and Uzbekistan), the action plan target set for 2020 of reducing the TB mortality rate by 35% has been achieved (Fig. 4.1.8). In another five countries, mortality was significantly reduced, but the target was not met.

### Indicator 1.D.1 Percentage of detected cases among estimated incident TB/HIV coinfected cases

Consistent improvement has been observed over the past five years in detecting TB/HIV coinfected people, reaching over 84% at regional level. In 2020, however, only 67.8% of the estimated number of TB/HIV coinfected people were

**Fig. 4.1.6. Trend in treatment success rate for new and relapse TB cases enrolled into treatment 2013–2019 (G) in each of the HPCs and total for 18 HPCs and WHO European Region (percentage), 2013–2019**




(G) Global indicator.

detected by health systems in the Region, comparable to the 64% achieved in 2015. None of the 18 HPCs achieved a detection rate of over 90%.

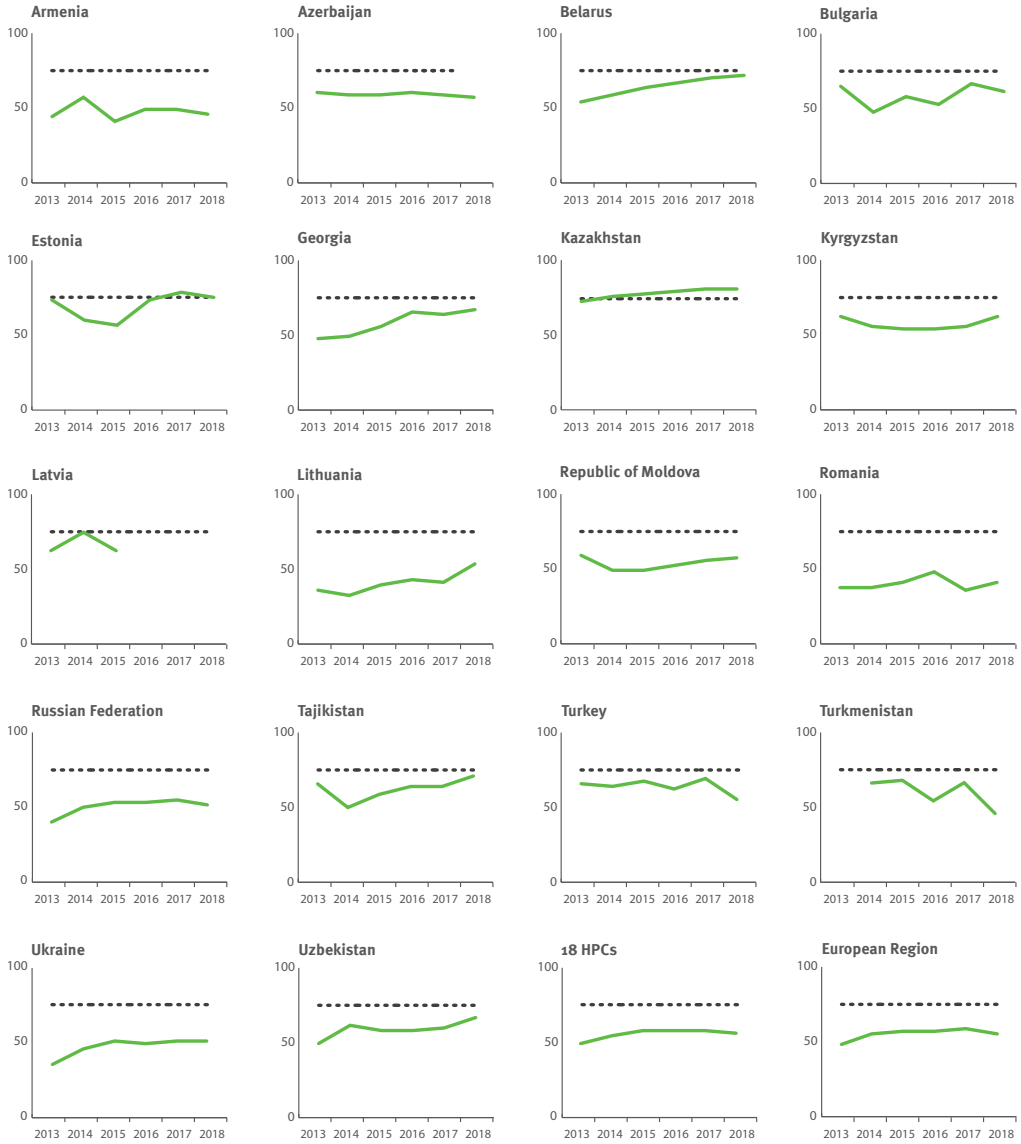
### Indicator 1.D.2 HIV testing coverage (G) (E)

The aim of the action plan was for countries to achieve HIV testing coverage of close to 100%. In 2020, HIV testing coverage at regional level was 92.6%, which is a notable improvement on the 67.6% testing coverage at baseline. Twelve HPCs reported HIV testing coverage of over 90% (Fig. 4.1.9).

### Indicator 1.D.3 Percentage of HIV coinfection among all TB (new and relapse TB cases)

In 2020, fifteen per cent of new TB patients with known HIV status were HIV-positive, compared to the 8.9% baseline in 2015. This rapid change is partially due to improvement of the surveillance system in the Russian Federation. An increase in TB/HIV coinfection was recorded in six of the 16 HPCs reporting TB/HIV status: Armenia, Azerbaijan, Belarus, Kazakhstan, the Republic of Moldova and the Russian Federation. Although Estonia, Georgia, Lithuania, Romania and Uzbekistan reported a lower percentage of TB/HIV cases in 2020 than in 2015, there is no clear trend towards reversion. The rapid increase in six of the HPCs is an indication that HIV transmission is continuing apace

**Fig. 4.1.7. Trend in treatment success rate in the RR/MDR-TB cohort enrolled in treatment (G) (E) between 2013 and 2018 for each of the 18 HPCs and as a total for the 18 HPCs and WHO European Region (percentage), 2013–2018**




(E) European indicator. (G) Global indicator.

in most eastern European and central Asian countries and that efforts towards the early identification of PLHIV and the administration of preventive TB treatment are inadequate.

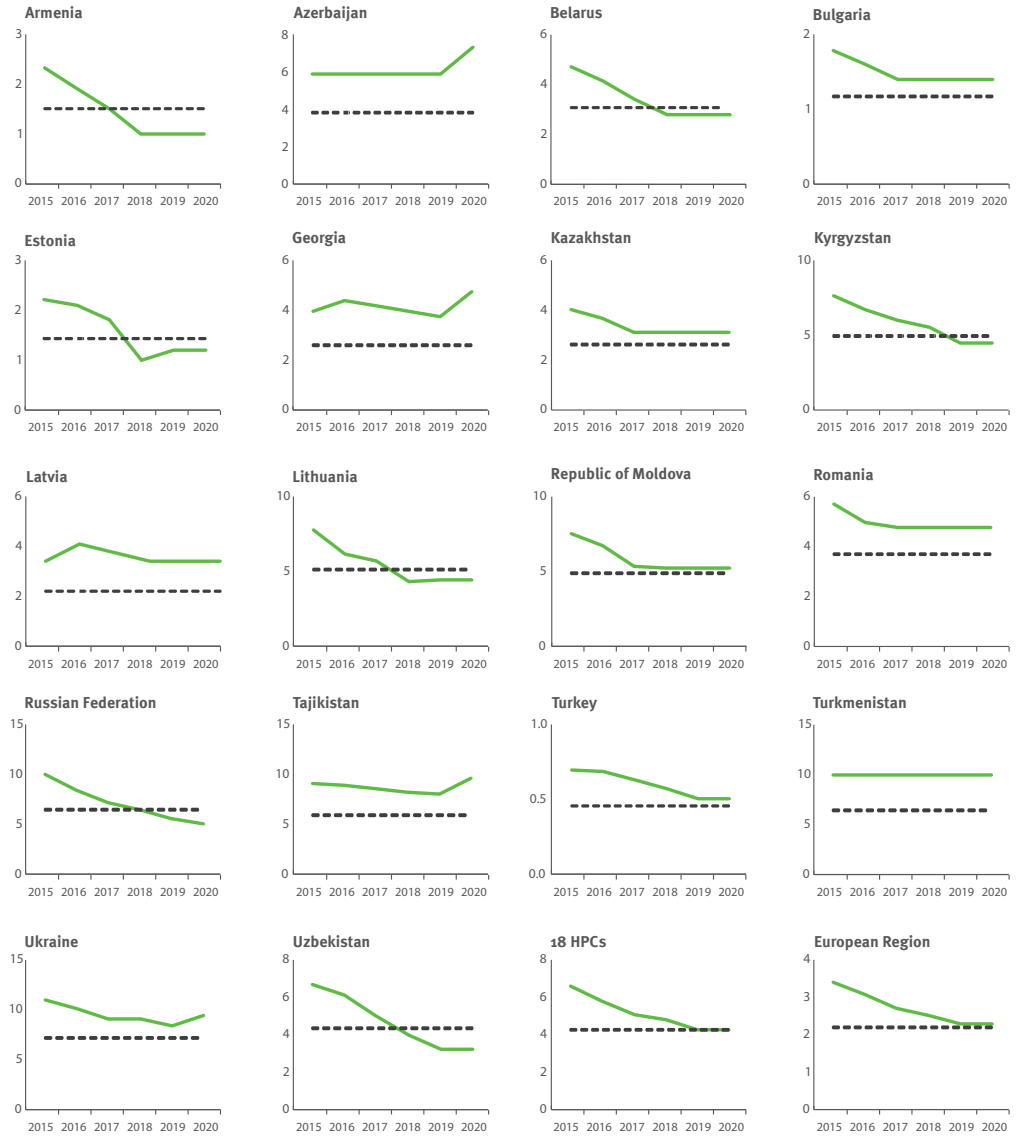
### Indicator 1.D.4 Percentage of TB/HIV coinfected patients enrolled in ART

The TB action plan aims to achieve full coverage with ART for all patients detected with TB/HIV coinfection, as per WHO recommendations. In 2020, 26 countries/areas in the Region provided information on ART enrolment among TB cases with positive HIV status, with ART coverage at 74.3% among those reporting. This is a remarkable improvement on the baseline of 53.8%, but far below the universal coverage targeted by the action plan. Eight of the HPCs attained coverage above 90% (Azerbaijan, Belarus, Bulgaria, Estonia, Georgia, Kazakhstan, Tajikistan and Ukraine).

### Indicator 1.D.5 TB preventive treatment coverage among people living with HIV/AIDS (G)

In 2020, five countries in the Region provided information on TB preventive treatment among PLHIV to the reporting system of the Joint United Nations Programme on HIV and AIDS. Overall, of 18 273 PLHIV newly enrolled in HIV care, 80% received treatment for latent TB infection (LTBI), which is a much higher figure than the 30% target (Fig. 4.1.10).

**Fig. 4.1.8. Trend in TB mortality rate (G) (E) for the 18 HPCs and WHO European Region, per 100 000 population, 2015–2020**




Trend of TB mortality rates per 100 000 population

..... Regional milestone of 35% reduction in TB deaths by 2020 compared to 2015

(E) European indicator. (G) Global indicator.

## Indicator 1.E.1 Contact investigation coverage (G) (E)

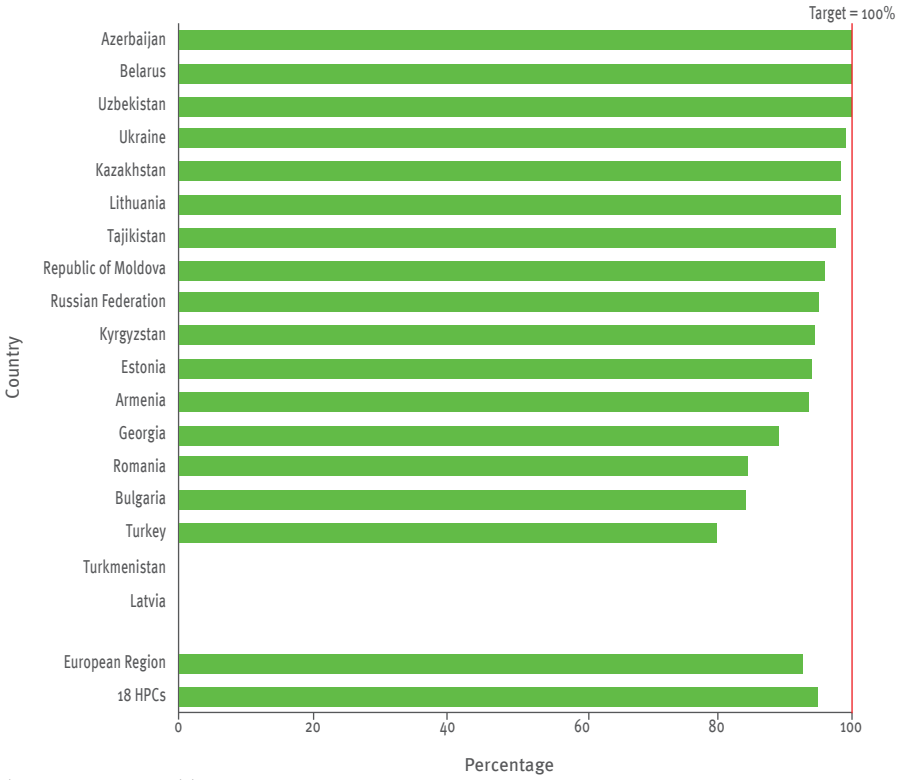
Contact tracing is a key component of TB prevention, especially in children. Contact investigation may result in earlier identification of people who are ill or infected with TB, possibly decreasing disease severity and reducing transmission of *M. tuberculosis*. WHO recommends that all contacts of bacteriologically confirmed TB patients be followed-up and screened for TB.

This indicator is calculated as the number of contacts of people with bacteriologically confirmed TB evaluated for TB, divided by the number eligible. Only 19 countries in the Region reported data on contact tracing to WHO, and 98% of all contacts with TB cases were investigated for TB/LTBI in 2020. The target of 90% was achieved by eight of nine HPCs reporting data on contact-tracing coverage (Fig. 4.1.11).

## Indicator 1.E.2 TB preventive treatment coverage of childhood TB contacts aged under 5 years (G) (E)

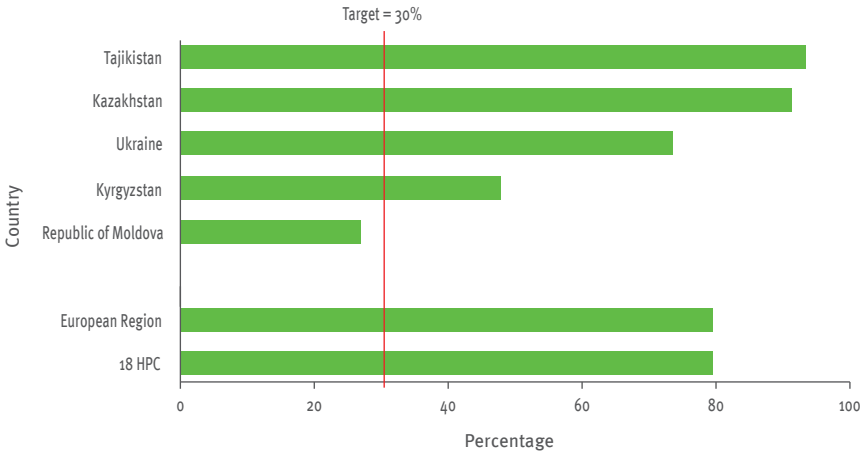
WHO recommends that children under 5 years who are household or close contacts of people with TB and who, after an appropriate clinical evaluation, are found not to have active TB should start TB preventive treatment in accordance with WHO guidelines. The regional action plan aims to achieve at least 90% coverage with TB preventive treatment of childhood TB contacts under 5 years. This indicator is calculated as the number of children aged

**Fig. 4.1.9. HIV testing coverage among new and relapse TB patients (G) (E) for the 18 HPCs and WHO European Region, 2020**




(E) European indicator. (G) Global indicator.
*Note*: Latvia and Turkmenistan did not report data.

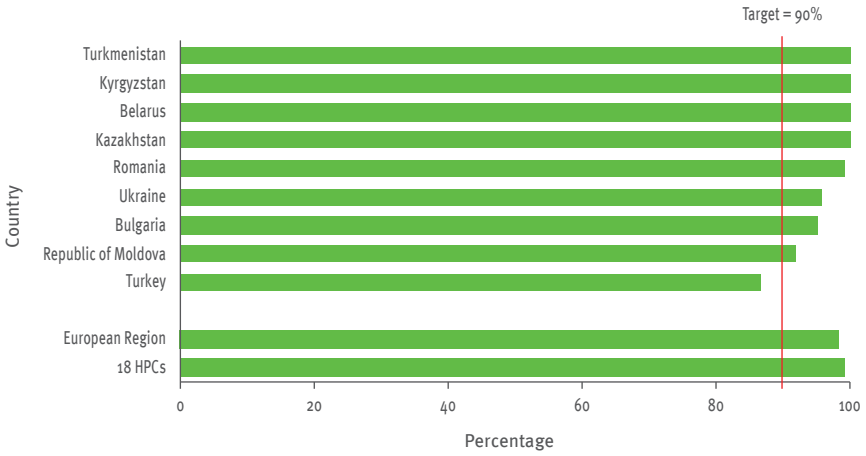
**Fig. 4.1.10. TB preventive treatment coverage among PLHIV (G) for the 18 HPCs and WHO European Region, 2020**




(E) European indicator. (G) Global indicator.
*Note*: Armenia, Azerbaijan, Belarus, Bulgaria, Estonia, Georgia, Latvia, Lithuania, Romania, the Russian Federation, Turkey, Turkmenistan and Uzbekistan did not report data.

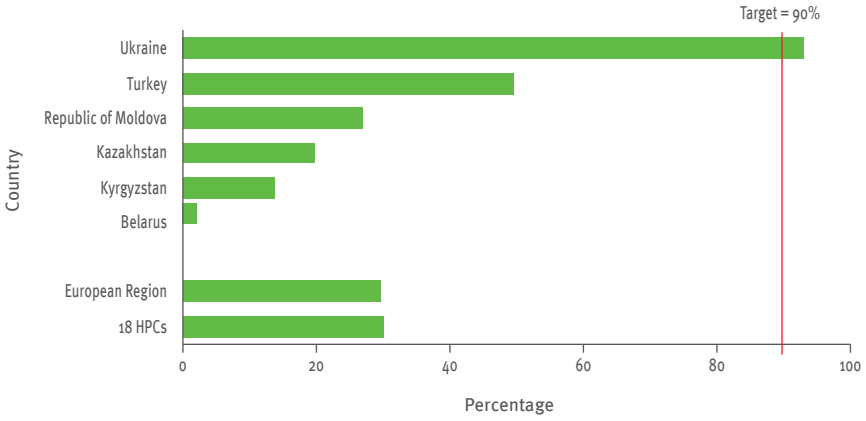
under 5 who are household contacts of bacteriologically confirmed pulmonary TB cases and have started on TB preventive treatment, divided by the number of children under 5 who are household contacts of bacteriologically confirmed pulmonary TB patients. In 2020, 11 countries provided information to the global TB database on TB preventive treatment among children under 5 years. At regional level, TB preventive treatment coverage of childhood TB contacts aged under 5 years was 29.6%. Ukraine was the only country among the six HPCs reporting data on LTBI treatment that achieved the 90% target (Fig. 4.1.12).

**Fig. 4.1.11. Contact investigation coverage (G) (E) for the 18 HPCs and WHO European Region, 2020**




(E) European indicator. (G) Global indicator.
*Note*: Armenia, Azerbaijan, Estonia, Georgia, Latvia, Lithuania, the Russian Federation, Tajikistan and Uzbekistan did not report data.

**Fig. 4.1.12. LTBI treatment coverage in childhood TB contacts aged under 5 years (G) (E) for the 18 HPCs and WHO European Region, 2020**




(E) European indicator. (G) Global indicator.
*Note*: Armenia, Azerbaijan, Bulgaria, Estonia, Georgia, Latvia, Lithuania, Romania, the Russian Federation, Tajikistan, Turkmenistan and Uzbekistan did not report data.

### Indicator 2.E.1 Treatment success rate (%) among new and relapse TB cases among prisoners

In 2020, 23 countries in the Region provided data on treatment outcome of prison TB cases enrolled in treatment in 2019. Overall, the treatment success rate of new and relapse TB cases at regional level was 60.4%, which is much lower than the 76.5% treatment success rate in the general population and the 63.2% baseline. The regional indicator is largely influenced by results for the Russian Federation, which accounts for around 79% of prison TB cases with available treatment outcomes. Six of the 15 HPCs achieved the target treatment success rate of 85%.

## 4.1.2 Conclusions and monitoring recommendations

In 2020, 20 of 26 indicators in the TB action plan for the WHO European Region were effectively monitored and evaluated using routine surveillance data. Achievement of the action plan targets has been affected by the COVID-19 pandemic. In the last year of the action plan, the decline in mortality and incidence slowed, far fewer people were diagnosed and treated for TB, and remarkably few people were tested for drug resistance and enrolled into RR/MDR-TB treatment. Despite these challenges, nine of 20 targets set by the regional action plan were achieved at regional level.

The Region achieved the 2020 regional action plan target to reduce the TB incidence rate in 2020 by 25% and was very close to achieving the target of reducing TB deaths by 35% against the 2015 baseline. Good progress was also observed in increasing HIV testing and ART coverage.

Although 11 targets set by the regional action plan were not achieved, improvement has been noted against the

baseline values. Treatment success rates for new and relapse TB cases and RR/MDR-TB cases were not achieved, but when data collected between 2016 and 2020 are compared, a slow but sustainable increase can be seen among both incident TB and RR/MDR-TB cohorts. A substantial increase in testing coverage using WRD has also been documented.

The Region was not successful in reaching the targets for six indicators, including TB treatment coverage, percentage of RR/MDR-TB among new and previously TB cases, the prevalence of HIV among new and relapse TB cases, TB preventive treatment coverage among children under 5 years and the treatment success rate among TB patients in prison. Despite the efforts made, the burden related to RR-TB and TB/HIV over the past five years continued to increase, indicating the need to introduce more innovative and effective approaches to address these issues.

Completeness and quality of data related to screening, contact tracing and preventive TB treatment needs to be improved. Prevention efforts, including contact tracing, TB preventive treatment coverage and ART coverage among PLHIV, need to be intensified. However, priority should be given to actions to restore access to and provision of TB services to ensure the level of TB detection and treatment returns to that of 2019.

## 4.2 European Union and European Economic Area countries

A summary of findings by EU/EEA Member State and indicator is provided below and in Table 25, while indicator definitions and targets can be found in Annex 6.

### 4.2.1 Integrated patient-centred care and prevention

#### 1.A Systematic screening of contacts and high-risk groups

#### Indicator 1.A.1 Coverage of population at risk with systematic screening for active TB and LTBI

Screening for active TB and LTBI should be promoted to contribute to the detection of active and latent cases of TB, especially in at-risk populations. The less generalized the epidemic becomes, the more emphasis needs to be placed on this activity. This indicator is a direct measure of the level of screening in the community. Strategies for screening should be developed and/or revised taking into account WHO recommendations *(5,6)* and ECDC guidance *(7,8)*. Of the six countries reporting these data (Bulgaria, Norway, Portugal, Romania, Slovakia and Slovenia), four reported screening coverage of over 80% for the population at risk (Table 25).

#### 1.B Early diagnosis of all forms of TB and universal access to DST, including the use of rapid tests

#### Indicator 1.B.1 Percentage of TB patients diagnosed using WRD (G)

Twenty-nine EU/EEA Member States reported on the proportion of patients notified with new and relapse TB in 2020 who were diagnosed using WRD (Table XIV). Overall, 33.7% of cases reported in the EU/EEA are diagnosed using these tests. The target for 2020 was 30%, which was met by 18 Member States (Fig. 4.2.1).

#### Indicator 1.B.2 First-line DST coverage (%) among all bacteriologically confirmed TB cases (G)

In 2020, 19 190 incident TB cases were bacteriologically confirmed in 29 EU/EEA Member States. DST results for rifampicin and isoniazid were provided for 14 997 (78.2%) of them (Table 10). The target (100%) was achieved by nine countries (Cyprus, Denmark, Estonia, Iceland, Lithuania, Malta, Norway, Slovenia and Sweden) and an additional seven achieved above 95% (Finland, Slovakia, Austria, Greece, Belgium, Luxembourg and Ireland) (Fig. 4.2.2).

#### Indicator 1.B.3 RR/MDR-TB case detection rate (%)

In 2016, WHO started replacing MDR-TB estimates with RR-TB estimates, since the latter provide a good proxy of the former and the recommended management is identical for both. The RR/MDR-TB case-detection rate is calculated by dividing the number of notified cases with RR/MDR-TB by the estimated number of such cases. In 2020, seven EU/EEA countries achieved an RR/MDR-TB detection rate of 85% or more (Table 25).

#### Indicator 1.B.4 TB notification rate per 100 0000 population (E)

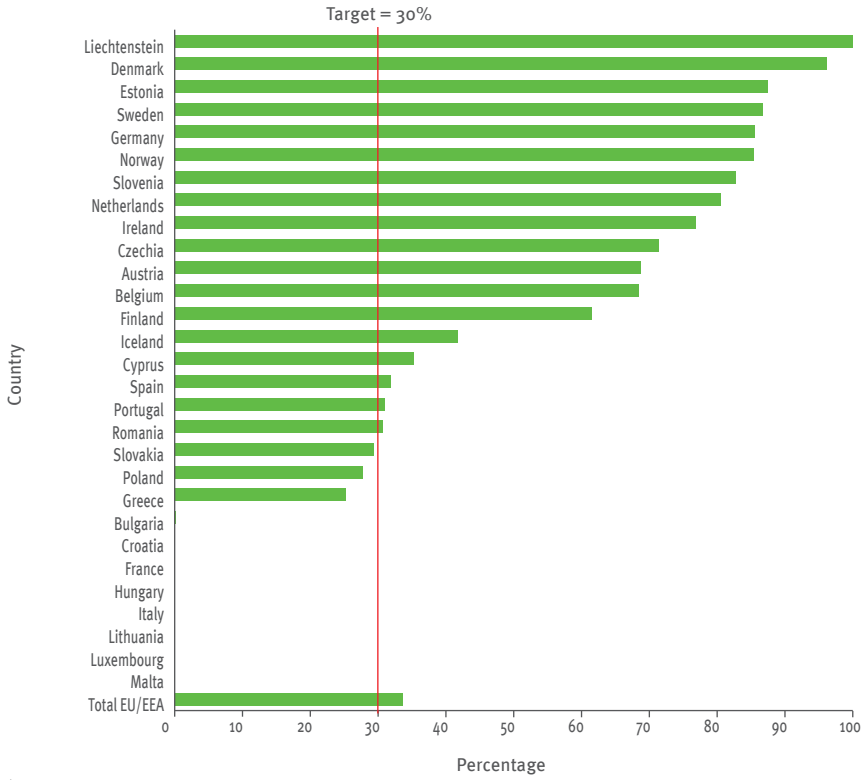
The regional action plan aims to reduce the TB incidence rate by 25% by 2020 against the 2015 baseline. To achieve this, countries in the Region should have at least a 5.5% annual reduction in the notification of new and relapse TB cases.

In 2020, country-specific notification rates in EU/EEA Member States differed considerably, ranging from 2.7 per 100 000 in Norway to 37.2 in Romania (Table III). Rates were below the regional target (24.6 per 100 000) in 26 of 29 reporting countries. Only Lithuania, Malta and Romania reported rates above the regional target, but both Lithuania and Romania have had an average annual decrease of over −5.5% since 2015 (−9% and −12.9%, respectively (Table III)), so they are on track to meet the 2020 reduction target (Fig. 4.2.3, Table 25).

#### Indicator 1.B.5 TB case-detection rate (%)

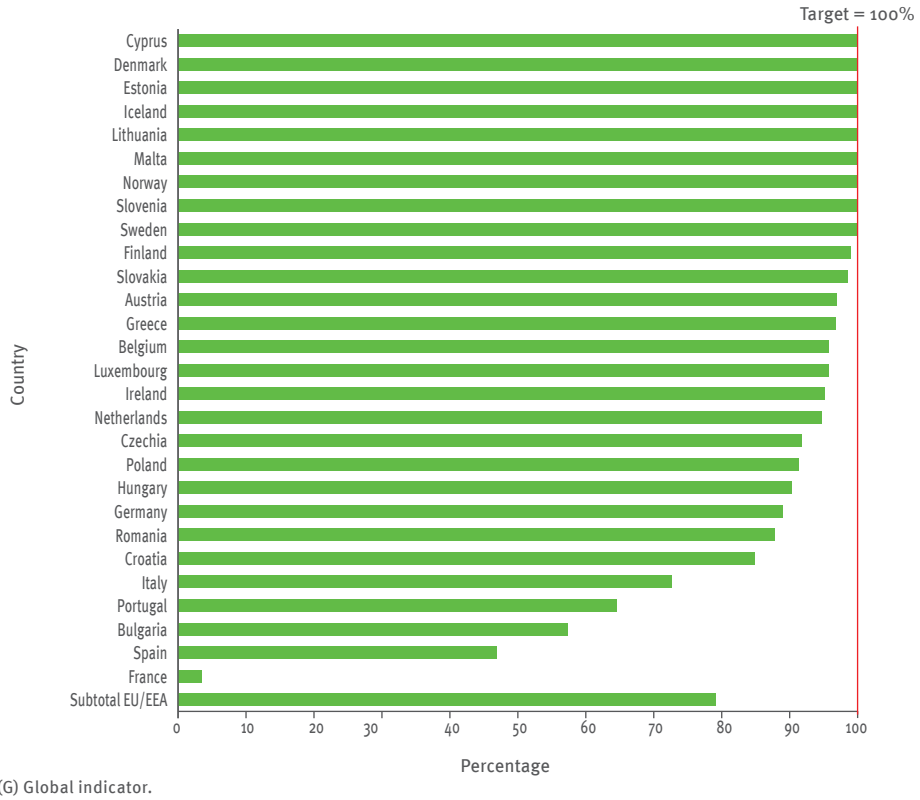
In 2020, 31 551 new and relapse TB cases (Table III) were notified in 29 countries compared to an estimated 42 600 TB cases (Table II), representing a case-detection rate of 74.1%. Twenty-two EU/EEA Member States reported a case-detection rate of 75% or above (Table 25), but only 12 achieved the target of an increase in case-detection rate against 2016.

**Fig. 4.2.1. Percentage of TB patients diagnosed using WRD (G), EU/EEA, 2020**




(G) Global indicator.

**Fig. 4.2.2. First-line DST coverage among all bacteriologically confirmed TB patients (G), EU/EEA, 2020**




(G) Global indicator.

### Indicator 1.B.6 Percentage of RR/MDR-TB among new TB patients (E)

In 2020, 29 EU/EEA countries reported DST results for first-line drugs. The prevalence of RR/MDR-TB among 12 099 new pulmonary TB cases with first-line DST results was 2.8% (Table 11), which was higher than in 2018 (2.6%) and the same as 2016 (2.8% (Table V)). The target of a decreasing percentage was met by 17 EU/EEA countries (Fig. 4.2.4, Table V).

### Indicator 1.B.7 Percentage of RR/MDR-TB among previously treated TB patients

In 2020, the prevalence of RR/MDR-TB among 2035 previously treated pulmonary TB cases tested for first-line DST was 12.8% (Table 11), which is lower than in 2018 and 2016 (15% and 14.5%, respectively (Table VI)). The target of a decreasing percentage was met by 17 EU/EEA countries (Table VI).

## 1.C Equitable access to quality treatment and continuity of care for all people with TB, including drug-resistant TB, and patient support to facilitate treatment adherence

### Indicator 1.C.1 Percentage of hospitalizations of new TB patients (E)

Thirteen EU/EEA Member States reported on hospitalization of new TB patients in 2020 (Fig. 4.2.5). When 2020 data were compared with 2016 data, a decrease in the percentage of hospitalizations was observed for six of the 13 countries.

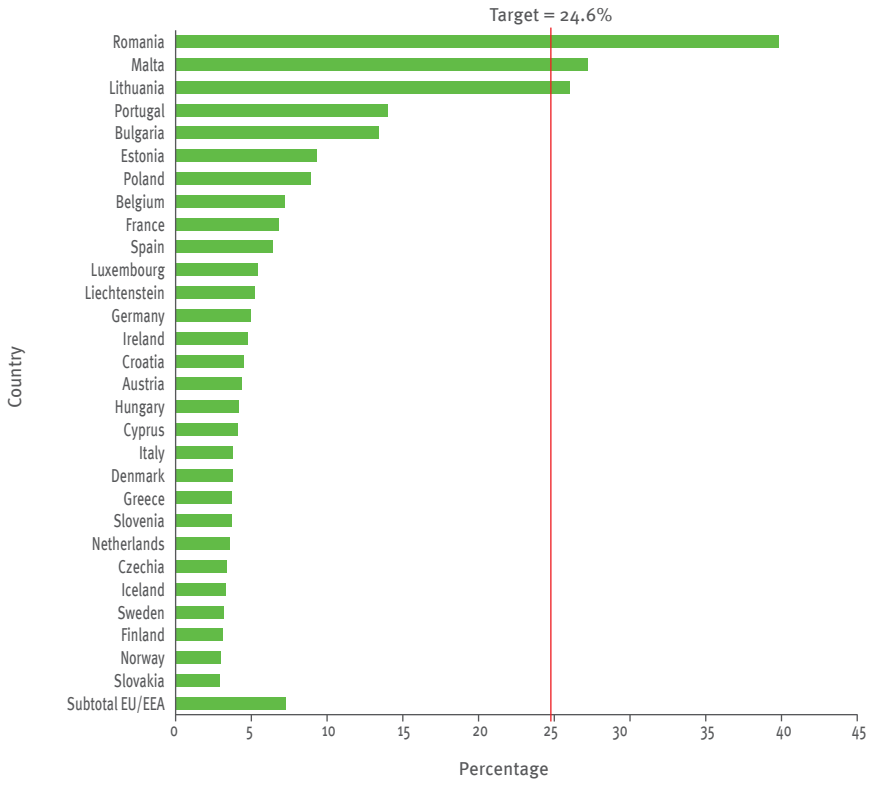
### Indicator 1.C.2 Percentage of detected RR/MDR-TB enrolled in treatment (G)

Twenty-eight Member States reported on treatment enrolment of RR/MDR-TB patients in 2020 (Table 13). The target of 100% treatment enrolment of RR/MDR-TB patients was met by 19 countries. Four countries did not diagnose any RR/MDR-TB cases in 2020. Overall, 97.6% of RR/MDR-TB cases reported in the EU/EEA started treatment with second-line anti-TB drugs, in accordance with WHO guidelines (Fig. 4.2.6).

### Indicator 1.C.3 TB treatment success rate (%) among all new and relapsed TB patients (G)

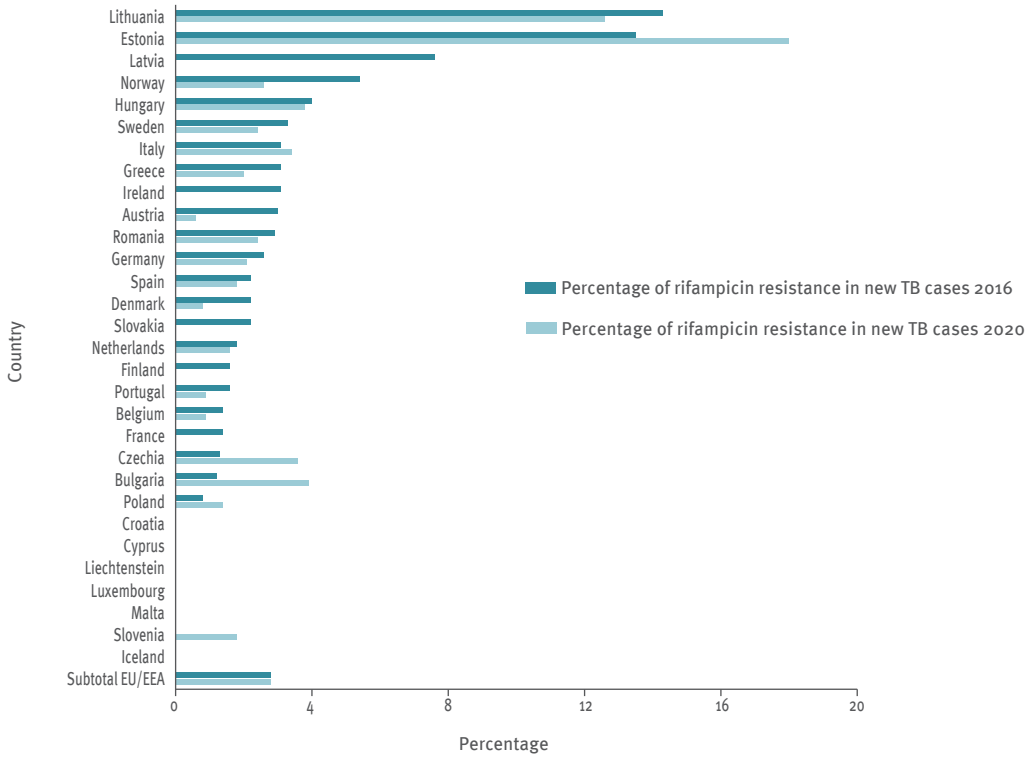
Of the 28 985 new and relapse TB cases notified in 2019 with a treatment outcome reported in 2020, 20 797 (71.8%) were treated successfully (Table 16). France, Greece, Italy, Latvia (did not report case-based data for 2020), Liechtenstein, Malta and Poland did not report treatment outcome data. Only four countries (Iceland, Lithuania, the Netherlands and Slovakia) met the treatment success target of 85% (Fig. 4.2.7).

**Fig. 4.2.3. TB notification rate per 100 000 population (E), EU/EEA, 2020**




(E) European indicator.

**Fig. 4.2.4. Percentage of RR/MDR-TB among new TB patients (E), 2016 and 2020, EU/EEA, 2020**




(E) European indicator.

### Indicator 1.C.4 TB treatment success rate (%) among the RR/MDR-TB treatment cohort (G) (E)

Of the 927 RR/MDR-TB cases notified in 2018 with a treatment outcome reported in 2020, 486 (52.4%) were treated successfully (Table 22). Of 18 Member States reporting treatment success for RR/MDR-TB cases diagnosed in 2018, only five (Austria, Belgium, the Netherlands, Norway and Sweden) met the treatment success target of 75%. Treatment success ranged from 0% in two countries (Croatia and Denmark) to 100% in Sweden (Fig. 4.2.8).

### Indicator 1.C.5 TB mortality rate per 100 000 population (ICD A15-19) (G) (E)

WHO estimated 3750 TB deaths among HIV-negative people in the EU/EEA for 2020 (Table 1). The estimated mortality for the EU/EEA was 0.8 deaths per 100 000 population, ranging from 0.2 in the Netherlands to over four in Lithuania and Romania. The regional target of below 2.7 cases per 100 000 was met by all EU/EEA Member States except Romania, Lithuania and Latvia (Fig. 4.2.9).

## 1.D Collaborative TB/HIV activities and management of comorbidities

### Indicator 1.D.1 TB/HIV case-detection rate (%)

In 2020, 19 EU/EEA Member States reported on new and relapse TB patients with HIV infection (Table 14). The detection rate of TB/HIV coinfected cases is based on reporting data (numerator, not available for 11 countries) and WHO estimates (denominator, not available for Liechtenstein). The target HIV case-detection rate of close to 100% was almost reached by Belgium (93.9%) and two countries (Czechia and Slovakia) had more reported than estimated cases, thereby exceeding the 100% target.

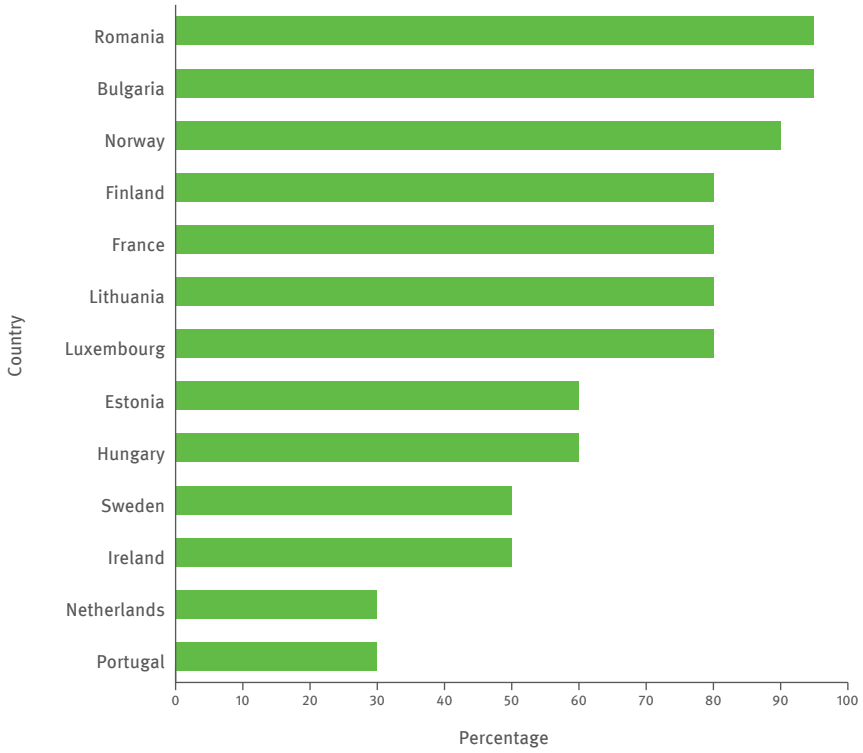
### Indicator 1.D.2 HIV testing coverage (%) (G) (E)

Nineteen EU/EEA countries provided information on the HIV status of their TB cases and 73.7% of cases had known HIV status (Table IX). The target testing coverage of close to 100% was achieved only by Greece (Fig. 4.2.10).

### Indicator 1.D.3 Percentage of HIV among all TB

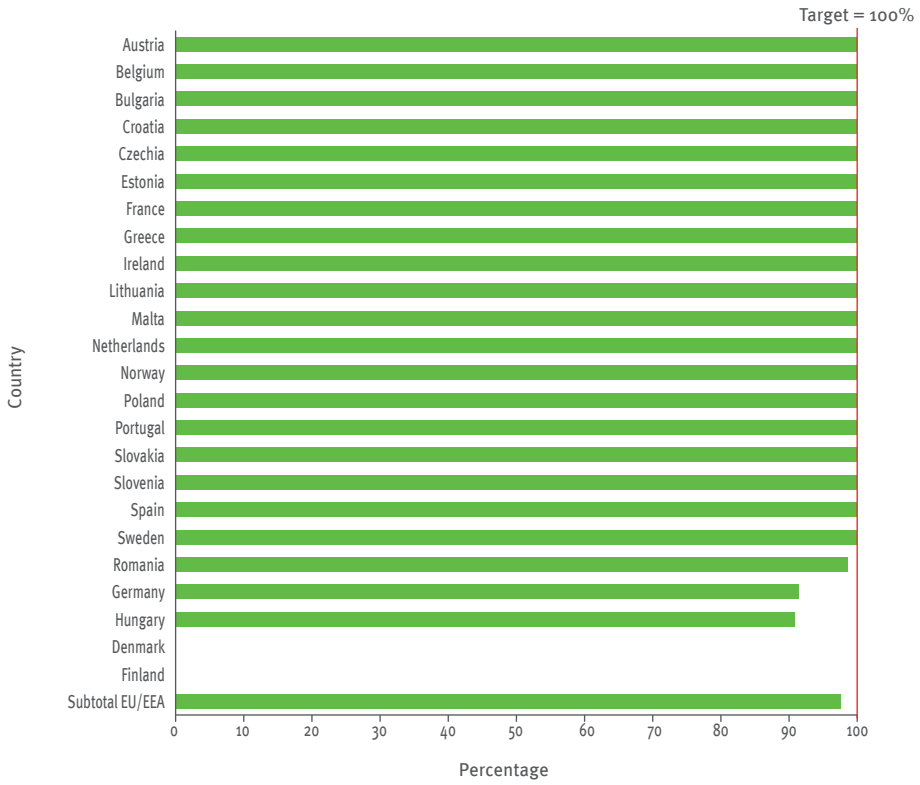
In 2020, 19 EU/EEA Member States reported 554 TB cases with HIV infection (Table IX). Country-specific proportions ranged from 0% in Croatia, Luxembourg and Slovenia to just over 11% in Estonia and Hungary (Table IX). Among the 15 countries with at least 50% reporting completeness for HIV in 2020, nine (Denmark, Estonia, Lithuania, Luxembourg, the Netherlands, Norway, Portugal, Romania and Slovenia) reached the target of a decrease in the percentage of HIV among all TB cases reported (compared with 2016).

**Fig. 4.2.5.** Percentage of hospitalizations for new TB patients (E), EU/EEA, 2020



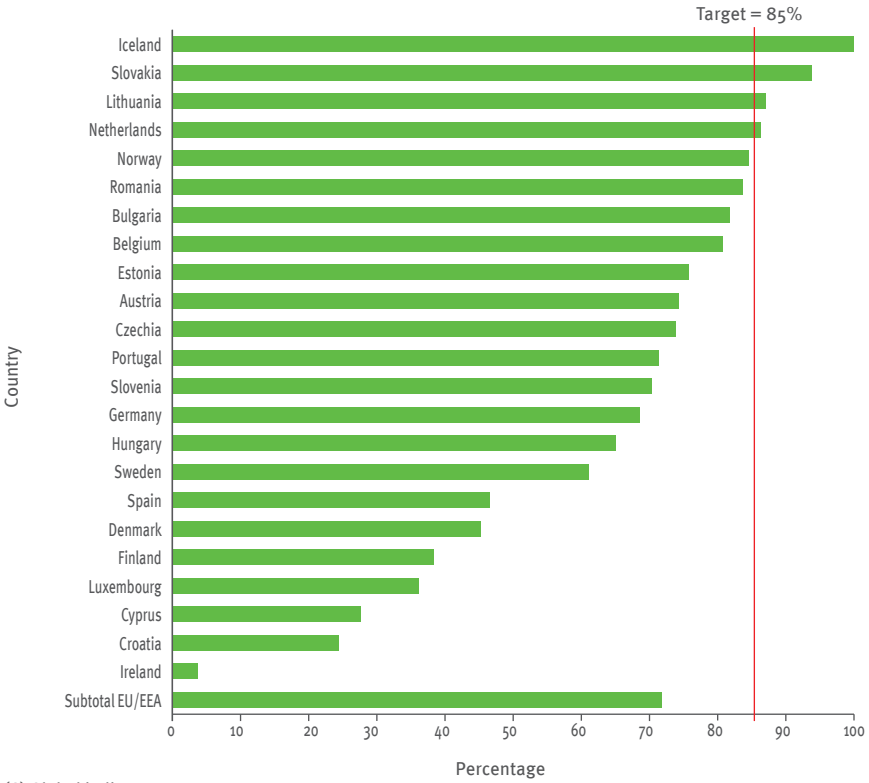

(E) European indicator.

**Fig. 4.2.6.** Percentage of detected RR/MDR-TB enrolled into treatment (G) (E), EU/EEA, 2020



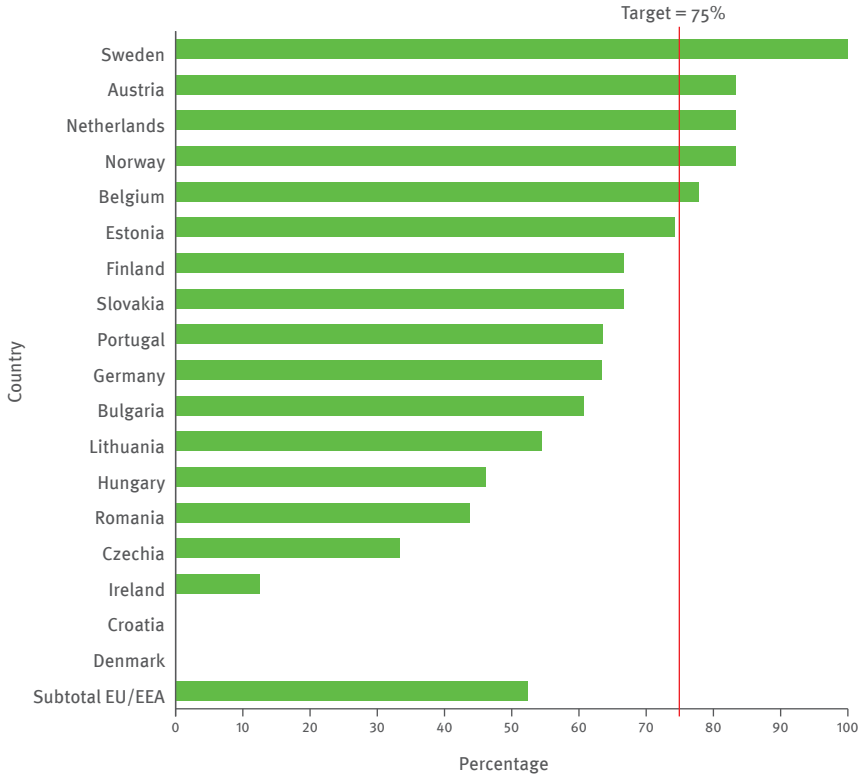

(E) European indicator. (G) Global indicator.

**Fig. 4.2.7.** TB treatment success rate among all new and relapse cases (G), EU/EEA, 2020



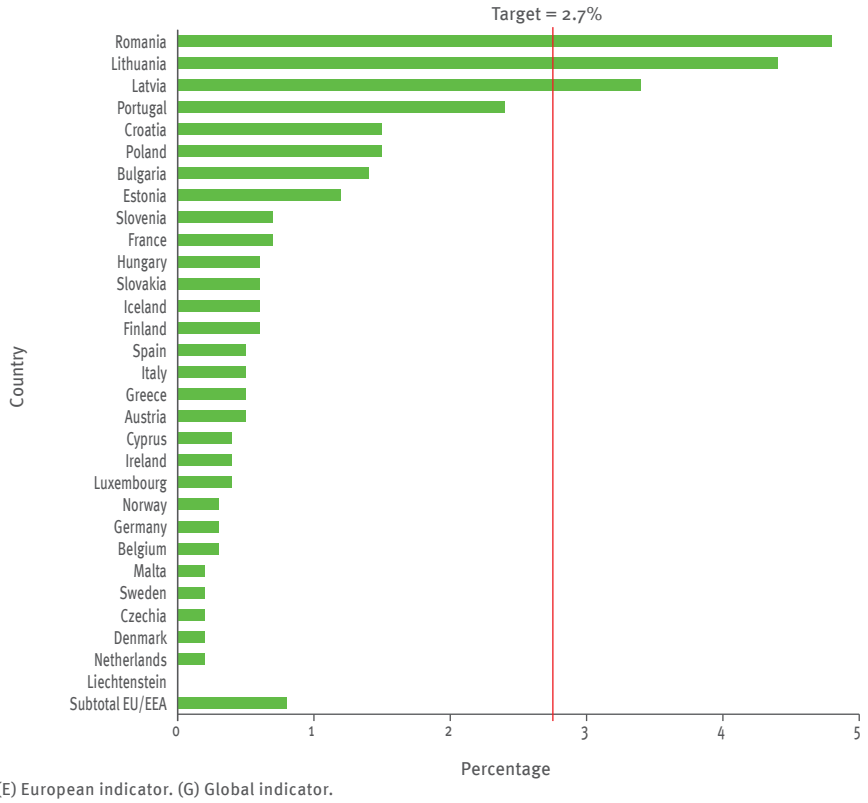

(G) Global indicator.

**Fig. 4.2.8.** TB treatment success rate among the RR/MDR-TB cohort (G) (E), EU/EEA, 2020



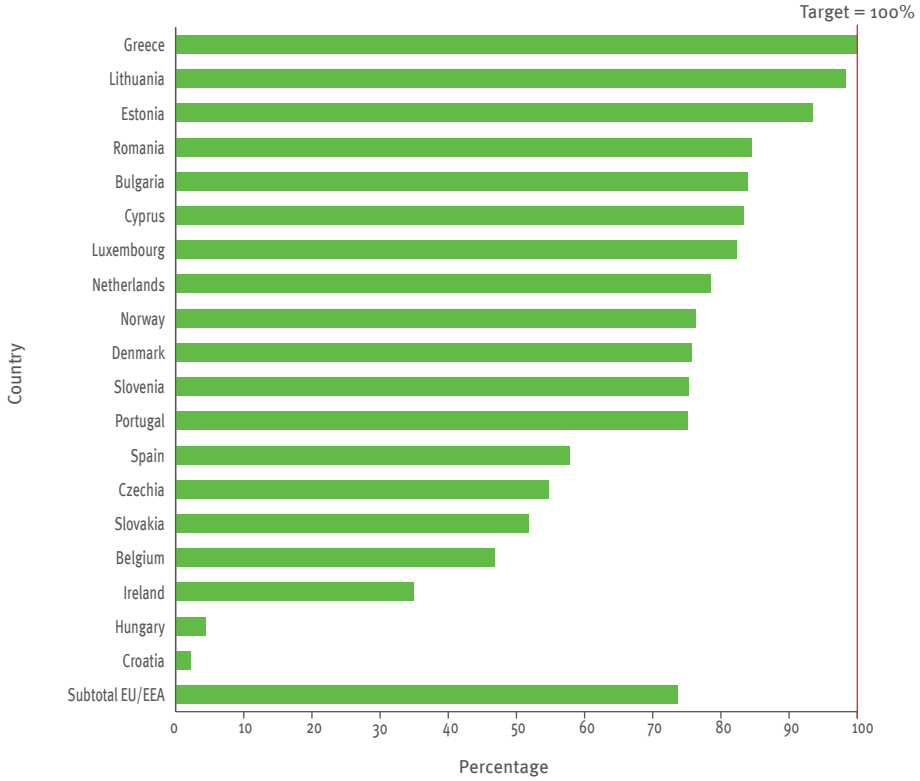

(E) European indicator. (G) Global indicator.

**Fig. 4.2.9.** TB mortality rate (ICD A15-19) (G) (E), EU/EEA, 2020




(E) European indicator. (G) Global indicator.

**Fig. 4.2.10.** HIV testing coverage (%) (G) (E), EU/EEA, 2018




(E) European indicator. (G) Global indicator.

#### Indicator 1.D.4 ART coverage (%) among TB/HIV coinfected

Six EU/EEA Member States reported ART enrolment to the WHO global TB database (Table 14). In these countries, 84.1% of HIV-coinfected TB cases had started ART in 2020. The target for enrolment coverage of close to 100% was achieved by three EU/EEA Member States (Bulgaria, Estonia and Slovakia).

#### Indicator 1.D.5 LTBI treatment coverage (%) among PLHIV (G)

The target for LTBI treatment coverage among PLHIV is 30%. No relevant data were available in the WHO global TB database for any EU/EEA Member State in 2020, so this indicator could not be monitored (Fig. 4.2.11).

### 1.E Management of LTBI and preventive treatment of persons at high risk, and vaccination against TB

#### Indicator 1.E.1 Contact investigation coverage (%) (G) (E)

Only three EU/EEA Member States reported contact investigation data for the percentage of all eligible contacts of bacteriologically confirmed TB cases who had been investigated for TB/LTBI in 2020 (Table 25). The target of 90% was achieved by two reporting Member States (Slovakia and Slovenia, both 100%) and was almost reached by a third country (Norway, 89.6%).

#### Indicator 1.E.2 LTBI treatment coverage (%) in childhood TB contacts aged under 5 years (G) (E)

Six EU/EEA Member States reported LTBI treatment coverage data for childhood TB contacts aged under 5 years, with 100% of these contacts reported to have started LTBI treatment in 2020 (Table 25).

## 4.2.2 Bold policies and supportive systems

### 2.A Political commitment with adequate resources, including universal health coverage policy

#### Indicator 2.A.1 Number of Member States that have a regular TB control/elimination performance publication every five years (E)

The target is for 30 countries to produce a regular TB control/elimination performance publication every five years, but data on this are not available for 2020.

### 2.B Health system strengthening in all functions, including well aligned functioning mechanisms for TB and human resources

#### Indicator 2.B.1 Percentage of TB patients and their households that experience catastrophic financial consequences due to TB (G) (E)

The target for this is close to zero, but data are not available for 2020.

### 2.C Regulatory frameworks for case-based surveillance, strengthening vital registration, quality and rational use of medicines and pharmacovigilance

#### Indicator 2.C.1 Treatment coverage with new TB drugs (%)

The target is 20% treatment coverage with new TB drugs, but data for this are not available for 2020.

### 2.D Community systems and civil society engagement

#### Indicator 2.D.1 Number of Member States with functioning multistakeholder coalitions advocating for TB care and resources

The target is for 30 countries to have such coalitions in place, but data are not available for 2020.

### 2.E Social protection, poverty alleviation and actions on other determinants of TB, such as migration and prisons

#### Indicator 2.E.1 Treatment success rate (%) of new and relapse TB cases among prisoners

Of the 263 TB cases notified in prisons across 10 EU/EEA Member States in 2019 for whom treatment outcome data are available, 176 (66.9%) were treated successfully (Table 21). Luxembourg reported no TB cases among prisoners. Among the 10 Member States reporting, treatment success ranged from 41.2% in the Netherlands to 100% in Estonia and Slovakia. Only two countries (Estonia and Slovakia) met the treatment success target of 85% for TB cases diagnosed in prisons.

## 4.2.3 Intensified research and innovation

### 3.A Discovery, development and rapid uptake of new tools, interventions and strategies

#### Indicator 3.A.1 European TB research initiative established by mid-2016

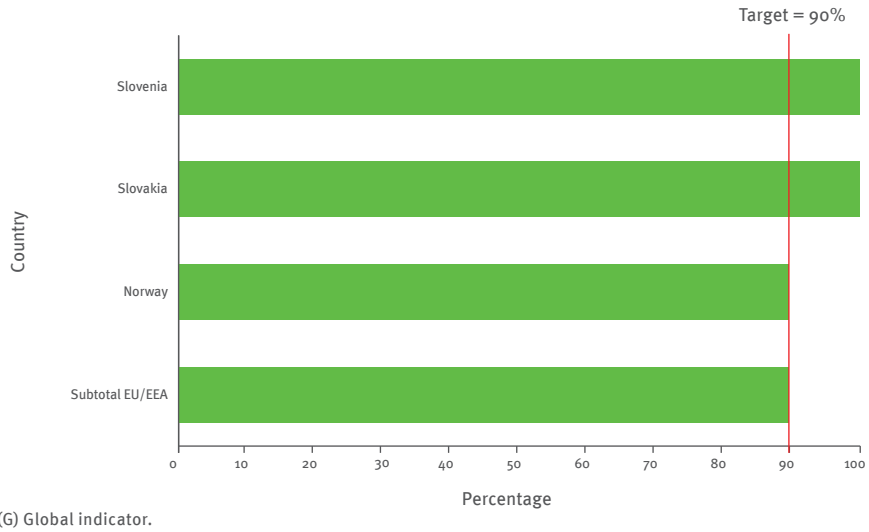
The target is for the European TB research initiative to be established, but country-specific indicators are not defined for 2020.

## 4.2.4 Conclusions and monitoring recommendations

In 2020, 19 of 26 WHO targets were monitored, based on the data available from EU/EEA Member States. For many of the indicators where data were reported by Member States, most of the targets either were met or close to being met. The most significant indicator is the TB notification rate, with a target incidence below 24.6 cases per 100 000 population. This target was met by 26 of 29 reporting countries. Most reporting EU/EEA Member States also met or were close to meeting the targets on use of WRD for diagnosis (30% of new cases and relapses) and first-line DST coverage among bacteriologically confirmed cases (target 100% of cases).

There is difficulty in monitoring progress against WHO targets due to limited or no reporting against some of the indicators. A reduction was seen across several indicators

**Fig. 4.2.11. LTBI treatment coverage among PLHIV (G), EU/EEA, 2020**




(G) Global indicator.

in the number of Member States reporting data in 2020 compared with 2018 and/or 2016. This may reflect the impact of the COVID-19 pandemic on public health resources.

Although TB seems well under control in most of the EU/EEA Member States, these monitoring figures indicate that certain aspects could be improved from the TB clinical service delivery perspective (to meet the indicator targets) and from the surveillance/data-reporting perspective (to have data for indicators).

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# 5. Annexes

## Annex 1. Tuberculosis surveillance system overview, European Union/European Economic Area, 2020

| Country | Data source | Legal character | Comprehensiveness | Type | National coverage | Data available | |
|---|---|---|---|---|---|---|---|
| | | | | | | EuroTB aggregated data | TESSy case-based data[a] |
| Austria | AT-TUBERKULOSEGESETZ | Cp | Co | C | Y | – | 1995–2020 |
| Belgium | BE-TUBERCULOSIS | Cp | Co | C | Y | – | 1995–2020 |
| Bulgaria | BG-MOH | Cp | Co | C | Y | 1995–2006 | 2007–2020 |
| Croatia[b] | HR-CNIPH | Cp | Co | C | Y | 1995–2007 | 2012–2020 |
| Cyprus | CY-NOTIFIED_DISEASES | Cp | Co | C | Y | 1995–2001 | 2002–2020 |
| Czechia | CZ-TUBERCULOSIS | Cp | Co | C | Y | – | 1995–2020 |
| Denmark | DK-MIS | Cp | Co | C | Y | – | 1995–2020 |
| Estonia | EE-TBC | Cp | Co | C | Y | – | 1995–2020 |
| Finland | FI-NIDR | Cp | Co | C | Y | – | 1995–2020 |
| France | FR-MANDATORY_INFECTIOUS_DISEASES | Cp | Co | C | Y | – | 1995–2020 |
| Germany | DE-SURVNET@RKI-7.1/6 | Cp | Co | C | Y | 1995–2000 | 2001–2020 |
| Greece | EL-NOTIFIABLE_DISEASES | Cp | Co | C | Y | 1995–2001 | 2002–2020 |
| Hungary | HU-TUBERCULOSIS | Cp | Co | C | Y | 1995–1998 | 1999–2020 |
| Iceland | IS-TUBERCULOSIS | Cp | Co | C | Y | – | 1995–2020 |
| Ireland | IE-CIDR | Cp | Co | C | Y | 1995–1997 | 1998–2020 |
| Italy | IT-NRS | Cp | Co | C | Y | – | 1995–2020 |
| Latvia | LV-TB | Cp | Co | C | Y | 1995–2000 | 2001–2017 |
| Liechtenstein | CH-SFOPH-LI | Cp | Co | C | Y | – | 1995–2020 |
| Lithuania | LT-TB_REGISTER | Cp | Co | C | Y | 1995–2002 | 2003–2020 |
| Luxembourg | LU-SYSTEM1 | Cp | Co | C | Y | – | 1995–2020 |
| Malta | MT-DISEASE_SURVEILLANCE | Cp | Co | C | Y | – | 1995–2020 |
| Netherlands | NL-NTR | Cp | Co | C | Y | – | 1995–2020 |
| Norway | NO-MSIS_A | Cp | Co | C | Y | – | 1995–2020 |
| Poland | PL_CR | Cp | Co | C | Y | 1995–1999 | 2000–2020 |
| Portugal | PT-TUBERCULOSIS | Cp | Co | C | Y | 1995–1999 | 2000–2020 |
| Romania | RO-NTBSy | Cp | Co | C | Y | – | 1995–2020 |
| Slovakia | SK-NRT | Cp | Co | C | Y | 1995 | 1996–2020 |
| Slovenia | SI-TUBERCULOSIS | Cp | Co | C | Y | – | 1995–2020 |
| Spain | ES-STATUTORY_DISEASES | Cp | Co | C | Y | 1995–2006 | 2007–2020 |
| Sweden | SE-SweTBReg | Cp | Co | C | Y | – | 1995–2020 |

Cp: compulsory reporting.
Co: comprehensive.
C: case-based.
TESSy: The European Surveillance System.
Y: yes.
[a] For some years, data from France, Spain and Italy related to drug-susceptibility testing have been collected in aggregated format from the WHO TB Monitoring and Evaluation data.
[b] Data reported since 2012 to TESSy, historical data extracted from WHO TB Monitoring and Evaluation data.

## Annex 2. List of variables for 2020 tuberculosis data collection[a]

| | List | Description |
|---|---|---|
| **Common set of variables** | | |
| 1 | RecordId | Unique identifier for each record generated by the national surveillance system |
| 2 | RecordType | Structure and format of the data |
| 3 | RecordTypeVersion | Indicates which version the sender uses when generating the data for upload |
| 4 | Subject | Disease to report |
| 5 | Status | Status of reporting NEW/UPDATE or DELETE (inactivate) |
| 6 | DataSource | The data source (surveillance system) that the record originates from |
| 7 | ReportingCountry | The country reporting the record |
| 8 | PlaceOfNotification | Place of the first notification of the case to a regional authority |
| 9 | PlaceOfResidence | Place of residence of patient at the time of disease onset |
| 10 | Age | Age of patient in years as reported in the national system |
| 11 | Gender | Gender of the reported case |
| 12 | DateOfDiagnosis | First date of clinical or laboratory diagnosis |
| 13 | DateOfNotification | Date when the case is first reported to public health authorities |
| 14 | DateUsedForStatistics | The reference date used for standard reports; usually one of the above |
| **Disease-specific variables** | | |
| 15 | BornReportingCountry | The patient was born in the country of report |
| 16 | CountryOfBirth | Country of birth of patient |
| 17 | CountryOfNationality | Country of nationality of patient |
| 18 | DateOfEntryToCountry | Date of entry to country – for TB cases not born in the reporting country |
| 19 | NationalityReportingCountry | Origin of the patient (based on citizenship) |
| 20 | MajorSiteOfTB | Major site of the disease |
| 21 | MinorSiteOfTB | Minor site of the disease |
| 22 | PrevDiagnosis | Previous diagnosis of tuberculosis in the past |
| 23 | PrevDiagnosisYear | Year of previous diagnosis |
| 24 | PrevTreatment | Previous anti-tuberculosis drug treatment (at least one month of drug combination) |
| 25 | PrevTreatmentCompletion | Completion of the previous anti-tuberculosis drug treatment |
| 26 | DiagnosedAnteMortem | Vital status of the patient at the time of diagnosis |
| 27 | EnrolledToTreatment | Patient started appropriate tuberculosis treatment according to international recommendations |
| 28 | Outcome12Months | Patient first outcome at 12 months from the start of the treatment |
| 29 | Outcome24Months | The first outcome observed 13 to 24 months from the start of treatment |
| 30 | Outcome36Months | The first outcome observed 25 to 36 months from the start of treatment |
| 31 | ResultCulture | The result of the culture test for *Mycobacterium tuberculosis* complex |
| 32 | ResultMicroscopy | The result of the microscopy test performed |
| 33 | ResultOtherTest | Additional laboratory test results |
| 34 | Pathogen | Species and gene (*Mycobacterium tuberculosis* complex) of the pathogen which is the cause of the reported disease |
| 35 | HIVStatus | Result of the last HIV test |
| 36 | SIR_AMK | Susceptibility to amikacin |
| 37 | SIR_BDQ | Susceptibility to bedaquiline |
| 38 | SIR_CAP | Susceptibility to capreomycin |
| 39 | SIR_DLM | Susceptibility to delamanid |
| 40 | SIR_ETH | Susceptibility to ethambutol |
| 41 | SIR_GAT | Susceptibility to gatifloxacin |
| 42 | SIR_INH | Susceptibility to isoniazid |
| 43 | SIR_KAN | Susceptibility to kanamycin |
| 44 | SIR_LVX | Susceptibility to levofloxacin |
| 45 | SIR_MFX | Susceptibility to moxifloxacin |
| 46 | SIR_OFX | Susceptibility to ofloxacin |
| 47 | SIR_PZA | Susceptibility to pyrazinamide |
| 48 | SIR_RIF | Susceptibility to rifampicin |
| 49 | SIR_STR | Susceptibility to streptomycin |
| 50 | IsolateID | Unique identifier for each isolate within the data source/laboratory system related to the case |
| 51 | ECDCIsolateID | Identifier for each isolate record that is guaranteed to be unique across countries/laboratories/pathogens and not contain additional encoded information |
| 52 | SpoligoCode[b] | Spoligo pattern code |
| 53 | MiruCode[b] | MIRU pattern code |
| 54 | BeijingGenotype[b] | Beijing genotype identification |

[a] Notification of tuberculosis cases for 2020, treatment outcome data updated for cohort 2019 and rifampicin-resitance/multidrug-resistance treatment outcome data updated for cohort 2018 and pre-extensive drug resistance treatment outcome data updated for cohort 2018 and extensively drug-resistant tuberculosis treatment outcome data updated for cohort 2017.
[b] Optional variable. No need to be reported if the "IsolateID" or "ECDCIsolateID" is provided.

## Annex 3. Completeness of data reported for 2020, European Union/European Economic Area

| Country | Age (%) | Gender (%) | Origin[a] (%) | Country of origin (%) | Site (%) | Previous treatment history[b] (%) | Diagnosed antemortem (%) | Result culture (%) | Result microscopy (%) | Result other test (%) | DST FLD (%) | DST SLD (%) | HIV status (%) | Enrolled in treatment (%) | Outcome 12 months[c] (%) | Outcome 24 months[d] (%) | Outcome 36 months[e] (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Austria | (100.0) | (100.0) | (100.0) | (99.7) | (100.0) | (81.2) | (99.5) | (92.5) | (67.5) | (72.9) | (95.7) | (100.0) | (0.0) | (0.0) | (93.9) | (100.0) | – |
| Belgium | (100.0) | (100.0) | (100.0) | (100.0) | (100.0) | (79.4) | (100.0) | (95.5) | (38.2) | (75.8) | (96.2) | (100.0) | (46.9) | (98.1) | (98.9) | (100.0) | – |
| *Bulgaria* | *(100.0)* | *(100.0)* | *(100.0)* | *(100.0)* | *(100.0)* | *(100.0)* | *(100.0)* | *(86.6)* | *(88.2)* | *(7.0)* | *(56.8)* | *(100.0)* | *(84.0)* | *(100.0)* | *(100.0)* | *(100.0)* | *(0.0)* |
| Croatia | (100.0) | (100.0) | (100.0) | (100.0) | (57.9) | (4.4) | (59.6) | (80.3) | (62.8) | (0.0) | (89.7) | (100.0) | (2.2) | (57.4) | (41.3) | – | – |
| Cyprus | (100.0) | (100.0) | (100.0) | (100.0) | (100.0) | (100.0) | (100.0) | (83.3) | (91.7) | (44.4) | (100.0) | – | (83.3) | (100.0) | (53.6) | – | – |
| Czechia | (100.0) | (100.0) | (100.0) | (100.0) | (100.0) | (100.0) | (100.0) | (98.6) | (88.8) | (83.7) | (90.2) | (100.0) | (54.8) | (100.0) | (100.0) | (100.0) | – |
| Denmark | (100.0) | (100.0) | (100.0) | (97.7) | (100.0) | (100.0) | (100.0) | (97.7) | (97.7) | (95.9) | (99.4) | (100.0) | (76.0) | (40.3) | (47.9) | – | – |
| *Estonia* | *(100.0)* | *(100.0)* | *(100.0)* | *(100.0)* | *(100.0)* | *(100.0)* | *(100.0)* | *(97.6)* | *(98.4)* | *(90.3)* | *(98.1)* | *(100.0)* | *(93.5)* | *(100.0)* | *(100.0)* | *(100.0)* | *(100.0)* |
| Finland | (100.0) | (100.0) | (98.9) | (97.1) | (100.0) | (99.4) | (100.0) | (81.0) | (49.4) | (69.0) | (97.9) | (100.0) | (0.0) | (78.7) | (42.0) | (100.0) | – |
| France | (100.0) | (100.0) | (88.9) | (93.8) | (99.1) | (54.2) | (2.0) | (52.7) | (81.5) | (0.0) | (3.6) | (100.0) | (0.0) | (0.0) | (14.7) | – | – |
| Germany | (100.0) | (99.8) | (95.7) | (96.1) | (98.5) | (71.5) | (97.3) | (86.1) | (90.4) | (85.5) | (87.9) | (100.0) | (0.0) | (97.4) | (85.6) | (100.0) | – |
| Greece | (98.7) | (100.0) | (100.0) | (94.7) | (94.4) | (90.7) | (100.0) | (91.9) | (69.2) | (25.5) | (96.4) | (100.0) | (100.0) | (94.7) | (0.0) | – | – |
| Hungary | (100.0) | (100.0) | (100.0) | (100.0) | (100.0) | (100.0) | (100.0) | (88.4) | (90.4) | (0.0) | (89.8) | (100.0) | (4.4) | (100.0) | (98.4) | (100.0) | – |
| Iceland | (100.0) | (100.0) | (100.0) | (83.3) | (91.7) | (0.0) | (100.0) | (50.0) | (50.0) | (41.7) | (100.0) | – | (0.0) | (100.0) | (100.0) | – | – |
| Ireland | (100.0) | (99.6) | (73.3) | (71.7) | (75.4) | (52.1) | (100.0) | (74.6) | (36.3) | (80.4) | (59.4) | (100.0) | (35.0) | (100.0) | (6.0) | (0.0) | – |
| Italy | (99.9) | (100.0) | (99.0) | (97.6) | (100.0) | (75.3) | (0.0) | (66.0) | (45.0) | (0.0) | (0.0) | – | (0.0) | (53.2) | (0.0) | – | – |
| *Latvia* | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Liechtenstein | (100.0) | (100.0) | (100.0) | (100.0) | (100.0) | (50.0) | (100.0) | (50.0) | (100.0) | (100.0) | (0.0) | – | (0.0) | (100.0) | – | – | – |
| *Lithuania* | *(100.0)* | *(100.0)* | *(100.0)* | *(100.0)* | *(100.0)* | *(100.0)* | *(100.0)* | *(100.0)* | *(100.0)* | *(0.8)* | *(100.0)* | *(100.0)* | *(98.3)* | *(100.0)* | *(100.0)* | *(100.0)* | – |
| Luxembourg | (100.0) | (100.0) | (100.0) | (97.1) | (100.0) | (88.2) | (100.0) | (91.2) | (67.6) | (0.0) | (96.4) | – | (82.4) | (100.0) | (54.0) | – | – |
| Malta | (92.9) | (100.0) | (100.0) | (65.7) | (100.0) | (70.0) | (0.0) | (30.7) | (62.1) | (0.0) | (93.0) | – | (0.0) | (100.0) | (0.0) | – | – |
| Netherlands | (100.0) | (100.0) | (98.7) | (99.5) | (99.2) | (100.0) | (97.0) | (82.5) | (79.1) | (86.4) | (93.0) | (100.0) | (78.5) | (97.3) | (97.3) | (100.0) | *(100.0)* |
| Norway | (100.0) | (100.0) | (100.0) | (100.0) | (98.1) | (100.0) | (100.0) | (93.1) | (72.5) | (93.8) | (99.2) | (100.0) | (76.3) | (99.4) | (95.1) | (100.0) | – |
| Poland | (100.0) | (100.0) | (100.0) | (99.8) | (100.0) | (100.0) | (100.0) | (90.1) | (95.4) | (27.0) | (91.2) | (100.0) | (0.0) | (0.0) | (0.0) | – | – |
| Portugal | (99.9) | (100.0) | (99.9) | (78.6) | (99.9) | (100.0) | (100.0) | (65.3) | (73.1) | (42.5) | (62.3) | (100.0) | (75.2) | (100.0) | (100.0) | (100.0) | – |
| *Romania* | *(100.0)* | *(100.0)* | *(100.0)* | *(100.0)* | *(100.0)* | *(100.0)* | *(100.0)* | *(94.7)* | *(95.7)* | *(36.6)* | *(87.0)* | *(100.0)* | *(84.6)* | *(100.0)* | *(100.0)* | *(100.0)* | – |
| Slovakia | (100.0) | (100.0) | (100.0) | (100.0) | (100.0) | (97.5) | (100.0) | (77.8) | (85.4) | (34.2) | (98.5) | (100.0) | (51.9) | (100.0) | (97.2) | (100.0) | – |
| Slovenia | (100.0) | (100.0) | (100.0) | (100.0) | (100.0) | (98.7) | (100.0) | (96.1) | (87.0) | (98.7) | (100.0) | – | (75.3) | (100.0) | (100.0) | – | – |
| Spain | (99.9) | (99.9) | (85.9) | (81.3) | (100.0) | (64.9) | (0.0) | (72.5) | (78.8) | (38.6) | (46.5) | (100.0) | (57.8) | (0.0) | (54.3) | (0.0) | – |
| Sweden | (100.0) | (100.0) | (100.0) | (100.0) | (100.0) | (99.7) | (100.0) | (100.0) | (64.0) | (89.3) | (100.0) | (100.0) | (0.0) | (100.0) | (67.0) | (100.0) | – |
| **Total EU/EEA** | **(99.9)** | **(100.0)** | **(96.3)** | **(95.4)** | **(99.2)** | **(83.2)** | **(69.3)** | **(81.0)** | **(82.8)** | **(36.8)** | **(71.4)** | **(100.0)** | **(39.3)** | **(61.1)** | **(61.6)** | **(98.3)** | **(66.7)** |

*Note:* WHO European Region 18 tuberculosis high-priority countries presented in italics.
DST FLD: drug-susceptibility testing for first-line anti-tuberculosis drugs, calculated for confirmed tuberculosis cases. FLD included in calculation are: isoniazid and rifampacin.
DST SLD: drug-susceptibility testing for second-line anti-tuberculosis drugs, calculated only for multidrug-resistant tuberculosis cases. SLD included in calculation are: bedaquiline, moxifloxacin and levofloxacin.
EU/EEA: European Union/European Economic Area.
[a] For determining the origin, two variables merged: BornReportingCountry and NationalityReportingCountry, depending on country preference.
[b] History of previous treatment defined by previous diagnosis of tuberculosis for cases reported by Belgium, Denmark, Ireland, Norway and the United Kingdom.
[c] Data for the 2019 cohort.
[d] Data for the multidrug-resistant tuberculosis 2019 cohort cases that are reported as "still on treatment" at 12 months.
[e] Data for the extensively drug-resistant tuberculosis 2018 cohort cases that are reported as "still on treatment" at 12 months and 24 months.

## Annex 4. Reporting completeness into Global TB Database, 2020

| Country/area | Identification (%) (17 fields) | Notification (%) (54 fields) | Anti-tuberculosis drug resistance surveillance (%) | Treatment outcome of TB cases by risk categories (%) (80 fields) | Implementing End TB Strategy (%) (100 fields) | Budget and expenditure (%) (49 fields) |
|---|---|---|---|---|---|---|
| **EU/EEA** | | | | | | |
| Austria | (0.0) | (77.8) | (71.4) | (46.3) | (0.0) | (0.0) |
| Belgium | (0.0) | (92.6) | (71.4) | (100.0) | (9.6) | (0.0) |
| *Bulgaria* | *(100.0)* | *(87.0)* | *(71.4)* | *(92.5)* | *(75.5)* | *(100.0)* |
| Croatia | (0.0) | (77.8) | (71.4) | (53.8) | (37.2) | (0.0) |
| Cyprus | (0.0) | (77.8) | (71.4) | (38.8) | (0.0) | (0.0) |
| Czechia | (94.1) | (96.3) | (71.4) | (100.0) | (54.3) | (0.0) |
| Denmark | (0.0) | (72.2) | (71.4) | (38.8) | (1.1) | (0.0) |
| *Estonia* | *(100.0)* | *(98.1)* | *(71.4)* | *(86.3)* | *(79.8)* | *(2.0)* |
| Finland | (70.6) | (87.0) | (71.4) | (46.3) | (47.9) | (0.0) |
| France | (94.1) | (83.3) | (71.4) | (46.3) | (35.1) | (0.0) |
| Germany | (76.5) | (79.6) | (71.4) | (60.0) | (11.7) | (0.0) |
| Greece | (0.0) | (77.8) | (71.4) | (0.0) | (0.0) | (0.0) |
| Hungary | (0.0) | (77.8) | (71.4) | (53.8) | (0.0) | (0.0) |
| Iceland | (0.0) | (77.8) | (71.4) | (38.8) | (0.0) | (0.0) |
| Ireland | (94.1) | (74.1) | (71.4) | (53.8) | (54.3) | (0.0) |
| Italy | (35.3) | (70.4) | (95.2) | (0.0) | (22.3) | (0.0) |
| *Latvia* | *(100.0)* | *(3.7)* | *(0.0)* | *(0.0)* | *(0.0)* | *(0.0)* |
| Liechtenstein | – | – | – | – | – | – |
| *Lithuania* | *(70.6)* | *(92.6)* | *(71.4)* | *(100.0)* | *(72.3)* | *(0.0)* |
| Luxembourg | (100.0) | (94.4) | (71.4) | (56.3) | (46.8) | (0.0) |
| Malta | (70.6) | (88.9) | (71.4) | (1.3) | (22.3) | (0.0) |
| Netherlands | (100.0) | (90.7) | (71.4) | (85.0) | (44.7) | (2.0) |
| Norway | (0.0) | (81.5) | (71.4) | (58.8) | (24.5) | (0.0) |
| Poland | (94.1) | (83.3) | (71.4) | (0.0) | (29.8) | (0.0) |
| Portugal | (70.6) | (92.6) | (71.4) | (77.5) | (66.0) | (0.0) |
| *Romania* | *(100.0)* | *(94.4)* | *(71.4)* | *(100.0)* | *(80.9)* | *(2.0)* |
| Slovakia | (64.7) | (98.1) | (71.4) | (92.5) | (73.4) | (2.0) |
| Slovenia | (100.0) | (90.7) | (71.4) | (40.0) | (77.7) | (0.0) |
| Spain | (0.0) | (77.8) | (71.4) | (53.8) | (0.0) | (0.0) |
| Sweden | (70.6) | (83.3) | (71.4) | (61.3) | (46.8) | (0.0) |
| **Subtotal EU/EEA** | **(53.5)** | **(79.3)** | **(67.5)** | **(52.7)** | **(33.8)** | **(3.6)** |
| **Non-EU/EEA** | | | | | | |
| Albania | (100.0) | (94.4) | (19.0) | (96.3) | (75.5) | (2.0) |
| Andorra | (64.7) | (48.1) | (40.5) | (73.8) | (53.2) | (2.0) |
| Armenia | (100.0) | (92.6) | (45.2) | (100.0) | (69.1) | (63.3) |
| *Azerbaijan* | *(88.2)* | *(85.2)* | *(28.6)* | *(50.0)* | *(53.2)* | *(79.6)* |
| *Belarus* | *(100.0)* | *(96.3)* | *(78.6)* | *(92.5)* | *(77.7)* | *(98.0)* |
| Bosnia and Herzegovina | (100.0) | (83.3) | (33.3) | (20.0) | (45.7) | (16.3) |
| *Georgia* | *(100.0)* | *(98.1)* | *(81.0)* | *(92.5)* | *(84.0)* | *(100.0)* |
| Israel | (100.0) | (90.7) | (54.8) | (62.5) | (22.3) | (0.0) |
| *Kazakhstan* | *(100.0)* | *(87.0)* | *(59.5)* | *(100.0)* | *(84.0)* | *(98.0)* |
| *Kyrgyzstan* | *(100.0)* | *(87.0)* | *(47.6)* | *(70.0)* | *(83.0)* | *(93.9)* |
| Republic of Moldova | (100.0) | (100.0) | (95.2) | (100.0) | (92.6) | (100.0) |
| Monaco | (29.4) | (75.9) | (7.1) | (0.0) | (0.0) | (0.0) |
| Montenegro | (100.0) | (85.2) | (54.8) | (52.5) | (67.0) | (2.0) |
| *North Macedonia* | *(100.0)* | *(83.3)* | *(95.2)* | *(100.0)* | *(76.6)* | *(0.0)* |
| *Russian Federation* | *(64.7)* | *(87.0)* | *(76.2)* | *(92.5)* | *(47.9)* | *(95.9)* |
| San Marino | (0.0) | (0.0) | (0.0) | (0.0) | (0.0) | (0.0) |
| Serbia | (100.0) | (75.9) | (7.1) | (31.3) | (78.7) | (0.0) |
| Serbia excluding Kosovo[1] | (100.0) | (0.0) | (0.0) | (0.0) | (0.0) | (0.0) |
| Kosovo[1] | (100.0) | (75.9) | (7.1) | (31.3) | (78.7) | (0.0) |
| Switzerland | (100.0) | (79.6) | (95.2) | (61.3) | (56.4) | (2.0) |
| *Tajikistan* | *(100.0)* | *(87.0)* | *(85.7)* | *(100.0)* | *(62.8)* | *(98.0)* |
| *Turkey* | *(100.0)* | *(90.7)* | *(95.2)* | *(100.0)* | *(87.2)* | *(0.0)* |
| *Turkmenistan* | *(88.2)* | *(74.1)* | *(21.4)* | *(31.3)* | *(52.1)* | *(16.3)* |
| *Ukraine* | *(100.0)* | *(92.6)* | *(85.7)* | *(100.0)* | *(93.6)* | *(100.0)* |
| United Kingdom | (29.4) | (61.1) | (54.8) | (46.3) | (0.0) | (0.0) |
| *Uzbekistan* | *(100.0)* | *(83.3)* | *(92.9)* | *(38.8)* | *(63.8)* | *(0.0)* |
| **Subtotal non-EU/EEA** | **(86.0)** | **(80.8)** | **(56.4)** | **(67.1)** | **(59.4)** | **(40.3)** |
| **Total European Region** | **(68.0)** | **(80.0)** | **(62.6)** | **(59.1)** | **(45.2)** | **(19.9)** |
| ***Subtotal 18 HPCs*** | ***(95.1)*** | ***(85.4)*** | ***(65.5)*** | ***(80.3)*** | ***(70.0)*** | ***(58.2)*** |

*Note:* European Region comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 tuberculosis HPCs presented in italics.
EU/EEA: European Union/European Economic Area.
HPCs: high-priority countries.
[1]All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

## Annex 5. Laboratory network capacity, European Region, 2020[a]

| Country/area | Country/area laboratory network | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Microscopy | | Culture | DST for isoniazid and rifampicin | | Line probe assay (N) | Xpert MTB/RIF (N) | International proficiency testing of national reference laboratory | | | |
| | | | | | | | | Year | Percentage agreement of results for: | | Acceptable performance[b] |
| | Number of laboratories performing | EQA passed | Number of laboratories performing | Number of laboratories performing | EQA passed | | | | isoniazid | rifampicin | |
| **EU/EEA** | | | | | | | | | | | |
| Austria | – | – | – | – | – | – | – | – | – | – | – |
| Belgium | – | – | – | – | – | – | – | – | – | – | – |
| *Bulgaria* | *33* | *33* | *30* | *10* | *10* | *3* | *4* | *2020* | *100* | *100* | *Y* |
| Croatia | 13 | 1 | 13 | 5 | 5 | 1 | 1 | 2020 | 100 | 100 | – |
| Cyprus | – | – | – | – | – | – | – | – | – | – | – |
| Czechia | 38 | 38 | 38 | 17 | 17 | – | – | 2020 | 100 | 100 | Y |
| Denmark | – | – | – | – | – | – | – | – | – | – | – |
| *Estonia* | *2* | *2* | *2* | *2* | *2* | *1* | *6* | *2020* | *100* | *100* | *Y* |
| Finland | 9 | 9 | 9 | 1 | 1 | 2 | 5 | 2020 | 100 | 100 | Y |
| France | 140 | – | 140 | 50 | – | 38 | 75 | 2020 | 100 | 100 | – |
| Germany | – | – | – | – | – | – | – | – | – | – | – |
| Greece | – | – | – | – | – | – | – | – | – | – | – |
| Hungary | – | – | – | – | – | – | – | – | – | – | – |
| Iceland | – | – | – | – | – | – | – | – | – | – | – |
| Ireland | 10 | 10 | 10 | 3 | 3 | 1 | 6 | 2020 | 100 | 100 | Y |
| Italy | 45 | – | 45 | 45 | – | 25 | 45 | 2019 | 100 | 100 | Y |
| *Latvia* | – | – | – | – | – | – | – | – | – | – | – |
| Liechtenstein | – | – | – | – | – | – | – | – | – | – | – |
| *Lithuania* | 11 | 11 | 5 | 5 | 5 | 1 | 4 | 2020 | 100 | 100 | – |
| Luxembourg | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 2020 | 100 | 100 | Y |
| Malta | 1 | – | 1 | 1 | – | 0 | 1 | – | – | – | – |
| Netherlands | – | – | 30 | 7 | – | – | – | 2020 | 100 | 100 | Y |
| Norway | – | – | – | – | – | – | – | – | – | – | – |
| Poland | 54 | – | 54 | 40 | – | 1 | 25 | 2020 | 100 | 100 | Y |
| Portugal | 46 | 46 | 42 | 19 | 10 | 20 | 10 | 2020 | 100 | 100 | Y |
| *Romania* | *94* | *87* | *87* | *87* | *45* | *8* | *30* | *2020* | *100* | *100* | *Y* |
| Slovakia | 7 | 7 | 3 | 1 | 1 | 1 | 1 | 2020 | 100 | 100 | Y |
| Slovenia | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 2020 | 100 | 100 | – |
| Spain | – | – | – | – | – | – | – | – | – | – | – |
| Sweden | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 2020 | 100 | 100 | Y |
| **Subtotal EU/EEA** | **511** | **252** | **517** | **300** | **105** | **109** | **220** | **–** | **–** | **–** | **–** |
| **Non-EU/EEA** | | | | | | | | | | | |
| Albania | 12 | 0 | 1 | 1 | 0 | 1 | 1 | 2016 | 100 | 100 | N |
| Andorra | 7 | – | 7 | 3 | – | 4 | 3 | – | – | – | – |
| *Armenia* | *18* | *18* | *1* | *1* | *0* | *1* | *8* | *2018* | *100* | *100* | *N* |
| *Azerbaijan* | *38* | *20* | *7* | *3* | *3* | *2* | *16* | *2020* | – | – | *Y* |
| *Belarus* | *96* | *81* | *15* | *8* | *8* | *8* | *24* | *2020* | *100* | *100* | *Y* |
| Bosnia and Herzegovina | 14 | 7 | 11 | 5 | 0 | 3 | 0 | – | – | – | – |
| Georgia | 11 | 0 | 2 | 1 | 1 | 2 | 28 | 2020 | 100 | 100 | Y |
| *Israel* | *13* | – | *13* | *1* | – | *1* | *1* | – | – | – | – |
| *Kazakhstan* | *245* | *140* | *20* | *20* | *20* | *17* | *119* | *2020* | *95* | *95* | *N* |
| *Kyrgyzstan* | *108* | *108* | *7* | *1* | *1* | *1* | *24* | *2020* | *100* | *100* | *Y* |
| Republic of Moldova | 57 | 57 | 4 | 4 | 4 | 4 | 4 | 2020 | 100 | 100 | Y |
| Monaco | – | – | – | – | – | – | – | – | – | – | – |
| Montenegro | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 2020 | 100 | 100 | Y |
| *North Macedonia* | *7* | *7* | *3* | *0* | *0* | *0* | *– 1* | *2017* | *100* | *100* | *N* |
| *Russian Federation* | *5 277* | *652* | *349* | *198* | *79* | *4* | *1* | – | – | – | – |
| *San Marino* | – | – | – | – | – | – | – | – | – | – | – |
| Serbia | 33 | – | 29 | 4 | 4 | 1 | – | – | – | – | – |
| Serbia excluding Kosovo[1] | 30 | – | 29 | 4 | 4 | 1 | – | – | – | – | – |
| Kosovo[1] | 3 | 0 | 0 | 0 | 0 | 0 | 0 | – | – | – | – |
| Switzerland | 32 | 32 | 20 | 9 | 9 | 5 | 55 | 2020 | 100 | 100 | Y |
| Tajikistan | 76 | 70 | 6 | 1 | 0 | 6 | 52 | 2019 | 100 | 100 | Y |
| *Turkey* | *165* | *114* | *85* | *46* | *46* | *5* | *26* | *2020* | *100* | *100* | *Y* |
| *Turkmenistan* | *67* | – | *6* | *6* | – | *6* | *7* | 2019 | – | – | – |
| *Ukraine* | *758* | *742* | *52* | *34* | *34* | *4* | *159* | – | *100* | *100* | – |
| United Kingdom | – | – | – | – | – | – | – | – | – | – | – |
| *Uzbekistan* | *290* | *254* | *8* | *8* | *8* | *12* | *52* | *2020* | *100* | *100* | *Y* |
| **Subtotal non-EU/EEA** | **7 325** | **2 303** | **647** | **355** | **218** | **87** | **762** | **–** | **–** | **–** | **–** |
| **Total European Region** | **7 836** | **2 555** | **1 164** | **655** | **323** | **196** | **982** | **–** | **–** | **–** | **–** |
| ***Subtotal 18 HPCs*** | ***7 346*** | ***2 389*** | ***686*** | ***435*** | ***266*** | ***85*** | ***744*** | **–** | **–** | **–** | **–** |

*Note:* European Region comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 tuberculosis HPCs presented in italics.
EQA: external quality assessment.
EU/EEA: European Union/European Economic Area.
DST: drug-susceptibility testing.
HPCs: high-priority countries.
N: no.
Y: yes.
[a] Data obtained from WHO Tuberculosis Monitoring and Evaluation database.
[b] Acceptable performance defined as reference laboratory achieving 95% performance (smear and drug-susceptibility testing).
[1] All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

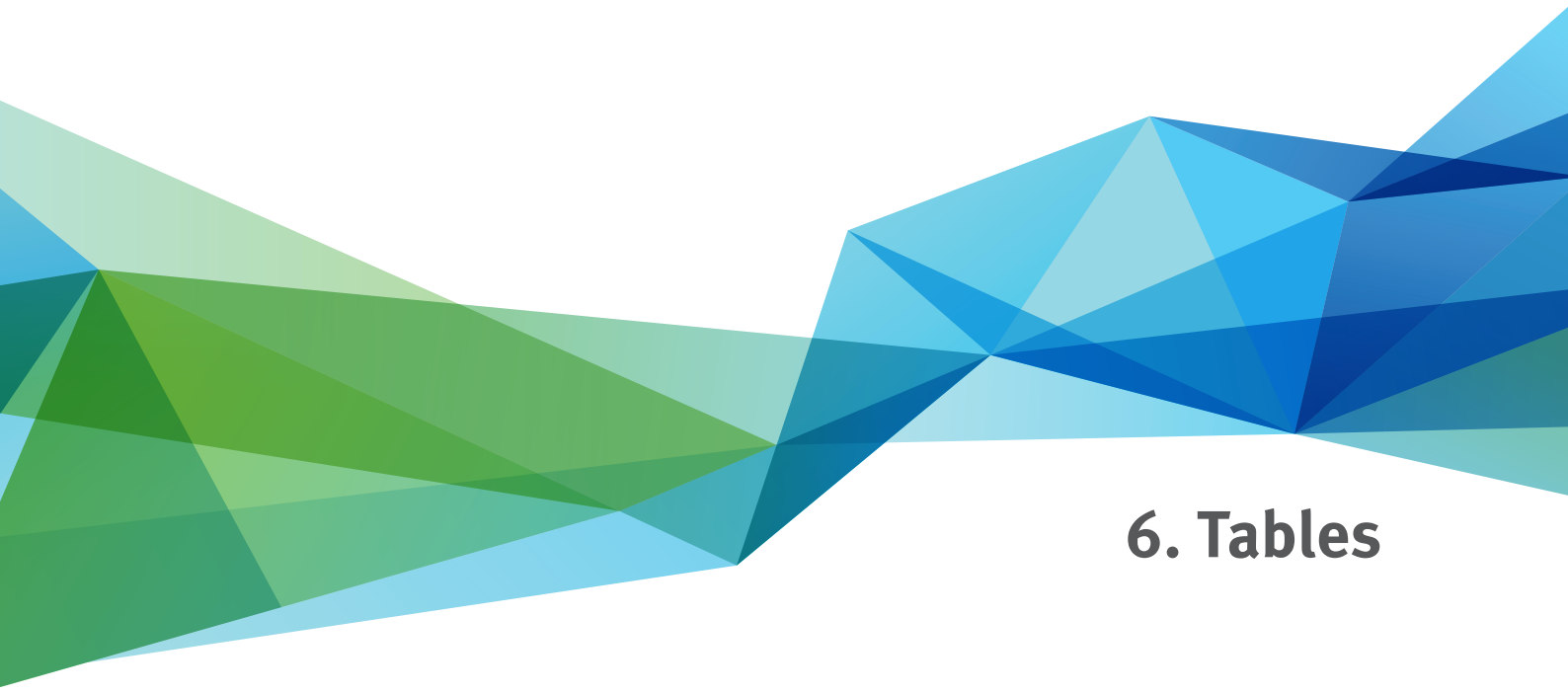
## Annex 6. Monitoring framework for follow up of the Tuberculosis Action Plan for the WHO European Region, 2016–2020

| Area of intervention | Indicator | Baseline for WHO European Region (2014) | Target | Frequency of assessment | Data source | Monitoring mechanism | Indicator definition | Indicator level |
|---|---|---|---|---|---|---|---|---|
| **1. Integrated patient-centred care and prevention** | | | | | | | | |
| 1.A Systematic screening of contacts and high-risk groups | | | | | | | | |
| 1.A.1 | Coverage of population at risk with systematic screening for active TB and LTBI | NA | Full coverage | 01–2016 01–2021 | NTP | Desk review | Total number of people screened for TB and/ or LTBI in a defined period over the total number of people at risk according to the national guidelines, in the same period | 98.2% |
| 1.B Early diagnosis of all forms of TB and universal access to DST, including the use of rapid tests | | | | | | | | |
| 1.B.1 | Percentage of TB patients diagnosed using WHO-recommended rapid tests (G) | NA | ≥ 90% | Annually | NTP | Desk review | Number of newly notified TB patients diagnosed with WHO-recommended rapid tests, divided by the total number of newly notified TB patients | 72.3% |
| 1.B.2 | First-line DST coverage (%) among all bacteriologically confirmed TB cases (G) | 91.9% | Close to 100% | Annually | WHO global TB database | Routine reporting | Number of TB patients with DST results divided by the number of notified cases in the same year, expressed as a percentage. DST coverage includes results from molecular (such as Xpert MTB/RIF) as well as conventional phenotypic DST results. | 92.0% |
| 1.B.3 | RR/MDR-TB case detection rate (%) (G) | 46.5% | 85% | Annually | WHO global TB database | Routine reporting | Total number of notified RR/MDR-TB cases over total number of estimated RR/MDR-TB cases among notified bacteriologically confirmed pulmonary TB patients | 93.8% |
| 1.B.4 | TB notification rate per 100 000 population (E) | 30.4 | 24.6 | Annually | WHO global TB database | Routine reporting | Total number of new and relapse TB cases notified per 100 000 population | 17.5 |
| 1.B.5 | TB case-detection rate (%) | 88.2% | Increase | Annually | WHO global TB database | Routine reporting | Total number of notified TB cases over total number of estimated TB cases expressed as percentage | 70.7% |
| 1.B.6 | Percentage of RR/MDR-TB among new TB patients (E) | 16.9% | Decrease | Annually | WHO global TB database | Routine reporting | Total number of laboratory-confirmed new RR/MDR-TB cases over total number of new TB cases with DST results expressed as percentage | 23.1% |
| 1.B.7 | Percentage of RR/MDR-TB among previously treated TB patients | 48.0% | Decrease | Annually | WHO global TB database | Routine reporting | Total number of laboratory-confirmed previously treated RR/MDR-TB cases over total number of previously treated TB cases with DST results expressed as percentage | 55.2% |
| 1.C Equitable access to quality treatment and continuity of care for all people with TB, including drug-resistant TB, and patient support to facilitate treatment adherence | | | | | | | | |
| 1.C.1 | Percentage of hospitalization of new TB patients (E) | NA | Decrease | 01–2016 01–2021 | NTP | Desk review | Total number of new TB cases hospitalized in a specified period over total number of new TB cases registered in the same period expressed as percentage | NA |
| 1.C.2 | Percentage of detected RR/MDR-TB enrolled in treatment (G) | 61.9% | Close to 100% | Annually | WHO global TB database | Routine reporting | Total number of laboratory-confirmed RR/MDR-TB cases enrolled into SLD treatment in line with WHO recommendations over total number of laboratory-confirmed RR/MDR-TB cases notified expressed as percentage | 125.4% |
| 1.C.3 | Treatment success rate (%) among all new and relapse TB patients (G) | 77.2% | 85% | Annually | WHO global TB database | Routine reporting | New and relapse TB cases registered in a specified period that were successfully treated | 76.5% |
| 1.C.4 | Treatment success rate (%) among the RR/MDR-TB treatment cohort (G) (E) | 54.8% | 75% | Annually | WHO global TB database | Routine reporting | Number of confirmed RR/MDR-TB cases during the specified period that were successfully treated over number of confirmed RR/MDR-TB cases that started on a prescribed MDR-TB treatment regimen during the specified period | 55.9% |
| 1.C.5 | TB mortality rate (ICD A15-19) per 100 000 population (G) (E) | 3.7 | 2.7 | Annually | WHO global TB database | Routine reporting | Estimated number of TB deaths (from vital registration system) per 100 000 population | 2.3 |
| 1.D Collaborative TB/HIV activities and management of comorbidities | | | | | | | | |
| 1.D.1 | TB/HIV case-detection rate (%) | 84.8% | Close to 100% | Annually | WHO global TB database | Routine reporting | Total number of registered HIV coinfected TB patients in a specified period over total number of estimated TB/HIV coinfected patients | 67.8% |
| 1.D.2 | HIV testing coverage (%) (G) (E) | 67.6% | Close to 100% | Annually | WHO global TB database | Routine reporting | Number of new and relapse TB patients with documented HIV status divided by the number of new and relapse TB patients notified in the same year, expressed as percentage | 92.6% |
| 1.D.3 | Percentage of HIV among all TB | 7.8% | Decrease | Annually | WHO global TB database | Routine reporting | Total number of registered TB patients in a specified period who are HIV-positive over total number of registered TB patients in the same period with documented HIV test results | 15.0% |
| 1.D.4 | ART coverage (%) among TB/HIV cases | 53.8% | Close to 100% | Annually | WHO global TB database | Routine reporting | Total number of registered HIV/TB patients in a specified period who are enrolled in ART over total number of registered TB patients in the same period who are HIV-positive | 74.3% |
| 1.D.5 | LTBI treatment enrolment rate (%) among PLHIV (G) | 4.8% | 30% | Annually | WHO global TB database | Routine reporting | Total number of new HIV cases enrolled in LTBI treatment in a specified period; total number of new HIV cases eligible for LTBI treatment in the same period | 79.5% |

## Annex 6 contd

| Area of intervention | Indicator | Baseline for WHO European Region (2014) | Target | Frequency of assessment | Data source | Monitoring mechanism | Indicator definition | Indicator level |
|---|---|---|---|---|---|---|---|---|
| 1.E Management of LTBI and preventive treatment of people at high risk, and vaccination against TB | | | | | | | | |
| 1.E.1 | Contact investigation coverage (%) (G) (E) | NA | 90% | 01–2016 01–2021 | NTP | Desk review | Number of contacts of people with bacteriologically confirmed TB who were investigated for TB/LTBI in a defined period over the number of contacts eligible for contact investigation in the same period | 98.2% |
| 1.E.2 | LTBI treatment coverage (%) in childhood TB contact persons aged under 5 years (G) | N/A | 90% | 01–2016 | NTP | Desk review | Total number of child TB contacts age < 5 years enrolled in LTBI treatment in a defined period over number of child TB contact cases eligible for LTBI treatment in the same period | 29.6% |
| **2. Bold policies and supportive systems** | | | | | | | | |
| 2.A Political commitment with adequate resources, including universal health coverage policy | | | | | | | | |
| 2.A.1 | Number of Member States that have a regular TB control/elimination performance publication every five years (E) | NA | 53 | Cumulative 2016–2020 | NTP | Desk review | – | – |
| 2.B Health system strengthening in all functions, including well aligned functioning mechanisms for TB and human resources | | | | | | | | |
| 2.B.1 | Percentage of TB patients and their households that experience catastrophic financial consequences due to TB (G) (E) | NA | Close to 0 | Annually | NTP | Desk review | Number of people treated for TB (and their households) who incur catastrophic costs (direct and indirect combined) divided by the total number of people treated for TB | – |
| 2.C Regulatory frameworks for case-based surveillance, strengthening vital registration, quality and rational use of medicines and pharmacovigilance | | | | | | | | |
| 2.C.1 | Treatment coverage (%) with new TB drugs | NA | 20% | Cumulative 2016–2020 | NTP | Desk review | Number of TB patients treated with regimens that include new TB drugs divided by the number of notified patients eligible for treatment with new TB drugs, expressed as a percentage | – |
| 2.D Community systems and civil society engagement | | | | | | | | |
| 2.D.1 | Number of Member States with functioning multistakeholder coalitions advocating for TB care and resources | NA | 53 | Cumulative 2016–2020 | NTP | Desk review | – | – |
| 2.E Social protection, poverty alleviation and actions on other determinants of TB, such as migration and prisons | | | | | | | | |
| 2.E.1 | Treatment success rate (%) of new and relapse TB cases among prisoners | 63.2% | 85% | Annually | WHO global TB database | Routine reporting | New and relapse prison TB cases registered in a specified period that were successfully treated | 60.4% |
| **3. Intensified research and innovation** | | | | | | | | |
| 3.A Discovery, development and rapid uptake of new tools, interventions and strategies | | | | | | | | |
| 3.A.1 | European TB research initiative established by mid-2016 | – | Established | Cumulative 2016–2020 | NTP | Desk review | – | – |

ART: antiretroviral therapy. DST: drug-susceptibility testing. (E): European (indicator). (G): global (indicator). LTBI: latent tuberculosis infection. NA: not available. NTP: national tuberculosis programme. PLHIV: people living with HIV. RR/MDR-TB: rifampicin-resistant/multidrug-resistant tuberculosis. SLD: second-line drug. TB: tuberculosis.



# 6. Tables

## Summary table. Tuberculosis (TB) surveillance data by region, European Region, 2020

| Data item | Table showing data by country/area | Region | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | EU/EEA | | Non-EU/EEA | | Total | | 18 high-priority countries[a] | |
| | | Number of reporting countries/areas[b] | Value | Number of reporting countries/areas[b] | Value | Number of reporting countries/areas[b] | Value | Number of reporting countries/areas[b] | Value |
| **Total population (millions)** | – | **29** | **518.1** | **24** | **481.9** | **53** | **932.9** | **18** | **411.0** |
| **Estimates of TB disease burden, 2020[c]** | | | | | | | | | |
| Estimated TB mortality rate (excluding HIV-related deaths) per 100 000 population | 1 | 30 | 0.8 | 21 | 3.5 | 51 | 2.3 | 18 | 4.4 |
| Estimated TB incidence rate per 100 000 population | 1 | 29 | 9.5 | 24 | 39.2 | 53 | 25.0 | 18 | 47.4 |
| Estimated RR-TB cases among notified bacteriologically confirmed pulmonary TB patients | 2 | 28 | 810 | 22 | 35 800 | 50 | 37 000 | 17 | 36 200 |
| Estimated percentage of HIV infection among incident TB cases (new and relapse) | 2 | 27 | 3.6 | 21 | 14.2 | 48 | 12.0 | 18 | 13.8 |
| **Notifications of TB cases, 2020** | | | | | | | | | |
| Total number of TB cases | 3 | 29 | 33 148 | 23 | 166 552 | 52 | 199 700 | 17 | 169 799 |
| All TB cases per 100 000 population | 3 | 29 | 7.3 | 23 | 34.6 | 52 | 21.4 | 17 | 41.5 |
| Mean annual percentage change of notification rate (2016–2020) | 3 | 29 | –11.6% | 23 | –9.7% | 52 | –9.8% | 17 | –9.7% |
| Number of new and relapse TB cases | III | 29 | 31 551 | 23 | 132 051 | 52 | 163 602 | 17 | 135 024 |
| New and relapse TB cases per 100 000 population | III | 29 | 7.0 | 23 | 27.4 | 52 | 17.5 | 17 | 32.8 |
| Mean annual percentage change of notification rate of new and relapse TB cases (2016–2020) | III | 28 | –11.1% | 23 | –10.7% | 51 | –10.7% | 17 | –10.9% |
| Percentage of new cases among all TB cases | 4 | 29 | 72.8% | 23 | 65.7% | 52 | 66.9% | 17 | 65.5% |
| Percentage of retreatment cases among all TB cases | 4 | 29 | 10.4% | 23 | 34.3% | 52 | 30.3% | 17 | 34.5% |
| Percentage of pulmonary TB among all TB cases | 5 | 29 | 77.7% | – | – | – | – | – | – |
| Percentage of laboratory-confirmed TB cases among all TB cases | 8 | 29 | 67.3% | – | – | – | – | – | – |
| Male-to-female ratio of new and relapse TB cases | 8 | 29 | 2.0 | 23 | 1.8 | 52 | 1.8 | 17 | 1.9 |
| Percentage of foreign TB cases among all TB cases | 9 | 29 | 33.0% | 20 | 4.3% | 50 | 9.4% | 14 | 2.0% |
| **TB case laboratory confirmation, RR/MDR and XDR, 2020** | | | | | | | | | |
| Percentage of laboratory-confirmed cases among new pulmonary TB cases[d] | 11 | 29 | 76.7% | 21 | 62.8% | 50 | 65.2% | 16 | 63.5% |
| Percentage of DST results reported among new bacteriologically confirmed pulmonary TB cases | 11 | 29 | 84.3% | 21 | 94.9% | 50 | 92.7% | 16 | 94.3% |
| Percentage of RR/MDR-TB among new pulmonary TB cases | 11 | 29 | 2.8% | 21 | 27.8% | 50 | 23.1% | 16 | 26.9% |
| Percentage of RR/MDR-TB among previously treated pulmonary TB cases | 11 | 29 | 12.8% | 21 | 57.7% | 50 | 55.2% | 16 | 56.2% |
| Percentage of pre-XDR-TB among all RR/MDR-TB cases with DST for fluoroquinolone | 12 | 29 | 27.6% | 15 | 27.0% | 44 | 33.0% | 16 | 32.9% |
| Percentage of XDR-TB among all pre-XDR-TB cases with DST for any other Group A drugs | 12 | 29 | 45.1% | 8 | 5.7% | 37 | 6.5% | 11 | 6.1% |
| Percentage of XDR-TB among all MDR-TB cases with DST for SLD | 14 | 29 | 22.4% | 18 | 22.5% | 47 | 22.5% | 15 | 22.6% |
| **TB/HIV coinfection, 2020** | | | | | | | | | |
| Percentage of new and relapse TB cases with known HIV status | 14 | 19 | 73.4% | 20 | 95.2% | 39 | 92.6% | 16 | 94.8% |
| Percentage of HIV-positive cases among new and relapse TB cases with known HIV status | 14 | 19 | 4.2% | 20 | 16.1% | 39 | 15.0% | 16 | 15.3% |
| Percentage of HIV-positive new and relapse TB cases started on ART | 14 | 6 | 84.1% | 20 | 74.2% | 26 | 74.3% | 14 | 74.3% |
| **Treatment outcome** | | | | | | | | | |
| Treatment success rate among new and relapse TB cases notified in 2019 | 16 | 23 | 71.8% | 23 | 77.5% | 46 | 76.5% | 17 | 78.2% |
| Treatment success rate among previously treated TB cases reported in 2019[e] | 17 | 22 | 51.2% | 22 | 61.7% | 44 | 61.1% | 17 | 61.0% |
| Treatment success rate among childhood TB cases notified in 2019 | 18 | 23 | 77.0% | 18 | 92.8% | 41 | 88.8% | 13 | 93.5% |
| Treatment success rate among TB/HIV cases notified in 2019 | 20 | 19 | 55.1% | 15 | 54.8% | 34 | 54.8% | 14 | 54.9% |
| Treatment success rate among RR/MDR-TB cases enrolled in SLD treatment in 2018 | 22 | 21 | 52.4% | 21 | 56.0% | 42 | 55.9% | 17 | 55.9% |
| Teatment success rate among all pre-XDR-TB cases notified in 2018 | 23 | 21 | 33.2% | 19 | 52.1% | 40 | 50.9% | 17 | 50.9% |
| Treatment success rate among all XDR-TB cases notified in 2017 | 24 | 21 | 52.1% | – | – | – | – | – | – |

*Note:* European Region comprises the 53 countries of the WHO European Region and Liechtenstein.
ART: antiretroviral therapy.
DST: drug-susceptibility testing.
MDR: multidrug-resistant.
RR: rifampicin-resistant.
SLD: second-line anti-TB drugs.
XDR: extensively drug-resistant.
[a] High-priority countries: the 18 high-priority countries in the WHO European Region are: Armenia, Azerbaijan, Belarus, Bulgaria, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, the Republic of Moldova, Romania, the Russian Federation, Tajikistan, Turkey, Turkmenistan, Ukraine and Uzbekistan.
[b] Number of countries/areas with available data included in the statistics.
[c] WHO estimates, as published in Global tuberculosis report 2020 (Geneva: World Health Organization; 2020 [will be replaced by a reference number]).
[d] Laboratory-confirmed cases – cases with positive identification for *Mycobacterium tuberculosis* complex confirmed by culture and/or line probe assay for non-EU/EEA countries and areas. For EU/EEA countries: culture-positive OR microscopy-positive and nucleic acid amplification test-positive cases.
[e] Excluding relapse TB cases.

## Table 1. Estimates of the TB disease burden, European Region, 2020

| Country | Population[a] | Estimated number of deaths from TB (all forms, excluding HIV) | | | | | | Estimated number of incident cases (all forms) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Number | | | Per 100 000 | | | Number | | | Per 100 000 | | |
| | | Best | Low | High | Best | Low | High | Best | Low | High | Best | Low | High |
| **EU/EEA** | | | | | | | | | | | | | |
| Austria | 9 006 400 | 41 | 40 | 42 | 0.46 | 0.45 | 0.47 | 440 | 380 | 510 | 4.9 | 4.2 | 5.6 |
| Belgium | 11 589 616 | 33 | 32 | 34 | 0.29 | 0.27 | 0.30 | 890 | 770 | 1 000 | 7.7 | 6.6 | 8.9 |
| *Bulgaria* | *6 948 445* | *97* | *95* | *99* | *1.40* | *1.40* | *1.40* | *1 300* | *1 000* | *1 700* | *19* | *14* | *24* |
| Croatia | 4 105 268 | 60 | 59 | 60 | 1.50 | 1.40 | 1.50 | 270 | 230 | 310 | 6.6 | 5.7 | 7.6 |
| Cyprus | 1 207 361 | 5 | 4 | 5 | 0.39 | 0.36 | 0.42 | 69 | 59 | 80 | 5.7 | 4.9 | 6.6 |
| Czechia | 10 708 982 | 23 | 22 | 23 | 0.21 | 0.21 | 0.21 | 410 | 350 | 480 | 3.9 | 3.3 | 4.5 |
| Denmark | 5 792 203 | 10 | 10 | 11 | 0.17 | 0.16 | 0.18 | 280 | 240 | 320 | 4.9 | 4.2 | 5.6 |
| *Estonia* | *1 326 539* | *16* | *16* | *16* | *1.20* | *1.20* | *1.20* | *140* | *120* | *160* | *10* | *8.9* | *12* |
| Finland | 5 540 718 | 30 | 30 | 31 | 0.55 | 0.55 | 0.55 | 200 | 170 | 230 | 3.6 | 3.1 | 4.2 |
| France | 65 273 512 | 440 | 420 | 460 | 0.68 | 0.64 | 0.71 | 5 300 | 4 700 | 6 000 | 8.2 | 7.2 | 9.2 |
| Germany | 83 783 945 | 270 | 260 | 270 | 0.32 | 0.31 | 0.33 | 4 600 | 3 900 | 5 300 | 5.5 | 4.7 | 6.4 |
| Greece | 10 423 056 | 52 | 49 | 54 | 0.50 | 0.47 | 0.52 | 470 | 400 | 550 | 4.5 | 3.9 | 5.2 |
| Hungary | 9 660 350 | 62 | 62 | 62 | 0.64 | 0.64 | 0.64 | 440 | 380 | 510 | 4.6 | 3.9 | 5.3 |
| Iceland | 341 250 | 2 | 2 | 2 | 0.62 | 0.60 | 0.64 | 10 | 8 | 11 | 2.8 | 2.4 | 3.3 |
| Ireland | 4 937 796 | 18 | 18 | 18 | 0.37 | 0.37 | 0.37 | 260 | 230 | 300 | 5.3 | 4.6 | 6.2 |
| Italy | 60 461 828 | 310 | 300 | 310 | 0.51 | 0.50 | 0.51 | 4 000 | 3 400 | 4 600 | 6.6 | 5.7 | 7.6 |
| *Latvia* | *1 886 202* | *64* | *62* | *65* | *3.40* | *3.30* | *3.50* | *430* | *370* | *500* | *23* | *20* | *26* |
| Liechtenstein | – | – | – | – | – | – | – | – | – | – | – | – | – |
| *Lithuania* | *2 722 291* | *120* | *110* | *130* | *4.40* | *4.20* | *4.70* | *790* | *680* | *910* | *29* | *25* | *34* |
| Luxembourg | 625 976 | 2 | 2 | 2 | 0.35 | 0.34 | 0.36 | 37 | 31 | 43 | 5.9 | 5 | 6.8 |
| Malta | 441 539 | 1 | 1 | 1 | 0.23 | 0.23 | 0.23 | 160 | 140 | 190 | 36 | 31 | 42 |
| Netherlands | 17 134 873 | 28 | 28 | 29 | 0.16 | 0.16 | 0.17 | 710 | 600 | 820 | 4.1 | 3.5 | 4.8 |
| Norway | 5 421 242 | 19 | 18 | 19 | 0.34 | 0.33 | 0.35 | 170 | 140 | 190 | 3.1 | 2.6 | 3.5 |
| Poland | 37 846 605 | 570 | 540 | 600 | 1.50 | 1.40 | 1.60 | 3 600 | 3 100 | 4 200 | 9.6 | 8.2 | 11 |
| Portugal | 10 196 707 | 240 | 230 | 250 | 2.40 | 2.30 | 2.40 | 1 600 | 1 400 | 1 800 | 16 | 13 | 18 |
| *Romania* | *19 237 682* | *920* | *910* | *930* | *4.80* | *4.80* | *4.80* | *12 000* | *10 000* | *14 000* | *64* | *54* | *74* |
| Slovakia | 5 459 643 | 35 | 34 | 35 | 0.64 | 0.63 | 0.65 | 180 | 150 | 200 | 3.2 | 2.8 | 3.7 |
| Slovenia | 2 078 932 | 14 | 14 | 15 | 0.69 | 0.68 | 0.70 | 86 | 74 | 100 | 4.1 | 3.5 | 4.8 |
| Spain | 46 754 783 | 250 | 250 | 260 | 0.54 | 0.53 | 0.55 | 3 400 | 2 900 | 3 900 | 7.3 | 6.2 | 8.4 |
| Sweden | 10 099 270 | 22 | 22 | 22 | 0.22 | 0.21 | 0.22 | 360 | 310 | 420 | 3.6 | 3.1 | 4.2 |
| **Subtotal EU/EEA** | **451 013 014** | **3 800** | **3 700** | **3 800** | **0.8** | **0.8** | **0.8** | **43 000** | **41 000** | **45 000** | **9.5** | **9.1** | **10.0** |
| **Non-EU/EEA** | | | | | | | | | | | | | |
| Albania | 2 877 800 | 11 | 6 | 18 | 0.40 | 0.22 | 0.63 | 430 | 370 | 500 | 15 | 13 | 17 |
| Andorra | 77 265 | 1 | 1 | 2 | 1.40 | 0.85 | 2.10 | 2 | 2 | 3 | 3 | 3 | 3 |
| *Armenia* | *2 963 234* | *30* | *29* | *30* | *1.00* | *0.99* | *1.00* | *680* | *520* | *870* | *23* | *18* | *29* |
| *Azerbaijan* | *10 139 175* | *740* | *660* | *830* | *7.30* | *6.50* | *8.20* | *5 900* | *4 500* | *7 500* | *58* | *44* | *74* |
| *Belarus* | *9 449 321* | *260* | *250* | *270* | *2.80* | *2.70* | *2.90* | *2 500* | *1 900* | *3 100* | *26* | *20* | *33* |
| Bosnia and Herzegovina | 3 280 815 | 110 | 96 | 130 | 3.50 | 2.90 | 4.10 | 850 | 650 | 1 100 | 26 | 20 | 33 |
| *Georgia* | *3 989 175* | *190* | *170* | *220* | *4.80* | *4.20* | *5.50* | *2 800* | *2 300* | *3 300* | *70* | *58* | *83* |
| Israel | 8 655 541 | 21 | 20 | 21 | 0.24 | 0.23 | 0.25 | 180 | 160 | 210 | 2 | 2 | 2 |
| *Kazakhstan* | *18 776 707* | *610* | *580* | *630* | *3.20* | *3.10* | *3.40* | *13 000* | *8 400* | *19 000* | *69* | *45* | *99* |
| *Kyrgyzstan* | *6 524 191* | *300* | *290* | *300* | *4.60* | *4.50* | *4.70* | *6 900* | *5 800* | *8 000* | *105* | *89* | *122* |
| Monaco | 39 244 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| Montenegro | 628 062 | 1 | 1 | 2 | 0.23 | 0.16 | 0.32 | 99 | 84 | 120 | 16 | 13 | 18 |
| North Macedonia | 2 083 380 | 25 | 21 | 28 | 1.20 | 1.00 | 1.40 | 250 | 190 | 310 | 12 | 9 | 15 |
| *Republic of Moldova* | *4 033 963* | *210* | *200* | *230* | *5.30* | *4.90* | *5.60* | *3 000* | *2 500* | *3 500* | *74* | *63* | *86* |
| *Russian Federation* | *145 934 460* | *7 300* | *7 100* | *7 600* | *5.00* | *4.80* | *5.20* | *68 000* | *43 000* | *98 000* | *46* | *30* | *67* |
| San Marino | 33 938 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| Serbia | 8 737 370 | 93 | 85 | 100 | 1.10 | 0.97 | 1.20 | 1 200 | 980 | 1 300 | 13 | 11 | 15 |
| Switzerland | 8 654 618 | 17 | 17 | 18 | 0.20 | 0.19 | 0.21 | 400 | 350 | 470 | 5 | 4 | 5 |
| *Tajikistan* | *9 537 642* | *920* | *790* | *1100* | *9.60* | *8.30* | *11.00* | *8 000* | *6 100* | *10 000* | *84* | *64* | *106* |
| *Turkey* | *84 339 067* | *420* | *410* | *440* | *0.50* | *0.48* | *0.52* | *13 000* | *11 000* | *15 000* | *15* | *13* | *18* |
| *Turkmenistan* | *6 031 187* | *620* | *520* | *720* | *10.00* | *8.60* | *12.00* | *2 800* | *2 200* | *3 600* | *47* | *36* | *60* |
| *Ukraine* | *43 733 759* | *4 100* | *3 500* | *4 800* | *9.40* | *7.90* | *11.00* | *32 000* | *21 000* | *45 000* | *73* | *49* | *102* |
| United Kingdom | 67 886 004 | 310 | 310 | 320 | 0.46 | 0.45 | 0.48 | 4 700 | 4 200 | 5 200 | 7 | 6 | 8 |
| *Uzbekistan* | *33 469 199* | *1 100* | *1 000* | *1 100* | *3.20* | *3.00* | *3.30* | *22 000* | *15 000* | *30 000* | *66* | *46* | *90* |
| **Subtotal non-EU/EEA** | **481 875 117** | **17 000** | **16 000** | **18 000** | **3.5** | **3.3** | **3.7** | **189 000** | **158 000** | **220 000** | **39** | **33** | **46** |
| **Total European Region** | **932 888 131** | **21 000** | **20 000** | **22 000** | **2.3** | **2.2** | **2.4** | **231 000** | **201 000** | **264 000** | **25** | **22** | **28** |
| ***Subtotal 18 HPCs*** | ***411 042 239*** | ***18 017*** | ***17 000*** | ***19 000*** | ***4.4*** | ***4.1*** | ***4.6*** | ***195 000*** | ***164 000*** | ***226 000*** | ***47*** | ***40*** | ***55*** |

*Note:* European Region comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB HPCs are presented in italics.
HPCs: high-priority countries.
[a] Population estimate 2020 by United Nations Statistical Database for all countries.

| Estimated incidence of child TB cases | | | | | | Estimated incidence of TB among females | | | | | | Country |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Number | | | Per 100 000 | | | Number | | | Per 100 000 | | | |
| Best | Low | High | Best | Low | High | Best | Low | High | Best | Low | High | |
| | | | | | | | | | | | | EU/EEA |
| 14 | 12 | 16 | 1.1 | 0.9 | 1.2 | 150 | 120 | 180 | 3.3 | 2.6 | 3.9 | Austria |
| 55 | 46 | 64 | 2.8 | 2.3 | 3.2 | 310 | 250 | 370 | 5.3 | 4.3 | 6.3 | Belgium |
| *110* | *79* | *140* | *10.8* | *7.7* | *13.7* | *450* | *300* | *600* | *12.6* | *8.4* | *16.8* | *Bulgaria* |
| 1 | 1 | 1 | 0.2 | 0.2 | 0.2 | 110 | 84 | 130 | 5.2 | 4.0 | 6.1 | Croatia |
| 2 | 2 | 2 | 1.0 | 1.0 | 1.0 | 32 | 25 | 38 | 5.3 | 4.1 | 6.3 | Cyprus |
| 2 | 2 | 3 | 0.1 | 0.1 | 0.2 | 130 | 100 | 150 | 2.4 | 1.8 | 2.8 | Czechia |
| 17 | 15 | 20 | 1.8 | 1.6 | 2.1 | 100 | 82 | 130 | 3.4 | 2.8 | 4.5 | Denmark |
| 1 | 1 | 1 | 0.5 | 0.5 | 0.5 | 36 | 29 | 42 | 5.2 | 4.2 | 6.0 | Estonia |
| 6 | 5 | 7 | 0.7 | 0.6 | 0.8 | 84 | 66 | 100 | 3.0 | 2.4 | 3.6 | Finland |
| 280 | 250 | 320 | 2.4 | 2.2 | 2.8 | 2 000 | 1 700 | 2 300 | 5.9 | 5.0 | 6.8 | France |
| 190 | 160 | 220 | 1.6 | 1.4 | 1.9 | 1 600 | 1 300 | 2 000 | 3.8 | 3.1 | 4.7 | Germany |
| 17 | 15 | 20 | 1.2 | 1.1 | 1.4 | 120 | 96 | 140 | 2.3 | 1.8 | 2.6 | Greece |
| 6 | 5 | 7 | 0.4 | 0.4 | 0.5 | 170 | 140 | 210 | 3.4 | 2.8 | 4.1 | Hungary |
| 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 4 | 4 | 5 | 2.4 | 2.4 | 2.9 | Iceland |
| 6 | 5 | 7 | 0.6 | 0.5 | 0.7 | 100 | 80 | 120 | 4.0 | 3.2 | 4.8 | Ireland |
| 220 | 180 | 250 | 2.8 | 2.3 | 3.2 | 2 400 | 1 900 | 2 900 | 7.7 | 6.1 | 9.3 | Italy |
| *8* | *7* | *9* | *2.6* | *2.3* | *2.9* | *130* | *110* | *160* | *12.8* | *10.8* | *15.7* | *Latvia* |
| – | – | – | – | – | – | – | – | – | – | – | – | Liechtenstein |
| *15* | *13* | *17* | *3.6* | *3.1* | *4.0* | *190* | *150* | *230* | *13.0* | *10.3* | *15.7* | *Lithuania* |
| 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 2 | 2 | 3 | 0.6 | 0.6 | 1.0 | Luxembourg |
| 9 | 7 | 10 | 14.2 | 11.0 | 15.8 | 30 | 24 | 35 | 13.6 | 10.9 | 15.9 | Malta |
| 22 | 18 | 25 | 0.8 | 0.7 | 0.9 | 310 | 240 | 370 | 3.6 | 2.8 | 4.3 | Netherlands |
| 13 | 11 | 15 | 1.4 | 1.2 | 1.6 | 93 | 74 | 110 | 3.5 | 2.8 | 4.1 | Norway |
| 44 | 37 | 50 | 0.8 | 0.6 | 0.9 | 970 | 780 | 1 200 | 5.0 | 4.0 | 6.2 | Poland |
| 47 | 40 | 54 | 3.5 | 3.0 | 4.1 | 560 | 440 | 670 | 10.4 | 8.2 | 12.5 | Portugal |
| *590* | *490* | *690* | *19.8* | *16.4* | *23.1* | *3 800* | *3 000* | *4 700* | *38.4* | *30.4* | *47.6* | *Romania* |
| 40 | 33 | 48 | 4.7 | 3.9 | 5.7 | 71 | 56 | 86 | 2.5 | 2.0 | 3.1 | Slovakia |
| 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 34 | 27 | 42 | 3.3 | 2.6 | 4.0 | Slovenia |
| 220 | 180 | 250 | 3.3 | 2.7 | 3.7 | 1 300 | 1 000 | 1 500 | 5.5 | 4.2 | 6.3 | Spain |
| 18 | 15 | 21 | 1.0 | 0.8 | 1.2 | 170 | 130 | 210 | 3.4 | 2.6 | 4.2 | Sweden |
| **1 950** | **1 830** | **2 070** | **2.9** | **2.7** | **3.0** | **15 000** | **14 000** | **16 000** | **6.5** | **6.1** | **6.9** | **Subtotal EU/EEA** |
| | | | | | | | | | | | | Non-EU/EEA |
| 5 | 5 | 6 | 1.0 | 1.0 | 1.2 | 110 | 88 | 130 | 7.8 | 6.2 | 9.2 | Albania |
| 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 1 | 1 | 1 | 2.5 | 2.5 | 2.5 | Andorra |
| *40* | *29* | *51* | *6.5* | *4.7* | *8.3* | *170* | *110* | *220* | *10.8* | *7.0* | *14.0* | *Armenia* |
| *360* | *260* | *450* | *15.1* | *10.9* | *18.9* | *2 100* | *1 400* | *2 800* | *41.4* | *27.6* | *55.2* | *Azerbaijan* |
| *81* | *60* | *100* | *5.0* | *3.7* | *6.1* | *740* | *490* | *980* | *14.7* | *9.7* | *19.4* | *Belarus* |
| 2 | 2 | 3 | 0.4 | 0.4 | 0.6 | 330 | 210 | 440 | 19.7 | 12.5 | 26.3 | Bosnia and Herzegovina |
| 150 | 120 | 170 | 18.6 | 14.9 | 21.1 | 960 | 730 | 1 200 | 46.0 | 35.0 | 57.5 | Georgia |
| 5 | 4 | 5 | 0.2 | 0.2 | 0.2 | 68 | 54 | 82 | 1.6 | 1.2 | 1.9 | Israel |
| *730* | *420* | *1 000* | *13.3* | *7.7* | *18.3* | *6 100* | *2 700* | *9 500* | *63.1* | *27.9* | *98.3* | *Kazakhstan* |
| *500* | *410* | *580* | *23.5* | *19.2* | *27.2* | *2 900* | *2 300* | *3 600* | *88.0* | *69.8* | *109.2* | *Kyrgyzstan* |
| 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | Monaco |
| 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 27 | 22 | 33 | 8.5 | 6.9 | 10.4 | Montenegro |
| 17 | 13 | 22 | 5.0 | 3.8 | 6.5 | 83 | 55 | 110 | 8.0 | 5.3 | 10.6 | North Macedonia |
| *140* | *120* | *160* | *21.8* | *18.7* | *25.0* | *860* | *690* | *1 000* | *40.9* | *32.8* | *47.6* | *Republic of Moldova* |
| *1 900* | *1 100* | *2 700* | *7.1* | *4.1* | *10.1* | *20 000* | *9 600* | *31 000* | *25.5* | *12.3* | *39.6* | *Russian Federation* |
| 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | San Marino |
| 29 | 24 | 34 | 2.2 | 1.8 | 2.5 | 640 | 500 | 780 | 14.4 | 11.2 | 17.5 | Serbia |
| 18 | 16 | 21 | 1.4 | 1.2 | 1.6 | 170 | 140 | 210 | 3.9 | 3.2 | 4.8 | Switzerland |
| *510* | *370* | *640* | *14.3* | *10.4* | *18.0* | *3 600* | *2 300* | *4 800* | *76.1* | *48.6* | *101.4* | *Tajikistan* |
| *830* | *690* | *970* | *4.1* | *3.4* | *4.8* | *5 500* | *4 300* | *6 800* | *12.9* | *10.1* | *15.9* | *Turkey* |
| *160* | *120* | *200* | *8.6* | *6.5* | *10.8* | *1 200* | *770* | *1 600* | *39.2* | *25.1* | *52.3* | *Turkmenistan* |
| *1 300* | *790* | *1 800* | *18.6* | *11.3* | *25.7* | *10 000* | *5 200* | *15 000* | *42.6* | *22.2* | *63.9* | *Ukraine* |
| 170 | 150 | 190 | 1.4 | 1.2 | 1.6 | 1 900 | 1 700 | 2 200 | 5.5 | 4.9 | 6.4 | United Kingdom |
| *3 200* | *2 000* | *4 400* | *33.2* | *20.7* | *45.6* | *10 000* | *5 400* | *15 000* | *59.6* | *32.2* | *89.4* | *Uzbekistan* |
| **10 000** | **8 000** | **12 000** | **9.9** | **7.9** | **11.9** | **67 000** | **54 000** | **80 000** | **26.8** | **21.6** | **32.0** | **Subtotal non-EU/EEA** |
| **12 000** | **10 000** | **14 000** | **7.1** | **5.9** | **8.3** | **84 000** | **68 000** | **99 000** | **17.5** | **14.2** | **20.6** | **Total European Region** |
| ***11 000*** | ***9 000*** | ***13 000*** | ***12.5*** | ***10.3*** | ***14.8*** | ***69 000*** | ***56 000*** | ***82 000*** | ***32.2*** | ***26.1*** | ***38.2*** | ***Subtotal 18 HPCs*** |

**Table 2. Estimates for TB/HIV coinfection and RR-TB, European Region, 2020**

| Country | Estimated HIV infection among incident TB cases (new and relapse) | | | | | | Estimated percentage of RR-TB cases among new TB cases | | |
|---|---|---|---|---|---|---|---|---|---|
| | Number | | | % | | | % | | |
| | Best | Low | High | Best | Low | High | Best | Low | High |
| **EU/EEA** | | | | | | | | | |
| Austria | 9 | 5 | 15 | 2.2 | 1.2 | 3.3 | 2.3 | 0.8 | 4.9 |
| Belgium | 33 | 12 | 64 | 3.7 | 1.4 | 7.1 | 2.1 | 1.0 | 3.9 |
| *Bulgaria* | *14* | *5* | *28* | *1.1* | *0.4* | *2.1* | *2.5* | *1.3* | *4.4* |
| Croatia | 3 | 1 | 4 | 1.0 | 0.5 | 1.5 | 0.4 | 0.0 | 2.5 |
| Cyprus | 3 | 2 | 5 | 4.7 | 2.5 | 7.6 | 0.0 | 0.0 | 7.6 |
| Czechia | 3 | 2 | 5 | 0.8 | 0.4 | 1.2 | 3.6 | 1.6 | 6.9 |
| Denmark | 7 | 3 | 14 | 2.5 | 0.9 | 4.9 | 1.8 | 0.4 | 5.0 |
| *Estonia* | *13* | *7* | *23* | *9.7* | *4.8* | *16.0* | *19.0* | *11.0* | *28.0* |
| Finland | 3 | 2 | 5 | 1.5 | 0.8 | 2.4 | 0.0 | 0.0 | 3.6 |
| France | 270 | 210 | 340 | 5.1 | 4.1 | 6.2 | 1.0 | 0.7 | 1.5 |
| Germany | 120 | 63 | 190 | 2.6 | 1.4 | 4.1 | 2.2 | 0.8 | 4.8 |
| Greece | 17 | 10 | 27 | 3.6 | 2.1 | 5.5 | 1.5 | 0.0 | 8.0 |
| Hungary | 5 | 3 | 8 | 1.1 | 0.6 | 1.7 | 3.8 | 1.4 | 8.2 |
| Iceland | 0 | 0 | 0 | 2.1 | 0.8 | 4.1 | 0.0 | 0.0 | 60.0 |
| Ireland | 10 | 5 | 15 | 3.6 | 2.0 | 5.7 | 1.1 | 0.0 | 5.8 |
| Italy | 210 | 120 | 320 | 5.2 | 3.0 | 7.9 | 2.4 | 1.7 | 3.2 |
| *Latvia* | *35* | *12* | *70* | *8.1* | *2.8* | *16.0* | *8.0* | *5.4* | *11.0* |
| Liechtenstein | – | – | – | – | – | – | – | – | – |
| *Lithuania* | *23* | *13* | *36* | *2.9* | *1.7* | *4.4* | *13.0* | *9.8* | *16.0* |
| Luxembourg | 0 | 0 | 2 | 0 | 0 | 5.4 | 0.0 | 0.0 | 19.0 |
| Malta | 3 | 0 | 8 | 1.7 | 0.2 | 4.9 | 0.0 | 0.0 | 9.5 |
| Netherlands | 22 | 13 | 34 | 3.1 | 1.9 | 4.8 | 1.6 | 0.5 | 4.1 |
| Norway | 4 | 1 | 7 | 2.1 | 0.8 | 4.1 | 2.5 | 0.3 | 8.6 |
| Poland | 43 | 23 | 67 | 1.2 | 0.7 | 1.8 | 1.4 | 1.0 | 2.1 |
| Portugal | 160 | 120 | 190 | 9.8 | 8.3 | 11.0 | 1.0 | 0.5 | 1.7 |
| *Romania* | *280* | *220* | *340* | *2.2* | *1.9* | *2.6* | *2.3* | *1.8* | *2.9* |
| Slovakia | 1 | 0 | 2 | 0.5 | 0.2 | 0.9 | 0.0 | 0.0 | 7.0 |
| Slovenia | 0 | 0 | 2 | – | – | 2.4 | 1.8 | 0.0 | 9.4 |
| Spain | 230 | 88 | 440 | 6.8 | 2.6 | 13.0 | 4.2 | 2.9 | 5.8 |
| Sweden | 8 | 4 | 13 | 2.2 | 1.2 | 3.5 | 2.4 | 0.7 | 5.9 |
| **Subtotal EU/EEA** | **1 530** | **1 000** | **2 000** | **3.6** | **2.2** | **4.9** | **2.7** | **1.9** | **3.7** |
| **Non-EU/EEA** | | | | | | | | | |
| Albania | 4 | 0 | 12 | 1.0 | 0.1 | 2.9 | 0.8 | 0.0 | 4.4 |
| Andorra | – | – | – | – | – | – | 0.0 | 0.0 | 98.0 |
| *Armenia* | *72* | *47* | *100* | *11.0* | *7.6* | *14.0* | *14.0* | *9.6* | *20.0* |
| *Azerbaijan* | *110* | *75* | *150* | *1.9* | *1.4* | *2.3* | *12.0* | *10.0* | *14.0* |
| *Belarus* | *220* | *160* | *290* | *8.9* | *7.5* | *10.0* | *40.0* | *36.0* | *43.0* |
| Bosnia and Herzegovina | 2 | 1 | 3 | 0.2 | 0.1 | 0.4 | 0.0 | 0.0 | 1.8 |
| *Georgia* | *55* | *35* | *78* | *1.9* | *1.3* | *2.7* | *11.0* | *8.9* | *13.0* |
| Israel | 17 | 9 | 28 | 9.5 | 5.2 | 15.0 | 5.6 | 1.8 | 13.0 |
| *Kazakhstan* | *850* | *540* | *1 200* | *6.5* | *6.0* | *7.0* | *36.0* | *35.0* | *38.0* |
| *Kyrgyzstan* | *220* | *180* | *280* | *3.3* | *2.7* | *3.8* | *28.0* | *26.0* | *30.0* |
| Monaco | – | – | – | – | – | – | 2.3 | 1.1 | 4.0 |
| Montenegro | 0 | 0 | 4 | 0 | 0 | 4.4 | 0.0 | 0.0 | 12.0 |
| North Macedonia | *1* | *0* | *2* | *0.5* | *0.2* | *1.0* | 1.2 | 0.0 | 6.7 |
| *Republic of Moldova* | *390* | *310* | *470* | *13.0* | *11.0* | *15.0* | *26.0* | *23.0* | *29.0* |
| *Russian Federation* | *16 000* | *10 000* | *24 000* | *24.0* | *24.0* | *25.0* | *36.0* | *36.0* | *37.0* |
| San Marino | – | – | – | – | – | – | 2.3 | 1.1 | 4.0 |
| Serbia | 4 | 2 | 6 | 0.3 | 0.2 | 0.5 | 1.1 | 0.5 | 2.2 |
| Switzerland | 18 | 10 | 29 | 4.5 | 2.5 | 7.0 | 1.1 | 0.2 | 3.3 |
| *Tajikistan* | *230* | *170* | *310* | *2.9* | *2.4* | *3.5* | *24.0* | *22.0* | *26.0* |
| *Turkey* | *150* | *120* | *190* | *1.2* | *1.0* | *1.4* | *2.5* | *2.0* | *3.0* |
| *Turkmenistan* | *630* | *340* | *1 000* | *22.0* | *13.0* | *34.0* | *23.0* | *21.0* | *26.0* |
| *Ukraine* | *7 000* | *4 600* | *9 800* | *22.0* | *21.0* | *22.0* | *29.0* | *28.0* | *30.0* |
| United Kingdom | 160 | 60 | 310 | 3.4 | 1.3 | 6.6 | 2.0 | 1.4 | 2.8 |
| *Uzbekistan* | *690* | *470* | *950* | *3.1* | *2.8* | *3.5* | *18.0* | *17.0* | *20.0* |
| **Subtotal non-EU/EEA** | **26 800** | **19 000** | **34 000** | **14.2** | **8.6** | **21.5** | **21.0** | **20.0** | **23.0** |
| **Total European Region** | **29 000** | **22 000** | **36 000** | **12.0** | **9.2** | **16.0** | **18.0** | **17.2** | **20.0** |
| ***Subtotal 18 HPCs*** | ***27 000*** | ***20 000*** | ***39 300*** | ***13.8*** | ***8.8*** | ***24.0*** | ***22.0*** | ***21.0*** | ***23.0*** |

*Note:* European Region comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB HPCs are presented in italics.
HPCs: high-priority countries.
RR-TB: rifampicin-resistant tuberculosis.

| Estimated percentage of RR-TB cases among retreated TB patients | | | Estimated RR-TB cases among notified bacteriologically confirmed pulmonary TB patients | | | Estimated number of incident RR-TB cases | | | Country |
|---|---|---|---|---|---|---|---|---|---|
| % | | | Number | | | Number | | | |
| Best | Low | High | Best | Low | High | Best | Low | High | |
| | | | | | | | | | **EU/EEA** |
| 18.0 | 3.8 | 43.0 | 8 | 3 | 13 | 13 | 5 | 24 | Austria |
| 8.8 | 1.9 | 24.0 | 13 | 6 | 20 | 26 | 13 | 43 | Belgium |
| *21.0* | *13.0* | *32.0* | *24* | *16* | *32* | *57* | *31* | *90* | *Bulgaria* |
| 6.3 | 0.2 | 30.0 | 1 | 0 | 3 | 2 | 0 | 5 | Croatia |
| 0.0 | 0.0 | 98.0 | 0 | 0 | 1 | 0 | 0 | 0 | Cyprus |
| 30.0 | 6.7 | 65.0 | 13 | 6 | 20 | 19 | 9 | 34 | Czechia |
| 0.0 | 0.0 | 20.0 | 2 | 0 | 5 | 4 | 1 | 11 | Denmark |
| *31.0* | *9.1* | *61.0* | *22* | *14* | *30* | *28* | *17* | *42* | *Estonia* |
| 67.0 | 9.4 | 99.0 | 2 | 0 | 4 | 2 | 1 | 3 | Finland |
| 10.0 | 7.1 | 15.0 | 32 | 23 | 41 | 95 | 66 | 130 | France |
| 23.0 | 16.0 | 30.0 | 92 | 46 | 140 | 140 | 66 | 250 | Germany |
| 9.1 | 0.2 | 41.0 | 6 | 0 | 16 | 10 | 1 | 31 | Greece |
| 24.0 | 8.2 | 47.0 | 13 | 6 | 21 | 27 | 12 | 47 | Hungary |
| 0.0 | 0.0 | 98.0 | 0 | 0 | 3 | 0 | 0 | 0 | Iceland |
| 0.0 | 0.0 | 46.0 | 1 | 0 | 5 | 2 | 1 | 4 | Ireland |
| 13.0 | 7.7 | 21.0 | 42 | 31 | 53 | 140 | 98 | 190 | Italy |
| *31.0* | *19.0* | *44.0* | – | – | – | *48* | *32* | *68* | *Latvia* |
| – | – | – | – | – | – | – | – | – | Liechtenstein |
| *32.0* | *24.0* | *41.0* | *100* | *86* | *120* | *130* | *99* | *170* | *Lithuania* |
| 0.0 | 0.0 | 98.0 | 0 | 0 | 2 | 0 | 0 | 0 | Luxembourg |
| 11.0 | 7.2 | 16.0 | 0 | 0 | 5 | 1 | 0 | 1 | Malta |
| 0.0 | 0.0 | 25.0 | 5 | 0 | 9 | 11 | 3 | 25 | Netherlands |
| 0.0 | 0.0 | 34.0 | 2 | 0 | 5 | 3 | 0 | 11 | Norway |
| 3.0 | 1.5 | 5.5 | 44 | 30 | 58 | 60 | 40 | 83 | Poland |
| 6.9 | 2.8 | 14.0 | 12 | 7 | 18 | 21 | 12 | 34 | Portugal |
| *13.0* | *12.0* | *15.0* | *290* | *260* | *330* | *570* | *430* | *730* | *Romania* |
| 9.1 | 0.2 | 41.0 | 1 | 0 | 4 | 1 | 0 | 1 | Slovakia |
| 0.0 | 0.0 | 60.0 | 1 | 0 | 3 | 1 | 1 | 2 | Slovenia |
| 18.0 | 9.4 | 30.0 | 77 | 54 | 100 | 180 | 120 | 250 | Spain |
| 10.0 | 0.3 | 45.0 | 5 | 1 | 10 | 10 | 3 | 21 | Sweden |
| **53.0** | **46.0** | **60.0** | **810** | **740** | **880** | **1 600** | **1 400** | **1 800** | **Subtotal EU/EEA** |
| | | | | | | | | | **Non-EU/EEA** |
| 23.0 | 5.0 | 54.0 | 4 | 0 | 8 | 8 | 2 | 19 | Albania |
| 11.0 | 7.2 | 16.0 | 0 | 0 | 1 | 0 | 0 | 0 | Andorra |
| *50.0* | *35.0* | *65.0* | *54* | *42* | *66* | *150* | *95* | *230* | *Armenia* |
| *24.0* | *23.0* | *26.0* | *720* | *670* | *760* | *1 200* | *850* | *1 500* | *Azerbaijan* |
| *75.0* | *71.0* | *78.0* | *820* | *790* | *860* | *1 300* | *930* | *1 600* | *Belarus* |
| 0.0 | 0.0 | 15.0 | 0 | 0 | 3 | 0 | 0 | 0 | Bosnia and Herzegovina |
| *26.0* | *21.0* | *32.0* | *190* | *170* | *220* | *420* | *320* | *530* | *Georgia* |
| 0.0 | 0.0 | 98.0 | 5 | 1 | 9 | 10 | 3 | 20 | Israel |
| *50.0* | *48.0* | *52.0* | *2 900* | *2 800* | *2 900* | *5 200* | *3 300* | *7 600* | *Kazakhstan* |
| *54.0* | *50.0* | *58.0* | *940* | *890* | *990* | *2 500* | *2 100* | *3 000* | *Kyrgyzstan* |
| 11.0 | 7.2 | 16.0 | 0 | 0 | 0 | 0 | 0 | 0 | Monaco |
| 0.0 | 0.0 | 85.0 | 0 | 0 | 2 | 0 | 0 | 0 | Montenegro |
| 10.0 | 0.3 | 45.0 | 2 | 0 | 5 | 4 | 0 | 16 | North Macedonia |
| *53.0* | *48.0* | *58.0* | *430* | *400* | *460* | *1 100* | *850* | *1 300* | *Republic of Moldova* |
| *68.0* | *68.0* | *69.0* | *23 000* | *23 000* | *24 000* | *37 000* | *23 000* | *53 000* | *Russian Federation* |
| 11.0 | 7.2 | 16.0 | 0 | 0 | 0 | 0 | 0 | 0 | San Marino |
| 4.7 | 1.3 | 11.0 | 2 | 1 | 3 | 17 | 7 | 30 | Serbia |
| 26.0 | 9.1 | 51.0 | 10 | 4 | 16 | 14 | 6 | 25 | Switzerland |
| *43.0* | *38.0* | *49.0* | *560* | *520* | *590* | *2 200* | *1 600* | *2 800* | *Tajikistan* |
| *11.0* | *7.8* | *15.0* | *140* | *120* | *170* | *400* | *310* | *510* | *Turkey* |
| *54.0* | *48.0* | *60.0* | *290* | *260* | *310* | *960* | *650* | *1 300* | *Turkmenistan* |
| *41.0* | *40.0* | *43.0* | *4 300* | *4 200* | *4 400* | *11 000* | *6 900* | *15 000* | *Ukraine* |
| 3.3 | 0.9 | 8.1 | 40 | 27 | 53 | 100 | 70 | 140 | United Kingdom |
| *38.0* | *36.0* | *41.0* | *1 400* | *1 300* | *1 500* | *5 200* | *3 600* | *7 100* | *Uzbekistan* |
| **53.0** | **46.0** | **60.0** | **35 800** | **35 000** | **36 000** | **68 800** | **53 000** | **84 000** | **Subtotal non-EU/EEA** |
| **53.0** | **45.0** | **60.0** | **37 000** | **37 000** | **37 000** | **69 000** | **54 000** | **86 000** | **Total European Region** |
| ***53.0*** | **46.0** | **60.0** | ***36 200*** | ***36 000*** | ***37 000*** | ***69 500*** | ***54 000*** | ***85 000*** | ***Subtotal 18 HPCs*** |

**Table 3. TB cases, notification rates per 100 000 population and mean annual change in rates, European Region, 2016–2020**

| Country/area | 2016 | | 2017 | | 2018 | | 2019 | | 2020 | | Mean annual % change in rate, 2016–2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | Rate | N | Rate | N | Rate | N | Rate | N | Rate | |
| **EU/EEA** | | | | | | | | | | | |
| Austria | 634 | 7.3 | 569 | 6.5 | 482 | 5.5 | 474 | 5.4 | 388 | 4.4 | −12.1% |
| Belgium | 1 042 | 9.2 | 967 | 8.5 | 977 | 8.6 | 963 | 8.4 | 830 | 7.2 | −6.0% |
| *Bulgaria* | *1 603* | *22.4* | *1 463* | *20.6* | *1 358* | *19.3* | *1 344* | *19.2* | *930* | *13.4* | *−12.1%* |
| Croatia | 464 | 11.1 | 378 | 9.1 | 372 | 9.1 | 305 | 7.5 | 183 | 4.5 | −20.1% |
| Cyprus | 60 | 7.1 | 53 | 6.2 | 52 | 6.0 | 69 | 7.9 | 36 | 4.1 | −13.0% |
| Czechia | 516 | 4.9 | 501 | 4.7 | 443 | 4.2 | 461 | 4.3 | 367 | 3.4 | −8.5% |
| Denmark | 330 | 5.8 | 275 | 4.8 | 291 | 5.0 | 281 | 4.8 | 219 | 3.8 | −10.2% |
| *Estonia* | *192* | *14.6* | *176* | *13.4* | *147* | *11.1* | *150* | *11.3* | *124* | *9.3* | *−10.6%* |
| Finland | 234 | 4.3 | 245 | 4.5 | 227 | 4.1 | 226 | 4.1 | 174 | 3.1 | −7.3% |
| France | 5 735 | 8.6 | 5 015 | 7.5 | 5 092 | 15.1 | 5 116 | 7.6 | 4 606 | 6.8 | −5.6% |
| Germany | 5 925 | 7.2 | 5 518 | 6.7 | 5 489 | 6.6 | 4 812 | 5.8 | 4 127 | 5.0 | −8.9% |
| Greece | 440 | 4.1 | 467 | 4.3 | 432 | 4.0 | 459 | 4.3 | 396 | 3.7 | −2.5% |
| Hungary | 786 | 8.0 | 685 | 7.0 | 640 | 6.5 | 552 | 5.6 | 406 | 4.2 | −15.1% |
| Iceland | 6 | 1.8 | 14 | 4.1 | 8 | 2.3 | 13 | 3.6 | 12 | 3.3 | 16.3% |
| Ireland | 315 | 6.7 | 300 | 6.3 | 310 | 6.4 | 266 | 5.4 | 240 | 4.8 | −7.7% |
| Italy | 4 032 | 6.6 | 3 944 | 6.5 | 3 912 | 6.5 | 3 346 | 5.6 | 2 287 | 3.8 | −12.8% |
| *Latvia* | *660* | *33.5* | *552* | *28.3* | – | – | – | – | – | – | – |
| Liechtenstein | 2 | 5.3 | 1 | 2.6 | 1 | 2.6 | – | – | 2 | 5.2 | −0.7% |
| *Lithuania* | *1 442* | *49.9* | *1 387* | *48.7* | *1 142* | *40.7* | *1 058* | *37.9* | *726* | *26.0* | *−15.1%* |
| Luxembourg | 29 | 5.0 | 32 | 5.4 | 42 | 7.0 | 50 | 8.1 | 34 | 5.4 | 1.9% |
| Malta | 50 | 11.1 | 42 | 9.1 | 55 | 11.6 | 98 | 19.9 | 140 | 27.2 | 25.1% |
| Netherlands | 887 | 5.2 | 783 | 4.6 | 795 | 4.6 | 754 | 4.4 | 623 | 3.6 | −9.0% |
| Norway | 295 | 5.7 | 261 | 5.0 | 208 | 3.9 | 162 | 3.0 | 160 | 3.0 | −14.8% |
| Poland | 6 444 | 17.0 | 5 787 | 15.2 | 5 487 | 14.4 | 5 321 | 14.0 | 3 388 | 8.9 | −14.8% |
| Portugal | 1 936 | 18.7 | 1 914 | 18.6 | 1 936 | 18.8 | 1 932 | 18.8 | 1 445 | 14.0 | −6.9% |
| *Romania* | *13 601* | *68.8* | *12 997* | *66.2* | *12 199* | *62.5* | *11 618* | *59.8* | *7 698* | *39.8* | *−12.8%* |
| Slovakia | 296 | 5.5 | 249 | 4.6 | 281 | 5.2 | 214 | 3.9 | 158 | 2.9 | −14.6% |
| Slovenia | 118 | 5.7 | 112 | 5.4 | 99 | 4.8 | 101 | 4.9 | 77 | 3.7 | −10.5% |
| Spain | 5 070 | 10.9 | 5 660 | 12.2 | 4 766 | 10.2 | 4 543 | 9.7 | 3 044 | 6.4 | −12.4% |
| Sweden | 714 | 7.2 | 519 | 5.2 | 488 | 4.8 | 479 | 4.7 | 328 | 3.2 | −18.6% |
| **Subtotal EU/EEA** | **53 858** | **12.0** | **50 866** | **11.3** | **47 731** | **10.6** | **45 167** | **10.0** | **33 148** | **7.3** | **−11.6%** |
| **Non-EU/EEA** | | | | | | | | | | | |
| Albania | 415 | 14.4 | 503 | 17.4 | 440 | 15.3 | 412 | 14.3 | 240 | 8.3 | −12.7% |
| Andorra | 4 | 5.2 | 1 | 1.3 | 2 | 2.6 | 5 | 6.5 | 2 | 2.6 | −15.9% |
| *Armenia* | *1 080* | *36.8* | *926* | *31.4* | *796* | *27.0* | *670* | *22.7* | *444* | *15.0* | *−20.1%* |
| *Azerbaijan* | *6 707* | *68.9* | *7 129* | *72.4* | *6 896* | *69.3* | *6 533* | *65.0* | *4 991* | *49.2* | *−8.1%* |
| Belarus | 3 598 | 38.1 | 3 052 | 32.3 | 2 542 | 26.9 | 2 615 | 27.7 | 1 778 | 18.8 | −16.2% |
| Bosnia and Herzegovina | 907 | 26.8 | 768 | 22.9 | 669 | 20.1 | 580 | 17.6 | 357 | 10.9 | −20.2% |
| *Georgia* | *3 330* | *82.9* | *2 927* | *73.0* | *2 590* | *64.7* | *2 451* | *61.3* | *1 842* | *46.2* | *−13.6%* |
| Israel | 250 | 3.1 | 234 | 2.8 | 292 | 3.5 | 217 | 2.5 | 158 | 1.8 | −12.3% |
| *Kazakhstan* | *12 658* | *71.0* | *12 942* | *71.6* | *13 361* | *72.9* | *12 990* | *70.0* | *10 020* | *53.4* | *−6.9%* |
| *Kyrgyzstan* | *7 995* | *131.6* | *7 695* | *124.3* | *7 585* | *120.3* | *7 039* | *109.7* | *4 885* | *74.9* | *−13.2%* |
| Monaco | 2 | 5.3 | – | – | 1 | 2.6 | – | – | 0 | 0.0 | −100.0% |
| Montenegro | 87 | 13.9 | 77 | 12.3 | *84* | *13.4* | *82* | *13.1* | *40* | *6.4* | *−17.7%* |
| North Macedonia | 267 | 12.8 | 219 | 10.5 | 217 | 10.4 | 199 | 9.6 | 148 | 7.1 | −13.7% |
| *Republic of Moldova* | *4 134* | *101.7* | *3 858* | *95.0* | *3 465* | *85.5* | *3 255* | *80.5* | *1 906* | *47.2* | *−17.4%* |
| *Russian Federation* | *121 046* | *83.3* | *114 187* | *78.5* | *106 913* | *73.4* | *103 979* | *71.3* | *84 956* | *58.2* | *−8.6%* |
| San Marino | *0* | *0.0* | *0* | *0.0* | 0 | 0.0 | 0 | 0.0 | – | – | – |
| Serbia | 1 488 | 16.8 | 1 466 | 16.6 | 1 358 | 15.4 | 1 179 | 13.4 | 441 | 5.0 | −26.0% |
| Serbia excluding Kosovo[1] | 767 | 10.8 | 745 | 10.6 | 656 | 9.4 | 567 | 8.2 | – | – | – |
| Kosovo[1] | 721 | 40.6 | 721 | 40.4 | 702 | 39.2 | 612 | 34.4 | 441 | 24.8 | −11.6% |
| Switzerland | 609 | 7.3 | 555 | 6.6 | 516 | 6.1 | 435 | 5.1 | 387 | 4.5 | −11.4% |
| *Tajikistan* | *6 241* | *72.0* | *6 279* | *70.7* | *5 975* | *65.7* | *5 976* | *64.1* | *4 316* | *45.3* | *−11.0%* |
| *Turkey* | *12 417* | *15.6* | *12 046* | *14.9* | *11 786* | *14.3* | *11 401* | *13.7* | *8 925* | *10.6* | *−9.2%* |
| *Turkmenistan* | *2 340* | *41.3* | *2 232* | *38.8* | *2 636* | *45.1* | *2 863* | *48.2* | *2 610* | *43.3* | *1.2%* |
| *Ukraine* | *34 088* | *76.2* | *31 584* | *71.0* | *30 378* | *68.7* | *28 539* | *64.9* | *19 521* | *44.6* | *−12.5%* |
| United Kingdom | 6 175 | 9.3 | 5 567 | 8.3 | 5 075 | 7.6 | 5 132 | 7.6 | 4 458 | 6.6 | −8.4% |
| *Uzbekistan* | *18 441* | *58.7* | *19 329* | *60.5* | *18 496* | *57.0* | *18 774* | *56.9* | *14 127* | *42.2* | *−7.9%* |
| **Subtotal non-EU/EEA** | **244 279** | **51.9** | **233 576** | **49.3** | **222 073** | **46.6** | **215 326** | **44.9** | **166 552** | **34.6** | **−9.7%** |
| **Total European Region** | **298 137** | **32.4** | **284 442** | **30.8** | **269 804** | **29.1** | **260 493** | **28.0** | **199 700** | **21.4** | **−9.8%** |
| ***Subtotal 18 HPCs*** | ***251 573*** | ***62.5*** | ***240 761*** | ***59.4*** | ***228 265*** | ***56.3*** | ***221 255*** | ***54.3*** | ***169 799*** | ***41.5*** | ***−9.7%*** |

*Note:* European Region comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB HPCs are presented in italics. The data published in this report might differ from figures in national reports due to different times of reporting. The deadline for correcting and updating the data used in this report in the joint database was 4 October 2021.
HPCs: high-priority countries.
[1] All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

## Table 4. TB cases by history of previous TB treatment, European Region, 2020

| Country/area | New[a] | | Unknown previous TB history | | Previously treated | | | | All TB cases |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Previous treatment completed | | Other previously treated | | |
| | N | (%)[b] | N | (%)[b] | N | (%)[c] | N | (%)[c] | N |
| **EU/EEA** | | | | | | | | | |
| Austria | 296 | (76.3) | 73 | (18.8) | 13 | (3.4) | 6 | (1.5) | 388 |
| Belgium[d] | 607 | (73.1) | 171 | (20.6) | 0 | (0.0) | 52 | (6.3) | 830 |
| *Bulgaria* | *820* | *(88.2)* | *0* | *(0.0)* | *67* | *(7.2)* | *43* | *(4.6)* | *930* |
| Croatia | 1 | (0.5) | 175 | (95.6) | 1 | (0.5) | 6 | (3.3) | 183 |
| Cyprus | 34 | (94.4) | 0 | (0.0) | 0 | (0.0) | 2 | (5.6) | 36 |
| Czechia | 351 | (95.6) | 0 | (0.0) | 9 | (2.5) | 7 | (1.9) | 367 |
| Denmark[d] | 205 | (93.6) | 0 | (0.0) | 0 | (0.0) | 14 | (6.4) | 219 |
| *Estonia* | *109* | *(87.9)* | *0* | *(0.0)* | *11* | *(8.9)* | *4* | *(3.2)* | *124* |
| Finland | 169 | (97.1) | 1 | (0.6) | 4 | (2.3) | 0 | (0.0) | 174 |
| France | 2 288 | (49.7) | 2 110 | (45.8) | 0 | (0.0) | 208 | (4.5) | 4 606 |
| Germany | 2 725 | (66.0) | 1 176 | (28.5) | 109 | (2.6) | 117 | (2.8) | 4 127 |
| Greece | 338 | (85.4) | 37 | (9.3) | 5 | (1.3) | 16 | (4.0) | 396 |
| Hungary | 359 | (88.4) | 0 | (0.0) | 25 | (6.2) | 22 | (5.4) | 406 |
| Iceland | 0 | (0.0) | 12 | (100.0) | 0 | (0.0) | 0 | (0.0) | 12 |
| Ireland[d] | 114 | (47.5) | 115 | (47.9) | 0 | (0.0) | 11 | (4.6) | 240 |
| Italy | 1 597 | (69.8) | 566 | (24.7) | 0 | (0.0) | 124 | (5.4) | 2 287 |
| *Latvia* | – | – | – | – | – | – | – | – | – |
| Liechtenstein | 1 | (50.0) | 1 | (50.0) | 0 | (0.0) | 0 | (0.0) | 2 |
| *Lithuania* | *591* | *(81.4)* | *0* | *(0.0)* | *97* | *(13.4)* | *38* | *(5.2)* | *726* |
| Luxembourg | 28 | (82.4) | 4 | (11.8) | 0 | (0.0) | 2 | (5.9) | 34 |
| Malta | 98 | (70.0) | 42 | (30.0) | 0 | (0.0) | 0 | (0.0) | 140 |
| Netherlands | 593 | (95.2) | 0 | (0.0) | 21 | (3.4) | 9 | (1.4) | 623 |
| Norway[d] | 144 | (90.0) | 0 | (0.0) | 0 | (0.0) | 16 | (10.0) | 160 |
| Poland | 2 912 | (86.0) | 0 | (0.0) | 238 | (7.0) | 238 | (7.0) | 3 388 |
| Portugal | 1 351 | (93.5) | 0 | (0.0) | 51 | (3.5) | 43 | (3.0) | 1 445 |
| *Romania* | *6 019* | *(78.2)* | *0* | *(0.0)* | *1 174* | *(15.3)* | *505* | *(6.6)* | *7 698* |
| Slovakia | 133 | (84.2) | 4 | (2.5) | 16 | (10.1) | 5 | (3.2) | 158 |
| Slovenia | 70 | (90.9) | 1 | (1.3) | 4 | (5.2) | 2 | (2.6) | 77 |
| Spain | 1 880 | (61.8) | 1 069 | (35.1) | 0 | (0.0) | 95 | (3.1) | 3 044 |
| Sweden | 306 | (93.3) | 1 | (0.3) | 9 | (2.7) | 12 | (3.7) | 328 |
| **Subtotal EU/EEA** | **24 139** | **(72.8)** | **5 558** | **(16.8)** | **1 854** | **(5.6)** | **1 597** | **(4.8)** | **33 148** |
| **Non-EU/EEA** | | | | | | | | | |
| Albania | 223 | (92.9) | – | – | 17 | (7.1) | 0 | (0.0) | 240 |
| Andorra | 2 | (100.0) | – | – | 0 | (0.0) | 0 | (0.0) | 2 |
| *Armenia* | *369* | *(83.1)* | – | – | *25* | *(5.6)* | *50* | *(11.3)* | *444* |
| *Azerbaijan* | *2 558* | *(51.3)* | – | – | *1 125* | *(22.5)* | *1 308* | *(26.2)* | *4 991* |
| *Belarus* | *1 171* | *(65.9)* | – | – | *343* | *(19.3)* | *264* | *(14.8)* | *1 778* |
| Bosnia and Herzegovina | 322 | (90.2) | – | – | 35 | (9.8) | 0 | (0.0) | 357 |
| *Georgia* | *1 484* | *(80.6)* | – | – | *187* | *(10.2)* | *171* | *(9.3)* | *1 842* |
| Israel | 156 | (98.7) | – | – | 2 | (1.3) | 0 | (0.0) | 158 |
| *Kazakhstan* | *6 934* | *(69.2)* | – | – | *2 669* | *(26.6)* | *417* | *(4.2)* | *10 020* |
| *Kyrgyzstan* | *3 534* | *(72.3)* | – | – | *707* | *(14.5)* | *644* | *(13.2)* | *4 885* |
| Monaco | 0 | – | – | – | – | – | – | – | – |
| Montenegro | 38 | (95.0) | – | – | 2 | (5.0) | 0 | (0.0) | 40 |
| North Macedonia | 130 | (87.8) | – | – | 13 | (8.8) | 5 | (3.4) | 148 |
| *Republic of Moldova* | *1 386* | *(72.7)* | – | – | *381* | *(20.0)* | *139* | *(7.3)* | *1 906* |
| *Russian Federation* | *47 399* | *(55.8)* | – | – | *11 324* | *(13.3)* | *26 233* | *(30.9)* | *84 956* |
| San Marino | – | – | – | – | – | – | – | – | – |
| Serbia | 412 | (93.4) | – | – | 27 | (6.1) | 2 | (0.5) | 441 |
| Serbia excluding Kosovo[1] | – | – | – | – | – | – | – | – | – |
| Kosovo[1] | 412 | (93.4) | – | – | 27 | (6.1) | 2 | (0.5) | 441 |
| Switzerland | 351 | (90.7) | – | – | 0 | (0.0) | 36 | (9.3) | 387 |
| *Tajikistan* | *3 759* | *(87.1)* | – | – | *389* | *(9.0)* | *168* | *(3.9)* | *4 316* |
| *Turkey* | *8 358* | *(93.6)* | – | – | *472* | *(5.3)* | *95* | *(1.1)* | *8 925* |
| *Turkmenistan* | *1 603* | *(61.4)* | – | – | *315* | *(12.1)* | *692* | *(26.5)* | *2 610* |
| *Ukraine* | *14 156* | *(72.5)* | – | – | *3 377* | *(17.3)* | *1 988* | *(10.2)* | *19 521* |
| United Kingdom[d] | 4 185 | (93.9) | – | – | 0 | (0.0) | 273 | (6.1) | 4 458 |
| *Uzbekistan* | *10 893* | *(77.1)* | – | – | *1 218* | *(8.6)* | *2 016* | *(14.3)* | *14 127* |
| **Subtotal non-EU/EEA** | **109 423** | **(65.7)** | **0** | **(0.0)** | **22 628** | **(13.6)** | **34 501** | **(20.7)** | **166 552** |
| **Total European Region** | **133 562** | **(66.9)** | **5 558** | **(2.8)** | **24 482** | **(12.3)** | **36 098** | **(18.1)** | **199 700** |
| ***Subtotal 18 HPCs*** | ***111 143*** | ***(65.5)*** | ***0*** | ***(0.0)*** | ***23 881*** | ***(14.1)*** | ***34 775*** | ***(20.5)*** | ***169 799*** |

*Note:* European Region comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB HPCs are presented in italics.
HPCs: high-priority countries.
[a] For non-EU/EEA countries and areas, cases with unknown previous TB history are included among new TB cases.
[b] Proportion of all TB cases.
[c] Proportion of all previously treated TB cases.
[d] Previous TB history is defined by previous diagnosis. Treatment completion is not analysed for these countries.
[1] All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

## Table 5. TB cases by site of disease, EU/EEA, 2020

| Country | Pulmonary | | | | Extrapulmonary | | No site reported | | Total |
|---|---|---|---|---|---|---|---|---|---|
| | Pulmonary only | | Pulmonary and extrapulmonary | | | | | | |
| | N | (%) | N | (%) | N | (%) | N | (%) | N |
| **EU/EEA** | | | | | | | | | |
| Austria | 251 | (64.7) | 44 | (11.3) | 93 | (24.0) | 0 | (0.0) | 388 |
| Belgium | 439 | (52.9) | 135 | (16.3) | 256 | (30.8) | 0 | (0.0) | 830 |
| *Bulgaria* | *696* | *(74.8)* | *50* | *(5.4)* | *184* | *(19.8)* | *0* | *(0.0)* | *930* |
| Croatia | 96 | (52.5) | 8 | (4.4) | 2 | (1.1) | 77 | (42.1) | 183 |
| Cyprus | 28 | (77.8) | 2 | (5.6) | 6 | (16.7) | 0 | (0.0) | 36 |
| Czechia | 294 | (80.1) | 27 | (7.4) | 46 | (12.5) | 0 | (0.0) | 367 |
| Denmark | 148 | (67.6) | 10 | (4.6) | 61 | (27.9) | 0 | (0.0) | 219 |
| *Estonia* | *96* | *(77.4)* | *19* | *(15.3)* | *9* | *(7.3)* | *0* | *(0.0)* | *124* |
| Finland | 118 | (67.8) | 0 | (0.0) | 56 | (32.2) | 0 | (0.0) | 174 |
| France | 3 140 | (68.2) | 0 | (0.0) | 1 423 | (30.9) | 43 | (0.9) | 4 606 |
| Germany | 2 341 | (56.7) | 562 | (13.6) | 1 161 | (28.1) | 63 | (1.5) | 4 127 |
| Greece | 264 | (66.7) | 60 | (15.2) | 50 | (12.6) | 22 | (5.6) | 396 |
| Hungary | 375 | (92.4) | 13 | (3.2) | 18 | (4.4) | 0 | (0.0) | 406 |
| Iceland | 8 | (66.7) | 0 | (0.0) | 3 | (25.0) | 1 | (8.3) | 12 |
| Ireland | 97 | (40.4) | 29 | (12.1) | 55 | (22.9) | 59 | (24.6) | 240 |
| Italy | 1 574 | (68.8) | 69 | (3.0) | 644 | (28.2) | 0 | (0.0) | 2 287 |
| *Latvia* | – | – | – | – | – | – | – | – | – |
| Liechtenstein | 0 | (0.0) | 0 | (0.0) | 2 | 100 | 0 | (0.0) | 2 |
| *Lithuania* | *676* | *(93.1)* | *0* | *(0.0)* | *50* | *(6.9)* | *0* | *(0.0)* | *726* |
| Luxembourg | 25 | (73.5) | 1 | (2.9) | 8 | (23.5) | 0 | (0.0) | 34 |
| Malta | 79 | (56.4) | 20 | (14.3) | 41 | (29.3) | 0 | (0.0) | 140 |
| Netherlands | 248 | (39.8) | 86 | (13.8) | 284 | (45.6) | 5 | (0.8) | 623 |
| Norway | 76 | (47.5) | 20 | (12.5) | 61 | (38.1) | 3 | (1.9) | 160 |
| Poland | 3 220 | (95.0) | 17 | (0.5) | 151 | (4.5) | 0 | (0.0) | 3 388 |
| Portugal | 841 | (58.2) | 166 | (11.5) | 436 | (30.2) | 2 | (0.1) | 1 445 |
| *Romania* | *6 169* | *(80.1)* | *486* | *(6.3)* | *1 043* | *(13.5)* | *0* | *(0.0)* | *7 698* |
| Slovakia | 101 | (63.9) | 34 | (21.5) | 23 | (14.6) | 0 | (0.0) | 158 |
| Slovenia | 44 | (57.1) | 22 | (28.6) | 11 | (14.3) | 0 | (0.0) | 77 |
| Spain | 2 014 | (66.2) | 211 | (6.9) | 819 | (26.9) | 0 | (0.0) | 3 044 |
| Sweden | 182 | (55.5) | 25 | (7.6) | 121 | (36.9) | 0 | (0.0) | 328 |
| **Total EU/EEA** | **23 640** | **(71.3)** | **2 116** | **(6.4)** | **7 117** | **(21.5)** | **275** | **(0.8)** | **33 148** |

*Note:* WHO European Region five TB high-priority countries are presented in italics.

**Table 6. TB cases by history of previous TB treatment, site of disease and diagnostic method, according to WHO definitions,[a] European Region, 2020**

| Country/area | New[b] and relapse TB cases | | | | | | | | | | Previously treated cases | | All TB cases |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | (%)[c] | Pulmonary[d] | | | | | | Extrapulmonary | | | | |
| | | | N | (%)[e] | Laboratory-confirmed[f] | | Clinically diagnosed | | | | | | |
| | | | | | N | (%)[g] | N | (%)[g] | N | (%)[e] | N | (%)[c] | N |
| **EU/EEA** | | | | | | | | | | | | | |
| Austria | 382 | (98.5) | 289 | (75.7) | 259 | (89.6) | 30 | (10.4) | 93 | (24.3) | 6 | (1.5) | 388 |
| Belgium[h] | 778 | (93.7) | 539 | (69.3) | 482 | (89.4) | 57 | (10.6) | 239 | (30.7) | 52 | (6.3) | 830 |
| *Bulgaria* | *887* | *(95.4)* | *708* | *(79.8)* | *438* | *(61.9)* | *270* | *(38.1)* | *179* | *(20.2)* | *43* | *(4.6)* | *930* |
| Croatia | 177 | (96.7) | 175 | (98.9) | 139 | (79.4) | 36 | (20.6) | 2 | (1.1) | 6 | (3.3) | 183 |
| Cyprus | 34 | (94.4) | 28 | (82.4) | 25 | (89.3) | 3 | (10.7) | 6 | (17.6) | 2 | (5.6) | 36 |
| Czechia | 360 | (98.1) | 314 | (87.2) | 269 | (85.7) | 45 | (14.3) | 46 | (12.8) | 7 | (1.9) | 367 |
| Denmark[h] | 205 | (93.6) | 148 | (72.2) | 132 | (89.2) | 16 | (10.8) | 57 | (27.8) | 14 | (6.4) | 219 |
| *Estonia* | *120* | *(96.8)* | *112* | *(93.3)* | *106* | *(94.6)* | *6* | *(5.4)* | *8* | *(6.7)* | *4* | *(3.2)* | *124* |
| Finland | 174 | (100.0) | 118 | (67.8) | 107 | (90.7) | 11 | (9.3) | 56 | (32.2) | 0 | (0.0) | 174 |
| France | 4 398 | (95.5) | 3 029 | (68.9) | 2 133 | (70.4) | 896 | (29.6) | 1 369 | (31.1) | 208 | (4.5) | 4 606 |
| Germany | 4 010 | (97.2) | 2 867 | (71.5) | 2 619 | (91.3) | 248 | (8.7) | 1 143 | (28.5) | 117 | (2.8) | 4 127 |
| Greece | 380 | (96.0) | 333 | (87.6) | 317 | (95.2) | 16 | (4.8) | 47 | (12.4) | 16 | (4.0) | 396 |
| Hungary | 384 | (94.6) | 366 | (95.3) | 194 | (53.0) | 172 | (47.0) | 18 | (4.7) | 22 | (5.4) | 406 |
| Iceland | 12 | (100.0) | 9 | (75.0) | 5 | (55.6) | 4 | (44.4) | 3 | (25.0) | 0 | (0.0) | 12 |
| Ireland[h] | 229 | (95.4) | 178 | (77.7) | 139 | (78.1) | 39 | (21.9) | 51 | (22.3) | 11 | (4.6) | 240 |
| Italy | 2 163 | (94.6) | 1 539 | (71.2) | 1 310 | (85.1) | 229 | (14.9) | 624 | (28.8) | 124 | (5.4) | 2 287 |
| *Latvia* | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Liechtenstein | 2 | (100.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 2 | (100.0) | 0 | (0.0) | 2 |
| *Lithuania* | *688* | *(94.8)* | *638* | *(92.7)* | *579* | *(90.8)* | *59* | *(9.2)* | *50* | *(7.3)* | *38* | *(5.2)* | *726* |
| Luxembourg | 32 | (94.1) | 24 | (75.0) | 23 | (95.8) | 1 | (4.2) | 8 | (25.0) | 2 | (5.9) | 34 |
| Malta | 140 | (100.0) | 99 | (70.7) | 52 | (52.5) | 47 | (47.5) | 41 | (29.3) | 0 | (0.0) | 140 |
| Netherlands | 614 | (98.6) | 333 | (54.2) | 286 | (85.9) | 47 | (14.1) | 281 | (45.8) | 9 | (1.4) | 623 |
| Norway[h] | 144 | (90.0) | 89 | (61.8) | 82 | (92.1) | 7 | (7.9) | 55 | (38.2) | 16 | (10.0) | 160 |
| Poland | 3 150 | (93.0) | 3 006 | (95.4) | 2 427 | (80.7) | 579 | (19.3) | 144 | (4.6) | 238 | (7.0) | 3 388 |
| Portugal | 1 402 | (97.0) | 976 | (69.6) | 864 | (88.5) | 112 | (11.5) | 426 | (30.4) | 43 | (3.0) | 1 445 |
| *Romania* | *7 193* | *(93.4)* | *6 159* | *(85.6)* | *5 295* | *(86.0)* | *864* | *(14.0)* | *1 034* | *(14.4)* | *505* | *(6.6)* | *7 698* |
| Slovakia | 153 | (96.8) | 130 | (85.0) | 74 | (56.9) | 56 | (43.1) | 23 | (15.0) | 5 | (3.2) | 158 |
| Slovenia | 75 | (97.4) | 64 | (85.3) | 62 | (96.9) | 2 | (3.1) | 11 | (14.7) | 2 | (2.6) | 77 |
| Spain | 2 949 | (96.9) | 2 149 | (72.9) | 1 592 | (74.1) | 557 | (25.9) | 800 | (27.1) | 95 | (3.1) | 3 044 |
| Sweden | 316 | (96.3) | 199 | (63.0) | 181 | (91.0) | 18 | (9.0) | 117 | (37.0) | 12 | (3.7) | 328 |
| **Subtotal EU/EEA** | **31 551** | **(95.2)** | **24 618** | **(78.0)** | **20 191** | **(82.0)** | **4 427** | **(18.0)** | **6 933** | **(22.0)** | **1 597** | **(4.8)** | **33 148** |
| **Non-EU/EEA** | | | | | | | | | | | | | |
| Albania | 240 | (100.0) | 201 | (83.8) | 147 | (73.1) | 54 | (26.9) | 39 | (16.3) | 0 | (0.0) | 240 |
| Andorra | 2 | (100.0) | 1 | (50.0) | 1 | (100.0) | 0 | (0.0) | 1 | (50.0) | 0 | (0.0) | 2 |
| Armenia | 394 | (88.7) | 285 | (72.3) | 216 | (75.8) | 69 | (24.2) | 109 | (27.7) | 50 | (11.3) | 444 |
| *Azerbaijan* | *3 683* | *(73.8)* | *3 016* | *(81.9)* | *2 309* | *(76.6)* | *707* | *(23.4)* | *667* | *(18.1)* | *1 308* | *(26.2)* | *4 991* |
| *Belarus* | *1 514* | *(85.2)* | *1 417* | *(93.6)* | *1 345* | *(94.9)* | *72* | *(5.1)* | *97* | *(6.4)* | *264* | *(14.8)* | *1 778* |
| Bosnia and Herzegovina | 357 | (100.0) | 319 | (89.4) | 240 | (75.2) | 79 | (24.8) | 38 | (10.6) | 0 | (0.0) | 357 |
| *Georgia* | *1 671* | *(90.7)* | *1 319* | *(78.9)* | *1 219* | *(92.4)* | *100* | *(7.6)* | *352* | *(21.1)* | *171* | *(9.3)* | *1 842* |
| Israel | 158 | (100.0) | 113 | (71.5) | 90 | (79.6) | 23 | (20.4) | 45 | (28.5) | 0 | (0.0) | 158 |
| *Kazakhstan* | *9 603* | *(95.8)* | *8 634* | *(89.9)* | *6 725* | *(77.9)* | *1 909* | *(22.1)* | *969* | *(10.1)* | *417* | *(4.2)* | *10 020* |
| *Kyrgyzstan* | *4 241* | *(86.8)* | *3 369* | *(79.4)* | *2 252* | *(66.8)* | *1 117* | *(33.2)* | *872* | *(20.6)* | *644* | *(13.2)* | *4 885* |
| Monaco | 0 | – | – | – | – | – | – | – | – | – | – | – | 0 |
| Montenegro | 40 | (100.0) | 38 | (95.0) | 31 | (81.6) | 7 | (18.4) | 2 | (5.0) | 0 | (0.0) | 40 |
| North Macedonia | 143 | (96.6) | 121 | (84.6) | 105 | (86.8) | 16 | (13.2) | 22 | (15.4) | 5 | (3.4) | 148 |
| *Republic of Moldova* | *1 767* | *(92.7)* | *1 633* | *(92.4)* | *1 122* | *(68.7)* | *511* | *(31.3)* | *134* | *(7.6)* | *139* | *(7.3)* | *1 906* |
| *Russian Federation* | *58 723* | *(69.1)* | *54 109* | *(92.1)* | *28 919* | *(53.4)* | *25 190* | *(46.6)* | *4 614* | *(7.9)* | *26 233* | *(30.9)* | *84 956* |
| San Marino | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Serbia | 439 | (99.5) | 317 | (72.2) | 145 | (45.7) | 172 | (54.3) | 122 | (27.8) | 2 | (0.5) | 441 |
| Serbia excluding Kosovo[i] | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Kosovo[i] | 439 | (99.5) | 317 | (72.2) | 145 | (45.7) | 172 | (54.3) | 122 | (27.8) | 2 | (0.5) | 441 |
| Switzerland | 351 | (90.7) | 260 | (74.1) | 244 | (93.8) | 16 | (6.2) | 91 | (25.9) | 36 | (9.3) | 387 |
| *Tajikistan* | *4 148* | *(96.1)* | *2 788* | *(67.2)* | *1 902* | *(68.2)* | *886* | *(31.8)* | *1 360* | *(32.8)* | *168* | *(3.9)* | *4 316* |
| *Turkey* | *8 830* | *(98.9)* | *5 724* | *(64.8)* | *4 478* | *(78.2)* | *1 246* | *(21.8)* | *3 106* | *(35.2)* | *95* | *(1.1)* | *8 925* |
| *Turkmenistan* | *1 918* | *(73.5)* | *1 516* | *(79.0)* | *711* | *(46.9)* | *805* | *(53.1)* | *402* | *(21.0)* | *692* | *(26.5)* | *2 610* |
| *Ukraine* | *17 533* | *(89.8)* | *15 983* | *(91.2)* | *11 569* | *(72.4)* | *4 414* | *(27.6)* | *1 550* | *(8.8)* | *1 988* | *(10.2)* | *19 521* |
| United Kingdom[h] | 4 185 | (93.9) | 2 253 | (53.8) | 1 809 | (80.3) | 444 | (19.7) | 1 932 | (46.2) | 273 | (6.1) | 4 458 |
| *Uzbekistan* | *12 111* | *(85.7)* | *7 487* | *(61.8)* | *4 779* | *(63.8)* | *2 708* | *(36.2)* | *4 624* | *(38.2)* | *2 016* | *(14.3)* | *14 127* |
| **Subtotal non-EU/EEA** | **132 051** | **(79.3)** | **110 903** | **(84.0)** | **70 358** | **(63.4)** | **40 545** | **(36.6)** | **21 148** | **(16.0)** | **34 501** | **(20.7)** | **166 552** |
| **Total European Region** | **163 602** | **(81.9)** | **135 521** | **(82.8)** | **90 549** | **(66.8)** | **44 972** | **(33.2)** | **28 081** | **(17.2)** | **36 098** | **(18.1)** | **199 700** |
| ***Subtotal 18 HPCs*** | ***135 024*** | ***(79.5)*** | ***114 897*** | ***(85.1)*** | ***73 964*** | ***(64.4)*** | ***40 933*** | ***(35.6)*** | ***20 127*** | ***(14.9)*** | ***34 775*** | ***(20.5)*** | ***169 799*** |

*Note:* European Region comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB HPCs are presented in italics.
HPCs: high-priority countries.
[a] WHO (2013). Definitions and reporting framework for tuberculosis – 2013 revision. Updated December 2014 and January 2020. Geneva: World Health Organization (WHO/HTM/TB/ 2013.2; https://apps.who.int/iris/handle/10665/79199, accessed 16 February 2022).
[b] Cases with unknown previous TB history are included among new TB ases.
[c] Proportion of all TB cases.
[d] For the EU/EEA countries, cases with no disease site reported are included among pulmonary TB cases.
[e] Proportion of all new and relapse TB cases.
[f] Confirmed by culture, smear and/or nucleic acid amplification test. Microscopy results from any specimen are included for EU/EEA countries.
[g] Proportion of all new and relapse pulmonary TB cases.
[h] Previous TB history is defined by previous diagnosis.
[i] All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

## Table 7. TB cases according to EU case definition, EU/EEA, 2020

| Country | All laboratory-confirmed cases[a] | | | | | | Confirmed cases[b] | | Probable cases | | Possible cases | | All TB cases |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Meeting only the smear-positive and nucleic acid test-positive criterion | | Meeting only the culture-positive criterion | | Meeting both criteria | | | | | | | | |
| | N | (%)[c] | N | (%)[c] | N | (%)[c] | N | (%)[d] | N | (%)[d] | N | (%)[d] | N |
| Austria | 6 | (2.1) | 219 | (77.9) | 56 | (19.9) | 281 | (72.4) | 55 | (14.2) | 52 | (13.4) | 388 |
| Belgium | 9 | (1.4) | 382 | (60.0) | 246 | (38.6) | 637 | (76.7) | 112 | (13.5) | 81 | (9.8) | 830 |
| *Bulgaria* | *1* | *(0.2)* | *432* | *(99.8)* | *0* | *(0.0)* | *433* | *(46.6)* | *96* | *(10.3)* | *401* | *(43.1)* | *930* |
| Croatia | 0 | (0.0) | 146 | (100.0) | 0 | (0.0) | 146 | (79.8) | 1 | (0.5) | 36 | (19.7) | 183 |
| Cyprus | 0 | (0.0) | 22 | (78.6) | 6 | (21.4) | 28 | (77.8) | 3 | (8.3) | 5 | (13.9) | 36 |
| Czechia | 4 | (1.4) | 161 | (56.5) | 120 | (42.1) | 285 | (77.7) | 56 | (15.3) | 26 | (7.1) | 367 |
| Denmark | 0 | (0.0) | 102 | (56.7) | 78 | (43.3) | 180 | (82.2) | 6 | (2.7) | 33 | (15.1) | 219 |
| *Estonia* | *1* | *(0.9)* | *58* | *(54.2)* | *48* | *(44.9)* | *107* | *(86.3)* | *13* | *(10.5)* | *4* | *(3.2)* | *124* |
| Finland | 0 | (0.0) | 117 | (83.0) | 24 | (17.0) | 141 | (81.0) | 23 | (13.2) | 10 | (5.7) | 174 |
| France | 0 | (0.0) | 1 879 | (100.0) | 0 | (0.0) | 1 879 | (40.8) | 850 | (18.5) | 1 877 | (40.8) | 4 606 |
| Germany | 115 | (3.5) | 1 682 | (51.6) | 1 462 | (44.9) | 3 259 | (79.0) | 404 | (9.8) | 464 | (11.2) | 4 127 |
| Greece | 0 | (0.0) | 321 | (88.9) | 40 | (11.1) | 361 | (91.2) | 13 | (3.3) | 22 | (5.6) | 396 |
| Hungary | 0 | (0.0) | 197 | (100.0) | 0 | (0.0) | 197 | (48.5) | 13 | (3.2) | 196 | (48.3) | 406 |
| Iceland | 0 | (0.0) | 4 | (66.7) | 2 | (33.3) | 6 | (50.0) | 0 | (0.0) | 6 | (50.0) | 12 |
| Ireland | 1 | (0.6) | 119 | (70.0) | 50 | (29.4) | 170 | (70.8) | 21 | (8.8) | 49 | (20.4) | 240 |
| Italy | 0 | (0.0) | 1 490 | (100.0) | 0 | (0.0) | 1 490 | (65.2) | 343 | (15.0) | 454 | (19.9) | 2 287 |
| *Latvia* | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Liechtenstein | 0 | (0.0) | 1 | (100.0) | 0 | (0.0) | 1 | (50.0) | 1 | (50.0) | 0 | (0.0) | 2 |
| *Lithuania* | *0* | *(0.0)* | *635* | *(100.0)* | *0* | *(0.0)* | *635* | *(87.5)* | *0* | *(0.0)* | *91* | *(12.5)* | *726* |
| Luxembourg | 0 | (0.0) | 28 | (100.0) | 0 | (0.0) | 28 | (82.4) | 1 | (2.9) | 5 | (14.7) | 34 |
| Malta | 0 | (0.0) | 43 | (100.0) | 0 | (0.0) | 43 | (30.7) | 25 | (17.9) | 72 | (51.4) | 140 |
| Netherlands | 8 | (1.9) | 252 | (58.5) | 171 | (39.7) | 431 | (69.2) | 77 | (12.4) | 115 | (18.5) | 623 |
| Norway | 1 | (0.8) | 91 | (68.4) | 41 | (30.8) | 133 | (83.1) | 13 | (8.1) | 14 | (8.8) | 160 |
| Poland | 0 | (0.0) | 2 017 | (76.0) | 638 | (24.0) | 2 655 | (78.4) | 50 | (1.5) | 683 | (20.2) | 3 388 |
| Portugal | 40 | (4.6) | 701 | (81.1) | 123 | (14.2) | 864 | (59.8) | 311 | (21.5) | 270 | (18.7) | 1 445 |
| *Romania* | *42* | *(0.7)* | *4 172* | *(73.2)* | *1 483* | *(26.0)* | *5 697* | *(74.0)* | *699* | *(9.1)* | *1 302* | *(16.9)* | *7 698* |
| Slovakia | 1 | (1.5) | 52 | (77.6) | 14 | (20.9) | 67 | (42.4) | 26 | (16.5) | 65 | (41.1) | 158 |
| Slovenia | 0 | (0.0) | 49 | (67.1) | 24 | (32.9) | 73 | (94.8) | 3 | (3.9) | 1 | (1.3) | 77 |
| Spain | 67 | (3.7) | 1 290 | (71.3) | 453 | (25.0) | 1 810 | (59.5) | 447 | (14.7) | 787 | (25.9) | 3 044 |
| Sweden | 0 | (0.0) | 199 | (75.4) | 65 | (24.6) | 264 | (80.5) | 29 | (8.8) | 35 | (10.7) | 328 |
| **Total EU/EEA** | **296** | **(1.3)** | **16 861** | **(75.6)** | **5 144** | **(23.1)** | **22 301** | **(67.3)** | **3 691** | **(11.1)** | **7 156** | **(21.6)** | **33 148** |

*Note:* WHO European Region 18 TB high-priority countries are presented in italics.
[a] Laboratory-confirmed TB cases according to the EU case definition.
[b] Culture-positive OR microscopy-positive and nucleic acid amplification test-positive.
[c] Proportion of all laboratory-confirmed TB cases.
[d] Proportion of all TB cases.

## Table 8. New and relapse TB cases, by age group and male-to-female ratio, European Region, 2020[a]

| Country/area | 0–4 | | | | 5–14 | | | | 15–24 | | | | 25–44 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | (%) | Rate per 100 000 | M/F ratio | N | (%) | Rate per 100 000 | M/F ratio | N | (%) | Rate per 100 000 | M/F ratio | N | (%) | Rate per 100 000 | M/F ratio |
| **EU/EEA** | | | | | | | | | | | | | | | | |
| Austria | 7 | (1.8) | 1.6 | 0.8 | 5 | (1.3) | 0.6 | 0.3 | 44 | (11.5) | 4.6 | 2.4 | 122 | (31.9) | 5.1 | 1.7 |
| Belgium[b] | 22 | (2.8) | 3.6 | 1.4 | 26 | (3.3) | 2.0 | 1.6 | 140 | (18.0) | 10.7 | 2.2 | 304 | (39.1) | 10.2 | 1.7 |
| *Bulgaria* | *8* | *(0.9)* | *2.5* | *0.6* | *16* | *(1.8)* | *2.3* | *1.3* | *37* | *(4.2)* | *6.0* | *0.6* | *247* | *(27.8)* | *13.1* | *1.6* |
| Croatia | 1 | (0.6) | 0.5 | N/F | 1 | (0.6) | 0.3 | N/F | 8 | (4.5) | 1.8 | 3.0 | 34 | (19.2) | 3.2 | 2.1 |
| Cyprus | 0 | (0.0) | 0.0 | – | 0 | (0.0) | 0.0 | – | 10 | (29.4) | 8.8 | 1.5 | 13 | (38.2) | 4.7 | 1.6 |
| Czechia | 1 | (0.3) | 0.2 | N/M | 1 | (0.3) | 0.1 | N/F | 16 | (4.4) | 1.7 | 1.3 | 121 | (33.6) | 4.0 | 2.2 |
| Denmark[b] | 3 | (1.5) | 1.0 | 0.5 | 7 | (3.4) | 1.1 | 2.5 | 24 | (11.7) | 3.3 | 2.0 | 76 | (37.1) | 5.2 | 1.1 |
| *Estonia* | *0* | *(0.0)* | *0.0* | – | *1* | *(0.8)* | *0.7* | *N/M* | *3* | *(2.5)* | *2.4* | *N/F* | *22* | *(18.3)* | *6.0* | *2.7* |
| Finland | 2 | (1.1) | 0.8 | N/F | 3 | (1.7) | 0.5 | 0.5 | 10 | (5.7) | 1.6 | 4.0 | 38 | (21.8) | 2.7 | 0.9 |
| France | 88 | (2.0) | 2.4 | 1.0 | 103 | (2.3) | 1.2 | 0.9 | 838 | (19.1) | 10.5 | 2.0 | 1 744 | (39.7) | 10.8 | 2.1 |
| Germany | 84 | (2.1) | 2.1 | 1.2 | 79 | (2.0) | 1.1 | 0.9 | 691 | (17.2) | 8.1 | 2.1 | 1 502 | (37.5) | 7.2 | 1.7 |
| Greece | 4 | (1.1) | 0.9 | 3.0 | 13 | (3.4) | 1.2 | 5.5 | 74 | (19.5) | 6.7 | 9.6 | 136 | (35.8) | 5.0 | 3.5 |
| Hungary | 0 | (0.0) | 0.0 | – | 5 | (1.3) | 0.5 | 1.5 | 23 | (6.0) | 2.2 | 0.8 | 94 | (24.5) | 3.4 | 1.2 |
| Iceland | 2 | (16.7) | 9.4 | 1.0 | 0 | (0.0) | 0.0 | – | 2 | (16.7) | 4.2 | 1.0 | 4 | (33.3) | 3.7 | 0.3 |
| Ireland[b] | 3 | (1.3) | 1.0 | N/M | 3 | (1.3) | 0.4 | 1.0 | 18 | (7.9) | 2.9 | 3.5 | 106 | (46.3) | 7.6 | 1.4 |
| Italy | 40 | (1.8) | 1.8 | 0.7 | 60 | (2.8) | 1.1 | 1.6 | 330 | (15.3) | 5.7 | 2.5 | 802 | (37.1) | 5.7 | 1.7 |
| *Latvia* | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Liechtenstein | 0 | (0.0) | 0.0 | – | 0 | (0.0) | 0.0 | – | 0 | (0.0) | 0.0 | – | 1 | (50.0) | 10.2 | N/F |
| *Lithuania* | *3* | *(0.4)* | *2.1* | *2.0* | *10* | *(1.5)* | *3.6* | *0.7* | *22* | *(3.2)* | *7.7* | *1.2* | *192* | *(27.9)* | *26.7* | *2.5* |
| Luxembourg | 0 | (0.0) | 0.0 | – | 0 | (0.0) | 0.0 | – | 7 | (21.9) | 9.7 | N/F | 17 | (53.1) | 8.8 | 16.0 |
| Malta | 4 | (2.9) | 16.7 | 3.0 | 3 | (2.1) | 6.6 | 2.0 | 60 | (42.9) | 109.2 | 6.5 | 51 | (36.4) | 29.5 | 2.6 |
| Netherlands | 6 | (1.0) | 0.7 | 1.0 | 13 | (2.1) | 0.7 | 0.1 | 89 | (14.5) | 4.2 | 1.4 | 278 | (45.3) | 6.5 | 1.2 |
| Norway[b] | 6 | (4.2) | 2.1 | 1.0 | 5 | (3.5) | 0.8 | 1.5 | 26 | (18.1) | 3.9 | 1.0 | 59 | (41.0) | 4.1 | 0.5 |
| Poland | 12 | (0.4) | 0.6 | 1.0 | 26 | (0.8) | 0.7 | 2.3 | 134 | (4.3) | 3.5 | 1.5 | 784 | (24.9) | 6.8 | 2.6 |
| Portugal | 24 | (1.7) | 5.5 | 1.4 | 18 | (1.3) | 1.9 | 3.5 | 133 | (9.5) | 12.1 | 1.3 | 383 | (27.3) | 14.9 | 1.7 |
| *Romania* | *100* | *(1.4)* | *10.0* | *1.2* | *161* | *(2.2)* | *7.9* | *1.1* | *612* | *(8.5)* | *30.2* | *1.2* | *2 226* | *(30.9)* | *42.1* | *2.2* |
| Slovakia | 23 | (15.0) | 7.8 | 1.9 | 12 | (7.8) | 2.1 | 2.0 | 3 | (2.0) | 0.5 | 0.5 | 26 | (17.0) | 1.6 | 1.4 |
| Slovenia | 0 | (0.0) | 0.0 | – | 0 | (0.0) | 0.0 | – | 3 | (4.0) | 1.5 | 2.0 | 12 | (16.0) | 2.1 | 1.0 |
| Spain | 67 | (2.3) | 3.3 | 1.2 | 121 | (4.1) | 2.5 | 1.5 | 288 | (9.8) | 6.1 | 1.5 | 982 | (33.3) | 7.8 | 1.4 |
| Sweden | 4 | (1.3) | 0.7 | 3.0 | 12 | (3.8) | 1.0 | 0.7 | 67 | (21.2) | 5.8 | 2.7 | 128 | (40.5) | 4.7 | 0.9 |
| **Subtotal EU/EEA** | **514** | **(1.6)** | **2.4** | **1.1** | **704** | **(2.2)** | **1.5** | **1.2** | **3 712** | **(11.8)** | **7.8** | **1.8** | **10 504** | **(33.3)** | **9.0** | **1.9** |
| **Non-EU/EEA** | | | | | | | | | | | | | | | | |
| Albania | 0 | (0.0) | 0.0 | – | 3 | (1.3) | 0.9 | 2.0 | 42 | (17.5) | 9.8 | 3.2 | 75 | (31.3) | 9.5 | 3.7 |
| Andorra | 0 | (0.0) | 0.0 | – | 0 | (0.0) | 0.0 | – | 0 | (0.0) | 0.0 | – | 2 | (100.0) | 10.3 | 1.0 |
| *Armenia* | *18* | *(4.6)* | *8.8* | *8.0* | *5* | *(1.3)* | *1.2* | *4.0* | *39* | *(9.9)* | *11.2* | *2.0* | *133* | *(33.8)* | *14.3* | *2.1* |
| *Azerbaijan* | *20* | *(0.8)* | *2.4* | *1.0* | *71* | *(2.8)* | *4.6* | *1.0* | *588* | *(23.0)* | *43.4* | *1.7* | *933* | *(36.5)* | *28.1* | *2.0* |
| *Belarus* | *1* | *(0.1)* | *0.2* | *0.0* | *3* | *(0.2)* | *0.3* | *0.5* | *48* | *(3.2)* | *5.5* | *1.1* | *567* | *(37.5)* | *20.0* | *2.7* |
| Bosnia and Herzegovina | 0 | (0.0) | 0.0 | – | 1 | (0.3) | 0.3 | 0.0 | 43 | (12.0) | 11.3 | 1.4 | 78 | (21.8) | 9.0 | 1.6 |
| *Georgia* | *6* | *(0.4)* | *2.2* | *0.5* | *42* | *(2.5)* | *7.8* | *0.8* | *222* | *(13.3)* | *49.2* | *1.6* | *653* | *(39.1)* | *59.6* | *1.8* |
| Israel | 2 | (1.3) | 0.2 | 1.0 | 2 | (1.3) | 0.1 | 1.0 | 8 | (5.1) | 0.6 | 1.0 | 79 | (50.0) | 3.5 | 1.9 |
| *Kazakhstan* | *64* | *(0.7)* | *3.3* | *0.7* | *239* | *(2.5)* | *6.7* | *0.7* | *1 104* | *(11.5)* | *49.8* | *1.0* | *3 987* | *(41.5)* | *70.6* | *1.1* |
| *Kyrgyzstan* | *41* | *(1.0)* | *5.4* | *1.4* | *139* | *(3.3)* | *10.1* | *1.1* | *801* | *(18.9)* | *79.0* | *1.3* | *1 403* | *(33.1)* | *72.1* | *1.3* |
| Monaco | 0 | – | – | – | 0 | – | – | – | 0 | – | – | – | 0 | – | – | – |
| Montenegro | *0* | *(0.0)* | *0.0* | – | *0* | *(0.0)* | *0.0* | – | *6* | *(15.0)* | *7.5* | *5.0* | *12* | *(30.0)* | *6.9* | *1.4* |
| North Macedonia | 4 | (2.8) | 3.6 | 1.0 | 6 | (4.2) | 2.6 | 0.5 | 17 | (11.9) | 6.8 | 0.9 | 48 | (33.6) | 7.6 | 3.0 |
| *Republic of Moldova* | *19* | *(1.1)* | *9.4* | *1.1* | *37* | *(2.1)* | *8.4* | *1.3* | *110* | *(6.2)* | *24.8* | *1.6* | *753* | *(42.6)* | *53.6* | *3.2* |
| *Russian Federation* | *575* | *(1.0)* | *6.2* | *1.0* | *1 052* | *(1.8)* | *6.0* | *0.9* | *3 058* | *(5.2)* | *22.3* | *1.3* | *31 043* | *(52.9)* | *70.4* | *2.4* |
| San Marino | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Serbia | 5 | (1.1) | 1.2 | 0.7 | 6 | (1.4) | 0.6 | 1.0 | 70 | (15.9) | 6.7 | 1.1 | 121 | (27.4) | 5.0 | 0.8 |
| Serbia excluding Kosovo[1] | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Kosovo[1] | 5 | (1.1) | 0.1 | 0.7 | 6 | (1.4) | 0.1 | 1.0 | 70 | (15.9) | 0.8 | 1.1 | 121 | (27.4) | 28.9 | 0.8 |
| Switzerland | 8 | (2.3) | 1.8 | 0.6 | 8 | (2.3) | 0.9 | 1.7 | 53 | (15.1) | 5.8 | 1.8 | 145 | (41.3) | 6.2 | 1.0 |
| *Tajikistan* | *65* | *(1.6)* | *4.8* | *1.4* | *175* | *(4.2)* | *8.0* | *1.0* | *1 014* | *(24.4)* | *61.6* | *1.3* | *1 496* | *(36.1)* | *55.9* | *1.2* |
| *Turkey* | *150* | *(1.7)* | *2.3* | *1.0* | *241* | *(2.7)* | *1.8* | *0.7* | *1 518* | *(17.2)* | *11.2* | *1.2* | *2 656* | *(30.1)* | *10.5* | *1.2* |
| *Turkmenistan* | *25* | *(1.3)* | *3.8* | *1.0* | *25* | *(1.3)* | *2.1* | *1.0* | *274* | *(14.3)* | *29.0* | *1.0* | *844* | *(44.0)* | *44.8* | *1.4* |
| *Ukraine* | *87* | *(0.5)* | *4.1* | *1.4* | *295* | *(1.7)* | *6.0* | *0.9* | *919* | *(5.2)* | *22.3* | *1.4* | *8 658* | *(49.4)* | *65.1* | *2.4* |
| United Kingdom[b] | 56 | (1.3) | 1.4 | 1.0 | 97 | (2.3) | 1.2 | 1.0 | 507 | (12.1) | 6.5 | 1.4 | 1 779 | (42.5) | 9.8 | 1.4 |
| *Uzbekistan* | *239* | *(2.0)* | *7.0* | *1.2* | *1 494* | *(12.3)* | *24.1* | *1.1* | *1 306* | *(10.8)* | *24.6* | *1.1* | *3 728* | *(30.8)* | *34.4* | *1.2* |
| **Subtotal non-EU/EEA** | **1 385** | **(1.1)** | **4.0** | **1.1** | **3 941** | **(3.0)** | **5.9** | **1.0** | **11 747** | **(9.0)** | **20.2** | **1.3** | **59 193** | **(45.2)** | **41.5** | **1.9** |
| **Total European Region** | **1 899** | **(1.2)** | **3.4** | **1.1** | **4 645** | **(2.9)** | **4.1** | **1.0** | **15 459** | **(9.5)** | **14.6** | **1.4** | **69 697** | **(42.9)** | **26.8** | **1.9** |
| ***Subtotal 18 HPCs*** | ***1 477*** | ***(1.1)*** | ***5.0*** | ***1.1*** | ***4 103*** | ***(3.0)*** | ***7.1*** | ***1.0*** | ***12 182*** | ***(8.8)*** | ***24.8*** | ***1.2*** | ***61 320*** | ***(44.4)*** | ***49.6*** | ***2.0*** |

*Note:* European Region comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB HPCs are presented in italics.
HPCs: high-priority countries.
F: female.
M: male
N/F: no female in the subgroup.
N/M: no male in the subgroup.
[a] Cases with unknown previous TB history are included among new TB cases.
[b] Previous TB history is defined by previous diagnosis.
[1] All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

| 45–64 | | | | > 64 | | | | Unknown | | | Total | | Country/area |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| N | (%) | Rate per 100 000 | M/F ratio | N | (%) | Rate per 100 000 | M/F ratio | N | (%) | Rate per 100 000 | N | M/F ratio | |
| | | | | | | | | | | | | | **EU/EEA** |
| 113 | (29.6) | 4.4 | 2.4 | 91 | (23.8) | 5.4 | 1.8 | 0 | (0.0) | – | 382 | 1.9 | Austria |
| 168 | (21.6) | 5.4 | 2.2 | 118 | (15.2) | 5.4 | 1.9 | 0 | (0.0) | – | 778 | 1.9 | Belgium[b] |
| *352* | *(39.7)* | *18.0* | *2.7* | *227* | *(25.6)* | *15.1* | *1.6* | *0* | *(0.0)* | – | *887* | *1.9* | *Bulgaria* |
| 63 | (35.6) | 5.6 | 2.0 | 70 | (39.5) | 8.2 | 0.8 | 0 | (0.0) | – | 177 | 1.5 | Croatia |
| 10 | (29.4) | 4.8 | 4.0 | 1 | (2.9) | 0.7 | N/M | 0 | (0.0) | – | 34 | 1.8 | Cyprus |
| 127 | (35.3) | 4.5 | 3.7 | 94 | (26.1) | 4.4 | 1.5 | 0 | (0.0) | – | 360 | 2.3 | Czechia |
| 73 | (35.6) | 4.8 | 1.2 | 22 | (10.7) | 1.9 | 3.4 | 0 | (0.0) | – | 205 | 1.4 | Denmark[b] |
| *56* | *(46.7)* | *16.0* | *4.6* | *38* | *(31.7)* | *14.3* | *1.7* | *0* | *(0.0)* | – | *120* | *2.9* | *Estonia* |
| 35 | (20.1) | 2.5 | 1.9 | 86 | (49.4) | 7.0 | 1.3 | 0 | (0.0) | – | 174 | 1.4 | Finland |
| 886 | (20.1) | 5.1 | 1.7 | 739 | (16.8) | 5.4 | 1.5 | 0 | (0.0) | – | 4 398 | 1.8 | France |
| 858 | (21.4) | 3.5 | 2.4 | 795 | (19.8) | 4.4 | 1.5 | 1 | (0.0) | – | 4 010 | 1.8 | Germany |
| 72 | (18.9) | 2.4 | 3.5 | 76 | (20.0) | 3.2 | 1.5 | 5 | (1.3) | 1.5 | 380 | 3.3 | Greece |
| 160 | (41.7) | 6.1 | 2.5 | 102 | (26.6) | 5.3 | 1.2 | 0 | (0.0) | – | 384 | 1.6 | Hungary |
| 4 | (33.3) | 4.6 | 3.0 | 0 | (0.0) | 0.0 | – | 0 | (0.0) | – | 12 | 1.0 | Iceland |
| 56 | (24.5) | 4.6 | 1.5 | 43 | (18.8) | 6.0 | 2.3 | 0 | (0.0) | – | 229 | 1.6 | Ireland[b] |
| 525 | (24.3) | 2.9 | 2.0 | 404 | (18.7) | 2.9 | 1.5 | 2 | (0.1) | 1.0 | 2 163 | 1.8 | Italy |
| – | – | – | – | – | – | – | – | – | – | – | – | – | *Latvia* |
| 0 | (0.0) | 0.0 | N/M | 1 | (50.0) | 14.1 | – | 0 | (0.0) | – | 2 | 1.0 | Liechtenstein |
| *342* | *(49.7)* | *42.2* | *5.1* | *119* | *(17.3)* | *21.4* | *2.1* | *0* | *(0.0)* | – | *688* | *3.1* | *Lithuania* |
| 5 | (15.6) | 2.9 | 4.0 | 3 | (9.4) | 3.3 | N/F | 0 | (0.0) | – | 32 | 15.0 | Luxembourg |
| 11 | (7.9) | 9.0 | N/F | 1 | (0.7) | 1.1 | N/F | 10 | (7.1) | N/F | 140 | 4.8 | Malta |
| 139 | (22.6) | 2.9 | 1.5 | 89 | (14.5) | 2.6 | 1.8 | 0 | (0.0) | – | 614 | 1.3 | Netherlands |
| 34 | (23.6) | 2.5 | 0.7 | 14 | (9.7) | 1.5 | 2.5 | 0 | (0.0) | – | 144 | 0.8 | Norway[b] |
| 1 370 | (43.5) | 13.8 | 4.8 | 824 | (26.2) | 11.9 | 1.6 | 0 | (0.0) | – | 3 150 | 2.7 | Poland |
| 523 | (37.3) | 17.7 | 2.2 | 320 | (22.8) | 14.0 | 1.9 | 1 | (0.1) | N/F | 1 402 | 1.9 | Portugal |
| *2 990* | *(41.6)* | *56.2* | *4.7* | *1 104* | *(15.3)* | *30.1* | *1.7* | *0* | *(0.0)* | – | *7 193* | *2.6* | *Romania* |
| 46 | (30.1) | 3.1 | 3.6 | 43 | (28.1) | 4.8 | 0.6 | 0 | (0.0) | – | 153 | 1.5 | Slovakia |
| 22 | (29.3) | 3.7 | 4.5 | 38 | (50.7) | 9.0 | 1.0 | 0 | (0.0) | – | 75 | 1.5 | Slovenia |
| 844 | (28.6) | 6.1 | 2.3 | 645 | (21.9) | 7.0 | 1.9 | 2 | (0.1) | N/F | 2 949 | 1.7 | Spain |
| 60 | (19.0) | 2.4 | 0.8 | 45 | (14.2) | 2.2 | 1.3 | 0 | (0.0) | – | 316 | 1.1 | Sweden |
| **9 944** | **(31.5)** | **7.9** | **3.0** | **6 152** | **(19.5)** | **6.6** | **1.6** | **21** | **(0.1)** | **5.3** | **31 551** | **2.0** | **Subtotal EU/EEA** |
| | | | | | | | | | | | | | **Non-EU/EEA** |
| 64 | (26.7) | 8.6 | 2.6 | 56 | (23.3) | 13.2 | 2.5 | 0 | (0.0) | – | 240 | 2.9 | Albania |
| 0 | (0.0) | 0.0 | *N/F* | 0 | (0.0) | 0.0 | – | 0 | (0.0) | – | 2 | 1.0 | Andorra |
| *144* | *(36.5)* | *19.9* | *5.9* | *55* | *(14.0)* | *15.7* | *2.7* | *0* | *(0.0)* | – | *394* | *3.1* | *Armenia* |
| *761* | *(29.7)* | *31.8* | *2.2* | *185* | *(7.2)* | *27.1* | *1.2* | *0* | *(0.0)* | – | *2 558* | *1.8* | *Azerbaijan* |
| *695* | *(45.9)* | *26.3* | *4.9* | *200* | *(13.2)* | *13.6* | *1.1* | *0* | *(0.0)* | – | *1 514* | *2.9* | *Belarus* |
| 118 | (33.1) | 12.2 | 2.4 | 117 | (32.8) | 19.9 | 1.3 | 0 | (0.0) | – | 357 | 1.6 | Bosnia and Herzegovina |
| *544* | *(32.6)* | *53.0* | *3.5* | *204* | *(12.2)* | *33.5* | *1.2* | *0* | *(0.0)* | – | *1 671* | *2.0* | *Georgia* |
| 31 | (19.6) | 1.9 | 1.6 | 36 | (22.8) | 3.4 | 1.6 | 0 | (0.0) | – | 158 | 1.7 | Israel |
| *3 064* | *(31.9)* | *77.5* | *1.1* | *1 145* | *(11.9)* | *77.2* | *0.9* | *0* | *(0.0)* | – | *9 603* | *1.0* | *Kazakhstan* |
| *1 276* | *(30.1)* | *113.3* | *1.8* | *581* | *(13.7)* | *188.4* | *1.1* | *0* | *(0.0)* | – | *4 241* | *1.4* | *Kyrgyzstan* |
| 0 | – | – | – | 0 | – | – | – | 0 | – | – | *0* | – | Monaco |
| *11* | *(27.5)* | *6.8* | *10.0* | *11* | *(27.5)* | *11.1* | *1.8* | *0* | *(0.0)* | – | *40* | *2.6* | Montenegro |
| 48 | (33.6) | 8.6 | 3.4 | 20 | (14.0) | 6.6 | 1.0 | 0 | (0.0) | – | 143 | 2.0 | North Macedonia |
| *704* | *(39.8)* | *67.7* | *4.3* | *144* | *(8.1)* | *28.6* | *2.2* | *0* | *(0.0)* | – | *1 767* | *3.1* | *Republic of Moldova* |
| *18 090* | *(30.8)* | *46.7* | *3.2* | *4 500* | *(7.7)* | *19.9* | *1.2* | *405* | *(0.7)* | *3.7* | *58 723* | *2.3* | *Russian Federation* |
| – | – | – | – | – | – | – | – | – | – | – | – | – | San Marino |
| 133 | (30.2) | 5.8 | 0.7 | 106 | (24.0) | 6.4 | 0.9 | 0 | (0.0) | – | 441 | 0.8 | Serbia |
| – | – | – | – | – | – | – | – | – | – | – | – | – | Serbia excluding Kosovo[1] |
| 133 | (30.2) | 14.4 | 0.7 | 106 | (24.0) | 10.2 | 0.9 | 0 | (0.0) | – | 441 | 0.8 | Kosovo[1] |
| 87 | (24.8) | 3.5 | 2.1 | 50 | (14.2) | 3.0 | 1.1 | 0 | (0.0) | – | 351 | 1.3 | Switzerland |
| *991* | *(23.9)* | *73.0* | *1.0* | *407* | *(9.8)* | *134.2* | *0.9* | *0* | *(0.0)* | – | *4 148* | *1.1* | *Tajikistan* |
| *2 629* | *(29.8)* | *14.8* | *1.8* | *1 636* | *(18.5)* | *21.6* | *1.4* | *0* | *(0.0)* | – | *8 830* | *1.3* | *Turkey* |
| *604* | *(31.5)* | *57.2* | *2.1* | *146* | *(7.6)* | *50.8* | *0.9* | *0* | *(0.0)* | – | *1 918* | *1.5* | *Turkmenistan* |
| *6 170* | *(35.2)* | *51.8* | *3.3* | *1 404* | *(8.0)* | *18.9* | *1.2* | *0* | *(0.0)* | – | *17 533* | *2.4* | *Ukraine* |
| 1 133 | (27.1) | 6.5 | 1.6 | 613 | (14.6) | 4.8 | 1.3 | 0 | (0.0) | – | 4 185 | 1.4 | United Kingdom[b] |
| *3 557* | *(29.4)* | *58.7* | *1.4* | *1 787* | *(14.8)* | *111.5* | *1.0* | *0* | *(0.0)* | – | *12 111* | *1.2* | *Uzbekistan* |
| **40 854** | **(31.2)** | **35.2** | **2.4** | **13 403** | **(10.2)** | **21.0** | **1.2** | **405** | **(0.3)** | **3.7** | **130 928** | **1.8** | **Subtotal non-EU/EEA** |
| **50 798** | **(31.3)** | **21.0** | **2.5** | **19 555** | **(12.0)** | **12.6** | **1.3** | **426** | **(0.3)** | **3.5** | **162 479** | **1.8** | **Total European Region** |
| ***44 102*** | ***(31.9)*** | ***44.9*** | ***2.6*** | ***14 495*** | ***(10.5)*** | ***28.4*** | ***1.2*** | ***405*** | ***(0.3)*** | **3.7** | ***138 084*** | ***1.9*** | ***Subtotal 18 HPCs*** |

[1] All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

## Table 9. TB cases by origin, European Region, 2020

| Country/area | Origin criterion | Native | | Foreign | | Unknown origin | | All TB cases |
|---|---|---|---|---|---|---|---|---|
| | | N | (%) | N | (%) | N | (%) | N |
| **EU/EEA** | | | | | | | | |
| Austria | Citizenship | 173 | (44.6) | 215 | (55.4) | 0 | (0.0) | 388 |
| Belgium | Citizenship | 358 | (43.1) | 472 | (56.9) | 0 | (0.0) | 830 |
| *Bulgaria* | *Birthplace* | *928* | *(99.8)* | *2* | *(0.2)* | *0* | *(0.0)* | *930* |
| Croatia | Birthplace | 183 | (100.0) | 0 | (0.0) | 0 | (0.0) | 183 |
| Cyprus | Birthplace | 5 | (13.9) | 31 | (86.1) | 0 | (0.0) | 36 |
| Czechia | Birthplace | 241 | (65.7) | 126 | (34.3) | 0 | (0.0) | 367 |
| Denmark | Birthplace | 61 | (27.9) | 158 | (72.1) | 0 | (0.0) | 219 |
| *Estonia* | *Birthplace* | *88* | *(71.0)* | *36* | *(29.0)* | *0* | *(0.0)* | *124* |
| Finland | Birthplace | 106 | (60.9) | 66 | (37.9) | 2 | (1.1) | 174 |
| France | Birthplace | 1 377 | (29.9) | 2 719 | (59.0) | 510 | (11.1) | 4 606 |
| Germany | Birthplace | 1 132 | (27.4) | 2 817 | (68.3) | 178 | (4.3) | 4 127 |
| Greece | Citizenship | 156 | (39.4) | 240 | (60.6) | 0 | (0.0) | 396 |
| Hungary | Citizenship | 387 | (95.3) | 19 | (4.7) | 0 | (0.0) | 406 |
| Iceland | Birthplace | 1 | (8.3) | 11 | (91.7) | 0 | (0.0) | 12 |
| Ireland | Birthplace | 68 | (28.3) | 108 | (45.0) | 64 | (26.7) | 240 |
| Italy | Birthplace | 992 | (43.4) | 1 273 | (55.7) | 22 | (1.0) | 2 287 |
| *Latvia* | – | – | – | – | – | – | – | – |
| Liechtenstein | Birthplace | 0 | (0.0) | 2 | (100.0) | 0 | (0.0) | 2 |
| *Lithuania* | *Birthplace* | *713* | *(98.2)* | *13* | *(1.8)* | *0* | *(0.0)* | *726* |
| Luxembourg | Birthplace | 5 | (14.7) | 29 | (85.3) | 0 | (0.0) | 34 |
| Malta | Birthplace | 3 | (2.1) | 137 | (97.9) | 0 | (0.0) | 140 |
| Netherlands | Birthplace | 164 | (26.3) | 451 | (72.4) | 8 | (1.3) | 623 |
| Norway | Birthplace | 30 | (18.8) | 130 | (81.3) | 0 | (0.0) | 160 |
| Poland | Citizenship | 3 272 | (96.6) | 116 | (3.4) | 0 | (0.0) | 3 388 |
| Portugal | Birthplace | 1 051 | (72.7) | 393 | (27.2) | 1 | (0.1) | 1 445 |
| *Romania* | *Birthplace* | *7 666* | *(99.6)* | *32* | *(0.4)* | *0* | *(0.0)* | *7 698* |
| Slovakia | Birthplace | 152 | (96.2) | 6 | (3.8) | 0 | (0.0) | 158 |
| Slovenia | Birthplace | 51 | (66.2) | 26 | (33.8) | 0 | (0.0) | 77 |
| Spain | Birthplace | 1 584 | (52.0) | 1 030 | (33.8) | 430 | (14.1) | 3 044 |
| Sweden | Birthplace | 44 | (13.4) | 284 | (86.6) | 0 | (0.0) | 328 |
| **Subtotal EU/EEA** | – | **20 991** | **(63.3)** | **10 942** | **(33.0)** | **1 215** | **(3.7)** | **33 148** |
| **Non-EU/EEA** | | | | | | | | |
| Albania | Citizenship | 240 | (100.0) | 0 | (0.0) | – | – | 240 |
| *Andorra* | *Citizenship* | *2* | *(100.0)* | *0* | *(0.0)* | – | – | *2* |
| *Armenia* | *Citizenship* | *440* | *(99.1)* | *4* | *(0.9)* | – | – | *444* |
| *Azerbaijan* | – | – | – | – | – | – | – | – |
| Belarus | Citizenship | 1 778 | (100.0) | 0 | (0.0) | – | – | 1 778 |
| *Bosnia and Herzegovina* | *Birthplace* | *352* | *(98.6)* | *5* | *(1.4)* | – | – | *357* |
| Georgia | – | – | – | – | – | – | – | – |
| *Israel* | *Birthplace* | *24* | *(15.2)* | *134* | *(84.8)* | – | – | *158* |
| *Kazakhstan* | *Citizenship* | *9 842* | *(98.2)* | *178* | *(1.8)* | – | – | *10 020* |
| Kyrgyzstan | Birthplace | 4 885 | (100.0) | 0 | (0.0) | – | – | 4 885 |
| Monaco | – | *0* | – | *0* | – | – | – | *0* |
| Montenegro | Citizenship | 36 | (90.0) | 4 | (10.0) | – | – | 40 |
| *North Macedonia* | *Birthplace* | *141* | *(95.3)* | *7* | *(4.7)* | – | – | *148* |
| *Republic of Moldova* | *Citizenship* | *1 898* | *(99.6)* | *8* | *(0.4)* | – | – | *1 906* |
| Russian Federation | Citizenship | 83 453 | (98.2) | 1 503 | (1.8) | – | – | 84 956 |
| San Marino | *Birthplace* | – | – | – | – | – | – | – |
| Serbia | – | 440 | (99.8) | 1 | (0.2) | – | – | 441 |
| Serbia excluding Kosovo[1] | – | – | – | – | – | – | – | – |
| Kosovo[1] | Birthplace | 440 | (99.8) | 1 | (0.2) | – | – | 441 |
| *Switzerland* | *Birthplace* | *111* | *(28.7)* | *276* | *(71.3)* | – | – | *387* |
| *Tajikistan* | – | – | – | – | – | – | – | – |
| *Turkey* | *Birthplace* | *7 505* | *(84.1)* | *1 420* | *(15.9)* | – | – | *8 925* |
| *Turkmenistan* | *Citizenship* | *2 610* | *(100.0)* | *0* | *(0.0)* | – | – | *2 610* |
| *Ukraine* | *Citizenship* | *19 490* | *(99.8)* | *31* | *(0.2)* | – | – | *19 521* |
| United Kingdom | Birthplace | 1 335 | (29.9) | 3 123 | (70.1) | – | – | 4 458 |
| *Uzbekistan* | *Birthplace* | *14 127* | *(100.0)* | *0* | *(0.0)* | – | – | *14 127* |
| **Subtotal non-EU/EEA** | – | **148 709** | **(95.7)** | **6 694** | **(4.3)** | **0** | **(0.0)** | **155 403** |
| ***Total European Region*** | – | ***169 700*** | ***(90.0)*** | ***17 636*** | ***(9.4)*** | ***1 215*** | **(0.6)** | ***188 551*** |
| ***Subtotal 18 HPCs*** | – | ***155 423*** | ***(98.0)*** | ***3 227*** | ***(2.0)*** | ***0*** | **(0.0)** | ***158 650*** |

*Note:* European Region comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB HPCs are presented in italics.
HPCs: high-priority countries.
[1] All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

## Table 10. Drug-resistance surveillance of bacteriologically confirmed[a] pulmonary TB cases, European Region, 2020

| Country/area | Source of data | Coverage | Bacteriologically confirmed cases[a] | | Cases with DST results at least for RIF | |
|---|---|---|---|---|---|---|
| | | | N | (%) | N | (%) |
| **EU/EEA** | | | | | | |
| Austria | TESSy | National | 227 | (76.9) | 220 | (96.9) |
| Belgium | TESSy | National | 461 | (80.3) | 441 | (95.7) |
| *Bulgaria* | *TESSy* | *National* | *424* | *(56.8)* | *243* | *(57.3)* |
| Croatia | TESSy | National | 99 | (95.2) | 84 | (84.8) |
| Cyprus | TESSy | National | 27 | (90.0) | 27 | (100.0) |
| Czechia | TESSy | National | 254 | (79.1) | 233 | (91.7) |
| Denmark | TESSy | National | 134 | (83.8) | 134 | (100.0) |
| *Estonia* | *TESSy* | *National* | *100* | *(87.0)* | *100* | *(100.0)* |
| Finland | TESSy | National | 103 | (87.3) | 102 | (99.0) |
| France | TESSy | *National* | 1 388 | (44.2) | 47 | (3.4) |
| Germany | TESSy | National | 2 468 | (85.0) | 2 197 | (89.0) |
| Greece | TESSy | National | 299 | (92.3) | 289 | (96.7) |
| Hungary | TESSy | National | 196 | (50.5) | 177 | (90.3) |
| Iceland | TESSy | National | 5 | (62.5) | 5 | (100.0) |
| Ireland | TESSy | National | 103 | (81.7) | 98 | (95.1) |
| Italy | NRL–TME[d] | Partial | 1 390 | (84.6) | 1 009 | (72.6) |
| *Latvia* | – | – | – | – | – | – |
| Liechtenstein | TESSy | National | 0 | – | 0 | – |
| *Lithuania* | *TESSy* | *National* | *617* | *(91.3)* | *617* | *(100.0)* |
| Luxembourg | TESSy | National | 23 | (88.5) | 22 | (95.7) |
| Malta | TESSy | National | 27 | (27.3) | 27 | (100.0) |
| Netherlands | TESSy | National | 264 | (79.0) | 250 | (94.7) |
| Norway | TESSy | National | 84 | (87.5) | 84 | (100.0) |
| Poland | TESSy | National | 2 573 | (79.5) | 2 350 | (91.3) |
| Portugal | TESSy | National | 724 | (71.9) | 467 | (64.5) |
| *Romania* | *TESSy* | *National* | *5 473* | *(82.2)* | *4 803* | *(87.8)* |
| Slovakia | TESSy | National | 65 | (48.1) | 64 | (98.5) |
| Slovenia | TESSy | National | 62 | (93.9) | 62 | (100.0) |
| Spain | TESSy | National | 1 420 | (63.8) | 665 | (46.8) |
| Sweden | TESSy | National | 180 | (87.0) | 180 | (100.0) |
| **Subtotal EU/EEA** | **–** | **–** | **19 190** | **(74.5)** | **14 997** | **(78.2)** |
| **Non-EU/EEA** | | | | | | |
| Albania | NRL–TME | National | 147 | (73.1) | 138 | (93.9) |
| Andorra | NRL–TME | National | 1 | (100.0) | 1 | (100.0) |
| *Armenia* | *NRL–TME* | *National* | *251* | *(74.5)* | *246* | *(98.0)* |
| *Azerbaijan* | *NRL–TME* | *National* | *3 617* | *(82.6)* | *3 505* | *(96.9)* |
| *Belarus* | *NRL–TME* | *National* | *1 584* | *(95.5)* | *1 584* | *(100.0)* |
| Bosnia and Herzegovina | NRL–TME | National | 240 | (72.3) | 231 | (96.3) |
| *Georgia* | *NRL–TME* | *National* | *1 370* | *(92.9)* | *1 355* | *(98.9)* |
| Israel | NRL–TME | National | 90 | (79.6) | 90 | (100.0) |
| *Kazakhstan* | *NRL–TME* | *National* | *7 084* | *(78.3)* | *7 074* | *(99.9)* |
| *Kyrgyzstan* | *NRL–TME* | *National* | *2 635* | *(66.0)* | *2 439* | *(92.6)* |
| Monaco | – | – | 0 | – | – | – |
| Montenegro | NRL–TME | National | 31 | (81.6) | 31 | (100.0) |
| North Macedonia | NRL–TME | National | 105 | (83.3) | 91 | (86.7) |
| *Republic of Moldova* | *NRL–TME* | *National* | *1 261* | *(69.3)* | *1 207* | *(95.7)* |
| *Russian Federation* | *NRL–TME* | *National* | *45 055* | *(56.3)* | *42 022* | *(93.3)* |
| San Marino | – | National | – | – | – | – |
| Serbia | NRL–TME | National | – | – | – | – |
| Serbia excluding Kosovo[1] | NRL–TME | National | – | – | – | – |
| Kosovo[1] | NRL–TME | National | – | – | – | – |
| Switzerland | NRL–TME | *Subnational* | 271 | (86.3) | 171 | (63.1) |
| *Tajikistan* | *NRL–TME* | *National* | *2 023* | *(69.2)* | *2 023* | *(100.0)* |
| *Turkey* | *NRL–TME* | *National* | *4 523* | *(78.0)* | *4 074* | *(90.1)* |
| *Turkmenistan* | – | – | – | – | – | – |
| *Ukraine* | *NRL–TME* | *National* | *13 177* | *(73.6)* | *12 818* | *(97.3)* |
| United Kingdom | TESSy | National | 1 927 | (79.7) | 1 622 | (84.2) |
| *Uzbekistan* | *NRL–TME* | *National* | *5 713* | *(60.1)* | *5 713* | *(100.0)* |
| **Subtotal non-EU/EEA** | **–** | **–** | **91 105** | **(64.0)** | **86 435** | **(94.9)** |
| **Total European Region** | **–** | **–** | **110 295** | **(65.6)** | **101 432** | **(92.0)** |
| ***Subtotal 18 HPCs*** | **–** | **–** | ***94 907*** | ***(64.6)*** | ***89 823*** | ***(94.6)*** |

*Note:* European Region comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB HPCs are presented in italics. The resistance pattern at the initiation of treatment is reported to TESSy irrespective of the method used for drug-susceptibility testing or resistance prediction.
DST: drug-susceptibility testing.
HPCs: high-priority countries.
MDR-TB: multidrug-resistant tuberculosis.
N: no.
NRL: national reference laboratory.
RIF: rifampicin.
TESSy: The European Surveillance System.
TME: WHO global TB data-collection system.
Y: yes.
[1] All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

| Cases resistant to RIF | | MDR-TB cases[b] | | All pulmonary TB cases | Reporting completeness[c] | |
|---|---|---|---|---|---|---|
| N | (%) | N | (%) | N | | |
| | | | | | | **EU/EEA** |
| 2 | (0.9) | 1 | (0.5) | 295 | Y | Austria |
| 9 | (2.0) | 7 | (1.6) | 574 | Y | Belgium |
| *12* | *(4.9)* | *9* | *(3.8)* | *746* | *Y* | *Bulgaria* |
| 1 | (1.2) | 1 | (1.2) | 104 | Y | Croatia |
| 0 | (0.0) | 0 | (0.0) | 30 | Y | Cyprus |
| 11 | (4.7) | 11 | (4.7) | 321 | Y | Czechia |
| 2 | (1.5) | 2 | (1.5) | 160 | Y | Denmark |
| *19* | *(19.0)* | *19* | *(19.4)* | *115* | *Y* | *Estonia* |
| 0 | (0.0) | 0 | (0.0) | 118 | Y | Finland |
| 47 | (100.0) | 47 | (100.0) | 3 140 | Y | France |
| 69 | (3.1) | 57 | (2.6) | 2 903 | Y | Germany |
| 7 | (2.4) | 5 | (1.7) | 324 | Y | Greece |
| 11 | (6.2) | 7 | (4.0) | 388 | Y | Hungary |
| 0 | (0.0) | 0 | (0.0) | 8 | Y | Iceland |
| 0 | (0.0) | 0 | (0.0) | 126 | Y | Ireland |
| 39 | (3.9) | 34 | (3.4) | 1 643 | N | Italy |
| – | – | – | – | – | *N* | *Latvia* |
| 0 | – | 0 | – | 0 | Y | Liechtenstein |
| *104* | *(16.9)* | *103* | *(16.7)* | *676* | *Y* | *Lithuania* |
| 0 | (0.0) | 0 | (0.0) | 26 | Y | Luxembourg |
| 0 | (0.0) | 0 | (0.0) | 99 | Y | Malta |
| 4 | (1.6) | 3 | (1.2) | 334 | Y | Netherlands |
| 2 | (2.4) | 1 | (1.2) | 96 | Y | Norway |
| 40 | (1.7) | 36 | (1.5) | 3 237 | Y | Poland |
| 7 | (1.5) | 6 | (1.3) | 1 007 | Y | Portugal |
| *244* | *(5.1)* | *203* | *(4.2)* | *6 655* | *Y* | *Romania* |
| 1 | (1.6) | 1 | (1.6) | 135 | Y | Slovakia |
| 1 | (1.6) | 0 | (0.0) | 66 | Y | Slovenia |
| 12 | (1.8) | 8 | (1.2) | 2 225 | Y | Spain |
| 5 | (2.8) | 5 | (2.8) | 207 | Y | Sweden |
| **649** | **(4.3)** | **566** | **(3.8)** | **25 758** | **–** | **Subtotal EU/EEA** |
| | | | | | | **Non-EU/EEA** |
| 4 | (2.9) | – | – | *201* | *Y* | Albania |
| 0 | (0.0) | *0* | *(0.0)* | *1* | *Y* | Andorra |
| *52* | *(21.1)* | *49* | *(21.5)* | *337* | *Y* | *Armenia* |
| *701* | *(20.0)* | *122* | *(10.5)* | *4 380* | *Y* | *Azerbaijan* |
| *825* | *(52.1)* | *787* | *(49.7)* | *1 658* | *Y* | *Belarus* |
| 0 | (0.0) | *0* | *(0.0)* | *332* | *Y* | Bosnia and Herzegovina |
| *191* | *(14.1)* | *165* | *(14.0)* | *1 475* | *Y* | *Georgia* |
| 5 | (5.6) | 5 | (5.6) | 113 | Y | Israel |
| *2 859* | *(40.4)* | *2 328* | *(32.9)* | *9 051* | *Y* | *Kazakhstan* |
| *870* | *(35.7)* | *715* | *(29.3)* | *3 992* | *Y* | *Kyrgyzstan* |
| – | – | – | – | – | – | Monaco |
| 0 | (0.0) | 0 | (0.0) | 38 | Y | Montenegro |
| 2 | (2.2) | 0 | (0.0) | 126 | Y | North Macedonia |
| *413* | *(34.2)* | *275* | *(30.8)* | *1 819* | *Y* | *Republic of Moldova* |
| *21 963* | *(52.3)* | *20 569* | *(48.9)* | *79 963* | *Y* | *Russian Federation* |
| – | – | – | – | – | – | San Marino |
| – | – | – | – | – | *N* | Serbia |
| – | – | – | – | – | *N* | Serbia excluding Kosovo[1] |
| – | – | – | – | – | *N* | Kosovo[1] |
| 4 | (2.3) | *0* | *(0.0)* | *314* | *N* | Switzerland |
| *555* | *(27.4)* | *324* | *(19.7)* | *2 925* | *Y* | *Tajikistan* |
| *127* | *(3.1)* | *108* | *(2.7)* | *5 802* | *Y* | *Turkey* |
| – | – | – | – | – | *N* | *Turkmenistan* |
| *4 177* | *(32.6)* | *3 076* | *(24.0)* | *17 915* | *Y* | *Ukraine* |
| 35 | (2.2) | 25 | (1.5) | 2 419 | Y | United Kingdom |
| *1 400* | *(24.5)* | *1 394* | *(25.6)* | *9 503* | *Y* | *Uzbekistan* |
| **34 183** | **(39.5)** | **29 942** | **(36.2)** | **142 364** | **–** | **Subtotal non-EU/EEA** |
| **34 832** | **(34.3)** | **30 508** | **(31.2)** | **168 122** | **–** | **Total European Region** |
| ***34 512*** | ***(38.4)*** | ***30 246*** | ***(35.1)*** | ***147 012*** | **–** | ***Subtotal 18 HPCs*** |

[a] Bacteriologically confirmed cases – cases with positive identification for *Mycobacterium tuberculosis* complex confirmed by culture and/or line probe assay for non-EU/EEA countries and areas. For EU/EEA countries: cases with positive identification for *Mycobacterium tuberculosis* complex confirmed by culture and/or line probe assay.
[b] Includes cases that are MDR but that also meet the pre-XDR or XDR case definitions (pre-XDR and XDR cases have not been excluded).
[c] Data are considered complete when national coverage is 100% OR culture results are available for 90% of all cases, and 50% of all cases are culture-positive, and 75% of them have DST results, and external quality-assessment results have been accurate in 95% of samples of reported year.
[d] Laboratory-related data from Italy are reported by the NRL and may differ from data shown elsewhere in this report.
[1] All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

**Table 11. Drug-resistance surveillance of bacteriologically confirmed[a] pulmonary TB cases by previous TB treatment history, European Region, 2020**

| | New cases with DST results to RIF | | New RR/MDR-TB cases[c] | | New bacteriologically confirmed pulmonary TB cases | | New pulmonary TB cases | | Previously treated cases with DST results to RIF | | Previously treated RR/MDR-TB cases[c] | | Previously treated bacteriologically confirmed pulmonary TB cases | | Previously treated pulmonary TB cases | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | (%)[d] | N | (%)[e] | N | (%)[f] | N | (%)[g] | N | (%)[d] | N | (%)[e] | N | (%)[f] | N | (%)[g] |
| **EU/EEA** | | | | | | | | | | | | | | | | |
| Austria | 173 | (97.2) | 0 | (0.0) | 178 | (80.2) | 222 | (92.5) | 5 | (100.0) | 1 | (20.0) | 5 | (27.8) | 18 | (7.5) |
| Belgium[k] | 320 | (96.4) | 2 | (0.6) | 332 | (79.6) | 417 | (92.3) | 22 | (91.7) | 0 | (0.0) | 24 | (68.6) | 35 | (7.7) |
| *Bulgaria* | *207* | *(56.1)* | *5* | *(2.4)* | *369* | *(57.2)* | *645* | *(86.5)* | *36* | *(65.5)* | *4* | *(11.1)* | *55* | *(54.5)* | *101* | *(13.5)* |
| Croatia | 0 | (0.0) | 0 | (0.0) | 1 | (100.0) | 1 | (12.5) | 6 | (85.7) | 1 | (16.7) | 7 | (100.0) | 7 | (87.5) |
| Cyprus | 25 | (100.0) | 0 | (0.0) | 25 | (89.3) | 28 | (93.3) | 2 | (100.0) | 0 | (0.0) | 2 | (100.0) | 2 | (6.7) |
| Czechia | 223 | (91.8) | 8 | (3.6) | 243 | (78.9) | 308 | (96.0) | 10 | (90.9) | 3 | (30.0) | 11 | (84.6) | 13 | (4.0) |
| Denmark[k] | 127 | (100.0) | 1 | (0.8) | 127 | (84.7) | 150 | (93.8) | 7 | (100.0) | 1 | (14.3) | 7 | (70.0) | 10 | (6.3) |
| *Estonia* | *89* | *(100.0)* | *16* | *(18.0)* | *89* | *(88.1)* | *101* | *(87.8)* | *11* | *(100.0)* | *3* | *(27.3)* | *11* | *(78.6)* | *14* | *(12.2)* |
| Finland | 100 | (99.0) | 0 | (0.0) | 101 | (88.6) | 114 | (96.6) | 2 | (100.0) | 0 | (0.0) | 2 | (50.0) | 4 | (3.4) |
| France | 20 | (2.9) | 20 | (100.0) | 685 | (45.5) | 1 507 | (90.8) | 11 | (16.2) | 11 | (100.0) | 68 | (44.4) | 153 | (9.2) |
| Germany | 1 553 | (90.9) | 33 | (2.1) | 1 708 | (87.0) | 1 964 | (91.6) | 95 | (80.5) | 5 | (5.3) | 118 | (65.2) | 181 | (8.4) |
| Greece | 251 | (96.9) | 5 | (2.0) | 259 | (91.8) | 282 | (94.9) | 14 | (93.3) | 1 | (7.1) | 15 | (100.0) | 15 | (5.1) |
| Hungary | 156 | (90.7) | 6 | (3.8) | 172 | (50.3) | 342 | (88.1) | 21 | (87.5) | 5 | (23.8) | 24 | (52.2) | 46 | (11.9) |
| Iceland | 0 | (0.0) | 0 | (0.0) | 0 | – | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) |
| Ireland[k] | 66 | (98.5) | 0 | (0.0) | 67 | (82.7) | 81 | (92.0) | 6 | (100.0) | 0 | (0.0) | 6 | (85.7) | 7 | (8.0) |
| Italy | 983 | (100.0) | 33 | (3.4) | 983 | (90.5) | 1 086 | (91.3) | 26 | (32.5) | 6 | (23.1) | 80 | (76.9) | 104 | (8.7) |
| *Latvia* | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Liechtenstein | *0* | (0.0) | 0 | (0.0) | 0 | – | 0 | (0.0) | 0 | *(0.0)* | 0 | *(0.0)* | 0 | *(0.0)* | 0 | (0.0) |
| *Lithuania* | *483* | *(100.0)* | *61* | *(12.6)* | *483* | *(89.1)* | *542* | *(80.2)* | *134* | *(100.0)* | *43* | *(32.1)* | *134* | *(100.0)* | *134* | *(19.8)* |
| Luxembourg | *18* | *(94.7)* | *0* | *(0.0)* | *19* | *(90.5)* | *21* | *(91.3)* | *1* | *(100.0)* | *0* | *(0.0)* | *1* | *(50.0)* | *2* | *(8.7)* |
| Malta | 18 | (100.0) | 0 | (0.0) | 18 | (25.4) | 71 | (100.0) | 0 | *(0.0)* | 0 | *(0.0)* | 0 | *(0.0)* | 0 | (0.0) |
| Netherlands | 243 | (95.3) | 4 | (1.6) | 255 | (79.4) | 321 | (96.1) | 7 | (77.8) | 0 | (0.0) | 9 | (69.2) | 13 | (3.9) |
| Norway[k] | 76 | (100.0) | 2 | (2.6) | 76 | (88.4) | 86 | (89.6) | 8 | (100.0) | 0 | (0.0) | 8 | (80.0) | 10 | (10.4) |
| Poland | 2 017 | (92.0) | 29 | (1.4) | 2 192 | (79.1) | 2 770 | (85.6) | 333 | (87.4) | 11 | (3.3) | 381 | (81.6) | 467 | (14.4) |
| Portugal | 439 | (64.8) | 4 | (0.9) | 677 | (72.1) | 939 | (93.2) | 28 | (59.6) | 3 | (10.7) | 47 | (69.1) | 68 | (6.8) |
| *Romania* | *3 608* | *(87.8)* | *85* | *(2.4)* | *4 109* | *(81.6)* | *5 038* | *(75.7)* | *1 195* | *(87.6)* | *159* | *(13.3)* | *1 364* | *(84.4)* | *1 617* | *(24.3)* |
| Slovakia | 51 | (98.1) | 0 | (0.0) | 52 | (46.8) | 111 | (84.7) | 11 | (100.0) | 1 | (9.1) | 11 | (55.0) | 20 | (15.3) |
| Slovenia | 57 | (100.0) | 1 | (1.8) | 57 | (96.6) | 59 | (90.8) | 4 | (100.0) | 0 | (0.0) | 4 | (66.7) | 6 | (9.2) |
| Spain | 627 | (68.9) | 11 | (1.8) | 910 | (68.9) | 1 320 | (94.6) | 30 | (58.8) | 1 | (3.3) | 51 | (67.1) | 76 | (5.4) |
| Sweden | 169 | (100.0) | 4 | (2.4) | 169 | (87.6) | 193 | (93.7) | 10 | (100.0) | 1 | (10.0) | 10 | (76.9) | 13 | (6.3) |
| **Subtotal EU/EEA** | **12 099** | **(84.3)** | **335** | **(2.8)** | **14 356** | **(76.7)** | **18 719** | **(85.7)** | **2 035** | **(82.9)** | **260** | **(12.8)** | **2 455** | **(78.3)** | **3 136** | **(14.4)** |
| **Non-EU/EEA** | | | | | | | | | | | | | | | | |
| Albania | 125 | (93.3) | 1 | (0.8) | 134 | (72.4) | 185 | (92.0) | 13 | (100.0) | 3 | (23.1) | 13 | (81.3) | 16 | (8.0) |
| Andorra | 1 | (100.0) | 0 | (0.0) | 1 | (100.0) | 1 | (100.0) | 0 | – | 0 | – | 0 | – | 0 | – |
| Armenia | 198 | (99.5) | 28 | (14.1) | 199 | (75.7) | 263 | (78.0) | 48 | (92.3) | 24 | (50.0) | 52 | (70.3) | 74 | (22.0) |
| Azerbaijan | 1 245 | (93.5) | 149 | (12.0) | 1 331 | (68.1) | 1 954 | (44.6) | 2 260 | (98.9) | 552 | (24.4) | 2 286 | (94.2) | 2 426 | (55.4) |
| *Belarus* | *1 015* | *(100.0)* | *401* | *(39.5)* | *1 015* | *(93.6)* | *1 084* | *(65.4)* | *569* | *(100.0)* | *424* | *(74.5)* | *569* | *(99.1)* | *574* | *(34.6)* |
| Bosnia and Herzegovina | 208 | (97.7) | 0 | (0.0) | 213 | (75.0) | 284 | (85.5) | 23 | (85.2) | 0 | (0.0) | 27 | (56.3) | 48 | (14.5) |
| *Georgia* | *1 064* | *(99.8)* | *114* | *(10.7)* | *1 066* | *(92.2)* | *1 156* | *(78.3)* | *291* | *(95.7)* | *77* | *(26.5)* | *304* | *(95.0)* | *320* | *(21.7)* |
| Israel | 89 | (100.0) | 5 | (5.6) | 89 | (80.2) | 111 | (98.2) | 1 | – | 0 | – | 1 | – | 2 | (1.8) |
| *Kazakhstan* | *4 858* | *(99.9)* | *1 758* | *(36.2)* | *4 862* | *(80.4)* | *6 051* | *(66.9)* | *2 216* | *(99.7)* | *1 101* | *(49.7)* | *2 222* | *(74.1)* | *3 000* | *(33.1)* |
| *Kyrgyzstan* | *1 741* | *(92.0)* | *493* | *(28.3)* | *1 892* | *(69.4)* | *2 725* | *(68.3)* | *698* | *(93.9)* | *377* | *(54.0)* | *743* | *(58.6)* | *1 267* | *(31.7)* |
| Monaco | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Montenegro | *29* | *(100.0)* | *0* | *(0.0)* | *29* | *(80.6)* | *36* | *(94.7)* | *2* | *(100.0)* | *0* | *(0.0)* | *2* | *(100.0)* | *2* | *(5.3)* |
| North Macedonia | 81 | (85.3) | 1 | (1.2) | 95 | (85.6) | 111 | (88.1) | 10 | (100.0) | 1 | (10.0) | 10 | (66.7) | 15 | (11.9) |
| *Republic of Moldova* | *840* | *(95.3)* | *218* | *(26.0)* | *881* | *(69.7)* | *1 264* | *(69.5)* | *367* | *(96.6)* | *195* | *(53.1)* | *380* | *(68.5)* | *555* | *(30.5)* |
| *Russian Federation* | *21 099* | *(92.5)* | *7 657* | *(36.3)* | *22 811* | *(52.6)* | *43 357* | *(54.2)* | *20 923* | *(94.1)* | *14 306* | *(68.4)* | *22 244* | *(60.8)* | *36 606* | *(45.8)* |
| San Marino | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Serbia | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Serbia excluding Kosovo[l] | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Kosovo[l] | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Switzerland | 171 | (90.5) | 4 | (2.3) | 189 | (72.7) | 260 | (82.8) | 0 | (0.0) | 0 | – | 27 | (50.0) | 54 | (17.2) |
| *Tajikistan* | *1 683* | *(100.0)* | *408* | *(24.2)* | *1 683* | *(67.6)* | *2 488* | *(85.1)* | *340* | *(100.0)* | *147* | *(43.2)* | *340* | *(77.8)* | *437* | *(14.9)* |
| *Turkey* | *3 777* | *(90.5)* | *94* | *(2.5)* | *4 172* | *(78.0)* | *5 346* | *(92.1)* | *297* | *(84.6)* | *33* | *(11.1)* | *351* | *(77.0)* | *456* | *(7.9)* |
| *Turkmenistan* | – | – | *0* | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Ukraine | 8 793 | (97.2) | 2 515 | (28.6) | 9 042 | (70.6) | 12 813 | (71.5) | 4 025 | (97.3) | 1 662 | (41.3) | 4 135 | (81.0) | 5 102 | (28.5) |
| United Kingdom[k] | 1 546 | (99.1) | 31 | (1.2) | 1 693 | (75.9) | 2 253 | (92.7) | 76 | (96.8) | 4 | (2.5) | 118 | (62.7) | 166 | (7.3) |
| *Uzbekistan* | *3 946* | *(100.0)* | *721* | *(18.3)* | *3 946* | *(61.2)* | *6 451* | *(67.9)* | *1 767* | *(100.0)* | *679* | *(38.4)* | *1 767* | *(57.9)* | *3 052* | *(32.1)* |
| **Subtotal non-EU/EEA** | **52 509** | **(94.9)** | **14 598** | **(27.8)** | **55 343** | **(62.8)** | **88 193** | **(61.9)** | **33 926** | **(95.3)** | **19 585** | **(57.7)** | **35 591** | **(65.7)** | **54 172** | **(38.1)** |
| **Total European Region** | **64 608** | **(92.7)** | **14 933** | **(23.1)** | **69 699** | **(65.2)** | **106 912** | **(65.1)** | **35 961** | **(94.5)** | **19 845** | **(55.2)** | **38 046** | **(66.4)** | **57 308** | **(34.9)** |
| ***Subtotal 18 HPCs*** | ***54 646*** | ***(94.3)*** | ***14 723*** | ***(26.9)*** | ***57 950*** | ***(63.5)*** | ***91 278*** | ***(62.1)*** | ***35 177*** | ***(95.2)*** | ***19 786*** | ***(56.2)*** | ***36 957*** | ***(66.3)*** | ***55 735*** | ***(37.9)*** |

*Note:* European Region comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB HPCs are presented in italics. The resistance pattern at the initiation of treatment is reported to TESSy irrespective of the method used for DST or resistance prediction.
DST: drug-susceptibility testing.
HPCs: high-priority countries.
RIF: rifampicin.
RR/MDR: rifampicin-resistant or multidrug-resistant tuberculosis.
TESSy: The European Surveillance System.
[a] Bacteriologically confirmed cases – cases with positive identification for *Mycobacterium tuberculosis* complex confirmed by culture and/or line probe assay for non-EU/EEA countries and areas. For EU/EEA countries: culture-positive OR microscopy-positive and nucleic acid amplification test-positive cases.
[b] Pulmonary TB cases with unknown previous TB treatment history are excluded.
[l] All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

| Total cases with DST results to RIF | | Total RR/MDR-TB cases | | Total bacteriologically confirmed pulmonary TB cases | | Total pulmonary TB cases | | |
|---|---|---|---|---|---|---|---|---|
| N | (%)[h] | N | (%)[i] | N | (%)[g] | N | (%)[j] | |
| | | | | | | | | **EU/EEA** |
| 178 | (97.3) | 2 | (0.6) | 183 | (76.3) | 240 | (61.9) | Austria |
| 342 | (96.1) | 3 | (0.6) | 356 | (78.8) | 452 | (54.5) | Belgium[k] |
| *243* | *(57.3)* | *12* | *(3.7)* | *424* | *(56.8)* | *746* | *(80.2)* | *Bulgaria* |
| 6 | (75.0) | 1 | (16.7) | 8 | (100.0) | 8 | (4.4) | Croatia |
| 27 | (100.0) | 0 | (0.0) | 27 | (90.0) | 30 | (83.3) | Cyprus |
| 233 | (91.7) | 11 | (4.7) | 254 | (79.1) | 321 | (87.5) | Czechia |
| 134 | (100.0) | 2 | (1.5) | 134 | (83.8) | 160 | (73.1) | Denmark[k] |
| *100* | *(100.0)* | *19* | *(19.0)* | *100* | *(87.0)* | *115* | *(92.7)* | *Estonia* |
| 102 | (99.0) | 0 | (0.0) | 103 | (87.3) | 118 | (67.8) | Finland |
| 31 | (4.1) | 31 | (100.0) | 753 | (45.4) | 1 660 | (36.0) | France |
| 1 648 | (90.3) | 38 | (2.3) | 1 826 | (85.1) | 2 145 | (52.0) | Germany |
| 265 | (96.7) | 6 | (2.3) | 274 | (92.3) | 297 | (75.0) | Greece |
| 177 | (90.3) | 11 | (6.2) | 196 | (50.5) | 388 | (95.6) | Hungary |
| 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | Iceland |
| 72 | (98.6) | 0 | (0.0) | 73 | (83.0) | 88 | (36.7) | Ireland[k] |
| 1 009 | (94.9) | 39 | (3.9) | 1 063 | (89.3) | 1 190 | (52.0) | Italy |
| – | – | – | – | – | – | – | – | *Latvia* |
| 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | Liechtenstein |
| *617* | *(100.0)* | *104* | *(16.9)* | *617* | *(91.3)* | *676* | *(93.1)* | *Lithuania* |
| *19* | *(95.0)* | *0* | *(0.0)* | *20* | *(87.0)* | *23* | *(67.6)* | Luxembourg |
| 18 | (100.0) | 0 | (0.0) | 18 | (25.4) | 71 | (50.7) | Malta |
| 250 | (94.7) | 4 | (1.6) | 264 | (79.0) | 334 | (53.6) | Netherlands |
| 84 | (100.0) | 2 | (2.4) | 84 | (87.5) | 96 | (60.0) | Norway[k] |
| 2 350 | (91.3) | 40 | (1.7) | 2 573 | (79.5) | 3 237 | (95.5) | Poland |
| 467 | (64.5) | 7 | (1.5) | 724 | (71.9) | 1 007 | (69.7) | Portugal |
| *4 803* | *(87.8)* | *244* | *(5.1)* | *5 473* | *(82.2)* | *6 655* | *(86.5)* | *Romania* |
| 62 | (98.4) | 1 | (1.6) | 63 | (48.1) | 131 | (82.9) | Slovakia |
| 61 | (100.0) | 1 | (1.6) | 61 | (93.8) | 65 | (84.4) | Slovenia |
| 657 | (68.4) | 12 | (1.8) | 961 | (68.8) | 1 396 | (45.9) | Spain |
| 179 | (100.0) | 5 | (2.8) | 179 | (86.9) | 206 | (62.8) | Sweden |
| **14 134** | **(84.1)** | **595** | **(4.2)** | **16 811** | **(76.9)** | **21 855** | **(66.0)** | **Subtotal EU/EEA** |
| | | | | | | | | **Non-EU/EEA** |
| 138 | (93.9) | 4 | (2.9) | 147 | (73.1) | 201 | (83.8) | Albania |
| 1 | (100.0) | 0 | (0.0) | 1 | (100.0) | 1 | (50.0) | Andorra |
| 246 | (98.0) | 52 | (21.1) | 251 | (74.5) | 337 | (75.9) | Armenia |
| 3 505 | (96.9) | 701 | (20.0) | 3 617 | (82.6) | 4 380 | (87.8) | Azerbaijan |
| *1 584* | *(100.0)* | *825* | *(52.1)* | *1 584* | *(95.5)* | *1 658* | *(93.3)* | *Belarus* |
| 231 | (96.3) | 0 | (0.0) | 240 | (72.3) | 332 | (93.0) | Bosnia and Herzegovina |
| *1 355* | *(98.9)* | *191* | *(14.1)* | *1 370* | *(92.8)* | *1 476* | *(80.2)* | *Georgia* |
| 90 | (100.0) | 5 | (5.6) | 90 | (79.6) | 113 | (71.5) | Israel |
| *7 074* | *(99.9)* | *2 859* | *(40.4)* | *7 084* | *(78.3)* | *9 051* | *(90.3)* | *Kazakhstan* |
| *2 439* | *(92.6)* | *870* | *(35.7)* | *2 635* | *(66.0)* | *3 992* | *(81.7)* | *Kyrgyzstan* |
| – | – | – | – | – | – | 0 | – | Monaco |
| 31 | (100.0) | 0 | (0.0) | 31 | (81.6) | 38 | (95.0) | Montenegro |
| 91 | (86.7) | 2 | (2.2) | 105 | (83.3) | 126 | (85.1) | North Macedonia |
| *1 207* | *(95.7)* | *413* | *(34.2)* | *1 261* | *(69.3)* | *1 819* | *(95.4)* | *Republic of Moldova* |
| *42 022* | *(93.3)* | *21 963* | *(52.3)* | *45 055* | *(56.3)* | *79 963* | *(94.1)* | *Russian Federation* |
| – | – | – | – | – | – | – | – | San Marino |
| – | – | – | – | – | – | – | – | Serbia |
| – | – | – | – | – | – | – | – | Serbia excluding Kosovo[l] |
| – | – | – | – | – | – | – | – | Kosovo[l] |
| 171 | (79.2) | 4 | (2.3) | 216 | (68.8) | 314 | (81.1) | Switzerland |
| *2 023* | *(100.0)* | *555* | *(27.4)* | *2 023* | *(69.2)* | *2 925* | *(67.8)* | *Tajikistan* |
| *4 074* | *(90.1)* | *127* | *(3.1)* | *4 523* | *(78.0)* | *5 802* | *(65.0)* | *Turkey* |
| – | – | – | – | – | – | – | – | *Turkmenistan* |
| *12 818* | *(97.3)* | *4 177* | *(32.6)* | *13 177* | *(73.6)* | *17 915* | *(91.8)* | Ukraine |
| *1 622* | *(98.9)* | *35* | *(1.2)* | *1 811* | *(74.9)* | *2 419* | *(53.3)* | United Kingdom[k] |
| *5 713* | *(100.0)* | *1 400* | *(24.5)* | *5 713* | *(60.1)* | *9 503* | *(67.3)* | *Uzbekistan* |
| **86 435** | **(95.1)** | **34 183** | **(39.5)** | **90 934** | **(63.9)** | **142 365** | **(87.1)** | **Subtotal non-EU/EEA** |
| **100 569** | **(93.3)** | **34 778** | **(34.6)** | **107 745** | **(65.6)** | **164 220** | **(83.5)** | **Total European Region** |
| ***89 823*** | ***(94.6)*** | ***34 512*** | ***(38.4)*** | ***94 907*** | ***(64.6)*** | ***147 013*** | ***(85.6)*** | ***Subtotal 18 HPCs*** |

[c] Includes cases that are RR/MDR but that also meet the pre-XDR or XDR case definitions (pre-XDR and XDR cases have not been excluded).
[d] Proportion of bacteriologically confirmed pulmonary TB cases with DST results with the respective previous TB treatment history.
[e] Proportion of bacteriologically confirmed pulmonary RR/MDR-TB cases with DST results and the respective previous TB treatment history.
[f] Proportion of all pulmonary TB cases with the respective previous TB treatment history.
[g] Proportion of all pulmonary TB cases. For EU/EEA, excluding the cases with unknown previous TB treatment history.
[h] Proportion of all bacteriologically confirmed pulmonary TB cases with DST results. For EU/EEA, excluding the cases with unknown previous TB treatment history.
[i] Proportion of all bacteriologically confirmed pulmonary RR/MDR-TB cases with DST results. For EU/EEA, excluding the cases with unknown previous TB treatment history.
[j] Proportion of all TB cases.
[k] Previous TB history is defined by previous diagnosis.
[l] All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

**Table 12. Pre-XDR-TB and XDR-TB cases among bacteriologically confirmed[a] pulmonary RR/MDR-TB cases, European Region, 2020**

| Country/area | Source of data | Coverage | Bacteriologically confirmed pulmonary RR/MDR-TB cases[b] | | Cases with DST results for any fluoroquinolone | | Pre-XDR-TB cases[c] | |
|---|---|---|---|---|---|---|---|---|
| | | | N | (%) | N | (%) | N | (%) |
| **EU/EEA** | | | | | | | | |
| Austria | TESSy | National | 2 | (0.9) | 2 | (100.0) | 0 | (0.0) |
| Belgium | TESSy | National | 9 | (2.0) | 5 | (55.6) | 1 | (20.0) |
| *Bulgaria* | *TESSy* | *National* | *12* | *(5.0)* | *10* | *(83.3)* | *2* | *(20.0)* |
| Croatia | TESSy | National | 1 | (1.2) | 0 | (0.0) | 0 | (0.0) |
| Cyprus | TESSy | National | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) |
| Czechia | TESSy | National | 11 | (4.7) | 7 | (63.6) | 4 | (57.1) |
| Denmark | TESSy | National | 2 | (1.5) | 2 | (100.0) | 0 | (0.0) |
| *Estonia* | *TESSy* | *National* | *19* | *(19.4)* | *19* | *(100.0)* | *6* | *(31.6)* |
| Finland | TESSy | National | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) |
| France | TESSy | National | 47 | (100.0) | 41 | (87.2) | 8 | (19.5) |
| Germany | TESSy | National | 69 | (3.1) | 51 | (73.9) | 10 | (19.6) |
| Greece | TESSy | National | 7 | (2.4) | 3 | (42.9) | 0 | (0.0) |
| Hungary | TESSy | National | 11 | (6.3) | 10 | (90.9) | 0 | (0.0) |
| Iceland | TESSy | National | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) |
| Ireland | TESSy | National | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) |
| Italy | NRL–TME | Partial | 39 | (3.9) | 34 | (87.2) | 8 | (23.5) |
| *Latvia* | – | – | – | – | – | – | – | – |
| Liechtenstein | TESSy | National | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) |
| *Lithuania* | *TESSy* | *National* | *104* | *(16.9)* | *104* | *(100.0)* | *34* | *(32.7)* |
| Luxembourg | TESSy | National | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) |
| Malta | TESSy | National | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) |
| Netherlands | TESSy | National | 4 | (1.6) | 4 | (100.0) | 0 | (0.0) |
| Norway | TESSy | National | 2 | (2.4) | 2 | (100.0) | 0 | (0.0) |
| Poland | TESSy | National | 40 | (1.7) | 14 | (35.0) | 12 | (85.7) |
| Portugal | TESSy | National | 7 | (1.5) | 3 | (42.9) | 0 | (0.0) |
| *Romania* | *TESSy* | *National* | *244* | *(5.1)* | *96* | *(39.3)* | *27* | *(28.1)* |
| Slovakia | TESSy | National | 1 | (1.6) | 1 | (100.0) | 0 | (0.0) |
| Slovenia | TESSy | National | 1 | (1.6) | 1 | (100.0) | 0 | (0.0) |
| Spain | TESSy | National | 12 | (1.8) | 3 | (25.0) | 1 | (33.3) |
| Sweden | TESSy | National | 5 | (2.8) | 5 | (100.0) | 2 | (40.0) |
| **Subtotal EU/EEA** | – | – | **649** | **(4.6)** | **417** | **(64.3)** | **115** | **(27.6)** |
| **Non-EU/EEA** | | | | | | | | |
| Albania | NRL–TME | National | 4 | (2.9) | 0 | (0.0) | – | – |
| Andorra | NRL–TME | National | 0 | (0.0) | – | – | – | – |
| *Armenia* | *NRL–TME* | *National* | *52* | *(21.1)* | *52* | *(100.0)* | *11* | *(21.2)* |
| *Azerbaijan* | *NRL–TME* | *National* | *701* | *(20.0)* | *576* | *(82.2)* | *87* | *(15.1)* |
| *Belarus* | *NRL–TME* | *National* | *825* | *(52.1)* | *825* | *(100.0)* | *354* | *(42.9)* |
| Bosnia and Herzegovina | – | – | 0 | (0.0) | – | – | – | – |
| *Georgia* | *NRL–TME* | *National* | *191* | *(14.1)* | *173* | *(90.6)* | *50* | *(28.9)* |
| Israel | NRL–TME | National | 5 | (5.6) | 5 | (100.0) | 1 | (20.0) |
| *Kazakhstan* | – | – | *2 859* | *(40.4)* | *2 848* | *(99.6)* | *399* | *(14.0)* |
| *Kyrgyzstan* | *NRL–TME* | *National* | *870* | *(35.7)* | *869* | *(99.9)* | *149* | *(17.1)* |
| Monaco | – | – | 0 | – | – | – | – | – |
| Montenegro | NRL–TME | National | 0 | (0.0) | – | – | – | – |
| North Macedonia | NRL–TME | National | 2 | (2.2) | 0 | (0.0) | – | – |
| *Republic of Moldova* | *NRL–TME* | *National* | *413* | *(34.2)* | *413* | *(100.0)* | *188* | *(45.5)* |
| *Russian Federation* | *NRL–TME* | *National* | *21 963* | *(52.3)* | *20 449* | *(93.1)* | *7 822* | *(38.3)* |
| San Marino | – | National | – | – | – | – | – | – |
| Serbia | – | – | – | – | – | – | – | – |
| Serbia excluding Kosovo[1] | – | – | – | – | – | – | – | – |
| Kosovo[1] | – | – | – | – | – | – | – | – |
| Switzerland | NRL–TME | National | 4 | (2.3) | 4 | (100.0) | 2 | (50.0) |
| *Tajikistan* | *NRL–TME* | *National* | *555* | *(27.4)* | *512* | *(92.3)* | *121* | *(23.6)* |
| *Turkey* | *NRL–TME* | *National* | *127* | *(3.1)* | *99* | *(78.0)* | *14* | *(14.1)* |
| *Turkmenistan* | – | – | – | – | – | – | – | – |
| *Ukraine* | *NRL–TME* | *National* | *4 177* | *(32.6)* | *4 177* | *(100.0)* | *1 120* | *(26.8)* |
| United Kingdom | | National | 35 | (2.2) | 32 | (91.4) | 8 | (25.0) |
| *Uzbekistan* | *NRL–TME* | *National* | *1 400* | *(24.5)* | *1 400* | *(100.0)* | *378* | *(27.0)* |
| **Subtotal non-EU/EEA** | – | – | **34 183** | **(39.5)** | **32 434** | **(94.9)** | **10 704** | **(33.0)** |
| **Total European Region** | – | – | **34 832** | **(34.6)** | **32 851** | **(94.3)** | **10 819** | **(32.9)** |
| ***Subtotal 18 HPCs*** | – | – | ***34 512*** | ***(38.4)*** | ***32 622*** | ***(94.5)*** | ***10 762*** | ***(33.0)*** |

*Note:* WHO European Region 18 TB HPCs are presented in italics. The resistance pattern at the initiation of treatment is reported to TESSy irrespective of the method used for DST or resistance prediction.
DST: drug-susceptibility testing.
HPCs: high-priority countries.
MDR-TB: multidrug-resistant tuberculosis.
N: no.
NRL: national reference laboratory.
TESSy: The European surveillance system.
TME: WHO global TB data-collection system.
XDR-TB: extensively drug-resistant tuberculosis.
Y: yes.
[1] All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

| Cases with DST results for any other Group A drugs | | XDR-TB cases[d] | | Reporting completeness[e] | Country/area |
|---|---|---|---|---|---|
| N | (%) | N | (%) | | |
| | | | | | |
| 0 | (0.0) | 0 | (0.0) | Y | Austria |
| 1 | (100.0) | 1 | (100.0) | Y | Belgium |
| *2* | *(100.0)* | *0* | *(0.0)* | *Y* | *Bulgaria* |
| 0 | (0.0) | 0 | (0.0) | Y | Croatia |
| 0 | (0.0) | 0 | (0.0) | Y | Cyprus |
| 4 | (100.0) | 4 | (100.0) | Y | Czechia |
| 0 | (0.0) | 0 | (0.0) | Y | Denmark |
| *6* | *(100.0)* | *6* | *(100.0)* | *Y* | *Estonia* |
| 0 | (0.0) | 0 | (0.0) | Y | Finland |
| 8 | (100.0) | 0 | (0.0) | Y | France |
| 10 | (100.0) | 6 | (60.0) | Y | Germany |
| 0 | (0.0) | 0 | (0.0) | Y | Greece |
| 0 | (0.0) | 0 | (0.0) | Y | Hungary |
| 0 | (0.0) | 0 | (0.0) | Y | Iceland |
| 0 | (0.0) | 0 | (0.0) | Y | Ireland |
| – | – | – | – | N | Italy |
| – | – | – | – | *N* | *Latvia* |
| 0 | (0.0) | 0 | (0.0) | Y | Liechtenstein |
| *34* | *(100.0)* | *12* | *(35.3)* | *Y* | *Lithuania* |
| 0 | (0.0) | 0 | (0.0) | Y | Luxembourg |
| 0 | (0.0) | 0 | (0.0) | Y | Malta |
| 0 | (0.0) | 0 | (0.0) | Y | Netherlands |
| 0 | (0.0) | 0 | (0.0) | Y | Norway |
| 10 | (83.3) | 4 | (40.0) | Y | Poland |
| 0 | (0.0) | 0 | (0.0) | Y | Portugal |
| *4* | *(14.8)* | *2* | *(50.0)* | *Y* | *Romania* |
| 0 | (0.0) | 0 | (0.0) | Y | Slovakia |
| 0 | (0.0) | 0 | (0.0) | Y | Slovenia |
| 1 | (100.0) | 0 | (0.0) | Y | Spain |
| 2 | (100.0) | 2 | (100.0) | Y | Sweden |
| **82** | **(71.3)** | **37** | **(45.1)** | **–** | **Subtotal EU/EEA** |
| | | | | – | **Non-EU/EEA** |
| – | – | – | – | Y | Albania |
| – | – | – | – | Y | Andorra |
| – | – | – | – | *Y* | *Armenia* |
| – | – | – | – | *Y* | *Azerbaijan* |
| – | – | – | – | *Y* | *Belarus* |
| – | – | – | – | Y | Bosnia and Herzegovina |
| *49* | *(98.0)* | *14* | *(28.6)* | *Y* | *Georgia* |
| – | – | – | – | Y | Israel |
| – | – | – | – | *Y* | *Kazakhstan* |
| – | – | – | – | *Y* | *Kyrgyzstan* |
| – | – | – | – | – | Monaco |
| – | – | – | – | Y | Montenegro |
| – | – | – | – | Y | North Macedonia |
| *188* | *(100.0)* | *19* | *(10.1)* | *Y* | *Republic of Moldova* |
| *2 474* | *(31.6)* | *87* | *(3.5)* | *Y* | *Russian Federation* |
| – | – | – | – | – | San Marino |
| – | – | – | – | N | Serbia |
| – | – | – | – | N | Serbia excluding Kosovo[1] |
| – | – | – | – | N | Kosovo[1] |
| 2 | (100.0) | 1 | (50.0) | N | Switzerland |
| *121* | *(100.0)* | *31* | *(25.6)* | *Y* | *Tajikistan* |
| *13* | *(92.9)* | *3* | *(23.1)* | *Y* | *Turkey* |
| – | – | – | – | *N* | *Turkmenistan* |
| *591* | *(52.8)* | *52* | *(8.8)* | *Y* | *Ukraine* |
| – | – | – | – | Y | United Kingdom |
| *378* | *(100.0)* | *9* | *(2.4)* | *Y* | *Uzbekistan* |
| **3 816** | **(35.7)** | **216** | **(5.7)** | **–** | **Subtotal non-EU/EEA** |
| **3 898** | **(36.0)** | **253** | **(6.5)** | **–** | **Total European Region** |
| ***3 860*** | ***(35.9)*** | ***235*** | ***(6.1)*** | **–** | ***Subtotal 18 HPCs*** |

[a] For EU/EEA countries, bacteriologically confirmed cases are culture-positive OR microscopy-positive and nucleic acid amplification test-positive cases. For non-EU/EEA countries and areas, cases with positive identification for *Mycobacterium tuberculosis* complex confirmed by culture and/or line probe assay.
[b] RR/MDR-TB defined as resistance to at least rifampicin. Includes cases that are RR/MDR but that also meet the pre-XDR or XDR case definitions (pre-XDR and XDR cases have not been excluded).
[c] Pre-XDR-TB defined as RR/MDR-TB as well as resistance to any fluoroquinolone.
[d] XDR-TB defined as resistance to rifampicin and resistance to at least one fluoroquinolone (pre-XDR-TB) as well as resistance to at least one additional Group A drug. Group A drugs include: levofloxacin, moxifloxacin, bedaquiline and linezolid. For EU/EEA countries, linezolid resistance is not yet reported to TESSy, therefore XDR-TB is assessed on resistance to levofloxacin, moxifloxacin and/or bedaquiline.
[e] Data considered complete when collected nationwide OR culture results available for ≥ 90% of all cases, and > 50% of all cases culture-positive, and > 75% of them with DST results for isoniazid and rifampicin, and ≥ 95% of the external quality-assessment results confirmed by a supranational reference laboratory.
[1] All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

## Table 13. RR/MDR-TB and pre-XDR/XDR-TB cases enrolled to treatment, European Region, 2020

| Country/area | Total number of RR/MDR-TB cases detected[a] | RR/MDR-TB cases enrolled to treatment[bc] | | Total number of pre-XDR[d]/XDR-TB[e] cases detected | Pre-XDR[d]/XDR-TB[e] cases enrolled to treatment[bc] | |
|---|---|---|---|---|---|---|
| | N | N | (%) | N | N | (%) |
| **EU/EEA** | | | | | | |
| Austria | 2 | 2 | (100.0) | 0 | 0 | – |
| Belgium | 14 | 14 | (100.0) | 3 | 3 | (100.0) |
| *Bulgaria* | *10* | *10* | *(100.0)* | *2* | *2* | (100.0) |
| Croatia | 1 | 1 | (100.0) | 0 | 0 | – |
| Cyprus | 0 | – | – | 0 | 0 | – |
| Czechia | 7 | 7 | (100.0) | 4 | 4 | (100.0) |
| Denmark | 2 | 0 | (0.0) | 0 | 0 | – |
| *Estonia* | *13* | *13* | *(100.0)* | *6* | *5* | *(83.3)* |
| Finland | 1 | 0 | (0.0) | 0 | 0 | – |
| France | 59 | 59 | (100.0) | 8 | 8 | (100.0) |
| Germany | 81 | 74 | (91.4) | 13 | 13 | (100.0) |
| Greece | 12 | 12 | (100.0) | 0 | 0 | – |
| Hungary | 11 | 10 | (90.9) | 0 | 0 | – |
| Iceland | 0 | – | – | 0 | 0 | – |
| Ireland | 1 | 1 | (100.0) | 0 | 0 | – |
| Italy | 39 | – | – | 8 | – | – |
| *Latvia* | – | – | – | – | – | – |
| Liechtenstein | 0 | – | – | 0 | 0 | – |
| *Lithuania* | *71* | *71* | *(100.0)* | *34* | *34* | *(100.0)* |
| Luxembourg | 0 | – | – | 0 | 0 | – |
| Malta | 2 | 2 | (100.0) | 0 | 0 | – |
| Netherlands | 12 | 12 | (100.0) | 0 | 0 | – |
| Norway | 2 | 2 | (100.0) | 0 | 0 | – |
| Poland | 29 | 29 | (100.0) | 13 | 13 | (100.0) |
| Portugal | 9 | 9 | (100.0) | 0 | 0 | – |
| *Romania* | *224* | *221* | *(98.7)* | *28* | *28* | *(100.0)* |
| Slovakia | 1 | 1 | (100.0) | 0 | 0 | – |
| Slovenia | 1 | 1 | (100.0) | 0 | 0 | – |
| Spain | 14 | 14 | (100.0) | 1 | 1 | (100.0) |
| Sweden | 4 | 4 | (100.0) | 2 | 2 | (100.0) |
| **Subtotal EU/EEA** | **622** | **569** | **(97.6)** | **122** | **113** | **(92.6)** |
| **Non-EU/EEA** | | | | | | |
| Albania | 4 | 4 | (100.0) | 0 | 0 | – |
| Andorra | 0 | 0 | – | 0 | 0 | – |
| *Armenia* | *45* | *45* | *(100.0)* | *7* | *7* | *(100.0)* |
| *Azerbaijan* | *656* | *586* | *(89.3)* | *108* | *69* | *(63.9)* |
| *Belarus* | *520* | *489* | *(94.0)* | *354* | *321* | *(90.7)* |
| Bosnia and Herzegovina | 0 | 0 | – | 0 | 0 | – |
| *Georgia* | *150* | *149* | *(99.3)* | *52* | *44* | *(84.6)* |
| Israel | 4 | 4 | (100.0) | 1 | 1 | (100.0) |
| *Kazakhstan* | *3 114* | *3 400* | *(109.2)* | *1 193* | *1 178* | *(98.7)* |
| *Kyrgyzstan* | *889* | *833* | *(93.7)* | *149* | *67* | *(45.0)* |
| Monaco | 0 | 0 | – | 0 | 0 | – |
| Montenegro | 0 | 0 | – | 0 | 0 | – |
| North Macedonia | 2 | 2 | (100.0) | 0 | 0 | – |
| *Republic of Moldova* | *225* | *483* | *(214.7)* | *219* | *209* | *(95.4)* |
| *Russian Federation* | *14 141* | *20 045* | *(141.8)* | *7 822* | *6 097* | *(77.9)* |
| San Marino | – | – | – | – | – | – |
| Serbia | – | – | – | – | – | – |
| Serbia excluding Kosovo[1] | – | – | – | – | – | – |
| Kosovo[1] | – | – | – | – | – | – |
| Switzerland | 4 | 1 | (25.0) | 1 | 1 | (100.0) |
| *Tajikistan* | *434* | *356* | *(82.0)* | *123* | *103* | *(83.7)* |
| *Turkey* | *135* | *132* | *(97.8)* | *14* | *14* | *(100.0)* |
| *Turkmenistan* | *519* | *519* | *(100.0)* | *264* | *0* | *(0.0)* |
| *Ukraine* | *3 085* | *3 527* | *(114.3)* | *1 172* | *1 350* | *(115.2)* |
| United Kingdom | – | – | – | – | – | – |
| *Uzbekistan* | *1 400* | *1 400* | *(100.0)* | *378* | *427* | *(113.0)* |
| **Subtotal non-EU/EEA** | **25 327** | **31 975** | **(126.2)** | **11 857** | **9 888** | **(83.4)** |
| **Total European Region** | **25 949** | **32 544** | **(125.4)** | **11 979** | **10 001** | **(83.5)** |
| ***Subtotal 18 HPCs*** | ***25 631*** | ***32 279*** | ***(125.9)*** | ***11 925*** | ***9 955*** | ***(83.5)*** |

*Note:* European Region comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB HPCs are presented in italics. The resistance pattern at the initiation of treatment is reported to TESSy irrespective of the method used for drug-susceptibility testing or resistance prediction.
HPCs: high-priority countries.
RR/MDR-TB: rifampicin-resistant or multidrug-resistant tuberculosis.
TESSy: The European Surveillance System.
XDR-TB: extensively drug-resistant tuberculosis.
[a] Excluding pre-XDR and XDR-TB cases.
[b] For countries that do not provide information on treatment start, all reported cases are used as proxy.
[c] For some non-EU/EEA countries and areas, patients who were diagnosed before 2018 but started on treatment in 2018 are included, resulting in over 100% coverage.
[d] Pre-XDR-TB defined as resistance to rifampicin (RR/MDR-TB) as well as resistance to any fluoroquinolone.
[e] XDR-TB defined as resistance to rifampicin and to at least one fluoroquinolone (pre-XDR-TB) as well as resistance to at least one additional Group A drug. Group A drugs include: levofloxacin, moxifloxacin, bedaquiline and linezolid. For EU/EEA countries, linezolid resistance is not yet reported to TESSy, therefore XDR-TB is assessed on resistance to levofloxacin, moxifloxacin and/or bedaquiline (in addition to meeting pre-XDR-TB criteria).
[1] All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

## Table 14. New and relapse[a] TB cases with HIV infection, European Region, 2020

| Country/area | New and relapse TB cases[b] | TB cases with known HIV status | | HIV-positive TB cases | | HIV-positive cases started ART[c] | |
|---|---|---|---|---|---|---|---|
| | N | N | (%) | N | (%) | N | (%) |
| **EU/EEA** | | | | | | | |
| Austria | – | – | – | – | – | – | – |
| Belgium[d] | 778 | 359 | (46.1) | 31 | (8.6) | – | – |
| *Bulgaria* | *887* | *747* | *(84.2)* | *1* | *(0.1)* | *1* | (100.0) |
| Croatia | 177 | 4 | (2.3) | 0 | (0.0) | – | – |
| Cyprus | 34 | 29 | (85.3) | 2 | (6.9) | – | – |
| Czechia | 360 | 195 | (54.2) | 7 | (3.6) | – | – |
| Denmark[d] | 205 | 154 | (75.1) | 4 | (2.6) | – | – |
| *Estonia* | *120* | *113* | *(94.2)* | *11* | *(9.7)* | *11* | *(100.0)* |
| Finland | – | – | – | – | – | – | – |
| France | – | – | – | – | – | – | – |
| Germany | – | – | – | – | – | – | – |
| Greece | 380 | 380 | (100.0) | 15 | (3.9) | – | – |
| Hungary | 384 | 17 | (4.4) | 2 | (11.8) | – | – |
| Iceland | – | – | – | – | – | – | – |
| Ireland[d] | 229 | 80 | (34.9) | 3 | (3.8) | – | – |
| Italy | – | – | – | – | – | – | – |
| *Latvia* | – | – | – | – | – | – | – |
| Liechtenstein | – | – | – | – | – | – | – |
| *Lithuania* | *688* | *676* | *(98.3)* | *18* | *(2.7)* | – | – |
| Luxembourg | 32 | 26 | (81.3) | 0 | (0.0) | 0 | – |
| Malta | – | – | – | – | – | – | – |
| Netherlands | 614 | 483 | (78.7) | 14 | (2.9) | 11 | (78.6) |
| Norway[d] | 144 | 114 | (79.2) | 2 | (1.8) | – | – |
| Poland | – | – | – | – | – | – | – |
| Portugal | 1 402 | 1 053 | (75.1) | 104 | (9.9) | – | – |
| *Romania* | *7 193* | *6 077* | *(84.5)* | *136* | *(2.2)* | *113* | *(83.1)* |
| Slovakia | 153 | 81 | (52.9) | 2 | (2.5) | 2 | (100.0) |
| Slovenia | 75 | 56 | (74.7) | 0 | (0.0) | – | – |
| Spain | 2 949 | 1 683 | (57.1) | 163 | (9.7) | – | – |
| Sweden | – | – | – | – | – | – | – |
| **Subtotal EU/EEA** | **16 804** | **12 327** | **(73.4)** | **515** | **(4.2)** | **138** | **(84.1)** |
| **Non-EU/EEA** | | | | | | | |
| Albania | 240 | 199 | (82.9) | 2 | (1.0) | 2 | (100.0) |
| Andorra | 2 | 0 | (0.0) | – | – | – | – |
| *Armenia* | *394* | *369* | *(93.7)* | *39* | *(10.6)* | – | – |
| *Azerbaijan* | *3 683* | *3 683* | *(100.0)* | *83* | *(2.3)* | *77* | *(92.8)* |
| *Belarus* | *1 514* | *1 514* | *(100.0)* | *135* | *(8.9)* | *124* | *(91.9)* |
| Bosnia and Herzegovina | 357 | 15 | (4.2) | 0 | – | – | – |
| *Georgia* | *1 669* | *1 490* | *(89.3)* | *29* | *(1.9)* | *29* | *(100.0)* |
| Israel | 158 | 158 | (100.0) | 15 | (9.5) | *15* | *(100.0)* |
| *Kazakhstan* | *9 603* | *9 440* | *(98.3)* | *614* | *(6.5)* | *592* | *(96.4)* |
| *Kyrgyzstan* | *4 241* | *4 007* | *(94.5)* | *131* | *(3.3)* | *88* | *(67.2)* |
| Monaco | 0 | – | – | – | – | – | – |
| Montenegro | 40 | 35 | (87.5) | 0 | (0.0) | – | – |
| North Macedonia | 143 | 69 | (48.3) | 1 | (1.4) | *1* | *(100.0)* |
| *Republic of Moldova* | *1 767* | *1 693* | *(95.8)* | *219* | *(12.9)* | *170* | *(77.6)* |
| *Russian Federation* | *58 723* | *55 838* | *(95.1)* | *13 506* | *(24.2)* | *9 190* | *(68.0)* |
| San Marino | – | – | – | – | – | – | – |
| Serbia | – | – | – | – | – | – | – |
| Serbia excluding Kosovo[1] | – | – | – | – | – | – | – |
| Kosovo[1] | – | – | – | – | – | – | – |
| Switzerland | – | – | – | – | – | – | – |
| *Tajikistan* | *4 148* | *4 043* | *(97.5)* | *118* | *(2.9)* | *116* | *(98.3)* |
| *Turkey* | *8 830* | *7 062* | *(80.0)* | *83* | *(1.2)* | *62* | *(74.7)* |
| *Turkmenistan* | – | – | – | – | – | – | – |
| *Ukraine* | *17 533* | *17 375* | *(99.1)* | *3 794* | *(21.8)* | *3 460* | *(91.2)* |
| United Kingdom[d] | – | – | – | – | – | – | – |
| *Uzbekistan* | *12 111* | *12 111* | *(100.0)* | *379* | *(3.1)* | *287* | *(75.7)* |
| **Subtotal non-EU/EEA** | **125 156** | **119 101** | **(95.2)** | **19 148** | **(16.1)** | **14 213** | **(74.2)** |
| **Total European Region** | **141 960** | **131 428** | **(92.6)** | **19 663** | **(15.0)** | **14 351** | **(74.3)** |
| ***Subtotal 18 HPCs*** | ***133 104*** | ***126 238*** | ***(94.8)*** | ***19 296*** | ***(15.3)*** | ***14 320*** | ***(74.3)*** |

*Note:* European Region comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB HPCs are presented in italics.
ART: antiretroviral therapy.
HPCs: high-priority countries.
[a] Cases with unknown previous TB history are included among new TB cases.
[b] Countries are only included in this analysis if total number of cases tested for HIV and test results are provided. For EU/EEA countries, countries are only included in this analysis if the total number of cases tested for HIV is more than zero.
[c] Data from the WHO Global TB Database.
[d] Previous TB history is defined by previous diagnosis.
[1] All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

## Table 15. TB in prisons, European Region, 2020[a]

| Country/area | Prison population[b] | New and relapse TB cases (all forms) notified in prisons | | Proportion of new and relapse TB cases in prisons out of the country total | TB relative risk in prisons[c] |
|---|---|---|---|---|---|
| | N | N | Rate per 100 000 prisoners | % | |
| **EU/EEA** | | | | | |
| Austria | – | – | – | – | – |
| Belgium | 10 559 | 11 | 104 | (1.2) | 13.3 |
| *Bulgaria* | *6 436* | *6* | *93* | *(0.4)* | *5.1* |
| Croatia | – | – | – | – | – |
| Cyprus | – | – | – | – | – |
| Czechia | 19 286 | 4 | 21 | (0.8) | 4.8 |
| Denmark | – | – | – | – | – |
| *Estonia* | *2 500* | *3* | *120* | *(1.5)* | *10.8* |
| Finland | – | – | – | – | – |
| France | – | – | – | – | – |
| Germany | – | – | – | – | – |
| Greece | – | – | – | – | – |
| Hungary | – | – | – | – | – |
| Iceland | – | – | – | – | – |
| Ireland | 6 490 | 0 | 0 | (0.0) | 0.0 |
| Italy | – | – | – | – | – |
| *Latvia* | – | – | – | – | – |
| Liechtenstein | – | – | – | – | – |
| *Lithuania* | *5 121* | *22* | *430* | *(1.6)* | *11.9* |
| Luxembourg | 750 | 1 | 133 | (3.3) | 17.1 |
| Malta | – | – | – | – | – |
| Netherlands | 24 092 | 6 | 25 | (0.7) | 5.8 |
| Norway | – | – | – | – | – |
| Poland | 70 716 | 112 | 158 | (1.8) | 12.1 |
| Portugal | 11 412 | 24 | 210 | (1.1) | 12.6 |
| *Romania* | *22 700* | *74* | *326* | *(0.5)* | *5.7* |
| Slovakia | 10 372 | 3 | 29 | (1.0) | 7.4 |
| Slovenia | 3 571 | 0 | 0 | (0.0) | 0.0 |
| Spain | – | – | – | – | – |
| Sweden | – | – | – | – | – |
| **Subtotal EU/EEA[c]** | **194 005** | **266** | **137** | **(0.9)** | **9.3** |
| **Non EU/EEA** | | | | | |
| Albania | – | – | – | – | – |
| Andorra | – | – | – | – | – |
| *Armenia* | 2 003 | *3* | 149.8 | *(0.8)* | 11.3 |
| *Azerbaijan* | *19 377* | *134* | *691.5* | *(3.6)* | *19.0* |
| *Belarus* | – | – | – | – | – |
| Bosnia and Herzegovina | – | – | – | – | – |
| *Georgia* | *9 143* | *28* | *306.2* | *(1.7)* | *7.3* |
| Israel | – | – | – | – | – |
| *Kazakhstan* | *32 000* | *199* | *621.9* | *(2.1)* | *12.2* |
| *Kyrgyzstan* | – | – | – | – | – |
| Monaco | – | – | – | – | – |
| Montenegro | – | – | – | – | – |
| North Macedonia | 2 600 | 3 | 115.4 | (2.1) | 16.8 |
| *Republic of Moldova* | *6 429* | *71* | *1 104.0* | *(4.0)* | *25.2* |
| *Russian Federation* | *499 659* | *5 442* | *1 089.0* | *(9.3)* | *27.1* |
| San Marino | – | – | – | – | – |
| Serbia | – | – | – | – | – |
| Serbia excluding Kosovo[1] | – | – | – | – | – |
| Kosovo[1] | – | – | – | – | – |
| Switzerland | – | – | – | – | – |
| *Tajikistan* | *13 000* | *68* | *523.1* | *(1.6)* | *12.0* |
| *Turkey* | *266 831* | *118* | *44.2* | *(1.3)* | *4.2* |
| *Turkmenistan* | – | – | – | – | – |
| *Ukraine* | *50 183* | *555* | *1 106.0* | *(3.2)* | *27.6* |
| United Kingdom | – | – | – | – | – |
| *Uzbekistan* | – | – | – | – | – |
| **Subtotal non-EU/EEA** | **901 225** | **6 621** | **734.7** | **(6.2)** | **22.5** |
| **Total European Region** | **1 095 230** | **6 887** | **628.8** | **(5.6)** | **23.5** |
| ***Subtotal 18 HPCs*** | ***935 382*** | ***6 723*** | ***718.7*** | ***(5.8)*** | ***22.1*** |

*Note:* European Region comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB HPCs are presented in italics.
HPCs: high-priority countries.
[a] Data from the WHO Global TB Database.
[b] Belarus, Kazakhstan, Montenegro and Kosovo[1] prison population data are from prisonstudies.org.
[c] In the calculation of summary results, only countries/areas reporting data on prison population and TB notification in prisons are included.
[1] All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

## Table 16. Treatment outcome of new and relapse TB cases[a] notified in 2019, European Region, 2020

| Country/area | New and relapse TB cases notified in 2019[b] | Success | | Died | | Failed | | Lost to follow-up[c] | | Still on treatment | | Not evaluated[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | N | (%) | N | (%) | N | (%) | N | (%) | N | (%) | N | (%) |
| **EU/EEA** | | | | | | | | | | | | | |
| Austria | 459 | 341 | (74.3) | 42 | (9.2) | 0 | (0.0) | 3 | (0.7) | 44 | (9.6) | 29 | (6.3) |
| Belgium[e] | 877 | 709 | (80.8) | 63 | (7.2) | 5 | (0.6) | 74 | (8.4) | 12 | (1.4) | 14 | (1.6) |
| *Bulgaria* | *1 278* | *1 045* | *(81.8)* | *95* | *(7.4)* | *12* | *(0.9)* | *101* | *(7.9)* | *1* | *(0.1)* | *24* | *(1.9)* |
| Croatia | 295 | 72 | (24.4) | 35 | (11.9) | 1 | (0.3) | 6 | (2.0) | 6 | (2.0) | 175 | (59.3) |
| Cyprus | 65 | 18 | (27.7) | 1 | (1.5) | 0 | (0.0) | 6 | (9.2) | 9 | (13.8) | 31 | (47.7) |
| Czechia | 447 | 330 | (73.8) | 50 | (11.2) | 1 | (0.2) | 50 | (11.2) | 9 | (2.0) | 7 | (1.6) |
| Denmark[e] | 259 | 117 | (45.2) | 2 | (0.8) | 0 | (0.0) | 1 | (0.4) | 3 | (1.2) | 136 | (52.5) |
| *Estonia* | *120* | *91* | *(75.8)* | *20* | *(16.7)* | *1* | *(0.8)* | *4* | *(3.3)* | *1* | *(0.8)* | *3* | *(2.5)* |
| Finland | 222 | 85 | (38.3) | 0 | (0.0) | 0 | (0.0) | 5 | (2.3) | 3 | (1.4) | 129 | (58.1) |
| France | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Germany | 4 566 | 3 130 | (68.6) | 355 | (7.8) | 3 | (0.1) | 125 | (2.7) | 122 | (2.7) | 831 | (18.2) |
| Greece | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Hungary | 517 | 336 | (65.0) | 68 | (13.2) | 16 | (3.1) | 52 | (10.1) | 20 | (3.9) | 25 | (4.8) |
| Iceland | 13 | 13 | (100.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) |
| Ireland[e] | 243 | 9 | (3.7) | 5 | (2.1) | 1 | (0.4) | 0 | (0.0) | 0 | (0.0) | 228 | (93.8) |
| Italy | – | – | – | – | – | – | – | – | – | – | – | – | – |
| *Latvia* | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Liechtenstein | – | – | – | – | – | – | – | – | – | – | – | – | – |
| *Lithuania* | *866* | *754* | *(87.1)* | *74* | *(8.5)* | *14* | *(1.6)* | *20* | *(2.3)* | *4* | *(0.5)* | *0* | *(0.0)* |
| Luxembourg | 47 | 17 | (36.2) | 0 | (0.0) | 0 | (0.0) | 7 | (14.9) | 0 | (0.0) | 23 | (48.9) |
| Malta | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Netherlands | 730 | 630 | (86.3) | 32 | (4.4) | 1 | (0.1) | 26 | (3.6) | 8 | (1.1) | 33 | (4.5) |
| Norway[e] | 149 | 126 | (84.6) | 4 | (2.7) | 3 | (2.0) | 3 | (2.0) | 0 | (0.0) | 13 | (8.7) |
| Poland | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Portugal | 1 859 | 1 327 | (71.4) | 107 | (5.8) | 2 | (0.1) | 68 | (3.7) | 291 | (15.7) | 64 | (3.4) |
| *Romania* | *10 812* | *9 051* | *(83.7)* | *1 016* | *(9.4)* | *168* | *(1.6)* | *497* | *(4.6)* | *79* | *(0.7)* | *1* | *(0.0)* |
| Slovakia | 209 | 196 | (93.8) | 7 | (3.3) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 6 | (2.9) |
| Slovenia | 98 | 69 | (70.4) | 22 | (22.4) | 0 | (0.0) | 3 | (3.1) | 3 | (3.1) | 1 | (1.0) |
| Spain | 4 386 | 2 045 | (46.6) | 179 | (4.1) | 1 | (0.0) | 18 | (0.4) | 51 | (1.2) | 2 092 | (47.7) |
| Sweden | 468 | 286 | (61.1) | 15 | (3.2) | 1 | (0.2) | 0 | (0.0) | 1 | (0.2) | 165 | (35.3) |
| **Subtotal EU/EEA** | **28 985** | **20 797** | **(71.8)** | **2 192** | **(7.6)** | **230** | **(0.8)** | **1 069** | **(3.7)** | **667** | **(2.3)** | **4 030** | **(13.9)** |
| **Non-EU/EEA** | | | | | | | | | | | | | |
| Albania | 412 | 364 | (88.3) | 19 | (4.6) | 0 | (0.0) | 18 | (4.4) | – | – | 11 | (2.7) |
| Andorra | 5 | 3 | (60.0) | 1 | (20.0) | 0 | (0.0) | 1 | (20.0) | – | – | 0 | (0.0) |
| *Armenia* | *485* | *399* | *(82.3)* | *36* | *(7.4)* | *19* | *(3.9)* | *29* | *(6.0)* | – | – | *2* | *(0.4)* |
| *Azerbaijan* | *1 702* | *1 429* | *(84.0)* | *66* | *(3.9)* | *53* | *(3.1)* | *134* | *(7.9)* | – | – | *20* | *(1.2)* |
| *Belarus* | *1 302* | *1 153* | *(88.6)* | *93* | *(7.1)* | *28* | *(2.2)* | *28* | *(2.2)* | – | – | *0* | *(0.0)* |
| Bosnia and Herzegovina | 580 | 185 | (31.9) | 28 | (4.8) | 10 | (1.7) | 3 | (0.5) | – | – | 354 | (61.0) |
| *Georgia* | *1 947* | *1 657* | *(85.1)* | *74* | *(3.8)* | *46* | *(2.4)* | *97* | *(5.0)* | – | – | *73* | *(3.7)* |
| Israel | 217 | 182 | (83.9) | 14 | (6.5) | 2 | (0.9) | 6 | (2.8) | – | – | 13 | (6.0) |
| *Kazakhstan* | *7 429* | *6 704* | *(90.2)* | *432* | *(5.8)* | *186* | *(2.5)* | *107* | *(1.4)* | – | – | *0* | *(0.0)* |
| *Kyrgyzstan* | *5 110* | *4 155* | *(81.3)* | *328* | *(6.4)* | *112* | *(2.2)* | *481* | *(9.4)* | – | – | *34* | *(0.7)* |
| Monaco | 0 | – | – | – | – | – | – | – | – | – | – | – | – |
| Montenegro | 82 | 78 | (95.1) | 4 | (4.9) | 0 | (0.0) | 0 | (0.0) | – | – | 0 | (0.0) |
| North Macedonia | 199 | 177 | (88.9) | 9 | (4.5) | 2 | (1.0) | 11 | (5.5) | – | – | 0 | (0.0) |
| *Republic of Moldova* | *2 215* | *1 854* | *(83.7)* | *164* | *(7.4)* | *69* | *(3.1)* | *116* | *(5.2)* | – | – | *12* | *(0.5)* |
| *Russian Federation* | *54 589* | *37 208* | *(68.2)* | *5 936* | *(10.9)* | *3 567* | *(6.5)* | *3 471* | *(6.4)* | – | – | *4 407* | *(8.1)* |
| San Marino | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Serbia | 602 | 513 | (85.2) | 24 | (4.0) | 3 | (0.5) | 57 | (9.5) | – | – | 5 | (0.8) |
| Serbia excluding Kosovo[1] | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Kosovo[1] | 602 | 513 | (85.2) | 24 | (4.0) | 3 | (0.5) | 57 | (9.5) | – | – | 5 | (0.8) |
| Switzerland | 391 | 267 | (68.3) | 10 | (2.6) | 0 | (0.0) | 0 | (0.0) | – | – | 114 | (29.2) |
| *Tajikistan* | *5 114* | *4 643* | *(90.8)* | *179* | *(3.5)* | *60* | *(1.2)* | *190* | *(3.7)* | – | – | *42* | *(0.8)* |
| *Turkey* | *11 095* | *9 231* | *(83.2)* | *973* | *(8.8)* | *22* | *(0.2)* | *200* | *(1.8)* | – | – | *669* | *(6.0)* |
| *Turkmenistan* | *2 117* | *1 749* | *(82.6)* | *90* | *(4.3)* | *135* | *(6.4)* | *84* | *(4.0)* | – | – | *59* | *(2.8)* |
| *Ukraine* | *19 414* | *15 381* | *(79.2)* | *1 816* | *(9.4)* | *1 180* | *(6.1)* | *1 023* | *(5.3)* | – | – | *14* | *(0.1)* |
| United Kingdom[e] | 4 739 | 3 675 | (77.5) | 229 | (4.8) | 0 | (0.0) | 208 | (4.4) | – | – | 627 | (13.2) |
| *Uzbekistan* | *14 224* | *12 820* | *(90.1)* | *548* | *(3.9)* | *227* | *(1.6)* | *353* | *(2.5)* | – | – | *276* | *(1.9)* |
| **Subtotal non-EU/EEA** | **133 970** | **103 827** | **(77.5)** | **11 073** | **(8.3)** | **5 721** | **(4.3)** | **6 617** | **(4.9)** | **0** | **(0.0)** | **6 732** | **(5.0)** |
| **Total European Region** | **162 955** | **124 624** | **(76.5)** | **13 265** | **(8.1)** | **5 951** | **(3.7)** | **7 686** | **(4.7)** | **667** | **(0.4)** | **10 762** | **(6.6)** |
| ***Subtotal 18 HPCs*** | ***139 819*** | ***109 324*** | ***(78.2)*** | ***11 940*** | ***(8.5)*** | ***5 899*** | ***(4.2)*** | ***6 935*** | ***(5.0)*** | ***85*** | ***(0.1)*** | ***5 636*** | ***(4.0)*** |

*Note:* European Region comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB HPCs are presented in italics. EU/EEA: country data are shown as missing (–) when data on treatment outcome are not reported. For inclusion in the cohort, drug-susceptibility data are also required. HPCs: high-priority countries.

[a] Cases with unknown previous TB history are included among new TB cases.
[b] For non-EU/EEA countries and areas: patients started on second-line treatment are excluded. For EU/EEA countries: rifampicin-resistant TB cases are excluded.
[c] In previous reports defined as "defaulted".
[d] In previous reports defined as "transferred out and unknown".
[e] Previous TB history is defined by previous diagnosis.
[1] All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

## Table 17. Treatment outcome of previously treated TB cases notified in 2019, European Region, 2020

| Country/area | New and relapse TB cases notified in 2019[a] | Success | | Died | | Failed | | Lost to follow-up[b] | | Still on treatment | | Not evaluated[c] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | N | (%) | N | (%) | N | (%) | N | (%) | N | (%) | N | (%) |
| **EU/EEA** | | | | | | | | | | | | | |
| Austria | 9 | 5 | (55.6) | 1 | (11.1) | 0 | (0.0) | 2 | (22.2) | 1 | (11.1) | 0 | (0.0) |
| Belgium | 69 | 53 | (76.8) | 3 | (4.3) | 2 | (2.9) | 9 | (13.0) | 2 | (2.9) | 0 | (0.0) |
| *Bulgaria* | *52* | *38* | *(73.1)* | *3* | *(5.8)* | *2* | *(3.8)* | *9* | *(17.3)* | *0* | *(0.0)* | *0* | *(0.0)* |
| Croatia | 8 | 3 | (37.5) | 1 | (12.5) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 4 | (50.0) |
| Cyprus | 3 | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 2 | (66.7) | 0 | (0.0) | 1 | (33.3) |
| Czechia | 6 | 2 | (33.3) | 1 | (16.7) | 0 | (0.0) | 2 | (33.3) | 0 | (0.0) | 1 | (16.7) |
| Denmark | 21 | 8 | (38.1) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 2 | (9.5) | 11 | (52.4) |
| *Estonia* | *1* | *1* | *(100.0)* | *0* | *(0.0)* | *0* | *(0.0)* | *0* | *(0.0)* | *0* | *(0.0)* | *0* | *(0.0)* |
| Finland | 1 | 1 | (100.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) |
| France | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Germany | 145 | 70 | (48.3) | 10 | (6.9) | 1 | (0.7) | 13 | (9.0) | 7 | (4.8) | 44 | (30.3) |
| Greece | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Hungary | 22 | 9 | (40.9) | 4 | (18.2) | 0 | (0.0) | 6 | (27.3) | 1 | (4.5) | 2 | (9.1) |
| Iceland | 0 | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – |
| Ireland | 17 | 1 | (5.9) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 16 | (94.1) |
| Italy | – | – | – | – | – | – | – | – | – | – | – | – | – |
| *Latvia* | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Liechtenstein | – | – | – | – | – | – | – | – | – | – | – | – | – |
| *Lithuania* | *19* | *16* | *(84.2)* | *0* | *(0.0)* | *1* | *(5.3)* | *2* | *(10.5)* | *0* | *(0.0)* | *0* | *(0.0)* |
| Luxembourg | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Malta | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Netherlands | 15 | 9 | (60.0) | 2 | (13.3) | 0 | (0.0) | 1 | (6.7) | 1 | (6.7) | 2 | (13.3) |
| Norway | 11 | 8 | (72.7) | 1 | (9.1) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 2 | (18.2) |
| Poland | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Portugal | 58 | 34 | (58.6) | 4 | (6.9) | 0 | (0.0) | 7 | (12.1) | 10 | (17.2) | 3 | (5.2) |
| *Romania* | *422* | *179* | *(42.4)* | *55* | *(13.0)* | *63* | *(14.9)* | *120* | *(28.4)* | *5* | *(1.2)* | *0* | *(0.0)* |
| Slovakia | 0 | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – |
| Slovenia | 3 | 2 | (66.7) | 0 | (0.0) | 0 | (0.0) | 1 | (33.3) | 0 | (0.0) | 0 | (0.0) |
| Spain | 136 | 81 | (59.6) | 5 | (3.7) | 2 | (1.5) | 0 | (0.0) | 2 | (1.5) | 46 | (33.8) |
| Sweden | 1 | 1 | (100.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) |
| **Subtotal EU/EEA** | **1 021** | **523** | **(51.2)** | **90** | **(8.8)** | **71** | **(7.0)** | **174** | **(17.0)** | **31** | **(3.0)** | **132** | **(12.9)** |
| **Non-EU/EEA** | | | | | | | | | | | | | |
| Albania | 0 | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – |
| Andorra | 0 | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – |
| *Armenia* | *17* | *6* | *(35.3)* | *2* | *(11.8)* | *3* | *(17.6)* | *6* | *(35.3)* | – | – | *0* | *(0.0)* |
| *Azerbaijan* | *2 401* | *1 788* | *(74.5)* | *154* | *(6.4)* | *129* | *(5.4)* | *266* | *(11.1)* | – | – | *64* | *(2.7)* |
| *Belarus* | *60* | *43* | *(71.7)* | *7* | *(11.7)* | *2* | *(3.3)* | *8* | *(13.3)* | – | – | *0* | *(0.0)* |
| Bosnia and Herzegovina | – | – | – | – | – | – | – | – | – | – | – | – | – |
| *Georgia* | *197* | *121* | *(61.4)* | *17* | *(8.6)* | *8* | *(4.1)* | *39* | *(19.8)* | – | – | *12* | *(6.1)* |
| Israel | 0 | 0 | – | 0 | – | 0 | – | 0 | – | – | – | 0 | – |
| *Kazakhstan* | *94* | *66* | *(70.2)* | *14* | *(14.9)* | *6* | *(6.4)* | *8* | *(8.5)* | – | – | *0* | *(0.0)* |
| *Kyrgyzstan* | *626* | *351* | *(56.1)* | *57* | *(9.1)* | *14* | *(2.2)* | *198* | *(31.6)* | – | – | *6* | *(1.0)* |
| Monaco | 0 | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – |
| Montenegro | 0 | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – |
| North Macedonia | 0 | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – |
| *Republic of Moldova* | *137* | *82* | *(59.9)* | *18* | *(13.1)* | *15* | *(10.9)* | *21* | *(15.3)* | – | – | *1* | *(0.7)* |
| *Russian Federation* | *7 851* | *3 980* | *(50.7)* | *763* | *(9.7)* | *1 091* | *(13.9)* | *859* | *(10.9)* | – | – | *1 158* | *(14.7)* |
| San Marino | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Serbia | 7 | 4 | (57.1) | 2 | (28.6) | 0 | (0.0) | 1 | (14.3) | – | – | 0 | (0.0) |
| Serbia excluding Kosovo[1] | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Kosovo[1] | 7 | 4 | (57.1) | 2 | (28.6) | 0 | (0.0) | 1 | (14.3) | – | – | 0 | (0.0) |
| Switzerland | 41 | 22 | (53.7) | 1 | (2.4) | 0 | (0.0) | 0 | (0.0) | – | – | 18 | (43.9) |
| *Tajikistan* | *144* | *115* | *(79.9)* | *16* | *(11.1)* | *2* | *(1.4)* | *9* | *(6.3)* | – | – | *2* | *(1.4)* |
| *Turkey* | *154* | *83* | *(53.9)* | *6* | *(3.9)* | *3* | *(1.9)* | *23* | *(14.9)* | – | – | *39* | *(25.3)* |
| *Turkmenistan* | *746* | *584* | *(78.3)* | *54* | *(7.2)* | *43* | *(5.8)* | *44* | *(5.9)* | – | – | *21* | *(2.8)* |
| *Ukraine* | *2 462* | *1 576* | *(64.0)* | *280* | *(11.4)* | *259* | *(10.5)* | *346* | *(14.1)* | – | – | *1* | *(0.0)* |
| United Kingdom | 322 | 235 | (73.0) | 16 | (5.0) | 0 | (0.0) | 17 | (5.3) | – | – | 54 | (16.8) |
| *Uzbekistan* | *1 550* | *1 308* | *(84.4)* | *98* | *(6.3)* | *16* | *(1.0)* | *68* | *(4.4)* | – | – | *60* | *(3.9)* |
| **Subtotal non-EU/EEA** | **16 809** | **10 364** | **(61.7)** | **1 505** | **(9.0)** | **1 591** | **(9.5)** | **1 913** | **(11.4)** | **0** | **(0.0)** | **1 436** | **(8.5)** |
| **Total European Region** | **17 830** | **10 887** | **(61.1)** | **1 595** | **(8.9)** | **1 662** | **(9.3)** | **2 087** | **(11.7)** | **31** | **(0.2)** | **1 568** | **(8.8)** |
| ***Subtotal 18 HPCs*** | ***16 933*** | ***10 337*** | ***(61.0)*** | ***1 544*** | ***(9.1)*** | ***1 657*** | ***(9.8)*** | ***2 026*** | ***(12.0)*** | ***5*** | ***(0.0)*** | ***1 364*** | ***(8.1)*** |

*Note:* European Region comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB HPCs are presented in italics. EU/EEA: country data are shown as missing (–) when data on treatment outcome are not reported.
HPCs: high-priority countries.
[a] Excluding relapsed TB cases
[b] In previous reports defined as "defaulted".
[c] In previous reports defined as "transferred out and unknown".
[1] All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

**Table 18. Treatment outcome of new and relapse[a] TB cases in children (0–14 years) notified in 2019, European Region, 2020**

| Country/area | New and relapse TB cases reported in 2019[b] | Success | | Died | | Failed | | Lost to follow-up[c] | | Still on treatment | | Not evaluated[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | N | (%) | N | (%) | N | (%) | N | (%) | N | (%) | N | (%) |
| **EU/EEA** | | | | | | | | | | | | | |
| Austria | 22 | 19 | (86.4) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 2 | (9.1) | 1 | (4.5) |
| Belgium[e] | 48 | 45 | (93.8) | 0 | (0.0) | 0 | (0.0) | 1 | (2.1) | 2 | (4.2) | 0 | (0.0) |
| *Bulgaria* | *54* | *47* | *(87.0)* | *1* | *(1.9)* | *0* | *(0.0)* | *3* | *(5.6)* | *0* | *(0.0)* | *3* | *(5.6)* |
| Croatia | 1 | 1 | (100.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) |
| Cyprus | 2 | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 2 | (100.0) |
| Czechia | 4 | 4 | (100.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) |
| Denmark[e] | 16 | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 16 | (100.0) |
| *Estonia* | *1* | *1* | *(100.0)* | *0* | *(0.0)* | *0* | *(0.0)* | *0* | *(0.0)* | *0* | *(0.0)* | *0* | *(0.0)* |
| Finland | 9 | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 9 | (100.0) |
| France | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Germany | 192 | 152 | (79.2) | 1 | (0.5) | 0 | (0.0) | 3 | (1.6) | 5 | (2.6) | 31 | (16.1) |
| Greece | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Hungary | 10 | 8 | (80.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 1 | (10.0) | 1 | (10.0) |
| Iceland | 0 | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – |
| Ireland[e] | 10 | 1 | (10.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 9 | (90.0) |
| Italy | – | – | – | – | – | – | – | – | – | – | – | – | – |
| *Latvia* | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Liechtenstein | – | – | – | – | – | – | – | – | – | – | – | – | – |
| *Lithuania* | *26* | *26* | *(100.0)* | *0* | *(0.0)* | *0* | *(0.0)* | *0* | *(0.0)* | *0* | *(0.0)* | *0* | *(0.0)* |
| Luxembourg | 0 | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – |
| Malta | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Netherlands | 47 | 43 | (91.5) | 0 | (0.0) | 0 | (0.0) | 2 | (4.3) | 1 | (2.1) | 1 | (2.1) |
| Norway[e] | 4 | 4 | (100.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) |
| Poland | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Portugal | 71 | 44 | (62.0) | 1 | (1.4) | 0 | (0.0) | 0 | (0.0) | 24 | (33.8) | 2 | (2.8) |
| *Romania* | *388* | *372* | *(95.9)* | *5* | *(1.3)* | *2* | *(0.5)* | *7* | *(1.8)* | *2* | *(0.5)* | *0* | *(0.0)* |
| Slovakia | 35 | 34 | (97.1) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 1 | (2.9) |
| Slovenia | 2 | 2 | (100.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) |
| Spain | 316 | 169 | (53.5) | 1 | (0.3) | 0 | (0.0) | 0 | (0.0) | 3 | (0.9) | 143 | (45.3) |
| Sweden | 18 | 11 | (61.1) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 7 | (38.9) |
| **Subtotal EU/EEA** | **1 276** | **983** | **(77.0)** | **9** | **(0.7)** | **2** | **(0.2)** | **16** | **(1.3)** | **40** | **(3.1)** | **226** | **(17.7)** |
| **Non-EU/EEA** | | | | | | | | | | | | | |
| Albania | 11 | 11 | (100.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | – | – | 0 | (0.0) |
| Andorra | 0 | – | – | – | – | – | – | – | – | – | – | – | – |
| *Armenia* | *29* | *26* | *(89.7)* | *0* | *(0.0)* | *0* | *(0.0)* | *3* | *(10.3)* | – | – | *0* | *(0.0)* |
| *Azerbaijan* | – | – | – | – | – | – | – | – | – | – | – | – | – |
| *Belarus* | *8* | *8* | *(100.0)* | *0* | *(0.0)* | *0* | *(0.0)* | *0* | *(0.0)* | – | – | *0* | *(0.0)* |
| Bosnia and Herzegovina | 3 | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | – | – | 3 | (100.0) |
| *Georgia* | *65* | *62* | *(95.4)* | *0* | *(0.0)* | *1* | *(1.5)* | *2* | *(3.1)* | – | – | *0* | *(0.0)* |
| Israel | 7 | 7 | (100.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | – | – | 0 | (0.0) |
| *Kazakhstan* | *274* | *271* | *(98.9)* | *1* | *(0.4)* | *2* | *(0.7)* | *0* | *(0.0)* | – | – | *0* | *(0.0)* |
| *Kyrgyzstan* | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Monaco | *0* | – | – | – | – | – | – | – | – | – | – | – | – |
| Montenegro | *1* | 1 | (100.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | – | – | 0 | (0.0) |
| North Macedonia | 12 | 12 | (100.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | – | – | 0 | (0.0) |
| *Republic of Moldova* | 103 | 103 | (100.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | – | – | 0 | (0.0) |
| *Russian Federation* | *1 753* | *1 652* | *(94.2)* | *10* | *(0.6)* | *39* | *(2.2)* | *6* | *(0.3)* | – | – | *46* | *(2.6)* |
| San Marino | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Serbia | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Serbia excluding Kosovo[1] | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Kosovo[1] | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Switzerland | 15 | 11 | (73.3) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | – | – | 4 | (26.7) |
| *Tajikistan* | *350* | *332* | *(94.9)* | *3* | *(0.9)* | *1* | *(0.3)* | *11* | *(3.1)* | – | – | *3* | *(0.9)* |
| *Turkey* | *490* | *397* | *(81.0)* | *21* | *(4.3)* | *0* | *(0.0)* | *8* | *(1.6)* | – | – | *64* | *(13.1)* |
| *Turkmenistan* | – | – | – | – | – | – | – | – | – | – | – | – | – |
| *Ukraine* | *428* | *414* | *(96.7)* | *8* | *(1.9)* | *5* | *(1.2)* | *1* | *(0.2)* | – | – | *0* | *(0.0)* |
| United Kingdom[e] | 182 | 154 | (84.6) | 0 | (0.0) | 0 | (0.0) | 3 | (1.6) | – | – | 25 | (13.7) |
| *Uzbekistan* | – | – | – | – | – | – | – | – | – | – | – | – | – |
| **Subtotal non-EU/EEA** | **3 731** | **3 461** | **(92.8)** | **43** | **(1.2)** | **48** | **(1.3)** | **34** | **(0.9)** | **0** | **(0.0)** | **145** | **(3.9)** |
| **Total European Region** | **5 007** | **4 444** | **(88.8)** | **52** | **(1.0)** | **50** | **(1.0)** | **50** | **(1.0)** | **40** | **(0.8)** | **371** | **(7.4)** |
| ***Subtotal 18 HPCs*** | ***3 969*** | ***3 711*** | ***(93.5)*** | ***49*** | ***(1.2)*** | ***50*** | ***(1.3)*** | ***41*** | ***(1.0)*** | ***2*** | ***(0.1)*** | ***116*** | ***(2.9)*** |

*Note:* European Region comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB HPCs are presented in italics. EU/EEA: country data are shown as missing (–) when data on treatment outcome are not reported. For inclusion in the cohort, drug-susceptibility data are also required. HPCs: high-priority countries.

[a] Cases with unknown previous TB history are included among new TB cases.
[b] For non-EU/EEA countries and areas: patients started on second-line treatment are excluded. For EU/EEA countries: rifampicin-resistant TB cases are excluded.
[c] In previous reports defined as "defaulted".
[d] In previous reports defined as "transferred out and unknown".
[e] Previous TB history is defined by previous diagnosis.
[1] All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

## Table 19. Treatment outcome of new and relapse[a] TB cases of foreign origin notified in 2019, European Region, 2020

| Country/area | New and relapse TB cases of foreign origin notified in 2019[b] | Success | | Died | | Failed | | Lost to follow-up[c] | | Still on treatment | | Not evaluated[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | N | (%) | N | (%) | N | (%) | N | (%) | N | (%) | N | (%) |
| **EU/EEA** | | | | | | | | | | | | | |
| Austria[e] | 250 | 185 | (74.0) | 7 | (2.8) | 0 | (0.0) | 0 | (0.0) | 30 | (12.0) | 28 | (11.2) |
| Belgium[ef] | 483 | 402 | (83.2) | 11 | (2.3) | 2 | (0.4) | 51 | (10.6) | 9 | (1.9) | 8 | (1.7) |
| *Bulgaria* | *0* | *0* | – | *0* | – | *0* | – | *0* | – | *0* | – | *0* | – |
| Croatia | 4 | 0 | (0.0) | 1 | (25.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 3 | (75.0) |
| Cyprus | 58 | 16 | (27.6) | 1 | (1.7) | 0 | (0.0) | 6 | (10.3) | 6 | (10.3) | 29 | (50.0) |
| Czechia | 128 | 86 | (67.2) | 7 | (5.5) | 0 | (0.0) | 27 | (21.1) | 4 | (3.1) | 4 | (3.1) |
| Denmark[f] | 184 | 83 | (45.1) | 1 | (0.5) | 0 | (0.0) | 1 | (0.5) | 1 | (0.5) | 98 | (53.3) |
| *Estonia* | *27* | *21* | *(77.8)* | *4* | *(14.8)* | *0* | *(0.0)* | *0* | *(0.0)* | *0* | *(0.0)* | *2* | *(7.4)* |
| Finland | 91 | 42 | (46.2) | 0 | (0.0) | 0 | (0.0) | 2 | (2.2) | 0 | (0.0) | 47 | (51.6) |
| France | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Germany | 3 193 | 2 255 | (70.6) | 133 | (4.2) | 1 | (0.0) | 86 | (2.7) | 87 | (2.7) | 631 | (19.8) |
| Greece[e] | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Hungary[e] | 38 | 16 | (42.1) | 0 | (0.0) | 0 | (0.0) | 5 | (13.2) | 1 | (2.6) | 16 | (42.1) |
| Iceland | 11 | 11 | (100.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) |
| Ireland[f] | 105 | 5 | (4.8) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 100 | (95.2) |
| Italy | – | – | – | – | – | – | – | – | – | – | – | – | – |
| *Latvia* | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Liechtenstein | – | – | – | – | – | – | – | – | – | – | – | – | – |
| *Lithuania* | *11* | *10* | *(90.9)* | *1* | *(9.1)* | *0* | *(0.0)* | *0* | *(0.0)* | *0* | *(0.0)* | *0* | *(0.0)* |
| Luxembourg | 43 | 16 | (37.2) | 0 | (0.0) | 0 | (0.0) | 6 | (14.0) | 0 | (0.0) | 21 | (48.8) |
| Malta | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Netherlands | 548 | 473 | (86.3) | 18 | (3.3) | 1 | (0.2) | 19 | (3.5) | 6 | (1.1) | 31 | (5.7) |
| Norway[f] | 135 | 115 | (85.2) | 1 | (0.7) | 3 | (2.2) | 3 | (2.2) | 0 | (0.0) | 13 | (9.6) |
| Poland[e] | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Portugal | 454 | 309 | (68.1) | 8 | (1.8) | 1 | (0.2) | 23 | (5.1) | 89 | (19.6) | 24 | (5.3) |
| *Romania* | *40* | *31* | *(77.5)* | *3* | *(7.5)* | *1* | *(2.5)* | *4* | *(10.0)* | *1* | *(2.5)* | *0* | *(0.0)* |
| Slovakia | 5 | 5 | (100.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) |
| Slovenia | 35 | 30 | (85.7) | 2 | (5.7) | 0 | (0.0) | 2 | (5.7) | 0 | (0.0) | 1 | (2.9) |
| Spain | 1 682 | 771 | (45.8) | 22 | (1.3) | 1 | (0.1) | 9 | (0.5) | 26 | (1.5) | 853 | (50.7) |
| Sweden | 406 | 256 | (63.1) | 8 | (2.0) | 0 | (0.0) | 0 | (0.0) | 1 | (0.2) | 141 | (34.7) |
| **Subtotal EU/EEA** | **7 931** | **5 138** | **(64.8)** | **228** | **(2.9)** | **10** | **(0.1)** | **244** | **(3.1)** | **261** | **(3.3)** | **2 050** | **(25.8)** |
| **Non-EU/EEA** | | | | | | | | | | | | | |
| Albania | 0 | 0 | – | 0 | – | 0 | – | 0 | – | – | – | 0 | – |
| Andorra | 1 | 1 | – | 0 | – | 0 | – | 0 | – | – | – | 0 | – |
| *Armenia* | *9* | *3* | *(33.3)* | *1* | *(11.1)* | *0* | *(0.0)* | *3* | *(33.3)* | – | – | *2* | *(22.2)* |
| *Azerbaijan* | – | – | – | – | – | – | – | – | – | – | – | – | – |
| *Belarus* | *0* | *0* | – | *0* | – | *0* | – | *0* | – | – | – | *0* | – |
| Bosnia and Herzegovina | – | – | – | – | – | – | – | – | – | – | – | – | – |
| *Georgia* | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Israel | 188 | 159 | (84.6) | *11* | *(5.9)* | *2* | *(1.1)* | *4* | *(2.1)* | – | – | *12* | *(6.4)* |
| *Kazakhstan* | *90* | *79* | *(87.8)* | *8* | *(8.9)* | *1* | *(1.1)* | *2* | *(2.2)* | – | – | *0* | *(0.0)* |
| *Kyrgyzstan* | – | – | – | – | – | – | – | – | – | – | – | – | – |
| *Monaco* | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Montenegro | 3 | 1 | (33.3) | 0 | (0.0) | 0 | (0.0) | 1 | (33.3) | – | – | 1 | (33.3) |
| North Macedonia | 2 | 2 | (100.0) | *0* | *(0.0)* | *0* | *(0.0)* | *0* | *(0.0)* | – | – | *0* | *(0.0)* |
| *Republic of Moldova* | *19* | *13* | *(68.4)* | *2* | *(10.5)* | *0* | *(0.0)* | *2* | *(10.5)* | – | – | *2* | *(10.5)* |
| *Russian Federation* | *1 880* | *1 603* | *(85.3)* | *10* | *(0.5)* | *56* | *(3.0)* | *0* | *(0.0)* | – | – | *211* | *(11.2)* |
| San Marino | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Serbia | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Serbia excluding Kosovo[1] | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Kosovo[1] | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Switzerland | 292 | 204 | (69.9) | *4* | *(1.4)* | *0* | *(0.0)* | *6* | *(2.1)* | – | – | *78* | *(26.7)* |
| *Tajikistan* | 0 | 0 | – | *0* | – | *0* | – | *0* | – | – | – | *0* | – |
| *Turkey* | *1 453* | *1 038* | *(71.4)* | *94* | *(6.5)* | *6* | *(0.4)* | *93* | *(6.4)* | – | – | *222* | *(15.3)* |
| *Turkmenistan* | – | – | – | – | – | – | – | – | – | – | – | – | – |
| *Ukraine* | *31* | *21* | *(67.7)* | *1* | *(3.2)* | *2* | *(6.5)* | *6* | *(19.4)* | – | – | *1* | *(3.2)* |
| United Kingdom[f] | 3 375 | 2 708 | (80.2) | 108 | (3.2) | 0 | (0.0) | 154 | (4.6) | – | – | 405 | (12.0) |
| *Uzbekistan* | *0* | 0 | – | 0 | – | 0 | – | 0 | – | – | – | 0 | – |
| **Subtotal non-EU/EEA** | **7 343** | **5 832** | **(79.4)** | **239** | **(3.3)** | **67** | **(0.9)** | **271** | **(3.7)** | **0** | **(0.0)** | **934** | **(12.7)** |
| **Total European Region** | **15 274** | **10 970** | **(71.8)** | **467** | **(3.1)** | **77** | **(0.5)** | **515** | **(3.4)** | **261** | **(1.7)** | **2 984** | **(19.5)** |
| ***Subtotal 18 HPCs*** | ***3 560*** | ***2 819*** | ***(79.2)*** | ***124*** | ***(3.5)*** | ***66*** | ***(1.9)*** | ***110*** | ***(3.1)*** | ***1*** | ***(0.0)*** | ***440*** | ***(12.4)*** |

*Note:* European Region comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB HPCs are presented in italics. EU/EEA: country data are shown as missing (–) when data on treatment outcome are not reported. For inclusion in the cohort, drug-susceptibility data are also required. HPCs: high-priority countries.

[a] Cases with unknown previous TB history are included among new TB cases.
[b] For non-EU/EEA countries and areas: patients started on second-line treatment are excluded. For EU/EEA countries: rifampicin-resistant TB cases are excluded.
[c] In previous reports defined as "defaulted".
[d] In previous reports defined as "transferred out and unknown".
[e] Origin is based on nationality.
[f] Previous TB history is defined by previous diagnosis.
[1] All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

## Table 20. Treatment outcome of HIV-positive new and relapse[a] TB cases notified in 2019, European Region, 2020

| Country/area | HIV-positive TB cases notified in 2019[b] | Success | | Died | | Failed | | Lost to follow-up[c] | | Still on treatment | | Not evaluated[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | N | (%) | N | (%) | N | (%) | N | (%) | N | (%) | N | (%) |
| **EU/EEA** | | | | | | | | | | | | | |
| Austria | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Belgium[e] | 34 | 27 | (79.4) | 2 | (5.9) | 1 | (2.9) | 3 | (8.8) | 1 | (2.9) | 0 | (0.0) |
| *Bulgaria* | *1* | *1* | *(100.0)* | *0* | *(0.0)* | *0* | *(0.0)* | *0* | *(0.0)* | *0* | *(0.0)* | *0* | *(0.0)* |
| Croatia | 0 | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – |
| Cyprus | 1 | 1 | (100.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) |
| Czechia | 7 | 3 | (42.9) | 1 | (14.3) | 0 | (0.0) | 2 | (28.6) | 1 | (14.3) | 0 | (0.0) |
| Denmark[e] | 4 | 1 | (25.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 3 | (75.0) |
| *Estonia* | *11* | *6* | *(54.5)* | *4* | *(36.4)* | *1* | *(9.1)* | *0* | *(0.0)* | *0* | *(0.0)* | *0* | *(0.0)* |
| Finland | – | – | – | – | – | – | – | – | – | – | – | – | – |
| France | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Germany | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Greece | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Hungary | 3 | 1 | (33.3) | 1 | (33.3) | 0 | (0.0) | 1 | (33.3) | 0 | (0.0) | 0 | (0.0) |
| Iceland | 0 | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – |
| Ireland[e] | 9 | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 9 | (100.0) |
| Italy | – | – | – | – | – | – | – | – | – | – | – | – | – |
| *Latvia* | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Liechtenstein | – | – | – | – | – | – | – | – | – | – | – | – | – |
| *Lithuania* | *20* | *18* | *(90.0)* | *2* | *(10.0)* | *0* | *(0.0)* | *0* | *(0.0)* | *0* | *(0.0)* | *0* | *(0.0)* |
| Luxembourg | 0 | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – |
| Malta | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Netherlands | 19 | 13 | (68.4) | 1 | (5.3) | 0 | (0.0) | 2 | (10.5) | 2 | (10.5) | 1 | (5.3) |
| Norway[e] | 4 | 3 | (75.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 1 | (25.0) |
| Poland | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Portugal | 143 | 81 | (56.6) | 9 | (6.3) | 1 | (0.7) | 7 | (4.9) | 36 | (25.2) | 9 | (6.3) |
| *Romania* | *171* | *110* | *(64.3)* | *26* | *(15.2)* | *1* | *(0.6)* | *28* | *(16.4)* | *6* | *(3.5)* | *0* | *(0.0)* |
| Slovakia | 4 | 4 | (100.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) |
| Slovenia | 1 | 1 | (100.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) |
| Spain | 207 | 82 | (39.6) | 13 | (6.3) | 0 | (0.0) | 1 | (0.5) | 5 | (2.4) | 106 | (51.2) |
| Sweden | – | – | – | – | – | – | – | – | – | – | – | – | – |
| **Subtotal EU/EEA** | **639** | **352** | **(55.1)** | **59** | **(9.2)** | **4** | **(0.6)** | **44** | **(6.9)** | **51** | **(8.0)** | **129** | **(20.2)** |
| **Non-EU/EEA** | | | | | | | | | | | | | |
| Albania | 8 | 4 | (50.0) | 3 | (37.5) | 0 | (0.0) | 1 | (12.5) | – | – | 0 | (0.0) |
| Andorra | 0 | 0 | – | 0 | – | 0 | – | 0 | – | – | – | 0 | – |
| *Armenia* | *43* | *28* | *(65.1)* | *10* | *(23.3)* | *4* | *(9.3)* | *1* | *(2.3)* | – | – | *0* | *(0.0)* |
| *Azerbaijan* | – | – | – | – | – | – | – | – | – | – | – | – | – |
| *Belarus* | *69* | *56* | *(81.2)* | *6* | *(8.7)* | *5* | *(7.2)* | *2* | *(2.9)* | – | – | *0* | *(0.0)* |
| Bosnia and Herzegovina | – | – | – | – | – | – | – | – | – | – | – | – | – |
| *Georgia* | *28* | *19* | *(67.9)* | *1* | *(3.6)* | *2* | *(7.1)* | *3* | *(10.7)* | – | – | *3* | *(10.7)* |
| Israel | 8 | 6 | (75.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | – | – | 2 | (25.0) |
| *Kazakhstan* | *258* | *190* | *(73.6)* | *46* | *(17.8)* | *7* | *(2.7)* | *15* | *(5.8)* | – | – | *0* | *(0.0)* |
| *Kyrgyzstan* | *103* | *65* | *(63.1)* | *24* | *(23.3)* | *2* | *(1.9)* | *12* | *(11.7)* | – | – | *0* | *(0.0)* |
| Monaco | 0 | 0 | – | 0 | – | 0 | – | 0 | – | – | – | 0 | – |
| Montenegro | – | – | – | – | – | – | – | – | – | – | – | – | – |
| *North Macedonia* | *1* | *0* | *(0.0)* | *1* | *(100.0)* | *0* | *(0.0)* | *0* | *(0.0)* | – | – | *0* | *(0.0)* |
| Republic of Moldova | 201 | 129 | (64.2) | 37 | (18.4) | 13 | (6.5) | 21 | (10.4) | – | – | 1 | (0.5) |
| *Russian Federation* | *11 568* | *5 501* | *(47.6)* | *2 712* | *(23.4)* | *1 277* | *(11.0)* | *1 145* | *(9.9)* | – | – | *933* | *(8.1)* |
| San Marino | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Serbia | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Serbia excluding Kosovo[1] | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Kosovo[1] | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Switzerland | – | – | – | – | – | – | – | – | – | – | – | – | – |
| *Tajikistan* | *136* | *97* | *(71.3)* | *28* | *(20.6)* | *2* | *(1.5)* | *9* | *(6.6)* | – | – | *0* | *(0.0)* |
| *Turkey* | *103* | *63* | *(61.2)* | *17* | *(16.5)* | *1* | *(1.0)* | *2* | *(1.9)* | – | – | *20* | *(19.4)* |
| *Turkmenistan* | – | – | – | – | – | – | – | – | – | – | – | – | – |
| *Ukraine* | *4 325* | *3 077* | *(71.1)* | *785* | *(18.2)* | *180* | *(4.2)* | *282* | *(6.5)* | – | – | *1* | *(0.0)* |
| United Kingdom[e] | – | – | – | – | – | – | – | – | – | – | – | – | – |
| *Uzbekistan* | – | – | – | – | – | – | – | – | – | – | – | – | – |
| **Subtotal non-EU/EEA** | **16 851** | **9 235** | **(54.8)** | **3 670** | **(21.8)** | **1 493** | **(8.9)** | **1 493** | **(8.9)** | **0** | **(0.0)** | **960** | **(5.7)** |
| **Total European Region** | **17 490** | **9 587** | **(54.8)** | **3 729** | **(21.3)** | **1 497** | **(8.6)** | **1 537** | **(8.8)** | **51** | **(0.3)** | **1 089** | **(6.2)** |
| ***Subtotal 18 HPCs*** | ***17 037*** | ***9 360*** | ***(54.9)*** | ***3 698*** | ***(21.7)*** | ***1 495*** | ***(8.8)*** | ***1 520*** | ***(8.9)*** | ***6*** | ***(0.0)*** | ***958*** | ***(5.6)*** |

*Note:* European Region comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB HPCs are presented in italics. EU/EEA: country data are shown as missing (–) when data on treatment outcome are not reported. For inclusion in the cohort, drug-susceptibility data are also required.
HPCs: high-priority countries.

[a] Cases with unknown previous TB history are included among new TB cases.
[b] Rifampicin-resistant TB cases are excluded.
[c] In previous reports defined as "defaulted".
[d] In previous reports defined as "transferred out and unknown".
[e] Previous TB history is defined by previous diagnosis.
[1] All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

**Table 21.** Treatment outcome among new and relapse[a] TB cases in prisons notified in 2019, European Region, 2020

| Country/area | New and relapse TB cases in prisons notified in 2019[b] | Success | | Died | | Failed | | Lost to follow-up[c] | | Not evaluated[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | N | (%) | N | (%) | N | (%) | N | (%) | N | (%) |
| **EU/EEA** | | | | | | | | | | | |
| Austria | – | – | – | – | – | – | – | – | – | – | – |
| Belgium | 13 | 11 | (84.6) | 0 | (0.0) | 0 | (0.0) | 2 | (15.4) | 0 | (0.0) |
| *Bulgaria* | *7* | *4* | *(57.1)* | *1* | *(14.3)* | *0* | *(0.0)* | *1* | *(14.3)* | *1* | *(14.3)* |
| Croatia | – | – | – | – | – | – | – | – | – | – | – |
| Cyprus | – | – | – | – | – | – | – | – | – | – | – |
| Czechia | 6 | 5 | (83.3) | 0 | (0.0) | 0 | (0.0) | 1 | (16.7) | 0 | (0.0) |
| Denmark | – | – | – | – | – | – | – | – | – | – | – |
| *Estonia* | *2* | *2* | *(100.0)* | *0* | *(0.0)* | *0* | *(0.0)* | *0* | *(0.0)* | *0* | *(0.0)* |
| Finland | – | – | – | – | – | – | – | – | – | – | – |
| France | – | – | – | – | – | – | – | – | – | – | – |
| Germany | 44 | 20 | (45.5) | 1 | (2.3) | 0 | (0.0) | 12 | (27.3) | 11 | (25.0) |
| Greece | – | – | – | – | – | – | – | – | – | – | – |
| Hungary | – | – | – | – | – | – | – | – | – | – | – |
| Iceland | – | – | – | – | – | – | – | – | – | – | – |
| Ireland | – | – | – | – | – | – | – | – | – | – | – |
| Italy | – | – | – | – | – | – | – | – | – | – | – |
| *Latvia* | – | – | – | – | – | – | – | – | – | – | – |
| Liechtenstein | – | – | – | – | – | – | – | – | – | – | – |
| *Lithuania* | *18* | *10* | *(55.6)* | *0* | *(0.0)* | *0* | *(0.0)* | *0* | *(0.0)* | *8* | *(44.4)* |
| Luxembourg | 0 | – | – | 0 | – | 0 | – | 0 | – | 0 | – |
| Malta | – | – | – | – | – | – | – | – | – | – | – |
| Netherlands | 17 | 7 | (41.2) | 0 | (0.0) | 0 | (0.0) | 5 | (29.4) | 5 | (29.4) |
| Norway | – | – | – | – | – | – | – | – | – | – | – |
| Poland | – | – | – | – | – | – | – | – | – | – | – |
| Portugal | 42 | 25 | (59.5) | 2 | (4.8) | 0 | (0.0) | 2 | (4.8) | 13 | (31.0) |
| *Romania* | *108* | *86* | *(79.6)* | *2* | *(1.9)* | *1* | *(0.9)* | *8* | *(7.4)* | *11* | *(10.2)* |
| Slovakia | 6 | 6 | (100.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) |
| Slovenia | – | – | – | – | – | – | – | – | – | – | – |
| Spain | – | – | – | – | – | – | – | – | – | – | – |
| Sweden | – | – | – | – | – | – | – | – | – | – | – |
| **Subtotal EU/EEA** | **263** | **176** | **(66.9)** | **6** | **(2.3)** | **1** | **(0.4)** | **31** | **(11.8)** | **49** | **(18.6)** |
| **Non-EU/EEA** | | | | | | | | | | | |
| Albania | 6 | 6 | (100.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) |
| Andorra | 0 | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – |
| *Armenia* | *2* | *0* | *(0.0)* | *0* | *(0.0)* | *1* | *(50.0)* | *1* | *(50.0)* | *0* | *(0.0)* |
| *Azerbaijan* | *116* | *112* | *(96.6)* | *2* | *(1.7)* | *1* | *(0.9)* | *0* | *(0.0)* | *1* | *(0.9)* |
| *Belarus* | *23* | *20* | *(87.0)* | *1* | *(4.3)* | *1* | *(4.3)* | *1* | *(4.3)* | *0* | *(0.0)* |
| Bosnia and Herzegovina | – | – | – | – | – | – | – | – | – | – | – |
| *Georgia* | *22* | *22* | *(100.0)* | *0* | *(0.0)* | *0* | *(0.0)* | *0* | *(0.0)* | *0* | *(0.0)* |
| Israel | 0 | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – |
| *Kazakhstan* | *77* | *67* | *(87.0)* | *1* | *(1.3)* | *4* | *(5.2)* | *5* | *(6.5)* | *0* | *(0.0)* |
| *Kyrgyzstan* | *95* | *77* | *(81.1)* | *3* | *(3.2)* | *3* | *(3.2)* | *12* | *(12.6)* | *0* | *(0.0)* |
| Monaco | 0 | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – |
| Montenegro | 1 | 1 | – | 0 | – | 0 | – | 0 | – | 0 | – |
| North Macedonia | 2 | 2 | (100.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) |
| *Republic of Moldova* | *84* | *66* | *(78.6)* | *4* | *(4.8)* | *6* | *(7.1)* | *4* | *(4.8)* | *4* | *(4.8)* |
| *Russian Federation* | *5 611* | *3 133* | *(55.8)* | *160* | *(2.9)* | *470* | *(8.4)* | *232* | *(4.1)* | *1 616* | *(28.8)* |
| San Marino | – | – | – | – | – | – | – | – | – | – | – |
| Serbia | – | – | – | – | – | – | – | – | – | – | – |
| Serbia excluding Kosovo[1] | – | – | – | – | – | – | – | – | – | – | – |
| Kosovo[1] | – | – | – | – | – | – | – | – | – | – | – |
| Switzerland | – | – | – | – | – | – | – | – | – | – | – |
| *Tajikistan* | *79* | *70* | *(88.6)* | *4* | *(5.1)* | *2* | *(2.5)* | *2* | *(2.5)* | *1* | *(1.3)* |
| *Turkey* | *188* | *146* | *(77.7)* | *16* | *(8.5)* | 3 | *(1.6)* | *10* | *(5.3)* | *13* | *(6.9)* |
| *Turkmenistan* | – | – | – | – | – | – | – | – | – | – | – |
| *Ukraine* | *453* | *343* | *(75.7)* | *26* | *(5.7)* | 34 | *(7.5)* | *50* | *(11.0)* | *0* | *(0.0)* |
| United Kingdom | – | – | – | – | – | – | – | – | – | – | – |
| *Uzbekistan* | – | – | – | – | – | – | – | – | – | – | – |
| **Subtotal non-EU/EEA** | **6 759** | **4 065** | **(60.1)** | **217** | **(3.2)** | **525** | **(7.8)** | **317** | **(4.7)** | **1 635** | **(24.2)** |
| **Total European Region** | **7 022** | **4 241** | **(60.4)** | **223** | **(3.2)** | **526** | **(7.5)** | **348** | **(5.0)** | **1 684** | **(24.0)** |
| ***Subtotal 18 HPCs*** | ***6 885*** | ***4 158*** | ***(60.4)*** | ***220*** | ***(3.2)*** | ***526*** | ***(7.6)*** | ***326*** | ***(4.7)*** | ***1 655*** | ***(24.0)*** |

*Note:* European Region comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB HPCs are presented in italics. EU/EEA: country data are shown as missing (–) when data on treatment outcome are not reported. For inclusion in the cohort, drug-susceptibility data are also required. HPCs: high-priority countries.

[a] Cases with unknown previous TB history are included among new TB cases.
[b] Rifampicin-resistant TB cases are excluded.
[c] In previous reports defined as "defaulted".
[d] In previous reports defined as "transferred out and unknown".
[1] All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

**Table 22. Treatment outcome after 24 months of RR/MDR-TB cases started on second-line treatment in 2018, European Region, 2020**

| Country/area | RR/MDR-TB[a] cases started on second-line treatment[b] in 2018 | Success | | Died | | Failed | | Lost to follow up[c] | | Still on treatment | | Not evaluated[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | N | (%) | N | (%) | N | (%) | N | (%) | N | (%) | N | (%) |
| **EU/EEA** | | | | | | | | | | | | | |
| Austria | 18 | 15 | (83.3) | 1 | (5.6) | 0 | (0.0) | 0 | (0.0) | 1 | (5.6) | 1 | (5.6) |
| Belgium | 9 | 7 | (77.8) | 1 | (11.1) | 0 | (0.0) | 1 | (11.1) | 0 | (0.0) | 0 | (0.0) |
| *Bulgaria* | *28* | *17* | *(60.7)* | *4* | *(14.3)* | *1* | *(3.6)* | *5* | *(17.9)* | *0* | *(0.0)* | *1* | *(3.6)* |
| Croatia | 2 | 0 | (0.0) | 1 | (50.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 1 | (50.0) |
| Cyprus | 0 | – | – | – | – | – | – | – | – | – | – | – | – |
| Czechia | 12 | 4 | (33.3) | 1 | (8.3) | 0 | (0.0) | 4 | (33.3) | 1 | (8.3) | 2 | (16.7) |
| Denmark | 4 | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 4 | (100.0) |
| *Estonia* | *31* | *23* | *(74.2)* | *4* | *(12.9)* | *0* | *(0.0)* | *1* | *(3.2)* | *1* | *(3.2)* | *2* | *(6.5)* |
| Finland | 3 | 2 | (66.7) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 1 | (33.3) |
| France | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Germany | 131 | 83 | (63.4) | 4 | (3.1) | 2 | (1.5) | 4 | (3.1) | 10 | (7.6) | 44 | (33.6) |
| Greece | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Hungary | 13 | 6 | (46.2) | 3 | (23.1) | 0 | (0.0) | 0 | (0.0) | 1 | (7.7) | 3 | (23.1) |
| Iceland | 0 | – | – | – | – | – | – | – | – | – | – | – | – |
| Ireland | 8 | 1 | (12.5) | 1 | (12.5) | 0 | (0.0) | 1 | (12.5) | 0 | (0.0) | 5 | (62.5) |
| Italy | – | – | – | – | – | – | – | – | – | – | – | – | – |
| *Latvia* | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Liechtenstein | – | – | – | – | – | – | – | – | – | – | – | – | – |
| *Lithuania* | *189* | *103* | *(54.5)* | *31* | *(16.4)* | *12* | *(6.3)* | *20* | *(10.6)* | *23* | *(12.2)* | *0* | *(0.0)* |
| Luxembourg | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Malta | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Netherlands | 6 | 5 | (83.3) | 1 | (16.7) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) |
| Norway | 6 | 5 | (83.3) | 0 | (0.0) | 1 | (16.7) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) |
| Poland | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Portugal | 11 | 7 | (63.6) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 2 | (18.2) | 2 | (18.2) |
| *Romania* | *439* | *192* | *(43.7)* | *81* | *(18.5)* | *81* | *(18.5)* | *73* | *(16.6)* | *12* | *(2.7)* | *0* | *(0.0)* |
| Slovakia | 3 | 2 | (66.7) | 1 | (33.3) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) |
| Slovenia | 0 | – | – | – | – | – | – | – | – | – | – | – | – |
| Spain | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Sweden | 14 | 14 | (100.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) |
| **Subtotal EU/EEA** | **927** | **486** | **(52.4)** | **134** | **(14.5)** | **97** | **(10.5)** | **109** | **(11.8)** | **51** | **(5.5)** | **66** | **(7.1)** |
| **Non-EU/EEA** | | | | | | | | | | | | | |
| Albania | 4 | 3 | (75.0) | 1 | (25.0) | 0 | (0.0) | 0 | (0.0) | – | – | 0 | (0.0) |
| Andorra | 0 | 0 | – | 0 | – | 0 | – | 0 | – | – | – | 0 | – |
| *Armenia* | *85* | *39* | *(45.9)* | *13* | *(15.3)* | *11* | *(12.9)* | *22* | *(25.9)* | – | – | *0* | *(0.0)* |
| *Azerbaijan* | *821* | *471* | *(57.4)* | *94* | *(11.4)* | *142* | *(17.3)* | *114* | *(13.9)* | – | – | *0* | *(0.0)* |
| *Belarus* | *919* | *670* | *(72.9)* | *87* | *(9.5)* | *60* | *(6.5)* | *95* | *(10.3)* | – | – | *7* | *(0.8)* |
| Bosnia and Herzegovina | – | – | – | – | – | – | – | – | – | – | – | – | – |
| *Georgia* | *230* | *155* | *(67.4)* | *13* | *(5.7)* | *13* | *(5.7)* | *34* | *(14.8)* | – | – | *15* | *(6.5)* |
| Israel | 14 | 9 | (64.3) | 2 | (14.3) | 0 | (0.0) | 2 | (14.3) | – | – | 1 | (7.1) |
| *Kazakhstan* | *4 336* | *3 499* | *(80.7)* | *408* | *(9.4)* | *182* | *(4.2)* | *216* | *(5.0)* | – | – | *31* | *(0.7)* |
| *Kyrgyzstan* | *1 244* | *775* | *(62.3)* | *122* | *(9.8)* | *97* | *(7.8)* | *249* | *(20.0)* | – | – | *1* | *(0.1)* |
| Monaco | 0 | 0 | – | 0 | – | 0 | – | 0 | – | – | – | 0 | – |
| Montenegro | 1 | 1 | (100.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | – | – | 0 | (0.0) |
| North Macedonia | 2 | 1 | (50.0) | 0 | (0.0) | 0 | (0.0) | 1 | (50.0) | – | – | 0 | (0.0) |
| Republic of Moldova | 921 | 541 | (58.7) | 98 | (10.6) | 111 | (12.1) | 169 | (18.3) | – | – | 2 | (0.2) |
| *Russian Federation* | *28 706* | *14 757* | *(51.4)* | *4 488* | *(15.6)* | *4 133* | *(14.4)* | *3 081* | *(10.7)* | – | – | *2 247* | *(7.8)* |
| San Marino | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Serbia | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Serbia excluding Kosovo[1] | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Kosovo[1] | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Switzerland | 9 | 6 | (66.7) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | – | – | 3 | (33.3) |
| *Tajikistan* | *727* | *510* | *(70.2)* | *95* | *(13.1)* | *23* | *(3.2)* | *88* | *(12.1)* | – | – | *11* | *(1.5)* |
| *Turkey* | *180* | *99* | *(55.0)* | *20* | *(11.1)* | *2* | *(1.1)* | *9* | *(5.0)* | – | – | *50* | *(27.8)* |
| *Turkmenistan* | *549* | *248* | *(45.2)* | *92* | *(16.8)* | *98* | *(17.9)* | *92* | *(16.8)* | – | – | *19* | *(3.5)* |
| *Ukraine* | *5 953* | *3 006* | *(50.5)* | *970* | *(16.3)* | *1 033* | *(17.4)* | *926* | *(15.6)* | – | – | *18* | *(0.3)* |
| United Kingdom | 40 | 30 | (75.0) | 2 | (5.0) | 0 | (0.0) | 4 | (10.0) | – | – | 4 | (10.0) |
| *Uzbekistan* | *2 039* | *1 375* | *(67.4)* | *278* | *(13.6)* | *120* | *(5.9)* | *173* | *(8.5)* | – | – | *93* | *(4.6)* |
| **Subtotal non-EU/EEA** | **46 780** | **26 195** | **(56.0)** | **6 783** | **(14.5)** | **6 025** | **(12.9)** | **5 275** | **(11.3)** | **0** | **(0.0)** | **2 502** | **(5.3)** |
| **Total European Region** | **47 707** | **26 681** | **(55.9)** | **6 917** | **(14.5)** | **6 122** | **(12.8)** | **5 384** | **(11.3)** | **51** | **(0.1)** | **2 568** | **(5.4)** |
| ***Subtotal 18 HPCs*** | ***47 397*** | ***26 480*** | ***(55.9)*** | ***6 898*** | ***(14.6)*** | ***6 119*** | ***(12.9)*** | ***5 367*** | ***(11.3)*** | ***36*** | ***(0.1)*** | ***2 497*** | ***(5.3)*** |

*Note:* European Region comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB HPCs are presented in italics. EU/EEA: country data are shown as missing (–) when data on treatment outcome are not reported. For inclusion in the cohort, drug-susceptibility data are also required.
HPCs: high-priority countries.
RR/MDR-TB: rifampicin-resistant or multidrug-resistant tuberculosis.
[a] Includes cases that are RR/MDR but that also meet the pre-XDR or XDR case definitions (pre-XDR and XDR cases have not been excluded).
[b] For EU/EEA countries, cases diagnosed postmortem are excluded, and cases with no treatment enrolment data reported are assumed to be enrolled in treatment.
[c] In previous reports defined as "defaulted".
[d] In previous reports defined as "transferred out and unknown".
[1] All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

**Table 23. Treatment outcome after 24 months of pre-XDR-TB cases started on second-line treatment in 2018, European Region, 2020**

| Country/area | Pre-XDR-TB[a] cases started on second-line treatment in 2018[b] | Success | | Died | | Failed | | Lost to follow-up[c] | | Still on treatment | | Not evaluated[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | N | (%) | N | (%) | N | (%) | N | (%) | N | (%) | N | (%) |
| **EU/EEA** | | | | | | | | | | | | | |
| Austria | 5 | 3 | (60.0) | 1 | (20.0) | 0 | (0.0) | 0 | (0.0) | 1 | (20.0) | 0 | (0.0) |
| Belgium | 5 | 4 | (80.0) | 1 | (20.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) |
| *Bulgaria* | *5* | *2* | *(40.0)* | *1* | *(20.0)* | *1* | *(20.0)* | *0* | *(0.0)* | *0* | *(0.0)* | *1* | *(20.0)* |
| Croatia | 0 | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – |
| Cyprus | 0 | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – |
| Czechia | 3 | 0 | (0.0) | 1 | (33.3) | 0 | (0.0) | 1 | (33.3) | 0 | (0.0) | 1 | (33.3) |
| Denmark | 0 | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – |
| *Estonia* | *10* | *9* | *(90.0)* | *0* | *(0.0)* | *0* | *(0.0)* | *0* | *(0.0)* | *1* | *(10.0)* | *0* | *(0.0)* |
| Finland | 1 | 1 | (100.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) |
| France | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Germany | 27 | 14 | (51.9) | 2 | (7.4) | 2 | (7.4) | 0 | (0.0) | 2 | (7.4) | 7 | (25.9) |
| Greece | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Hungary | 6 | 1 | (16.7) | 1 | (16.7) | 0 | (0.0) | 0 | (0.0) | 1 | (16.7) | 3 | (50.0) |
| Iceland | 0 | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – |
| Ireland | 0 | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – |
| Italy | – | – | – | – | – | – | – | – | – | – | – | – | – |
| *Latvia* | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Liechtenstein | – | – | – | – | – | – | – | – | – | – | – | – | – |
| *Lithuania* | *76* | *23* | *(30.3)* | *13* | *(17.1)* | *10* | *(13.2)* | *7* | *(9.2)* | *23* | *(30.3)* | *0* | *(0.0)* |
| Luxembourg | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Malta | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Netherlands | 2 | 2 | (100.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) |
| Norway | 1 | 1 | (100.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) |
| Poland | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Portugal | 0 | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – |
| *Romania* | *69* | *10* | *(14.5)* | *21* | *(30.4)* | *30* | *(43.5)* | *2* | *(2.9)* | *6* | *(8.7)* | *0* | *(0.0)* |
| Slovakia | 1 | 0 | (0.0) | 1 | (100.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) |
| Slovenia | 0 | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – |
| Spain | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Sweden | 0 | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – |
| **Subtotal EU/EEA** | **211** | **70** | **(33.2)** | **42** | **(19.9)** | **43** | **(20.4)** | **10** | **(4.7)** | **34** | **(16.1)** | **12** | **(5.7)** |
| **Non-EU/EEA** | | | | | | | | | | | | | |
| Albania | 0 | 0 | – | 0 | – | 0 | – | 0 | – | – | – | 0 | – |
| Andorra | 0 | 0 | – | 0 | – | 0 | – | 0 | – | – | – | 0 | – |
| *Armenia* | *14* | *3* | *(21.4)* | *4* | *(28.6)* | *3* | *(21.4)* | *4* | *(28.6)* | – | – | *0* | *(0.0)* |
| *Azerbaijan* | 189 | 116 | (61.4) | 15 | (7.9) | 27 | (14.3) | 31 | (16.4) | – | – | 0 | (0.0) |
| *Belarus* | *383* | *293* | *(76.5)* | *32* | *(8.4)* | *33* | *(8.6)* | *25* | *(6.5)* | – | – | *0* | *(0.0)* |
| Bosnia and Herzegovina | – | – | – | – | – | – | – | – | – | – | – | – | – |
| *Georgia* | *54* | *29* | *(53.7)* | *3* | *(5.6)* | *11* | *(20.4)* | *7* | *(13.0)* | – | – | *4* | *(7.4)* |
| Israel | 2 | 1 | (50.0) | 0 | (0.0) | 1 | (50.0) | 0 | (0.0) | – | – | 0 | (0.0) |
| *Kazakhstan* | *386* | *293* | *(75.9)* | *35* | *(9.1)* | *34* | *(8.8)* | *21* | *(5.4)* | – | – | *3* | *(0.8)* |
| *Kyrgyzstan* | *105* | *55* | *(52.4)* | *19* | *(18.1)* | *10* | *(9.5)* | *21* | *(20.0)* | – | – | *0* | *(0.0)* |
| Monaco | 0 | 0 | – | 0 | – | 0 | – | 0 | – | – | – | 0 | – |
| Montenegro | – | – | – | – | – | – | – | – | – | – | – | – | – |
| North Macedonia | 0 | 0 | – | 0 | – | 0 | – | 0 | – | – | – | 0 | – |
| Republic of Moldova | 62 | 32 | (51.6) | 19 | (30.6) | 2 | (3.2) | 2 | (3.2) | – | – | 7 | (11.3) |
| *Russian Federation* | *27* | *11* | *(40.7)* | *6* | *(22.2)* | *6* | *(22.2)* | *1* | *(3.7)* | – | – | *3* | *(11.1)* |
| San Marino | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Serbia | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Serbia excluding Kosovo[1] | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Kosovo[1] | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Switzerland | 1 | 1 | (100.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | – | – | 0 | (0.0) |
| *Tajikistan* | *63* | *42* | *(66.7)* | *10* | *(15.9)* | *5* | *(7.9)* | *6* | *(9.5)* | – | – | *0* | *(0.0)* |
| *Turkey* | *8* | *1* | *(12.5)* | *1* | (12.5) | *0* | *(0.0)* | *0* | *(0.0)* | – | – | *6* | *(75.0)* |
| *Turkmenistan* | 28 | 8 | (28.6) | 8 | (28.6) | 10 | (35.7) | 2 | (7.1) | – | – | 0 | (0.0) |
| *Ukraine* | *1 479* | *505* | *(34.1)* | *195* | (13.2) | *622* | *(42.1)* | *157* | *(10.6)* | – | – | *0* | *(0.0)* |
| United Kingdom | 5 | 2 | (40.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | – | – | 3 | (60.0) |
| *Uzbekistan* | *404* | *280* | *(69.3)* | *62* | *(15.3)* | *27* | *(6.7)* | *20* | *(5.0)* | – | – | *15* | *(3.7)* |
| **Subtotal non-EU/EEA** | **3 210** | **1 672** | **(52.1)** | **409** | **(12.7)** | **791** | **(24.6)** | **297** | **(9.3)** | **0** | **(0.0)** | **41** | **(1.3)** |
| **Total European Region** | **3 421** | **1 742** | **(50.9)** | **451** | **(13.2)** | **834** | **(24.4)** | **307** | **(9.0)** | **34** | **(1.0)** | **53** | **(1.5)** |
| ***Subtotal 18 HPCs*** | ***3 362*** | ***1 712*** | ***(50.9)*** | ***444*** | ***(13.2)*** | ***831*** | ***(24.7)*** | ***306*** | ***(9.1)*** | ***30*** | ***(0.9)*** | ***39*** | ***(1.2)*** |

*Note:* European Region comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB HPCs are presented in italics. EU/EEA: country data are shown as missing (–) when data on treatment outcome are not reported. For inclusion in the cohort, drug-susceptibility data are also required.
HPCs: high-priority countries.
Pre-XDR-TB: pre-extensively drug-resistant tuberculosis.
[a] Pre-XDR-TB defined as resistance to rifampicin (RR/MDR-TB) as well as resistance to any fluoroquinolone. Includes cases that are pre-XDR but that also meet the XDR case definitions (XDR cases have not been excluded).
[b] For EU/EEA countries, cases diagnosed postmortem are excluded, and cases with no treatment enrolment data reported are assumed to be enrolled in treatment.
[c] In previous reports defined as "defaulted".
[d] In previous reports defined as "transferred out and unknown".
[1] All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

**Table 24. Treatment outcome after 36 months of XDR-TB notified in 2017, EU/EEA, 2020**

| Country | XDR-TB[a] cases reported in 2017 | Success | | Died | | Failed | | Lost to follow-up[b] | | Not evaluated[c] | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | N | (%) | N | (%) | N | (%) | N | (%) | N | (%) |
| **EU/EEA** | | | | | | | | | | | |
| Austria | 2 | 0 | (0.0) | 1 | (50.0) | 0 | (0.0) | 0 | (0.0) | 1 | (50.0) |
| Belgium | 0 | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – |
| *Bulgaria* | *4* | *2* | *(50.0)* | *1* | *(25.0)* | *0* | *(0.0)* | *0* | *(0.0)* | *1* | *(25.0)* |
| Croatia | 0 | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – |
| Cyprus | 0 | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – |
| Czechia | 0 | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – |
| Denmark | 0 | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – |
| *Estonia* | *3* | *1* | *(33.3)* | *1* | *(33.3)* | *1* | *(33.3)* | *0* | *(0.0)* | *0* | *(0.0)* |
| Finland | 0 | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – |
| France | – | – | – | – | – | – | – | – | – | – | – |
| Germany | 13 | 5 | (38.5) | 0 | (0.0) | 0 | (0.0) | 1 | (7.7) | 7 | (53.8) |
| Greece | 0 | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – |
| Hungary | 0 | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – |
| Iceland | 0 | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – |
| Ireland | – | – | – | – | – | – | – | – | – | – | – |
| Italy | – | – | – | – | – | – | – | – | – | – | – |
| *Latvia* | – | – | – | – | – | – | – | – | – | – | – |
| Liechtenstein | – | – | – | – | – | – | – | – | – | – | – |
| *Lithuania* | *1* | *0* | *(0.0)* | *0* | *(0.0)* | *0* | *(0.0)* | *1* | *(100.0)* | *0* | *(0.0)* |
| Luxembourg | – | – | – | – | – | – | – | – | – | – | – |
| Malta | – | – | – | – | – | – | – | – | – | – | – |
| Netherlands | 0 | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – |
| Norway | 0 | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – |
| Poland | – | – | – | – | – | – | – | – | – | – | – |
| Portugal | 2 | 2 | (100.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) |
| *Romania* | *1* | *0* | *(0.0)* | *1* | *(100.0)* | *0* | *(0.0)* | *0* | *(0.0)* | *0* | *(0.0)* |
| Slovakia | 0 | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – |
| Slovenia | 0 | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – |
| Spain | – | – | – | – | – | – | – | – | – | – | – |
| Sweden | 0 | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – |
| **Total EU/EEA** | **26** | **10** | **(38.5)** | **4** | **(15.4)** | **1** | **(3.8)** | **2** | **(7.7)** | **9** | **(34.6)** |

*Note:* WHO European Region 18 TB high-priority countries are presented in italics. Country data are shown as missing (–) when data on treatment outcome are not reported. For inclusion in the cohort, drug-susceptibility data are also required.
TESSy: The European Surveillance System.
XDR-TB: extensively drug-resistant tuberculosis.
[a] XDR-TB defined as resistance to rifampicin and to at least one fluoroquinolone (pre-XDR-TB) as well as resistance to at least one additional Group A drug. Group A drugs include: levofloxacin, moxifloxacin, bedaquiline and linezolid. For EU/EEA countries, linezolid resistance is not yet reported to TESSy, therefore XDR-TB is assessed on resistance to levofloxacin, moxifloxacin and/or bedaquiline (in addition to meeting pre-XDR-TB criteria).
[b] In previous reports defined as "defaulted".
[c] In previous reports defined as "transferred out and unknown".

**Table 25.** Monitoring the WHO *Roadmap to implement the tuberculosis action plan for the WHO European Region, 2016–2020*, 2020

| Country | 1. Integrated, patient-centred care and prevention | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Systematic screening of contacts and high-risk groups | Early diagnosis of all forms of TB and universal access to DST, including the use of rapid tests | | | | | | | Equitable access to quality treatment and continuum of care for all people with TB, including drug-resistant TB; and patient support to facilitate treatment adherence | | | | |
| | 1.A.1 Coverage of population at risk with systematic screening for active TB and LTBI. Target = 80% | 1.B.1 Percentage of notified new and relapse TB patients diagnosed using WHO-recommended rapid tests (G). Target ≥ 90% | 1.B.2 First-line DST coverage (%) among all bacteriologically confirmed TB cases (G).[a] Target = 100% | 1.B.3 RR/MDR-TB case-detection rate (%).[a] Target = 85% | 1.B.4 TB notification rate per 100 000 population (E). Target = 24.6 per 100 000 population | 1.B.5 TB case-detection rate (%). Target: increase | 1.B.6 Percentage of RR/MDR-TB among new TB patients (E).[a] Target: decrease | 1.B.7 Percentage of RR/MDR-TB among previously treated TB patients.[a] Target: decrease | 1.C.1 Percentage of hospitalization of new TB patients (E). Target: decrease | 1.C.2 Percentage of detected RR/MDR-TB enrolled in treatment (G). Target = 100% | 1.C.3 Treatment success rate (%) among all new and relapse TB patients (G). Target = 85% | 1.C.4 Treatment success rate (%) among the RR/MDR-TB treatment cohort (G) (E). Target = 75% | 1.C.5 TB mortality rate (ICD A15–19) (G) (E). Target = 2.7 per 100 000 population |
| **EU/EEA** | | | | | | | | | | | | | |
| Austria | – | (68.8) | (96.9) | (12.5) | (4.4) | (86.8) | (0.6) | (20.0) | – | (100.0) | (74.3) | (83.3) | (0.5) |
| Belgium | – | (68.5) | (95.7) | (15.4) | (7.2) | (87.4) | (0.9) | (0.0) | – | (100.0) | (80.8) | (77.8) | (0.3) |
| *Bulgaria* | *(95.1)* | *(0.2)* | *(57.3)* | *(37.5)* | *(13.4)* | *(68.2)* | *(3.9)* | *(11.1)* | *(90.0)* | *(100.0)* | *(81.8)* | *(60.7)* | *(1.4)* |
| Croatia | – | (0.0) | (84.8) | (100.0) | (4.5) | (65.6) | (0.0) | (16.7) | – | (100.0) | (24.4) | (0.0) | (1.5) |
| Cyprus | – | (35.3) | (100.0) | – | (4.1) | (49.3) | (0.0) | (0.0) | – | – | (27.7) | – | (0.4) |
| Czechia | – | (71.4) | (91.7) | (84.6) | (3.4) | (87.8) | (3.6) | (30.0) | (95.0) | (100.0) | (73.8) | (33.3) | (0.2) |
| Denmark | – | (96.1) | (100.0) | (100.0) | (3.8) | (73.2) | (0.8) | (14.3) | – | (0.0) | (44.9) | (0.0) | (0.2) |
| *Estonia* | – | *(87.5)* | *(100.0)* | *(86.4)* | *(9.3)* | *(85.7)* | *(18.0)* | *(27.3)* | *(60.0)* | *(100.0)* | *(75.8)* | *(74.2)* | *(1.2)* |
| Finland | – | (61.5) | (99.0) | (0.0) | (3.1) | (87.0) | (0.0) | (0.0) | (80.0) | (0.0) | (38.3) | (66.7) | (0.6) |
| France | – | (0.0) | (3.4) | (96.9) | (6.8) | (83.0) | (100.0) | (100.0) | – | (100.0) | – | – | (0.7) |
| Germany | – | (85.5) | (89.0) | (35.9) | (5.0) | (87.2) | (2.1) | (5.3) | – | (91.4) | (68.6) | (63.4) | (0.3) |
| Greece | – | (25.3) | (96.7) | (66.7) | (3.7) | (80.9) | (2.0) | (7.1) | – | (100.0) | – | – | (0.5) |
| Hungary | – | (0.0) | (90.3) | (53.8) | (4.2) | (87.3) | (3.8) | (23.8) | – | (90.9) | (65.0) | (46.2) | (0.6) |
| Iceland | – | (41.7) | (100.0) | – | (3.3) | (120.0) | – | – | – | – | (100.0) | – | (0.6) |
| Ireland | – | (76.9) | (95.1) | (0.0) | (4.8) | (88.1) | (0.0) | (0.0) | (50.0) | (100.0) | (3.7) | (12.5) | (0.4) |
| Italy | – | (0.0) | (72.6) | (81.0) | (3.8) | (54.1) | (3.4) | (23.1) | | – | – | – | (0.5) |
| *Latvia* | – | – | – | – | – | – | – | – | – | – | – | – | (3.4) |
| Liechtenstein | – | (100.0) | – | – | (5.2) | – | – | (0.0) | – | – | – | – | (0.0) |
| *Lithuania* | – | *(0.0)* | *(100.0)* | *(103.0)* | *(26.0)* | *(87.1)* | *(12.6)* | *(32.1)* | *(80.0)* | *(100.0)* | *(87.1)* | *(54.5)* | *(4.4)* |
| Luxembourg | – | (0.0) | (95.7) | – | (5.4) | (86.5) | (0.0) | (0.0) | (80.0) | – | (36.2) | – | (0.4) |
| Malta | – | (0.0) | (100.0) | – | (27.2) | (87.5) | (0.0) | (0.0) | | – | – | – | (0.2) |
| Netherlands | – | (80.5) | (94.7) | (60.0) | (3.6) | (86.5) | (1.6) | (0.0) | (30.0) | (100.0) | (86.3) | (83.3) | (0.2) |
| Norway | (80.7) | (85.4) | (100.0) | (50.0) | (3.0) | (84.7) | (2.6) | (0.0) | – | (100.0) | (84.6) | (83.3) | (0.3) |
| Poland | – | (27.8) | (91.3) | (81.8) | (8.9) | (87.5) | (1.4) | (3.3) | – | (100.0) | – | – | (1.5) |
| Portugal | (70.6) | (31.0) | (64.5) | (50.0) | (14.0) | (87.6) | (0.9) | (10.7) | (30.0) | (100.0) | (71.4) | (63.6) | (2.4) |
| *Romania* | *(99.0)* | *(30.7)* | *(87.8)* | *(70.0)* | *(39.8)* | *(59.9)* | *(2.4)* | *(13.3)* | *(60.0)* | *(98.7)* | *(83.7)* | *(43.7)* | *(4.8)* |
| Slovakia | (100.0) | (29.4) | (98.5) | (100.0) | (2.9) | (85.0) | (0.0) | (9.1) | (80.0) | (100.0) | (93.8) | (66.7) | (0.6) |
| Slovenia | (27.3) | (82.7) | (100.0) | (0.0) | (3.7) | (87.2) | (1.8) | (0.0) | (95.0) | – | (70.4) | – | (0.7) |
| Spain | – | (31.9) | (46.8) | (10.4) | (6.4) | (86.7) | (1.8) | (3.3) | – | (100.0) | (46.6) | – | (0.5) |
| Sweden | – | (86.7) | (100.0) | (100.0) | (3.2) | (87.8) | (2.4) | (10.0) | (50.0) | (100.0) | (61.1) | (100.0) | (0.2) |
| **Subtotal EU/EEA** | **(95.7)** | **(33.7)** | **(78.2)** | **(64.4)** | **(7.3)** | **(74.1)** | **(2.8)** | **(12.8)** | **–** | **(97.6)** | **(71.8)** | **(52.4)** | **(0.8)** |

*Note:* European Region comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB HPCs are presented in italics.
Numbers in red indicate that the target is not met; numbers in green that the target is met. Black text indicates that the target cannot be assessed. For indicators 1.B.4 and 1.C.5, number in green indicates also that the country/area/(sub)region is on track to meet the 2020 target.
DST: drug-susceptibility testing.
E: WHO European Region indicator.
G: End TB Strategy global indicator.
HPCs: high-priority countries.
LTBI: latent tuberculosis infection.
PLHIV: people living with HIV.
RR/MDR: rifampicin-resistant or multidrug-resistant.
[a] Only pulmonary cases included.
[b] Target not assessed for countries with less than 50% reporting completeness for HIV.

| Collaborative TB/HIV activities, and management of relevant comorbidities | | | | | Management of LTBI and preventive treatment of persons at high risk, and vaccination against TB | | 2. Bold policies and supportive systems | | | | | 3. Intensified research and innovation | Country |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.D.1 TB/HIV case-detection rate (%). Target = 90% | 1.D.2 HIV testing coverage (%) (G) (E). Target = 100% | 1.D.3 Percentage of HIV among all TB. Target: decrease[b] | 1.D.4 ART enrolment rate (%) among TB/HIV coinfected. Target = 100% | 1.D.5 LTBI treatment coverage among PLHIV (G). Target = 30% | 1.E.1 Contact investigation coverage (G) (E). Target = 90% | 1.E.2 LTBI treatment coverage in childhood TB contacts aged under 5 years (G) (E). Target = 90% | 2.A.1 Number of Member States that have a TB control/elimination performance publicly available (E). Target = 53 | 2.B.1 Percentage of TB-affected households that experience catastrophic costs due to TB (G) (E). Target: close to 0 | 2.C.1 Treatment coverage (%) with new TB drugs (G) (E). Target = 30% | 2.D.1 Number of Member States with functioning multistakeholder coalitions advocating for TB care and resource. Target = 53 | 2.E.1 Treatment success rate (%) of new and relapse TB cases among prisoners. Target = 85% | 3.A.1 European TB research initiative established by mid-2016. Target: established | |
| | | | | | | | | | | | | | **EU/EEA** |
| – | – | – | – | – | – | – | – | – | – | – | – | – | Austria |
| (93.9) | (46.1) | (8.5) | – | – | – | – | – | – | – | – | (84.6) | – | Belgium |
| *(7.1)* | *(84.2)* | *(0.1)* | *(100.0)* | – | *(95.1)* | – | – | – | – | – | *(57.1)* | – | *Bulgaria* |
| (0.0) | (2.3) | (0.0) | – | – | – | – | – | – | – | – | – | – | Croatia |
| (66.7) | (85.3) | (6.7) | – | – | – | – | – | – | – | – | – | – | Cyprus |
| (233.3) | (54.2) | (3.5) | – | – | – | – | – | – | – | – | (83.3) | – | Czechia |
| (57.1) | (75.1) | (2.4) | – | – | – | – | – | – | – | – | – | – | Denmark |
| *(84.6)* | *(94.2)* | *(11.2)* | *(100.0)* | – | – | – | – | – | – | – | *(100.0)* | – | *Estonia* |
| – | – | – | – | – | – | – | – | – | – | – | – | – | Finland |
| – | – | – | – | – | – | – | – | – | – | – | – | – | France |
| – | – | – | – | – | – | – | – | – | – | – | (45.5) | – | Germany |
| (88.2) | (100.0) | (4.3) | – | – | – | – | – | – | – | – | – | – | Greece |
| (40.0) | (4.4) | (11.1) | – | – | – | – | – | – | – | – | – | – | Hungary |
| – | – | – | – | – | – | – | – | – | – | – | – | – | Iceland |
| (30.0) | (34.9) | (3.6) | – | – | – | – | – | – | – | – | – | – | Ireland |
| – | – | – | – | – | – | – | – | – | – | – | – | – | Italy |
| – | – | – | – | – | – | – | – | – | – | – | – | – | *Latvia* |
| – | – | – | – | – | – | – | – | – | – | – | – | – | Liechtenstein |
| *(78.3)* | *(98.3)* | *(2.8)* | – | – | – | – | – | – | – | – | *(55.6)* | – | *Lithuania* |
| – | (81.3) | (0.0) | – | – | – | – | – | – | – | – | – | – | Luxembourg |
| – | – | – | – | – | – | – | – | – | – | – | – | – | Malta |
| (63.6) | (78.7) | (2.9) | (78.6) | – | – | – | – | – | – | – | (41.2) | – | Netherlands |
| (50.0) | (79.2) | (1.6) | – | – | (80.7) | (14.3) | – | – | – | – | – | – | Norway |
| – | – | – | – | – | – | – | – | – | – | – | – | – | Poland |
| (65.0) | (75.1) | (10.2) | – | – | (70.6) | – | – | – | – | – | (59.5) | – | Portugal |
| *(48.6)* | *(84.5)* | *(2.3)* | *(83.1)* | – | *(99.0)* | – | – | – | – | – | (79.6) | – | *Romania* |
| (200.0) | (52.9) | (2.4) | (100.0) | – | (100.0) | (0.0) | – | – | – | – | (100.0) | – | Slovakia |
| – | (74.7) | (0.0) | – | – | (27.3) | (91.3) | – | – | – | – | – | – | Slovenia |
| (70.9) | (57.1) | (9.8) | – | – | – | – | – | – | – | – | – | – | Spain |
| – | – | – | – | – | – | – | – | – | – | – | – | – | Sweden |
| **(33.7)** | **(73.4)** | **(4.2)** | **(84.1)** | – | **(95.7)** | **(14.3)** | – | – | – | – | **(66.9)** | – | **Subtotal EU/EEA** |

## Table 25 contd

| Country/area | 1. Integrated, patient-centred care and prevention | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Systematic screening of contacts and high-risk groups | Early diagnosis of all forms of TB and universal access to DST, including the use of rapid tests | | | | | | | Equitable access to quality treatment and continuum of care for all people with TB, including drug-resistant TB; and patient support to facilitate treatment adherence | | | | |
| | 1.A.1 Coverage of population at risk with systematic screening for active TB and LTBI. Target = 80% | 1.B.1 Percentage of notified new and relapse TB patients diagnosed using WHO-recommended rapid tests (G). Target ≥ 90% | 1.B.2 First-line DST coverage (%) among all bacteriologically confirmed TB cases (G).[a] Target = 100% | 1.B.3 RR/MDR-TB case-detection rate (%).[a] Target = 85% | 1.B.4 TB notification rate per 100 000 population (E). Target = 24.6 per 100 000 population | 1.B.5 TB case-detection rate (%). Target: increase | 1.B.6 Percentage of RR/MDR-TB among new TB patients (E).[a] Target: decrease | 1.B.7 Percentage of RR/MDR-TB among previously treated TB patients.[a] Target: decrease | 1.C.1 Percentage of hospitalization of new TB patients (E). Target: decrease | 1.C.2 Percentage of detected RR/MDR-TB enrolled in treatment (G). Target = 100% | 1.C.3 Treatment success rate (%) among all new and relapse TB patients (G). Target = 85% | 1.C.4 Treatment success rate (%) among the RR/MDR-TB treatment cohort (G) (E). Target = 75% | 1.C.5 TB mortality rate (ICD A15–19) (G) (E). Target = 2.7 per 100 000 population |
| **Non-EU/EEA** | | | | | | | | | | | | | |
| Albania | (29.3) | (57.5) | (93.9) | (100.0) | (8.3) | (55.8) | (0.8) | (23.1) | (20.0) | (100.0) | (88.3) | (75.0) | (0.4) |
| Andorra | (100.0) | (100.0) | (100.0) | – | (2.6) | (100.0) | (0.0) | (0.0) | (100.0) | – | (60.0) | – | (1.4) |
| *Armenia* | *(89.1)* | *(82.7)* | *(98.0)* | *(96.3)* | *(13.3)* | *(57.9)* | *(14.1)* | *(50.0)* | *(63.0)* | *(100.0)* | *(82.3)* | *(45.9)* | *(1.0)* |
| ***Azerbaijan*** | – | ***(82.4)*** | ***(96.9)*** | ***(97.4)*** | ***(36.3)*** | ***(62.4)*** | *(12.0)* | *(24.4)* | *(27.0)* | ***(89.3)*** | ***(84.0)*** | ***(57.4)*** | ***(7.3)*** |
| *Belarus* | *(100.0)* | *(94.2)* | *(100.0)* | *(100.6)* | *(16.0)* | *(60.6)* | *(39.5)* | *(74.5)* | *(68.0)* | *(94.0)* | *(88.6)* | *(72.9)* | *(2.8)* |
| Bosnia and Herzegovina | – | – | (96.3) | – | (10.9) | (42.0) | (0.0) | (0.0) | – | – | (31.9) | – | (3.5) |
| *Georgia* | – | *(87.7)* | *(98.9)* | *(100.5)* | *(41.8)* | *(59.6)* | *(10.7)* | *(26.5)* | *(22.0)* | *(99.3)* | *(85.1)* | *(67.4)* | *(4.8)* |
| Israel | – | – | (100.0) | (100.0) | (1.8) | (87.8) | (5.6) | (0.0) | | (100.0) | (83.9) | (64.3) | (0.2) |
| *Kazakhstan* | *(100.0)* | *(96.0)* | *(99.9)* | *(98.6)* | *(51.1)* | *(73.9)* | *(36.2)* | *(49.7)* | *(64.0)* | *(109.2)* | *(90.2)* | *(80.7)* | *(3.2)* |
| ***Kyrgyzstan*** | ***(100.0)*** | ***(58.8)*** | ***(92.6)*** | ***(92.6)*** | ***(65.0)*** | ***(61.5)*** | *(28.3)* | *(54.0)* | ***(86.0)*** | ***(93.7)*** | ***(81.3)*** | ***(62.3)*** | *(4.6)* |
| Monaco | – | – | – | – | (0.0) | – | – | – | – | – | – | – | (0.0) |
| Montenegro | (14.5) | *(87.5)* | (100.0) | – | (6.4) | (40.4) | (0.0) | (0.0) | (93.0) | – | (95.1) | 100.0 | (0.2) |
| North Macedonia | (100.0) | – | (86.7) | (100.0) | (6.9) | (57.2) | (1.2) | (10.0) | (50.0) | (100.0) | (88.9) | (50.0) | (1.2) |
| ***Republic of Moldova*** | *(91.8)* | *(94.2)* | *(95.7)* | *(96.0)* | ***(43.8)*** | ***(58.9)*** | *(26.0)* | *(53.1)* | *(58.0)* | *(214.7)* | ***(83.7)*** | ***(58.7)*** | ***(5.3)*** |
| *Russian Federation* | – | *(81.6)* | *(93.3)* | *(95.5)* | *(40.2)* | *(86.4)* | *(36.3)* | *(68.4)* | *(63.0)* | *(141.8)* | *(68.2)* | *(51.4)* | *(5.0)* |
| San Marino | – | – | – | – | (0.0) | – | – | – | – | – | – | – | (0.0) |
| Serbia | – | – | – | – | (5.0) | (36.6) | – | – | (75.0) | – | (85.2) | – | (1.1) |
| Serbia excluding Kosovo[1] | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Kosovo[1] | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Switzerland | (100.0) | – | (63.1) | (40.0) | (4.1) | (87.8) | (2.3) | (0.0) | (80.0) | (25.0) | (68.3) | (66.7) | (0.2) |
| *Tajikistan* | – | *(84.4)* | *(100.0)* | *(99.1)* | *(43.5)* | *(51.9)* | *(24.2)* | *(43.2)* | *(73.0)* | *(82.0)* | *(90.8)* | *(70.2)* | *(9.6)* |
| ***Turkey*** | *(86.7)* | – | *(90.1)* | *(90.7)* | *(10.5)* | ***(67.9)*** | *(2.5)* | *(11.1)* | ***(55.0)*** | ***(97.8)*** | ***(83.2)*** | ***(55.0)*** | *(0.5)* |
| *Turkmenistan* | *(100.0)* | *(37.1)* | – | – | *(31.8)* | *(68.5)* | – | – | *(72.0)* | *(100.0)* | *(82.6)* | *(45.2)* | *(10.0)* |
| ***Ukraine*** | *(95.7)* | *(95.7)* | *(97.3)* | *(97.1)* | ***(40.1)*** | ***(54.8)*** | *(28.6)* | *(41.3)* | *(61.0)* | *(114.3)* | ***(79.2)*** | ***(50.5)*** | *(9.4)* |
| United Kingdom | – | (11.4) | (84.2) | (87.5) | (6.2) | (89.0) | (2.0) | (5.3) | – | – | (77.5) | (75.0) | (0.5) |
| ***Uzbekistan*** | – | *(91.3)* | *(100.0)* | *(100.0)* | ***(36.2)*** | ***(55.1)*** | *(18.3)* | *(38.4)* | *(90.0)* | *(100.0)* | *(90.1)* | ***(67.4)*** | *(3.2)* |
| **Subtotal non-EU/EEA** | **(99.1)** | **(82.3)** | **(94.9)** | **(95.5)** | **(27.4)** | **(70.0)** | **(27.8)** | **(57.7)** | **–** | **(126.2)** | **(77.5)** | **(56.0)** | **(3.5)** |
| **Total European Region** | **(98.2)** | **(72.3)** | **(92.0)** | **(93.8)** | **(17.5)** | **(70.7)** | **(23.1)** | **(55.2)** | **–** | **(125.4)** | **(76.5)** | **(55.9)** | **(2.3)** |
| ***Subtotal 18 HPCs*** | *(99.1)* | *(80.7)* | *(94.6)* | *(95.2)* | **(32.8)** | *(69.2)* | *(26.9)* | *(56.2)* | **–** | *(125.9)* | *(78.2)* | *(55.9)* | *(4.4)* |

[1] All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

| Collaborative TB/HIV activities, and management of relevant comorbidities | | | | | Management of LTBI and preventive treatment of persons at high risk, and vaccination against TB | | 2. Bold policies and supportive systems | | | | | 3. Intensified research and innovation | Country/area |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.D.1 TB/HIV case-detection rate (%). Target = 90% | 1.D.2 HIV testing coverage (%) (G) (E). Target = 100% | 1.D.3 Percentage of HIV among all TB. Target: decrease[3] | 1.D.4 ART enrolment rate (%) among TB/HIV coinfected. Target = 100% | 1.D.5 LTBI treatment coverage among PLHIV (G). Target = 30% | 1.E.1 Contact investigation coverage (G) (E). Target = 90% | 1.E.2 LTBI treatment coverage in childhood TB contacts aged under 5 years (G) (E). Target = 90% | 2.A.1 Number of Member States that have a TB control/elimination performance publicly available (E). Target = 53 | 2.B.1 Percentage of TB-affected households that experience catastrophic costs due to TB (G) (E). Target: close to 0 | 2.C.1 Treatment coverage (%) with new TB drugs (G) (E). Target = 30% | 2.D.1 Number of Member States with functioning multistakeholder coalitions advocating for TB care and resource. Target = 53 | 2.E.1 Treatment success rate (%) of new and relapse TB cases among prisoners. Target = 85% | 3.A.1 European TB research initiative established by mid-2016. Target: established | |
| | | | | | | | | | | | | | **Non-EU/EEA** |
| (50.0) | (82.9) | (1.0) | (100.0) | – | (29.3) | – | – | – | – | – | (100.0) | – | Albania |
| – | (0.0) | – | – | – | (100.0) | – | – | – | – | – | – | – | Andorra |
| (54.2) | (93.7) | (10.6) | (0.0) | – | (89.1) | – | – | – | – | – | (0.0) | – | *Armenia* |
| (75.5) | (120.9) | (1.9) | (92.8) | – | – | – | – | – | – | – | (96.6) | – | *Azerbaijan* |
| (61.4) | (100.0) | (8.9) | (91.9) | – | (100.0) | (2.1) | – | – | – | – | (87.0) | – | *Belarus* |
| (0.0) | (4.2) | – | – | – | – | – | – | – | – | – | – | – | Bosnia and Herzegovina |
| (52.7) | (89.3) | (1.9) | (100.0) | – | – | – | – | – | – | – | (100.0) | – | *Georgia* |
| (88.2) | (100.0) | (9.5) | (100.0) | – | – | – | – | – | – | – | – | – | Israel |
| (72.2) | (98.3) | (6.5) | (96.4) | (91.2) | (100.0) | (19.7) | – | – | – | – | (87.0) | – | *Kazakhstan* |
| (59.5) | (94.5) | (3.3) | (67.2) | (47.9) | (100.0) | (13.8) | – | – | – | – | (81.1) | – | *Kyrgyzstan* |
| – | – | – | – | – | – | – | – | – | – | – | – | – | Monaco |
| – | (87.5) | (0.0) | – | – | (14.5) | – | – | – | – | – | – | – | Montenegro |
| (100.0) | (48.3) | (1.4) | (100.0) | – | (100.0) | (0.0) | – | – | – | – | (100.0) | – | North Macedonia |
| (56.2) | (95.8) | (12.9) | (77.6) | (26.9) | (91.8) | (27.0) | – | – | – | – | (78.6) | – | *Republic of Moldova* |
| (84.4) | (95.1) | (24.2) | (68.0) | – | – | – | – | – | – | – | (55.8) | – | *Russian Federation* |
| – | – | – | – | – | – | – | – | – | – | – | – | – | San Marino |
| – | – | – | – | – | – | – | – | – | – | – | – | – | Serbia |
| – | – | – | – | – | – | – | – | – | – | – | – | – | Serbia excluding Kosovo[1] |
| – | – | – | – | – | – | – | – | – | – | – | – | – | Kosovo[1] |
| – | – | – | – | – | (100.0) | (47.1) | – | – | – | – | – | – | Switzerland |
| (51.3) | (97.5) | (2.9) | (98.3) | (93.4) | – | – | – | – | – | – | (88.6) | – | *Tajikistan* |
| (55.3) | (80.0) | (1.2) | (74.7) | – | (86.7) | (49.6) | – | – | – | – | (77.7) | – | *Turkey* |
| – | – | – | – | – | (100.0) | – | – | – | – | – | – | – | *Turkmenistan* |
| (54.2) | (99.1) | (21.8) | (91.2) | (73.5) | (95.7) | (93.2) | – | – | – | – | (75.7) | – | *Ukraine* |
| – | – | – | – | – | – | – | – | – | – | – | – | – | United Kingdom |
| (54.9) | (100.0) | (3.1) | (75.7) | – | – | – | – | – | – | – | – | – | *Uzbekistan* |
| **(71.4)** | **(95.2)** | **(16.1)** | **(74.2)** | **(79.5)** | **(99.1)** | **(30.1)** | **–** | **–** | **–** | **–** | **(60.1)** | **–** | **Subtotal non-EU/EEA** |
| **(67.8)** | **(92.6)** | **(15.0)** | **(74.3)** | **(79.5)** | **(98.2)** | **(29.6)** | **–** | **–** | **–** | **–** | **(60.4)** | **–** | **Total European Region** |
| ***(71.5)*** | ***(94.8)*** | ***(15.3)*** | ***(74.3)*** | ***(79.5)*** | ***(99.1)*** | ***(30.1)*** | **–** | **–** | **–** | **–** | ***(60.4)*** | **–** | ***Subtotal 18 HPCs*** |

[1] All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

# 7. Trend tables

## Table I. Estimated tuberculosis (TB) mortality per 100 000 population, European Region, 2011–2020[a]

| Country | 2011 | | 2012 | | 2013 | | 2014 | | 2015 | | 2016 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | Rate per 100 000 | N | Rate per 100 000 | N | Rate per 100 000 | N | Rate per 100 000 | N | Rate per 100 000 | N | Rate per 100 000 |
| **EU/EEA** | | | | | | | | | | | | |
| Austria | 56 | (0.7) | 43 | (0.5) | 70 | (0.8) | 72 | (0.8) | 65 | (0.8) | 39 | (0.5) |
| Belgium | 54 | (0.5) | 61 | (0.6) | 57 | (0.5) | 42 | (0.4) | 61 | (0.4) | 32 | (0.3) |
| *Bulgaria* | *180* | *(2.4)* | *170* | *(2.4)* | *160* | *(2.1)* | *130* | *(1.8)* | *120* | *(1.8)* | *120* | *(1.6)* |
| Croatia | 66 | (1.5) | 60 | (1.4) | 54 | (1.3) | 40 | (1.0) | 46 | (1.0) | 58 | (1.4) |
| Cyprus | 4 | (0.3) | 5 | (0.4) | 1 | (0.1) | 5 | (0.4) | 2 | (0.4) | 3 | (0.2) |
| Czechia | 56 | (0.5) | 31 | (0.3) | 68 | (0.6) | 40 | (0.4) | 57 | (0.4) | 43 | (0.4) |
| Denmark | 17 | (0.3) | 23 | (0.4) | 17 | (0.3) | 13 | (0.2) | 17 | (0.2) | 23 | (0.4) |
| *Estonia* | *46* | *(3.5)* | *36* | *(2.7)* | *26* | *(1.9)* | *29* | *(2.2)* | *22* | *(2.2)* | *28* | *(2.1)* |
| Finland | 62 | (1.1) | 50 | (0.9) | 32 | (0.6) | 41 | (0.8) | 33 | (0.8) | 26 | (0.5) |
| France | 640 | (1.0) | 560 | (0.9) | 560 | (0.9) | 480 | (0.8) | 470 | (0.8) | 440 | (0.7) |
| Germany | 340 | (0.4) | 360 | (0.4) | 380 | (0.5) | 320 | (0.4) | 320 | (0.4) | 300 | (0.4) |
| Greece | 75 | (0.7) | 110 | (1.0) | 78 | (0.7) | 55 | (0.5) | 45 | (0.5) | 48 | (0.5) |
| Hungary | 120 | (1.2) | 130 | (1.3) | 95 | (1.0) | 84 | (0.9) | 100 | (0.9) | 64 | (0.7) |
| Iceland | 3 | (0.8) | 3 | (0.9) | 2 | (0.5) | 2 | (0.6) | 2 | (0.6) | 2 | (0.6) |
| Ireland | 29 | (0.6) | 26 | (0.6) | 22 | (0.5) | 24 | (0.5) | 17 | (0.5) | 17 | (0.4) |
| Italy | 390 | (0.7) | 340 | (0.6) | 270 | (0.5) | 290 | (0.5) | 340 | (0.5) | 310 | (0.5) |
| *Latvia* | *81* | *(3.9)* | *64* | *(3.1)* | *110* | *(5.2)* | *69* | *(3.4)* | *99* | *(3.4)* | *80* | *(4.1)* |
| Liechtenstein | – | – | – | – | – | – | – | – | – | – | – | – |
| *Lithuania* | *220* | *(7.0)* | *260* | *(8.5)* | *210* | *(7.1)* | *230* | *(7.8)* | *190* | *(7.8)* | *180* | *(6.2)* |
| Luxembourg | 2 | (0.4) | 1 | (0.2) | 1 | (0.2) | 1 | (0.2) | 1 | (0.2) | 1 | (0.2) |
| Malta | 3 | (0.7) | 1 | (0.2) | 3 | (0.7) | 1 | (0.2) | 2 | (0.2) | 3 | (0.7) |
| Netherlands | 37 | (0.2) | 35 | (0.2) | 40 | (0.2) | 35 | (0.2) | 37 | (0.2) | 30 | (0.2) |
| Norway | 30 | (0.6) | 22 | (0.5) | 21 | (0.4) | 13 | (0.3) | 12 | (0.3) | 18 | (0.3) |
| Poland | 690 | (1.8) | 680 | (1.8) | 580 | (1.5) | 580 | (1.5) | 580 | (1.5) | 600 | (1.6) |
| Portugal | 230 | (2.2) | 230 | (2.2) | 230 | (2.2) | 220 | (2.1) | 220 | (2.1) | 210 | (2.0) |
| *Romania* | *1 300* | *(6.5)* | *1 300* | *(6.3)* | *1 200* | *(5.7)* | *1 100* | *(5.7)* | *1 100* | *(5.7)* | *990* | *(5.0)* |
| Slovakia | 26 | (0.5) | 18 | (0.3) | 21 | (0.4) | 35 | (0.6) | 35 | (0.6) | 35 | (0.6) |
| Slovenia | 14 | (0.7) | 11 | (0.6) | 9 | (0.5) | 22 | (1.0) | 11 | (1.0) | 7 | (0.4) |
| Spain | 300 | (0.6) | 330 | (0.7) | 300 | (0.6) | 290 | (0.6) | 250 | (0.6) | 260 | (0.6) |
| Sweden | 47 | (0.5) | 40 | (0.4) | 44 | (0.5) | 30 | (0.3) | 25 | (0.3) | 26 | (0.3) |
| **Subtotal EU/EEA** | **5 100** | **(1.1)** | **5 000** | **(1.1)** | **4 700** | **(1.1)** | **4 300** | **(1.0)** | **4 300** | **(1.0)** | **4 000** | **(0.9)** |
| **Non-EU/EEA** | | | | | | | | | | | | |
| Albania | 9 | (0.3) | 9 | (0.3) | 8 | (0.3) | 8 | (0.3) | 8 | (0.3) | 8 | (0.3) |
| Andorra | 0 | (0.3) | 1 | (1.0) | 0 | (0.6) | 1 | (0.7) | 0 | (0.5) | 0 | (0.5) |
| *Armenia* | *120* | *(4.2)* | *140* | *(4.8)* | *110* | *(3.6)* | *81* | *(2.8)* | *68* | *(2.3)* | *56* | *(1.9)* |
| *Azerbaijan* | *660* | *(7.2)* | *420* | *(4.6)* | *440* | *(4.7)* | *430* | *(4.5)* | *570* | *(5.9)* | *580* | *(5.9)* |
| *Belarus* | *850* | *(9.0)* | *750* | *(7.9)* | *650* | *(6.9)* | *510* | *(5.4)* | *450* | *(4.7)* | *390* | *(4.1)* |
| Bosnia and Herzegovina | 180 | (5.0) | 170 | (4.6) | 150 | (4.2) | 130 | (3.8) | 120 | (3.6) | 120 | (3.5) |
| *Georgia* | *230* | *(5.6)* | *230* | *(5.7)* | *210* | *(5.1)* | *190* | *(4.6)* | *160* | *(4.0)* | *180* | *(4.4)* |
| Israel | 22 | (0.3) | 22 | (0.3) | 15 | (0.2) | 15 | (0.2) | 15 | (0.2) | 15 | (0.2) |
| *Kazakhstan* | *1 700* | *(10.0)* | *1 600* | *(9.7)* | *1 100* | *(6.2)* | *930* | *(5.4)* | *720* | *(4.1)* | *660* | *(3.7)* |
| *Kyrgyzstan* | *660* | *(12.0)* | *630* | *(11.0)* | *630* | *(11.0)* | *520* | *(8.9)* | *460* | *(7.8)* | *420* | *(6.9)* |
| Monaco | 0 | (0.2) | 0 | (0.1) | 0 | (0.1) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) |
| Montenegro | 1 | (0.2) | 1 | (0.2) | 1 | (0.2) | 1 | (0.2) | 1 | (0.2) | 1 | (0.2) |
| North Macedonia | 32 | (1.6) | 28 | (1.4) | 25 | (1.2) | 25 | (1.2) | 25 | (1.2) | 25 | (1.2) |
| *Republic of Moldova* | *540* | *(13.0)* | *510* | *(13.0)* | *370* | *(9.1)* | *370* | *(9.0)* | *310* | *(7.7)* | *280* | *(6.9)* |
| *Russian Federation* | *22 000* | *(15.0)* | *19 000* | *(13.0)* | *18 000* | *(12.0)* | *16 000* | *(11.0)* | *14 000* | *(9.9)* | *12 000* | *(8.4)* |
| San Marino | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) |
| Serbia | 150 | (1.7) | 160 | (1.8) | 150 | (1.6) | 120 | (1.3) | 88 | (1.0) | 100 | (1.1) |
| Switzerland | 25 | (0.3) | 23 | (0.3) | 20 | (0.3) | 13 | (0.2) | 17 | (0.2) | 25 | (0.3) |
| *Tajikistan* | *800* | *(10.0)* | *790* | *(10.0)* | *780* | *(9.7)* | *780* | *(9.5)* | *760* | *(9.0)* | *760* | *(8.8)* |
| *Turkey* | *850* | *(1.2)* | *740* | *(1.0)* | *620* | *(0.8)* | *590* | *(0.8)* | *540* | *(0.7)* | *540* | *(0.7)* |
| *Turkmenistan* | *730* | *(14.0)* | *590* | *(11.0)* | *530* | *(9.9)* | *640* | *(12.0)* | *570* | *(10.0)* | *580* | *(10.0)* |
| *Ukraine* | *7 200* | *(16.0)* | *7 100* | *(16.0)* | *6 400* | *(14.0)* | *5 800* | *(13.0)* | *5 000* | *(11.0)* | *4 500* | *(10.0)* |
| United Kingdom | 340 | (0.5) | 340 | (0.5) | 360 | (0.6) | 370 | (0.6) | 350 | (0.5) | 310 | (0.5) |
| *Uzbekistan* | *2 500* | *(8.7)* | *2 200* | *(7.5)* | *2 200* | *(7.2)* | *2 200* | *(7.1)* | *2 000* | *(6.6)* | *1 900* | *(6.1)* |
| **Subtotal non-EU/EEA** | **40 000** | **(8.8)** | **35 000** | **(7.7)** | **33 000** | **(7.2)** | **30 000** | **(6.5)** | **26 000** | **(5.6)** | **23 000** | **(4.9)** |
| **Total European Region** | **44 000** | **(4.9)** | **41 000** | **(4.5)** | **37 000** | **(4.1)** | **34 000** | **(3.7)** | **31 000** | **(3.4)** | **28 000** | **(3.0)** |
| ***Subtotal 18 HPCs*** | ***41 000*** | ***(10.5)*** | ***37 000*** | ***(9.4)*** | ***34 000*** | ***(8.6)*** | ***31 000*** | ***(7.8)*** | ***27 000*** | ***(6.7)*** | ***24 000*** | ***(6.0)*** |

*Note:* European Region comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB HPCs are presented in italics.
HPCs: high-priority countries.
[a] Excludes HIV coinfected cases.

| 2017 | | 2018 | | 2019 | | 2020 | | Mean annual % change in rate, 2016–2020 | Mean annual % change in rate, 2011–2020 | Country |
|---|---|---|---|---|---|---|---|---|---|---|
| N | Rate per 100 000 | N | Rate per 100 000 | N | Rate per 100 000 | N | Rate per 100 000 | | | |
| | | | | | | | | | | **EU/EEA** |
| 36 | (0.4) | 49 | (0.6) | 41 | (0.5) | 41 | (0.5) | 0.6 | –4.1 | Austria |
| 33 | (0.3) | 33 | (0.3) | 33 | (0.3) | 33 | (0.3) | 0.0 | –5.7 | Belgium |
| *98* | *(1.4)* | *98* | *(1.4)* | *98* | *(1.4)* | *97* | *(1.4)* | *–3.3* | *–5.8* | *Bulgaria* |
| 61 | (1.5) | 60 | (1.5) | 60 | (1.5) | 60 | (1.5) | 1.7 | 0.0 | Croatia |
| 3 | (0.3) | 5 | (0.4) | 5 | (0.4) | 5 | (0.4) | 15.4 | 1.5 | Cyprus |
| 38 | (0.4) | 39 | (0.4) | 23 | (0.2) | 23 | (0.2) | –15.4 | –9.8 | Czechia |
| 14 | (0.3) | 10 | (0.2) | 10 | (0.2) | 10 | (0.2) | –19.8 | –6.1 | Denmark |
| *23* | *(1.8)* | *13* | *(1.0)* | *16* | *(1.2)* | *16* | *(1.2)* | *–13.1* | *–11.2* | *Estonia* |
| 35 | (0.6) | 30 | (0.6) | 30 | (0.6) | 30 | (0.6) | 3.5 | –7.4 | Finland |
| 440 | (0.7) | 440 | (0.7) | 440 | (0.7) | 440 | (0.7) | 0.0 | –4.2 | France |
| 300 | (0.4) | 310 | (0.4) | 270 | (0.3) | 270 | (0.3) | –2.9 | –3.0 | Germany |
| 58 | (0.6) | 52 | (0.5) | 52 | (0.5) | 52 | (0.5) | 2.7 | –3.5 | Greece |
| 63 | (0.7) | 84 | (0.9) | 62 | (0.6) | 62 | (0.6) | –0.8 | –6.7 | Hungary |
| 2 | (0.6) | 2 | (0.6) | 2 | (0.6) | 2 | (0.6) | 1.2 | –2.8 | Iceland |
| 18 | (0.4) | 18 | (0.4) | 18 | (0.4) | 18 | (0.4) | 0.0 | –5.6 | Ireland |
| 310 | (0.5) | 310 | (0.5) | 310 | (0.5) | 310 | (0.5) | 0.0 | –2.8 | Italy |
| *75* | *(3.8)* | *65* | *(3.4)* | *64* | *(3.4)* | *64* | *(3.4)* | *–4.6* | *–1.5* | *Latvia* |
| – | – | – | – | – | – | – | – | – | – | Liechtenstein |
| *160* | *(5.7)* | *120* | *(4.3)* | *120* | *(4.4)* | *120* | *(4.4)* | *–8.2* | *–5.0* | *Lithuania* |
| 3 | (0.5) | 2 | (0.4) | 2 | (0.4) | 2 | (0.4) | 18.1 | –1.5 | Luxembourg |
| 1 | (0.2) | 1 | (0.2) | 1 | (0.2) | 1 | (0.2) | –25.1 | –12.0 | Malta |
| 24 | (0.1) | 28 | (0.2) | 28 | (0.2) | 28 | (0.2) | –2.9 | –3.5 | Netherlands |
| 18 | (0.3) | 18 | (0.3) | 18 | (0.3) | 19 | (0.3) | 0.0 | –6.1 | Norway |
| 560 | (1.5) | 570 | (1.5) | 570 | (1.5) | 570 | (1.5) | –1.6 | –2.0 | Poland |
| 200 | (2.0) | 240 | (2.4) | 240 | (2.4) | 240 | (2.4) | 4.7 | 1.0 | Portugal |
| *950* | *(4.8)* | *940* | *(4.8)* | *930* | *(4.8)* | *920* | *(4.8)* | *–1.0* | *–3.3* | *Romania* |
| 35 | (0.6) | 35 | (0.6) | 35 | (0.6) | 35 | (0.6) | 0.0 | 3.0 | Slovakia |
| 7 | (0.4) | 6 | (0.3) | 14 | (0.7) | 14 | (0.7) | 18.5 | 0.0 | Slovenia |
| 250 | (0.5) | 250 | (0.5) | 250 | (0.5) | 250 | (0.5) | –0.5 | –1.9 | Spain |
| 23 | (0.2) | 22 | (0.2) | 22 | (0.2) | 22 | (0.2) | –4.1 | –8.7 | Sweden |
| **3 800** | **(0.8)** | **3 900** | **(0.9)** | **3 800** | **(0.8)** | **3 800** | **(0.8)** | **–1.4** | **–3.4** | **Subtotal EU/EEA** |
| | | | | | | | | | | **Non-EU/EEA** |
| 8 | (0.3) | 8 | (0.3) | 8 | (0.3) | 11 | (0.4) | 8.4 | 3.6 | Albania |
| 0 | (0.1) | 0 | (0.3) | 0 | (0.6) | 1 | (1.4) | 30.0 | 17.0 | Andorra |
| *45* | *(1.5)* | *30* | *(1.0)* | *30* | *(1.0)* | *30* | *(1.0)* | *–14.8* | *–14.7* | *Armenia* |
| *580* | *(5.9)* | *590* | *(5.9)* | *590* | *(5.9)* | *740* | *(7.3)* | *5.5* | *0.2* | *Azerbaijan* |
| *320* | *(3.4)* | *260* | *(2.8)* | *260* | *(2.8)* | *260* | *(2.8)* | *–9.1* | *–12.2* | *Belarus* |
| 110 | (3.2) | 100 | (3.0) | 93 | (2.8) | 110 | (3.5) | 0.0 | –3.9 | Bosnia and Herzegovina |
| *170* | *(4.2)* | *160* | *(4.0)* | *150* | *(3.8)* | *190* | *(4.8)* | *2.2* | *–1.7* | *Georgia* |
| 13 | (0.2) | 20 | (0.2) | 20 | (0.2) | 21 | (0.2) | 7.5 | –2.1 | Israel |
| *580* | *(3.2)* | *590* | *(3.2)* | *600* | *(3.2)* | *610* | *(3.2)* | *–3.6* | *–11.9* | *Kazakhstan* |
| *380* | *(6.1)* | *360* | *(5.7)* | *290* | *(4.6)* | *300* | *(4.6)* | *–9.6* | *–10.1* | *Kyrgyzstan* |
| 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | | –100.0 | Monaco |
| 1 | (0.2) | 1 | (0.2) | 1 | (0.2) | 1 | (0.2) | 3.6 | 1.6 | Montenegro |
| 25 | (1.2) | 25 | (1.2) | 25 | (1.2) | 25 | (1.2) | 0.0 | –3.1 | North Macedonia |
| *220* | *(5.5)* | *210* | *(5.3)* | *210* | *(5.3)* | *210* | *(5.3)* | *–6.4* | *–9.5* | *Republic of Moldova* |
| *10 000* | *(7.1)* | *9 200* | *(6.3)* | *8 000* | *(5.5)* | *7 300* | *(5.0)* | *–12.2* | *–11.5* | *Russian Federation* |
| 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | | | San Marino |
| 94 | (1.1) | 94 | (1.1) | 94 | (1.1) | 93 | (1.1) | 0.0 | –4.7 | Serbia |
| 17 | (0.2) | 17 | (0.2) | 17 | (0.2) | 17 | (0.2) | –9.6 | –5.1 | Switzerland |
| 750 | (8.5) | 740 | (8.2) | 730 | (7.9) | 920 | (9.6) | 2.2 | –0.5 | *Tajikistan* |
| *500* | *(0.6)* | *460* | *(0.6)* | *420* | *(0.5)* | *420* | *(0.5)* | *–7.4* | *–9.3* | *Turkey* |
| *590* | *(10.0)* | *600* | *(10.0)* | *610* | *(10.0)* | *620* | *(10.0)* | *0.0* | *–3.7* | *Turkmenistan* |
| *4 000* | *(9.1)* | *4 000* | *(9.0)* | *3 700* | *(8.3)* | *4 100* | *(9.4)* | *–1.5* | *–5.7* | *Ukraine* |
| 310 | (0.5) | 310 | (0.5) | 310 | (0.5) | 310 | (0.5) | 0.0 | –1.6 | United Kingdom |
| *1 600* | *(5.0)* | *1 300* | *(4.0)* | *1 000* | *(3.2)* | *1 100* | *(3.2)* | *–14.9* | *–10.5* | *Uzbekistan* |
| **20 000** | **(4.2)** | **19 000** | **(4.0)** | **17 000** | **(3.5)** | **17 000** | **(3.5)** | **–7.8** | **–9.7** | **Subtotal non-EU/EEA** |
| **25 000** | **(2.7)** | **23 000** | **(2.5)** | **21 000** | **(2.3)** | **21 000** | **(2.3)** | **–7.3** | **–8.3** | **Total European Region** |
| ***21 000*** | ***(5.2)*** | ***20 000*** | ***(4.9)*** | ***18 000*** | ***(4.4)*** | ***18 000*** | ***(4.4)*** | ***–7.4*** | ***–9.3*** | ***Subtotal 18 HPCs*** |

## Table II. Estimated TB incidence per 100 000 population, European Region, 2011–2020

| Country | 2011 | | 2012 | | 2013 | | 2014 | | 2015 | | 2016 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | Rate per 100 000 | N | Rate per 100 000 | N | Rate per 100 000 | N | Rate per 100 000 | N | Rate per 100 000 | N | Rate per 100 000 |
| **EU/EEA** | | | | | | | | | | | | |
| Austria | 770 | (9.2) | 710 | (8.4) | 720 | (8.4) | 650 | (7.5) | 650 | (7.5) | 710 | (8.1) |
| Belgium | 1 100 | (10.0) | 1 000 | (9.4) | 1 000 | (9.3) | 1 000 | (9.1) | 1 100 | (9.5) | 1 100 | (10.0) |
| *Bulgaria* | *2 700* | *(37.0)* | *2 600* | *(35.0)* | *2 400* | *(33.0)* | *2 300* | *(31.0)* | *2 000* | *(28.0)* | *1 900* | *(27.0)* |
| Croatia | 710 | (17.0) | 620 | (14.0) | 590 | (14.0) | 570 | (13.0) | 560 | (13.0) | 520 | (12.0) |
| Cyprus | 59 | (5.2) | 72 | (6.4) | 47 | (4.1) | 45 | (3.9) | 72 | (6.2) | 66 | (5.6) |
| Czechia | 650 | (6.2) | 650 | (6.1) | 540 | (5.1) | 550 | (5.1) | 580 | (5.5) | 590 | (5.5) |
| Denmark | 410 | (7.4) | 390 | (7.0) | 380 | (6.7) | 340 | (5.9) | 370 | (6.5) | 340 | (5.9) |
| *Estonia* | *340* | *(25.0)* | *300* | *(23.0)* | *300* | *(23.0)* | *270* | *(21.0)* | *240* | *(18.0)* | *220* | *(16.0)* |
| Finland | 360 | (6.7) | 300 | (5.5) | 310 | (5.6) | 290 | (5.3) | 310 | (5.6) | 260 | (4.7) |
| France | 5 700 | (9.0) | 5 700 | (9.0) | 5 700 | (8.9) | 5 500 | (8.5) | 5 400 | (8.4) | 5 700 | (8.7) |
| Germany | 4 700 | (5.8) | 4 600 | (5.7) | 4 800 | (5.9) | 5 000 | (6.1) | 6 500 | (8.0) | 6 600 | (8.0) |
| Greece | 520 | (4.8) | 600 | (5.5) | 570 | (5.3) | 560 | (5.2) | 500 | (4.7) | 470 | (4.4) |
| Hungary | 1 500 | (15.0) | 1 300 | (14.0) | 1 200 | (12.0) | 920 | (9.4) | 990 | (10.0) | 850 | (8.7) |
| Iceland | 9 | (2.8) | 12 | (3.5) | 13 | (3.9) | 9 | (2.8) | 8 | (2.4) | 7 | (2.1) |
| Ireland | 450 | (9.7) | 390 | (8.5) | 410 | (8.9) | 340 | (7.4) | 340 | (7.3) | 340 | (7.2) |
| Italy | 3 900 | (6.6) | 3 600 | (5.9) | 3 500 | (5.8) | 4 000 | (6.6) | 4 000 | (6.6) | 4 300 | (7.2) |
| *Latvia* | *990* | *(47.0)* | *1 100* | *(53.0)* | *1 000* | *(49.0)* | *850* | *(42.0)* | *800* | *(40.0)* | *740* | *(37.0)* |
| Liechtenstein | – | – | – | – | – | – | – | – | – | – | – | – |
| *Lithuania* | *2 000* | *(65.0)* | *1 900* | *(62.0)* | *1 800* | *(60.0)* | *1 700* | *(57.0)* | *1 600* | *(55.0)* | *1 500* | *(54.0)* |
| Luxembourg | 29 | (5.5) | 52 | (9.7) | 44 | (8.1) | 28 | (5.0) | 34 | (6.1) | 33 | (5.8) |
| Malta | 34 | (8.3) | 48 | (11.0) | 58 | (13.0) | 52 | (12.0) | 37 | (8.5) | 58 | (13.0) |
| Netherlands | 1 100 | (6.7) | 1 100 | (6.3) | 960 | (5.7) | 940 | (5.5) | 980 | (5.8) | 1 000 | (5.9) |
| Norway | 370 | (7.4) | 390 | (7.9) | 420 | (8.2) | 350 | (6.8) | 330 | (6.3) | 320 | (6.1) |
| Poland | 9 100 | (24.0) | 8 100 | (21.0) | 8 100 | (21.0) | 7 500 | (20.0) | 7 200 | (19.0) | 7 100 | (19.0) |
| Portugal | 2 900 | (27.0) | 2 900 | (27.0) | 2 700 | (26.0) | 2 500 | (24.0) | 2 400 | (23.0) | 2 100 | (20.0) |
| *Romania* | *20 000* | *(96.0)* | *19 000* | *(92.0)* | *18 000* | *(89.0)* | *17 000* | *(85.0)* | *16 000* | *(82.0)* | *15 000* | *(74.0)* |
| Slovakia | 430 | (8.0) | 370 | (6.8) | 460 | (8.4) | 370 | (6.8) | 350 | (6.5) | 320 | (5.9) |
| Slovenia | 210 | (10.0) | 150 | (7.5) | 160 | (7.7) | 160 | (7.9) | 150 | (7.2) | 140 | (6.5) |
| Spain | 7 400 | (16.0) | 6 500 | (14.0) | 6 000 | (13.0) | 5 500 | (12.0) | 4 600 | (9.9) | 5 400 | (12.0) |
| Sweden | 620 | (6.5) | 680 | (7.1) | 700 | (7.3) | 730 | (7.5) | 900 | (9.2) | 810 | (8.2) |
| **Subtotal EU/EEA** | **69 100** | **(15.5)** | **65 100** | **(14.6)** | **62 900** | **(14.1)** | **60 000** | **(13.4)** | **59 000** | **(13.2)** | **58 500** | **(13.1)** |
| **Non-EU/EEA** | | | | | | | | | | | | |
| Albania | 490 | (17.0) | 470 | (16.0) | 550 | (19.0) | 470 | (16.0) | 480 | (17.0) | 480 | (17.0) |
| Andorra | 3 | (4.1) | 10 | (13.0) | 6 | (7.1) | 7 | (8.7) | 5 | (5.9) | 5 | (6.0) |
| *Armenia* | *1 600* | *(55.0)* | *1 500* | *(53.0)* | *1 700* | *(60.0)* | *1 700* | *(57.0)* | *1 500* | *(50.0)* | *1 300* | *(44.0)* |
| *Azerbaijan* | *11 000* | *(125.0)* | *8 000* | *(86.0)* | *7 300* | *(78.0)* | *7 200* | *(76.0)* | *6 800* | *(71.0)* | *6 400* | *(66.0)* |
| *Belarus* | *5 900* | *(62.0)* | *6 000* | *(63.0)* | *5 600* | *(59.0)* | *4 800* | *(51.0)* | *4 700* | *(50.0)* | *4 000* | *(42.0)* |
| Bosnia and Herzegovina | 1 700 | (46.0) | 1 800 | (49.0) | 1 600 | (44.0) | 1 500 | (43.0) | 1 400 | (40.0) | 1 100 | (33.0) |
| *Georgia* | *5 000* | *(122.0)* | *4 800* | *(119.0)* | *4 700* | *(116.0)* | *4 300* | *(106.0)* | *4 000* | *(99.0)* | *3 700* | *(92.0)* |
| Israel | 470 | (6.3) | 580 | (7.6) | 350 | (4.6) | 420 | (5.3) | 320 | (4.0) | 290 | (3.5) |
| *Kazakhstan* | *22 000* | *(135.0)* | *20 000* | *(122.0)* | *18 000* | *(106.0)* | *16 000* | *(91.0)* | *14 000* | *(81.0)* | *13 000* | *(73.0)* |
| *Kyrgyzstan* | *6 900* | *(125.0)* | *7 100* | *(127.0)* | *8 100* | *(142.0)* | *7 300* | *(126.0)* | *8 100* | *(136.0)* | *8 100* | *(133.0)* |
| Monaco | 0 | (1.0) | 0 | (1.1) | 0 | (1.1) | 0 | (0.0) | 0 | (0.0) | 2 | (6.0) |
| Montenegro | 130 | (20.0) | 110 | (18.0) | 140 | (22.0) | 130 | (21.0) | 92 | (15.0) | 100 | (16.0) |
| North Macedonia | 420 | (20.0) | 430 | (21.0) | 400 | (19.0) | 350 | (17.0) | 350 | (17.0) | 330 | (16.0) |
| *Republic of Moldova* | *4 900* | *(119.0)* | *5 100* | *(124.0)* | *5 200* | *(127.0)* | *4 700* | *(115.0)* | *4 100* | *(102.0)* | *4 100* | *(101.0)* |
| *Russian Federation* | *116 000* | *(81.0)* | *110 000* | *(77.0)* | *106 000* | *(73.0)* | *101 000* | *(70.0)* | *97 000* | *(67.0)* | *91 000* | *(63.0)* |
| San Marino | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) |
| Serbia | 2 500 | (28.0) | 2 200 | (24.0) | 2 400 | (27.0) | 2 100 | (23.0) | 1 900 | (21.0) | 1 700 | (19.0) |
| Switzerland | 600 | (7.6) | 480 | (6.0) | 540 | (6.6) | 490 | (5.9) | 610 | (7.4) | 660 | (7.9) |
| *Tajikistan* | *9 000* | *(117.0)* | *8 500* | *(108.0)* | *8 000* | *(100.0)* | *7 500* | *(91.0)* | *7 300* | *(86.0)* | *7 400* | *(85.0)* |
| *Turkey* | *17 000* | *(24.0)* | *16 000* | *(22.0)* | *15 000* | *(20.0)* | *15 000* | *(20.0)* | *14 000* | *(18.0)* | *14 000* | *(18.0)* |
| *Turkmenistan* | *3 400* | *(66.0)* | *3 700* | *(70.0)* | *3 800* | *(71.0)* | *3 200* | *(58.0)* | *2 700* | *(49.0)* | *2 600* | *(46.0)* |
| *Ukraine* | *48 000* | *(105.0)* | *46 000* | *(101.0)* | *44 000* | *(96.0)* | *43 000* | *(94.0)* | *41 000* | *(91.0)* | *39 000* | *(87.0)* |
| United Kingdom | 9 500 | (15.0) | 9 300 | (14.0) | 8 300 | (13.0) | 7 400 | (11.0) | 6 600 | (10.0) | 6 500 | (9.8) |
| *Uzbekistan* | *27 000* | *(93.0)* | *26 000* | *(89.0)* | *26 000* | *(86.0)* | *25 000* | *(82.0)* | *25 000* | *(79.0)* | *24 000* | *(76.0)* |
| **Subtotal non-EU/EEA** | **294 000** | **(64.8)** | **278 000** | **(60.8)** | **268 000** | **(58.2)** | **254 000** | **(54.8)** | **242 000** | **(51.8)** | **230 000** | **(48.9)** |
| **Total European Region** | **363 000** | **(40.4)** | **343 000** | **(38.0)** | **331 000** | **(36.5)** | **314 000** | **(34.5)** | **301 000** | **(32.9)** | **289 000** | **(31.5)** |
| ***Subtotal 18 HPCs*** | ***304 000*** | ***(77.8)*** | ***288 000*** | ***(73.3)*** | ***277 000*** | ***(70.0)*** | ***263 000*** | ***(66.1)*** | ***251 000*** | ***(62.7)*** | ***238 000*** | ***(59.0)*** |

*Note:* European Region comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB HPCs are presented in italics.
HPCs: high-priority countries.

| 2017 | | 2018 | | 2019 | | 2020 | | Mean annual % change in rate, 2016–2020 | Mean annual % change in rate, 2011–2020 | Country |
|---|---|---|---|---|---|---|---|---|---|---|
| N | Rate per 100 000 | N | Rate per 100 000 | N | Rate per 100 000 | N | Rate per 100 000 | | | |
| | | | | | | | | | | **EU/EEA** |
| 650 | (7.3) | 540 | (6.1) | 530 | (6.0) | 440 | (4.9) | –11.8 | –6.8 | Austria |
| 1 100 | (9.2) | 1 000 | (9.1) | 1 000 | (8.9) | 890 | (7.7) | –6.3 | –2.9 | Belgium |
| *1 800* | *(25.0)* | *1 600* | *(23.0)* | *1 400* | *(21.0)* | *1 300* | *(19.0)* | *–8.4* | *–7.1* | *Bulgaria* |
| 420 | (10.0) | 420 | (10.0) | 340 | (8.3) | 270 | (6.6) | –13.9 | –10.0 | Croatia |
| 60 | (5.1) | 59 | (4.9) | 76 | (6.3) | 69 | (5.7) | 0.4 | 1.0 | Cyprus |
| 570 | (5.4) | 500 | (4.7) | 530 | (4.9) | 410 | (3.9) | –8.2 | –5.0 | Czechia |
| 290 | (5.1) | 310 | (5.4) | 300 | (5.2) | 280 | (4.9) | –4.5 | –4.5 | Denmark |
| *200* | *(15.0)* | *170* | *(13.0)* | *170* | *(13.0)* | *140* | *(10.0)* | *–11.1* | *–9.7* | *Estonia* |
| 270 | (4.9) | 260 | (4.8) | 260 | (4.7) | 200 | (3.6) | –6.4 | –6.7 | Finland |
| 5 900 | (9.0) | 5 800 | (8.9) | 5 900 | (9.0) | 5 300 | (8.2) | –1.5 | –1.0 | France |
| 6 200 | (7.4) | 6 100 | (7.3) | 5 300 | (6.4) | 4 600 | (5.5) | –8.9 | –0.6 | Germany |
| 500 | (4.7) | 470 | (4.4) | 500 | (4.8) | 470 | (4.5) | 0.6 | –0.7 | Greece |
| 750 | (7.7) | 690 | (7.1) | 610 | (6.3) | 440 | (4.6) | –14.7 | –12.3 | Hungary |
| 15 | (4.5) | 9 | (2.7) | 15 | (4.4) | 10 | (2.8) | 7.5 | 0.0 | Iceland |
| 350 | (7.3) | 340 | (7.0) | 280 | (5.8) | 260 | (5.3) | –7.4 | –6.5 | Ireland |
| 4 400 | (7.3) | 4 300 | (7.2) | 3 700 | (6.0) | 4 000 | (6.6) | –2.2 | 0.0 | Italy |
| *620* | *(32.0)* | *560* | *(29.0)* | *490* | *(26.0)* | *430* | *(23.0)* | *–11.2* | *–7.6* | *Latvia* |
| – | – | – | – | – | – | – | – | – | – | Liechtenstein |
| *1 500* | *(51.0)* | *1 200* | *(44.0)* | *1 200* | *(42.0)* | *790* | *(29.0)* | *–14.4* | *–8.6* | *Lithuania* |
| 37 | (6.2) | 48 | (8.0) | 55 | (9.0) | 37 | (5.9) | 0.4 | 0.8 | Luxembourg |
| 48 | (11.0) | 63 | (14.0) | 110 | (26.0) | 160 | (36.0) | 29.0 | 17.7 | Malta |
| 890 | (5.2) | 910 | (5.3) | 860 | (5.0) | 710 | (4.1) | –8.7 | –5.3 | Netherlands |
| 270 | (5.1) | 220 | (4.1) | 180 | (3.3) | 170 | (3.1) | –15.6 | –9.2 | Norway |
| 6 400 | (17.0) | 6 000 | (16.0) | 5 700 | (15.0) | 3 600 | (9.6) | –15.7 | –9.7 | Poland |
| 2 000 | (20.0) | 2 100 | (21.0) | 2 000 | (19.0) | 1 600 | (16.0) | –5.4 | –5.6 | Portugal |
| *14 000* | *(72.0)* | *13 000* | *(68.0)* | *13 000* | *(66.0)* | *12 000* | *(64.0)* | *–3.6* | *–4.4* | *Romania* |
| 260 | (4.8) | 310 | (5.8) | 250 | (4.5) | 180 | (3.2) | –14.2 | –9.7 | Slovakia |
| 130 | (6.2) | 110 | (5.4) | 110 | (5.4) | 86 | (4.1) | –10.9 | –9.4 | Slovenia |
| 5 000 | (11.0) | 5 200 | (11.0) | 4 700 | (10.0) | 3 400 | (7.3) | –11.7 | –8.3 | Spain |
| 560 | (5.7) | 550 | (5.5) | 550 | (5.5) | 360 | (3.6) | –18.6 | –6.4 | Sweden |
| **55 200** | **(12.3)** | **52 800** | **(11.7)** | **50 100** | **(11.1)** | **42 600** | **(9.5)** | **–7.8** | **–5.4** | **Subtotal EU/EEA** |
| | | | | | | | | | | **Non-EU/EEA** |
| 580 | (20.0) | 510 | (18.0) | 470 | (16.0) | 430 | (15.0) | –3.1 | –1.4 | Albania |
| 1 | (1.5) | 2 | (3.0) | 6 | (7.5) | 2 | (3.0) | –15.9 | –3.4 | Andorra |
| *1 100* | *(36.0)* | *920* | *(31.0)* | *780* | *(26.0)* | *680* | *(23.0)* | *–15.0* | *–9.2* | *Armenia* |
| *6 500* | *(66.0)* | *6 300* | *(63.0)* | *6 000* | *(60.0)* | *5 900* | *(58.0)* | *–3.2* | *–8.2* | *Azerbaijan* |
| *3 500* | *(37.0)* | *2 900* | *(31.0)* | *2 800* | *(29.0)* | *2 500* | *(26.0)* | *–11.3* | *–9.2* | *Belarus* |
| 960 | (29.0) | 830 | (25.0) | 900 | (27.0) | 850 | (26.0) | –5.8 | –6.1 | Bosnia and Herzegovina |
| *3 400* | *(86.0)* | *3 200* | *(80.0)* | *3 000* | *(74.0)* | *2 800* | *(70.0)* | *–6.6* | *–6.0* | *Georgia* |
| 270 | (3.3) | 340 | (4.0) | 250 | (2.9) | 180 | (2.1) | –12.0 | –11.5 | Israel |
| *12 000* | *(69.0)* | *12 000* | *(67.0)* | *13 000* | *(68.0)* | *13 000* | *(69.0)* | *–1.4* | *–7.2* | *Kazakhstan* |
| *7 700* | *(124.0)* | *7 300* | *(116.0)* | *7 100* | *(110.0)* | *6 900* | *(105.0)* | *–5.7* | *–1.9* | *Kyrgyzstan* |
| 0 | (0.0) | 1 | (3.0) | 0 | (0.0) | 0 | (0.0) | 0.0 | –100.0 | Monaco |
| 86 | (14.0) | 97 | (15.0) | 92 | (15.0) | 99 | (16.0) | 0.0 | –2.4 | Montenegro |
| 270 | (13.0) | 270 | (13.0) | 250 | (12.0) | 250 | (12.0) | –6.9 | –5.5 | North Macedonia |
| *3 900* | *(95.0)* | *3 500* | *(86.0)* | *3 200* | *(80.0)* | *3 000* | *(74.0)* | *–7.5* | *–5.1* | *Republic of Moldova* |
| *86 000* | *(59.0)* | *79 000* | *(54.0)* | *73 000* | *(50.0)* | *68 000* | *(46.0)* | *–7.6* | *–6.1* | *Russian Federation* |
| 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0.0 | 0.0 | San Marino |
| 1 700 | (19.0) | 1 500 | (17.0) | 1 300 | (14.0) | 1 200 | (13.0) | –9.1 | –8.2 | Serbia |
| 610 | (7.2) | 540 | (6.4) | 460 | (5.4) | 400 | (4.7) | –12.2 | –5.2 | Switzerland |
| *7 500* | *(85.0)* | *7 600* | *(84.0)* | *7 700* | *(83.0)* | *8 000* | *(84.0)* | *–0.3* | *–3.6* | *Tajikistan* |
| *14 000* | *(17.0)* | *13 000* | *(16.0)* | *13 000* | *(16.0)* | *13 000* | *(15.0)* | *–4.5* | *–5.1* | *Turkey* |
| *2 500* | *(43.0)* | *2 700* | *(46.0)* | *2 600* | *(45.0)* | *2 800* | *(47.0)* | *0.5* | *–3.7* | *Turkmenistan* |
| *37 000* | *(84.0)* | *36 000* | *(80.0)* | *34 000* | *(77.0)* | *32 000* | *(73.0)* | *–4.3* | *–4.0* | *Ukraine* |
| 5 900 | (8.8) | 5 400 | (8.0) | 5 400 | (8.0) | 4 700 | (6.9) | –8.4 | –8.3 | United Kingdom |
| *23 000* | *(73.0)* | *23 000* | *(70.0)* | *22 000* | *(67.0)* | *22 000* | *(66.0)* | *–3.5* | *–3.7* | *Uzbekistan* |
| **218 000** | **(46.0)** | **207 000** | **(43.4)** | **197 000** | **(41.1)** | **189 000** | **(39.2)** | **–5.4** | **–5.4** | **Subtotal non-EU/EEA** |
| **273 000** | **(29.6)** | **260 000** | **(28.1)** | **247 000** | **(26.6)** | **232 000** | **(24.9)** | **–5.7** | **–5.2** | **Total European Region** |
| ***226 000*** | ***(55.7)*** | ***214 000*** | ***(52.5)*** | ***204 000*** | ***(49.8)*** | ***195 000*** | ***(47.4)*** | ***–5.3*** | ***–5.4*** | ***Subtotal 18 HPCs*** |

**Table III.** New and relapse TB cases,a notification rates per 100 000 population and mean annual change in rates, European Region, 2011–2020

| Country | 2011 | | 2012 | | 2013 | | 2014 | | 2015 | | 2016 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | Rate per 100 000 | N | Rate per 100 000 | N | Rate per 100 000 | N | Rate per 100 000 | N | Rate per 100 000 | N | Rate per 100 000 |
| **EU/EEA** | | | | | | | | | | | | |
| Austria | 671 | (8.0) | 623 | (7.4) | 628 | (7.4) | 567 | (6.7) | 564 | (6.6) | 619 | (7.1) |
| Belgium | 963 | (8.8) | 898 | (8.1) | 890 | (8.0) | 878 | (7.9) | 919 | (8.2) | 982 | (8.7) |
| *Bulgaria* | *2 313* | *(31.4)* | *2 212* | *(30.2)* | *1 930* | *(26.5)* | *1 825* | *(25.2)* | *1 619* | *(22.5)* | *1 525* | *(21.3)* |
| Croatia | - | - | 539 | (12.6) | 510 | (12.0) | 498 | (11.7) | 485 | (11.5) | 452 | (10.8) |
| Cyprus | 52 | (6.2) | 65 | (7.5) | 41 | (4.7) | 39 | (4.5) | 63 | (7.4) | 57 | (6.7) |
| Czechia | 568 | (5.4) | 557 | (5.3) | 468 | (4.5) | 472 | (4.5) | 507 | (4.8) | 511 | (4.8) |
| Denmark | 359 | (6.5) | 342 | (6.1) | 330 | (5.9) | 293 | (5.2) | 320 | (5.7) | 292 | (5.1) |
| *Estonia* | *316* | *(23.8)* | *269* | *(20.3)* | *265* | *(20.1)* | *237* | *(18.0)* | *206* | *(15.7)* | *188* | *(14.3)* |
| Finland | 318 | (5.9) | 269 | (5.0) | 263 | (4.8) | 257 | (4.7) | 270 | (4.9) | 223 | (4.1) |
| France | 5 000 | (7.7) | 5 003 | (7.7) | 4 947 | (7.5) | 4 888 | (7.4) | 4 457 | (6.7) | 5 446 | (8.2) |
| Germany | 4 176 | (5.2) | 4 038 | (5.0) | 4 094 | (5.1) | 4 350 | (5.4) | 5 626 | (6.9) | 5 739 | (7.0) |
| Greece | 454 | (4.1) | 520 | (4.7) | 494 | (4.5) | 484 | (4.4) | 438 | (4.0) | 417 | (3.9) |
| Hungary | 1 445 | (14.5) | 1 182 | (11.9) | 1 040 | (10.5) | 799 | (8.1) | 858 | (8.7) | 737 | (7.5) |
| Iceland | 9 | (2.8) | 11 | (3.4) | 11 | (3.4) | 9 | (2.8) | 7 | (2.1) | 6 | (1.8) |
| Ireland | 387 | (8.5) | 333 | (7.3) | 350 | (7.6) | 290 | (6.3) | 266 | (5.7) | 290 | (6.1) |
| Italy | 4 140 | (7.0) | 3 512 | (5.9) | 3 435 | (5.8) | 3 663 | (6.0) | 3 476 | (5.7) | 3 778 | (6.2) |
| *Latvia* | *871* | *(42.0)* | *971* | *(47.5)* | *872* | *(43.1)* | *738* | *(36.9)* | *697* | *(35.1)* | *641* | *(32.6)* |
| Liechtenstein | 1 | (2.8) | 2 | (5.5) | 0 | (0.0) | 0 | (0.0) | 1 | (2.7) | 2 | (5.3) |
| *Lithuania* | *1 751* | *(57.4)* | *1 640* | *(54.6)* | *1 573* | *(52.9)* | *1 481* | *(50.3)* | *1 395* | *(47.8)* | *1 347* | *(46.6)* |
| Luxembourg | 25 | (4.9) | 45 | (8.6) | 38 | (7.1) | 24 | (4.4) | 30 | (5.3) | 29 | (5.0) |
| Malta | 32 | (7.7) | 41 | (9.8) | 50 | (11.8) | 45 | (10.5) | 32 | (7.3) | 50 | (11.1) |
| Netherlands | 985 | (5.9) | 934 | (5.6) | 828 | (4.9) | 805 | (4.8) | 846 | (5.0) | 875 | (5.2) |
| Norway | 320 | (6.5) | 340 | (6.8) | 354 | (7.0) | 299 | (5.9) | 282 | (5.5) | 273 | (5.2) |
| Poland | 8 175 | (21.5) | 7 285 | (19.1) | 7 043 | (18.5) | 6 539 | (17.2) | 6 237 | (16.4) | 6 143 | (16.2) |
| Portugal | 2 551 | (24.1) | 2 558 | (24.3) | 2 356 | (22.5) | 2 223 | (21.3) | 2 154 | (20.8) | 1 891 | (18.3) |
| *Romania* | *17 672* | *(87.5)* | *16 764* | *(83.4)* | *15 505* | *(77.4)* | *14 834* | *(74.4)* | *14 215* | *(71.5)* | *12 774* | *(64.6)* |
| Slovakia | 397 | (7.4) | 344 | (6.4) | 398 | (7.4) | 320 | (5.9) | 308 | (5.7) | 281 | (5.2) |
| Slovenia | 190 | (9.3) | 138 | (6.7) | 139 | (6.8) | 142 | (6.9) | 129 | (6.3) | 118 | (5.7) |
| Spain | 6 410 | (13.7) | 5 738 | (12.3) | 5 328 | (11.4) | 4 685 | (10.1) | 4 818 | (10.4) | 3 973 | (8.6) |
| Sweden | 542 | (5.8) | 591 | (6.2) | 603 | (6.3) | 625 | (6.5) | 776 | (8.0) | 691 | (7.0) |
| **Subtotal EU/EEA** | **61 093** | **(13.7)** | **57 764** | **(13.0)** | **54 783** | **(12.3)** | **52 309** | **(11.7)** | **52 001** | **(11.6)** | **50 350** | **(11.2)** |
| **Non-EU/EEA** | | | | | | | | | | | | |
| Albania | 422 | (14.4) | 408 | (14.0) | 474 | (16.3) | 408 | (14.1) | 415 | (14.4) | 415 | (14.4) |
| Andorra | 3 | (3.6) | 9 | (10.9) | 5 | (6.2) | 6 | (7.6) | 4 | (5.1) | 4 | (5.2) |
| *Armenia* | *1 261* | *(43.8)* | *1 213* | *(42.1)* | *1 397* | *(48.2)* | *1 329* | *(45.6)* | *1 171* | *(40.0)* | *1 027* | *(35.0)* |
| *Azerbaijan* | *9 146* | *(100.0)* | *6 363* | *(68.7)* | *5 860* | *(62.4)* | *5 788* | *(60.9)* | *5 456* | *(56.7)* | *5 159* | *(53.0)* |
| *Belarus* | *4 697* | *(49.9)* | *4 783* | *(50.8)* | *4 470* | *(47.4)* | *3 858* | *(40.9)* | *3 765* | *(39.9)* | *3 211* | *(34.0)* |
| Bosnia and Herzegovina | 1 360 | (37.1) | 1 409 | (39.1) | 1 261 | (35.6) | 1 196 | (34.3) | 1 092 | (31.8) | 907 | (26.8) |
| *Georgia* | *4 547* | *(111.4)* | *3 940* | *(96.9)* | *3 434* | *(84.8)* | *3 200* | *(79.3)* | *3 152* | *(78.3)* | *2 983* | *(74.3)* |
| Israel | 412 | (5.5) | 506 | (6.6) | 308 | (4.0) | 361 | (4.6) | 280 | (3.5) | 250 | (3.1) |
| *Kazakhstan* | *25 074* | *(152.0)* | *18 006* | *(107.5)* | *18 958* | *(111.3)* | *15 244* | *(88.1)* | *14 006* | *(79.7)* | *12 322* | *(69.1)* |
| *Kyrgyzstan* | *5 980* | *(108.4)* | *6 195* | *(110.2)* | *7 075* | *(123.4)* | *6 390* | *(109.3)* | *7 027* | *(117.9)* | *7 026* | *(115.7)* |
| Monaco | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 2 | (5.3) |
| Montenegro | 110 | (17.6) | 98 | (15.7) | 119 | (19.0) | 113 | (18.0) | 80 | (12.8) | 87 | (13.9) |
| North Macedonia | 335 | (16.2) | 346 | (16.7) | 318 | (15.3) | 284 | (13.7) | 282 | (13.6) | 263 | (12.6) |
| *Republic of Moldova* | *4 233* | *(103.8)* | *4 409* | *(108.2)* | *4 485* | *(110.1)* | *4 058* | *(99.6)* | *3 608* | *(88.6)* | *3 571* | *(87.8)* |
| *Russian Federation* | *112 910* | *(78.6)* | *105 753* | *(73.4)* | *106 053* | *(73.5)* | *102 340* | *(70.7)* | *99 590* | *(68.7)* | *92 407* | *(63.6)* |
| San Marino | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | 0 | (0.0) |
| Serbia | 2 174 | (24.3) | 1 872 | (20.9) | 2 106 | (23.6) | 1 818 | (20.4) | 1 649 | (18.6) | 1 472 | (16.6) |
| Serbia excluding Kosovo[1] | 1 320 | (17.9) | 1 168 | (16.2) | 1 184 | (16.2) | 984 | (13.8) | 879 | 12.4 | 755 | 10.7 |
| Kosovo[1] | 854 | (48.6) | 704 | (38.7) | 922 | (54.0) | 834 | (44.8) | 770 | 43.5 | 717 | 40.4 |
| Switzerland | 524 | (6.6) | 416 | (5.2) | 466 | (5.7) | 423 | (5.2) | 531 | (6.4) | 573 | (6.8) |
| *Tajikistan* | *7 035* | *(91.4)* | *6 508* | *(82.6)* | *5 576* | *(69.2)* | *5 807* | *(70.4)* | *5 894* | *(69.7)* | *5 965* | *(68.9)* |
| *Turkey* | *15 054* | *(20.5)* | *14 139* | *(18.9)* | *13 170* | *(17.3)* | *13 108* | *(17.0)* | *12 550* | *(16.0)* | *12 186* | *(15.3)* |
| Turkmenistan | 2 731 | (52.8) | 2 937 | (55.8) | 3 047 | (56.8) | 2 537 | (46.4) | 2 191 | (39.4) | 2 068 | (36.5) |
| *Ukraine* | *34 237* | *(75.0)* | *40 990* | *(90.2)* | *36 510* | *(80.6)* | *31 701* | *(70.3)* | *30 151* | *(67.1)* | *29 052* | *(65.0)* |
| United Kingdom | 8 407 | (13.1) | 8 269 | (12.8) | 7 384 | (11.4) | 6 622 | (10.1) | 5 854 | (8.9) | 5 793 | (8.7) |
| *Uzbekistan* | *15 345* | *(53.0)* | *14 832* | *(50.4)* | *20 812* | *(69.5)* | *18 345* | *(60.3)* | *16 315* | *(52.7)* | *16 050* | *(51.0)* |
| **Subtotal non-EU/EEA** | **255 997** | **(56.4)** | **243 401** | **(53.2)** | **243 288** | **(52.8)** | **224 936** | **(48.5)** | **215 063** | **(46.0)** | **202 793** | **(43.1)** |
| **Total European Region** | **317 090** | **(35.3)** | **301 165** | **(33.4)** | **298 071** | **(32.9)** | **277 245** | **(30.4)** | **267 064** | **(29.2)** | **253 143** | **(27.6)** |
| ***Subtotal 18 HPCs*** | ***265 173*** | ***(67.9)*** | ***251 924*** | ***(64.1)*** | ***250 992*** | ***(63.5)*** | ***232 820*** | ***(58.5)*** | ***223 008*** | ***(55.7)*** | ***209 502*** | ***(52.0)*** |

*Note:* European Region comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB HPCs are presented in italics.
HPCs: high-priority countries.
[1] All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

| 2017 | | 2018 | | 2019 | | 2020 | | Mean annual % change in rate, 2016–2020 | Mean annual % change in rate, 2011–2020 | Country |
|---|---|---|---|---|---|---|---|---|---|---|
| N | Rate per 100 000 | N | Rate per 100 000 | N | Rate per 100 000 | N | Rate per 100 000 | | | |
| | | | | | | | | | | **EU/EEA** |
| 561 | (6.4) | 470 | (5.3) | 464 | (5.2) | 382 | (4.3) | –11.9 | –6.7 | Austria |
| 911 | (8.0) | 910 | (8.0) | 890 | (7.8) | 778 | (6.8) | –6.1 | –2.8 | Belgium |
| *1 408* | *(19.8)* | *1 290* | *(18.3)* | *1 288* | *(18.4)* | *887* | *(12.8)* | *–12.0* | *–9.5* | *Bulgaria* |
| 372 | (9.0) | 364 | (8.9) | 297 | (7.3) | 177 | (4.4) | –20.3 | –9.5 | Croatia |
| 52 | (6.1) | 51 | (5.9) | 66 | (7.5) | 34 | (3.8) | –13.1 | –5.2 | Cyprus |
| 495 | (4.7) | 434 | (4.1) | 455 | (4.3) | 360 | (3.4) | –8.7 | –5.1 | Czechia |
| 253 | (4.4) | 270 | (4.7) | 260 | (4.5) | 205 | (3.5) | –8.9 | –6.5 | Denmark |
| *172* | *(13.1)* | *145* | *(11.0)* | *147* | *(11.1)* | *120* | *(9.0)* | *–10.8* | *–10.2* | *Estonia* |
| 242 | (4.4) | 226 | (4.1) | 225 | (4.1) | 174 | (3.1) | –6.2 | –6.8 | Finland |
| 5 015 | (7.5) | 4 779 | (7.1) | 4 869 | (7.2) | 4 398 | (6.5) | –5.4 | –1.8 | France |
| 5 371 | (6.5) | 5 326 | (6.4) | 4 648 | (5.6) | 4 010 | (4.8) | –8.8 | –0.8 | Germany |
| 434 | (4.0) | 406 | (3.8) | 434 | (4.0) | 380 | (3.5) | –2.1 | –1.6 | Greece |
| 650 | (6.6) | 602 | (6.2) | 528 | (5.4) | 384 | (3.9) | –14.9 | –13.5 | Hungary |
| 13 | (3.8) | 8 | (2.3) | 13 | (3.6) | 12 | (3.3) | 16.3 | 1.7 | Iceland |
| 283 | (5.9) | 290 | (6.0) | 247 | (5.0) | 229 | (4.6) | –6.9 | –6.5 | Ireland |
| 3 828 | (6.3) | 3 777 | (6.2) | 3 185 | (5.3) | 2 163 | (3.6) | –12.6 | –7.0 | Italy |
| *543* | *(27.8)* | – | – | – | – | – | – | – | – | *Latvia* |
| 1 | (2.6) | 1 | (2.6) | – | – | 2 | (5.2) | –0.7 | 7.2 | Liechtenstein |
| *1 268* | *(44.5)* | *1 063* | *(37.8)* | *1 006* | *(36.0)* | *688* | *(24.6)* | *–14.8* | *–9.0* | *Lithuania* |
| 32 | (5.4) | 42 | (7.0) | 48 | (7.8) | 32 | (5.1) | 0.4 | 0.5 | Luxembourg |
| 42 | (9.1) | 55 | (11.6) | 98 | (19.9) | 140 | (27.2) | 25.1 | 15.0 | Malta |
| 772 | (4.5) | 780 | (4.5) | 739 | (4.3) | 614 | (3.5) | –9.0 | –5.6 | Netherlands |
| 237 | (4.5) | 188 | (3.6) | 150 | (2.8) | 144 | (2.7) | –15.4 | –9.4 | Norway |
| 5 535 | (14.6) | 5 196 | (13.7) | 4 983 | (13.1) | 3 150 | (8.3) | –15.4 | –10.0 | Poland |
| 1 870 | (18.1) | 1 887 | (18.3) | 1 872 | (18.2) | 1 402 | (13.6) | –7.1 | –6.2 | Portugal |
| *12 303* | *(62.6)* | *11 581* | *(59.3)* | *11 070* | *(57.0)* | *7 193* | *(37.2)* | *–12.9* | *–9.1* | *Romania* |
| 228 | (4.2) | 273 | (5.0) | 214 | (3.9) | 153 | (2.8) | –14.2 | –10.2 | Slovakia |
| 112 | (5.4) | 98 | (4.7) | 98 | (4.7) | 75 | (3.6) | –11.1 | –10.0 | Slovenia |
| 4 522 | (9.7) | 4 614 | (9.9) | 4 406 | (9.4) | 2 949 | (6.2) | –7.6 | –8.4 | Spain |
| 487 | (4.9) | 474 | (4.7) | 478 | (4.7) | 316 | (3.1) | –18.7 | –6.8 | Sweden |
| **48 012** | **(10.6)** | **45 600** | **(10.1)** | **43 178** | **(9.6)** | **31 551** | **(7.0)** | **–11.1** | **–7.2** | **Subtotal EU/EEA** |
| | | | | | | | | | | **Non-EU/EEA** |
| 503 | (17.4) | 440 | (15.3) | 412 | (14.3) | 240 | (8.3) | –12.7 | –5.9 | Albania |
| 1 | (1.3) | 2 | (2.6) | 5 | (6.5) | 2 | (2.6) | –15.9 | –3.5 | Andorra |
| *841* | *(28.6)* | *734* | *(24.9)* | *621* | *(21.0)* | *394* | *(13.3)* | *–21.5* | *–12.4* | *Armenia* |
| *5 231* | *(53.1)* | *5 038* | *(50.6)* | *4 823* | *(48.0)* | *3 683* | *(36.3)* | *–9.0* | *–10.6* | *Azerbaijan* |
| *2 781* | *(29.4)* | *2 359* | *(25.0)* | *2 207* | *(23.3)* | *1 514* | *(16.0)* | *–17.1* | *–11.9* | *Belarus* |
| 766 | (22.9) | 666 | (20.0) | 580 | (17.6) | 357 | (10.9) | –20.2 | –12.8 | Bosnia and Herzegovina |
| *2 597* | *(64.8)* | *2 316* | *(57.9)* | *2 169* | *(54.3)* | *1 671* | *(41.9)* | *–13.3* | *–10.3* | *Georgia* |
| 234 | (2.8) | 292 | (3.5) | 217 | (2.5) | 158 | (1.8) | –12.3 | –11.5 | Israel |
| *12 449* | *(68.9)* | *12 832* | *(70.0)* | *12 501* | *(67.4)* | *9 603* | *(51.1)* | *–7.2* | *–11.4* | *Kazakhstan* |
| *6 687* | *(108.0)* | *6 338* | *(100.5)* | *6 138* | *(95.7)* | *4 241* | *(65.0)* | *–13.4* | *–5.5* | *Kyrgyzstan* |
| – | – | 1 | (2.6) | – | – | 0 | (0.0) | –100.0 | – | Monaco |
| 75 | (12.0) | 84 | (13.4) | 80 | (12.7) | 40 | (6.4) | –17.7 | –10.7 | Montenegro |
| 216 | (10.4) | 217 | (10.4) | 199 | (9.6) | 143 | (6.9) | –14.2 | –9.1 | North Macedonia |
| *3 358* | *(82.7)* | *3 022* | *(74.6)* | *2 809* | *(69.5)* | *1 767* | *(43.8)* | *–16.0* | *–9.1* | *Republic of Moldova* |
| *84 510* | *(58.1)* | *78 258* | *(53.7)* | *73 328* | *(50.3)* | *58 723* | *(40.2)* | *–10.8* | *–7.2* | *Russian Federation* |
| 0 | (0.0) | 0 | (0.0) | 0 | (0.0) | – | – | – | 0.0 | San Marino |
| 1 450 | (16.4) | 1 330 | (15.1) | 1 106 | (12.6) | 439 | (5.0) | –25.9 | –16.0 | Serbia |
| 738 | 10.5 | 641 | 9.1 | 501 | 7.2 | – | – | – | – | Serbia excluding Kosovo[1] |
| 712 | 39.9 | 689 | 38.5 | 605 | 33.8 | 439 | (23.4) | –12.7 | –7.8 | Kosovo[1] |
| 529 | (6.3) | 473 | (5.5) | 402 | (4.7) | 351 | (4.1) | –12.2 | –5.3 | Switzerland |
| *5 895* | *(66.4)* | *5 726* | *(62.9)* | *5 755* | *(61.7)* | *4 148* | *(43.5)* | *–10.9* | *–7.9* | *Tajikistan* |
| *11 821* | *(14.6)* | *11 576* | *(14.1)* | *11 247* | *(13.5)* | *8 830* | *(10.5)* | *–9.0* | *–7.2* | *Turkey* |
| 1 968 | (34.2) | 2 157 | (36.9) | 2 117 | (35.6) | 1 918 | (31.8) | –3.4 | –5.5 | Turkmenistan |
| *27 229* | *(61.2)* | *26 512* | *(59.9)* | *25 379* | *(57.7)* | *17 533* | *(40.1)* | *–11.4* | *–6.7* | *Ukraine* |
| 5 248 | (7.9) | 4 775 | (7.1) | 4 803 | (7.1) | 4 185 | (6.2) | –8.4 | –8.1 | United Kingdom |
| *16 842* | *(52.7)* | *16 413* | *(50.5)* | *16 272* | *(49.3)* | *12 111* | *(36.2)* | *–8.2* | *–4.1* | *Uzbekistan* |
| **191 231** | **(40.4)** | **181 561** | **(38.1)** | **173 170** | **(36.1)** | **132 051** | **(27.4)** | **–10.7** | **–7.7** | **Subtotal non-EU/EEA** |
| **239 243** | **(25.9)** | **227 161** | **(24.5)** | **216 348** | **(23.3)** | **163 602** | **(17.5)** | **–10.7** | **–7.5** | **Total European Region** |
| ***197 903*** | ***(48.8)*** | ***187360*** | ***(46.0)*** | ***178 877*** | ***(43.7)*** | ***135 024*** | ***(32.8)*** | ***-10.9*** | ***-7.8*** | ***Subtotal 18 HPCs*** |

## Table IV. TB cases in children under 15 years, European Region, 2016–2020[a]

| Country/area | 2016 | | | 2017 | | | 2018 | | | 2019 | | | 2020 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | Percentage among all TB | Rate per 100 000 | N | Percentage among all TB | Rate per 100 000 | N | Percentage among all TB | Rate per 100 000 | N | Percentage among all TB | Rate per 100 000 | N | Percentage among all TB | Rate per 100 000 |
| **EU/EEA** | | | | | | | | | | | | | | | |
| Austria | 30 | (4.7) | 2.4 | 21 | (3.7) | 1.7 | 28 | (5.8) | 2.2 | 22 | (4.6) | 1.7 | 12 | (3.1) | 0.9 |
| Belgium | 59 | (5.7) | 3.1 | 68 | (7.0) | 3.5 | 60 | (6.1) | 3.1 | 50 | (5.2) | 2.6 | 48 | (5.8) | 2.5 |
| *Bulgaria* | *126* | *(7.9)* | *12.6* | *108* | *(7.4)* | *10.8* | *72* | *(5.3)* | *7.2* | *59* | *(4.4)* | *5.9* | *24* | *(2.6)* | *2.4* |
| Croatia | 5 | (1.1) | 0.8 | 3 | (0.8) | 0.5 | 8 | (2.2) | 1.3 | 1 | (0.3) | 0.2 | 2 | (1.1) | 0.3 |
| Cyprus | 0 | (0.0) | 0.0 | 3 | (5.7) | 2.2 | 1 | (1.9) | 0.7 | 2 | (2.9) | 1.4 | 0 | (0.0) | 0.0 |
| Czechia | 10 | (1.9) | 0.6 | 6 | (1.2) | 0.4 | 5 | (1.1) | 0.3 | 4 | (0.9) | 0.2 | 2 | (0.5) | 0.1 |
| Denmark | 18 | (5.5) | 1.9 | 12 | (4.4) | 1.2 | 11 | (3.8) | 1.1 | 16 | (5.7) | 1.7 | 10 | (4.6) | 1.0 |
| *Estonia* | *4* | *(2.1)* | *1.9* | *0* | *(0.0)* | *0.0* | *2* | *(1.4)* | *0.9* | *1* | *(0.7)* | *0.5* | *1* | *(0.8)* | *0.5* |
| Finland | 6 | (2.6) | 0.7 | 6 | (2.4) | 0.7 | 2 | (0.9) | 0.2 | 9 | (4.0) | 1.0 | 5 | (2.9) | 0.6 |
| France | 1 153 | (20.1) | 9.4 | 343 | (6.8) | 2.8 | 244 | (4.8) | 2.0 | 226 | (4.4) | 1.9 | 196 | (4.3) | 1.6 |
| Germany | 226 | (3.8) | 2.1 | 242 | (4.4) | 2.2 | 213 | (3.9) | 1.9 | 195 | (4.1) | 1.7 | 163 | (3.9) | 1.4 |
| Greece | 21 | (4.8) | 1.3 | 11 | (2.4) | 0.7 | 6 | (1.4) | 0.4 | 17 | (3.7) | 1.1 | 17 | (4.3) | 1.1 |
| Hungary | 6 | (0.8) | 0.4 | 6 | (0.9) | 0.4 | 3 | (0.5) | 0.2 | 10 | (1.8) | 0.7 | 5 | (1.2) | 0.4 |
| Iceland | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 2 | (16.7) | 2.9 |
| Ireland | 17 | (5.4) | 1.7 | 6 | (2.0) | 0.6 | 7 | (2.3) | 0.7 | 10 | (3.8) | 1.0 | 6 | (2.5) | 0.6 |
| Italy | 158 | (3.9) | 1.9 | 168 | (4.3) | 2.1 | 164 | (4.2) | 2.0 | 180 | (5.4) | 2.3 | 104 | (4.5) | 1.3 |
| *Latvia* | *23* | *(3.5)* | *7.7* | *10* | *(1.8)* | *3.3* | – | – | – | – | – | – | – | – | – |
| Liechtenstein | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | – | – | – | 0 | (0.0) | 0.0 |
| *Lithuania* | *47* | *(3.3)* | *11.1* | *44* | *(3.2)* | *10.4* | *19* | *(1.7)* | *4.5* | *27* | *(2.6)* | *6.4* | *13* | *(1.8)* | *3.1* |
| Luxembourg | 1 | (3.4) | 1.1 | 1 | (3.1) | 1.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 |
| Malta | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 1 | (1.8) | 1.5 | 2 | (2.0) | 3.0 | 7 | (5.0) | 10.1 |
| Netherlands | 49 | (5.5) | 1.8 | 34 | (4.3) | 1.2 | 21 | (2.6) | 0.8 | 48 | (6.4) | 1.8 | 19 | (3.0) | 0.7 |
| Norway | 13 | (4.4) | 1.4 | 17 | (6.5) | 1.8 | 7 | (3.4) | 0.7 | 4 | (2.5) | 0.4 | 11 | (6.9) | 1.2 |
| Poland | 103 | (1.6) | 1.8 | 68 | (1.2) | 1.2 | 52 | (0.9) | 0.9 | 81 | (1.5) | 1.4 | 39 | (1.2) | 0.7 |
| Portugal | 36 | (1.9) | 2.5 | 45 | (2.4) | 3.1 | 50 | (2.6) | 3.5 | 71 | (3.7) | 5.0 | 43 | (3.0) | 3.1 |
| *Romania* | *596* | *(4.4)* | *19.4* | *533* | *(4.1)* | *17.4* | *542* | *(4.4)* | *17.7* | *390* | *(3.4)* | *12.8* | *262* | *(3.4)* | *8.6* |
| Slovakia | 61 | (20.6) | 7.3 | 46 | (18.5) | 5.5 | 40 | (14.2) | 4.7 | 35 | (16.4) | 4.1 | 35 | (22.2) | 4.1 |
| Slovenia | 3 | (2.5) | 1.0 | 2 | (1.8) | 0.6 | 1 | (1.0) | 0.3 | 2 | (2.0) | 0.6 | 0 | (0.0) | 0.0 |
| Spain | 321 | (6.3) | 4.6 | 347 | (6.1) | 5.0 | 302 | (6.3) | 4.3 | 319 | (7.0) | 4.6 | 188 | (6.2) | 2.7 |
| Sweden | 58 | (8.1) | 3.4 | 26 | (5.0) | 1.5 | 31 | (6.4) | 1.7 | 19 | (4.0) | 1.0 | 16 | (4.9) | 0.9 |
| **Subtotal EU/EEA** | **3 150** | **(5.8)** | **4.6** | **2 176** | **(4.3)** | **3.2** | **1 892** | **(4.0)** | **2.8** | **1 800** | **(4.0)** | **2.6** | **1 230** | **(3.7)** | **1.8** |
| **Non-EU/EEA** | | | | | | | | | | | | | | | |
| Albania | 13 | (3.1) | 2.4 | 14 | (2.8) | 2.7 | 4 | (0.9) | 0.8 | 11 | (2.7) | 2.2 | 3 | (1.3) | 0.6 |
| Andorra | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 |
| *Armenia* | *21* | *(2.0)* | *3.5* | *20* | *(2.4)* | *3.3* | *37* | *(5.0)* | *6.1* | *38* | *(6.1)* | *6.2* | *23* | *(5.8)* | *3.7* |
| *Azerbaijan* | *175* | *(3.4)* | *7.8* | *166* | *(3.2)* | *7.2* | *200* | *(4.0)* | *8.6* | *179* | *(3.7)* | *7.6* | *91* | *(2.5)* | *3.8* |
| *Belarus* | *13* | *(0.4)* | *0.8* | *13* | *(0.5)* | *0.8* | *12* | *(0.5)* | *0.8* | *8* | *(0.4)* | *0.5* | *4* | *(0.3)* | *0.2* |
| Bosnia and Herzegovina | 10 | (1.1) | 2.0 | 11 | (1.4) | 2.2 | 5 | (0.8) | 1.0 | 3 | (0.5) | 0.6 | 1 | (0.3) | 0.2 |
| *Georgia* | *123* | *(4.1)* | *15.9* | *94* | *(3.6)* | *12.0* | *77* | *(3.3)* | *9.7* | *72* | *(3.3)* | *9.0* | *48* | *(2.9)* | *6.0* |
| Israel | 13 | (5.2) | 0.6 | 16 | (6.8) | 0.7 | 16 | (5.5) | 0.7 | 7 | (3.2) | 0.3 | 4 | (2.5) | 0.2 |
| *Kazakhstan* | *326* | *(2.6)* | *6.7* | *404* | *(3.2)* | *8.0* | *362* | *(2.8)* | *6.9* | *351* | *(2.8)* | *6.6* | *303* | *(3.2)* | *5.5* |
| *Kyrgyzstan* | *407* | *(5.8)* | *21.0* | *436* | *(6.5)* | *21.9* | *310* | *(4.9)* | *15.2* | *305* | *(5.0)* | *14.6* | *180* | *(4.2)* | *8.5* |
| Monaco | 1 | (0.0) | 0.0 | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – |
| Montenegro | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 2 | (2.4) | 1.7 | 1 | (1.3) | 0.9 | 0 | (0.0) | 0.0 |
| North Macedonia | 25 | (9.5) | 7.2 | 10 | (4.6) | 2.9 | 12 | (5.5) | 3.5 | 12 | (6.0) | 3.5 | 10 | (7.0) | 2.9 |
| *Republic of Moldova* | *103* | *(2.9)* | *16.0* | *123* | *(3.7)* | *19.2* | *95* | *(3.1)* | *14.8* | *101* | *(3.6)* | *15.7* | *56* | *(3.2)* | *8.7* |
| *Russian Federation* | *2 876* | *(3.1)* | *11.4* | *2 494* | *(3.0)* | *9.7* | *2 169* | *(2.8)* | *8.3* | *2 028* | *(2.8)* | *7.7* | *1 627* | *(2.8)* | *6.1* |
| San Marino | 0 | – | – | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 |
| Serbia | 17 | (1.2) | 1.2 | 22 | (1.5) | 1.6 | 29 | (2.1) | 2.1 | 15 | (1.3) | 1.1 | 11 | (2.5) | 0.8 |
| Serbia excluding Kosovo[1] | 0 | (0.0) | 0.0 | 7 | (0.9) | 0.7 | 6 | (0.9) | 0.6 | 4 | (0.7) | 0.4 | – | – | – |
| Kosovo[1] | 17 | (2.4) | 3.7 | 15 | (2.1) | 3.3 | 23 | (3.3) | 5.2 | 11 | (1.8) | 2.5 | 11 | (2.5) | 2.5 |
| Switzerland | 30 | (5.2) | 2.4 | 23 | (4.3) | 1.8 | 26 | (5.5) | 2.0 | 15 | (3.7) | 1.2 | 16 | (4.6) | 1.2 |
| *Tajikistan* | *389* | *(6.5)* | *12.4* | *353* | *(6.0)* | *10.9* | *346* | *(6.0)* | *10.3* | *404* | *(7.0)* | *11.7* | *240* | *(5.8)* | *6.8* |
| *Turkey* | *628* | *(5.2)* | *3.1* | *551* | *(4.7)* | *2.7* | *599* | *(5.2)* | *3.0* | *496* | *(4.4)* | *2.4* | *391* | *(4.4)* | *1.9* |
| *Turkmenistan* | *5* | *(0.2)* | *0.3* | *39* | *(2.0)* | *2.2* | *37* | *(1.7)* | *2.1* | *44* | *(2.1)* | *2.4* | *50* | *(2.6)* | *2.7* |
| *Ukraine* | *571* | *(2.0)* | *8.3* | *611* | *(2.2)* | *8.8* | *580* | *(2.2)* | *8.3* | *585* | *(2.3)* | *8.3* | *382* | *(2.2)* | *5.5* |
| United Kingdom | 224 | (3.9) | 1.9 | 195 | (3.7) | 1.7 | 159 | (3.3) | 1.3 | 182 | (3.8) | 1.5 | 153 | (3.7) | 1.3 |
| *Uzbekistan* | *2 010* | *(12.5)* | *22.5* | *1 989* | *(11.8)* | *21.8* | *2 029* | *(12.4)* | *21.8* | *2 190* | *(13.5)* | *23.1* | *1 733* | *(14.3)* | *18.0* |
| **Subtotal non-EU/EEA** | **7 980** | **(3.9)** | **8.2** | **7 584** | **(4.0)** | **7.7** | **7 106** | **(3.9)** | **7.1** | **7 047** | **(4.1)** | **7.0** | **5 326** | **(4.0)** | **5.3** |
| **Total European Region** | **11 130** | **(4.4)** | **6.7** | **9 760** | **(4.1)** | **5.9** | **8 998** | **(4.0)** | **5.4** | **8 847** | **(4.1)** | **5.3** | **6 556** | **(4.0)** | **3.9** |
| ***Subtotal 18 HPCs*** | ***8 443*** | ***(4.0)*** | ***10.1*** | ***7 988*** | ***(4.0)*** | ***9.4*** | ***7 488*** | ***(4.0)*** | ***8.7*** | ***7 278*** | ***(4.1)*** | ***8.4*** | ***5 428*** | ***(4.0)*** | ***6.2*** |

*Note:* European Region comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB HPCs are presented in italics.
HPCs: high-priority countries.
[a] For non-EU/EEA countries, new and relapse cases are included; for EU/EEA countries, all TB cases under 15 years of age are included.
[1] All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

**Table V.** RR/MDR-TB[a] notification among new bacteriologically confirmed[b] pulmonary TB cases with available DST results, European Region, 2016–2020

| Country/area | 2016 | | | 2017 | | | 2018 | | | 2019 | | | 2020 | | | Mean annual % change in rate, 2016–2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | % | Rate per 100 000 | N | % | Rate per 100 000 | N | % | Rate per 100 000 | N | % | Rate per 100 000 | N | % | Rate per 100 000 | |
| **EU/EEA** | | | | | | | | | | | | | | | | |
| Austria | 8 | (3.0) | 0.1 | 11 | (4.2) | 0.1 | 10 | (4.8) | 0.1 | 2 | (1.0) | 0.0 | 1 | (0.6) | 0.0 | –40.9 |
| Belgium[c] | 6 | (1.4) | 0.1 | 2 | (0.5) | 0.0 | 5 | (1.2) | 0.0 | 9 | (2.1) | 0.1 | 3 | (0.9) | 0.0 | –16.3 |
| *Bulgaria* | *7* | *(1.2)* | *0.1* | *14* | *(2.7)* | *0.2* | *12* | *(2.5)* | *0.2* | *7* | *(1.7)* | *0.1* | *8* | *(3.9)* | *0.1* | *4.1* |
| Croatia | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 1 | (0.4) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | – |
| Cyprus | 0 | (0.0) | 0.0 | 1 | (3.0) | 0.1 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | – |
| Czechia | 4 | (1.3) | 0.0 | 3 | (1.0) | 0.0 | 10 | (3.6) | 0.1 | 8 | (2.6) | 0.1 | 8 | (3.6) | 0.1 | 18.5 |
| Denmark[c] | 4 | (2.2) | 0.1 | 1 | (0.6) | 0.0 | 4 | (2.5) | 0.1 | 3 | (1.8) | 0.1 | 1 | (0.8) | 0.0 | –29.6 |
| *Estonia* | *18* | *(13.5)* | *1.4* | *26* | *(21.7)* | *2.0* | *22* | *(21.6)* | *1.7* | *17* | *(17.0)* | *1.3* | *16* | *(18.0)* | *1.2* | *–3.1* |
| Finland | 2 | (1.6) | 0.0 | 4 | (2.9) | 0.1 | 4 | (3.1) | 0.1 | 2 | (1.6) | 0.0 | 0 | (0.0) | 0.0 | –100.0 |
| France | 33 | (1.4) | 0.0 | 48 | (1.8) | 0.1 | 46 | (1.7) | 0.1 | 20 | (100.0) | 0.0 | 20 | (100.0) | 0.0 | –12.0 |
| Germany | 56 | (2.6) | 0.1 | 57 | (2.6) | 0.1 | 62 | (2.8) | 0.1 | 39 | (2.0) | 0.0 | 33 | (2.1) | 0.0 | –12.6 |
| Greece | 3 | (3.1) | 0.0 | 6 | (4.0) | 0.1 | 5 | (4.3) | 0.0 | 6 | (3.4) | 0.1 | 5 | (2.0) | 0.0 | 13.8 |
| Hungary | 12 | (4.0) | 0.1 | 9 | (3.1) | 0.1 | 8 | (2.6) | 0.1 | 8 | (3.3) | 0.1 | 6 | (3.8) | 0.1 | –15.8 |
| Iceland | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | – | 0.0 | – |
| Ireland[c] | 4 | (3.1) | 0.1 | 2 | (1.9) | 0.0 | 4 | (4.2) | 0.1 | 1 | (1.1) | 0.0 | 0 | (0.0) | 0.0 | –100.0 |
| Italy | 24 | (3.1) | 0.0 | 60 | (3.1) | 0.1 | 37 | (2.1) | 0.1 | 41 | (2.4) | 0.1 | 33 | (3.4) | 0.1 | 8.7 |
| *Latvia* | *32* | *(7.6)* | *1.6* | *29* | *(8.0)* | *1.5* | – | – | – | – | – | – | – | – | – | – |
| Liechtenstein | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | – | – | – | 0 | (0.0) | 0.0 | – |
| *Lithuania* | *126* | *(14.3)* | *4.4* | *118* | *(13.8)* | *4.1* | *96* | *(12.8)* | *3.4* | *100* | *(13.8)* | *3.6* | *61* | *(12.6)* | *2.2* | *–15.9* |
| Luxembourg | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | – |
| Malta | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | – |
| Netherlands | 6 | (1.8) | 0.0 | 6 | (1.7) | 0.0 | 3 | (0.9) | 0.0 | 7 | (2.3) | 0.0 | 4 | (1.6) | 0.0 | –10.2 |
| Norway[c] | 8 | (5.4) | 0.2 | 6 | (4.4) | 0.1 | 6 | (6.1) | 0.1 | 1 | (1.2) | 0.0 | 2 | (2.6) | 0.0 | –29.8 |
| Poland | 31 | (0.8) | 0.1 | 37 | (1.1) | 0.1 | 37 | (1.2) | 0.1 | 32 | (1.0) | 0.1 | 29 | (1.4) | 0.1 | –1.6 |
| Portugal | 14 | (1.6) | 0.1 | 11 | (1.2) | 0.1 | 6 | (0.7) | 0.1 | 9 | (1.2) | 0.1 | 4 | (0.9) | 0.0 | –26.8 |
| *Romania* | *178* | *(2.9)* | *0.9* | *152* | *(2.5)* | *0.8* | *166* | *(2.8)* | *0.8* | *159* | *(2.7)* | *0.8* | *85* | *(2.4)* | *0.4* | *–16.4* |
| Slovakia | 2 | (2.2) | 0.0 | 4 | (4.1) | 0.1 | 1 | (0.9) | 0.0 | 1 | (1.3) | 0.0 | 0 | (0.0) | 0.0 | –100.0 |
| Slovenia | 0 | (0.0) | 0.0 | 1 | (1.2) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 1 | (1.8) | 0.0 | – |
| Spain | 7 | (2.2) | 0.0 | 19 | (2.2) | 0.0 | 14 | (1.7) | 0.0 | 17 | (1.7) | 0.0 | 11 | (1.8) | 0.0 | 11.4 |
| Sweden | 12 | (3.3) | 0.1 | 8 | (3.2) | 0.1 | 5 | (1.8) | 0.0 | 5 | (2.1) | 0.0 | 4 | (2.4) | 0.0 | –24.9 |
| **Subtotal EU/EEA** | **597** | **(2.8)** | **0.1** | **635** | **(2.8)** | **0.1** | **564** | **(2.6)** | **0.1** | **494** | **(2.7)** | **0.1** | **335** | **(2.8)** | **0.1** | **–13.5** |
| **Non-EU/EEA** | | | | | | | | | | | | | | | | |
| Albania | 2 | (5.3) | 0.1 | 2 | (2.9) | 0.1 | 3 | (5.1) | 0.1 | 2 | (7.7) | 0.1 | 1 | (0.8) | 0.0 | –15.8 |
| Andorra | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0.0 |
| *Armenia* | *61* | *(17.1)* | *2.1* | *51* | *(15.9)* | *1.7* | *51* | *(20.4)* | *1.7* | *38* | *(16.3)* | *1.3* | *28* | *(14.1)* | *0.9* | *–17.9* |
| *Azerbaijan* | *219* | *(18.8)* | *2.2* | *245* | *(12.4)* | *2.5* | *237* | *(12.0)* | *2.4* | *219* | *(11.5)* | *2.2* | *149* | *(12.0)* | *1.5* | *–10.1* |
| *Belarus* | *677* | *(38.0)* | *7.2* | *649* | *(38.4)* | *6.9* | *559* | *(36.6)* | *5.9* | *561* | *(37.7)* | *5.9* | *401* | *(39.5)* | *4.2* | *–12.3* |
| Bosnia and Herzegovina | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 2 | (0.5) | 0.1 | 1 | (0.3) | 0.0 | 0 | (0.0) | 0.0 | 0.0 |
| *Georgia* | 172 | (10.8) | 4.3 | 163 | (11.3) | 4.1 | 160 | (12.2) | 4.0 | 165 | (12.1) | 4.1 | 114 | (10.7) | 2.9 | –9.6 |
| Israel | *9* | *(7.4)* | *0.1* | *7* | *(5.4)* | *0.1* | *15* | *(9.7)* | *0.2* | *9* | *(8.6)* | *0.1* | *5* | *(5.6)* | *0.1* | *–15.1* |
| *Kazakhstan* | *1 869* | *(57.3)* | *10.5* | *1 406* | *(36.7)* | *7.8* | *1 706* | *(27.1)* | *9.3* | *1 534* | *(27.0)* | *8.3* | *1 758* | *(36.2)* | *9.4* | *–2.8* |
| *Kyrgyzstan* | *597* | *(27.3)* | *9.8* | *584* | *(25.6)* | *9.4* | *663* | *(28.9)* | *10.5* | *700* | *(29.5)* | *10.9* | *493* | *(28.3)* | *7.6* | *–6.4* |
| Monaco | *0* | – | – | – | – | – | *0* | – | – | – | – | – | *0* | – | – | *0.0* |
| Montenegro | *0* | *(0.0)* | *0.0* | *0* | *(0.0)* | *0.0* | *0* | *(0.0)* | *0.0* | *0* | *(0.0)* | *0.0* | *0* | *(0.0)* | *0.0* | *0.0* |
| North Macedonia | 2 | (1.3) | 0.1 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 1 | (0.8) | 0.0 | 1 | (1.2) | 0.0 | –15.9 |
| *Republic of Moldova* | *387* | *(25.7)* | *9.5* | *399* | *(27.6)* | *9.8* | *402* | *(28.8)* | *9.9* | *441* | *(32.9)* | *10.9* | *218* | *(26.0)* | *5.4* | *–13.2* |
| *Russian Federation* | *8 463* | *(27.3)* | *5.8* | *9 312* | *(32.0)* | *6.4* | *9 654* | *(34.5)* | *6.6* | *9 246* | *(35.3)* | *6.3* | *7 657* | *(36.3)* | *5.2* | *–2.6* |
| San Marino | *0* | – | – | *0* | *(0.0)* | *0.0* | *0* | *(0.0)* | *0.0* | *0* | *(0.0)* | *0.0* | – | – | – | – |
| Serbia | 5 | (1.4) | 0.1 | 1 | (0.3) | 0.0 | 2 | (0.7) | 0.0 | 2 | (0.9) | 0.0 | – | – | – | – |
| Serbia excluding Kosovo[1] | 5 | (1.4) | 0.1 | 1 | (0.3) | 0.0 | 2 | (0.7) | 0.0 | 2 | (0.9) | 0.0 | – | – | – | – |
| Kosovo[1] | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – | – | – | – | – |
| Switzerland | 13 | (4.6) | 0.2 | 7 | (2.6) | 0.1 | 3 | (1.1) | 0.0 | 5 | (2.6) | 0.1 | 4 | (2.3) | 0.0 | –26.1 |
| *Tajikistan* | *576* | *(22.5)* | *6.6* | *490* | *(20.1)* | *5.5* | *696* | *(28.0)* | *7.6* | *672* | *(29.0)* | *7.2* | *408* | *(24.2)* | *4.3* | *–10.4* |
| *Turkey* | *148* | *(2.9)* | *0.2* | *162* | *(3.3)* | *0.2* | *163* | *(3.5)* | *0.2* | *113* | *(2.4)* | *0.1* | *94* | *(2.5)* | *0.1* | *–11.9* |
| *Turkmenistan* | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| *Ukraine* | *3 687* | *(26.6)* | *8.2* | *3 388* | *(27.9)* | *7.6* | *3 587* | *(29.0)* | *8.1* | *3 438* | *(27.2)* | *7.8* | *2 515* | *(28.6)* | *5.8* | *–8.6* |
| United Kingdom[c] | 38 | (1.7) | 0.1 | 28 | (1.4) | 0.0 | 24 | (1.2) | 0.0 | 27 | (1.4) | | 31 | (2.0) | 0.0 | –5.5 |
| *Uzbekistan* | *757* | *(100.0)* | *2.4* | *657* | *(14.8)* | *2.1* | *735* | *(15.2)* | *2.3* | *615* | *(11.7)* | *1.9* | *721* | *(18.3)* | *2.2* | *–2.7* |
| **Subtotal non-EU/EEA** | **17 682** | **(25.7)** | **3.8** | **17 551** | **(25.3)** | **3.8** | **18 662** | **(26.4)** | **4.0** | **17 789** | **(26.0)** | **3.8** | **14 598** | **(27.8)** | **3.1** | **–4.8** |
| **Total European Region** | **18 279** | **(20.6)** | **2.0** | **18 186** | **(20.3)** | **2.1** | **19 226** | **(21.0)** | **2.1** | **18 283** | **(21.3)** | **2.0** | **14 933** | **(23.1)** | **1.6** | **–4.9** |
| ***Subtotal 18 HPCs*** | ***17 974*** | ***(24.6)*** | ***4.5*** | ***17 845*** | ***(24.2)*** | ***4.5*** | ***18 909*** | ***(25.3)*** | ***4.7*** | ***18 025*** | ***(24.8)*** | ***4.5*** | ***14 726*** | ***(26.9)*** | ***3.7*** | ***–5.2*** |

*Note:* European Region comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB HPCs are presented in italics. The resistance pattern at the initiation of treatment is reported to TESSy irrespective of the method used for DST or resistance prediction.
DST: drug-susceptibility testing.
HPCs: high-priority countries.
RR/MDR-TB: rifampicin-resistant or multidrug-resistant tuberculosis.
TESSy: the European Surveillance System.
[a] Includes cases that are RR/MDR but that also meet the pre-XDR or XDR case definitions (pre-XDR and XDR cases have not been excluded).
[b] Bacteriologically confirmed cases – cases with positive identification for *Mycobacterium tuberculosis* complex confirmed by culture and/or line probe assay for non-EU/EEA countries, culture-positive OR microscopy-positive and nucleic acid amplification test-positive cases for EU/EEA countries.
[c] Previous TB history is defined as previous diagnosis.
[1] All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

**Table VI. RR/MDR-TB[a] notification among previously treated bacteriologically confirmed[b] pulmonary TB cases with available DST results, European Region, 2016–2020**

| Country/area | 2016 | | | 2017 | | | 2018 | | | 2019 | | | 2020 | | | Mean annual % change in rate, 2016–2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | % | Rate per 100 000 | N | % | Rate per 100 000 | N | % | Rate per 100 000 | N | % | Rate per 100 000 | N | % | Rate per 100 000 | |
| **EU/EEA** | | | | | | | | | | | | | | | | |
| Austria | 3 | (17.6) | 0.0 | 3 | (20.0) | 0.0 | 3 | (21.4) | 0.0 | 1 | (8.3) | 0.0 | 1 | (20.0) | 0.0 | –24.4 |
| Belgium[c] | 3 | (8.6) | 0.0 | 2 | (5.1) | 0.0 | 1 | (2.9) | 0.0 | 4 | (10.0) | 0.0 | 0 | (0.0) | 0.0 | –100.0 |
| *Bulgaria* | *15* | *(18.5)* | *0.2* | *15* | *(18.1)* | *0.2* | *16* | *(22.2)* | *0.2* | *7* | *(14.0)* | *0.1* | *4* | *(11.1)* | *0.1* | *–27.6* |
| Croatia | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 1 | (6.3) | 0.0 | 1 | (7.7) | 0.0 | 1 | (16.7) | 0.0 | – |
| Cyprus | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | – |
| Czechia | 2 | (16.7) | 0.0 | 3 | (18.8) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 3 | (30.0) | 0.0 | 10.3 |
| Denmark[c] | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 1 | (14.3) | 0.0 | – |
| *Estonia* | *7* | *(53.8)* | *0.5* | *11* | *(52.4)* | *0.8* | *10* | *(55.6)* | *0.8* | *10* | *(47.6)* | *0.8* | *3* | *(30.0)* | *0.2* | *–19.3* |
| Finland | 0 | (0.0) | 0.0 | 2 | (66.7) | 0.0 | 0 | (0.0) | 0.0 | 1 | (25.0) | 0.0 | 0 | (0.0) | 0.0 | – |
| France | 18 | (6.8) | 0.0 | 33 | (13.9) | 0.0 | 36 | (14.8) | 0.1 | 18 | (100.0) | 0.0 | 11 | (100.0) | 0.0 | –11.8 |
| Germany | 18 | (12.8) | 0.0 | 25 | (20.8) | 0.0 | 23 | (17.2) | 0.0 | 18 | (15.0) | 0.0 | 5 | (5.3) | 0.0 | –27.6 |
| Greece | 2 | (20.0) | 0.0 | 1 | (5.9) | 0.0 | 0 | (0.0) | 0.0 | 1 | (5.9) | 0.0 | 1 | (7.1) | 0.0 | –15.8 |
| Hungary | 8 | (21.6) | 0.1 | 4 | (14.8) | 0.0 | 5 | (14.7) | 0.1 | 5 | (22.7) | 0.1 | 5 | (23.8) | 0.1 | –10.9 |
| Iceland | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | – |
| Ireland[c] | 2 | (16.7) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 1 | (11.1) | 0.0 | 0 | (0.0) | 0.0 | –100.0 |
| Italy | 9 | (9.3) | 0.0 | 13 | (17.3) | 0.0 | 12 | (17.9) | 0.0 | 4 | (12.9) | 0.0 | 6 | (23.1) | 0.0 | –9.3 |
| *Latvia* | *21* | *(23.3)* | *1.1* | *18* | *(30.5)* | *0.9* | – | – | – | – | – | – | – | – | – | – |
| Liechtenstein | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | – | – | – | 0 | (0.0) | 0.0 | – |
| *Lithuania* | *127* | *(43.6)* | *4.4* | *145* | *(54.1)* | *5.1* | *92* | *(42.2)* | *3.3* | *70* | *(38.9)* | *2.5* | *43* | *(32.1)* | *1.5* | *–23.1* |
| Luxembourg | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0 | – |
| Malta | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | – |
| Netherlands | 5 | (38.5) | 0.0 | 1 | (7.1) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | –100.0 |
| Norway[c] | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 1 | (14.3) | 0.0 | 0 | (0.0) | 0.0 | – |
| Poland | 20 | (4.4) | 0.1 | 15 | (3.9) | 0.0 | 18 | (4.1) | 0.0 | 12 | (3.0) | 0.0 | 11 | (3.3) | 0.0 | –13.9 |
| Portugal | 3 | (4.3) | 0.0 | 2 | (2.9) | 0.0 | 2 | (3.9) | 0.0 | 5 | (7.7) | 0.0 | 3 | (10.7) | 0.0 | 0.1 |
| *Romania* | *365* | *(16.9)* | *1.8* | *291* | *(15.0)* | *1.5* | *270* | *(14.8)* | *1.4* | *216* | *(12.7)* | *1.1* | *159* | *(13.4)* | *0.8* | *–18.3* |
| Slovakia | 1 | (5.6) | 0.0 | 2 | (7.7) | 0.0 | 2 | (13.3) | 0.0 | 4 | (19.0) | 0.1 | 1 | (9.1) | 0.0 | –0.1 |
| Slovenia | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | – |
| Spain | 4 | (0.8) | 0.0 | 13 | (2.3) | 0.0 | 4 | (9.3) | 0.0 | 1 | (1.7) | 0.0 | 1 | (3.3) | 0.0 | –29.6 |
| Sweden | 3 | (15.8) | 0.0 | 2 | (9.5) | 0.0 | 2 | (18.2) | 0.0 | 0 | (0.0) | 0.0 | 1 | (10.0) | 0.0 | –24.9 |
| **Subtotal EU/EEA** | **636** | **(14.5)** | **0.1** | **601** | **(14.8)** | **0.1** | **497** | **(15.0)** | **0.1** | **380** | **(13.4)** | **0.1** | **260** | **(12.8)** | **0.1** | **–20.1** |
| **Non-EU/EEA** | | | | | | | | | | | | | | | | |
| Albania | 2 | (100.0) | 0.1 | 2 | (20.0) | 0.1 | 1 | (25.0) | 0.0 | 2 | (66.7) | 0.1 | 3 | (23.1) | 0.1 | 10.8 |
| Andorra | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0.0 |
| *Armenia* | *67* | *(64.4)* | *2.3* | *48* | *(44.4)* | *1.6* | *34* | *(41.5)* | *1.2* | *27* | *(40.9)* | *0.9* | *24* | *(50.0)* | *0.8* | *–22.8* |
| *Azerbaijan* | *706* | *(39.5)* | *7.3* | *762* | *(28.3)* | *7.7* | *701* | *(25.6)* | *7.0* | *533* | *(24.4)* | *5.3* | *552* | *(24.4)* | *5.4* | *–6.9* |
| *Belarus* | *569* | *(71.7)* | *6.0* | *468* | *(66.9)* | *5.0* | *425* | *(69.4)* | *4.5* | *313* | *(59.8)* | *3.3* | *424* | *(74.5)* | *4.5* | *–7.1* |
| Bosnia and Herzegovina | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | – |
| *Georgia* | 192 | (30.8) | 4.8 | 161 | (30.0) | 4.0 | 137 | (30.9) | 3.4 | 139 | (32.1) | 3.5 | 77 | (26.5) | 1.9 | –20.3 |
| Israel | *0* | *(0.0)* | *0.0* | *1* | *(50.0)* | *0.0* | *0* | *(0.0)* | *0.0* | *0* | *(0.0)* | *0.0* | *0* | *(0.0)* | *0.0* | – |
| *Kazakhstan* | *1 050* | *(53.9)* | *5.9* | *1 557* | *(60.3)* | *8.6* | *2 337* | *(64.3)* | *12.8* | *1 446* | *(44.5)* | *7.8* | *1 101* | *(49.7)* | *5.9* | *–0.1* |
| *Kyrgyzstan* | *619* | *(60.2)* | *10.2* | *666* | *(60.9)* | *10.8* | *850* | *(68.3)* | *13.5* | *603* | *(60.1)* | *9.4* | *377* | *(54.0)* | *5.8* | *–13.2* |
| Monaco | *0* | – | – | – | – | – | *0* | – | – | *0* | – | – | – | – | – | – |
| Montenegro | *0* | *(0.0)* | *0.0* | *1* | *(11.1)* | *0.2* | *1* | *(33.3)* | *0.2* | *0* | *(0.0)* | *0.0* | *0* | *(0.0)* | *0.0* | – |
| North Macedonia | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 1 | (10.0) | 0.0 | – |
| *Republic of Moldova* | *295* | *(55.7)* | *7.3* | *280* | *(55.0)* | *6.9* | *359* | *(59.6)* | *8.9* | *118* | *(34.2)* | *2.9* | *195* | *(53.1)* | *4.8* | *–9.7* |
| *Russian Federation* | *17 508* | *(65.2)* | *12.1* | *16 567* | *(66.8)* | *11.4* | *17 011* | *(70.6)* | *11.7* | *17 199* | *(70.8)* | *11.8* | *14 306* | *(68.4)* | *9.8* | *–5.0* |
| San Marino | *0* | – | – | *0* | – | *0.0* | *0* | – | *0.0* | *0* | – | *0.0* | *0* | – | *0.0* | *0.0* |
| Serbia | 5 | (12.5) | 0.1 | 4 | (13.3) | 0.0 | 1 | (3.7) | 0.0 | 0 | (0.0) | 0.0 | – | – | – | – |
| Serbia excluding Kosovo[1] | 3 | (7.5) | 0.0 | 4 | (13.3) | 0.0 | 1 | (3.7) | 0.0 | 0 | (0.0) | 0.0 | – | – | – | – |
| Kosovo[1] | 2 | (6.3) | 0.1 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | – | – | – | – | – | – | – |
| Switzerland | 1 | (7.1) | 0.0 | 2 | (22.2) | 0.0 | 1 | (6.7) | 0.0 | 4 | (16.7) | 0.0 | 0 | (0.0) | 0.0 | –100.0 |
| *Tajikistan* | *172* | *(44.9)* | *2.0* | *153* | *(23.5)* | *1.7* | *208* | *(37.8)* | *2.3* | *206* | *(40.4)* | *2.2* | *147* | *(43.2)* | *1.5* | *–6.1* |
| *Turkey* | *92* | *(15.7)* | *0.1* | *77* | *(14.1)* | *0.1* | *53* | *(11.9)* | *0.1* | *37* | *(9.7)* | *0.0* | *33* | *(11.1)* | *0.0* | *–23.7* |
| *Turkmenistan* | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| *Ukraine* | *3 654* | *(47.0)* | *8.2* | *3 113* | *(47.9)* | *7.0* | *2 888* | *(46.4)* | *6.5* | *2 498* | *(42.9)* | *5.7* | *1 662* | *(41.3)* | *3.8* | *–17.4* |
| United Kingdom[c] | 8 | (5.4) | 0.0 | 6 | (4.7) | 0.0 | 8 | (5.3) | 0.0 | 4 | (3.3) | 0.0 | 4 | (5.3) | 0.0 | –16.4 |
| *Uzbekistan* | *1 199* | *(97.6)* | *3.8* | *1 200* | *(57.5)* | *3.8* | *687* | *(34.1)* | *2.1* | *467* | *(21.8)* | *1.4* | *679* | *(38.4)* | *2.0* | *–14.6* |
| **Subtotal non-EU/EEA** | **26 139** | **(59.5)** | **5.6** | **25 068** | **(58.2)** | **5.4** | **25 702** | **(59.9)** | **5.5** | **23 596** | **(57.3)** | **5.0** | **19 585** | **(57.7)** | **4.2** | **–7.1** |
| **Total European Region** | **26 775** | **(55.4)** | **2.9** | **25 669** | **(54.5)** | **3.0** | **26 199** | **(56.7)** | **2.8** | **23 976** | **(54.5)** | **2.6** | **19 845** | **(55.2)** | **2.2** | **–7.3** |
| ***Subtotal 18 HPCs*** | ***26 658*** | ***(57.6)*** | ***6.7*** | ***25 532*** | ***(56.5)*** | ***6.4*** | ***26 078*** | ***(58.2)*** | ***6.5*** | ***23 889*** | ***(55.7)*** | ***5.9*** | ***19 786*** | ***(56.2)*** | ***4.9*** | ***–7.5*** |

*Note:* European Region comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB HPCs are presented in italics. The resistance pattern at the initiation of treatment is reported to TESSy irrespective of the method used for DST or resistance prediction.
DST: drug-susceptibility testing.
HPCs: high-priority countries.
RR/MDR-TB: rifampicin-resistant or multidrug-resistant tuberculosis.
TESSy: the European Surveillance System.
[a] Includes cases that are RR/MDR but that also meet the pre-XDR or XDR case definitions (pre-XDR and XDR cases have not been excluded).
[b] Bacteriologically confirmed cases – cases with positive identification for *Mycobacterium tuberculosis* complex confirmed by culture and/or line probe assay for non-EU/EEA countries, culture-positive OR microscopy-positive and nucleic acid amplification test-positive cases for EU/EEA countries.
[c] Previous TB history is defined as previous diagnosis.
[1] All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

**Table VII.** RR/MDR-TB[a] notification among all bacteriologically confirmed[b] TB cases with available DST results EU/EEA 2016–2020

| Country | 2016 | | | 2017 | | | 2018 | | | 2019 | | | 2020 | | | Mean annual % change in rate 2016–2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | % | Rate per 100 000 | N | % | Rate per 100 000 | N | % | Rate per 100 000 | N | % | Rate per 100 000 | N | % | Rate per 100 000 | |
| **EU/EEA** | | | | | | | | | | | | | | | | |
| Austria | 17 | (3.6) | 0.2 | 19 | (4.5) | 0.2 | 18 | (5.2) | 0.2 | 6 | (1.8) | 0.1 | 2 | (0.7) | 0.0 | –41.8 |
| Belgium | 12 | (1.6) | 0.1 | 8 | (1.1) | 0.1 | 9 | (1.3) | 0.1 | 17 | (2.4) | 0.1 | 17 | (2.8) | 0.1 | 8.6 |
| *Bulgaria* | *22* | *(3.3)* | *0.3* | *29* | *(4.8)* | *0.4* | *28* | *(5.1)* | *0.4* | *14* | *(3.1)* | *0.2* | *10* | *(4.1)* | *0.1* | *–17.3* |
| Croatia | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 2 | (0.7) | 0.0 | 2 | (0.8) | 0.0 | 1 | (0.8) | 0.0 | – |
| Cyprus | 1 | (2.4) | 0.1 | 1 | (2.6) | 0.1 | 0 | (0.0) | 0.0 | 1 | (1.9) | 0.1 | 0 | (0.0) | 0.0 | –100.0 |
| Czechia | 7 | (1.9) | 0.1 | 8 | (2.3) | 0.1 | 12 | (3.7) | 0.1 | 8 | (2.4) | 0.1 | 11 | (4.3) | 0.1 | 11.6 |
| Denmark | 5 | (2.0) | 0.1 | 2 | (0.9) | 0.0 | 4 | (1.8) | 0.1 | 4 | (1.8) | 0.1 | 2 | (1.1) | 0.0 | –20.9 |
| *Estonia* | *26* | *(17.1)* | *2.0* | *37* | *(26.1)* | *2.8* | *32* | *(26.2)* | *2.4* | *27* | *(21.3)* | *2.0* | *19* | *(18.1)* | *1.4* | *–7.8* |
| Finland | 6 | (3.3) | 0.1 | 6 | (3.1) | 0.1 | 4 | (2.2) | 0.1 | 3 | (1.7) | 0.1 | 1 | (0.7) | 0.0 | –36.2 |
| France | 51 | (1.9) | 0.1 | 81 | (2.8) | 0.1 | 82 | (2.7) | 0.1 | 75 | (100.0) | 0.1 | 67 | (100.0) | 0.1 | 6.8 |
| Germany | 116 | (2.9) | 0.1 | 134 | (3.4) | 0.2 | 130 | (3.3) | 0.2 | 100 | (2.9) | 0.1 | 91 | (3.2) | 0.1 | –6.2 |
| Greece | 5 | (4.2) | 0.0 | 9 | (4.7) | 0.1 | 6 | (3.9) | 0.1 | 7 | (3.1) | 0.1 | 12 | (3.4) | 0.1 | 24.7 |
| Hungary | 20 | (5.9) | 0.2 | 13 | (4.1) | 0.1 | 13 | (3.9) | 0.1 | 13 | (5.0) | 0.1 | 11 | (6.2) | 0.1 | –13.7 |
| Iceland | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | – |
| Ireland | 7 | (3.0) | 0.1 | 6 | (3.0) | 0.1 | 7 | (3.4) | 0.1 | 6 | (3.4) | 0.1 | 1 | (1.0) | 0.0 | –39.3 |
| Italy | 33 | (3.8) | 0.1 | 73 | (3.7) | 0.1 | 49 | (2.7) | 0.1 | 45 | (2.6) | 0.1 | 39 | (3.3) | 0.1 | 4.7 |
| *Latvia* | *56* | *(10.4)* | *2.8* | *48* | *(11.1)* | *2.5* | – | – | – | – | – | – | – | – | – | – |
| Liechtenstein | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | – | – | – | 0 | (0.0) | 0.0 | – |
| *Lithuania* | *255* | *(21.2)* | *8.8* | *264* | *(23.0)* | *9.3* | *189* | *(19.1)* | *6.7* | *173* | *(18.5)* | *6.2* | *105* | *(16.5)* | *3.8* | *–19.2* |
| Luxembourg | 1 | (4.0) | 0.2 | 1 | (4.3) | 0.2 | 1 | (2.9) | 0.2 | 1 | (3.1) | 0.2 | 0 | (0.0) | 0.0 | –100.0 |
| Malta | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 2 | (5.0) | 0.4 | – |
| Netherlands | 15 | (2.7) | 0.1 | 10 | (1.9) | 0.1 | 6 | (1.1) | 0.0 | 9 | (1.9) | 0.1 | 12 | (3.0) | 0.1 | –6.0 |
| Norway | 11 | (4.8) | 0.2 | 9 | (4.2) | 0.2 | 6 | (3.6) | 0.1 | 2 | (1.5) | 0.0 | 2 | (1.5) | 0.0 | –35.2 |
| Poland | 52 | (1.2) | 0.1 | 52 | (1.4) | 0.1 | 58 | (1.5) | 0.2 | 45 | (1.2) | 0.1 | 42 | (1.7) | 0.1 | –5.2 |
| Portugal | 19 | (1.7) | 0.2 | 13 | (1.2) | 0.1 | 11 | (1.0) | 0.1 | 15 | (1.7) | 0.1 | 9 | (1.7) | 0.1 | –16.9 |
| *Romania* | *550* | *(6.4)* | *2.8* | *454* | *(5.5)* | *2.3* | *442* | *(5.5)* | *2.3* | *381* | *(4.9)* | *2.0* | *252* | *(5.1)* | *1.3* | *–17.3* |
| Slovakia | 3 | (2.7) | 0.1 | 7 | (5.2) | 0.1 | 3 | (2.1) | 0.1 | 5 | (4.4) | 0.1 | 1 | (1.5) | 0.0 | –24.1 |
| Slovenia | 0 | (0.0) | 0.0 | 1 | (0.9) | 0.0 | 0 | (0.0) | 0.0 | 0 | (0.0) | 0.0 | 1 | (1.4) | 0.0 | – |
| Spain | 15 | (1.4) | 0.0 | 35 | (2.0) | 0.1 | 23 | (2.1) | 0.0 | 19 | (1.4) | 0.0 | 15 | (1.8) | 0.0 | –0.5 |
| Sweden | 25 | (4.2) | 0.3 | 12 | (2.8) | 0.1 | 13 | (3.2) | 0.1 | 10 | (2.5) | 0.1 | 6 | (2.3) | 0.1 | –30.8 |
| **Total EU/EEA** | **1 330** | **(4.5)** | **0.3** | **1 332** | **(4.4)** | **0.3** | **1 148** | **(4.0)** | **0.3** | **988** | **(4.0)** | **0.2** | **731** | **(4.3)** | **0.2** | **–13.9** |

*Note:* European Region comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB high-priority countries are presented in italics. The resistance pattern at the initiation of treatment is reported to TESSy irrespective of the method used for DST or resistance prediction.
DST: drug-susceptibility testing.
RR/MDR-TB: rifampicin-resistant or multidrug-resistant tuberculosis.
TESSy: the European Surveillance System.
[a] Includes cases that are RR/MDR but that also meet the pre-XDR or XDR case definitions (pre-XDR and XDR cases have not been excluded).
[b] Culture-positive OR microscopy-positive and nucleic acid amplification test-positive cases.

**Table VIII. Pre-XDR-TB notification among pulmonary RR/MDR-TB[a] cases with DST results to fluoroquinolones, European Region, 2016–2020[b]**

| Country/area | 2016 | | | 2017 | | | 2018 | | | 2019 | | | 2020 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | RR/MDR-TB cases tested for FQL (N) | Pre-XDR-TB cases (N) | Percentage among cases tested for FQL | RR/MDR-TB cases tested for FQL (N) | Pre-XDR-TB cases (N) | Percentage among cases tested for FQL | RR/MDR-TB cases tested for FQL (N) | Pre-XDR-TB cases (N) | Percentage among cases tested for FQL | RR/MDR-TB cases tested for FQL (N) | Pre-XDR-TB cases (N) | Percentage among cases tested for FQL | RR/MDR-TB cases tested for FQL (N) | Pre-XDR-TB cases (N) | Percentage among cases tested for FQL |
| **EU/EEA** | | | | | | | | | | | | | | | |
| Austria | 15 | 4 | (26.7) | 16 | 4 | (25.0) | 15 | 4 | (26.7) | 3 | 2 | (66.7) | 2 | 0 | (0.0) |
| Belgium | 9 | 0 | (0.0) | 3 | 0 | (0.0) | 7 | 5 | (71.4) | 11 | 2 | (18.2) | 5 | 1 | (20.0) |
| *Bulgaria* | *22* | *3* | *(13.6)* | *27* | *4* | *(14.8)* | *28* | *5* | *(17.9)* | *14* | *4* | *(28.6)* | *10* | *2* | *(20.0)* |
| Croatia | 0 | – | – | 0 | – | – | 1 | 0 | (0.0) | 1 | 1 | (100.0) | 0 | – | – |
| Cyprus | 0 | – | – | 1 | 1 | (100.0) | 0 | – | – | 1 | 0 | (0.0) | 0 | – | – |
| Czechia | 5 | 0 | (0.0) | 6 | 2 | (33.3) | 10 | 1 | (10.0) | 2 | 0 | (0.0) | 7 | 4 | (57.1) |
| Denmark | 4 | 0 | (0.0) | 1 | 0 | (0.0) | 4 | 0 | (0.0) | 3 | 0 | (0.0) | 2 | 0 | (0.0) |
| *Estonia* | *25* | *7* | *(28.0)* | *35* | *11* | *(31.4)* | *32* | *10* | *(31.3)* | *25* | *5* | *(20.0)* | *19* | *6* | *(31.6)* |
| Finland | 3 | 1 | (33.3) | 6 | 1 | (16.7) | 4 | 1 | (25.0) | 2 | 0 | (0.0) | 0 | – | – |
| France | 46 | 12 | (26.1) | 57 | 14 | (24.6) | 61 | 16 | (26.2) | 60 | 15 | (25.0) | 41 | 8 | (19.5) |
| Germany | 72 | 23 | (31.9) | 85 | 14 | (16.5) | 87 | 26 | (29.9) | 59 | 15 | (25.4) | 51 | 10 | (19.6) |
| Greece | 0 | – | – | 6 | 1 | (16.7) | 6 | 1 | (16.7) | 4 | 0 | (0.0) | 3 | 0 | (0.0) |
| Hungary | 17 | 10 | (58.8) | 12 | 5 | (41.7) | 12 | 6 | (50.0) | 13 | 6 | (46.2) | 10 | 0 | (0.0) |
| Iceland | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – |
| Ireland | 6 | 2 | (33.3) | 5 | 1 | (20.0) | 5 | 0 | (0.0) | 3 | 0 | (0.0) | 0 | – | – |
| Italy | 22 | 13 | (59.1) | 28 | 11 | (39.3) | 17 | 14 | (82.4) | 34 | 12 | (35.3) | 34 | 8 | (23.5) |
| *Latvia* | *53* | *22* | *(41.5)* | *47* | *18* | *(38.3)* | – | – | – | – | – | – | – | – | – |
| Liechtenstein | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – |
| *Lithuania* | *253* | *88* | *(34.8)* | *263* | *108* | *(41.1)* | *188* | *76* | *(40.4)* | *159* | *75* | *(47.2)* | *104* | *34* | *(32.7)* |
| Luxembourg | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – |
| Malta | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – |
| Netherlands | 9 | 0 | (0.0) | 6 | 0 | (0.0) | 3 | 1 | (33.3) | 7 | 2 | (28.6) | 4 | 0 | (0.0) |
| Norway | 8 | 0 | (0.0) | 6 | 1 | (16.7) | 6 | 1 | (16.7) | 2 | 1 | (50.0) | 2 | 0 | (0.0) |
| Poland | 38 | 13 | (34.2) | 36 | 11 | (30.6) | 41 | 18 | (43.9) | 31 | 7 | (22.6) | 14 | 12 | (85.7) |
| Portugal | 12 | 3 | (25.0) | 8 | 2 | (25.0) | 1 | 0 | (0.0) | 5 | 0 | (0.0) | 3 | 0 | (0.0) |
| *Romania* | *238* | *95* | *(39.9)* | *225* | *76* | *(33.8)* | *265* | *70* | *(26.4)* | *147* | *51* | *(34.7)* | *96* | *27* | *(28.1)* |
| Slovakia | 3 | 1 | (33.3) | 5 | 2 | (40.0) | 2 | 1 | (50.0) | 5 | 0 | (0.0) | 1 | 0 | (0.0) |
| Slovenia | 0 | – | – | 1 | 0 | (0.0) | 0 | – | – | 0 | – | – | 1 | 0 | (0.0) |
| Spain | 5 | 2 | (40.0) | 9 | 1 | (11.1) | 10 | 2 | (20.0) | 5 | 0 | (0.0) | 3 | 1 | (33.3) |
| Sweden | 14 | 5 | (35.7) | 10 | 0 | (0.0) | 7 | 0 | (0.0) | 6 | 0 | (0.0) | 5 | 2 | (40.0) |
| **Subtotal EU/EEA** | **879** | **304** | **(34.6)** | **904** | **288** | **(31.9)** | **812** | **258** | **(31.8)** | **602** | **198** | **(32.9)** | **417** | **115** | **(27.6)** |
| **Non-EU/EEA** | | | | | | | | | | | | | | | |
| Albania | – | – | – | 0 | 0 | – | – | – | – | – | – | – | – | – | – |
| Andorra | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – | – | – | – |
| *Armenia* | *57* | *12* | *(21.1)* | *98* | *20* | *(20.4)* | *85* | *18* | *(21.2)* | *63* | *19* | *(30.2)* | *52* | *11* | *(21.2)* |
| *Azerbaijan* | *535* | *209* | *(39.1)* | *812* | *208* | *(25.6)* | *864* | *148* | *(17.1)* | *704* | *153* | *(21.7)* | *576* | *87* | *(15.1)* |
| *Belarus* | *674* | *218* | *(32.3)* | *1 117* | *464* | *(41.5)* | *984* | *272* | *(27.6)* | *874* | *277* | *(31.7)* | *825* | *354* | *(42.9)* |
| Bosnia and Herzegovina | 0 | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| *Georgia* | *315* | *106* | *(33.7)* | *266* | *93* | *(35.0)* | *211* | *75* | *(35.5)* | *242* | *65* | *(26.9)* | *173* | *50* | *(28.9)* |
| Israel | 9 | 3 | (33.3) | 8 | 1 | (12.5) | 15 | 3 | (20.0) | 9 | 1 | (11.1) | 5 | 1 | (20.0) |
| *Kazakhstan* | – | – | – | *2 187* | *278* | *(12.7)* | *3 577* | *349* | *(9.8)* | *2 460* | *635* | *(25.8)* | *2 848* | *399* | *(14.0)* |
| *Kyrgyzstan* | *407* | *114* | *(28.0)* | *659* | *220* | *(33.4)* | *666* | *117* | *(17.6)* | *909* | *97* | *(10.7)* | *869* | *149* | *(17.1)* |
| Monaco | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Montenegro | 0 | – | – | 1 | 1 | (100.0) | 1 | 0 | (0.0) | 0 | – | – | 0 | – | – |
| North Macedonia | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – |
| *Republic of Moldova* | *603* | *108* | *(17.9)* | *533* | *89* | *(16.7)* | *658* | *157* | *(23.9)* | *559* | *121* | *(21.6)* | *413* | *188* | *(45.5)* |
| *Russian Federation* | *0* | – | – | *22 528* | *5 672* | *(25.2)* | *23 919* | *7 737* | *(32.3)* | *25 331* | *9 077* | *(35.8)* | *20 449* | *7 822* | *(38.3)* |
| San Marino | *0* | – | – | *0* | – | – | *0* | – | – | *0* | – | – | – | – | – |
| Serbia | – | – | – | 0 | – | – | – | – | – | – | – | – | – | – | – |
| Serbia excluding Kosovo[1] | – | – | – | 0 | – | – | – | – | – | – | – | – | – | – | – |
| Kosovo[1] | – | – | – | 0 | – | – | – | – | – | – | – | – | – | – | – |
| Switzerland | 13 | 1 | (7.7) | – | – | – | 4 | 1 | (25.0) | 9 | 0 | (0.0) | 4 | 2 | (50.0) |
| *Tajikistan* | *644* | *331* | *(51.4)* | *464* | *55* | *(11.9)* | *583* | *197* | *(33.8)* | *362* | *16* | *(4.4)* | *512* | *121* | *(23.6)* |
| *Turkey* | *156* | *23* | *(14.7)* | *121* | *9* | *(7.4)* | *142* | *16* | *(11.3)* | *90* | *22* | *(24.4)* | *99* | *14* | *(14.1)* |
| *Turkmenistan* | – | – | – | – | – | – | – | – | – | – | – | – | *0* | – | – |
| *Ukraine* | *10 141* | *3 464* | *(34.2)* | *6 501* | *1 965* | *(30.2)* | *6 475* | *2 498* | *(38.6)* | *5 936* | *890* | *(15.0)* | *4 177* | *1 120* | *(26.8)* |
| United Kingdom | 44 | 8 | (18.2) | 31 | 10 | (32.3) | 25 | 6 | (24.0) | 29 | 5 | (17.2) | 32 | 8 | (25.0) |
| *Uzbekistan* | *1 802* | *211* | *(11.7)* | *540* | *51* | *(9.4)* | *1 422* | *11* | *(0.8)* | *466* | *209* | *(44.8)* | *1 400* | *378* | *(27.0)* |
| **Subtotal non-EU/EEA** | **15 400** | **4 808** | **(31.2)** | **35 866** | **9 136** | **(25.5)** | **39 631** | **11 605** | **(29.3)** | **38 043** | **11 587** | **(30.5)** | **32 434** | **10 704** | **(33.0)** |
| **Total European Region** | **16 279** | **5 112** | **(31.4)** | **36 770** | **9 424** | **(25.6)** | **40 443** | **11 863** | **(29.3)** | **38 645** | **11 785** | **(30.5)** | **32 851** | **10 819** | **(32.9)** |
| ***Subtotal 18 HPCs*** | ***15 925*** | ***5 011*** | ***(31.5)*** | ***36 423*** | ***9 341*** | ***(25.6)*** | ***40 099*** | ***11 756*** | ***(29.3)*** | ***38 341*** | ***11 716*** | ***(30.6)*** | ***32 622*** | ***10 762*** | ***(33.0)*** |

*Note:* European Region comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB HPCs are presented in italics.
DST: drug-susceptibility testing.
FQL: fluroquinolones.
HPCs: high-priority countries.
RR/MDR-TB: rifampicin-resistant or multidrug-resistant tuberculosis.
XDR-TB: extensively drug-resistant tuberculosis.
[a] Includes cases that are RR/MDR but that also meet the pre-XDR or XDR case definitions (pre-XDR and XDR cases have not been excluded).
[b] Includes only countries reporting second-line anti-TB drug susceptibility testing for at least one fluoroquinolone (ciprofloxacin, gatifloxacin, levofloxacin, moxifloxacin and ofloxacin) and one injectable drug (amikacin, capreomycin and kanamycin).
[1] All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

## Table IX. TB cases with HIV infection, European Region, 2016–2020[a]

| Country/area | 2016 | | | | | 2017 | | | | | 2018 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | All TB cases (N) | Cases with known HIV status | | HIV positive | | All TB cases (N) | Cases with known HIV status | | HIV positive | | All TB cases (N) | Cases with known HIV status | | HIV positive | |
| | | N | % | N | %[b] | | N | % | N | %[b] | | N | % | N | %[b] |
| **EU/EEA** | | | | | | | | | | | | | | | |
| Austria | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Belgium | 1 042 | 477 | (45.8) | 33 | (6.9) | 967 | 514 | (53.2) | 43 | (8.4) | 977 | 502 | (51.4) | 35 | (7.0) |
| *Bulgaria* | *1 603* | *1 260* | *(78.6)* | *0* | *(0.0)* | *1 463* | *1 204* | *(82.3)* | *3* | *(0.2)* | *1 358* | *1 118* | *(82.3)* | *0* | *(0.0)* |
| Croatia | 464 | 4 | (0.9) | 0 | (0.0) | 378 | 3 | (0.8) | 0 | (0.0) | 372 | 2 | (0.5) | 0 | (0.0) |
| Cyprus | 60 | 48 | (80.0) | 0 | (0.0) | 53 | 49 | (92.5) | 0 | (0.0) | 52 | 41 | (78.8) | 1 | (2.4) |
| Czechia | 516 | 205 | (39.7) | 5 | (2.4) | 501 | 195 | (38.9) | 8 | (4.1) | 443 | 190 | (42.9) | 4 | (2.1) |
| Denmark | 330 | 150 | (45.5) | 9 | (6.0) | 275 | 211 | (76.7) | 3 | (1.4) | 291 | 234 | (80.4) | 3 | (1.3) |
| *Estonia* | *192* | *185* | *(96.4)* | *22* | *(11.9)* | *176* | *164* | *(93.2)* | *14* | *(8.5)* | *147* | *137* | *(93.2)* | *13* | *(9.5)* |
| Finland | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| France | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Germany | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Greece | 440 | 296 | (67.3) | 8 | (2.7) | 467 | 389 | (83.3) | 13 | (3.3) | 432 | 362 | (83.8) | 11 | (3.0) |
| Hungary | 786 | 19 | (2.4) | 1 | (5.3) | 685 | 18 | (2.6) | 1 | (5.6) | 640 | 23 | (3.6) | 3 | (13.0) |
| Iceland | 6 | 6 | (100.0) | 0 | (0.0) | 14 | 13 | (92.9) | 0 | (0.0) | 8 | 8 | (100.0) | 1 | (12.5) |
| Ireland | 315 | 139 | (44.1) | 4 | (2.9) | 300 | 156 | (52.0) | 14 | (9.0) | 310 | 160 | (51.6) | 13 | (8.1) |
| Italy | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| *Latvia* | *660* | *507* | *(76.8)* | *57* | *(11.2)* | *552* | *471* | *(85.3)* | *52* | *(11.0)* | – | – | – | – | – |
| Liechtenstein | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| *Lithuania* | *1 442* | *1 138* | *(78.9)* | *41* | *(3.6)* | *1 387* | *1 125* | *(81.1)* | *42* | *(3.7)* | *1 142* | *954* | *(83.5)* | *32* | *(3.4)* |
| Luxembourg | 29 | 5 | (17.2) | 2 | (40.0) | 32 | 3 | (9.4) | 1 | (33.3) | 42 | 7 | (16.7) | 0 | (0.0) |
| Malta | 50 | 46 | (92.0) | 8 | (17.4) | 42 | 37 | (88.1) | 0 | (0.0) | – | – | – | – | – |
| Netherlands | 887 | 646 | (72.8) | 20 | (3.1) | 783 | 602 | (76.9) | 23 | (3.8) | 795 | 624 | (78.5) | 21 | (3.4) |
| Norway | 295 | 255 | (86.4) | 10 | (3.9) | 261 | 228 | (87.4) | 7 | (3.1) | 208 | 184 | (88.5) | 7 | (3.8) |
| Poland | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Portugal | 1 936 | 1 697 | (87.7) | 183 | (10.8) | 1 914 | 1 744 | (91.1) | 149 | (8.5) | 1 936 | 1 698 | (87.7) | 161 | (9.5) |
| *Romania* | *13 601* | *10 844* | *(79.7)* | *305* | *(2.8)* | *12 997* | *10 890* | *(83.8)* | *232* | *(2.1)* | *12 199* | *10 355* | *(84.9)* | *255* | *(2.5)* |
| Slovakia | 296 | 132 | (44.6) | 0 | (0.0) | 249 | 227 | (91.2) | 0 | (0.0) | 281 | 238 | (84.7) | 2 | (0.8) |
| Slovenia | 118 | 95 | (80.5) | 1 | (1.1) | 112 | 80 | (71.4) | 0 | (0.0) | 99 | 80 | (80.8) | 0 | (0.0) |
| Spain | 5 070 | 3 021 | (59.6) | 243 | (8.0) | 5 660 | 2 845 | (50.3) | 266 | (9.3) | 4 766 | 76 | (1.6) | 35 | (46.1) |
| Sweden | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| **Subtotal EU/EEA** | **30 138** | **21 175** | **(70.3)** | **952** | **(4.5)** | **29 268** | **21 168** | **(72.3)** | **871** | **(4.1)** | **26 498** | **16 993** | **(64.1)** | **597** | **(3.5)** |
| **Non-EU/EEA** | | | | | | | | | | | | | | | |
| Albania | 415 | 223 | (53.7) | 6 | (2.7) | 503 | 235 | (46.7) | 4 | (1.7) | 440 | 215 | (48.9) | 6 | (2.8) |
| Andorra | 4 | 0 | (0.0) | – | – | 1 | 0 | (0.0) | 0 | (0.0) | 2 | 0 | (0.0) | 0 | (0.0) |
| *Armenia* | *1 027* | *1 027* | *(100.0)* | *57* | *(5.6)* | *841* | *838* | *(99.6)* | *66* | *(7.9)* | *734* | *699* | *(95.2)* | *72* | *(10.3)* |
| *Azerbaijan* | *5 159* | *4 722* | *(91.5)* | *99* | *(2.1)* | *5 231* | *5 889* | *(112.6)* | *95* | *(1.6)* | *5 038* | *6 483* | *(128.7)* | *87* | *(1.3)* |
| *Belarus* | *3 211* | *3 148* | *(98.0)* | *275* | *(8.7)* | *2 781* | *2 781* | *(100.0)* | *202* | *(7.3)* | *2 359* | *2 359* | *(100.0)* | *182* | *(7.7)* |
| Bosnia and Herzegovina | 907 | 1 | (0.1) | 1 | (100.0) | – | – | – | – | – | – | – | – | – | – |
| *Georgia* | *2 983* | *2 866* | *(96.1)* | *61* | *(2.1)* | *2 597* | *2 442* | *(94.0)* | *43* | *(1.8)* | *2 316* | *2 174* | *(93.9)* | *45* | *(2.1)* |
| Israel | *250* | *250* | *(100.0)* | *18* | *(7.2)* | *234* | *234* | *(100.0)* | *12* | *(5.1)* | *292* | *292* | *(100.0)* | *12* | *(4.1)* |
| *Kazakhstan* | *12 322* | *10 616* | *(86.2)* | *576* | *(5.4)* | *12 449* | *11 056* | *(88.8)* | *443* | *(4.0)* | *12 832* | *12 236* | *(95.4)* | *717* | *(5.9)* |
| *Kyrgyzstan* | *7 026* | *6 254* | *(89.0)* | *210* | *(3.4)* | *6 687* | *5 966* | *(89.2)* | *216* | *(3.6)* | *6 338* | *5 771* | *(91.1)* | *187* | *(3.2)* |
| Monaco | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Montenegro | 87 | 60 | (69.0) | 0 | (0.0) | 75 | 63 | (84.0) | 0 | (0.0) | 84 | 43 | (51.2) | 0 | (0.0) |
| North Macedonia | 263 | 207 | (78.7) | 0 | (0.0) | 216 | 178 | (82.4) | 0 | (0.0) | 217 | 126 | (58.1) | 3 | (2.4) |
| *Republic of Moldova* | *3 571* | *3 366* | *(94.3)* | *293* | *(8.7)* | *3 358* | *3 352* | *(99.8)* | *277* | *(8.3)* | *3 022* | *2 893* | *(95.7)* | *248* | *(8.6)* |
| *Russian Federation* | *92 407* | *79 935* | *(86.5)* | *16 570* | *(20.7)* | *84 510* | *81 443* | *(96.4)* | *15 695* | *(19.3)* | *78 258* | *74 075* | *(94.7)* | *14797* | *(20.0)* |
| San Marino | *0* | – | – | – | – | *0* | – | – | – | – | *0* | – | – | – | – |
| Serbia | 755 | 84 | (11.1) | 5 | (6.0) | 1 450 | 71 | (4.9) | 8 | (11.3) | 641 | 56 | (8.7) | 8 | (14.3) |
| Serbia excluding Kosovo[1] | 755 | 84 | (11.1) | 5 | (6.0) | 738 | 91 | (12.3) | 8 | (8.8) | 641 | 56 | (8.7) | 8 | (14.3) |
| Kosovo[1] | – | – | – | – | – | 712 | 0 | (0.0) | – | – | – | – | – | – | – |
| Switzerland | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| *Tajikistan* | *5 965* | *5 850* | *(98.1)* | *201* | *(3.4)* | *5 895* | *5 937* | *(100.7)* | *219* | *(3.7)* | *5 726* | *5 545* | *(96.8)* | *227* | *(4.1)* |
| *Turkey* | *12 186* | *8 549* | *(70.2)* | *56* | *(0.7)* | *11 821* | *8 423* | *(71.3)* | *65* | *(0.8)* | *11 576* | *8 234* | *(71.1)* | *67* | *(0.8)* |
| *Turkmenistan* | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| *Ukraine* | *29 052* | *28 194* | *(97.0)* | *5 832* | *(20.7)* | *27 229* | *26 623* | *(97.8)* | *5 955* | *(22.4)* | *26 512* | *26 312* | *(99.2)* | *6053* | *(23.0)* |
| United Kingdom | – | – | – | – | – | 5 248 | 4 407 | (84.0) | 128 | (2.9) | 4 775 | 4 060 | (85.0) | 115 | (2.8) |
| *Uzbekistan* | *16 050* | *18 441* | *(114.9)* | *758* | *(4.1)* | *16 842* | *16 842* | *(100.0)* | *935* | *(5.6)* | *16 413* | *16 413* | *(100.0)* | *736* | *(4.5)* |
| **Subtotal non-EU/EEA** | **193 640** | **173 793** | **(89.8)** | **25 018** | **(14.4)** | **187 968** | **176 780** | **(94.0)** | **24 363** | **(13.8)** | **177 575** | **167 986** | **(94.6)** | **23 562** | **(14.0)** |
| **Total European Region** | **223 778** | **194 968** | **(87.1)** | **25 970** | **(13.3)** | **217 236** | **197 948** | **(91.1)** | **25 234** | **(12.7)** | **204 073** | **184 979** | **(90.6)** | **24 159** | **(13.1)** |
| ***Subtotal 18 HPCs*** | ***208 457*** | ***186 902*** | ***(89.7)*** | ***25 413*** | ***(13.6)*** | ***196 816*** | ***185 446*** | ***(94.2)*** | ***24 554*** | ***(13.2)*** | ***185 970*** | ***175 758*** | ***(94.5)*** | ***23 718*** | ***(13.5)*** |

*Note:* European Region comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB HPCs are presented in italics.
HPCs: high-priority countries.
[a] HIV prevalence may be underestimated due to incomplete HIV testing and/or reporting of HIV serostatus. Countries/areas were only included in this analysis if the total number of cases tested for HIV and test results were provided.
[b] Proportion calculated from TB cases with known HIV test results.
[1] All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

| 2019 | | | | | 2020 | | | | | Country/area |
|---|---|---|---|---|---|---|---|---|---|---|
| All TB cases (N) | Cases with known HIV status | | HIV positive | | All TB cases (N) | Cases with known HIV status | | HIV positive | | |
| | N | % | N | %[b] | | N | % | N | %[b] | |
| | | | | | | | | | | **EU/EEA** |
| – | – | – | – | – | – | – | – | – | – | Austria |
| 963 | 502 | (52.1) | 43 | (8.6) | 830 | 389 | (46.9) | 33 | (8.5) | Belgium |
| *1 344* | *1 104* | *(82.1)* | *1* | *(0.1)* | *930* | *781* | *(84.0)* | *1* | *(0.1)* | *Bulgaria* |
| 305 | 5 | (1.6) | 0 | (0.0) | 183 | 4 | (2.2) | 0 | (0.0) | Croatia |
| 69 | 43 | (62.3) | 2 | (4.7) | 36 | 30 | (83.3) | 2 | (6.7) | Cyprus |
| 461 | 270 | (58.6) | 8 | (3.0) | 367 | 201 | (54.8) | 7 | (3.5) | Czechia |
| 281 | 227 | (80.8) | 7 | (3.1) | 219 | 166 | (75.8) | 4 | (2.4) | Denmark |
| *150* | *141* | *(94.0)* | *16* | *(11.3)* | *124* | *116* | *(93.5)* | *13* | *(11.2)* | *Estonia* |
| – | – | – | – | – | – | – | – | – | – | Finland |
| – | – | – | – | – | – | – | – | – | – | France |
| – | – | – | – | – | – | – | – | – | – | Germany |
| 459 | 408 | (88.9) | 19 | (4.7) | 396 | 396 | (100.0) | 17 | (4.3) | Greece |
| 552 | 32 | (5.8) | 3 | (9.4) | 406 | 18 | (4.4) | 2 | (11.1) | Hungary |
| 13 | 11 | (84.6) | 0 | (0.0) | – | – | – | – | – | Iceland |
| 266 | 106 | (39.8) | 10 | (9.4) | 240 | 84 | (35.0) | 3 | (3.6) | Ireland |
| – | – | – | – | – | – | – | – | – | – | Italy |
| – | – | – | – | – | – | – | – | – | – | *Latvia* |
| – | – | – | – | – | – | – | – | – | – | Liechtenstein |
| *1 058* | *1 020* | *(96.4)* | *27* | *(2.6)* | *726* | *714* | *(98.3)* | *20* | *(2.8)* | *Lithuania* |
| 50 | 37 | (74.0) | 0 | (0.0) | 34 | 28 | (82.4) | 0 | (0.0) | Luxembourg |
| – | – | – | – | – | – | – | – | – | – | Malta |
| 754 | 596 | (79.0) | 21 | (3.5) | 623 | 489 | (78.5) | 14 | (2.9) | Netherlands |
| 162 | 133 | (82.1) | 6 | (4.5) | 160 | 122 | (76.3) | 2 | (1.6) | Norway |
| – | – | – | – | – | – | – | – | – | – | Poland |
| 1 932 | 1 641 | (84.9) | 153 | (9.3) | 1 445 | 1 087 | (75.2) | 111 | (10.2) | Portugal |
| *11 618* | *10 218* | *(87.9)* | *200* | *(2.0)* | *7 698* | *6 513* | *(84.6)* | *150* | *(2.3)* | *Romania* |
| 214 | 148 | (69.2) | 4 | (2.7) | 158 | 82 | (51.9) | 2 | (2.4) | Slovakia |
| 101 | 73 | (72.3) | 1 | (1.4) | 77 | 58 | (75.3) | 0 | (0.0) | Slovenia |
| 4 543 | 2 597 | (57.2) | 233 | (9.0) | 3 044 | 1 759 | (57.8) | 173 | (9.8) | Spain |
| – | – | – | – | – | – | – | – | – | – | Sweden |
| **25 295** | **19 312** | **(76.3)** | **754** | **(3.9)** | **17 696** | **13 037** | **(73.7)** | **554** | **(4.2)** | **Subtotal EU/EEA** |
| | | | | | | | | | | **Non-EU/EEA** |
| 412 | 368 | (89.3) | 8 | (2.2) | 240 | 199 | (82.9) | 2 | (1.0) | Albania |
| 5 | 0 | (0.0) | 0 | (0.0) | 2 | 0 | (0.0) | 0 | – | Andorra |
| *621* | *591* | *(95.2)* | *62* | *(10.5)* | *394* | *369* | *(93.7)* | *39* | *(10.6)* | *Armenia* |
| *4 823* | *4 534* | *(94.0)* | *71* | *(1.6)* | *3 683* | *3 683* | *(100.0)* | *83* | *(2.3)* | *Azerbaijan* |
| *2 207* | *2 207* | *(100.0)* | *157* | *(7.1)* | *1 514* | *1 514* | *(100.0)* | *135* | *(8.9)* | *Belarus* |
| – | – | – | – | – | – | – | – | – | – | Bosnia and Herzegovina |
| *2 169* | *1 841* | *(84.9)* | *33* | *(1.8)* | *1 669* | *1 490* | *(89.3)* | *29* | *(1.9)* | *Georgia* |
| *217* | *217* | *(100.0)* | *8* | *(3.7)* | *158* | *158* | *(100.0)* | *15* | *(9.5)* | Israel |
| *12 501* | *12 375* | *(99.0)* | *666* | *(5.4)* | *9 603* | *9 440* | *(98.3)* | *614* | *(6.5)* | *Kazakhstan* |
| *6 138* | *5 810* | *(94.7)* | *131* | *(2.3)* | *4 241* | *4 007* | *(94.5)* | *131* | *(3.3)* | *Kyrgyzstan* |
| – | – | – | – | – | – | – | – | – | – | Monaco |
| 80 | 76 | (95.0) | 0 | (0.0) | 40 | 35 | (87.5) | 0 | (0.0) | Montenegro |
| 199 | 152 | (76.4) | 1 | (0.7) | 143 | 69 | (48.3) | 1 | (1.4) | North Macedonia |
| *2 809* | *2 792* | *(99.4)* | *295* | *(10.6)* | *1 767* | *1 693* | *(95.8)* | *219* | *(12.9)* | *Republic of Moldova* |
| *73 328* | *70 610* | *(96.3)* | *16 453* | *(23.3)* | *58 723* | *55 838* | *(95.1)* | *13 506* | *(24.2)* | *Russian Federation* |
| *0* | – | – | – | – | *0* | – | – | – | – | San Marino |
| 501 | 39 | (7.8) | 3 | (7.7) | – | – | – | – | – | Serbia |
| 501 | 39 | (7.8) | 3 | (7.7) | – | – | – | – | – | Serbia excluding Kosovo[1] |
| – | – | – | – | – | – | – | – | – | – | Kosovo[1] |
| – | – | – | – | – | – | – | – | – | – | Switzerland |
| *5 755* | *5 660* | *(98.3)* | *167* | *(3.0)* | *4 148* | *4 043* | *(97.5)* | *118* | *(2.9)* | *Tajikistan* |
| *11 247* | *8 814* | *(78.4)* | *104* | *(1.2)* | *8 830* | *7 062* | *(80.0)* | *83* | *(1.2)* | *Turkey* |
| – | – | – | – | – | – | – | – | – | – | *Turkmenistan* |
| *25 379* | *25 210* | *(99.3)* | *5 800* | *(23.0)* | *17 533* | *17 375* | *(99.1)* | *3 794* | *(21.8)* | *Ukraine* |
| – | – | – | – | – | – | – | – | – | – | United Kingdom |
| *16 272* | *16 272* | *(100.0)* | *647* | *(4.0)* | *12 111* | *12 111* | *(100.0)* | *379* | *(3.1)* | *Uzbekistan* |
| **164 663** | **157 568** | **(95.7)** | **24 606** | **(15.6)** | **124 799** | **119 086** | **(95.4)** | **19 148** | **(16.1)** | **Subtotal non-EU/EEA** |
| **189 958** | **176 880** | **(93.1)** | **25 360** | **(14.3)** | **142 495** | **132 123** | **(92.7)** | **19 702** | **(14.9)** | **Total European Region** |
| ***177 419*** | ***169 199*** | ***(95.4)*** | ***24 830*** | ***(14.7)*** | ***133 694*** | ***126 749*** | ***(94.8)*** | ***19 314*** | ***(15.2)*** | ***Subtotal 18 HPCs*** |

## Table X. Treatment success after 12 months for new[a] and relapse TB cases, European Region, 2015–2019[b]

| Country/area | 2015 | | | 2016 | | | 2017 | | | 2018 | | | 2019 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Cases reported | Success | | Cases reported | Success | | Cases reported | Success | | Cases reported | Success | | Cases reported | Success | |
| | | N | (%) | | N | (%) | | N | (%) | | N | (%) | | N | (%) |
| **EU/EEA** | | | | | | | | | | | | | | | |
| Austria | 553 | 404 | (73.1) | 604 | 452 | (74.8) | 543 | 375 | (69.1) | 455 | 334 | (73.4) | 459 | 341 | (74.3) |
| Belgium[c] | 905 | 719 | (79.4) | 973 | 793 | (81.5) | 905 | 718 | (79.3) | 902 | 737 | (81.7) | 877 | 709 | (80.8) |
| *Bulgaria* | *1 598* | *1 350* | *(84.5)* | *1 510* | *1 291* | *(85.5)* | *1 386* | *1 167* | *(84.2)* | *1 268* | *1 085* | *(85.6)* | *1 278* | *1 045* | *(81.8)* |
| Croatia | 484 | 275 | (56.8) | 452 | 264 | (58.4) | 372 | 245 | (65.9) | 363 | 107 | (29.5) | 295 | 72 | (24.4) |
| Cyprus | 63 | 35 | (55.6) | 56 | 37 | (66.1) | 51 | 34 | (66.7) | 51 | 30 | (58.8) | 65 | 18 | (27.7) |
| Czechia | 499 | 343 | (68.7) | 505 | 346 | (68.5) | 489 | 337 | (68.9) | 422 | 290 | (68.7) | 447 | 330 | (73.8) |
| Denmark[c] | 314 | 157 | (50.0) | 288 | 113 | (39.2) | 251 | 99 | (39.4) | 266 | 48 | (18.0) | 259 | 117 | (45.2) |
| *Estonia* | *172* | *143* | *(83.1)* | *165* | *132* | *(80.0)* | *139* | *112* | *(80.6)* | *115* | *96* | *(83.5)* | *120* | *91* | *(75.8)* |
| Finland | 261 | 100 | (38.3) | 217 | 69 | (31.8) | 236 | 85 | (36.0) | 222 | 51 | (23.0) | 222 | 85 | (38.3) |
| France | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Germany | 5 525 | 3 590 | (65.0) | 5 635 | 3 926 | (69.7) | 5 253 | 3 716 | (70.7) | 5 214 | 3 721 | (71.4) | 4 566 | 3 130 | (68.6) |
| Greece | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Hungary | 851 | 600 | (70.5) | 722 | 511 | (70.8) | 639 | 429 | (67.1) | 591 | 388 | (65.7) | 517 | 336 | (65.0) |
| Iceland | 7 | 7 | (100.0) | 6 | 5 | (83.3) | 13 | 12 | (92.3) | 8 | 8 | (100.0) | 13 | 13 | (100.0) |
| Ireland[c] | 265 | 191 | (72.1) | 285 | 168 | (58.9) | 277 | 163 | (58.8) | 284 | 110 | (38.7) | 243 | 9 | (3.7) |
| Italy | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| *Latvia* | *642* | *540* | *(84.1)* | *592* | *505* | *(85.3)* | – | – | – | – | – | – | – | – | – |
| Liechtenstein | 1 | 0 | (0.0) | 2 | 2 | (100.0) | 1 | 1 | (100.0) | – | – | – | – | – | – |
| *Lithuania* | *1 219* | *975* | *(80.0)* | *1 152* | *958* | *(83.2)* | *1 086* | *905* | *(83.3)* | *926* | *806* | *(87.0)* | *866* | *754* | *(87.1)* |
| Luxembourg | – | – | – | – | – | – | – | – | – | – | – | – | 47 | 17 | (36.2) |
| Malta | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Netherlands | 838 | 732 | (87.4) | 864 | 758 | (87.7) | 762 | 665 | (87.3) | 774 | 668 | (86.3) | 730 | 630 | (86.3) |
| Norway[c] | 277 | 244 | (88.1) | 262 | 226 | (86.3) | 228 | 214 | (93.9) | 182 | 160 | (87.9) | 149 | 126 | (84.6) |
| Poland | 6 196 | 3 293 | (53.1) | 6 099 | 3 300 | (54.1) | – | – | – | – | – | – | – | – | – |
| Portugal | 2 130 | 1 556 | (73.1) | 1 872 | 1 316 | (70.3) | 1 859 | 1 350 | (72.6) | 1 877 | 1 365 | (72.7) | 1 859 | 1 327 | (71.4) |
| *Romania* | *13 908* | *11 834* | *(85.1)* | *12 458* | *10 729* | *(86.1)* | *12 007* | *10 348* | *(86.2)* | *11 271* | *9 483* | *(84.1)* | *10 812* | *9 051* | *(83.7)* |
| Slovakia | 305 | 263 | (86.2) | 279 | 241 | (86.4) | 222 | 204 | (91.9) | 271 | 249 | (91.9) | 209 | 196 | (93.8) |
| Slovenia | 129 | 105 | (81.4) | 118 | 84 | (71.2) | 111 | 85 | (76.6) | 98 | 77 | (78.6) | 98 | 69 | (70.4) |
| Spain | 4 798 | 3 454 | (72.0) | 3 964 | 2 669 | (67.3) | 4 499 | 2 721 | (60.5) | 4 596 | 2 065 | (44.9) | 4 386 | 2 045 | (46.6) |
| Sweden | 754 | 659 | (87.4) | 669 | 607 | (90.7) | 477 | 413 | (86.6) | 462 | 361 | (78.1) | 468 | 286 | (61.1) |
| **Subtotal EU/EEA** | **42 694** | **31 569** | **(73.9)** | **39 749** | **29 502** | **(74.2)** | **31 806** | **24 398** | **(76.7)** | **30 618** | **22 239** | **(72.6)** | **28 985** | **20 797** | **(71.8)** |
| **Non-EU/EEA** | | | | | | | | | | | | | | | |
| Albania | 409 | 354 | (86.6) | 409 | 357 | (87.3) | 499 | 435 | (87.2) | 434 | 386 | (88.9) | 412 | 364 | (88.3) |
| Andorra | 4 | 4 | (100.0) | 4 | 3 | (75.0) | 1 | 1 | (100.0) | 2 | 2 | (100.0) | 5 | 3 | (60.0) |
| *Armenia* | *910* | *721* | *(79.2)* | *869* | *703* | *(80.9)* | *710* | *563* | *(79.3)* | *615* | *497* | *(80.8)* | *485* | *399* | *(82.3)* |
| *Azerbaijan* | *1 475* | *1 221* | *(82.8)* | *1 464* | *1 225* | *(83.7)* | *1 777* | *1 492* | *(84.0)* | *1 751* | *1 471* | *(84.0)* | *1 702* | *1 429* | *(84.0)* |
| *Belarus* | *2 525* | *2 243* | *(88.8)* | *2 123* | *1 894* | *(89.2)* | *1 792* | *1 587* | *(88.6)* | *1 418* | *1 250* | *(88.2)* | *1 302* | *1 153* | *(88.6)* |
| Bosnia and Herzegovina | 1 092 | 707 | (64.7) | 907 | 505 | (55.7) | 766 | 343 | (44.8) | 666 | 189 | (28.4) | 580 | 185 | (31.9) |
| *Georgia* | *2 841* | *2 386* | *(84.0)* | *2 715* | *2 263* | *(83.4)* | *2 351* | *1 977* | *(84.1)* | *2 071* | *1 735* | *(83.8)* | *1 947* | *1 659* | *(85.2)* |
| Israel | 263 | 218 | (82.9) | 250 | 198 | (79.2) | 225 | 196 | (87.1) | 292 | 227 | (77.7) | 217 | 182 | (83.9) |
| *Kazakhstan* | *14 006* | *12 691* | *(90.6)* | *6 775* | *5 962* | *(88.0)* | *8 589* | *7 826* | *(91.1)* | *7 859* | *7 093* | *(90.3)* | *7 429* | *6 704* | *(90.2)* |
| *Kyrgyzstan* | *6 139* | *5 063* | *(82.5)* | *6 072* | *4 968* | *(81.8)* | *5 752* | *4 728* | *(82.2)* | *5 333* | *4 321* | *(81.0)* | *5 110* | *4 155* | *(81.3)* |
| Monaco | – | – | – | 2 | 0 | (0.0) | – | – | – | 1 | 0 | (0.0) | – | – | – |
| Montenegro | 80 | 74 | (92.5) | 87 | 70 | (80.5) | 75 | 65 | (86.7) | 81 | 77 | (95.1) | 82 | 78 | (95.1) |
| North Macedonia | 282 | 243 | (86.2) | 263 | 232 | (88.2) | 219 | 193 | (88.1) | 214 | 187 | (87.4) | 199 | 177 | (88.9) |
| *Republic of Moldova* | *2 992* | *2 379* | *(79.5)* | *3 048* | *2 515* | *(82.5)* | *2 715* | *2 187* | *(80.6)* | *2 312* | *1 954* | *(84.5)* | *2 215* | *1 854* | *(83.7)* |
| *Russian Federation* | *80 424* | *57 060* | *(70.9)* | *73 137* | *52 335* | *(71.6)* | *67 593* | *46 938* | *(69.4)* | *59 850* | *41 154* | *(68.8)* | *54 589* | *37 208* | *(68.2)* |
| San Marino | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – | – | – | – |
| Serbia | 1 647 | 1 471 | (89.3) | 1 443 | 1 191 | (82.5) | 1 440 | 1 239 | (86.0) | 1 265 | 1 032 | (81.6) | 602 | 513 | (85.2) |
| Serbia excluding Kosovo[1] | 882 | 733 | (83.1) | 733 | 590 | (80.5) | 738 | 616 | (83.5) | 579 | 459 | (79.3) | – | – | – |
| Kosovo[1] | 765 | 738 | (96.5) | 710 | 601 | (84.6) | 702 | 623 | (88.7) | 686 | 573 | (83.5) | 602 | 513 | (85.2) |
| Switzerland | – | – | – | 565 | 384 | (68.0) | 518 | 406 | (78.4) | 376 | 309 | (82.2) | 391 | 267 | (68.3) |
| *Tajikistan* | *5 298* | *4 734* | *(89.4)* | *5 324* | *4 751* | *(89.2)* | *5 259* | *4 789* | *(91.1)* | *4 995* | *4 452* | *(89.1)* | *5 114* | *4 643* | *(90.8)* |
| *Turkey* | *12 362* | *10 735* | *(86.8)* | *12 017* | *10 462* | *(87.1)* | *11 638* | *10 014* | *(86.0)* | *11 407* | *9 691* | *(85.0)* | *11 095* | *9 231* | *(83.2)* |
| *Turkmenistan* | *1 669* | *1 451* | *(86.9)* | *2 068* | *1 738* | *(84.0)* | *1 968* | *1 676* | *(85.2)* | *2 157* | *1 780* | *(82.5)* | *2 117* | *1 749* | *(82.6)* |
| *Ukraine* | *23 892* | *17 939* | *(75.1)* | *22 615* | *17 234* | *(76.2)* | *21 165* | *16 189* | *(76.5)* | *20 221* | *15 607* | *(77.2)* | *19 414* | *15 381* | *(79.2)* |
| United Kingdom[c] | 5 802 | 4 594 | (79.2) | 5 675 | 4 570 | (80.5) | 5 176 | 4 216 | (81.5) | 4 684 | 3 724 | (79.5) | 4 739 | 3 675 | (77.5) |
| *Uzbekistan* | *15 220* | *13 536* | *(88.9)* | *14 743* | *12 906* | *(87.5)* | *15 167* | *13 554* | *(89.4)* | *14 423* | *13 217* | *(91.6)* | *14 224* | *12 820* | *(90.1)* |
| **Subtotal non-EU/EEA** | **179 332** | **139 824** | **(78.0)** | **162 575** | **126 466** | **(77.8)** | **155 395** | **120 614** | **(77.6)** | **142 427** | **110 355** | **(77.5)** | **133 970** | **103 829** | **(77.5)** |
| **Total European Region** | **222 026** | **171 393** | **(77.2)** | **202 324** | **155 968** | **(77.1)** | **187 201** | **145 012** | **(77.5)** | **173 045** | **132 594** | **(76.6)** | **162 955** | **124 626** | **(76.5)** |
| ***Subtotal 18 HPCs*** | ***187 292*** | ***147 001*** | ***(78.5)*** | ***168 847*** | ***132 571*** | ***(78.5)*** | ***161 094*** | ***126 052*** | ***(78.2)*** | ***147 992*** | ***115 692*** | ***(78.2)*** | ***139 819*** | ***109 326*** | ***(78.2)*** |

*Note:* European Region comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB HPCs are presented in italics. EU/EEA: country data are shown as missing (–) when data on treatment outcome are not reported. For inclusion in the cohort, drug-susceptibility data are also required. HPCs: high-priority countries.

[a] For EU/EEA countries, cases with unknown TB history are considered as new cases.

[b] Excluding rifampicin-resistant cases.

[c] Previous TB history is defined as previous diagnosis.

[1] All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

## Table XI. Treatment success after 24 months of RR/MDR-TB[a] cases started on treatment[b], European Region, 2014–2018

| Country/area | 2014 | | | 2015 | | | 2016 | | | 2017 | | | 2018 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Cases reported | Success | | Cases reported | Success | | Cases reported | Success | | Cases reported | Success | | Cases reported | Success | |
| | | N | (%) | | N | (%) | | N | (%) | | N | (%) | | N | (%) |
| **EU/EEA** | | | | | | | | | | | | | | | |
| Austria | 21 | 13 | (61.9) | 13 | 12 | (92.3) | 17 | 11 | (64.7) | 19 | 10 | (52.6) | 18 | 15 | (83.3) |
| Belgium | 13 | 7 | (53.8) | 16 | 16 | (100.0) | 12 | 10 | (83.3) | 8 | 6 | (75.0) | 9 | 7 | (77.8) |
| *Bulgaria* | *44* | *22* | *(50.0)* | *28* | *17* | *(60.7)* | *22* | *12* | *(54.5)* | *29* | *18* | *(62.1)* | *28* | *17* | *(60.7)* |
| Croatia | 1 | 0 | (0.0) | 1 | 1 | (100.0) | 0 | – | – | 0 | – | – | 2 | 0 | (0.0) |
| Cyprus | 0 | – | – | 0 | – | – | – | – | – | – | – | – | 0 | – | – |
| Czechia | 7 | 3 | (42.9) | 9 | 3 | (33.3) | 5 | 2 | (40.0) | 8 | 3 | (37.5) | 12 | 4 | (33.3) |
| Denmark | 2 | 1 | (50.0) | 7 | 0 | (0.0) | 5 | 3 | (60.0) | 2 | 1 | (50.0) | 4 | 0 | (0.0) |
| *Estonia* | *51* | *32* | *(62.7)* | *40* | *25* | *(62.5)* | *25* | *18* | *(72.0)* | *35* | *28* | *(80.0)* | *31* | *23* | *(74.2)* |
| Finland | 7 | 2 | (28.6) | 9 | 4 | (44.4) | 6 | 4 | (66.7) | 5 | 2 | (40.0) | 3 | 2 | (66.7) |
| France | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Germany | 105 | 35 | (33.3) | 131 | 54 | (41.2) | 121 | 45 | (37.2) | 138 | 75 | (54.3) | 131 | 83 | (63.4) |
| Greece | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Hungary | 4 | 4 | (100.0) | 9 | 2 | (22.2) | 20 | 8 | (40.0) | 13 | 6 | (46.2) | 13 | 6 | (46.2) |
| Iceland | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – |
| Ireland | 2 | 1 | (50.0) | 1 | 0 | (0.0) | 7 | 5 | (71.4) | 6 | 2 | (33.3) | 8 | 1 | (12.5) |
| Italy | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| *Latvia* | *71* | *52* | *(73.2)* | *63* | *39* | *(61.9)* | – | – | – | – | – | – | – | – | – |
| Liechtenstein | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – |
| *Lithuania* | *279* | *91* | *(32.6)* | *248* | *99* | *(39.9)* | *255* | *110* | *(43.1)* | *264* | *111* | *(42.0)* | *189* | *103* | *(54.5)* |
| Luxembourg | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Malta | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Netherlands | 7 | 6 | (85.7) | 10 | 6 | (60.0) | 15 | 11 | (73.3) | 10 | 8 | (80.0) | 6 | 5 | (83.3) |
| Norway | 11 | 9 | (81.8) | 6 | 6 | (100.0) | 11 | 10 | (90.9) | 9 | 8 | (88.9) | 6 | 5 | (83.3) |
| Poland | 49 | 9 | (18.4) | 45 | 16 | (35.6) | – | – | – | – | 0 | – | – | 0 | – |
| Portugal | 28 | 15 | (53.6) | 26 | 9 | (34.6) | 19 | 5 | (26.3) | 13 | 10 | (76.9) | 11 | 7 | (63.6) |
| *Romania* | *597* | *246* | *(41.2)* | *589* | *259* | *(44.0)* | *547* | *271* | *(49.5)* | *455* | *183* | *(40.2)* | *439* | *192* | *(43.7)* |
| Slovakia | 4 | 2 | (50.0) | 3 | 1 | (33.3) | 3 | 0 | (0.0) | 7 | 2 | (28.6) | 3 | 2 | (66.7) |
| Slovenia | 0 | – | – | 0 | – | – | 0 | – | – | 1 | 0 | (0.0) | 0 | – | – |
| Spain | 0 | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Sweden | 17 | 15 | (88.2) | 26 | 24 | (92.3) | 25 | 23 | (92.0) | 12 | 10 | (83.3) | 14 | 14 | (100.0) |
| **Subtotal EU/EEA** | **1 320** | **565** | **(42.8)** | **1 280** | **593** | **(46.3)** | **1 115** | **548** | **(49.1)** | **1 034** | **483** | **(46.7)** | **927** | **486** | **(52.4)** |
| **Non-EU/EEA** | | | | | | | | | | | | | | | |
| Albania | – | – | – | 3 | 3 | (100.0) | 1 | 1 | (100.0) | 0 | – | – | 4 | 3 | (75.0) |
| Andorra | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – |
| *Armenia* | *118* | *68* | *(57.6)* | *95* | *40* | *(42.1)* | *118* | *58* | *(49.2)* | *104* | *52* | *(50.0)* | *85* | *39* | *(45.9)* |
| *Azerbaijan* | *745* | *441* | *(59.2)* | *800* | *473* | *(59.1)* | *798* | *480* | *(60.2)* | *858* | *509* | *(59.3)* | *821* | *471* | *(57.4)* |
| *Belarus* | *1 472* | *872* | *(59.2)* | *1 400* | *899* | *(64.2)* | *1 180* | *796* | *(67.5)* | *1 067* | *752* | *(70.5)* | *919* | *670* | *(72.9)* |
| Bosnia and Herzegovina | 3 | 2 | (66.7) | 1 | 1 | (100.0) | 0 | – | – | – | – | – | – | – | – |
| *Georgia* | *411* | *201* | *(48.9)* | *412* | *231* | *(56.1)* | *339* | *222* | *(65.5)* | *316* | *203* | *(64.2)* | *230* | *155* | *(67.4)* |
| Israel | 16 | 12 | (75.0) | 10 | 8 | (80.0) | 9 | 6 | (66.7) | 7 | 5 | (71.4) | 14 | 9 | (64.3) |
| *Kazakhstan* | *6 320* | *4 813* | *(76.2)* | *6 482* | *5 063* | *(78.1)* | *6 260* | *4 979* | *(79.5)* | *5 338* | *4 340* | *(81.3)* | *4 336* | *3 499* | *(80.7)* |
| *Kyrgyzstan* | *1 157* | *650* | *(56.2)* | *1 162* | *624* | *(53.7)* | *1 232* | *655* | *(53.2)* | *1 166* | *643* | *(55.1)* | *1 244* | *775* | *(62.3)* |
| Monaco | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Montenegro | 2 | 0 | (0.0) | 1 | 1 | (100.0) | 0 | – | – | 0 | – | – | 1 | 1 | (100.0) |
| North Macedonia | 3 | 1 | (33.3) | 5 | 2 | (40.0) | 2 | 1 | (50.0) | 1 | 0 | (0.0) | 2 | 1 | (50.0) |
| *Republic of Moldova* | *919* | *457* | *(49.7)* | *996* | *487* | *(48.9)* | *979* | *518* | *(52.9)* | *962* | *537* | *(55.8)* | *921* | *541* | *(58.7)* |
| *Russian Federation* | *20 089* | *10 170* | *(50.6)* | *22 607* | *12 117* | *(53.6)* | *22 593* | *12 141* | *(53.7)* | *22 901* | *12 629* | *(55.1)* | *28 706* | *14 757* | *(51.4)* |
| San Marino | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – | – | – | – |
| Serbia | 19 | 12 | (63.2) | 10 | 9 | (90.0) | 12 | 9 | (75.0) | 10 | 7 | (70.0) | – | – | – |
| Serbia excluding Kosovo[1] | 13 | 7 | (53.8) | 5 | 4 | (80.0) | 10 | 7 | (70.0) | 6 | 4 | (66.7) | – | – | – |
| Kosovo[1] | 6 | 5 | (83.3) | 5 | 5 | (100.0) | 2 | 2 | (100.0) | 4 | 3 | (75.0) | – | – | – |
| Switzerland | 12 | 9 | (75.0) | 16 | 7 | (43.8) | 17 | 8 | (47.1) | 12 | 10 | (83.3) | 9 | 6 | (66.7) |
| *Tajikistan* | *804* | *398* | *(49.5)* | *682* | *398* | *(58.4)* | *681* | *440* | *(64.6)* | *546* | *352* | *(64.5)* | *727* | *510* | *(70.2)* |
| *Turkey* | *257* | *163* | *(63.4)* | *230* | *156* | *(67.8)* | *211* | *131* | *(62.1)* | *202* | *139* | *(68.8)* | *180* | *99* | *(55.0)* |
| *Turkmenistan* | *213* | *143* | *(67.1)* | *210* | *142* | *(67.6)* | *557* | *303* | *(54.4)* | *343* | *226* | *(65.9)* | *549* | *248* | *(45.2)* |
| *Ukraine* | *7 174* | *3 297* | *(46.0)* | *7 592* | *3 855* | *(50.8)* | *7 277* | *3 590* | *(49.3)* | *6 685* | *3 407* | *(51.0)* | *5 953* | *3 006* | *(50.5)* |
| United Kingdom | 53 | 32 | (60.4) | 45 | 32 | (71.1) | 59 | 39 | (66.1) | 56 | 35 | (62.5) | 40 | 30 | (75.0) |
| *Uzbekistan* | *3 602* | *2 216* | *(61.5)* | *2 149* | *1 259* | *(58.6)* | *1 986* | *1 140* | *(57.4)* | *2 265* | *1 372* | *(60.6)* | *2 039* | *1 375* | *(67.4)* |
| **Subtotal non-EU/EEA** | **43 389** | **23 957** | **(55.2)** | **44 908** | **25 807** | **(57.5)** | **44 311** | **25 517** | **(57.6)** | **42 839** | **25 218** | **(58.9)** | **46 780** | **26 195** | **(56.0)** |
| **Total European Region** | **44 709** | **24 522** | **(54.8)** | **46 188** | **26 400** | **(57.2)** | **45 426** | **26 065** | **(57.4)** | **43 873** | **25 701** | **(58.6)** | **47 707** | **26 681** | **(55.9)** |
| ***Subtotal 18 HPCs*** | ***44 323*** | ***24 332*** | ***(54.9)*** | ***45 785*** | ***26 183*** | ***(57.2)*** | ***45 060*** | ***25 864*** | ***(57.4)*** | ***43 536*** | ***25 501*** | ***(58.6)*** | ***47 397*** | ***26 480*** | ***(55.9)*** |

*Note:* European Region comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB HPCs are presented in italics. EU/EEA: country data are shown as missing (–) when data on treatment outcome are not reported. For inclusion in the cohort, drug-susceptibility data are also required.
HPCs: high-priority countries.
RR/MDR-TB: rifampicin-resistant/multidrug-resistant tuberculosis.
[a] Includes cases that are RR/MDR but that also meet the pre-XDR or XDR case definitions (pre-XDR and XDR cases have not been excluded).
[b] For EU/EEA countries, cases diagnosed postmortem were excluded, and cases with no data on treatment enrolment were assumed to be enrolled in treatment.
[1] All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

## Table XII. Treatment success after 24 months of pre-XDR-TB[a] cases started on treatment,[b] European Region, 2014–2018

| Country/area | 2014 | | | 2015 | | | 2016 | | | 2017 | | | 2018 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Pre-XDR TB cases (N) | Success | | Pre-XDR TB cases (N) | Success | | Pre-XDR TB cases (N) | Success | | Pre-XDR TB cases (N) | Success | | Pre-XDR TB cases (N) | Success | |
| | | N | (%) | | N | (%) | | N | (%) | | N | (%) | | N | (%) |
| **EU/EEA** | | | | | | | | | | | | | | | |
| Austria | 2 | 1 | (50.0) | 2 | 1 | (50.0) | 5 | 4 | (80.0) | 6 | 3 | (50.0) | 5 | 3 | (60.0) |
| Belgium | 3 | 1 | (33.3) | 4 | 4 | (100.0) | 0 | – | – | 0 | – | – | 5 | 4 | (80.0) |
| *Bulgaria* | *10* | *4* | *(40.0)* | *6* | *3* | *(50.0)* | *3* | *0* | *(0.0)* | *4* | *2* | *(50.0)* | *5* | *2* | *(40.0)* |
| Croatia | 0 | – | – | 1 | 1 | (100.0) | 0 | – | – | 0 | – | – | 0 | – | – |
| Cyprus | 0 | – | – | 0 | – | – | – | – | – | – | – | – | 0 | – | – |
| Czechia | 1 | 0 | (0.0) | 5 | 1 | (20.0) | 0 | – | – | 2 | 1 | (50.0) | 3 | 0 | (0.0) |
| Denmark | 0 | – | – | 2 | 0 | (0.0) | 0 | – | – | 0 | – | – | 0 | – | – |
| *Estonia* | *16* | *5* | *(31.3)* | *14* | *7* | *(50.0)* | *6* | *3* | *(50.0)* | *11* | *6* | *(54.5)* | *10* | *9* | *(90.0)* |
| Finland | 1 | 0 | (0.0) | 1 | 0 | (0.0) | 2 | 1 | (50.0) | 0 | – | – | 1 | 1 | (100.0) |
| France | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Germany | 18 | 6 | (33.3) | 24 | 8 | (33.3) | 24 | 8 | (33.3) | 15 | 7 | (46.7) | 27 | 14 | (51.9) |
| Greece | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Hungary | 1 | 1 | (100.0) | 3 | 1 | (33.3) | 10 | 5 | (50.0) | 5 | 2 | (40.0) | 6 | 1 | (16.7) |
| Iceland | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – |
| Ireland | 0 | – | – | 0 | – | – | 2 | 1 | (50.0) | 1 | 1 | (100.0) | 0 | – | – |
| Italy | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| *Latvia* | *17* | *12* | *(70.6)* | *18* | *10* | *(55.6)* | – | – | – | – | – | – | – | – | – |
| Liechtenstein | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – |
| *Lithuania* | *106* | *12* | *(11.3)* | *100* | *19* | *(19.0)* | *88* | *11* | *(12.5)* | *108* | *12* | *(11.1)* | *76* | *23* | *(30.3)* |
| Luxembourg | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Malta | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Netherlands | 0 | – | – | 0 | – | – | 0 | – | – | 1 | 0 | (0.0) | 2 | 2 | (100.0) |
| Norway | 2 | 1 | (50.0) | 0 | – | – | 0 | – | – | 2 | 2 | (100.0) | 1 | 1 | (100.0) |
| Poland | 10 | 1 | (10.0) | 9 | 4 | (44.4) | – | – | – | – | – | – | – | – | – |
| Portugal | 3 | 2 | (66.7) | 6 | 1 | (16.7) | 4 | 0 | (0.0) | 2 | 2 | (100.0) | 0 | – | – |
| *Romania* | *105* | *22* | *(21.0)* | *123* | *48* | *(39.0)* | *96* | *34* | *(35.4)* | *76* | *8* | *(10.5)* | *69* | *10* | *(14.5)* |
| Slovakia | 1 | 1 | (100.0) | 0 | – | – | 1 | 0 | (0.0) | 2 | 0 | (0.0) | 1 | 0 | (0.0) |
| Slovenia | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – |
| Spain | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Sweden | 1 | 0 | (0.0) | 2 | 1 | (50.0) | 6 | 4 | (66.7) | 1 | 0 | (0.0) | 0 | – | – |
| **Subtotal EU/EEA** | **297** | **69** | **(23.2)** | **320** | **109** | **(34.1)** | **247** | **71** | **(28.7)** | **247** | **46** | **(18.6)** | **211** | **70** | **(33.2)** |
| **Non-EU/EEA** | | | | | | | | | | | | | | | |
| Albania | – | – | – | – | – | – | 0 | – | – | 0 | – | – | 0 | – | – |
| Andorra | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – |
| *Armenia* | *10* | *4* | *(40.0)* | *8* | *4* | *(50.0)* | *10* | *3* | *(30.0)* | *16* | *7* | *(43.8)* | *14* | *3* | *(21.4)* |
| *Azerbaijan* | *69* | *16* | *(23.2)* | – | – | – | – | – | – | *182* | *115* | *(63.2)* | *189* | *116* | *(61.4)* |
| *Belarus* | *431* | *157* | *(36.4)* | *508* | *268* | *(52.8)* | *393* | *207* | *(52.7)* | *419* | *256* | *(61.1)* | *383* | *293* | *(76.5)* |
| Bosnia and Herzegovina | 0 | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| *Georgia* | *56* | *18* | *(32.1)* | *62* | *35* | *(56.5)* | *55* | *31* | *(56.4)* | *47* | *28* | *(59.6)* | *54* | *29* | *(53.7)* |
| Israel | 2 | 1 | (50.0) | 1 | 1 | (100.0) | 2 | 2 | (100.0) | 1 | 0 | (0.0) | 2 | 1 | (50.0) |
| *Kazakhstan* | *318* | *98* | *(30.8)* | *391* | *126* | *(32.2)* | *435* | *207* | *(47.6)* | *300* | *145* | *(48.3)* | *386* | *293* | *(75.9)* |
| *Kyrgyzstan* | *32* | *5* | *(15.6)* | *51* | *9* | *(17.6)* | *68* | *10* | *(14.7)* | *157* | *91* | *(58.0)* | *105* | *55* | *(52.4)* |
| Monaco | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Montenegro | 0 | – | – | 0 | – | – | 1 | 1 | (100.0) | 1 | 1 | (100.0) | 0 | – | – |
| North Macedonia | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – |
| *Republic of Moldova* | *9* | *3* | *(33.3)* | *32* | *5* | *(15.6)* | *65* | *17* | *(26.2)* | *62* | *20* | *(32.3)* | *62* | *32* | *(51.6)* |
| *Russian Federation* | *2 209* | *687* | *(31.1)* | *2 882* | *960* | *(33.3)* | *2 909* | *1 094* | *(37.6)* | *4 140* | *1 710* | *(41.3)* | *27* | *11* | *(40.7)* |
| San Marino | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – | – | – | – |
| Serbia | 0 | | – | 0 | – | – | 1 | 0 | (0.0) | 0 | – | – | – | – | – |
| Serbia excluding Kosovo[1] | – | – | – | – | – | – | – | – | – | 0 | – | – | – | – | – |
| Kosovo[1] | – | – | – | – | – | – | – | – | – | 0 | – | – | – | – | – |
| Switzerland | 1 | 0 | (0.0) | 0 | – | – | 0 | – | – | 0 | – | – | 1 | 1 | (100.0) |
| *Tajikistan* | *0* | – | – | | | – | *43* | *20* | – | *250* | *155* | *(62.0)* | *63* | *42* | *(66.7)* |
| *Turkey* | *2* | *0* | *(0.0)* | *3* | *2* | *(66.7)* | *9* | *5* | *(55.6)* | *2* | *0* | *(0.0)* | *8* | *1* | *(12.5)* |
| *Turkmenistan* | – | – | – | – | – | – | – | – | – | *5* | *2* | *(40.0)* | *28* | *8* | *(28.6)* |
| *Ukraine* | *1 097* | *278* | *(25.3)* | *1 206* | *424* | *(35.2)* | *1 353* | *501* | *(37.0)* | *1 376* | *473* | *(34.4)* | *1 479* | *505* | *(34.1)* |
| United Kingdom | 3 | 1 | (33.3) | 8 | 2 | (25.0) | 7 | 3 | (42.9) | 3 | 1 | (33.3) | 5 | 2 | (40.0) |
| *Uzbekistan* | – | – | – | *147* | *34* | *(23.1)* | *184* | *91* | *(49.5)* | *258* | *162* | *(62.8)* | *404* | *280* | *(69.3)* |
| **Subtotal non-EU/EEA** | **4 239** | **1 268** | **(29.9)** | **5 299** | **1 870** | **(35.3)** | **5 535** | **2 192** | **(39.6)** | **7 219** | **3 166** | **(43.9)** | **3 210** | **1 672** | **(52.1)** |
| **Total European Region** | **4 536** | **1 337** | **(29.5)** | **5 619** | **1 979** | **(35.2)** | **5 782** | **2 263** | **(39.1)** | **7 466** | **3 212** | **(43.0)** | **3 421** | **1 742** | **(50.9)** |
| ***Subtotal 18 HPCs*** | ***4 487*** | ***1 321*** | ***(29.4)*** | ***5 551*** | ***1 954*** | ***(35.2)*** | ***5 717*** | ***2 234*** | ***(39.1)*** | ***7 413*** | ***3 192*** | ***(43.1)*** | ***3 362*** | ***1 712*** | ***(50.9)*** |

*Note:* European Region comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB HPCs are presented in italics. EU/EEA: country data are shown as missing (–) when data on treatment outcome are not reported. For inclusion in the cohort, drug-susceptibility data are also required.
HPCs: high-priority countries.
Pre-XDR-TB: pre-extensively drug-resistant tuberculosis.
[a] Pre-XDR-TB defined as resistance to rifampicin (RR/MDR-TB) as well as resistance to any fluoroquinolone. Includes cases that are pre-XDR-TB but that also meet the XDR case definition (XDR cases have not been excluded).
[b] For EU/EEA countries, cases diagnosed postmortem are excluded, and cases with no treatment enrolment data reported are assumed to be enrolled in treatment.
[1] All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

## Table XIII. Treatment success after 36 months of XDR-TB[a] cases notified in EU/EEA, 2013–2017

| Country/area | 2013 | | | 2014 | | | 2015 | | | 2016 | | | 2017 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | XDR-TB cases (N) | Success | | XDR-TB cases (N) | Success | | XDR-TB cases (N) | Success | | XDR-TB cases (N) | Success | | XDR-TB cases (N) | Success | |
| | | N | (%) | | N | (%) | | N | (%) | | N | (%) | | N | (%) |
| **EU/EEA** | | | | | | | | | | | | | | | |
| Austria | 7 | 4 | (57.1) | 2 | 2 | (100.0) | 1 | 1 | (100.0) | 2 | 2 | (100.0) | 2 | 0 | (0.0) |
| Belgium | 4 | 3 | (75.0) | 3 | 3 | (100.0) | 4 | 4 | (100.0) | 0 | – | – | 0 | – | – |
| *Bulgaria* | *7* | *2* | *(28.6)* | *5* | *2* | *(40.0)* | *1* | *1* | *(100.0)* | *1* | *0* | *(0.0)* | *4* | *2* | *(50.0)* |
| Croatia | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – |
| Cyprus | 0 | – | – | 0 | – | – | 0 | – | – | – | – | – | 0 | – | – |
| Czechia | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – |
| Denmark | 1 | 1 | (100.0) | 0 | – | – | 2 | 0 | (0.0) | 0 | – | – | 0 | – | – |
| *Estonia* | *4* | *1* | *(25.0)* | *6* | *3* | *(50.0)* | *6* | *3* | *(50.0)* | *0* | – | – | *3* | *1* | *(33.3)* |
| Finland | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – |
| France | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Germany | 11 | 1 | (9.1) | 11 | 3 | (27.3) | 16 | 6 | (37.5) | 19 | 6 | (31.6) | 13 | 5 | (38.5) |
| Greece | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Hungary | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – |
| Iceland | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – |
| Ireland | – | – | – | 0 | – | – | 0 | – | – | – | – | – | – | – | – |
| Italy | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| *Latvia* | *0* | – | – | *8* | *7* | *(87.5)* | – | – | – | – | – | – | – | – | – |
| Liechtenstein | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – |
| *Lithuania* | *0* | – | – | *0* | – | – | *0* | – | – | *0* | – | – | *1* | *0* | *(0.0)* |
| Luxembourg | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – |
| Malta | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Netherlands | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – |
| Norway | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – |
| Poland | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – |
| Portugal | 2 | 2 | (100.0) | 1 | 0 | (0.0) | 2 | 0 | (0.0) | 2 | 0 | (0.0) | 2 | 2 | (100.0) |
| *Romania* | *0* | – | – | *0* | – | – | *0* | – | – | *0* | – | – | *1* | *0* | *(0.0)* |
| Slovakia | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – |
| Slovenia | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – |
| Spain | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Sweden | 1 | 1 | (100.0) | 1 | 0 | (0.0) | 1 | 1 | (100.0) | 3 | 1 | (33.3) | 0 | – | – |
| **Total EU/EEA** | **37** | **15** | **(40.5)** | **37** | **20** | **(54.1)** | **33** | **16** | **(48.5)** | **27** | **9** | **(33.3)** | **26** | **10** | **(38.5)** |

*Note:* WHO European Region 18 TB high-priority countries presented in italics. EU/EEA: country data are shown as missing (–) when data on treatment outcome are not reported. For inclusion in the cohort, drug-susceptibility data are also required.
TESSy: the European Surveillance System.
XDR TB: extensively drug-resistant tuberculosis.
[a] XDR-TB defined as resistance to rifampicin and to at least one fluoroquinolone (pre-XDR-TB) as well as resistance to at least one additional Group A drug. Group A drugs include levofloxacin, moxifloxacin, bedaquiline and linezolid. For EU/EEA countries, linezolid resistance is not yet reported to TESSy, therefore XDR-TB is assessed on resistance to levofloxacin, moxifloxacin and/or bedaquiline (in addition to meeting pre-XDR-TB criteria).

**Table XIV. New and relapsed TB cases tested using WHO-recommended rapid diagnostics such as Xpert MTB/RIF,[a] European Region, 2016–2020**

| Country/area | 2016 | | | 2017 | | | 2018 | | | 2019 | | | 2020 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | New and relapse TB cases[b] | Cases tested using WHO recommended rapid diagnostics[c] | | New and relapse TB cases[b] | Cases tested using WHO recommended rapid diagnostics[c] | | New and relapse TB cases[b] | Cases tested using WHO recommended rapid diagnostics[c] | | New and relapse TB cases[b] | Cases tested using WHO recommended rapid diagnostics[c] | | New and relapse TB cases[b] | Cases tested using WHO recommended rapid diagnostics[c] | |
| | N | N | (%) | N | N | (%) | N | N | (%) | N | N | (%) | N | N | (%) |
| **EU/EEA** | | | | | | | | | | | | | | | |
| Austria | 619 | 490 | (79.2) | 561 | 444 | (79.1) | 470 | 376 | (80.0) | 464 | 366 | (78.9) | 382 | 263 | (68.8) |
| Belgium[d] | 982 | 473 | (48.2) | 911 | 484 | (53.1) | 910 | 522 | (57.4) | 890 | 613 | (68.9) | 778 | 533 | (68.5) |
| *Bulgaria* | *1 525* | *6* | *(0.4)* | *1 408* | *5* | *(0.4)* | *1 290* | *7* | *(0.5)* | *1 288* | *17* | *(1.3)* | *887* | *2* | *(0.2)* |
| Croatia | 452 | 0 | (0.0) | 372 | 0 | (0.0) | 364 | 0 | (0.0) | 297 | 0 | (0.0) | 177 | 0 | (0.0) |
| Cyprus | 57 | 4 | (7.0) | 52 | 14 | (26.9) | 51 | 17 | (33.3) | 66 | 30 | (45.5) | 34 | 12 | (35.3) |
| Czechia | 511 | 252 | (49.3) | 495 | 334 | (67.5) | 434 | 274 | (63.1) | 455 | 313 | (68.8) | 360 | 257 | (71.4) |
| Denmark[d] | 292 | 209 | (71.6) | 253 | 198 | (78.3) | 270 | 262 | (97.0) | 260 | 238 | (91.5) | 205 | 197 | (96.1) |
| *Estonia* | *188* | *144* | *(76.6)* | *172* | *138* | *(80.2)* | *145* | *127* | *(87.6)* | *147* | *132* | *(89.8)* | *120* | *105* | *(87.5)* |
| Finland | 223 | 62 | (27.8) | 242 | 91 | (37.6) | 226 | 105 | (46.5) | 225 | 130 | (57.8) | 174 | 107 | (61.5) |
| France | 5 446 | 0 | (0.0) | 5 015 | 0 | (0.0) | 4 779 | 0 | (0.0) | 4 869 | 0 | (0.0) | 4 398 | 0 | (0.0) |
| Germany | 5 739 | 4 454 | (77.6) | 5 371 | 4 328 | (80.6) | 5 326 | 4 497 | (84.4) | 4 648 | 4 005 | (86.2) | 4 010 | 3 428 | (85.5) |
| Greece | 417 | 168 | (40.3) | 434 | 204 | (47.0) | 406 | 181 | (44.6) | 434 | 219 | (50.5) | 380 | 96 | (25.3) |
| Hungary | 737 | 0 | (0.0) | 650 | 0 | (0.0) | 602 | 0 | (0.0) | 528 | 0 | (0.0) | 384 | 0 | (0.0) |
| Iceland | 6 | 5 | (83.3) | 13 | 12 | (92.3) | 8 | 8 | (100.0) | 13 | 12 | (92.3) | 12 | 5 | (41.7) |
| Ireland[d] | 290 | 118 | (40.7) | 283 | 124 | (43.8) | 290 | 140 | (48.3) | 247 | 114 | (46.2) | 229 | 176 | (76.9) |
| Italy | 3 778 | – | – | 3 828 | – | – | 3 777 | – | – | 3 185 | – | – | 2 163 | – | – |
| *Latvia* | *641* | *0* | *(0.0)* | *543* | *178* | *(32.8)* | – | – | – | – | – | – | – | – | – |
| Liechtenstein | 2 | 0 | (0.0) | 1 | 1 | (100.0) | 1 | 1 | (100.0) | – | – | – | 2 | 2 | (100.0) |
| *Lithuania* | *1 347* | *0* | *(0.0)* | *1 268* | *0* | *(0.0)* | *1 063* | *0* | *(0.0)* | *1 006* | *0* | *(0.0)* | *688* | *0* | *(0.0)* |
| Luxembourg | 29 | 0 | (0.0) | 32 | 0 | (0.0) | 42 | 0 | (0.0) | 48 | 0 | (0.0) | 32 | 0 | (0.0) |
| Malta | 50 | 17 | (34.0) | 42 | 13 | (31.0) | 55 | 0 | (0.0) | 98 | 0 | (0.0) | 140 | 0 | (0.0) |
| Netherlands | 875 | 588 | (67.2) | 772 | 576 | (74.6) | 780 | 582 | (74.6) | 739 | 573 | (77.5) | 614 | 494 | (80.5) |
| Norway[d] | 273 | 204 | (74.7) | 237 | 183 | (77.2) | 188 | 150 | (79.8) | 150 | 128 | (85.3) | 144 | 123 | (85.4) |
| Poland | 6 143 | 888 | (14.5) | 5 535 | 1 037 | (18.7) | 5 196 | 1 054 | (20.3) | 4 983 | 1 094 | (22.0) | 3 150 | 876 | (27.8) |
| Portugal | 1 891 | 349 | (18.5) | 1 870 | 404 | (21.6) | 1 887 | 481 | (25.5) | 1 872 | 543 | (29.0) | 1 402 | 434 | (31.0) |
| *Romania* | *12 774* | *846* | *(6.6)* | *12 303* | *3 214* | *(26.1)* | *11 581* | *2 757* | *(23.8)* | *11 070* | *2 840* | *(25.7)* | *7 193* | *2 211* | *(30.7)* |
| Slovakia | 281 | 58 | (20.6) | 228 | 56 | (24.6) | 273 | 66 | (24.2) | 214 | 60 | (28.0) | 153 | 45 | (29.4) |
| Slovenia | 118 | 96 | (81.4) | 112 | 95 | (84.8) | 98 | 81 | (82.7) | 98 | 84 | (85.7) | 75 | 62 | (82.7) |
| Spain | 3 973 | 976 | (24.6) | 4 522 | 1 228 | (27.2) | 4 614 | 1 181 | (25.6) | 4 406 | 1 261 | (28.6) | 2 949 | 940 | (31.9) |
| Sweden | 691 | 461 | (66.7) | 487 | 412 | (84.6) | 474 | 326 | (68.8) | 478 | 386 | (80.8) | 316 | 274 | (86.7) |
| **Subtotal EU/EEA** | **50 350** | **10 868** | **(21.6)** | **48 012** | **13 773** | **(28.7)** | **45 600** | **13 195** | **(28.9)** | ***43 178*** | ***13 158*** | ***(30.5)*** | ***31 551*** | ***10 642*** | ***(33.7)*** |
| **Non-EU/EEA** | | | | | | | | | | | | | | | |
| Albania | – | – | – | – | – | – | – | – | – | 412 | 135 | (32.8) | 240 | 138 | (57.5) |
| Andorra | 4 | 4 | (100.0) | 1 | 1 | (100.0) | 2 | 2 | (100.0) | 5 | 5 | (100.0) | 2 | 2 | (100.0) |
| *Armenia* | *1 027* | *57* | *(5.6)* | *841* | *631* | *(75.0)* | *734* | *619* | *(84.3)* | *621* | *512* | *(82.4)* | *394* | *326* | *(82.7)* |
| *Azerbaijan* | *5 159* | *2 025* | *(39.3)* | *5 231* | *2 869* | *(54.8)* | *5 038* | *3 472* | *(68.9)* | *4 823* | *4 096* | *(84.9)* | *3 683* | *3 033* | *(82.4)* |
| *Belarus* | *3 211* | *2 555* | *(79.6)* | *2 781* | *2 452* | *(88.2)* | *2 359* | *2 201* | *(93.3)* | *2 207* | *2 035* | *(92.2)* | *1 514* | *1 426* | *(94.2)* |
| Bosnia and Herzegovina | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| *Georgia* | *2 983* | *2 421* | *(81.2)* | *2 597* | *2 099* | *(80.8)* | *2 316* | *1 940* | *(83.8)* | *2 169* | *1 824* | *(84.1)* | *1 669* | *1 464* | *(87.7)* |
| Israel | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| *Kazakhstan* | *12 322* | *10 505* | *(85.3)* | *12 449* | *10 226* | *(82.1)* | *12 832* | *11 454* | *(89.3)* | *12 501* | *11 513* | *(92.1)* | *9 603* | *9 219* | *(96.0)* |
| *Kyrgyzstan* | *7 026* | *2 533* | *(36.1)* | *6 687* | *4 330* | *(64.8)* | *6 338* | *3 910* | *(61.7)* | *6 138* | *4 575* | *(74.5)* | *4 241* | *2 495* | *(58.8)* |
| Monaco | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Montenegro | 87 | 25 | (28.7) | 75 | 48 | (64.0) | 84 | 64 | (76.2) | 80 | 57 | (71.3) | 40 | 35 | (87.5) |
| North Macedonia | – | – | – | 216 | 152 | (70.4) | 217 | 147 | (67.7) | – | – | – | – | – | – |
| *Republic of Moldova* | *3 571* | *1 813* | *(50.8)* | *3 358* | *3 129* | *(93.2)* | *3 022* | *2 857* | *(94.5)* | *2 809* | *2 809* | *(100.0)* | *1 767* | *1 664* | *(94.2)* |
| *Russian Federation* | *92 407* | *64 512* | *(69.8)* | *84 510* | *65 843* | *(77.9)* | *78 258* | *57 344* | *(73.3)* | *73 328* | *58 300* | *(79.5)* | *58 723* | *47 901* | *(81.6)* |
| San Marino | 0 | – | – | 0 | – | – | 0 | – | – | 0 | – | – | – | – | – |
| Serbia | – | – | – | 1 450 | 275 | (19.0) | 1 330 | 399 | (30.0) | 1 106 | 414 | (37.4) | – | – | – |
| Serbia excluding Kosovo[1] | – | – | – | 738 | 0 | (0.0) | 641 | 0 | (0.0) | 501 | 0 | (0.0) | – | – | – |
| Kosovo[1] | – | – | – | 712 | 275 | (38.6) | 689 | 399 | (57.9) | 605 | 414 | (68.4) | – | – | – |
| Switzerland | – | – | – | 529 | 354 | (66.9) | – | – | – | 402 | 304 | (75.6) | – | – | – |
| *Tajikistan* | *5 965* | *4 368* | *(73.2)* | *5 895* | *3 075* | *(52.2)* | *5 726* | *4 235* | *(74.0)* | *5 755* | *4 915* | *(85.4)* | *4 148* | *3 502* | *(84.4)* |
| *Turkey* | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| *Turkmenistan* | – | – | – | *1 968* | *1,488* | *(75.6)* | *2 157* | *1 611* | *(74.7)* | *2 117* | *1 650* | *(77.9)* | *1 918* | *711* | *(37.1)* |
| *Ukraine* | – | – | – | – | – | – | *26 512* | *23,093* | *(87.1)* | *25 379* | *22 537* | *(88.8)* | *17 533* | *16 774* | *(95.7)* |
| United Kingdom | 5 793 | 381 | (6.6) | 5 248 | 397 | (7.6) | 4 775 | 367 | (7.7) | 4 803 | 492 | (10.2) | 4 185 | 475 | (11.4) |
| *Uzbekistan* | *16 050* | *12 270* | *(76.4)* | *16 842* | *11 368* | *(67.5)* | *16 413* | *14 390* | *(87.7)* | *16 272* | *12 074* | *(74.2)* | *12 111* | *11 062* | *(91.3)* |
| **Subtotal non-EU/EEA** | **155 605** | **103 469** | **(66.5)** | **150 678** | **108 737** | **(72.2)** | **168 113** | **128 105** | **(76.2)** | ***160 927*** | ***128 247*** | ***(79.7)*** | ***121 771*** | ***100 227*** | ***(82.3)*** |
| **Total European Region** | **205 955** | **114 337** | **(55.5)** | **198 690** | **122 510** | **(61.7)** | **213 713** | **141 300** | **(66.1)** | ***204 105*** | ***141 405*** | ***(69.3)*** | ***153 322*** | ***110 869*** | ***(72.3)*** |
| ***Subtotal 18 HPCs*** | ***166 196*** | ***104 055*** | ***(62.6)*** | ***158 853*** | ***111 045*** | ***(69.9)*** | ***175 784*** | ***130 017*** | ***(74.0)*** | ***167 630*** | ***129 829*** | ***(77.4)*** | ***126 192*** | ***101 895*** | ***(80.7)*** |

*Note:* European Region comprises the 53 countries of the WHO European Region and Liechtenstein. WHO European Region 18 TB HPCs are presented in italics.
HPCs: high-priority countries.

[a] See:WHO (2013). Automated real-time nucleic acid amplification technology for rapid and simultaneous detection of tuberculosis and rifampicin resistance. Policy update. Geneva: World Health Organization (WHOWHO/HTM/TB/2013.16; https://apps.who.int/iris/handle/10665/112472, accessed 7 February 2022).

[b] Cases with unknown previous TB history are included among new TB cases.

[c] All nucleic acid amplification tests are counted as "tested using WHO-recommended rapid diagnostics" for EU/EEA countries.

[d] Previous TB history is defined as previous diagnosis.

[1] All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

# 8. Country profiles

### Abbreviations used in country profiles

| | |
|---|---|
| ART | antiretroviral therapy |
| C+ | culture-positive |
| DR-TB | drug-resistant tuberculosis |
| DRS | drug-resistance surveillance |
| DST | drug-susceptibility testing |
| MDR-TB | multidrug-resistant tuberculosis |
| EQA | external quality assessment |
| pre-XDR-TB | pre-extensively drug-resistant tuberculosis |
| RR/MDR-TB | rifampicin-resistant or multidrug-resistant tuberculosis |
| RR-TB | rifampicin-resistant tuberculosis |
| TB | tuberculosis |

# Albania

Population estimate 2020 by United Nations Statistical Database: 2 877 800

## TB cases, 2020

| Notifications | | |
|---|---|---|
| Total number of cases | 240 | |
| Notification rate per 100 000 | 8.3 | |
| New[a] and relapse | 240 | |
| New[a] and relapse notification rate per 100 000 | 8.3 | |
| Pulmonary | 201 | (83.8%) |
| of which microscopy-positive | – | – |
| of which laboratory-confirmed | 147 | (73.1%) |
| Laboratory-confirmed TB cases | – | – |
| Mean age of new native TB cases | 45.4 years | |
| Mean age of new foreign TB cases | – | – |
| Foreign origin of all TB cases | 0 | (0.0%) |
| New (not previously treated) | 223 | (92.9%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 430 | [370–500] |

[a] Cases with unknown previous TB history included in new cases.

## Drug-resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | Yes | |
| Completeness of HIV data[b] | Yes | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 138 | (93.9%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary cases N, best [low–high] | 4 | [0–8] |
| Pulmonary RR/MDR-TB cases notified | 4 | (2.9%) |
| of which pre-XDR-TB cases | 0 | (0.0%) |
| Notified RR/MDR-TB | 4 | – |
| of which pre-XDR-TB cases | 0 | (0.0%) |
| TB cases tested for HIV | 199 | (82.9%) |
| HIV-positive TB cases | 2 | (1.0%) |
| of these on ART | 2 | (100.0%) |

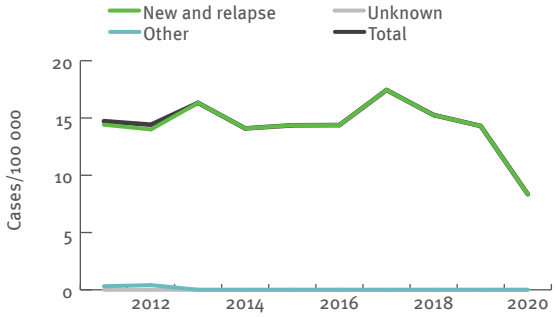
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New and relapse TB cases notified in 2019[a] | | RR/MDR-TB cases enrolled into DR-TB treatment in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 412 | | 4 | |
| Success | 364 | (88.3%) | 3 | (75.0%) |
| Died | 19 | (4.6%) | 1 | (25.0%) |
| Failed | 0 | (0.0%) | 0 | (0.0%) |
| Lost to follow-up | 18 | (4.4%) | 0 | (0.0%) |
| Not evaluated | 11 | (2.7%) | 0 | (0.0%) |

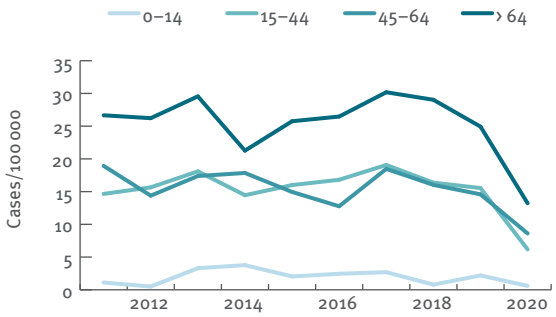
[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

## TB notification rates by previous treatment history, 2011–2020



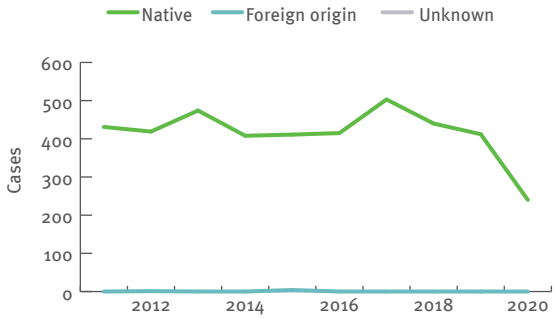

*Note:* starting from 2013 onward, cases with unknown history are included in new and relapses.

## New and relapse TB cases – notification rates by age group, 2011–2020

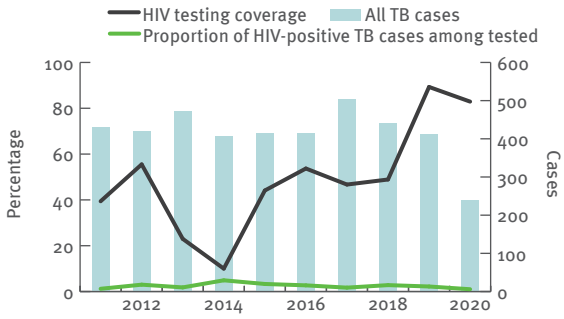



*Note:* data up to 2012 include new TB cases only.

## TB cases by geographical origin, 2011–2020

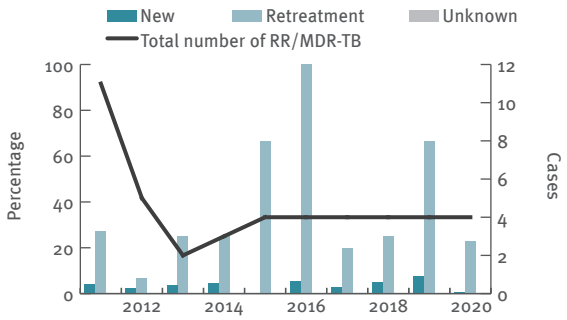



## TB/HIV coinfection, 2011–2020

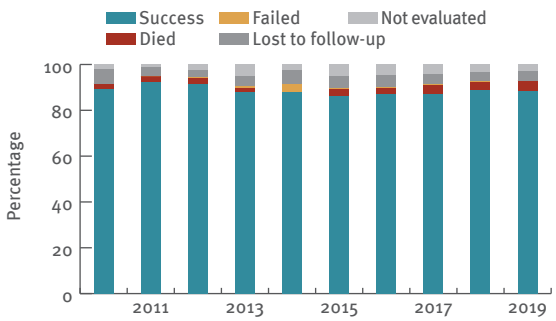



*Note:* data up to 2014 include all TB cases.

## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new and relapse TB cases, 2010–2019




*Note:* 2010–2011 cohorts include new cases only.

# Andorra

Total population estimate 2020 by United Nations Statistical Database: 77 267

## TB cases, 2020

| Notifications | | |
|---|---|---|
| Total number of cases | 2 | |
| Notification rate per 100 000 | 2.6 | |
| New[a] and relapse | 2 | |
| New[a] and relapse notification rate per 100 000 | 2.6 | |
| Pulmonary | 1 | (50.0%) |
| of which microscopy-positive | – | – |
| of which laboratory-confirmed | 1 | (100.0%) |
| Laboratory-confirmed TB cases | – | – |
| Mean age of new native TB cases | 40.0 years | |
| Mean age of new foreign TB cases | – | – |
| Foreign origin of all TB cases | 0 | (0.0%) |
| New (not previously treated) | 2 | (100.0%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 2 | [2–3] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | Yes | |
| Completeness of HIV data[b] | No | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 1 | (100.0%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 0 | [0–1] |
| Pulmonary RR/MDR-TB cases notified | 0 | (0.0%) |
| of which pre-XDR-TB cases | 0 | (0.0%) |
| Notified RR/MDR-TB | 0 | – |
| of which pre-XDR-TB cases | 0 | (0.0%) |
| TB cases tested for HIV | 0 | (0.0%) |
| HIV-positive TB cases | – | – |
| of these on ART | – | – |

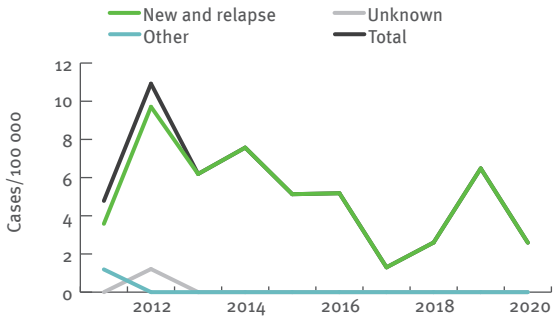
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New and relapse TB cases notified in 2019[a] | | RR/MDR-TB cases enrolled into DR-TB treatment in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 5 | | 0 | |
| Success | 3 | (60.0%) | 0 | – |
| Died | 1 | (20.0%) | 0 | – |
| Failed | 0 | (0.0%) | 0 | – |
| Lost to follow-up | 1 | (20.0%) | 0 | – |
| Not evaluated | 0 | (0.0%) | 0 | – |

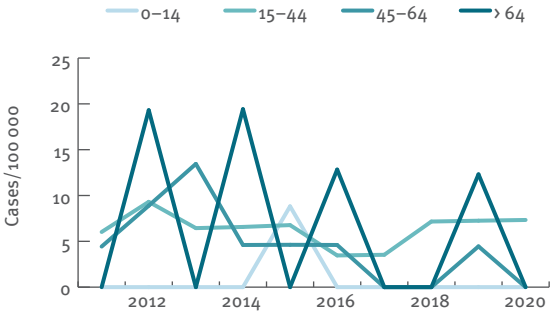
[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

## TB notification rates by previous treatment history, 2011–2020



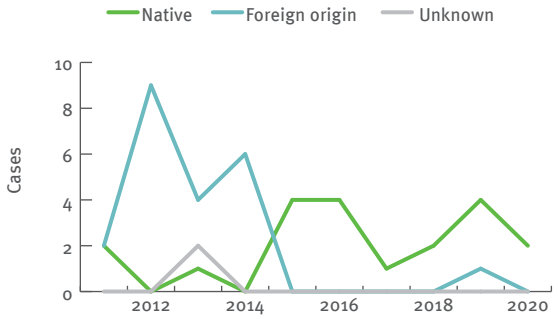

*Note:* starting from 2013 onward, cases with unknown history are included in new and relapses.

## New and relapse TB cases – notification rates by age group, 2011–2020

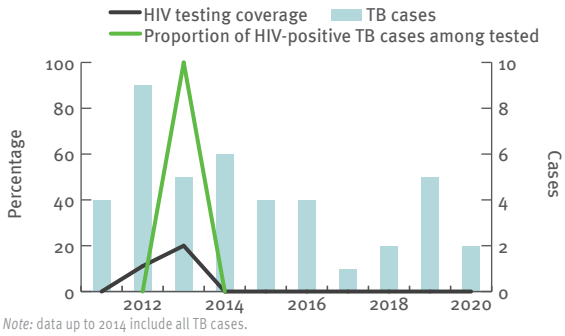



*Note:* data up to 2012 include new TB cases only.

## TB cases by geographical origin, 2011–2020

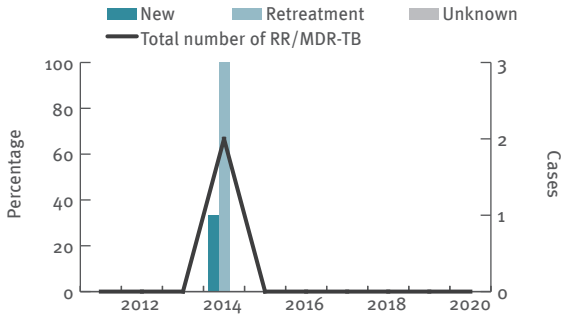



## TB/HIV coinfection, 2011–2020

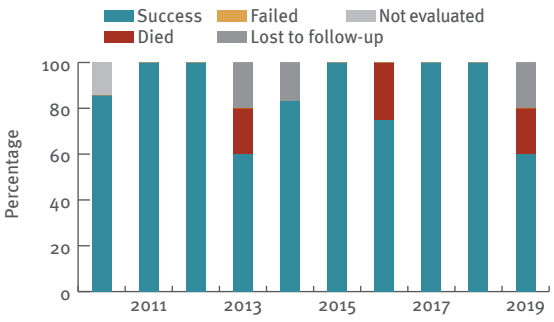



*Note:* data up to 2014 include all TB cases.

## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new and relapse TB cases, 2010–2019




*Note:* 2010–2011 cohorts include new cases only.

# Armenia

Total population estimate 2020 by United Nations Statistical Database: 2 963 234

## TB cases, 2020

| Notifications | | |
|---|---|---|
| Total number of cases | 444 | |
| Notification rate per 100 000 | 15.0 | |
| New[a] and relapse | 394 | |
| New[a] and relapse notification rate per 100 000 | 13.3 | |
| Pulmonary | 337 | (75.9%) |
| of which microscopy-positive | – | – |
| of which laboratory-confirmed | 251 | (74.5%) |
| Laboratory-confirmed TB cases | – | – |
| Mean age of new native TB cases | 44.0 years | |
| Mean age of new foreign TB cases | – | – |
| Foreign origin of all TB cases | 4 | (0.9%) |
| New (not previously treated) | 369 | (83.1%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 680 | [520–870] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | Yes | |
| Completeness of HIV data[b] | Yes | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 246 | (98.0%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 54 | [42–66] |
| Pulmonary RR/MDR-TB cases notified | 52 | (21.1%) |
| of which pre-XDR-TB cases | 11 | (21.2%) |
| Notified RR/MDR-TB | 52 | – |
| of which pre-XDR-TB cases | 7 | (13.5%) |
| TB cases tested for HIV | 369 | (93.7%) |
| HIV-positive TB cases | 39 | (10.6%) |
| of these on ART | 0 | (0.0%) |

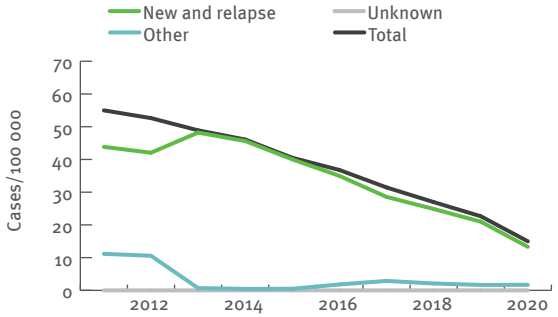
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New and relapse TB cases notified in 2019[a] | | RR/MDR-TB cases enrolled into DR-TB treatment in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 485 | | 85 | |
| Success | 399 | (82.3%) | 39 | (45.9%) |
| Died | 36 | (7.4%) | 13 | (15.3%) |
| Failed | 19 | (3.9%) | 11 | (12.9%) |
| Lost to follow-up | 29 | (6.0%) | 22 | (25.9%) |
| Not evaluated | 2 | (0.4%) | 0 | (0.0%) |

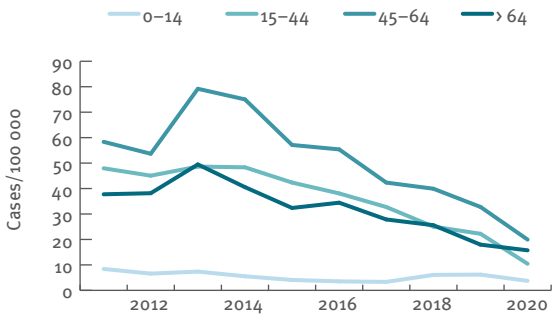
[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

## TB notification rates by previous treatment history, 2011–2020



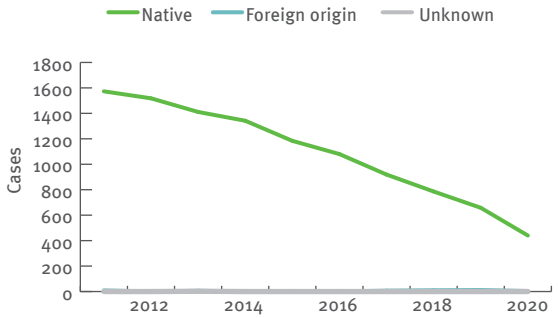

*Note:* starting from 2013 onward, cases with unknown history are included in new and relapses.

## New and relapse TB cases – notification rates by age group, 2011–2020

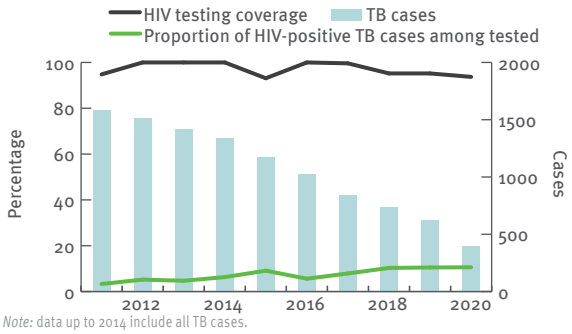



*Note:* data up to 2012 include new TB cases only.

## TB cases by geographical origin, 2011–2020

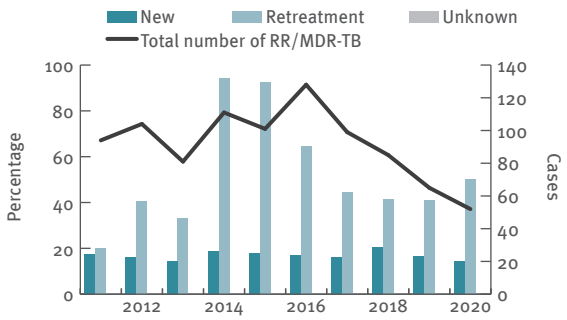



## TB/HIV coinfection, 2011–2020

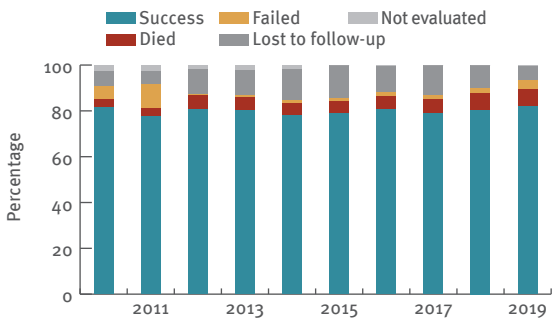



*Note:* data up to 2014 include all TB cases.

## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new and relapse TB cases, 2010–2019




*Note:* 2010–2011 cohorts include new cases only.

# Austria

Total population at 9 April 2021 by EUROSTAT: 8 901 064

## TB cases, 2020

| Notifications | | |
|---|---|---|
| Total number of cases | 388 | |
| Notification rate per 100 000 | 4.4 | |
| New[a] and relapse | 382 | |
| New[a] and relapse notification rate per 100 000 | 4.3 | |
| Pulmonary | 295 | (76.0%) |
| of which microscopy-positive | 65 | (22.0%) |
| of which laboratory-confirmed | 227 | (76.9%) |
| Laboratory-confirmed TB cases | 281 | (72.4%) |
| Mean age of new native TB cases | 53.3 years | |
| Mean age of new foreign TB cases | 40.3 years | |
| Foreign origin of all TB cases | 215 | (55.4%) |
| New (not previously treated) | 296 | (76.3%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 440 | [380–510] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | Yes | |
| Completeness of HIV data[b] | No | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 269 | (95.7%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 8 | [3–13] |
| Pulmonary RR/MDR-TB cases notified | 2 | (0.9%) |
| of which pre-XDR-TB cases | 0 | (0.0%) |
| Notified RR/MDR-TB | 2 | – |
| of which pre-XDR-TB cases | 0 | (0.0%) |
| TB cases tested for HIV | – | – |
| HIV-positive TB cases | – | – |
| of these on ART | – | – |

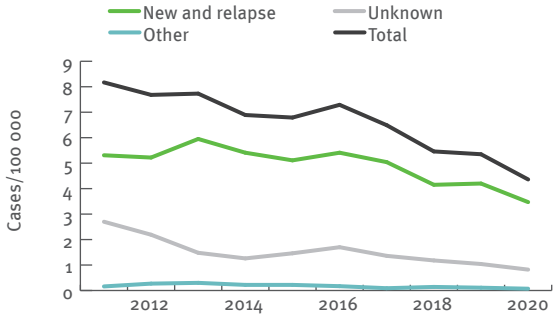
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

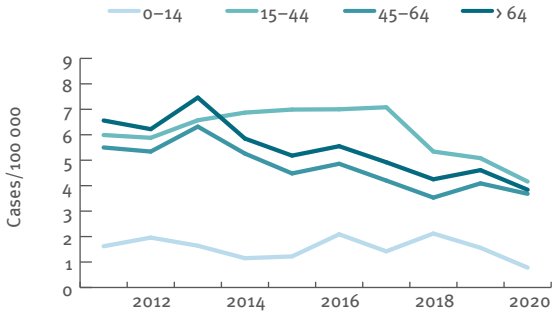
| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New culture-positive pulmonary TB cases notified in 2019[a] | | All RR/MDR-TB cases notified in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 195 | | 18 | |
| Success | 149 | (76.4%) | 15 | (83.3%) |
| Died | 15 | (7.7%) | 1 | (5.6%) |
| Failed | 0 | (0.0%) | 0 | (0.0%) |
| Lost to follow-up | 1 | (0.5%) | 0 | (0.0%) |
| Still on treatment | 18 | (9.2%) | 1 | (5.6%) |
| Not evaluated | 12 | (6.2%) | 1 | (5.6%) |

[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

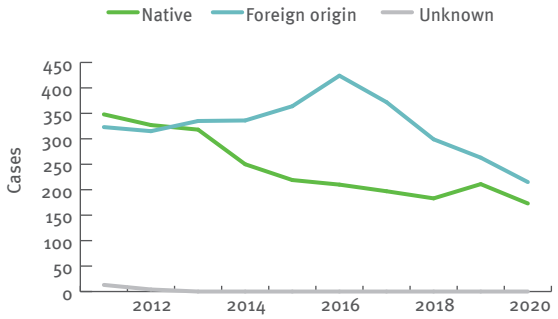
## TB notification rates by previous treatment history, 2011–2020




## New and relapse TB cases – notification rates by age group, 2011–2020



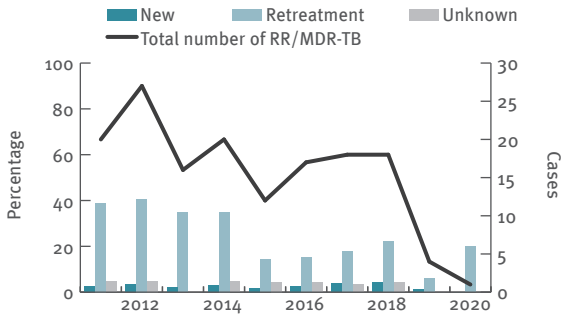

## TB cases by geographical origin, 2011–2020



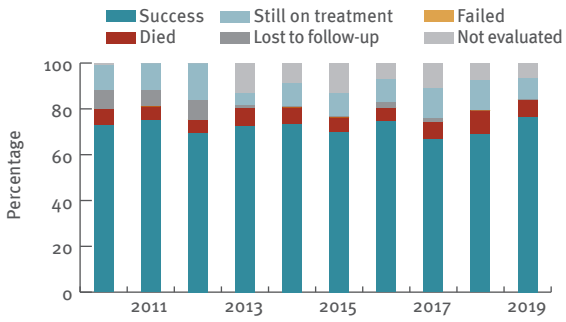

## TB/HIV coinfection, 2011–2020

Data not reported

## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new culture-confirmed pulmonary TB cases, 2010–2019



# Azerbaijan

Total population estimate 2020 by United Nations Statistical Database: 10 139 175

## TB cases, 2020

**Notifications**

| | | |
|---|---|---|
| Total number of cases | 4 991 | |
| Notification rate per 100 000 | 49.2 | |
| New[a] and relapse | 3 683 | |
| New[a] and relapse notification rate per 100 000 | 36.3 | |
| Pulmonary | 4 380 | (87.8%) |
| of which microscopy-positive | – | – |
| of which laboratory-confirmed | 3 617 | (82.6%) |
| Laboratory-confirmed TB cases | – | – |
| Mean age of new native TB cases | 26.9 years | |
| Mean age of new foreign TB cases | – | – |
| Foreign origin of all TB cases | – | – |
| New (not previously treated) | 2 558 | (51.3%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 5 900 | [4 500–7 500] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | Yes | |
| Completeness of HIV data[b] | Yes | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 3 505 | (96.9%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 720 | [670–760] |
| Pulmonary RR/MDR-TB cases notified | 701 | (20.0%) |
| of which pre-XDR-TB cases | 87 | (15.1%) |
| Notified RR/MDR-TB | 764 | – |
| of which pre-XDR-TB cases | 108 | (14.1%) |
| TB cases tested for HIV | 3 683 | (100%) |
| HIV-positive TB cases | 83 | (1.9%) |
| of these on ART | 77 | (92.8%) |

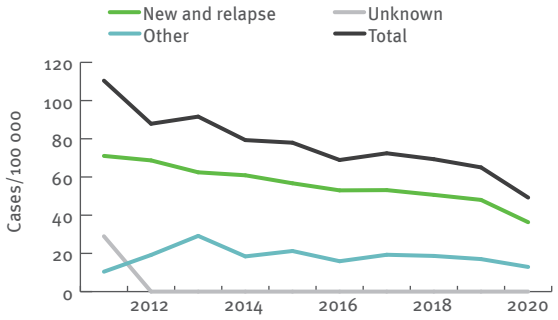
[a] National coverage 100% or culturing 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New and relapse TB cases notified in 2019[a] | | RR/MDR-TB cases enrolled into DR-TB treatment in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 1 702 | | 821 | |
| Success | 1 429 | (84.0%) | 471 | (57.4%) |
| Died | 66 | (3.9%) | 94 | (11.4%) |
| Failed | 53 | (3.1%) | 142 | (17.3%) |
| Lost to follow-up | 134 | (7.9%) | 114 | (13.9%) |
| Not evaluated | 20 | (1.2%) | 0 | (0.0%) |

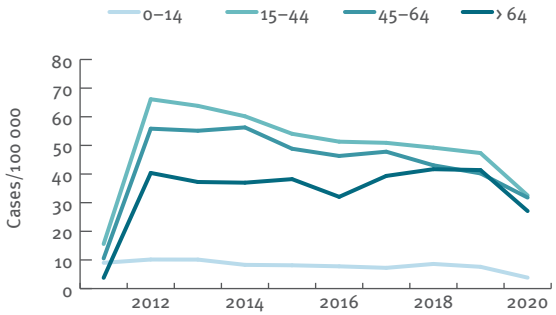
[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

## TB notification rates by previous treatment history, 2011–2020



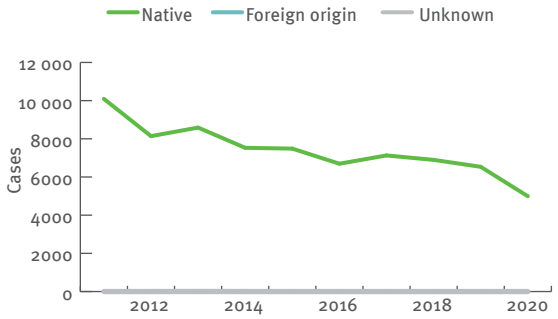

*Note:* starting from 2013 onward, cases with unknown history are included in new and relapse.

## New and relapse TB cases – notification rates by age group, 2011–2020

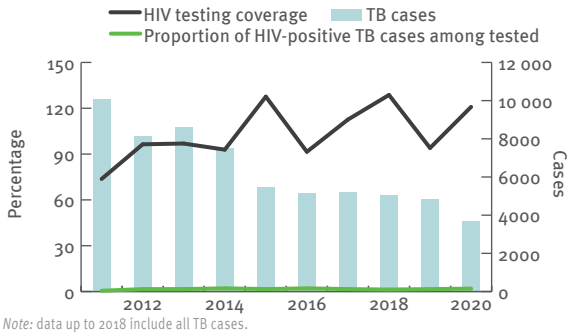



*Note:* data up to 2012 include new TB cases only.

## TB cases by geographical origin, 2011–2020

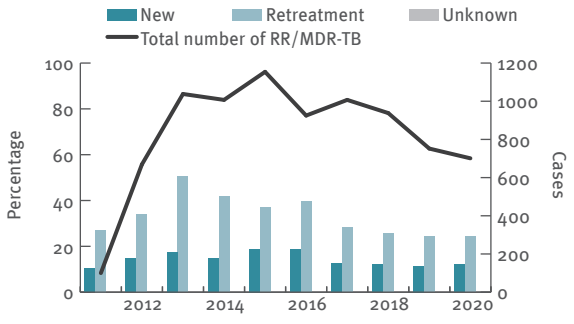



## TB/HIV coinfection, 2011–2020

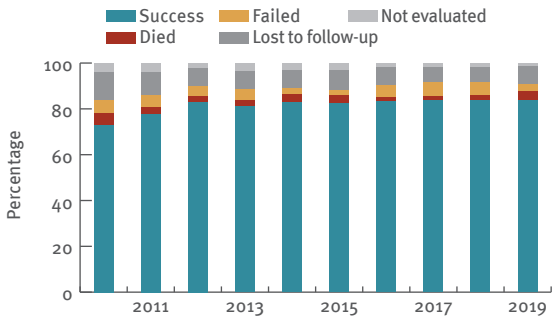



*Note:* data up to 2018 include all TB cases.

## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new and relapse TB cases, 2010–2019




*Note:* 2010–2011 cohorts include new cases only.

# Belarus

Total population estimate 2020 by United Nations Statistical Database: 9 449 321

## TB cases, 2020

**Notifications**

| | | |
|---|---|---|
| Total number of cases | 1 778 | |
| Notification rate per 100 000 | 18.8 | |
| New[a] and relapse | 1 514 | |
| New[a] and relapse notification rate per 100 000 | 16.0 | |
| Pulmonary | 1 658 | (93.3%) |
| of which microscopy-positive | – | – |
| of which laboratory-confirmed | 1 584 | (95.5%) |
| Laboratory-confirmed TB cases | – | – |
| Mean age of new native TB cases | 48.6 years | |
| Mean age of new foreign TB cases | – | – |
| Foreign origin of all TB cases | 0 | (0.0%) |
| New (not previously treated) | 1 171 | (65.9%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 2 500 | [1 900–3 100] |

[a] Cases with unknown previous TB history included in new cases.

## Drug-resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | Yes | |
| Completeness of HIV data[b] | Yes | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 1 584 | (100.0%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 820 | [790–860] |
| Pulmonary RR/MDR-TB cases notified | 825 | (52.1%) |
| of which pre-XDR-TB cases | 354 | (42.9%) |
| Notified RR/MDR-TB | 874 | – |
| of which pre-XDR-TB cases | 354 | (40.5%) |
| TB cases tested for HIV | 1 514 | (100.0%) |
| HIV-positive TB cases | 135 | (8.9%) |
| of these on ART | 124 | (91.9%) |

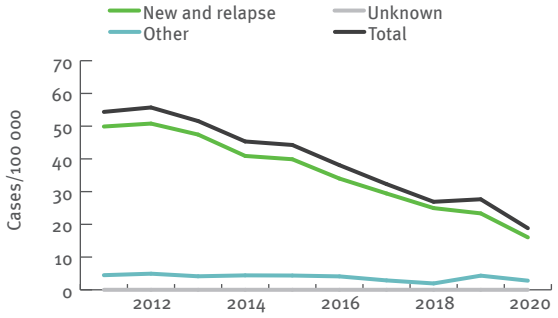
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New and relapse TB cases notified in 2019[a] | | RR/MDR-TB cases enrolled into DR-TB treatment in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 1 302 | | 919 | |
| Success | 1 153 | (88.6%) | 670 | (72.9%) |
| Died | 93 | (7.1%) | 87 | (9.5%) |
| Failed | 28 | (2.2%) | 60 | (6.5%) |
| Lost to follow-up | 28 | (2.2%) | 95 | (10.3%) |
| Not evaluated | 0 | (0.0%) | 7 | (0.8%) |

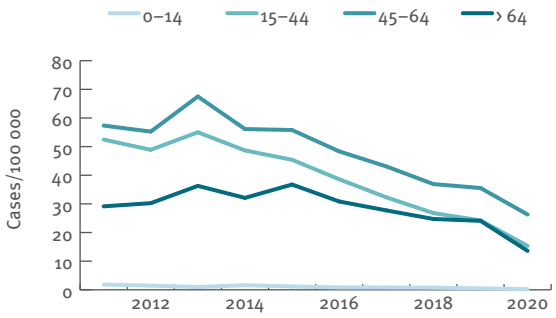
[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

## TB notification rates by previous treatment history, 2011–2020



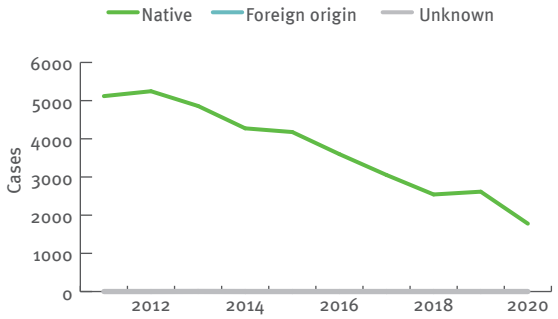

*Note:* starting from 2013 onward, cases with unknown history are included in new and relapses.

## New and relapse TB cases – notification rates by age group, 2011–2020

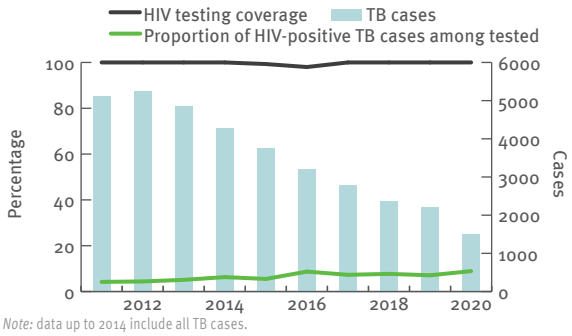



*Note:* data up to 2012 include new TB cases only.

## TB cases by geographical origin, 2011–2020

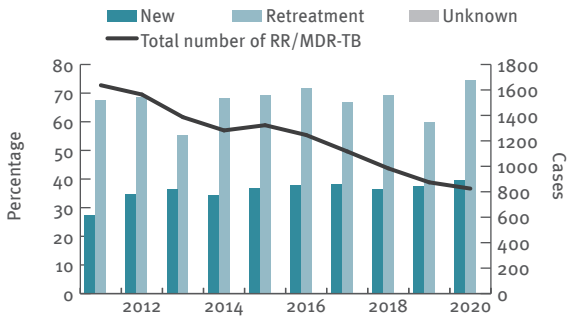



## TB/HIV coinfection, 2011–2020

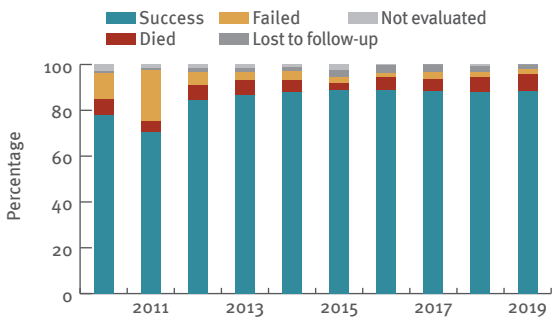



*Note:* data up to 2014 include all TB cases.

## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new and relapse TB cases, 2010–2019[a]




*Note:* 2010–2011 cohorts include new cases only.

# Belgium

Total population at 9 April 2021 by EUROSTAT: 11 522 440

## TB cases, 2020

| Notifications | | |
|---|---|---|
| Total number of cases | 830 | |
| Notification rate per 100 000 | 7.2 | |
| New[a] and relapse | 778 | |
| New[a] and relapse notification rate per 100 000 | 6.8 | |
| Pulmonary | 574 | (69.2%) |
| of which microscopy-positive | 271 | (47.2%) |
| of which laboratory-confirmed | 461 | (80.3%) |
| Laboratory-confirmed TB cases | 637 | (76.7%) |
| Mean age of new native TB cases | 45.6 years | |
| Mean age of new foreign TB cases | 34.7 years | |
| Foreign origin of all TB cases | 472 | (56.9%) |
| New (not previously treated) | 607 | (73.1%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 890 | [770–1000] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | Yes | |
| Completeness of HIV data[b] | No | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 613 | (96.2%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 13 | [6–20] |
| Pulmonary RR/MDR-TB cases notified | 9 | (2.0%) |
| of which pre-XDR-TB cases | 1 | (20.0%) |
| Notified RR/MDR-TB | 17 | – |
| of which pre-XDR-TB cases | 3 | (17.6%) |
| TB cases tested for HIV | 389 | (46.9%) |
| HIV-positive TB cases | 33 | (8.5%) |
| of these on ART | – | – |

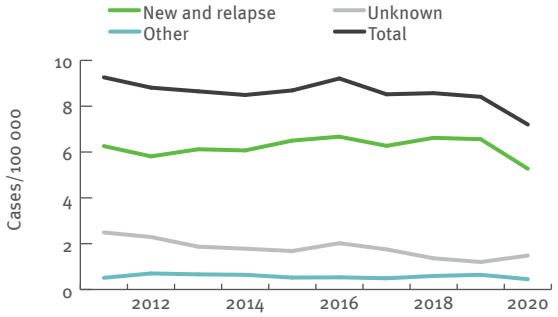
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

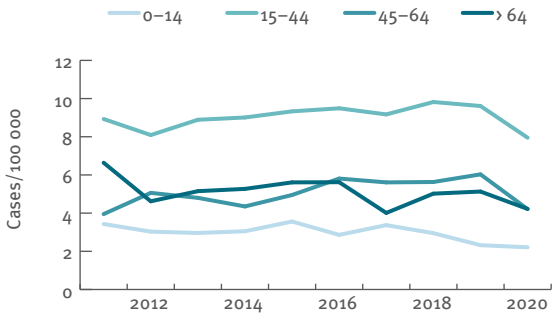
| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New culture-positive pulmonary TB cases notified in 2019[a] | | All MDR-TB cases notified in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 445 | | 9 | |
| Success | 353 | (79.3%) | 7 | (77.8%) |
| Died | 34 | (7.6%) | 1 | (11.1%) |
| Failed | 4 | (0.9%) | 0 | (0.0%) |
| Lost to follow-up | 33 | (7.4%) | 1 | (11.1%) |
| Still on treatment | 13 | (2.9%) | 0 | (0.0%) |
| Not evaluated | 8 | (1.8%) | 0 | (0.0%) |

[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

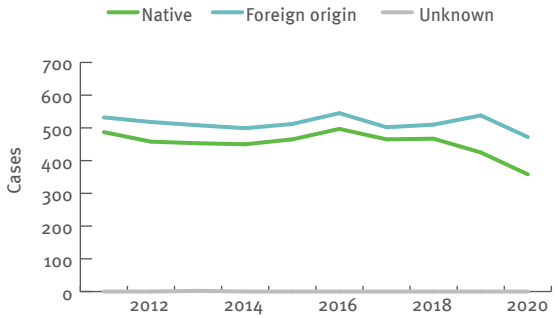
## TB notification rates by previous treatment history, 2011–2020



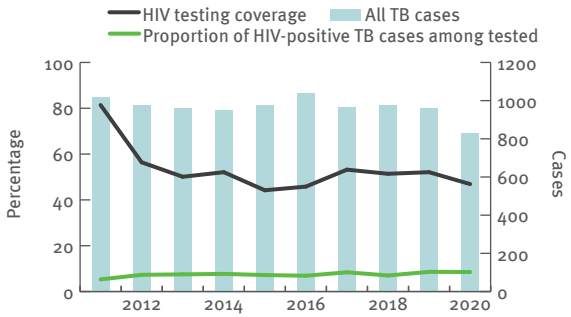

## New and relapse TB cases – notification rates by age group, 2011–2020



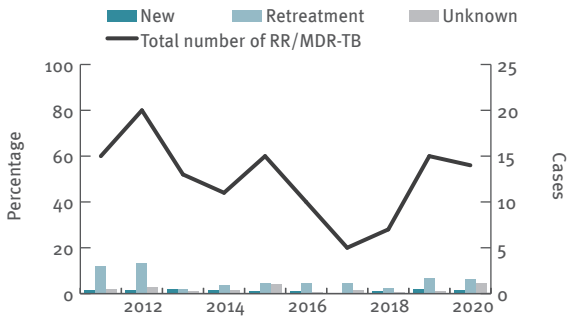

## TB cases by geographical origin, 2011–2020



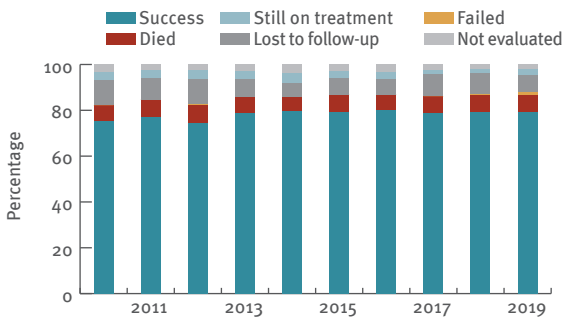

## TB/HIV coinfection, 2011–2020




## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new culture-confirmed pulmonary TB cases, 2010–2019



# Bosnia and Herzegovina

Total population estimate 2020 by United Nations Statistical Database: 3 280 815

## TB cases, 2020

| Notifications | | |
|---|---|---|
| Total number of cases | 357 | |
| Notification rate per 100 000 | 10.9 | |
| New[a] and relapse | 357 | |
| New[a] and relapse notification rate per 100 000 | 10.9 | |
| Pulmonary | 332 | (93.0%) |
| of which microscopy-positive | – | – |
| of which laboratory-confirmed | 240 | (72.3%) |
| Laboratory-confirmed TB cases | – | – |
| Mean age of new native TB cases | 51.3 years | |
| Mean age of new foreign TB cases | – | – |
| Foreign origin of all TB cases | 5 | (1.4%) |
| New (not previously treated) | 322 | (90.2%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 850 | [650–1 100] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | Yes | |
| Completeness of HIV data[b] | No | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 231 | (96.3%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary cases N, best [low–high] | 0 | [0–3] |
| Pulmonary RR/MDR-TB cases notified | 0 | (0.0%) |
| of which pre-XDR-TB cases | – | – |
| Notified RR/MDR-TB | 0 | – |
| of which pre-XDR-TB cases | – | – |
| TB cases tested for HIV | 15 | (4.2%) |
| HIV-positive TB cases | 0 | (0.0%) |
| of these on ART | – | – |

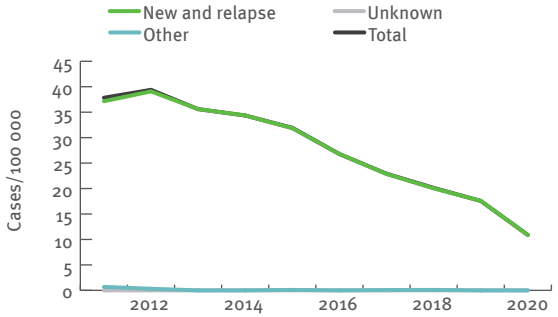
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New and relapse TB cases notified in 2019[a] | | RR/MDR-TB cases enrolled into DR-TB treatment in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 580 | | 0 | |
| Success | 185 | (31.9%) | 0 | – |
| Died | 28 | (4.8%) | 0 | – |
| Failed | 10 | (1.7%) | 0 | – |
| Lost to follow-up | 3 | (0.5%) | 0 | – |
| Not evaluated | 354 | (61.0%) | 0 | – |

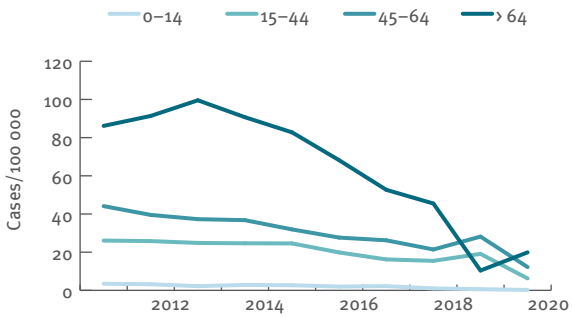
[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

## TB notification rates by previous treatment history, 2011–2020



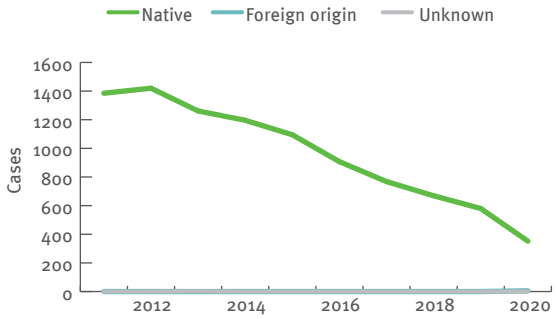

*Note:* starting from 2013 onward, cases with unknown history are included in new and relapses.

## New and relapse TB cases – notification rates by age group, 2011–2020

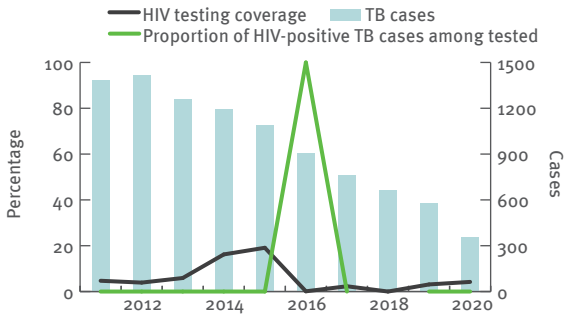



*Note:* data up to 2012 include new TB cases only.

## TB cases by geographical origin, 2011–2020

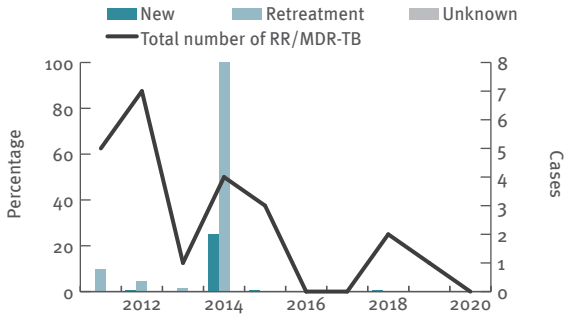



## TB/HIV coinfection, 2011–2020

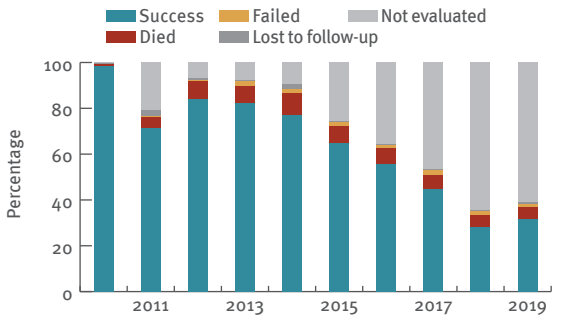



*Note:* data up to 2014 include all TB cases.

## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new and relapse TB cases, 2010–2019




*Note:* 2010–2011 cohorts include new cases only.

# Bulgaria

Total population at 9 April 2021 by EUROSTAT: 6 951 482

## TB cases, 2020

**Notifications**

| | | |
|---|---|---|
| Total number of cases | 930 | |
| Notification rate per 100 000 | 13.4 | |
| New[a] and relapse | 887 | |
| New[a] and relapse notification rate per 100 000 | 12.8 | |
| Pulmonary | 746 | (80.2%) |
| of which microscopy-positive | 377 | (50.5%) |
| of which laboratory-confirmed | 424 | (56.8%) |
| Laboratory-confirmed TB cases | 433 | (46.6%) |
| Mean age of new native TB cases | 51.5 years | |
| Mean age of new foreign TB cases | 37.5 years | |
| Foreign origin of all TB cases | 2 | (0.2%) |
| New (not previously treated) | 820 | (88.2%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 1 300 | [1 000–1 700] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | Yes | |
| Completeness of HIV data[b] | Yes | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 246 | (56.8%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 24 | [16–32] |
| Pulmonary RR/MDR-TB cases notified | 12 | (5.0%) |
| of which pre-XDR-TB cases | 2 | (22.2%) |
| Notified RR/MDR-TB | 12 | – |
| of which pre-XDR-TB cases | 2 | (22.2%) |
| TB cases tested for HIV | 781 | (84.0%) |
| HIV-positive TB cases | 1 | (0.1%) |
| of these on ART | 1 | (100.0%) |

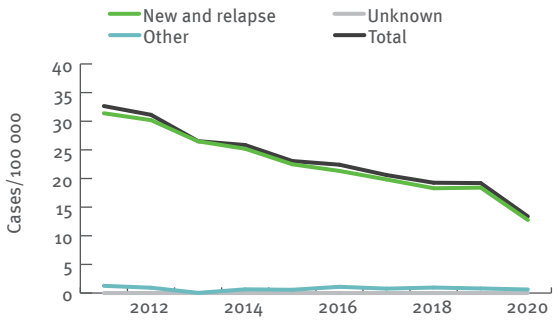
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

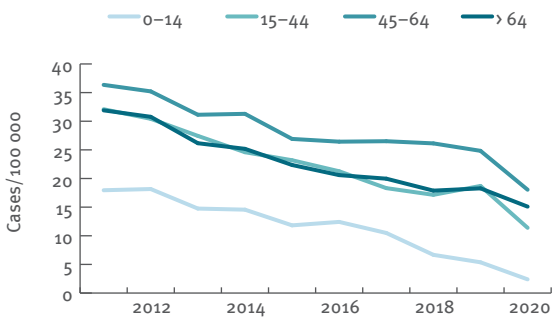
| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New culture-positive pulmonary TB cases notified in 2019[a] | | All RR/MDR-TB cases notified in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 549 | | 28 | |
| Success | 449 | (81.8%) | 17 | (60.7%) |
| Died | 44 | (8.0%) | 4 | (14.3%) |
| Failed | 7 | (1.3%) | 1 | (3.6%) |
| Lost to follow-up | 34 | (6.2%) | 5 | (17.9%) |
| Still on treatment | 0 | (0.0%) | 0 | (0.0%) |
| Not evaluated | 15 | (2.7%) | 1 | (3.6%) |

[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

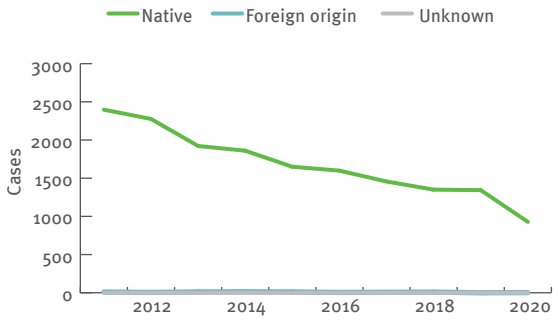
## TB notification rates by previous treatment history, 2011–2020



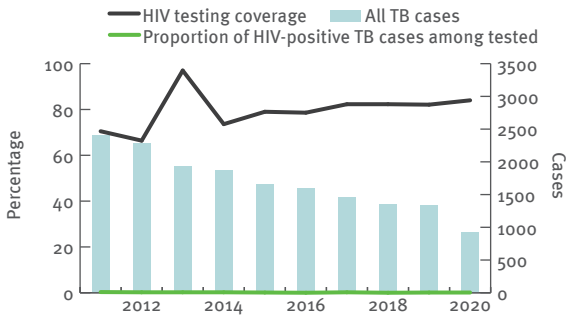

## New and relapse TB cases – notification rates by age group, 2011–2020



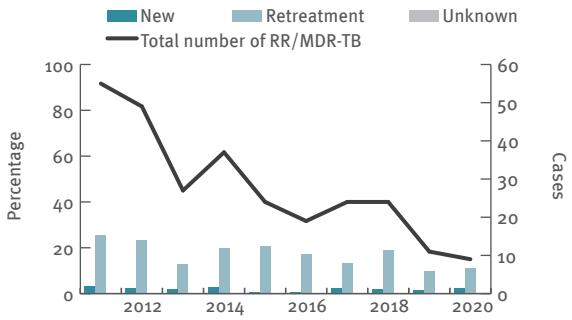

## TB cases by geographical origin, 2011–2020



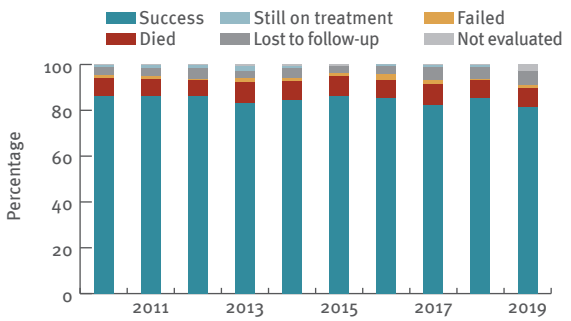

## TB/HIV coinfection, 2011–2020




## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new culture-confirmed pulmonary TB cases, 2010–2019



# Croatia

Total population at 9 April 2021 by EUROSTAT: 4 058 165

## TB cases, 2020

| Notifications | | |
|---|---|---|
| Total number of cases | 183 | |
| Notification rate per 100 000 | 4.5 | |
| New[a] and relapse | 177 | |
| New[a] and relapse notification rate per 100 000 | 4.4 | |
| Pulmonary | 104 | (56.8%) |
| of which microscopy-positive | 67 | (64.4%) |
| of which laboratory-confirmed | 99 | (95.2%) |
| Laboratory-confirmed TB cases | 146 | (79.8%) |
| Mean age of new native TB cases | 86.0 years | |
| Mean age of new foreign TB cases | – | |
| Foreign origin of all TB cases | 0 | (0.0%) |
| New (not previously treated) | 1 | (0.5%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 270 | [230–310] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | Yes | |
| Completeness of HIV data[b] | No | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 131 | (89.7%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 1 | [0–3] |
| Pulmonary RR/MDR-TB cases notified | 1 | (1.2%) |
| of which pre-XDR-TB cases | 0 | – |
| Notified RR/MDR-TB | 1 | – |
| of which pre-XDR-TB cases | 0 | – |
| TB cases tested for HIV | 4 | (2.2%) |
| HIV-positive TB cases | 0 | (0.0%) |
| of these on ART | – | – |

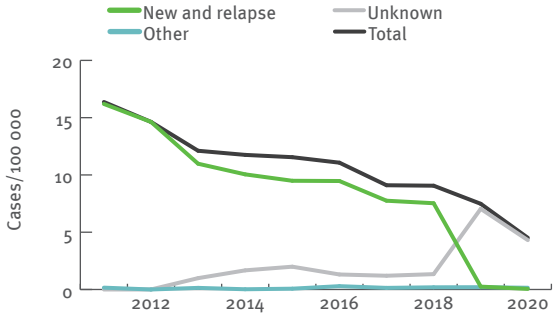
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

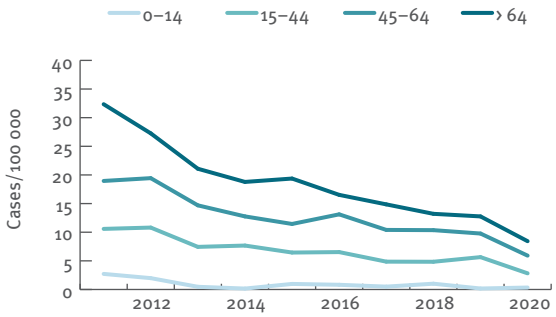
| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New[a] culture-positive pulmonary TB cases notified in 2019[b] | | All RR/MDR-TB cases notified in 2018[c] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 2 | | 2 | |
| Success | 2 | (100%) | 0 | (0.0%) |
| Died | 0 | (0.0%) | 1 | (50.0%) |
| Failed | 0 | (0.0%) | 0 | (0.0%) |
| Lost to follow-up | 0 | (0.0%) | 0 | (0.0%) |
| Still on treatment | 0 | (0.0%) | 0 | (0.0%) |
| Not evaluated | 0 | (0.0%) | 1 | (50.0%) |

[a] For 2019, cases with unknown treatment history included in new cases.
[b] Treatment outcome as presented is treatment outcome after 12 months.
[c] Treatment outcome as presented is treatment outcome after 24 months.

## TB notification rates by previous treatment history, 2011–2020

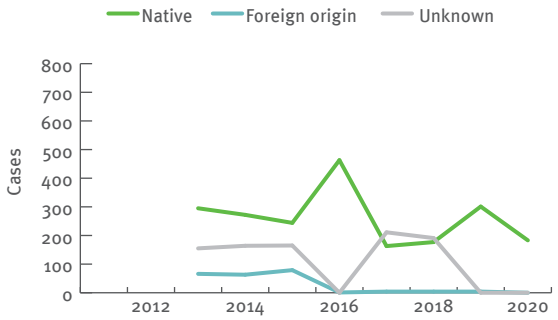



## New and relapse TB cases – notification rates by age group, 2011–2020

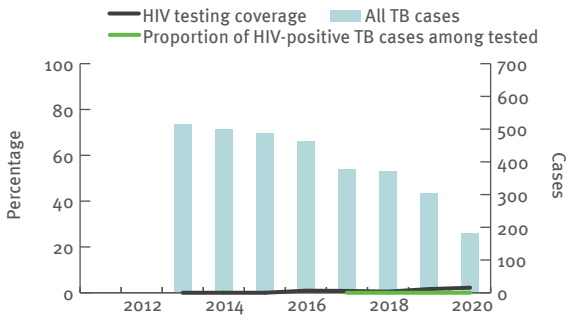



*Note:* for 2019, cases with unknown treatment history included in new cases.

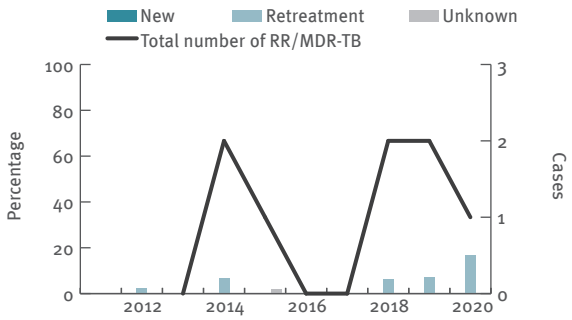
## TB cases by geographical origin, 2011–2020



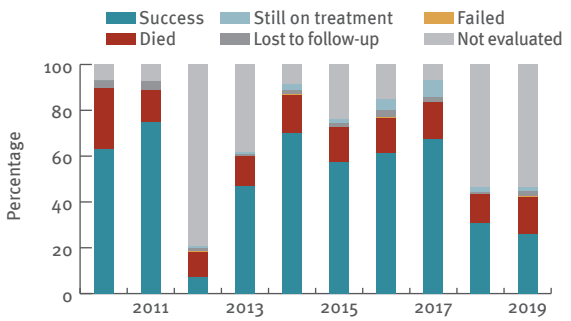

## TB/HIV coinfection, 2011–2020




## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new culture-confirmed pulmonary TB cases, 2010–2019



# Cyprus

Total population at 9 April 2021 by EUROSTAT: 888 005

## TB cases, 2020

| Notifications | | |
|---|---|---|
| Total number of cases | 36 | |
| Notification rate per 100 000 | 4.1 | |
| New[a] and relapse | 34 | |
| New[a] and relapse notification rate per 100 000 | 3.8 | |
| Pulmonary | 30 | (83.3%) |
| of which microscopy-positive | 10 | (33.3%) |
| of which laboratory-confirmed | 27 | (90.0%) |
| Laboratory-confirmed TB cases | 28 | (77.8%) |
| Mean age of new native TB cases | 55.4 years | |
| Mean age of new foreign TB cases | 32.9 years | |
| Foreign origin of all TB cases | 31 | (86.1%) |
| New (not previously treated) | 34 | (94.4%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 69 | [59–80] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | Yes | |
| Completeness of HIV data[b] | Yes | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 28 | (100.0%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 0 | [0–1] |
| Pulmonary RR/MDR-TB cases notified | 0 | – |
| of which pre-XDR-TB cases | 0 | – |
| Notified RR/MDR-TB | 0 | – |
| of which pre-XDR-TB cases | 0 | – |
| TB cases tested for HIV | 30 | (83.3%) |
| HIV-positive TB cases | 2 | (6.7%) |
| of these on ART | – | – |

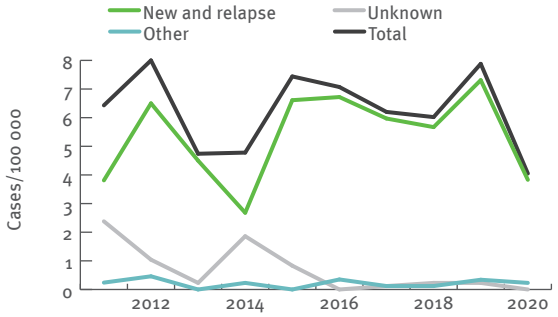
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

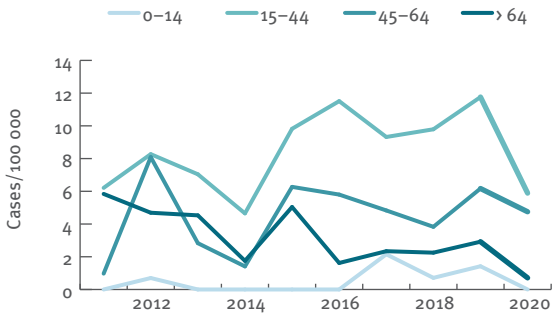
| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New culture-positive pulmonary TB cases notified in 2019[a] | | All RR/MDR-TB cases notified in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 47 | | 0 | |
| Success | 12 | (25.5%) | 0 | – |
| Died | 0 | (0.0%) | 0 | – |
| Failed | 0 | (0.0%) | 0 | – |
| Lost to follow-up | 6 | (12.8%) | 0 | – |
| Still on treatment | 7 | (14.9%) | 0 | – |
| Not evaluated | 22 | (46.8%) | 0 | – |

[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

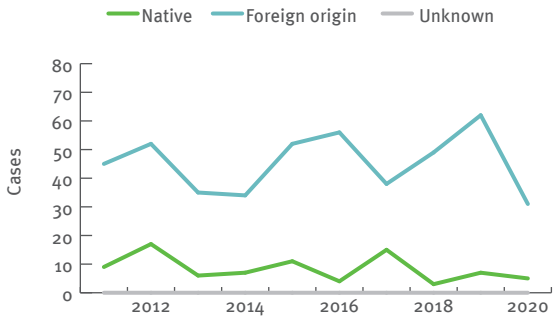
## TB notification rates by previous treatment history, 2011–2020



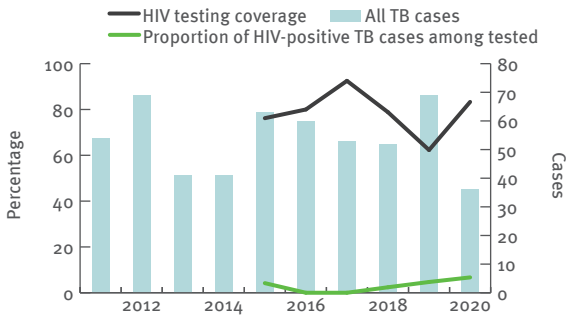

## New and relapse TB cases – notification rates by age group, 2011–2020



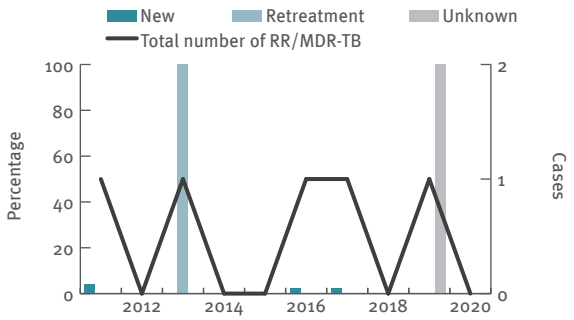

## TB cases by geographical origin, 2011–2020



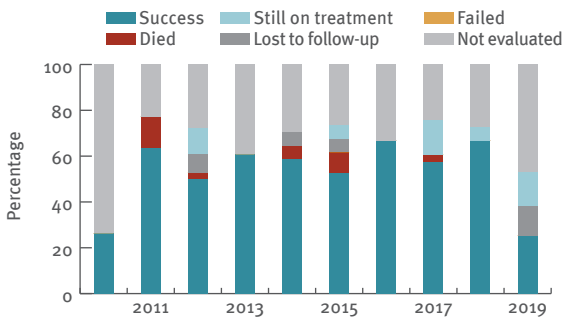

## TB/HIV coinfection, 2011–2020




## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new culture-confirmed pulmonary TB cases, 2010–2019



# Czechia

Total population at 9 April 2021 by EUROSTAT: 10 693 939

## TB cases, 2020

| Notifications | | |
|---|---|---|
| Total number of cases | 367 | |
| Notification rate per 100 000 | 3.4 | |
| New[a] and relapse | 360 | |
| New[a] and relapse notification rate per 100 000 | 3.4 | |
| Pulmonary | 321 | (87.5%) |
| of which microscopy-positive | 166 | (51.7%) |
| of which laboratory-confirmed | 254 | (79.1%) |
| Laboratory-confirmed TB cases | 285 | (77.7%) |
| Mean age of new native TB cases | 57.1 years | |
| Mean age of new foreign TB cases | 40.2 years | |
| Foreign origin of all TB cases | 126 | (34.3%) |
| New (not previously treated) | 351 | (95.6%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 410 | [350–480] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | Yes | |
| Completeness of HIV data[b] | Yes | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 257 | (90.2%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 13 | [6–20] |
| Pulmonary RR/MDR-TB cases notified | 11 | (4.7%) |
| of which pre-XDR-TB cases | 4 | (57.1%) |
| Notified RR/MDR-TB | 11 | – |
| of which pre-XDR-TB cases | 4 | (36.4%) |
| TB cases tested for HIV | 201 | (54.8%) |
| HIV-positive TB cases | 7 | (3.5%) |
| of these on ART | – | – |

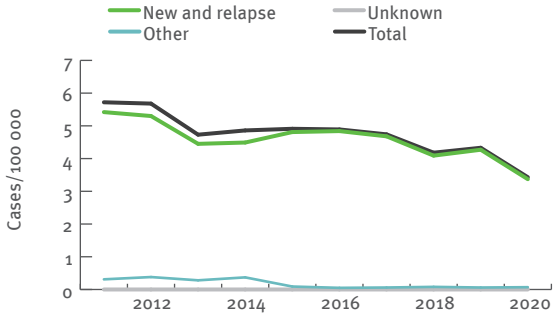
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

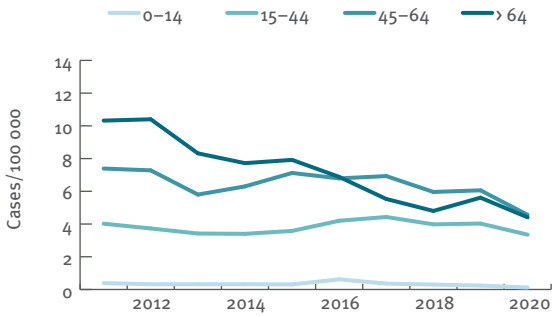
| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New culture-positive pulmonary TB cases notified in 2019[a] | | All RR/MDR-TB cases notified in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 335 | | 12 | |
| Success | 235 | (70.1%) | 4 | (33.3%) |
| Died | 40 | (11.9%) | 1 | (8.3%) |
| Failed | 1 | (0.3%) | 0 | (0.0%) |
| Lost to follow-up | 40 | (11.9%) | 4 | (33.3%) |
| Still on treatment | 12 | (3.6%) | 1 | (8.3%) |
| Not evaluated | 7 | (2.1%) | 2 | (16.7%) |

[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

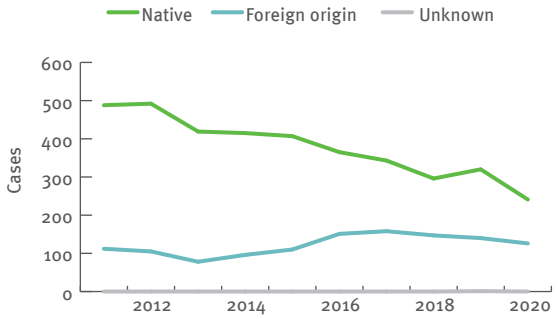
## TB notification rates by previous treatment history, 2011–2020



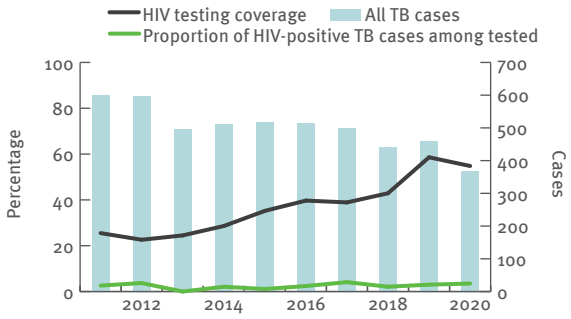

## New and relapse TB cases – notification rates by age group, 2011–2020



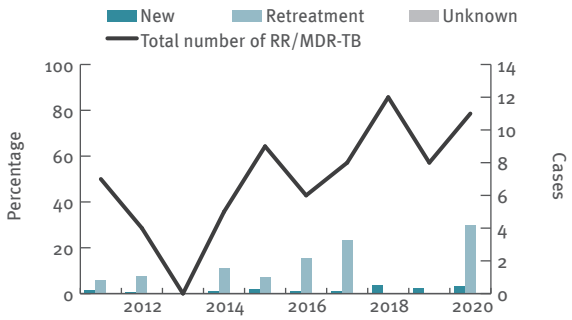

## TB cases by geographical origin, 2011–2020



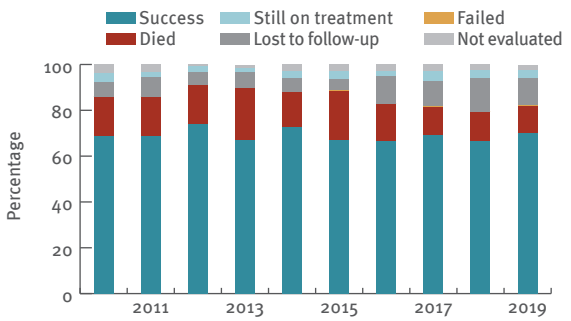

## TB/HIV coinfection, 2011–2020




## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new culture-confirmed pulmonary TB cases, 2010–2019



# Denmark

Total population at 9 April 2021 by EUROSTAT: 5 822 763

## TB cases, 2020

| Notifications | | |
|---|---|---|
| Total number of cases | 221 | |
| Notification rate per 100 000 | 3.8 | |
| New[a] and relapse | 207 | |
| New[a] and relapse notification rate per 100 000 | 3.6 | |
| Pulmonary | 160 | (72.4%) |
| of which microscopy-positive | 76 | (47.5%) |
| of which laboratory-confirmed | 134 | (83.8%) |
| Laboratory-confirmed TB cases | 180 | (81.4%) |
| Mean age of new native TB cases | 48.7 years | |
| Mean age of new foreign TB cases | 40.6 years | |
| Foreign origin of all TB cases | 159 | (71.9%) |
| New (not previously treated) | 207 | (93.7%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 280 | [240–320] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | Yes | |
| Completeness of HIV data[b] | Yes | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 179 | (99.4%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 2 | [0–5] |
| Pulmonary RR/MDR-TB cases notified | 2 | (1.5%) |
| of which pre-XDR-TB cases | 0 | (0.0%) |
| Notified RR/MDR-TB | 2 | – |
| of which pre-XDR-TB cases | 0 | (0.0%) |
| TB cases tested for HIV | 168 | (76.0%) |
| HIV-positive TB cases | 4 | (2.4%) |
| of these on ART | – | – |

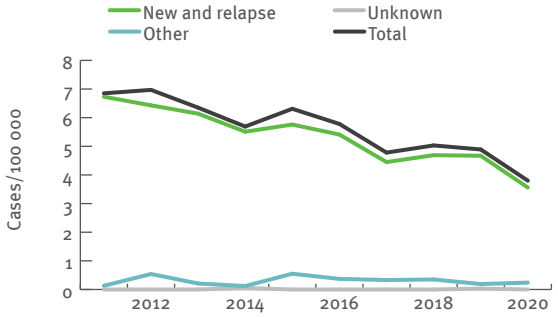
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

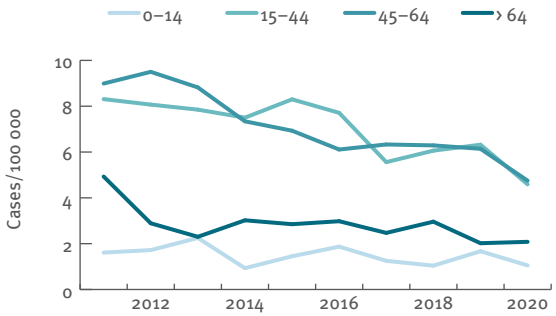
| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New culture-positive pulmonary TB cases notified in 2019[a] | | All RR/MDR-TB cases notified in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 170 | | 4 | |
| Success | 77 | (45.3%) | 0 | (0.0%) |
| Died | 1 | (0.6%) | 0 | (0.0%) |
| Failed | 0 | (0.0%) | 0 | (0.0%) |
| Lost to follow-up | 1 | (0.6%) | 0 | (0.0%) |
| Still on treatment | 3 | (1.8%) | 0 | (0.0%) |
| Not evaluated | 88 | (51.8%) | 4 | (100.0%) |

[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

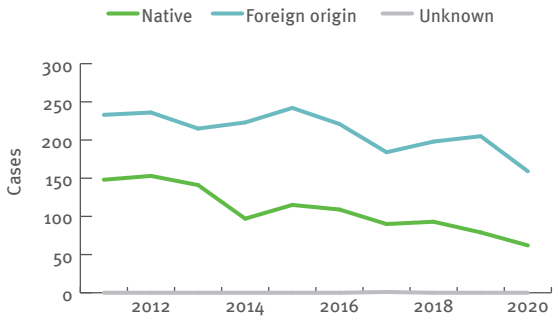
## TB notification rates by previous treatment history, 2011–2020



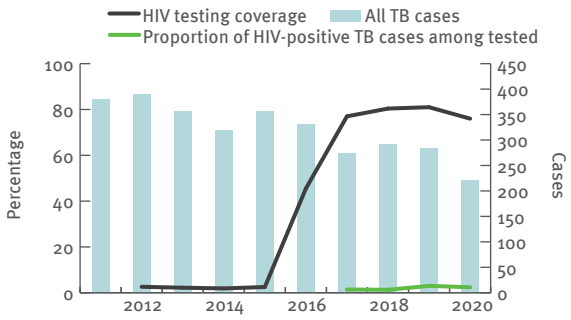

## New and relapse TB cases – notification rates by age group, 2011–2020



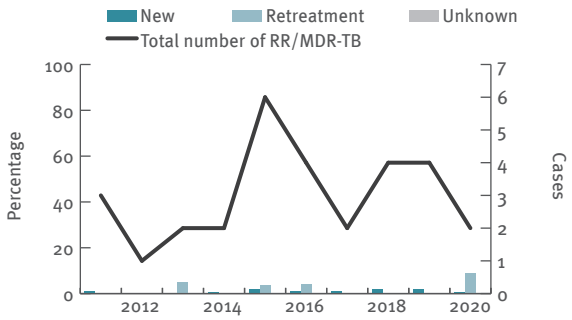

## TB cases by geographical origin, 2011–2020



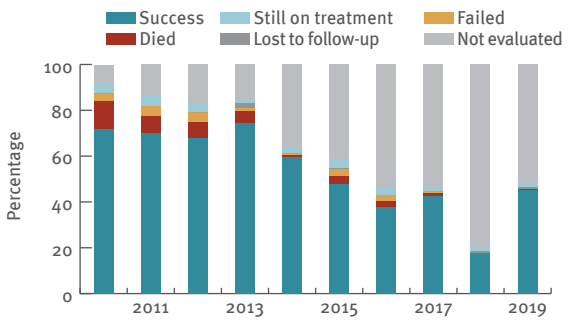

## TB/HIV coinfection, 2011–2020




## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new culture-confirmed pulmonary TB cases, 2010–2019



# Estonia

Total population at 9 April 2021 by EUROSTAT: 1 328 976

## TB cases, 2020

| Notifications | | |
|---|---|---|
| Total number of cases | 124 | |
| Notification rate per 100 000 | 9.3 | |
| New[a] and relapse | 120 | |
| New[a] and relapse notification rate per 100 000 | 9.0 | |
| Pulmonary | 115 | (92.7%) |
| of which microscopy-positive | 54 | (47.0%) |
| of which laboratory-confirmed | 100 | (87.0%) |
| Laboratory-confirmed TB cases | 107 | (86.3%) |
| Mean age of new native TB cases | 53.9 years | |
| Mean age of new foreign TB cases | 60.1 years | |
| Foreign origin of all TB cases | 36 | (29.0%) |
| New (not previously treated) | 109 | (87.9%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 140 | [120–160] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | Yes | |
| Completeness of HIV data[b] | Yes | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 105 | (98.1%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 22 | [14–30] |
| Pulmonary RR/MDR-TB cases notified | 19 | (19.4%) |
| of which pre-XDR-TB cases | 6 | (31.6%) |
| Notified RR/MDR-TB | 19 | – |
| of which pre-XDR-TB cases | 6 | (31.6%) |
| TB cases tested for HIV | 116 | (93.5%) |
| HIV-positive TB cases | 13 | (11.2%) |
| of these on ART | 11 | (84.6%) |

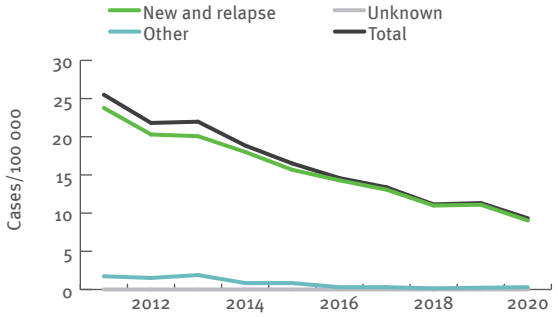
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

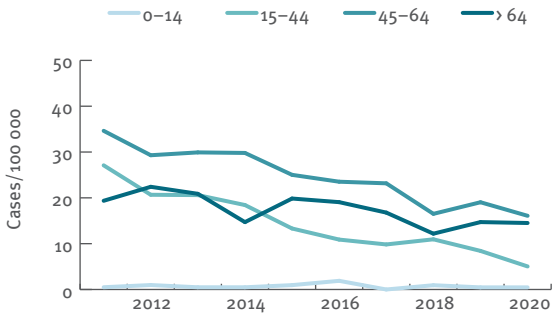
| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New culture-positive pulmonary TB cases notified in 2019[a] | | All RR/MDR-TB cases notified in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 100 | | 32 | |
| Success | 68 | (68.0%) | 23 | (71.9%) |
| Died | 15 | (15.0%) | 5 | (15.6%) |
| Failed | 0 | (0.0%) | 0 | (0.0%) |
| Lost to follow-up | 1 | (1.0%) | 1 | (3.1%) |
| Still on treatment | 14 | (14.0%) | 1 | (3.1%) |
| Not evaluated | 2 | (2.0%) | 2 | (6.3%) |

[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

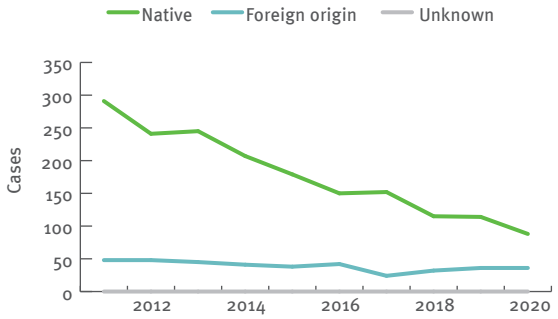
## TB notification rates by previous treatment history, 2011–2020



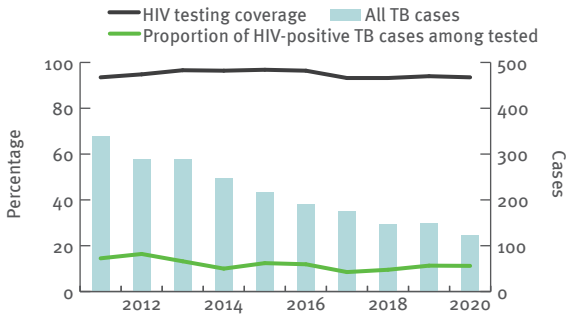

## New and relapse TB cases – notification rates by age group, 2011–2020



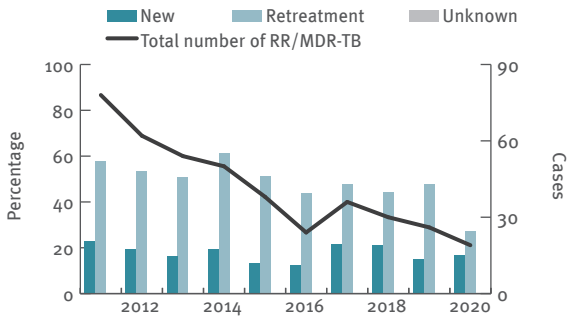

## TB cases by geographical origin, 2011–2020



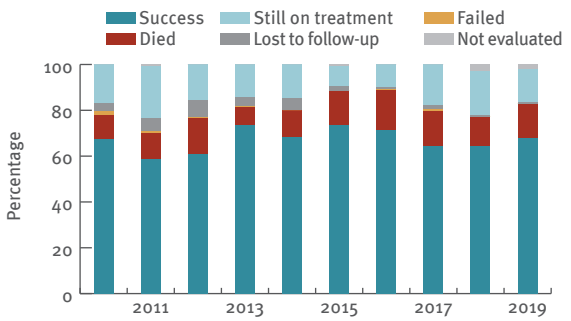

## TB/HIV coinfection, 2011–2020




## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new culture-confirmed pulmonary TB cases, 2010–2019



# Finland

Total population at 9 April 2021 by EUROSTAT: 5 525 292

## TB cases, 2020

| Notifications | | |
|---|---|---|
| Total number of cases | 174 | |
| Notification rate per 100 000 | 3.1 | |
| New[a] and relapse | 174 | |
| New[a] and relapse notification rate per 100 000 | 3.1 | |
| Pulmonary | 118 | (67.8%) |
| of which microscopy-positive | 32 | (27.1%) |
| of which laboratory-confirmed | 103 | (87.3%) |
| Laboratory-confirmed TB cases | 141 | (81.0%) |
| Mean age of new native TB cases | 71.1 years | |
| Mean age of new foreign TB cases | 40.7 years | |
| Foreign origin of all TB cases | 66 | (37.9%) |
| New (not previously treated) | 169 | (97.1%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 200 | [170–230] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | Yes | |
| Completeness of HIV data[b] | No | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 138 | (97.9%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 2 | [0–4] |
| Pulmonary RR/MDR-TB cases notified | 0 | (0.0%) |
| of which pre-XDR-TB cases | 0 | (0.0%) |
| Notified RR/MDR-TB | 1 | – |
| of which pre-XDR-TB cases | 0 | (0.0%) |
| TB cases tested for HIV | – | – |
| HIV-positive TB cases | – | – |
| of these on ART | – | – |

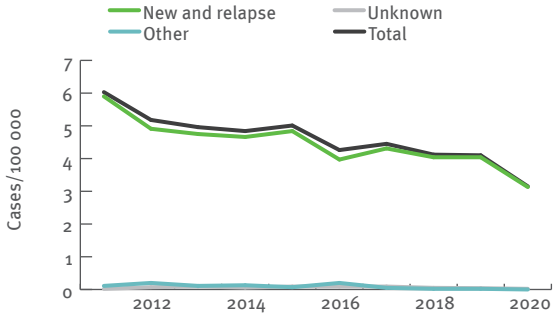
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

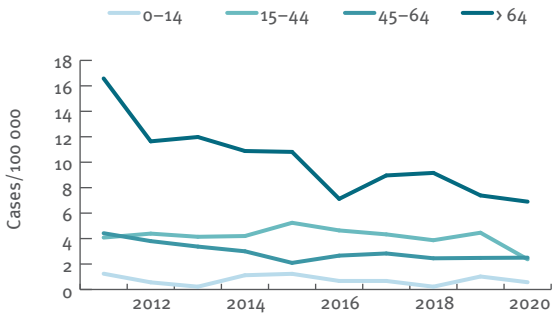
| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New culture-positive pulmonary TB cases notified in 2019[a] | | All RR/MDR-TB cases notified in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 126 | | 4 | |
| Success | 73 | (57.9%) | 2 | (50.0%) |
| Died | 0 | (0.0%) | 0 | (0.0%) |
| Failed | 0 | (0.0%) | 0 | (0.0%) |
| Lost to follow-up | 3 | (2.4%) | 0 | (0.0%) |
| Still on treatment | 4 | (3.2%) | 0 | (0.0%) |
| Not evaluated | 46 | (36.5%) | 2 | (50.0%) |

[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

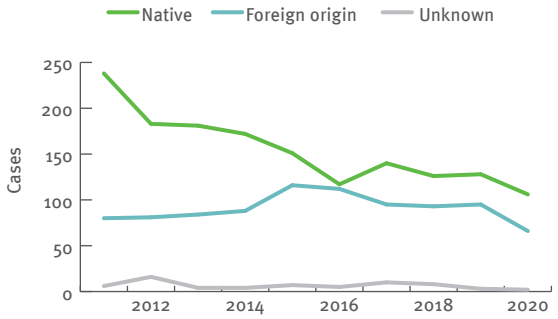
## TB notification rates by previous treatment history, 2011–2020




## New and relapse TB cases – notification rates by age group, 2011–2020



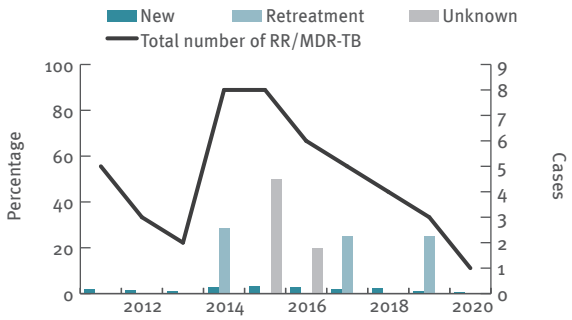

## TB cases by geographical origin, 2011–2020



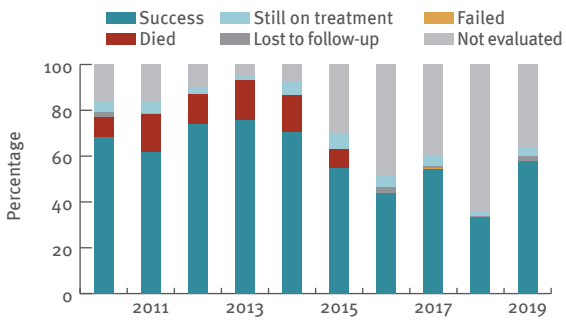

## TB/HIV coinfection, 2011–2020

Data not reported

## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new culture-confirmed pulmonary TB cases, 2010–2019



# France

Total population at 9 April 2021 by EUROSTAT: 67 320 216

## TB cases, 2020

**Notifications**

| | | |
|---|---|---|
| Total number of cases | 4 606 | |
| Notification rate per 100 000 | 6.8 | |
| New[a] and relapse | 4 398 | |
| New[a] and relapse notification rate per 100 000 | 6.5 | |
| Pulmonary | 3 140 | (68.2%) |
| of which microscopy-positive | 1 439 | – |
| of which laboratory-confirmed | 1 388 | (44.2%) |
| Laboratory-confirmed TB cases | 1 879 | (40.8%) |
| Mean age of new native TB cases | 46.3 years | |
| Mean age of new foreign TB cases | 37.4 years | |
| Foreign origin of all TB cases | 2 719 | (59.0%) |
| New (not previously treated) | 2 288 | (49.7%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 5 300 | [4 700–6 000] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | Yes | |
| Completeness of HIV data[b] | No | |
| Case-linked data-reporting | No | |
| Cases with DST results | 67 | (1.5%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 32 | [23–41] |
| Pulmonary RR/MDR-TB cases notified | 47 | (100.0%) |
| of which pre-XDR-TB cases | 8 | (19.5%) |
| Notified RR/MDR-TB | 67 | – |
| of which pre-XDR-TB cases | 8 | (11.9%) |
| TB cases tested for HIV | – | – |
| HIV-positive TB cases | – | – |
| of these on ART | – | – |

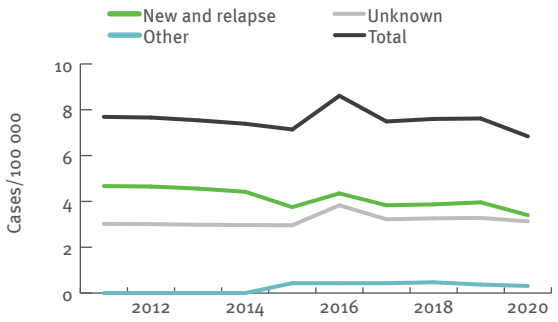
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

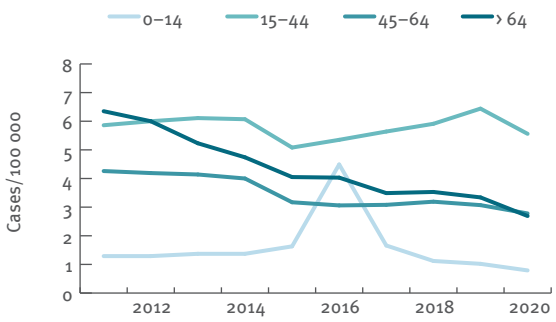
| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New culture-positive pulmonary TB cases notified in 2019[a] | | All RR/MDR-TB cases notified in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 726 | | 82 | |
| Success | 129 | (17.8%) | 3 | (3.7%) |
| Died | 15 | (2.1%) | 1 | (1.2%) |
| Failed | 0 | (0.0%) | 0 | (0.0%) |
| Lost to follow-up | 6 | (0.8%) | 1 | (1.2%) |
| Still on treatment | 4 | (0.6%) | 0 | (0.0%) |
| Not evaluated | 572 | (78.8%) | 77 | (93.9%) |

[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

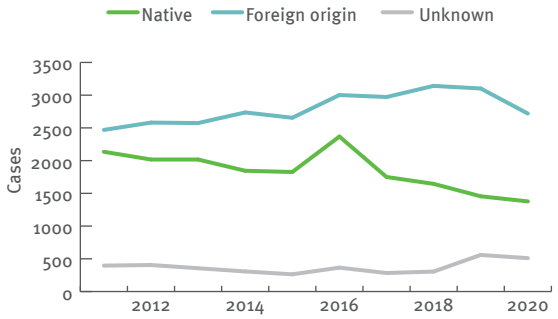
## TB notification rates by previous treatment history, 2011–2020



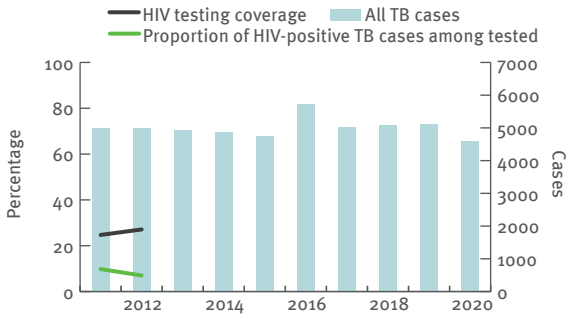

## New and relapse TB cases – notification rates by age group, 2011–2020



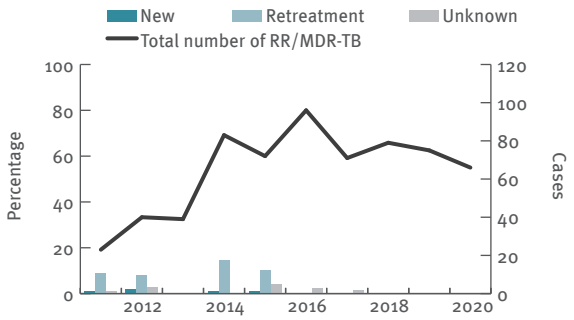

## TB cases by geographical origin, 2011–2020



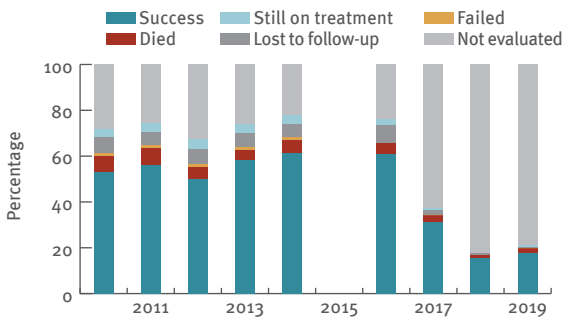

## TB/HIV coinfection, 2011–2020




## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new culture-confirmed pulmonary TB cases, 2010–2019



# Georgia

Total population estimate 2020 by United Nations Statistical Database: 3 989 175

## TB cases, 2020

| Notifications | | |
|---|---|---|
| Total number of cases | 1 842 | |
| Notification rate per 100 000 | 46.2 | |
| New[a] and relapse | 1 671 | |
| New[a] and relapse notification rate per 100 000 | 41.9 | |
| Pulmonary | 1 475 | (80.1%) |
| of which microscopy-positive | | |
| of which laboratory-confirmed | 1 370 | (92.9%) |
| Laboratory-confirmed TB cases | – | – |
| Mean age of new native TB cases | 42.9 years | |
| Mean age of new foreign TB cases | – | – |
| Foreign origin of all TB cases | – | – |
| New (not previously treated) | 1 484 | (80.6%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 2 800 | [2 300–3 300] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | Yes | |
| Completeness of HIV data[b] | Yes | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 1 355 | (98.9%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 190 | [170–220] |
| Pulmonary RR/MDR-TB cases notified | 191 | (14.1%) |
| of which pre-XDR-TB cases | 50 | (28.9%) |
| Notified RR/MDR-TB | 202 | – |
| of which pre-XDR-TB cases | 52 | (25.7%) |
| TB cases tested for HIV | 1 493 | (89.3%) |
| HIV-positive TB cases | 29 | (1.9%) |
| of these on ART | 29 | (100.0%) |

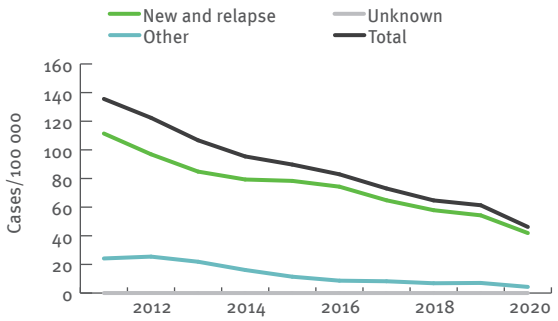
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New and relapse TB cases notified in 2019[a] | | RR/MDR-TB cases enrolled into DR-TB treatment in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 1 947 | | 230 | |
| Success | 1 659 | (85.2%) | 155 | (67.4%) |
| Died | 74 | (3.8%) | 13 | (5.7%) |
| Failed | 46 | (2.4%) | 13 | (5.7%) |
| Lost to follow-up | 97 | (5.0%) | 34 | (14.8%) |
| Not evaluated | 71 | (3.6%) | 15 | (6.5%) |

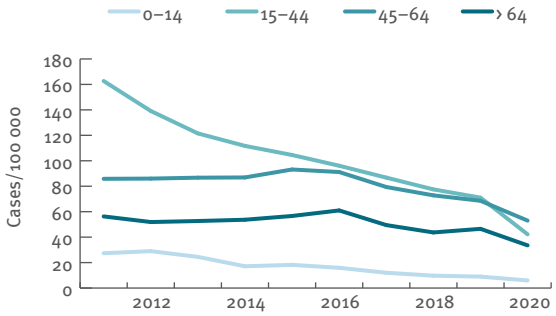
[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

### TB notification rates by previous treatment history, 2011–2020



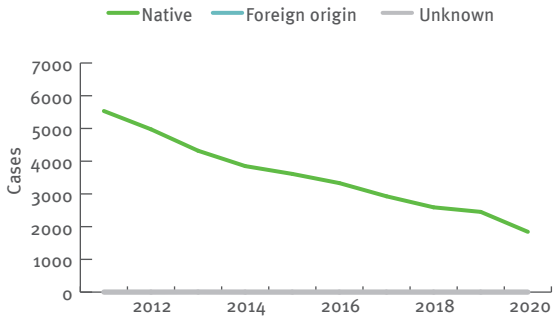

*Note:* starting from 2013 onward, cases with unknown history are included in new and relapses.

### New and relapse TB cases – notification rates by age group, 2011–2020

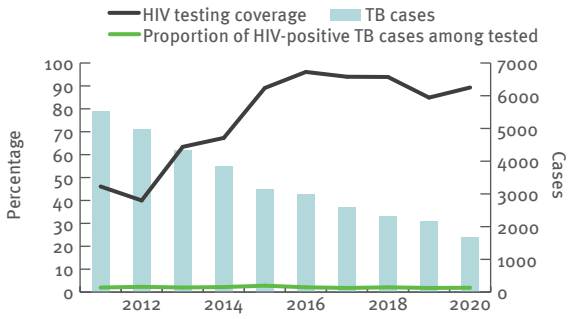



*Note:* data up to 2012 include new TB cases only.

### TB cases by geographical origin, 2011–2020

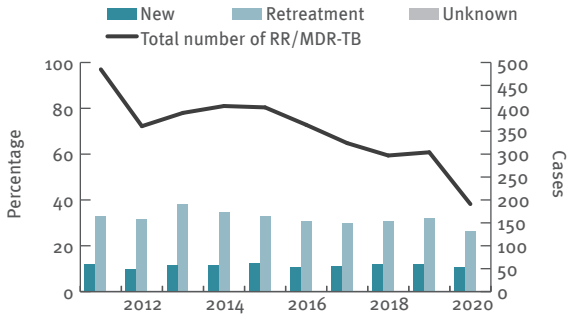



### TB/HIV coinfection, 2011–2020

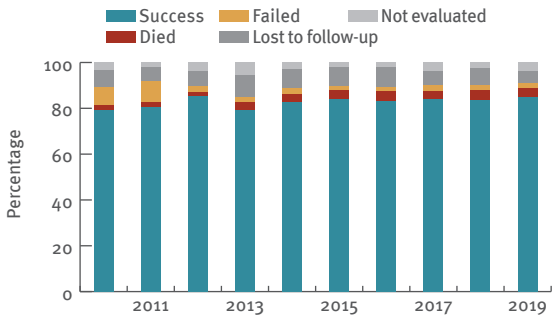



*Note:* data up to 2014 include all TB cases.

### RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




### Treatment outcome, new and relapse TB cases, 2010–2019




*Note:* 2010–2011 cohorts include new cases only.

# Germany

Total population at 9 April 2021 by EUROSTAT: 83 166 711

## TB cases, 2020

| Notifications | | |
|---|---|---|
| Total number of cases | 4 127 | |
| Notification rate per 100 000 | 5.0 | |
| New[a] and relapse | 4 010 | |
| New[a] and relapse notification rate per 100 000 | 4.8 | |
| Pulmonary | 2 903 | (70.3%) |
| of which microscopy-positive | 1 547 | (53.3%) |
| of which laboratory-confirmed | 2 468 | (85.0%) |
| Laboratory-confirmed TB cases | 3 259 | (79.0%) |
| Mean age of new native TB cases | 52.0 years | |
| Mean age of new foreign TB cases | 37.6 years | |
| Foreign origin of all TB cases | 2 817 | (68.3%) |
| New (not previously treated) | 2 725 | (66.0%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 4 600 | [3 900–5 300] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | Yes | |
| Completeness of HIV data[b] | No | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 2 865 | – |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 92 | [46–140] |
| Pulmonary RR/MDR-TB cases notified | 69 | (3.1%) |
| of which pre-XDR-TB cases | 10 | (21.3%) |
| Notified RR/MDR-TB | 94 | – |
| of which pre-XDR-TB cases | 13 | (13.8%) |
| TB cases tested for HIV | – | – |
| HIV-positive TB cases | – | – |
| of these on ART | – | – |

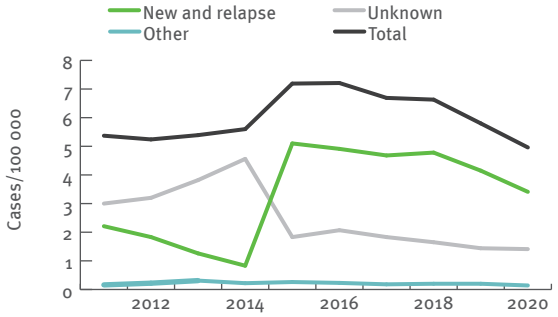
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

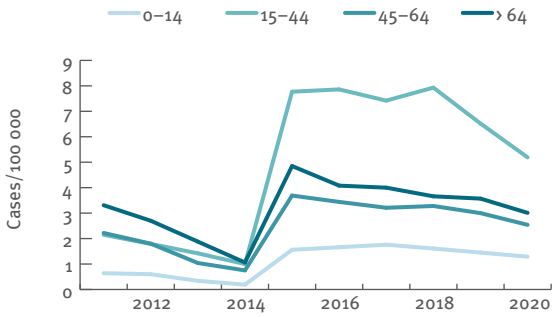
| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New culture-positive pulmonary TB cases notified in 2019[a] | | All RR/MDR-TB cases notified in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 2 009 | | 134 | |
| Success | 1 426 | (71.0%) | 83 | (61.9%) |
| Died | 174 | (8.7%) | 4 | (3.0%) |
| Failed | 2 | (0.1%) | 1 | (0.7%) |
| Lost to follow-up | 39 | (1.9%) | 4 | (3.0%) |
| Still on treatment | 63 | (3.1%) | 12 | (9.0%) |
| Not evaluated | 305 | (15.2%) | 30 | (22.4%) |

[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

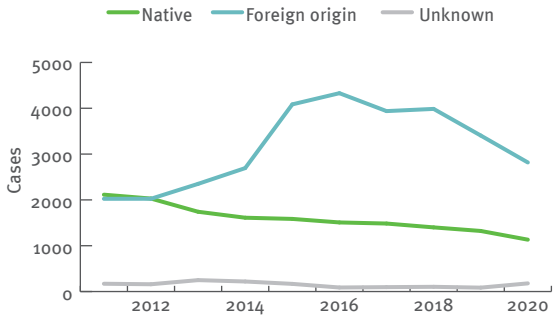
## TB notification rates by previous treatment history, 2011–2020




## New and relapse TB cases – notification rates by age group, 2011–2020



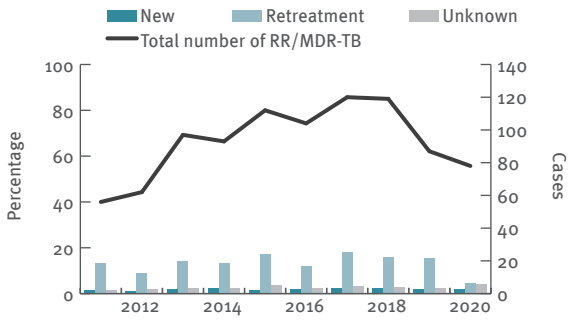

## TB cases by geographical origin, 2011–2020



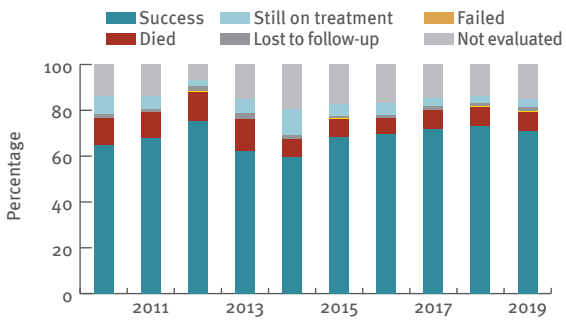

## TB/HIV coinfection, 2011–2020

Data not reported

## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new culture-confirmed pulmonary TB cases, 2010–2019



# Greece

Total population at 9 April 2021 by EUROSTAT: 10 718 565

## TB cases, 2020

| Notifications | | |
|---|---|---|
| Total number of cases | 396 | |
| Notification rate per 100 000 | 3.7 | |
| New[a] and relapse | 380 | |
| New[a] and relapse notification rate per 100 000 | 3.5 | |
| Pulmonary | 324 | (81.8%) |
| of which microscopy-positive | 206 | (63.6%) |
| of which laboratory-confirmed | 299 | (92.3%) |
| Laboratory-confirmed TB cases | 361 | (91.2%) |
| Mean age of new native TB cases | 58.0 years | |
| Mean age of new foreign TB cases | 31.2 years | |
| Foreign origin of all TB cases | 240 | (60.6%) |
| New (not previously treated) | 338 | (85.4%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 470 | [400–550] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | Yes | |
| Completeness of HIV data[b] | Yes | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 348 | (96.4%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 6 | [0–16] |
| Pulmonary RR/MDR-TB cases notified | 7 | (2.4%) |
| of which pre-XDR-TB cases | 0 | – |
| Notified RR/MDR-TB | 12 | – |
| of which pre-XDR-TB cases | 0 | – |
| TB cases tested for HIV | 396 | (100.0%) |
| HIV-positive TB cases | 17 | (4.3%) |
| of these on ART | – | – |

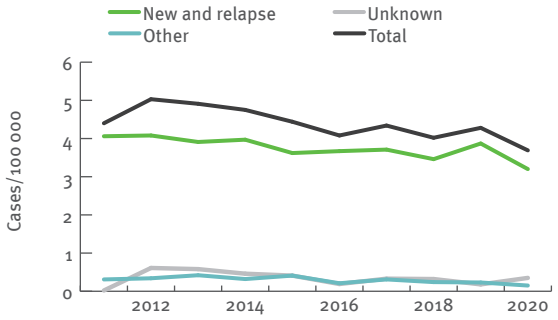
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

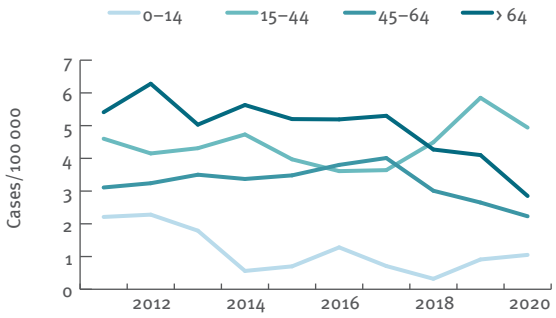
| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New culture-positive pulmonary TB cases notified in 2019[a] | | All RR/MDR-TB cases notified in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 212 | | 6 | |
| Success | – | – | – | – |
| Died | – | – | – | – |
| Failed | – | – | – | – |
| Lost to follow-up | – | – | – | – |
| Still on treatment | – | – | – | – |
| Not evaluated | – | – | – | – |

[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

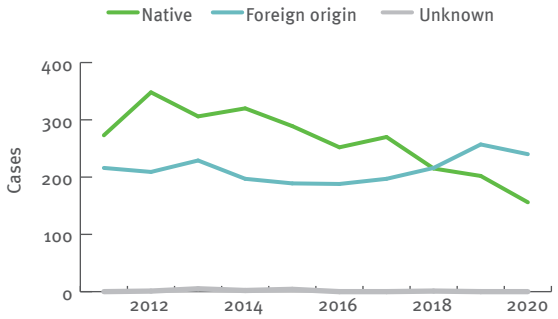
## TB notification rates by previous treatment history, 2011–2020



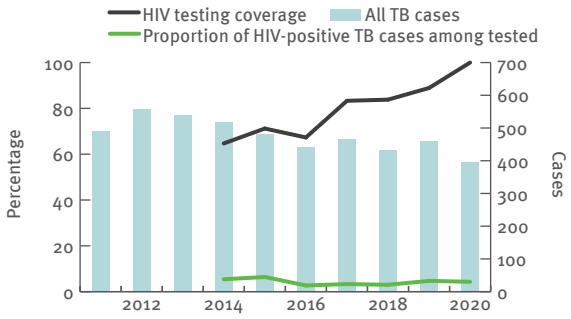

## New and relapse TB cases – notification rates by age group, 2011–2020



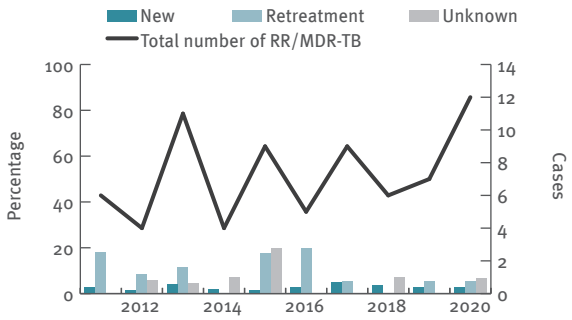

## TB cases by geographical origin, 2011–2020




## TB/HIV coinfection, 2011–2020




## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new culture-confirmed pulmonary TB cases, 2010–2019

Data not reported

# Hungary

Total population at 9 April 2021 by EUROSTAT: 9 769 526

## TB cases, 2020

| Notifications | | |
|---|---|---|
| Total number of cases | 406 | |
| Notification rate per 100 000 | 4.2 | |
| New[a] and relapse | 384 | |
| New[a] and relapse notification rate per 100 000 | 3.9 | |
| Pulmonary | 388 | (95.6%) |
| of which microscopy-positive | 125 | (32.2%) |
| of which laboratory-confirmed | 196 | (50.5%) |
| Laboratory-confirmed TB cases | 197 | (48.5%) |
| Mean age of new native TB cases | 52.6 years | |
| Mean age of new foreign TB cases | 34.4 years | |
| Foreign origin of all TB cases | 19 | (4.7%) |
| New (not previously treated) | 359 | (88.4%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 440 | [380–510] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | Yes | |
| Completeness of HIV data[b] | No | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 177 | (89.8%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 13 | [6–21] |
| Pulmonary RR/MDR-TB cases notified | 11 | (6.3%) |
| of which pre-XDR-TB cases | 0 | – |
| Notified RR/MDR-TB | 11 | – |
| of which pre-XDR-TB cases | 0 | – |
| TB cases tested for HIV | 18 | (4.4%) |
| HIV-positive TB cases | 2 | (11.1%) |
| of these on ART | – | – |

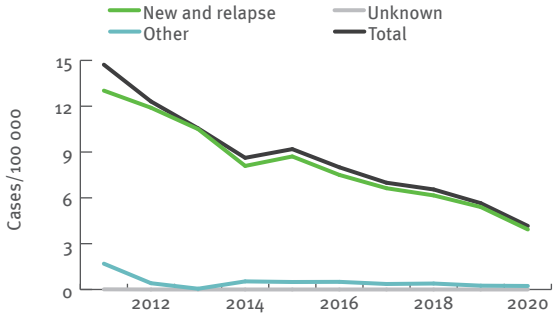
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

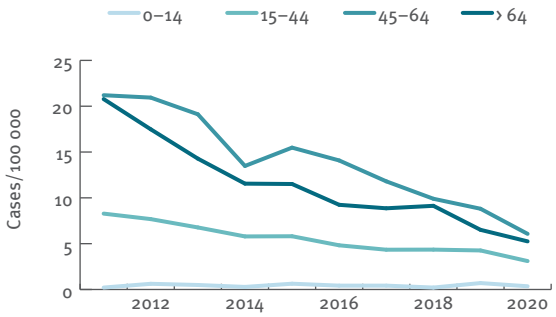
| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New culture-positive pulmonary TB cases notified in 2019[a] | | All RR/MDR-TB cases notified in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 255 | | 13 | |
| Success | 151 | (59.2%) | 6 | (46.2%) |
| Died | 42 | (16.5%) | 3 | (23.1%) |
| Failed | 6 | (2.4%) | 0 | (0.0%) |
| Lost to follow-up | 33 | (12.9%) | 0 | (0.0%) |
| Still on treatment | 10 | (3.9%) | 1 | (7.7%) |
| Not evaluated | 13 | (5.1%) | 3 | (23.1%) |

[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

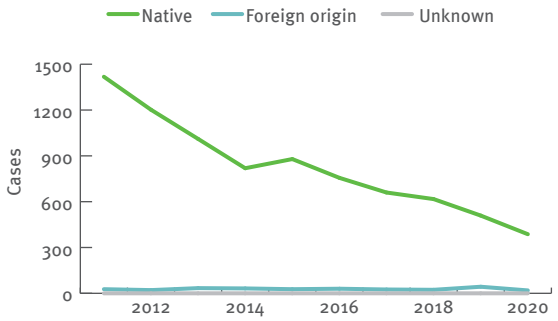
## TB notification rates by previous treatment history, 2011–2020



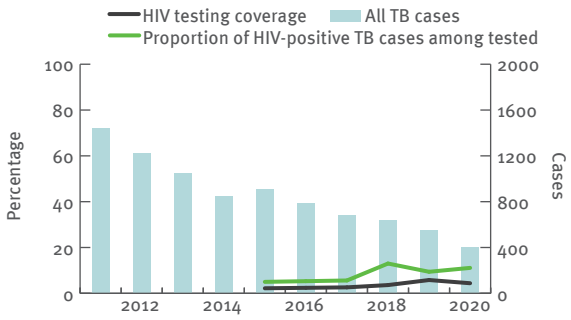

## New and relapse TB cases – notification rates by age group, 2011–2020



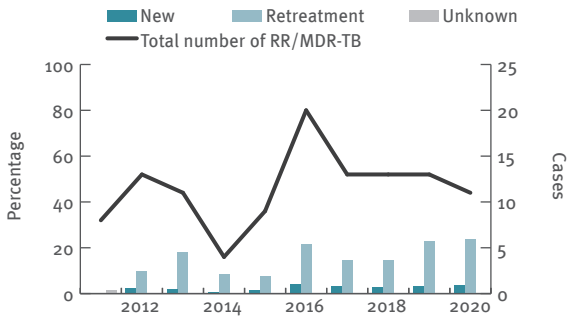

## TB cases by geographical origin, 2011–2020



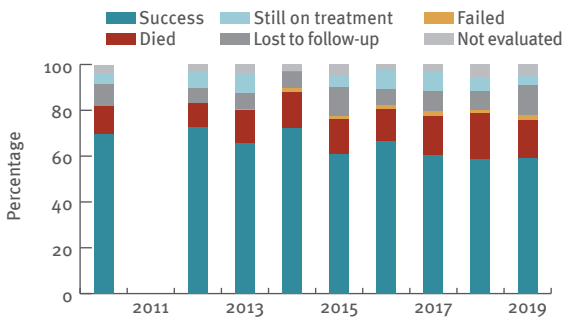

## TB/HIV coinfection, 2011–2020




## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new culture-confirmed pulmonary TB cases, 2010–2019



# Iceland

Total population at 9 April 2021 by EUROSTAT: 364 134

## TB cases, 2020

| Notifications | | |
|---|---|---|
| Total number of cases | 12 | |
| Notification rate per 100 000 | 3.3 | |
| New[a] and relapse | 12 | |
| New[a] and relapse notification rate per 100 000 | 3.3 | |
| Pulmonary | 8 | (66.7%) |
| of which microscopy-positive | 2 | (25.0%) |
| of which laboratory-confirmed | 5 | (62.5%) |
| Laboratory-confirmed TB cases | 6 | (50.0%) |
| Mean age of new native TB cases | – | |
| Mean age of new foreign TB cases | – | |
| Foreign origin of all TB cases | 11 | (91.7%) |
| New (not previously treated) | 12 | (100.0%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 10 | [8–11] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | Yes | |
| Completeness of HIV data[b] | No | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 6 | (100.0%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 0 | [0–3] |
| Pulmonary RR/MDR-TB cases notified | 0 | (0.0%) |
| of which pre-XDR-TB cases | 0 | – |
| Notified RR/MDR-TB | 0 | – |
| of which pre-XDR-TB cases | 0 | – |
| TB cases tested for HIV | – | – |
| HIV-positive TB cases | – | – |
| of these on ART | – | – |

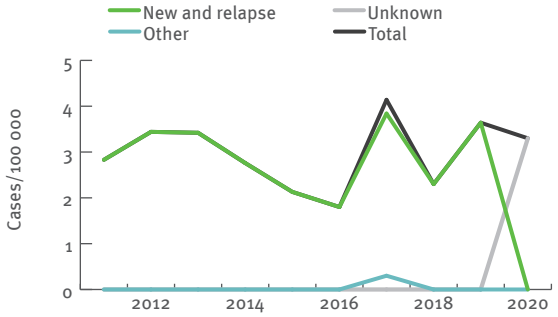
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

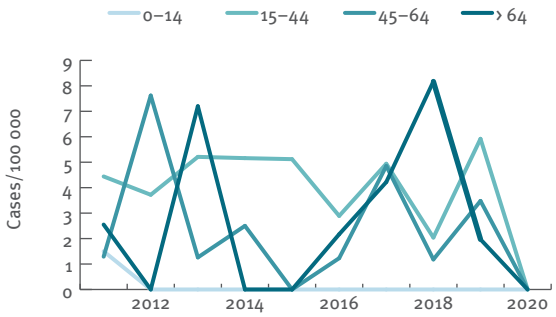
| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New culture-positive pulmonary TB cases notified in 2019[a] | | All RR/MDR-TB cases notified in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 4 | | 0 | |
| Success | 4 | (100.0%) | – | – |
| Died | 0 | (0.0%) | – | – |
| Failed | 0 | (0.0%) | – | – |
| Lost to follow-up | 0 | (0.0%) | – | – |
| Still on treatment | 0 | (0.0%) | – | – |
| Not evaluated | 0 | (0.0%) | – | – |

[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

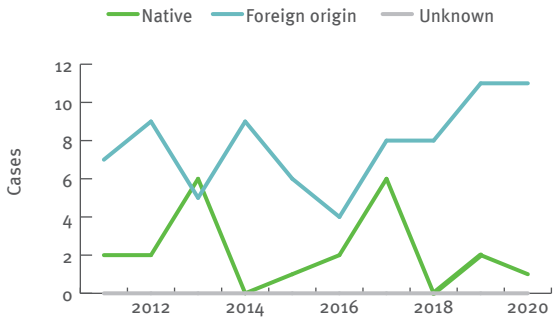
## TB notification rates by previous treatment history, 2011–2020



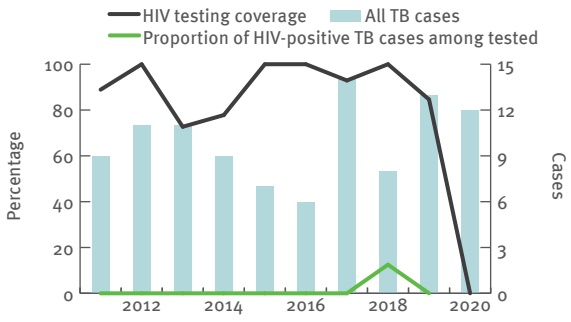

## New and relapse TB cases – notification rates by age group, 2011–2020



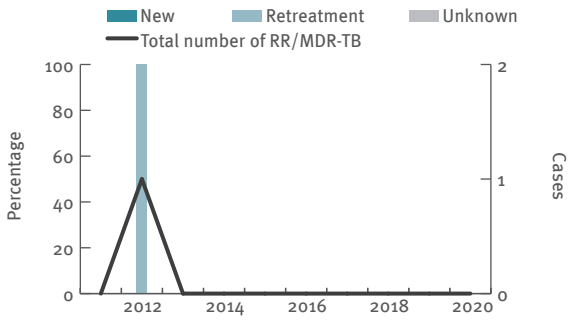

## TB cases by geographical origin, 2011–2020



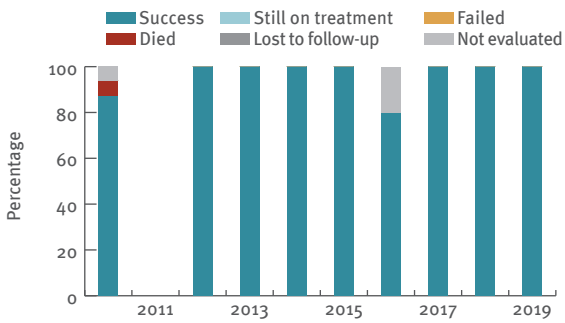

## TB/HIV coinfection, 2011–2020




## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new culture-confirmed pulmonary TB cases, 2010–2019



# Ireland

Total population at 9 April 2021 by EUROSTAT: 4 964 440

## TB cases, 2020

| Notifications | | |
|---|---|---|
| Total number of cases | 240 | |
| Notification rate per 100 000 | 4.8 | |
| New[a] and relapse | 229 | |
| New[a] and relapse notification rate per 100 000 | 4.6 | |
| Pulmonary | 126 | (52.5%) |
| of which microscopy-positive | 51 | (40.5%) |
| of which laboratory-confirmed | 103 | (81.7%) |
| Laboratory-confirmed TB cases | 170 | (70.8%) |
| Mean age of new native TB cases | 57.8 years | |
| Mean age of new foreign TB cases | 35.6 years | |
| Foreign origin of all TB cases | 108 | (45.0%) |
| New (not previously treated) | 114 | (47.5%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 260 | [230–300] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | Yes | |
| Completeness of HIV data[b] | No | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 101 | (59.4%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 1 | [0–5] |
| Pulmonary RR/MDR-TB cases notified | 0 | (0.0%) |
| of which pre-XDR-TB cases | 0 | – |
| Notified RR/MDR-TB | 1 | – |
| of which pre-XDR-TB cases | 0 | (0.0%) |
| TB cases tested for HIV | 84 | (35.0%) |
| HIV-positive TB cases | 3 | (3.6%) |
| of these on ART | – | – |

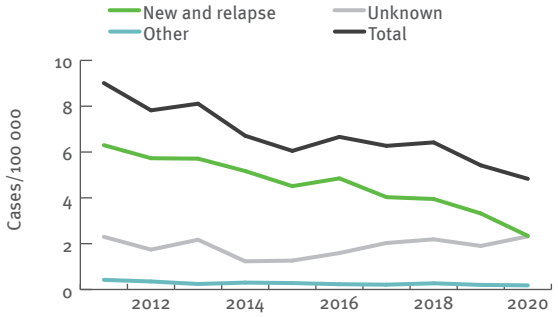
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

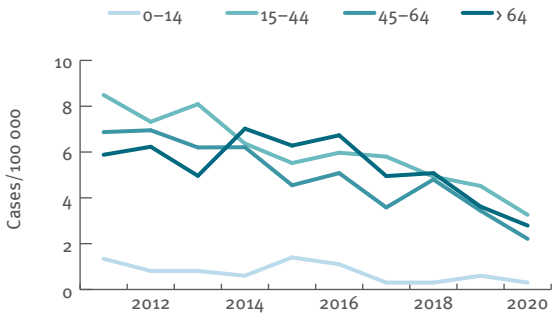
| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New culture-positive pulmonary TB cases notified in 2019[a] | | All RR/MDR-TB cases notified in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 98 | | 8 | |
| Success | 5 | (5.1%) | 1 | (12.5%) |
| Died | 3 | (3.1%) | 1 | (12.5%) |
| Failed | 0 | (0.0%) | 0 | (0.0%) |
| Lost to follow-up | 0 | (0.0%) | 1 | (12.5%) |
| Still on treatment | 0 | (0.0%) | 0 | (0.0%) |
| Not evaluated | 90 | (91.8%) | 5 | (62.5%) |

[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

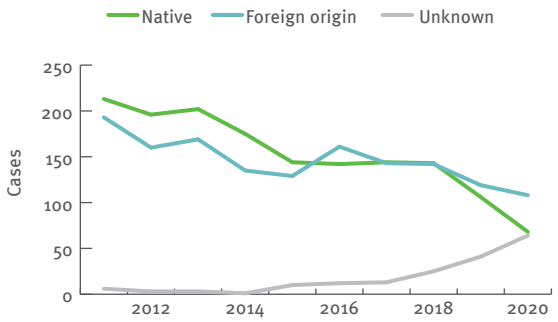
## TB notification rates by previous treatment history, 2011–2020



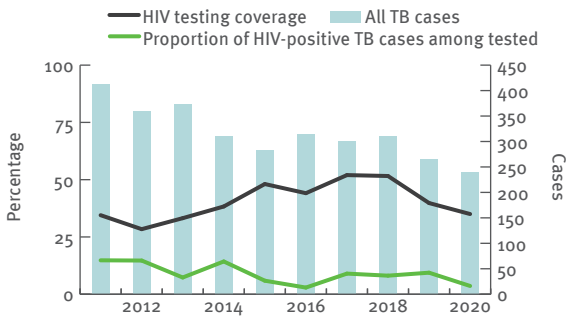

## New and relapse TB cases – notification rates by age group, 2011–2020



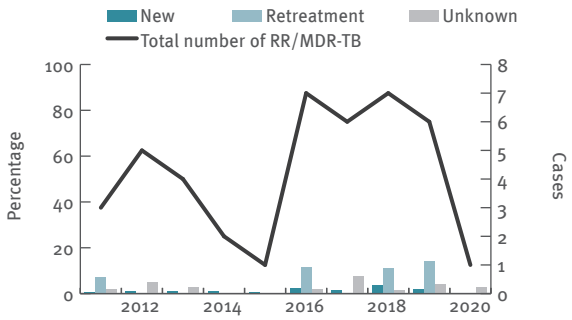

## TB cases by geographical origin, 2011–2020



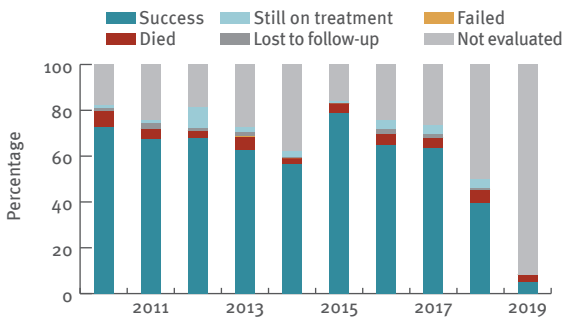

## TB/HIV coinfection, 2011–2020




## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new culture-confirmed pulmonary TB cases, 2010–2019



# Israel

Total population estimate 2020 by United Nations Statistical Database: 8 655 541

## TB cases, 2020

| Notifications | | |
|---|---|---|
| Total number of cases | 158 | |
| Notification rate per 100 000 | 1.8 | |
| New[a] and relapse | 158 | |
| New[a] and relapse notification rate per 100 000 | 1.8 | |
| Pulmonary | 113 | (71.5%) |
| of which microscopy-positive | | |
| of which laboratory-confirmed | 90 | (79.6%) |
| Laboratory-confirmed TB cases | – | – |
| Mean age of new native TB cases | 44.6 years | |
| Mean age of new foreign TB cases | – | |
| Foreign origin of all TB cases | 134 | (84.8%) |
| New (not previously treated) | 156 | (98.7%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 180 | [160–210] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | Yes | |
| Completeness of HIV data[b] | Yes | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 90 | (100.0%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 5 | [1–9] |
| Pulmonary RR/MDR-TB cases notified | 5 | (5.6%) |
| of which pre-XDR-TB cases | 1 | (20.0%) |
| Notified RR/MDR-TB | 5 | – |
| of which pre-XDR-TB cases | 1 | (20.0%) |
| TB cases tested for HIV | 158 | (100.0%) |
| HIV-positive TB cases | 15 | (9.5%) |
| of these on ART | 15 | (100.0%) |

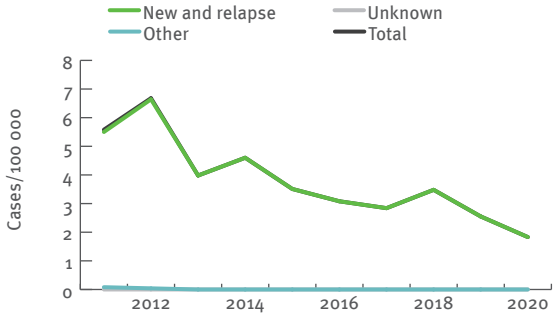
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New and relapse TB cases notified in 2019[a] | | RR/MDR-TB cases enrolled into DR-TB treatment in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 217 | | 14 | |
| Success | 182 | (83.9%) | 9 | (64.3%) |
| Died | 14 | (6.5%) | 2 | (14.3%) |
| Failed | 2 | (0.9%) | 0 | (0.0%) |
| Lost to follow-up | 6 | (2.8%) | 2 | (14.3%) |
| Not evaluated | 13 | (6.0%) | 1 | (7.1%) |

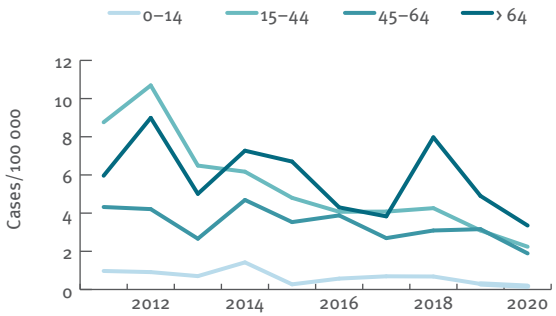
[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

## TB notification rates by previous treatment history, 2011–2020



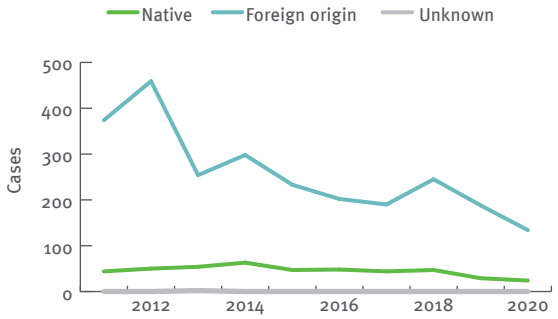

*Note:* cases with unknown previous treatment included with new and relapse cases.

## New and relapse TB cases – notification rates by age group, 2011–2020

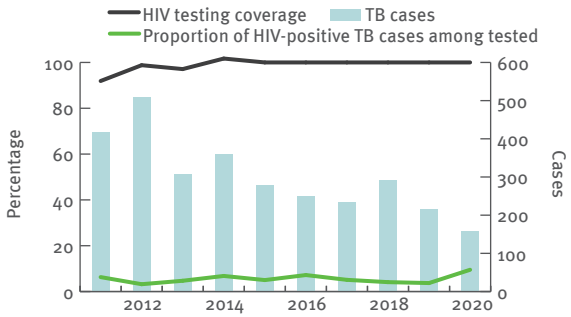



*Note:* data up to 2012 include new TB cases only.

## TB cases by geographical origin, 2011–2020

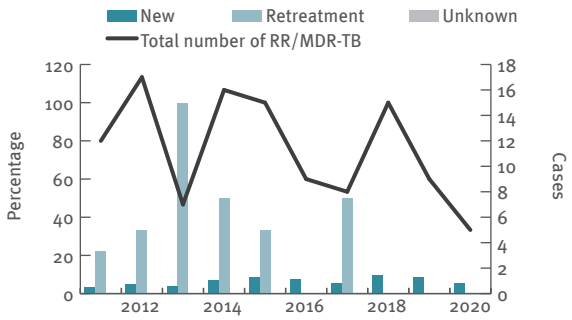



## TB/HIV coinfection, 2011–2020

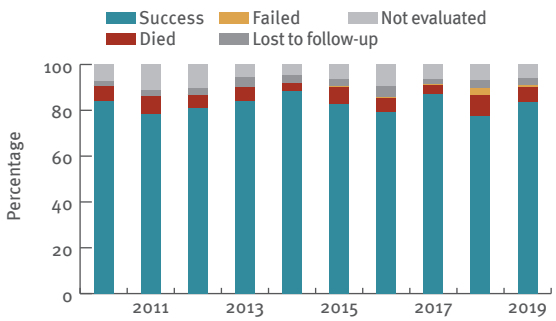



*Note:* data up to 2014 includes all TB cases.

## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new and relapse TB cases, 2010–2019




*Note:* 2010–2011 cohorts include new cases only.

# Italy

Total population at 9 April 2021 by EUROSTAT: 59 641 488

## TB cases, 2020

**Notifications**

| | | |
|---|---|---|
| Total number of cases | 2 287 | |
| Notification rate per 100 000 | 3.8 | |
| New[a] and relapse | 2 163 | |
| New[a] and relapse notification rate per 100 000 | 3.6 | |
| Pulmonary | 1 643 | (71.8%) |
| of which microscopy-positive | 725 | (44.1%) |
| of which laboratory-confirmed | 0 | (0.0%) |
| Laboratory-confirmed TB cases | 1 490 | (65.2%) |
| Mean age of new native TB cases | 53.3 years | |
| Mean age of new foreign TB cases | 36.9 years | |
| Foreign origin of all TB cases | 1 273 | (55.7%) |
| New (not previously treated) | 1 597 | (69.8%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 4 000 | [3 400–4 600] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | No | |
| Completeness of HIV data[b] | No | |
| Case-linked data-reporting | No | |
| Cases with DST results | 1 009 | (67.7%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 42 | [31–53] |
| Pulmonary RR/MDR-TB cases notified | 39 | (3.3%) |
| of which pre-XDR-TB cases | 8 | (21.6%) |
| Notified RR/MDR-TB | 39 | – |
| of which pre-XDR-TB cases | – | – |
| TB cases tested for HIV | – | – |
| HIV-positive TB cases | – | – |
| of these on ART | – | – |

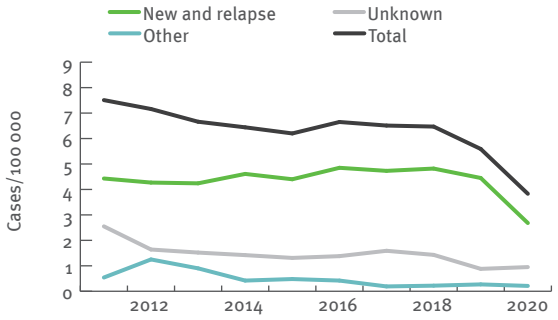
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.
[c] Cases with unknown previous TB treatment history included in new cases.

## Treatment outcome monitoring

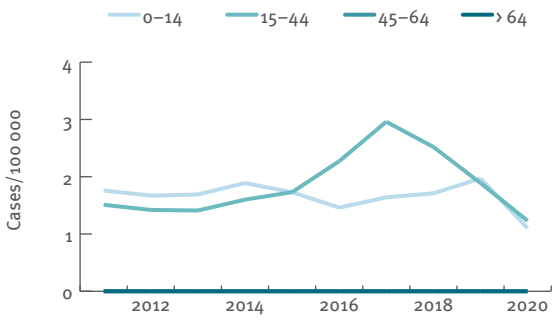
| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New culture-positive pulmonary TB cases notified in 2019[a] | | All RR/MDR-TB cases notified in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 1 534 | | 49 | |
| Success | – | – | – | – |
| Died | – | – | – | – |
| Failed | – | – | – | – |
| Lost to follow-up | – | – | – | – |
| Still on treatment | – | – | – | – |
| Not evaluated | – | – | – | – |

[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

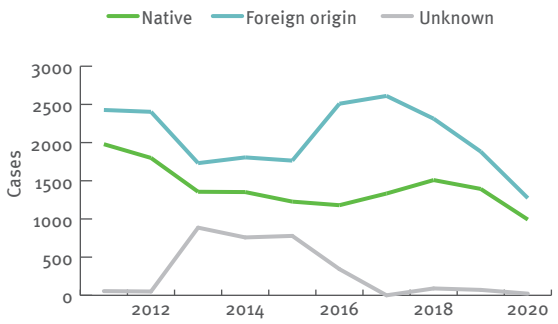
## TB notification rates by previous treatment history, 2011–2020




## New and relapse TB cases – notification rates by age group, 2011–2020



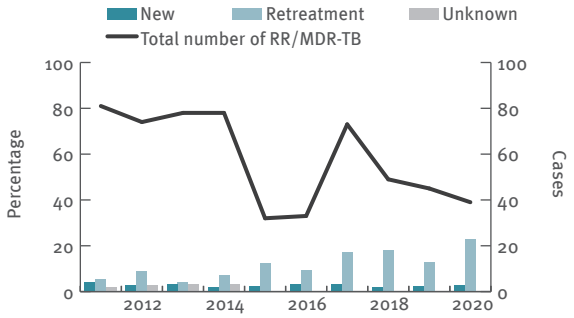

## TB cases by geographical origin, 2011–2020




## TB/HIV coinfection, 2011–2020

Data not reported

## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new culture-confirmed pulmonary TB cases, 2010–2019

Data not reported

# Kazakhstan

Total population estimate 2020 by United Nations Statistical Database: 18 776 707

## TB cases, 2020

**Notifications**

| | | |
|---|---|---|
| Total number of cases | 10 020 | |
| Notification rate per 100 000 | 53.4 | |
| New[a] and relapse | 9 603 | |
| New[a] and relapse notification rate per 100 000 | 51.1 | |
| Pulmonary | 9 051 | (90.3%) |
| of which microscopy-positive | – | – |
| of which laboratory-confirmed | 7 084 | (78.3%) |
| Laboratory-confirmed TB cases | – | – |
| Mean age of new native TB cases | 42.9 years | |
| Mean age of new foreign TB cases | – | |
| Foreign origin of all TB cases | 178 | (1.8%) |
| New (not previously treated) | 6 934 | (69.2%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 13 000 | [8 400–19 000] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | No | |
| Completeness of HIV data[b] | Yes | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 7 074 | (99.9%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 2 900 | [2 800–2 900] |
| Pulmonary RR/MDR-TB cases notified | 2 859 | (40.4%) |
| of which pre-XDR-TB cases | 399 | (14.0%) |
| Notified RR/MDR-TB | 4 307 | – |
| of which pre-XDR-TB cases | 1193 | (27.7%) |
| TB cases tested for HIV | 9 440 | (98.3%) |
| HIV-positive TB cases | 614 | (6.5%) |
| of these on ART | 592 | (96.4%) |

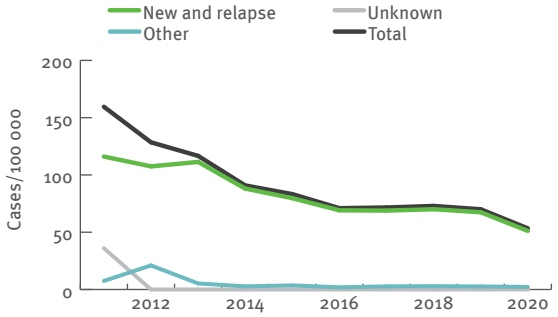
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New and relapse TB cases notified in 2019[a] | | RR/MDR TB cases enrolled into DR-TB treatment in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 7 429 | | 4 336 | |
| Success | 6 704 | (90.2%) | 3 499 | (80.7%) |
| Died | 432 | (5.8%) | 408 | (9.4%) |
| Failed | 186 | (2.5%) | 182 | (4.2%) |
| Lost to follow-up | 107 | (1.4%) | 216 | (5.0%) |
| Not evaluated | 0 | (0.0%) | 31 | (0.7%) |

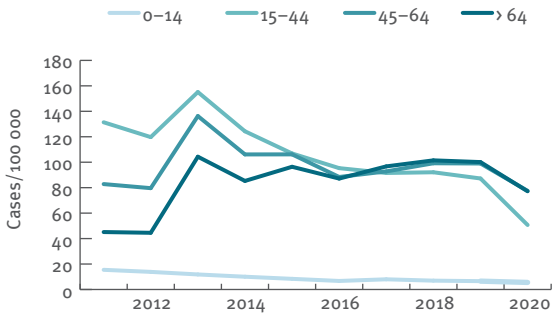
[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

## TB notification rates by previous treatment history, 2011–2020



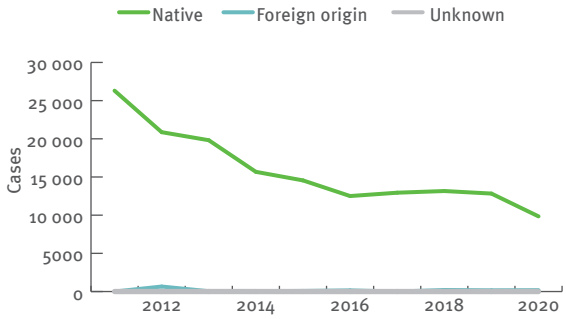

*Note:* starting from 2013 onward, cases with unknown history are included in new and relapses.

## New and relapse TB cases – notification rates by age group, 2011–2020

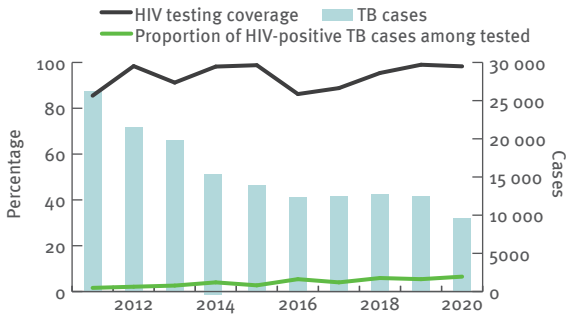



*Note:* data up to 2012 include new TB cases only.

## TB cases by geographical origin, 2011–2020

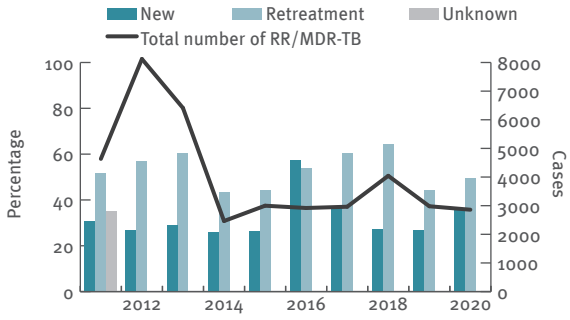



## TB/HIV coinfection, 2011–2020

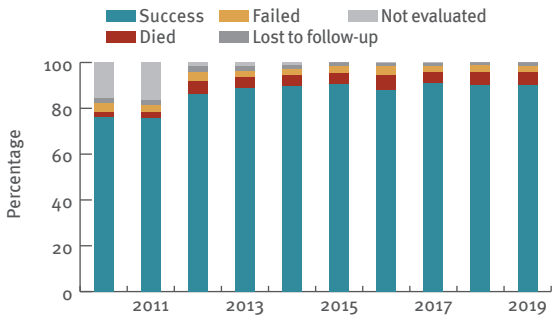



*Note:* data up to 2014 include all TB cases.

## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new and relapse TB cases 2010–2019




*Note:* 2010–2011 cohorts include new cases only.

# Kyrgyzstan

Total population estimate 2020 by United Nations Statistical Database: 6 524 191

## TB cases, 2020

| Notifications | | |
|---|---|---|
| Total number of cases | 4 885 | |
| Notification rate per 100 000 | 74.9 | |
| New[a] and relapse | 4 241 | |
| New[a] and relapse notification rate per 100 000 | 65.0 | |
| Pulmonary | 3 992 | (81.7%) |
| of which microscopy-positive | – | – |
| of which laboratory-confirmed | 2 635 | (66.0%) |
| Laboratory-confirmed TB cases | – | – |
| Mean age of new native TB cases | 41.6 years | |
| Mean age of new foreign TB cases | – | |
| Foreign origin of all TB cases | 0 | (0.0%) |
| New (not previously treated) | 3 534 | (72.3%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 6 900 | [5 800–8 000] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | Yes | |
| Completeness of HIV data[b] | Yes | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 2 439 | (92.6%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 940 | [890–990] |
| Pulmonary RR/MDR-TB cases notified | 870 | (35.7%) |
| of which pre-XDR-TB cases | 149 | (17.1%) |
| Notified RR/MDR-TB | 1 038 | – |
| of which pre-XDR-TB cases | 149 | (14.4%) |
| TB cases tested for HIV | 4 007 | (94.5%) |
| HIV-positive TB cases | 131 | (3.3%) |
| of these on ART | 88 | (67.2%) |

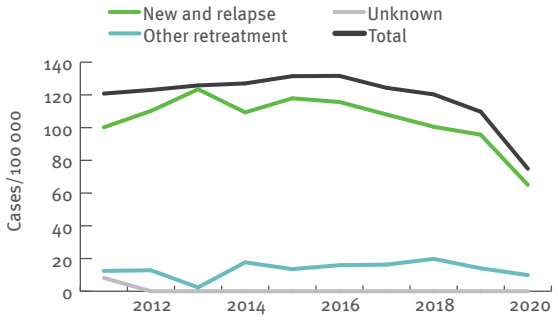
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New and relapse TB cases notified in 2019[a] | | RR/MDR TB cases enrolled into DR-TB treatment in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 5 110 | | 1 244 | |
| Success | 4 155 | (81.3%) | 775 | (62.3%) |
| Died | 328 | (6.4%) | 122 | (9.8%) |
| Failed | 112 | (2.2%) | 97 | (7.8%) |
| Lost to follow-up | 481 | (9.4%) | 249 | (20.0%) |
| Not evaluated | 34 | (0.7%) | 1 | (0.1%) |

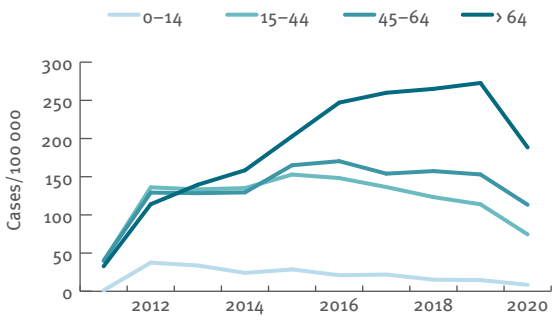
[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

## TB notification rates by previous treatment history, 2011–2020



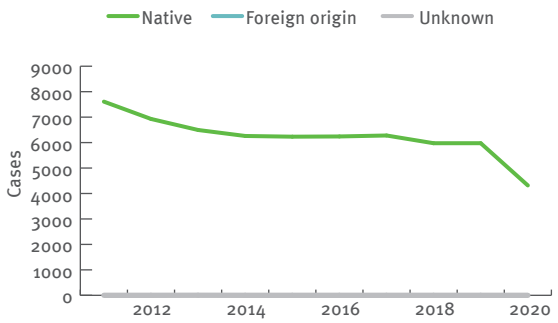

*Note:* starting from 2013 onward, cases with unknown history are included in new and relapses.

## New and relapse TB cases - notification rates by age group, 2011–2020

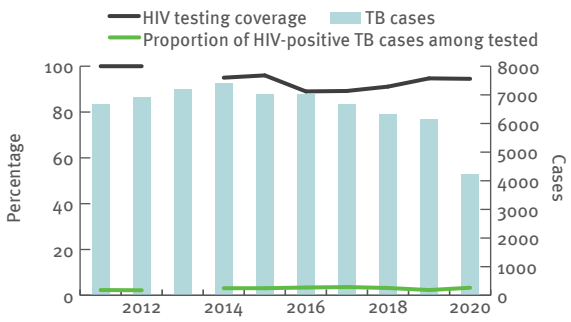



*Note:* data up to 2012 include new TB cases only.

## TB cases by geographical origin, 2011–2020

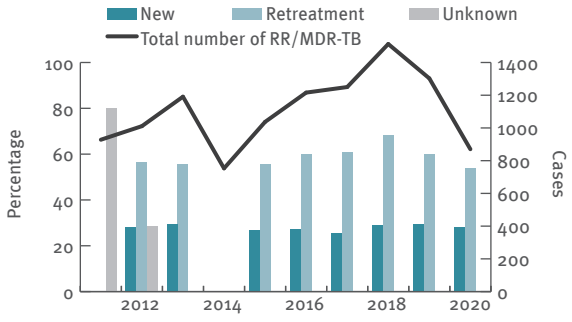



## TB/HIV coinfection, 2011–2020

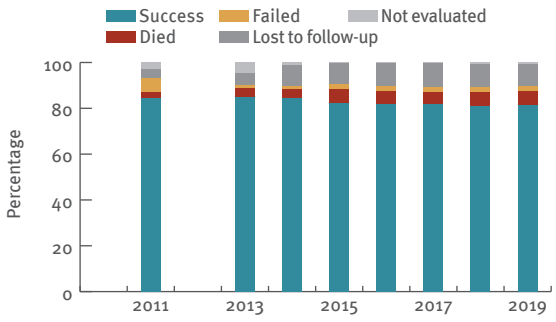



*Note:* data up to 2014 include all TB cases.

## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new and relapse TB cases, 2010–2019




*Note:* 2010–2011 cohorts include new cases only.

# Latvia

Total population at 9 April 2021 by EUROSTAT: 1 907 675

## TB cases, 2020

| Notifications | | |
|---|---|---|
| Total number of cases | – | |
| Notification rate per 100 000 | – | |
| New[a] and relapse | – | |
| New[a] and relapse notification rate per 100 000 | – | |
| Pulmonary | – | – |
| of which microscopy-positive | – | – |
| of which laboratory-confirmed | – | – |
| Laboratory-confirmed TB cases | – | – |
| Mean age of new native TB cases | | – |
| Mean age of new foreign TB cases | | – |
| Foreign origin of all TB cases | – | – |
| New (not previously treated) | – | – |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 430 | [370–500] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | No | |
| Completeness of HIV data[b] | No | |
| Case-linked data-reporting | No | |
| Cases with DST results | – | – |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | – | – |
| Pulmonary RR/MDR-TB cases notified | – | – |
| of which pre-XDR-TB cases | – | – |
| Notified RR/MDR-TB | – | – |
| of which pre-XDR-TB cases | – | – |
| TB cases tested for HIV | – | – |
| HIV-positive TB cases | – | – |
| of these on ART | – | – |

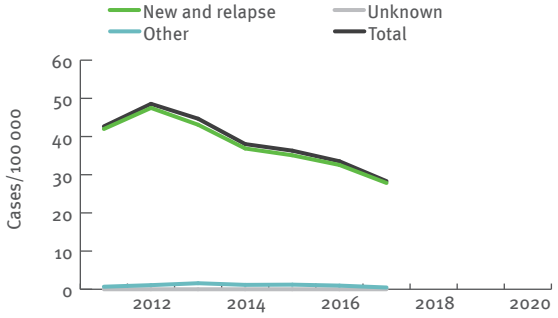
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

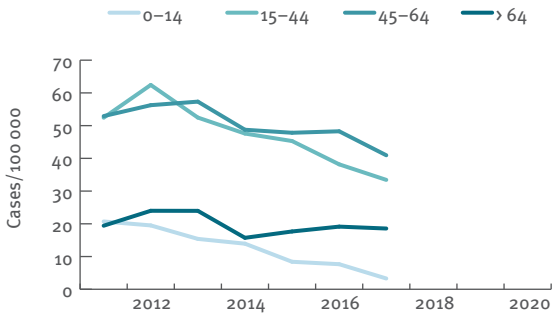
| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New culture-positive pulmonary TB cases notified in 2019[a] | | All RR/MDR-TB cases notified in 2018[b] | |
| Case-linked data-reporting | No | | – | |
| Cases notified | 0 | | 0 | |
| Success | – | – | – | – |
| Died | – | – | – | – |
| Failed | – | – | – | – |
| Lost to follow-up | – | – | – | – |
| Still on treatment | – | – | – | – |
| Not evaluated | – | – | – | – |

[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

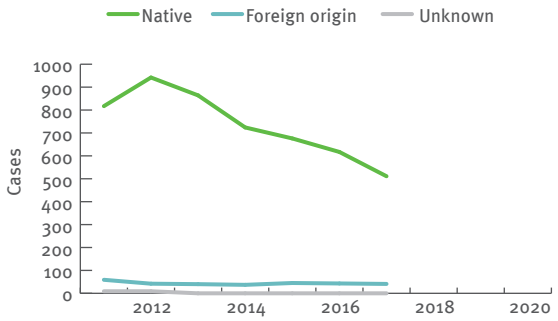
## TB notification rates by previous treatment history, 2011–2020



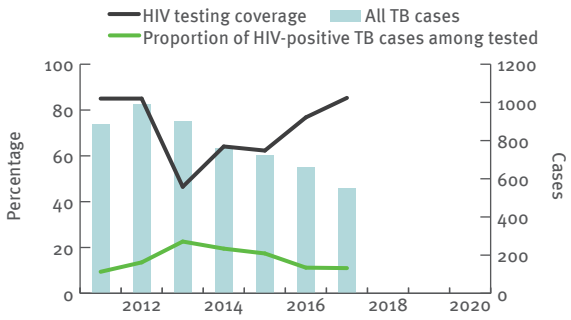

## New and relapse TB cases – notification rates by age group, 2011–2020



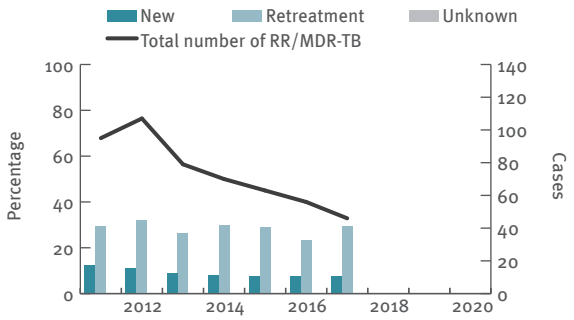

## TB cases by geographical origin, 2011–2020



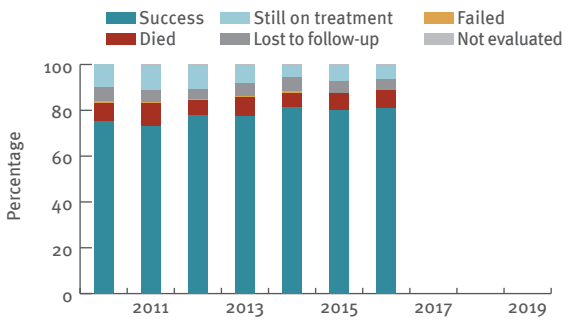

## TB/HIV coinfection, 2011–2020




## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new culture-confirmed pulmonary TB cases, 2010–2019



# Liechtenstein

Total population at 9 April 2021 by EUROSTAT: 38 747

## TB cases, 2020

| Notifications | | |
|---|---|---|
| Total number of cases | 2 | |
| Notification rate per 100 000 | 5.2 | |
| New[a] and relapse | 2 | |
| New[a] and relapse notification rate per 100 000 | 5.2 | |
| Pulmonary | 0 | (0.0%) |
| of which microscopy-positive | 0 | – |
| of which laboratory-confirmed | 0 | – |
| Laboratory-confirmed TB cases | 1 | (50.0%) |
| Mean age of new native TB cases | – | |
| Mean age of new foreign TB cases | 76.0 years | |
| Foreign origin of all TB cases | 2 | (100.0%) |
| New (not previously treated) | 1 | (50.0%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | – | – |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | Yes | |
| Completeness of HIV data[b] | No | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 0 | (0.0%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | – | – |
| Pulmonary RR/MDR-TB cases notified | 0 | – |
| of which pre-XDR-TB cases | 0 | – |
| Notified RR/MDR-TB | 0 | – |
| of which pre-XDR-TB cases | 0 | – |
| TB cases tested for HIV | – | – |
| HIV-positive TB cases | – | – |
| of these on ART | – | – |

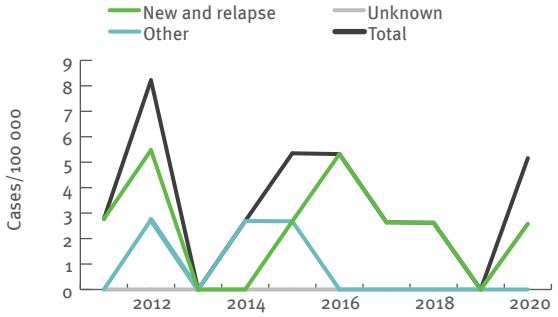
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

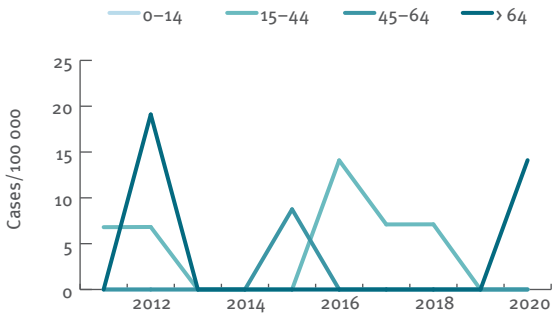
| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New culture-positive pulmonary TB cases notified in 2019[a] | | All RR/MDR-TB cases notified in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 0 | | 0 | |
| Success | – | – | – | – |
| Died | – | – | – | – |
| Failed | – | – | – | – |
| Lost to follow-up | – | – | – | – |
| Still on treatment | – | – | – | – |
| Not evaluated | – | – | – | – |

[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

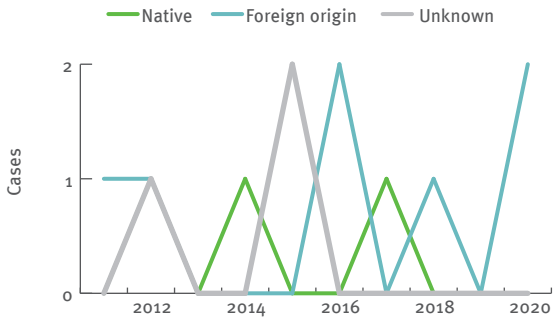
## TB notification rates by previous treatment history, 2011–2020




## New and relapse TB cases – notification rates by age group, 2011–2020



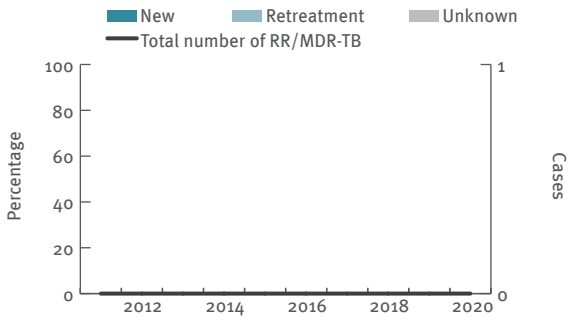

## TB cases by geographical origin, 2011–2020



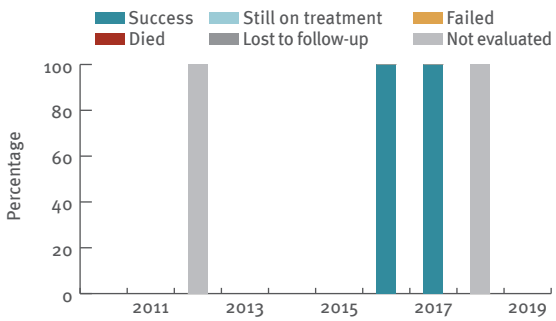

## TB/HIV coinfection, 2011–2020

Data not reported

## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new culture-confirmed pulmonary TB cases, 2010–2019



# Lithuania

Total population at 9 April 2021 by EUROSTAT: 2 794 090

## TB cases, 2020

| Notifications | | |
|---|---|---|
| Total number of cases | 726 | |
| Notification rate per 100 000 | 26.0 | |
| New[a] and relapse | 688 | |
| New[a] and relapse notification rate per 100 000 | 24.6 | |
| Pulmonary | 676 | (93.1%) |
| of which microscopy-positive | 434 | (64.2%) |
| of which laboratory-confirmed | 617 | (91.3%) |
| Laboratory-confirmed TB cases | 635 | (87.5%) |
| Mean age of new native TB cases | 49.9 years | |
| Mean age of new foreign TB cases | 55.1 years | |
| Foreign origin of all TB cases | 13 | (1.8%) |
| New (not previously treated) | 591 | (81.4%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 790 | [680–910] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | Yes | |
| Completeness of HIV data[b] | Yes | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 635 | (100.0%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 100 | [86–120] |
| Pulmonary RR/MDR-TB cases notified | 104 | (16.9%) |
| of which pre-XDR-TB cases | 34 | (56.7%) |
| Notified RR/MDR-TB | 105 | – |
| of which pre-XDR-TB cases | 34 | (32.4%) |
| TB cases tested for HIV | 714 | (98.3%) |
| HIV-positive TB cases | 20 | (2.8%) |
| of these on ART | – | – |

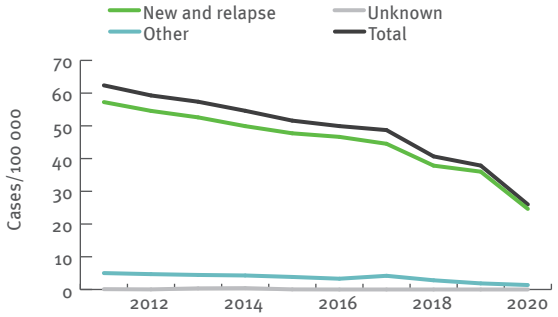
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.
[c] Cases with unknown previous TB treatment history included in new cases.

## Treatment outcome monitoring

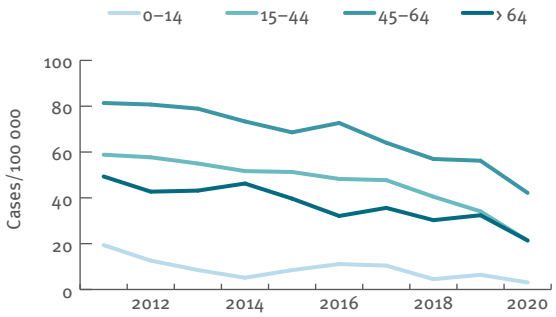
| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New culture-positive pulmonary TB cases notified in 2019[a] | | All RR/MDR-TB cases notified in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 725 | | 189 | |
| Success | 535 | (73.8%) | 103 | (54.5%) |
| Died | 75 | (10.3%) | 31 | (16.4%) |
| Failed | 13 | (1.8%) | 12 | (6.3%) |
| Lost to follow-up | 17 | (2.3%) | 20 | (10.6%) |
| Still on treatment | 84 | (11.6%) | 23 | (12.2%) |
| Not evaluated | 1 | (0.1%) | 0 | (0.0%) |

[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

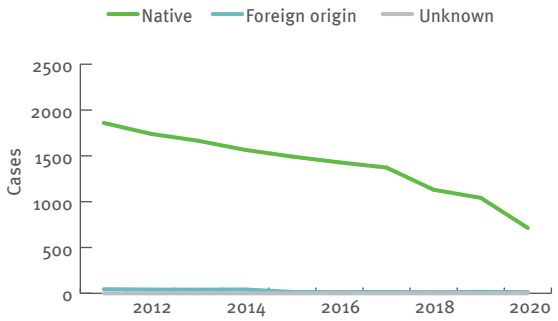
## TB notification rates by previous treatment history, 2011–2020



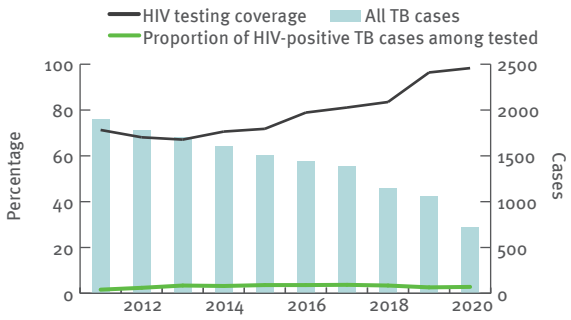

## New and relapse TB cases – notification rates by age group, 2011–2020



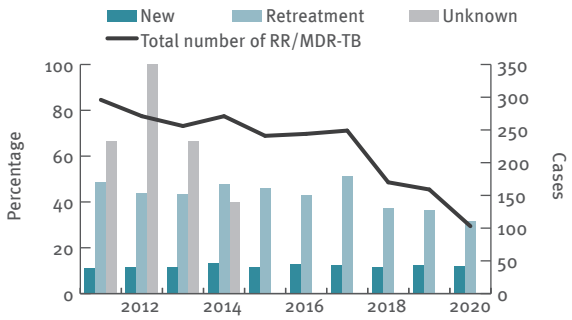

## TB cases by geographical origin, 2011–2020



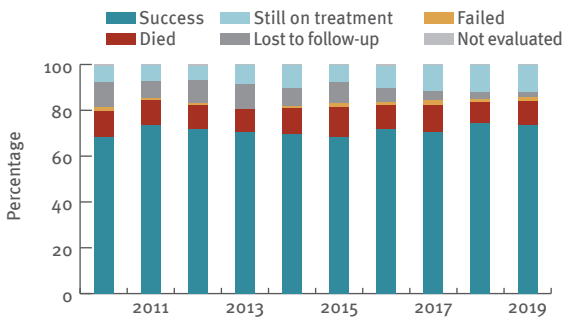

## TB/HIV coinfection, 2011–2020




## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new culture-confirmed pulmonary TB cases, 2010–2019



# Luxembourg

Total population at 9 April 2021 by EUROSTAT: 626 108

## TB cases, 2020

| Notifications | | |
|---|---|---|
| Total number of cases | 34 | |
| Notification rate per 100 000 | 5.4 | |
| New[a] and relapse | 32 | |
| New[a] and relapse notification rate per 100 000 | 5.1 | |
| Pulmonary | 26 | (76.5%) |
| of which microscopy-positive | 19 | (73.1%) |
| of which laboratory-confirmed | 23 | (88.5%) |
| Laboratory-confirmed TB cases | 28 | (82.4%) |
| Mean age of new native TB cases | 43.2 years | |
| Mean age of new foreign TB cases | 34.4 years | |
| Foreign origin of all TB cases | 29 | (85.3%) |
| New (not previously treated) | 28 | (82.4%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 37 | [31–43] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | Yes | |
| Completeness of HIV data[b] | Yes | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 27 | (96.4%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 0 | [0–2] |
| Pulmonary RR/MDR-TB cases notified | 0 | (0.0%) |
| of which pre-XDR-TB cases | 0 | – |
| Notified RR/MDR-TB | 0 | – |
| of which pre-XDR-TB cases | 0 | – |
| TB cases tested for HIV | 28 | (82.4%) |
| HIV-positive TB cases | 0 | (0.0%) |
| of these on ART | 0 | – |

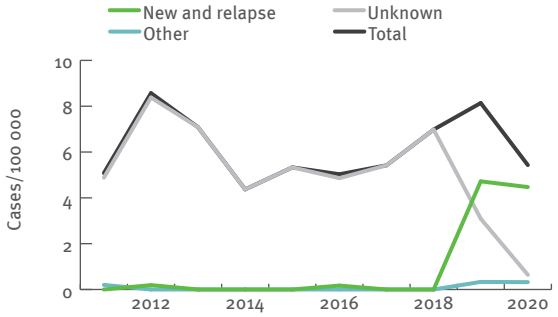
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

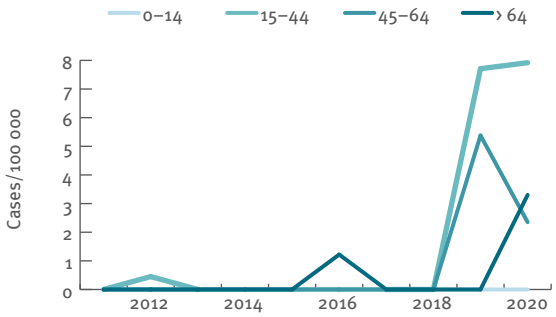
| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New culture-positive pulmonary TB cases notified in 2019[a] | | All RR/MDR-TB cases notified in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 21 | | 1 | |
| Success | 8 | (38.1%) | 0 | (0.0%) |
| Died | 0 | (0.0%) | 0 | (0.0%) |
| Failed | 0 | (0.0%) | 0 | (0.0%) |
| Lost to follow-up | 3 | (14.3%) | 0 | (0.0%) |
| Still on treatment | 0 | (0.0%) | 0 | (0.0%) |
| Not evaluated | 10 | (47.6%) | 1 | (100.0%) |

[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

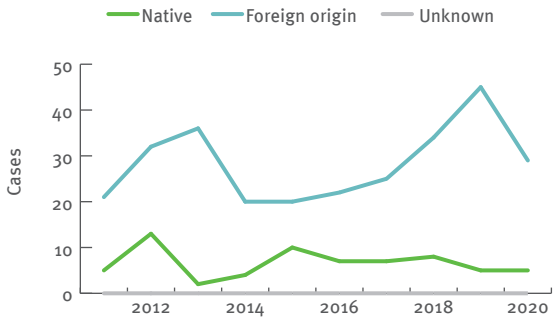
## TB notification rates by previous treatment history, 2011–2020



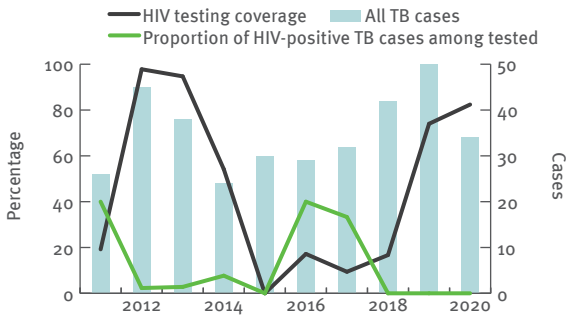

## New and relapse TB cases – notification rates by age group, 2011–2020



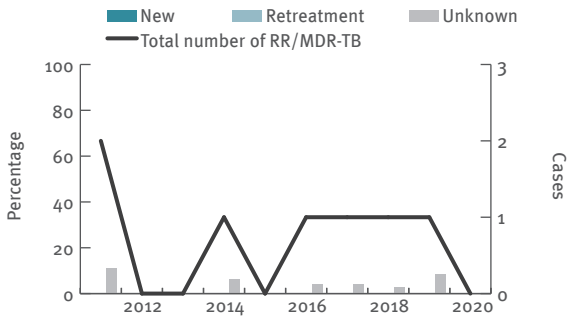

## TB cases by geographical origin, 2011–2020



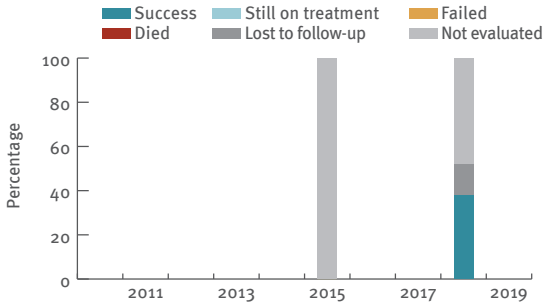

## TB/HIV coinfection, 2011–2020




## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new culture-confirmed pulmonary TB cases, 2010–2019



# Malta

Total population at 9 April 2021 by EUROSTAT: 514 564

## TB cases, 2020

**Notifications**

| | | |
|---|---|---|
| Total number of cases | 140 | |
| Notification rate per 100 000 | 27.2 | |
| New[a] and relapse | 140 | |
| New[a] and relapse notification rate per 100 000 | 27.2 | |
| Pulmonary | 99 | (70.7%) |
| of which microscopy-positive | 29 | (29.3%) |
| of which laboratory-confirmed | 27 | (27.3%) |
| Laboratory-confirmed TB cases | 43 | (30.7%) |
| Mean age of new native TB cases | 31.3 years | |
| Mean age of new foreign TB cases | 25.1 years | |
| Foreign origin of all TB cases | 137 | (97.9%) |
| New (not previously treated) | 98 | (70.0%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 160 | [140–190] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | Yes | |
| Completeness of HIV data[b] | No | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 40 | (93.0%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 0 | [0–5] |
| Pulmonary RR/MDR-TB cases notified | 0 | (0.0%) |
| of which pre-XDR-TB cases | 0 | – |
| Notified RR/MDR-TB | 0 | |
| of which pre-XDR-TB cases | 0 | – |
| TB cases tested for HIV | – | – |
| HIV-positive TB cases | – | – |
| of these on ART | – | – |

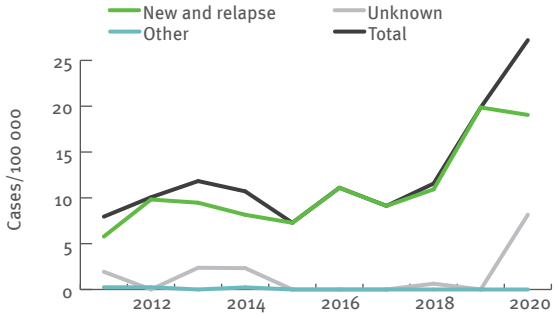
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

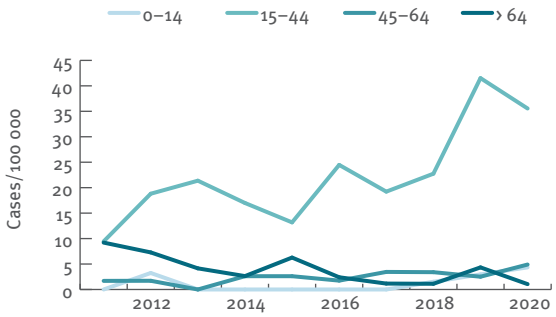
| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New culture-positive pulmonary TB cases notified in 2019[a] | | All RR/MDR-TB cases notified in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 37 | | 0 | |
| Success | – | – | – | – |
| Died | – | – | – | – |
| Failed | – | – | – | – |
| Lost to follow-up | – | – | – | – |
| Still on treatment | – | – | – | – |
| Not evaluated | – | – | – | – |

[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

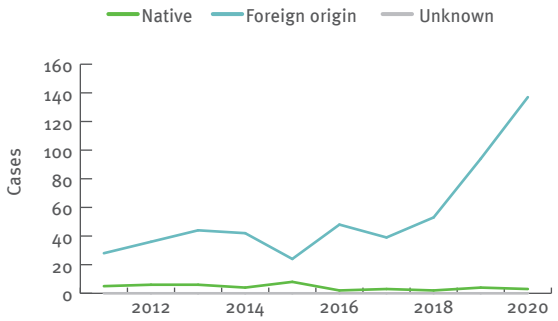
## TB notification rates by previous treatment history, 2011–2020




## New and relapse TB cases – notification rates by age group, 2011–2020

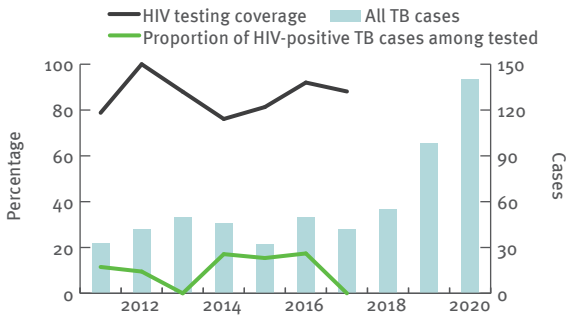



## TB cases by geographical origin, 2011–2020

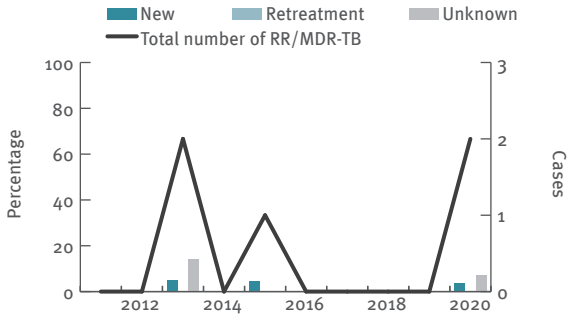



*Note:* by nationality for 2000–2006.

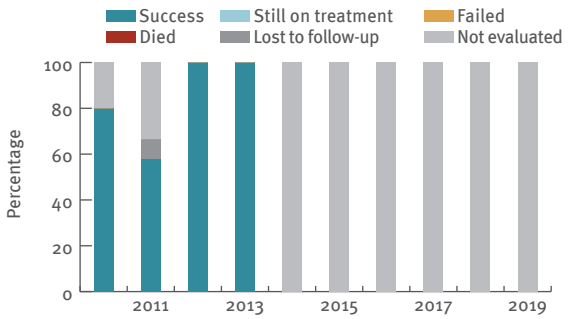
## TB/HIV coinfection, 2011–2020




## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new culture-confirmed pulmonary TB cases, 2010–2019



# Monaco

Total population estimate 2020 by United Nations Statistical Database: 39 244

## TB cases, 2020

| Notifications | | |
|---|---|---|
| Total number of cases | 0 | |
| Notification rate per 100 000 | – | |
| New[a] and relapse | – | |
| New[a] and relapse notification rate per 100 000 | – | |
| Pulmonary | | |
| of which microscopy-positive | – | – |
| of which laboratory-confirmed | – | – |
| Laboratory-confirmed TB cases | – | – |
| Mean age of new native TB cases | – | |
| Mean age of new foreign TB cases | – | |
| Foreign origin of all TB cases | – | – |
| New (not previously treated) | – | – |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 0 | [0–0] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | No | |
| Completeness of HIV data[b] | No | |
| Case-linked data-reporting | No | |
| Cases with DST results | – | – |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 0 | [0–0] |
| Pulmonary RR/MDR-TB cases notified | – | – |
| of which pre-XDR-TB cases | – | – |
| Notified RR/MDR-TB | – | – |
| of which pre-XDR-TB cases | – | – |
| TB cases tested for HIV | – | – |
| HIV-positive TB cases | – | – |
| of these on ART | – | – |

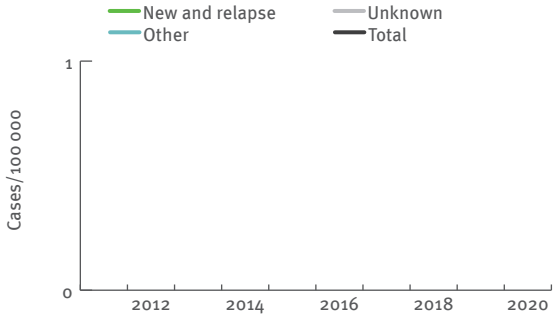
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

| Geographical coverage | National | |
|---|---|---|
| Outcome cohort | New and relapse TB cases notified in 2019[a] | RR/MDR-TB cases enrolled into DR-TB treatment in 2018[b] |
| Case-linked data-reporting | Yes | – |
| Cases notified | 0 | 0 |
| Success | – | – |
| Died | – | – |
| Failed | – | – |
| Lost to follow-up | – | – |
| Not evaluated | – | – |

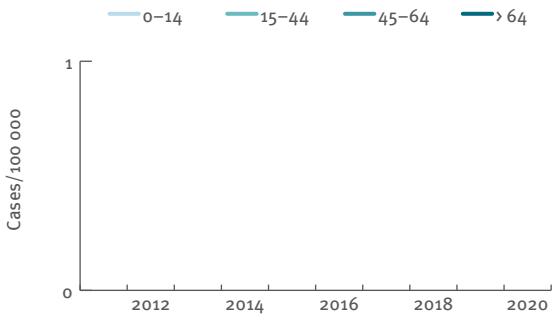
[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

## TB notification rates by previous treatment history, 2011–2020



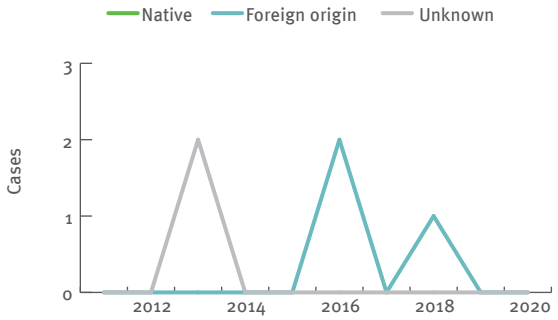

*Note:* starting from 2013 onward, cases with unknown history are included in new and relapses.

## New and relapse TB cases – notification rates by age group, 2011–2020

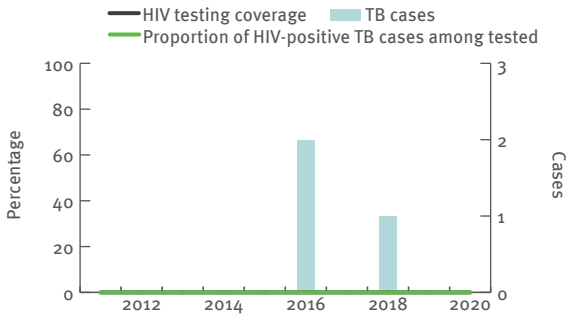



*Note:* data up to 2012 include new TB cases only.

## TB cases by geographical origin, 2011–2020

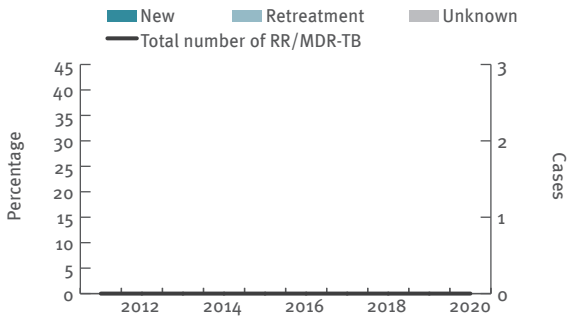



## TB/HIV coinfection, 2011–2020

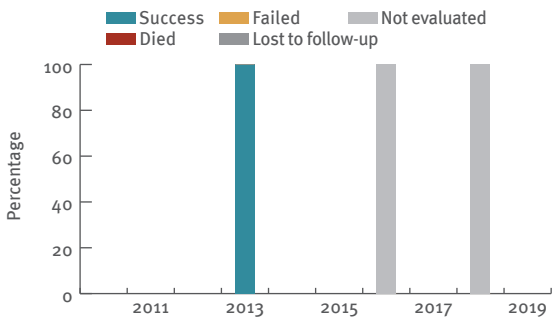



*Note:* data up to 2014 include all TB cases.

## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new and relapse TB cases, 2010–2019




*Note:* 2010–2011 cohorts include new cases only.

# Montenegro

Total population estimate 2020 by United Nations Statistical Database: 628 062

## TB cases, 2020

| Notifications | | |
|---|---|---|
| Total number of cases | 40 | |
| Notification rate per 100 000 | 6.4 | |
| New[a] and relapse | 40 | |
| New[a] and relapse notification rate per 100 000 | 6.4 | |
| Pulmonary | 38 | (95.0%) |
| of which microscopy-positive | – | – |
| of which laboratory-confirmed | 31 | (81.6%) |
| Laboratory-confirmed TB cases | – | – |
| Mean age of new native TB cases | 48.0 years | |
| Mean age of new foreign TB cases | – | |
| Foreign origin of all TB cases | 4 | (10.0%) |
| New (not previously treated) | 38 | (95.0%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 99 | [84–120] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | Yes | |
| Completeness of HIV data[b] | Yes | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 31 | (100.0%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 0 | [0–2] |
| Pulmonary RR/MDR-TB cases notified | 0 | (0.0%) |
| of which pre-XDR-TB cases | – | – |
| Notified RR/MDR-TB | 0 | – |
| of which pre-XDR-TB cases | – | – |
| TB cases tested for HIV | 35 | (87.5%) |
| HIV-positive TB cases | 0 | (0.0%) |
| of these on ART | – | – |

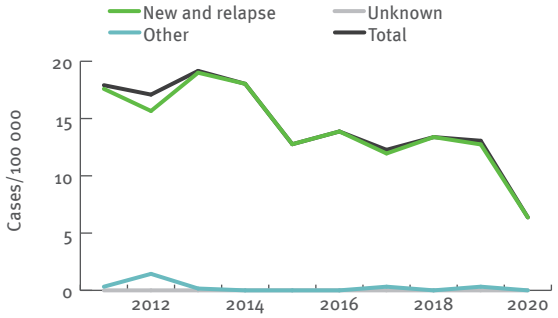
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases > 50%, DST done for C+ > 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New and relapse TB cases notified in 2019[a] | | RR/MDR-TB cases enrolled into DR-TB treatment in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 82 | | 1 | |
| Success | 78 | (95.1%) | 1 | (100.0%) |
| Died | 4 | (4.9%) | 0 | (0.0%) |
| Failed | 0 | (0.0%) | 0 | (0.0%) |
| Lost to follow-up | 0 | (0.0%) | 0 | (0.0%) |
| Not evaluated | 0 | (0.0%) | 0 | (0.0%) |

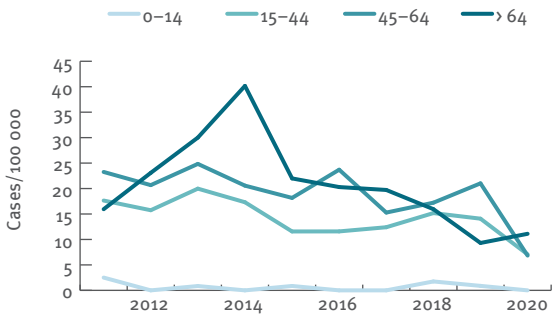
[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

## TB notification rates by previous treatment history, 2011–2020



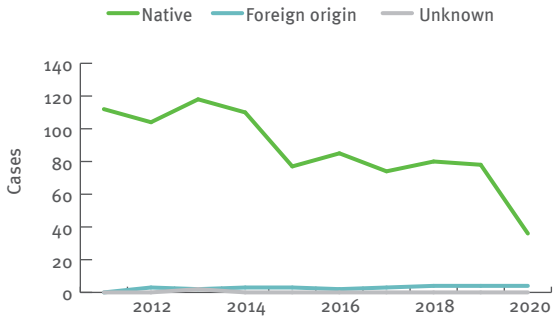

*Note:* starting from 2013 onward, cases with unknown history are included in new and relapses.

## New and relapse TB cases – notification rates by age group, 2011–2020

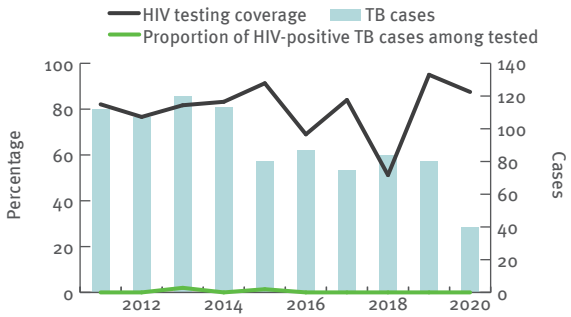



*Note:* data up to 2012 include new TB cases only.

## TB cases by geographical origin, 2011–2020

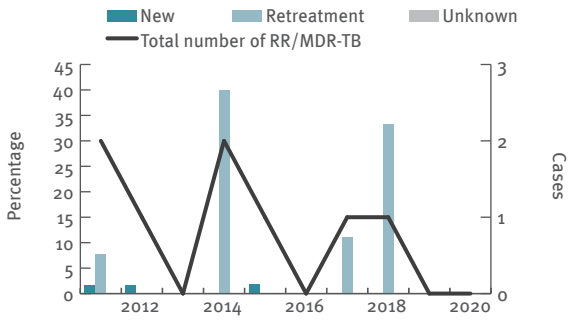



## TB/HIV coinfection, 2011–2020

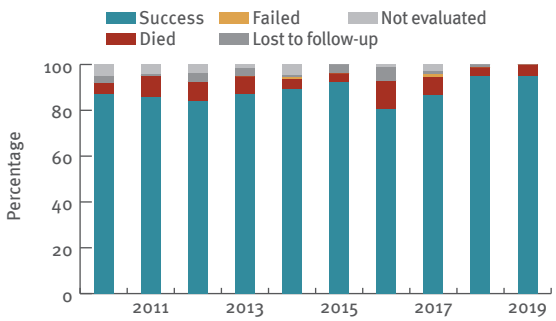



*Note:* data up to 2014 include all TB cases.

## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new and relapse TB cases, 2010–2019




*Note:* 2010–2011 cohorts include new cases only.

# Netherlands

Total population at 9 April 2021 by EUROSTAT: 17 407 585

## TB cases, 2020

| Notifications | | |
|---|---|---|
| Total number of cases | 623 | |
| Notification rate per 100 000 | 3.6 | |
| New[a] and relapse | 614 | |
| New[a] and relapse notification rate per 100 000 | 3.5 | |
| Pulmonary | 334 | (53.6%) |
| of which microscopy-positive | 166 | (49.7%) |
| of which laboratory-confirmed | 264 | (79.0%) |
| Laboratory-confirmed TB cases | 431 | (69.2%) |
| Mean age of new native TB cases | 45.8 years | |
| Mean age of new foreign TB cases | 39.1 years | |
| Foreign origin of all TB cases | 451 | (72.4%) |
| New (not previously treated) | 593 | (95.2%) |
| **Estimates** | | |
| Estimated new and relapse cases N. best [low–high] | 710 | [600–820] |

[a] Cases with unknown previous TB history included in new cases.

## Drug-resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | Yes | |
| Completeness of HIV data[b] | Yes | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 401 | (93.0%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 5 | [0–9] |
| Pulmonary RR/MDR-TB cases notified | 4 | (1.6%) |
| of which pre-XDR-TB cases | 0 | (0.0%) |
| Notified RR/MDR-TB | 12 | – |
| of which pre-XDR-TB cases | 0 | (0.0%) |
| TB cases tested for HIV | 489 | (78.5%) |
| HIV-positive TB cases | 14 | (2.9%) |
| of these on ART | 0 | (0.0%) |

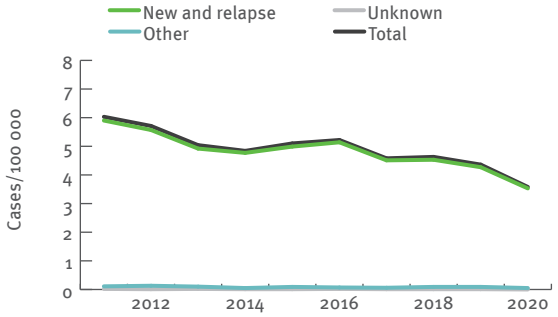
[a] National coverage 100% or culturing ≥ 90%. C+/all TB cases › 50%. DST done for C+ › 75%. EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.
[c] Cases with unknown previous TB treatment history included in new cases.

## Treatment outcome monitoring

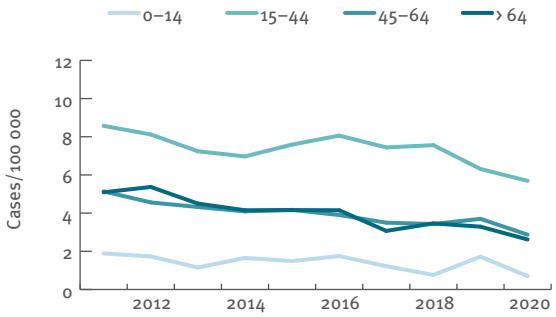
| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New culture-positive pulmonary TB cases notified in 2019[a] | | All RR/MDR-TB cases notified in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 321 | | 6 | |
| Success | 265 | (82.6%) | 5 | (83.3%) |
| Died | 18 | (5.6%) | 1 | (16.7%) |
| Failed | 0 | (0.0%) | 0 | (0.0%) |
| Lost to follow-up | 12 | (3.7%) | 0 | (0.0%) |
| Still on treatment | 7 | (2.2%) | 0 | (0.0%) |
| Not evaluated | 19 | (5.9%) | 0 | (0.0%) |

[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

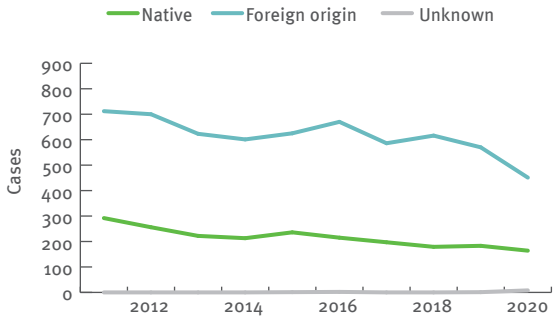
## TB notification rates by previous treatment history, 2011–2020



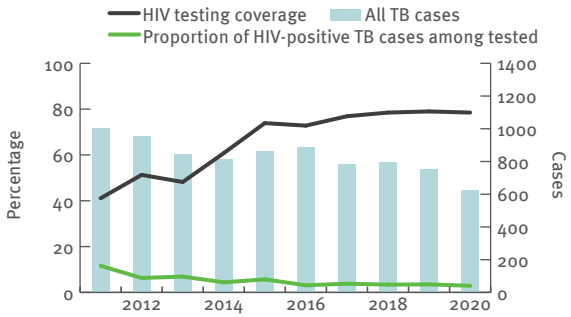

## New and relapse TB cases – notification rates by age group, 2011–2020



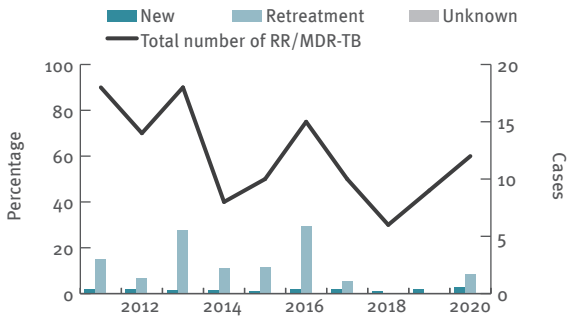

## TB cases by geographical origin, 2011–2020



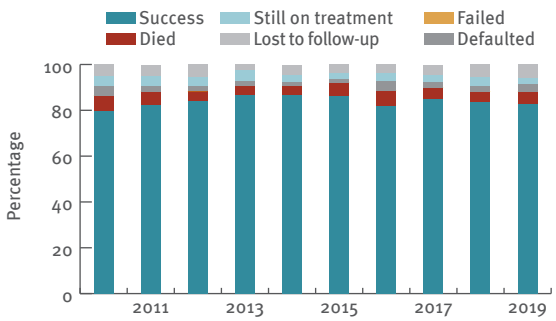

## TB/HIV coinfection, 2011–2020




## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new culture-confirmed pulmonary TB cases, 2010–2019



# North Macedonia

Total population estimate 2020 by United Nations Statistical Database: 2 083 380

## TB cases, 2020

| Notifications | | |
|---|---|---|
| Total number of cases | 148 | |
| Notification rate per 100 000 | 7.1 | |
| New[a] and relapse | 143 | |
| New[a] and relapse notification rate per 100 000 | 6.9 | |
| Pulmonary | 126 | (85.1%) |
| of which microscopy-positive | – | – |
| of which laboratory-confirmed | 105 | (83.3%) |
| Laboratory-confirmed TB cases | – | – |
| Mean age of new native TB cases | 42.9 years | |
| Mean age of new foreign TB cases | – | |
| Foreign origin of all TB cases | 7 | (4.7%) |
| New (not previously treated) | 130 | (87.8%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 250 | [190–310] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | Yes | |
| Completeness of HIV data[b] | No | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 91 | (86.7%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 2 | [0–5] |
| Pulmonary RR/MDR-TB cases notified | 2 | (2.2%) |
| of which pre-XDR-TB cases | – | – |
| Notified RR/MDR-TB | 2 | – |
| of which pre-XDR-TB cases | 0 | (0.0%) |
| TB cases tested for HIV | 69 | (48.3%) |
| HIV-positive TB cases | 1 | (1.4%) |
| of these on ART | 1 | (100.0%) |

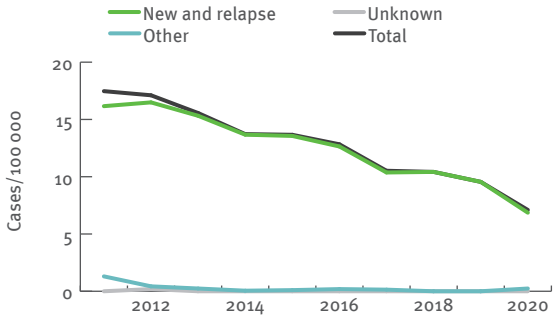
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New and relapse TB cases notified in 2019[a] | | RR/MDR TB cases enrolled into DR-TB treatment in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 199 | | 2 | |
| Success | 177 | (88.9%) | 1 | (50.0%) |
| Died | 9 | (4.5%) | 0 | (0.0%) |
| Failed | 2 | (1.0%) | 0 | (0.0%) |
| Lost to follow-up | 11 | (5.5%) | 1 | (50.0%) |
| Not evaluated | 0 | (0.0%) | 0 | (0.0%) |

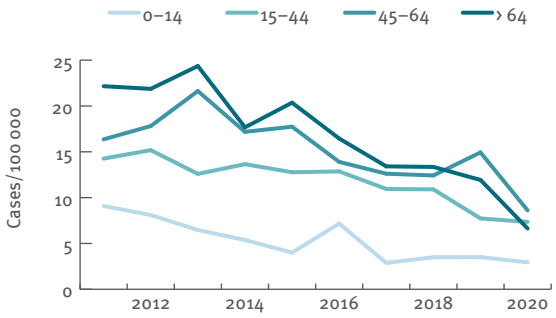
[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

## TB notification rates by previous treatment history, 2011–2020



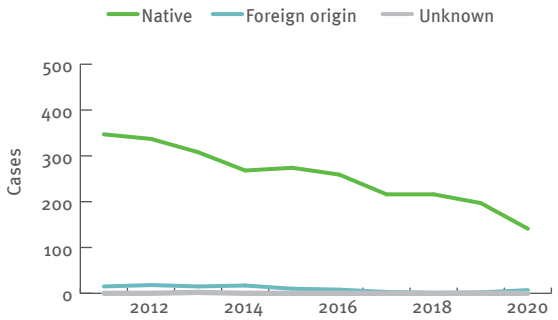

*Note:* starting from 2013 onward, cases with unknown history are included in new and relapses.

## New and relapse TB cases – notification rates by age group, 2011–2020

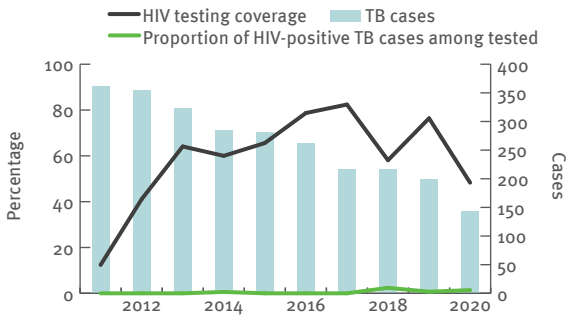



*Note:* data up to 2012 include new TB cases only.

## TB cases by geographical origin, 2011–2020

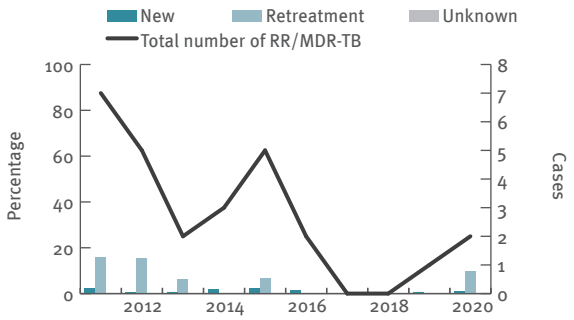



## TB/HIV coinfection, 2011–2020

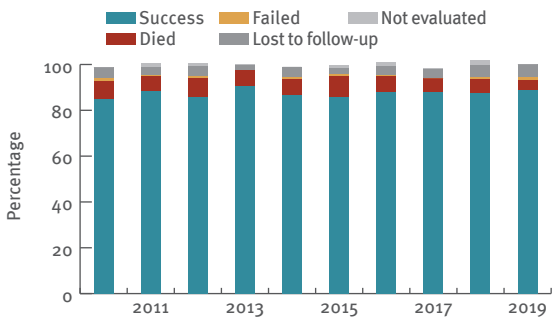



*Note:* data up to 2014 include all TB cases.

## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new and relapse TB cases, 2010–2019




*Note:* 2010–2011 cohorts include new cases only.

# Norway

Total population at 9 April 2021 by EUROSTAT: 5 367 580

## TB cases, 2020

| Notifications | | |
|---|---|---|
| Total number of cases | 160 | |
| Notification rate per 100 000 | 3.0 | |
| New[a] and relapse | 144 | |
| New[a] and relapse notification rate per 100 000 | 2.7 | |
| Pulmonary | 96 | (60.0%) |
| of which microscopy-positive | 41 | (42.7%) |
| of which laboratory-confirmed | 84 | (87.5%) |
| Laboratory-confirmed TB cases | 133 | (83.1%) |
| Mean age of new native TB cases | 40.8 years | |
| Mean age of new foreign TB cases | 36.1 years | |
| Foreign origin of all TB cases | 130 | (81.3%) |
| New (not previously treated) | 144 | (90.0%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 170 | [140–190] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | Yes | |
| Completeness of HIV data[b] | Yes | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 132 | (99.2%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 2 | [0–5] |
| Pulmonary RR/MDR-TB cases notified | 2 | (2.4%) |
| of which pre-XDR-TB cases | 0 | (0.0%) |
| Notified RR/MDR-TB | 2 | – |
| of which pre-XDR-TB cases | 0 | (0.0%) |
| TB cases tested for HIV | 122 | (76.3%) |
| HIV-positive TB cases | 2 | (1.6%) |
| of these on ART | – | – |

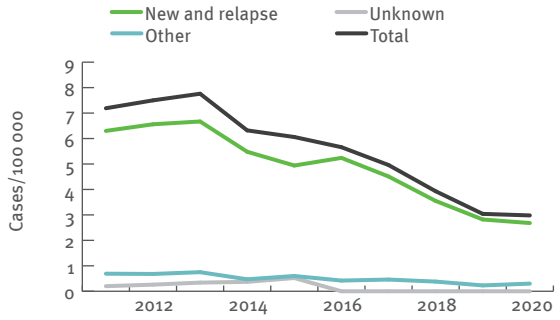
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

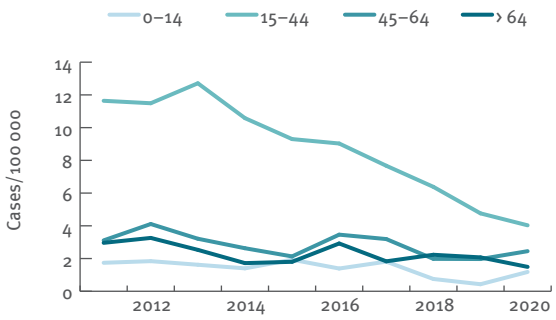
| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New culture-positive pulmonary TB cases notified in 2019[a] | | All RR/MDR-TB cases notified in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 86 | | 6 | |
| Success | 74 | (86.0%) | 5 | (83.3%) |
| Died | 3 | (3.5%) | 0 | (0.0%) |
| Failed | 0 | (0.0%) | 1 | (16.7%) |
| Lost to follow-up | 1 | (1.2%) | 0 | (0.0%) |
| Still on treatment | 1 | (1.2%) | 0 | (0.0%) |
| Not evaluated | 7 | (8.1%) | 0 | (0.0%) |

[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

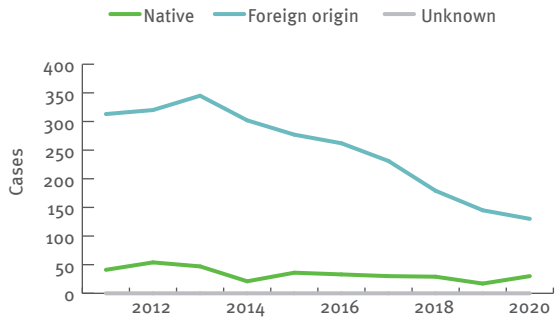
## TB notification rates by previous treatment history, 2011–2020



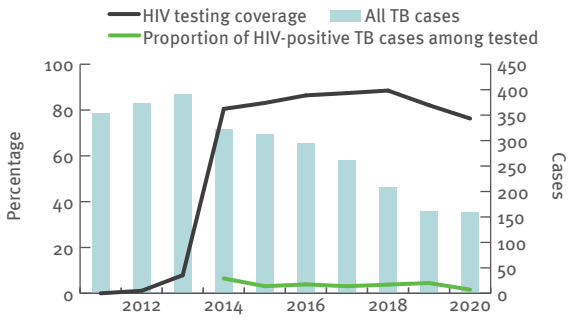

## New and relapse TB cases – notification rates by age group, 2011–2020



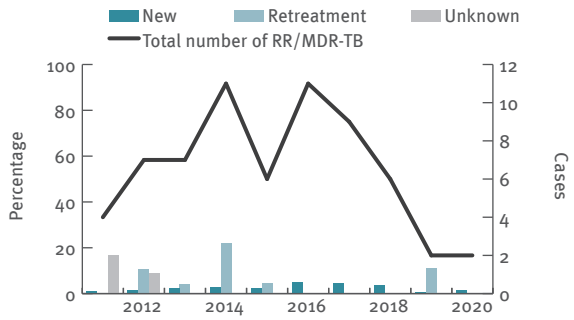

## TB cases by geographical origin, 2011–2020



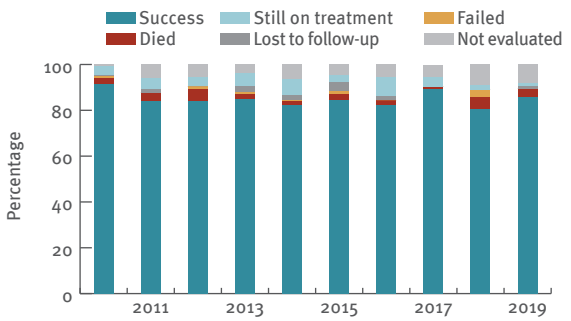

## TB/HIV coinfection, 2011–2020




## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new culture-confirmed pulmonary TB cases, 2010–2019



# Poland

Total population at 9 April 2021 by EUROSTAT: 37 958 138

## TB cases, 2020

**Notifications**

| | | |
|---|---|---|
| Total number of cases | 3 388 | |
| Notification rate per 100 000 | 8.9 | |
| New[a] and relapse | 3 150 | |
| New[a] and relapse notification rate per 100 000 | 8.3 | |
| Pulmonary | 3 237 | (95.5%) |
| of which microscopy-positive | 1 794 | (55.4%) |
| of which laboratory-confirmed | 2 573 | (79.5%) |
| Laboratory-confirmed TB cases | 2 655 | (78.4%) |
| Mean age of new native TB cases | 53.9 years | |
| Mean age of new foreign TB cases | 36.4 years | |
| Foreign origin of all TB cases | 116 | (3.4%) |
| New (not previously treated) | 2 912 | (86.0%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 3 600 | [3 100–4 200] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | Yes | |
| Completeness of HIV data[b] | No | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 2 421 | (91.2%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 44 | [30–58] |
| Pulmonary RR/MDR-TB cases notified | 40 | (1.7%) |
| of which pre-XDR-TB cases | 12 | (30.0%) |
| Notified RR/MDR-TB | 42 | – |
| of which pre-XDR-TB cases | 13 | (31.0%) |
| TB cases tested for HIV | – | – |
| HIV-positive TB cases | – | – |
| of these on ART | – | – |

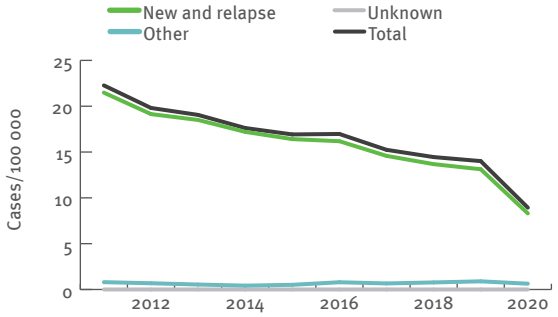
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

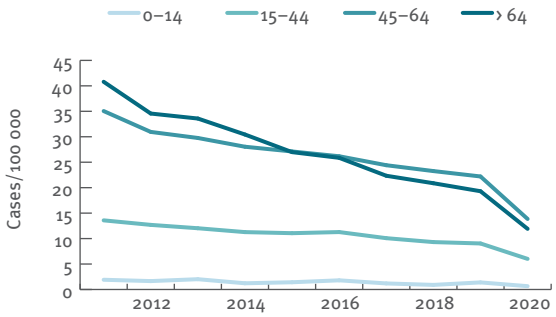
| | | | | |
|---|---|---|---|---|
| Geographical coverage | National | | | |
| Outcome cohort | New culture-positive pulmonary TB cases notified in 2019[a] | | All RR/MDR-TB cases notified in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 3 466 | | 58 | |
| Success | – | – | – | – |
| Died | – | – | – | – |
| Failed | – | – | – | – |
| Lost to follow-up | – | – | – | – |
| Still on treatment | – | – | – | – |
| Not evaluated | – | – | – | – |

[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

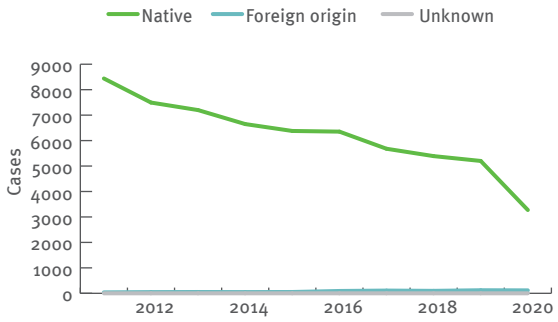
## TB notification rates by previous treatment history, 2011–2020




## New and relapse TB cases – notification rates by age group, 2011–2020



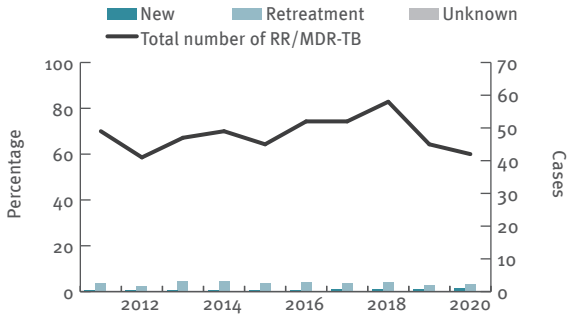

## TB cases by geographical origin, 2011–2020



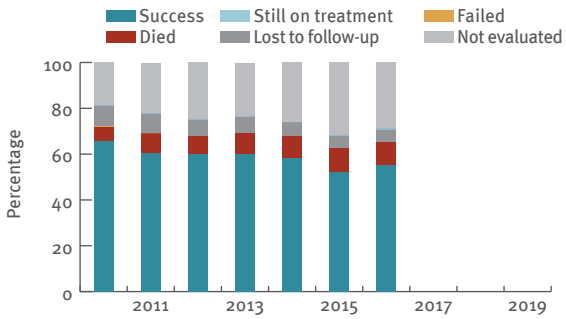

## TB/HIV coinfection, 2011–2020

Data not reported

## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new culture-confirmed pulmonary TB cases, 2010–2019



# Portugal

Total population at 9 April 2021 by EUROSTAT: 10 295 909

## TB cases, 2020

| Notifications | | |
|---|---|---|
| Total number of cases | 1 445 | |
| Notification rate per 100 000 | 14.0 | |
| New[a] and relapse | 1 402 | |
| New[a] and relapse notification rate per 100 000 | 13.6 | |
| Pulmonary | 1 007 | (69.7%) |
| of which microscopy-positive | 556 | (55.2%) |
| of which laboratory-confirmed | 724 | (71.9%) |
| Laboratory-confirmed TB cases | 864 | (59.8%) |
| Mean age of new native TB cases | 53.1 years | |
| Mean age of new foreign TB cases | 38.2 years | |
| Foreign origin of all TB cases | 393 | (27.2%) |
| New (not previously treated) | 1 351 | (93.5%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 1 600 | [1 400–1 800] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | Yes | |
| Completeness of HIV data[b] | Yes | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 538 | (62.3%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 12 | [7–18] |
| Pulmonary RR/MDR-TB cases notified | 7 | (1.5%) |
| of which pre-XDR-TB cases | 0 | (0.0%) |
| Notified RR/MDR-TB | 9 | – |
| of which pre-XDR-TB cases | 0 | (0.0%) |
| TB cases tested for HIV | 1 087 | (75.2%) |
| HIV-positive TB cases | 111 | (10.2%) |
| of these on ART | – | – |

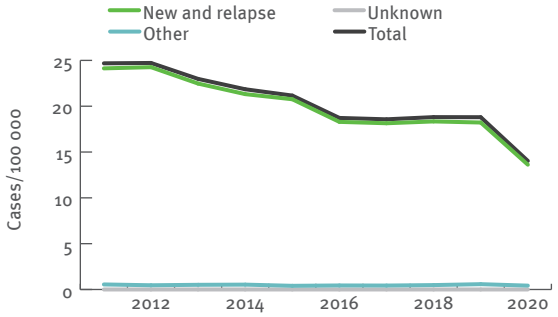
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

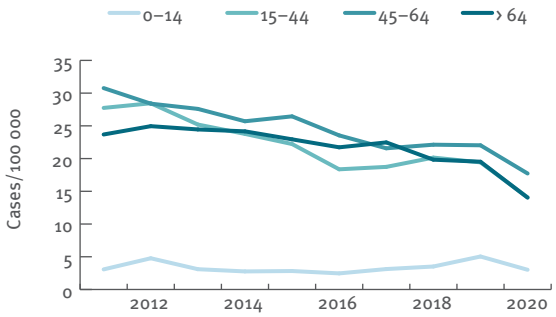
| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New culture-positive pulmonary TB cases notified in 2019[a] | | All RR/MDR-TB cases notified in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 961 | | 11 | |
| Success | 696 | (72.4%) | 7 | (63.6%) |
| Died | 66 | (6.9%) | 0 | (0.0%) |
| Failed | 0 | (0.0%) | 0 | (0.0%) |
| Lost to follow-up | 27 | (2.8%) | 0 | (0.0%) |
| Still on treatment | 137 | (14.3%) | 2 | (18.2%) |
| Not evaluated | 35 | (3.6%) | 2 | (18.2%) |

[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

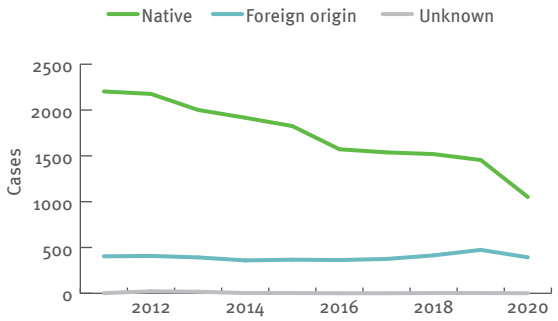
## TB notification rates by previous treatment history, 2011–2020



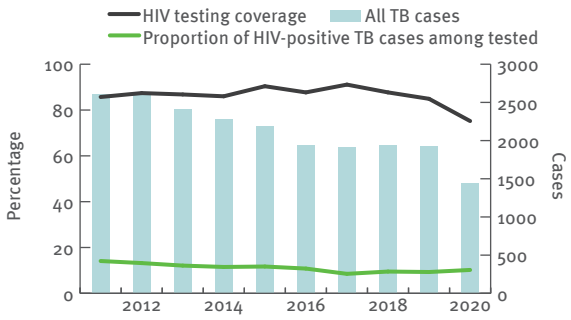

## New and relapse TB cases – notification rates by age group, 2011–2020



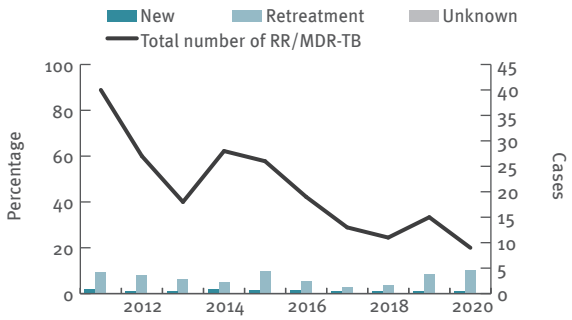

## TB cases by geographical origin, 2011–2020



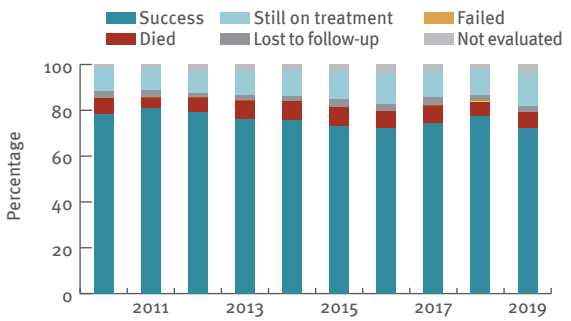

## TB/HIV coinfection, 2011–2020




## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new culture-confirmed pulmonary TB cases, 2010–2019



# Republic of Moldova

Total population estimate 2020 by United Nations Statistical Database: 4 033 963

## TB cases, 2020

**Notifications**

| | | |
|---|---|---|
| Total number of cases | 1 906 | |
| Notification rate per 100 000 | 47.2 | |
| New[a] and relapse | 1 767 | |
| New[a] and relapse notification rate per 100 000 | 43.8 | |
| Pulmonary | 1 819 | (95.4%) |
| of which microscopy-positive | – | – |
| of which laboratory-confirmed | 1 261 | (69.3%) |
| Laboratory-confirmed TB cases | – | – |
| Mean age of new native TB cases | 44.2 years | |
| Mean age of new foreign TB cases | – | |
| Foreign origin of all TB cases | 8 | (0.4%) |
| New (not previously treated) | 1 386 | (72.7%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 3 000 | [2 500–3 500] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | No | |
| Completeness of HIV data[b] | Yes | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 1 207 | (95.7%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 430 | [400–460] |
| Pulmonary RR/MDR-TB cases notified | 413 | (34.2%) |
| of which pre-XDR-TB cases | 188 | (45.5%) |
| Notified RR/MDR-TB | 444 | – |
| of which pre-XDR-TB cases | 219 | (49.3%) |
| TB cases tested for HIV | 1 693 | (95.8%) |
| HIV-positive TB cases | 219 | (12.9%) |
| of these on ART | 170 | (77.6%) |

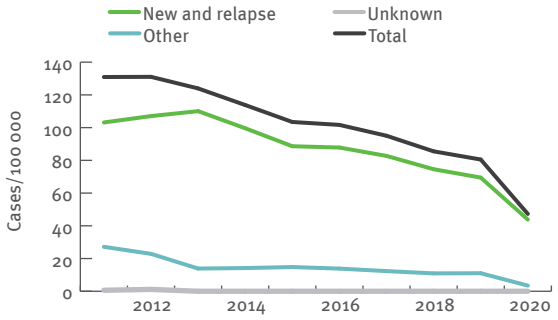
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New and relapse TB cases notified in 2019[a] | | RR/MDR TB cases enrolled into DR-TB treatment in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 2 215 | | 921 | |
| Success | 1 854 | (83.7%) | 541 | (58.7%) |
| Died | 164 | (7.4%) | 98 | (10.6%) |
| Failed | 69 | (3.1%) | 111 | (12.1%) |
| Lost to follow-up | 116 | (5.2%) | 169 | (18.3%) |
| Not evaluated | 12 | (0.5%) | 2 | (0.2%) |

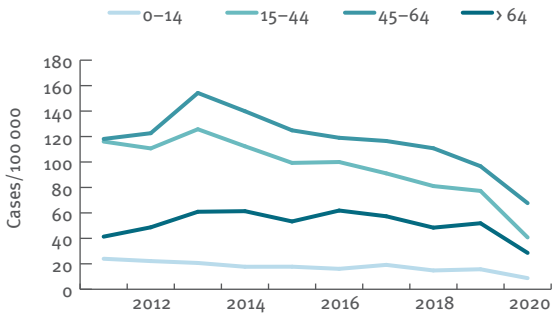
[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

## TB notification rates by previous treatment history, 2011–2020



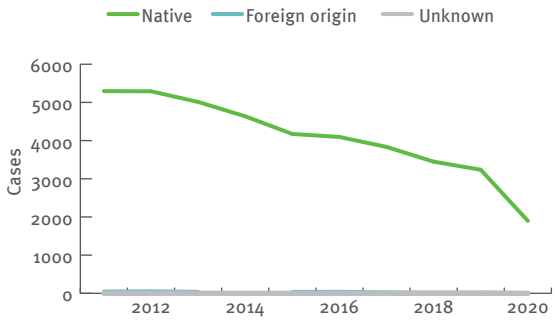

*Note:* starting from 2013 onward, cases with unknown history are included in new and relapses.

## New and relapse TB cases – notification rates by age group, 2011–2020

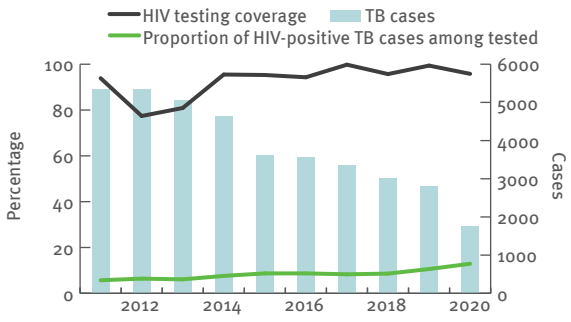



*Note:* data up to 2012 include new TB cases only.

## TB cases by geographical origin, 2011–2020

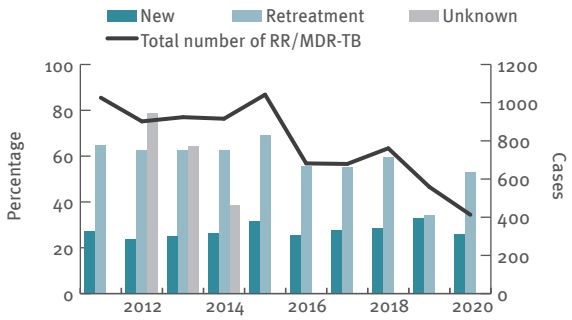



## TB/HIV coinfection, 2011–2020

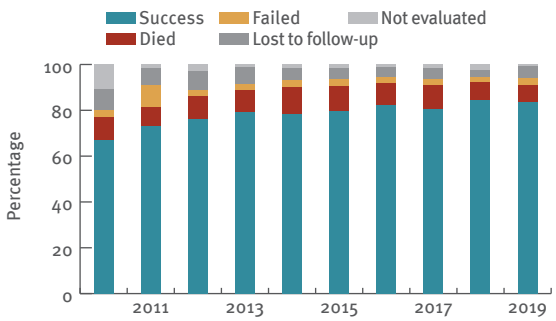



*Note:* data up to 2014 include all TB cases.

## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new and relapse TB cases, 2010–2019




*Note:* 2010–2011 cohorts include new cases only.

# Romania

Total population at 9 April 2021 by EUROSTAT: 19 328 838

## TB cases, 2020

| Notifications | | |
|---|---|---|
| Total number of cases | 7 698 | |
| Notification rate per 100 000 | 39.8 | |
| New[a] and relapse | 7 193 | |
| New[a] and relapse notification rate per 100 000 | 37.2 | |
| Pulmonary | 6 655 | (86.5%) |
| of which microscopy-positive | 4 409 | (66.3%) |
| of which laboratory-confirmed | 5 473 | (82.2%) |
| Laboratory-confirmed TB cases | 5 697 | (74.0%) |
| Mean age of new native TB cases | 45.7 years | |
| Mean age of new foreign TB cases | 30.5 years | |
| Foreign origin of all TB cases | 32 | (0.4%) |
| New (not previously treated) | 6 019 | (78.2%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 12 000 | [10 000–14 000] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | Yes | |
| Completeness of HIV data[b] | Yes | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 4 959 | (87.0%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 290 | [260–330] |
| Pulmonary RR/MDR-TB cases notified | 244 | (5.1%) |
| of which pre-XDR-TB cases | 27 | (11.1%) |
| Notified RR/MDR-TB | 252 | – |
| of which pre-XDR-TB cases | 28 | (11.1%) |
| TB cases tested for HIV | 6 513 | (84.6%) |
| HIV-positive TB cases | 150 | (2.3%) |
| of these on ART | 0 | (0.0%) |

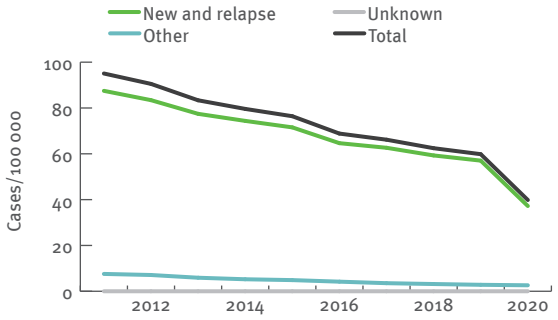
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

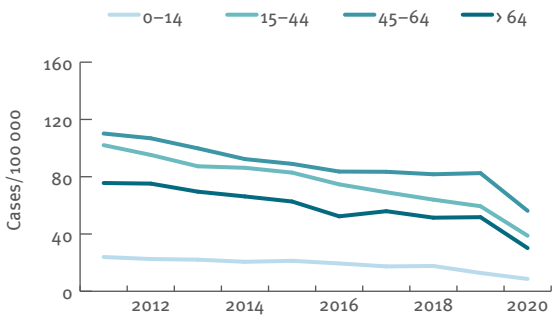
| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New culture-positive pulmonary TB cases notified in 2019[a] | | All RR/MDR-TB cases notified in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 6 310 | | 447 | |
| Success | 5 232 | (82.9%) | 192 | (43.0%) |
| Died | 565 | (9.0%) | 87 | (19.5%) |
| Failed | 108 | (1.7%) | 81 | (18.1%) |
| Lost to follow-up | 275 | (4.4%) | 75 | (16.8%) |
| Still on treatment | 127 | (2.0%) | 12 | (2.7%) |
| Not evaluated | 3 | (0.0%) | 0 | (0.0%) |

[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

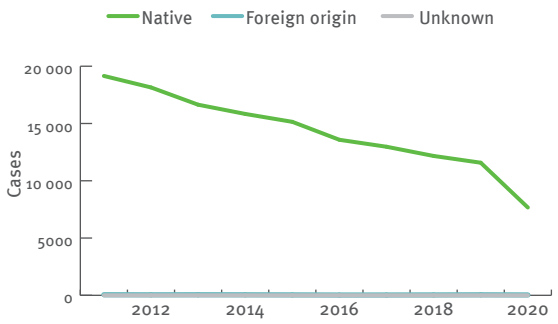
## TB notification rates by previous treatment history, 2011–2020



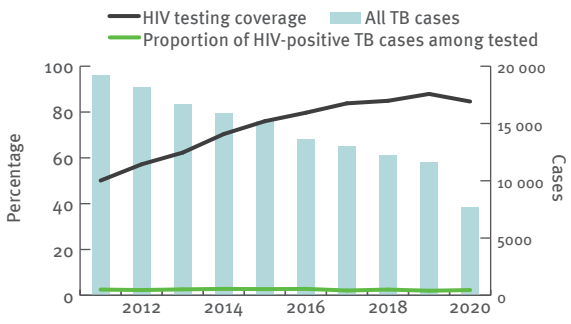

## New and relapse TB cases – notification rates by age group, 2011–2020



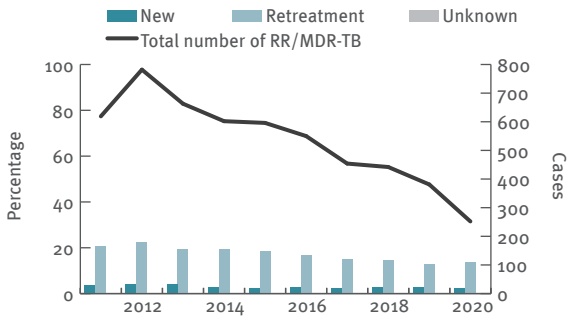

## TB cases by geographical origin, 2011–2020



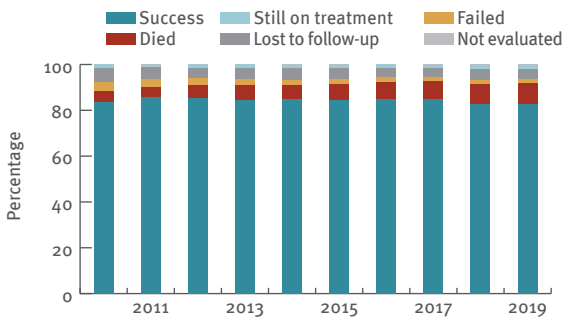

## TB/HIV coinfection, 2011–2020




## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new culture-confirmed pulmonary TB cases, 2010–2019



# Russian Federation

Total population estimate 2020 by United Nations Statistical Database: 145 934 460

## TB cases, 2020

**Notifications**

| | | |
|---|---|---|
| Total number of cases | 84 956 | |
| Notification rate per 100 000 | 58.2 | |
| New[a] and relapse | 58 723 | |
| New[a] and relapse notification rate per 100 000 | 40.2 | |
| Pulmonary | 79 963 | (94.1%) |
| of which microscopy-positive | – | – |
| of which laboratory-confirmed | 45 055 | (56.3%) |
| Laboratory-confirmed TB cases | – | – |
| Mean age of new native TB cases | 42.4 years | |
| Mean age of new foreign TB cases | – | |
| Foreign origin of all TB cases | 1 503 | (1.8%) |
| New (not previously treated) | 47 399 | (55.8%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 68 000 | [43 000–98 000] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | Yes | |
| Completeness of HIV data[b] | Yes | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 42 022 | (93.3%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 23 000 | [23 000–24 000] |
| Pulmonary RR/MDR-TB cases notified | 21 963 | (52.3%) |
| of which pre-XDR-TB cases | 7 822 | (38.3%) |
| Notified RR/MDR-TB | 21 963 | – |
| of which pre-XDR-TB cases | 7 822 | (35.6%) |
| TB cases tested for HIV | 55 838 | (95.1%) |
| HIV-positive TB cases | 13 506 | (24.2%) |
| of these on ART | 9 190 | (68.0%) |

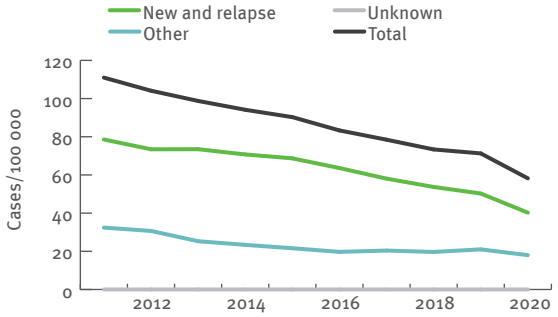
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New and relapse TB cases notified in 2019[a] | | RR/MDR TB cases enrolled into DR-TB treatment in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 54 589 | | 28 706 | |
| Success | 37 208 | (68.2%) | 14 757 | (51.4%) |
| Died | 5 936 | (10.9%) | 4 488 | (15.6%) |
| Failed | 3 567 | (6.5%) | 4 133 | (14.4%) |
| Lost to follow-up | 3 471 | (6.4%) | 3 081 | (10.7%) |
| Not evaluated | 4 407 | (8.1%) | 2 247 | (7.8%) |

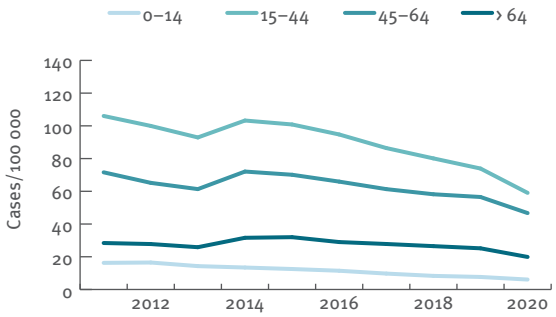
[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

## TB notification rates by previous treatment history, 2011–2020



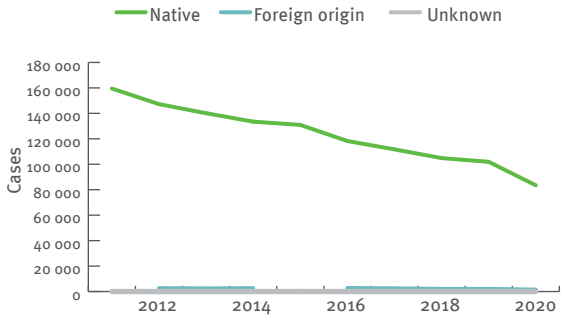

*Note:* starting from 2013 onward, cases with unknown history are included in new and relapses.

## New and relapse TB cases – notification rates by age group, 2011–2020

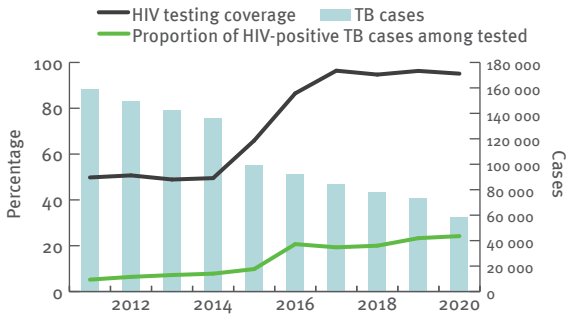



*Note:* data up to 2012 include new TB cases only.

## TB cases by geographical origin, 2011–2020

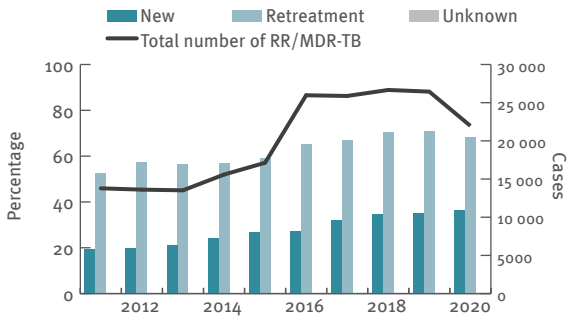



## TB/HIV coinfection, 2011–2020

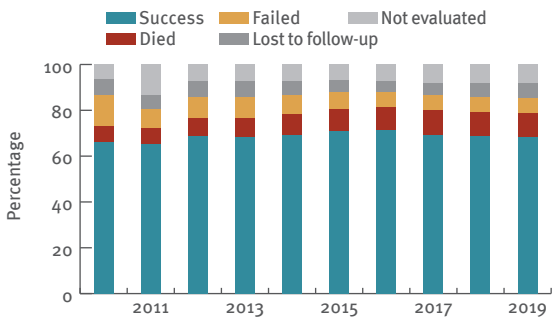



*Note:* data up to 2014 include all TB cases.

## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new and relapse TB cases, 2010–2019




*Note:* 2010–2011 cohorts include new cases only.

# San Marino

Total population estimate 2020 by United Nations Statistical Database: 33 938

## TB cases, 2020

| Notifications | | |
|---|---|---|
| Total number of cases | | – |
| Notification rate per 100 000 | | – |
| New[a] and relapse | | – |
| New[a] and relapse notification rate per 100 000 | | – |
| Pulmonary | – | – |
| of which microscopy-positive | – | – |
| of which laboratory-confirmed | – | – |
| Laboratory-confirmed TB cases | – | – |
| Mean age of new native TB cases | | – |
| Mean age of new foreign TB cases | | – |
| Foreign origin of all TB cases | – | – |
| New (not previously treated) | – | – |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 0 | [0–0] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | | No |
| Completeness of HIV data[b] | | No |
| Case-linked data-reporting | | No |
| Cases with DST results | – | – |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 0 | [0–0] |
| Pulmonary RR/MDR-TB cases notified | – | – |
| of which pre-XDR-TB cases | – | – |
| Notified RR/MDR-TB | – | – |
| of which pre-XDR-TB cases | – | – |
| TB cases tested for HIV | – | – |
| HIV-positive TB cases | – | – |
| of these on ART | – | – |

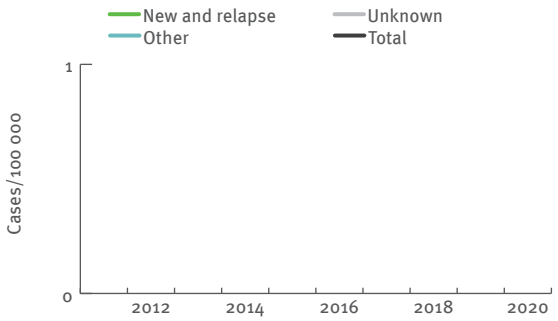
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

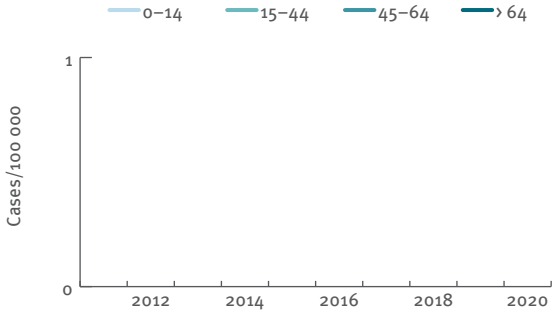
| Geographical coverage | National | |
|---|---|---|
| Outcome cohort | New and relapse TB cases notified in 2019[a] | RR/MDR-TB cases enrolled into DR-TB treatment in 2018[b] |
| Case-linked data-reporting | – | – |
| Cases notified | – | – |
| Success | – | – |
| Died | – | – |
| Failed | – | – |
| Lost to follow-up | – | – |
| Not evaluated | – | – |

[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

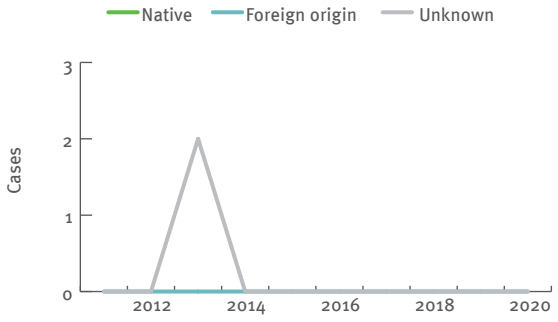
## TB notification rates by previous treatment history, 2011–2020



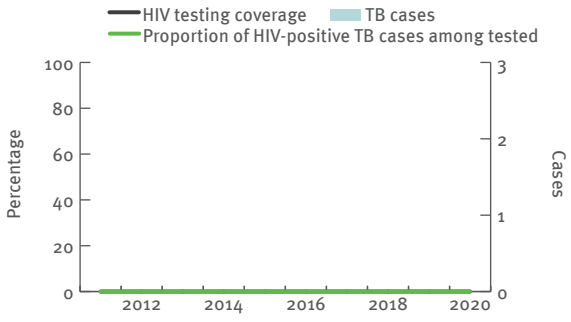

## New and relapse TB cases – notification rates by age group, 2011–2020



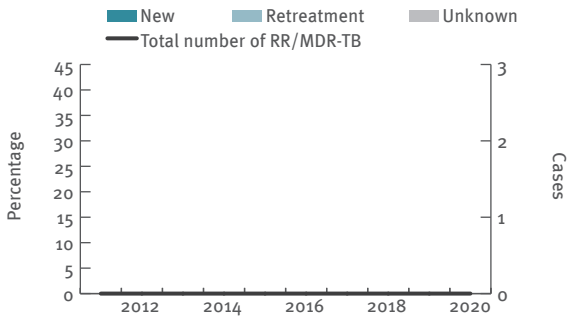

## TB cases by geographical origin, 2011–2020



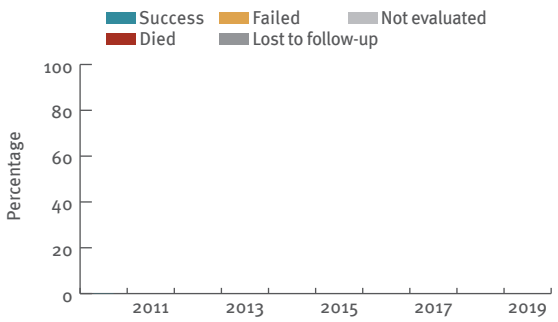

## TB/HIV coinfection, 2011–2020




## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new and relapse TB cases, 2010–2019




*Note:* 2010–2011 cohorts include new cases only.

# Serbia

Total population estimate 2020 by United Nations Statistical Database: 8 737 370

## TB cases, 2020

| Notifications | | |
|---|---|---|
| Total number of cases | | – |
| Notification rate per 100 000 | | – |
| New[a] and relapse | | – |
| New[a] and relapse notification rate per 100 000 | | – |
| Pulmonary | – | – |
| of which microscopy-positive | – | – |
| of which laboratory-confirmed | – | – |
| Laboratory-confirmed TB cases | – | – |
| Mean age of new native TB cases | | – |
| Mean age of new foreign TB cases | | – |
| Foreign origin of all TB cases | – | – |
| New (not previously treated) | – | – |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 1 200 | [980–1 300] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | | No |
| Completeness of HIV data[b] | | No |
| Case-linked data-reporting | | No |
| Cases with DST results | – | – |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 2 | [1–3] |
| Pulmonary RR/MDR-TB cases notified | – | – |
| of which pre-XDR-TB cases | – | – |
| Notified RR/MDR-TB | – | – |
| of which pre-XDR-TB cases | – | – |
| TB cases tested for HIV | – | – |
| HIV-positive TB cases | – | – |
| of these on ART | – | – |

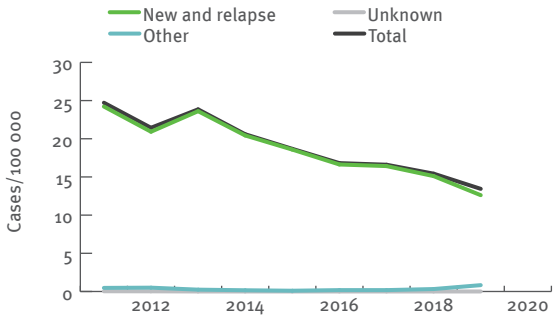
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

| Geographical coverage | National | |
|---|---|---|
| Outcome cohort | New and relapse TB cases notified in 2019[a] | RR/MDR-TB cases enrolled into DR-TB treatment in 2018[b] |
| Case-linked data-reporting | – | – |
| Cases notified | – | – |
| Success | – | – |
| Died | – | – |
| Failed | – | – |
| Lost to follow-up | – | – |
| Not evaluated | – | – |

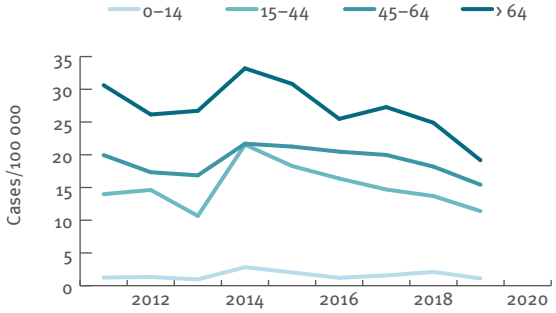
[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

## TB notification rates by previous treatment history, 2011–2020



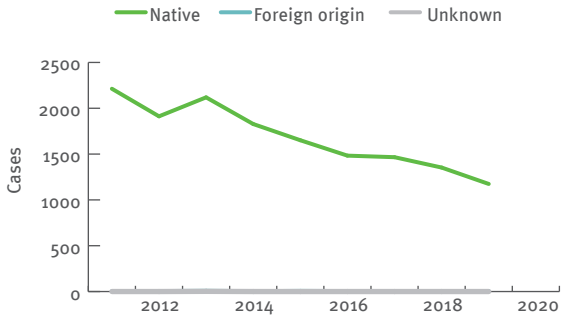

*Note:* starting from 2013 onward, cases with unknown history are included in new and relapses.

## New and relapse TB cases – notification rates by age group, 2011–2020

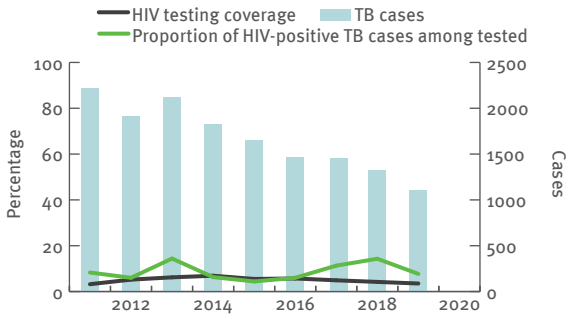



*Note:* data up to 2012 include new TB cases only.

## TB cases by geographical origin, 2011–2020

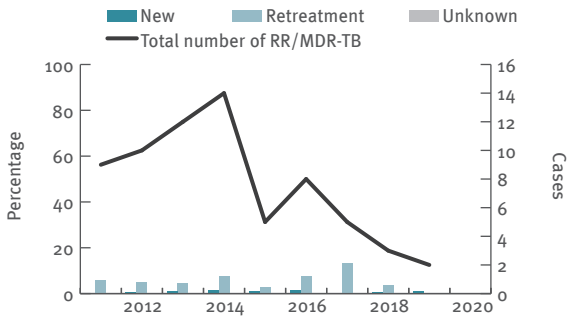



## TB/HIV coinfection, 2011–2020




*Note:* data up to 2014 include all TB cases.

## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new and relapse TB cases, 2010–2019

*Note:* 2010–2011 cohorts include new cases only.

# Slovakia

Total population at 9 April 2021 by EUROSTAT: 5 457 873

## TB cases, 2020

| Notifications | | |
|---|---|---|
| Total number of cases | 158 | |
| Notification rate per 100 000 | 2.9 | |
| New[a] and relapse | 153 | |
| New[a] and relapse notification rate per 100 000 | 2.8 | |
| Pulmonary | 135 | (85.4%) |
| of which microscopy-positive | 37 | (27.4%) |
| of which laboratory-confirmed | 65 | (48.1%) |
| Laboratory-confirmed TB cases | 67 | (42.4%) |
| Mean age of new native TB cases | 44.2 years | |
| Mean age of new foreign TB cases | 37.5 years | |
| Foreign origin of all TB cases | 6 | (3.8%) |
| New (not previously treated) | 133 | (84.2%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 180 | [150–200] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | Yes | |
| Completeness of HIV data[b] | Yes | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 66 | (98.5%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 1 | [0–4] |
| Pulmonary RR/MDR-TB cases notified | 1 | (1.6%) |
| of which pre-XDR-TB cases | 0 | (0.0%) |
| Notified RR/MDR-TB | 1 | – |
| of which pre-XDR-TB cases | 0 | (0.0%) |
| TB cases tested for HIV | 82 | (51.9%) |
| HIV-positive TB cases | 2 | (2.4%) |
| of these on ART | 0 | (0.0%) |

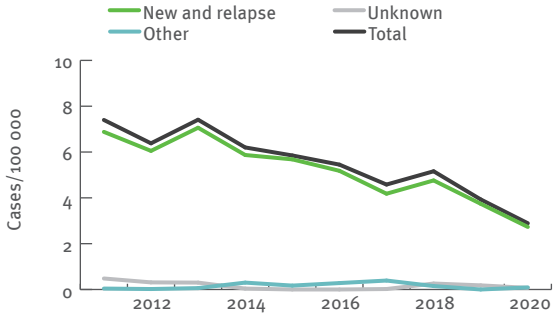
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

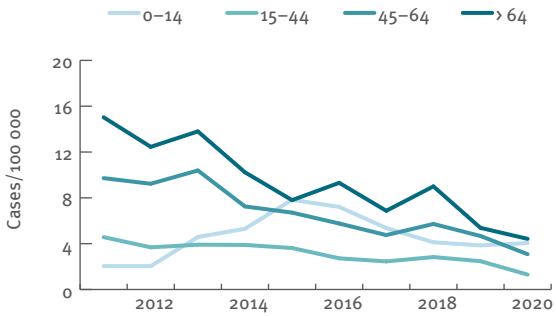
| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New culture-positive pulmonary TB cases notified in 2019[a] | | All RR/MDR-TB cases notified in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 79 | | 3 | |
| Success | 76 | (96.2%) | 2 | (66.7%) |
| Died | 2 | (2.5%) | 1 | (33.3%) |
| Failed | 0 | (0.0%) | 0 | (0.0%) |
| Lost to follow-up | 0 | (0.0%) | 0 | (0.0%) |
| Still on treatment | 1 | (1.3%) | 0 | (0.0%) |
| Not evaluated | 0 | (0.0%) | 0 | (0.0%) |

[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

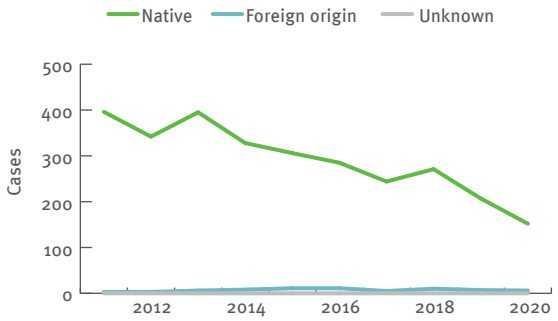
## TB notification rates by previous treatment history, 2011–2020



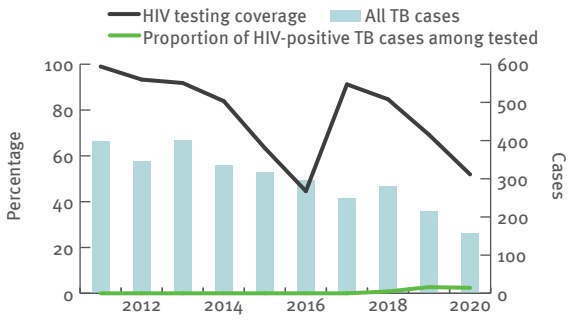

## New and relapse TB cases – notification rates by age group, 2011–2020



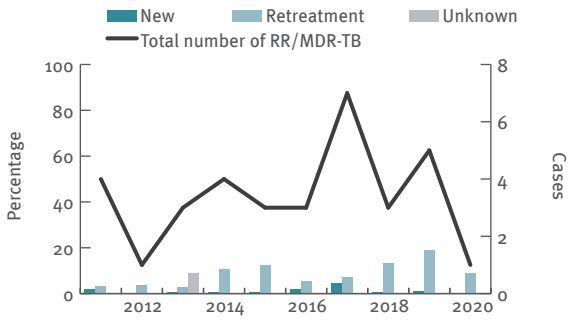

## TB cases by geographical origin, 2011–2020



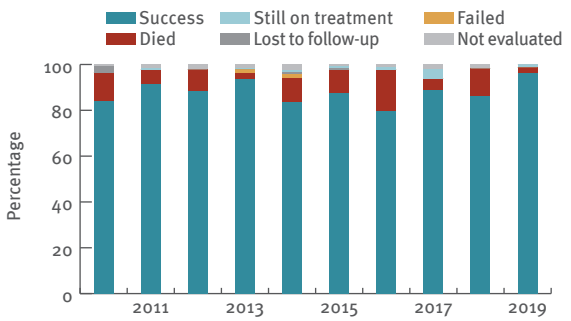

## TB/HIV coinfection, 2011–2020




## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new culture-confirmed pulmonary TB cases, 2010–2019



# Slovenia

Total population at 9 April 2021 by EUROSTAT: 22 095 861

## TB cases, 2020

| Notifications | | |
|---|---|---|
| Total number of cases | 77 | |
| Notification rate per 100 000 | 3.7 | |
| New[a] and relapse | 75 | |
| New[a] and relapse notification rate per 100 000 | 3.6 | |
| Pulmonary | 66 | (85.7%) |
| of which microscopy-positive | 25 | (37.9%) |
| of which laboratory-confirmed | 62 | (93.9%) |
| Laboratory-confirmed TB cases | 73 | (94.8%) |
| Mean age of new native TB cases | 67.6 years | |
| Mean age of new foreign TB cases | 54.0 years | |
| Foreign origin of all TB cases | 26 | (33.8%) |
| New (not previously treated) | 70 | (90.9%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 86 | [74–100] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | Yes | |
| Completeness of HIV data[b] | Yes | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 73 | (100.0%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 1 | [0–3] |
| Pulmonary RR/MDR-TB cases notified | 1 | (1.6%) |
| of which pre-XDR-TB cases | 0 | – |
| Notified RR/MDR-TB | 1 | – |
| of which pre-XDR-TB cases | 0 | – |
| TB cases tested for HIV | 58 | (75.3%) |
| HIV-positive TB cases | 0 | (0.0%) |
| of these on ART | – | – |

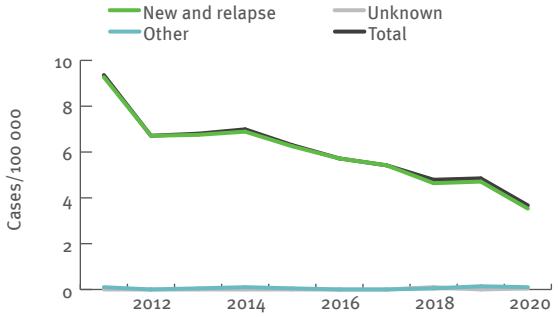
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

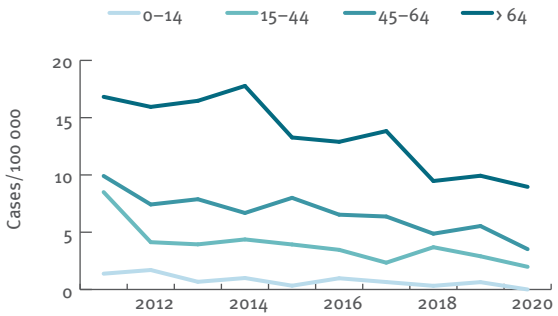
| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New culture-positive pulmonary TB cases notified in 2019[a] | | All RR/MDR-TB cases notified in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 78 | | 0 | |
| Success | 59 | (75.6%) | – | – |
| Died | 15 | (19.2%) | – | – |
| Failed | 0 | (0.0%) | – | – |
| Lost to follow-up | 3 | (3.8%) | – | – |
| Still on treatment | 1 | (1.3%) | – | – |
| Not evaluated | 0 | (0.0%) | – | – |

[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

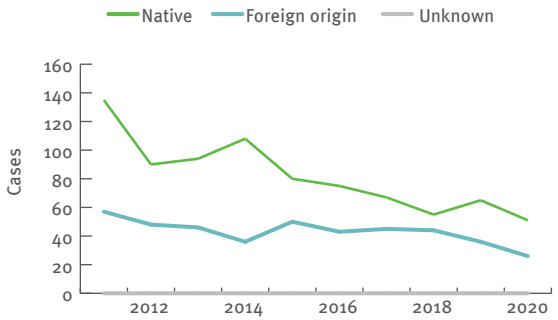
## TB notification rates by previous treatment history, 2011–2020



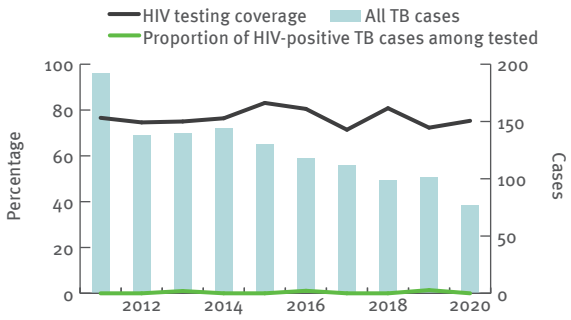

## New and relapse TB cases – notification rates by age group, 2011–2020



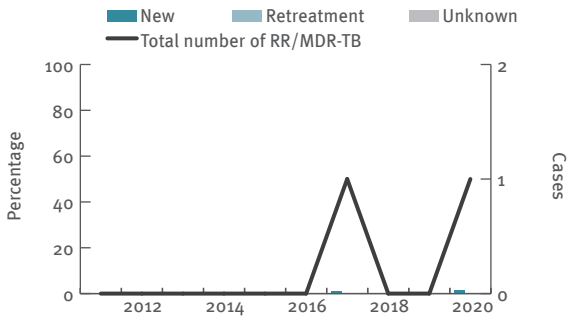

## TB cases by geographical origin, 2011–2020



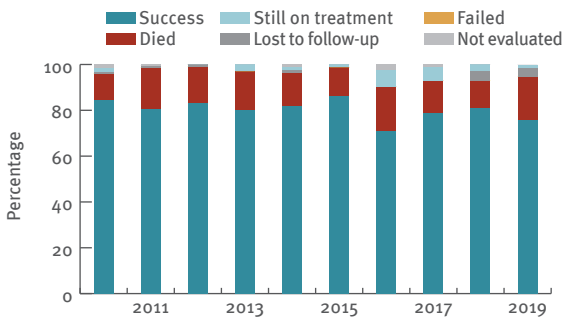

## TB/HIV coinfection, 2011–2020




## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new culture-confirmed pulmonary TB cases, 2010–2019



# Spain

Total population at 9 April 2021 by EUROSTAT: 47 332 614

## TB cases, 2020

| Notifications | | |
|---|---|---|
| Total number of cases | 3 044 | |
| Notification rate per 100 000 | 6.4 | |
| New[a] and relapse | 2 949 | |
| New[a] and relapse notification rate per 100 000 | 6.2 | |
| Pulmonary | 2 225 | (73.1%) |
| of which microscopy-positive | 925 | (41.6%) |
| of which laboratory-confirmed | 1 420 | (63.8%) |
| Laboratory-confirmed TB cases | 1 810 | (59.5%) |
| Mean age of new native TB cases | 51.0 years | |
| Mean age of new foreign TB cases | 37.5 years | |
| Foreign origin of all TB cases | 1 030 | (33.8%) |
| New (not previously treated) | 1 880 | (61.8%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 3 400 | [2 900–3 900] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | Yes | |
| Completeness of HIV data[b] | Yes | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 842 | (46.5%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 77 | [54–100] |
| Pulmonary RR/MDR-TB cases notified | 12 | (1.4%) |
| of which pre-XDR-TB cases | 1 | (33.3%) |
| Notified RR/MDR-TB | 15 | – |
| of which pre-XDR-TB cases | 1 | (6.7%) |
| TB cases tested for HIV | 1 759 | (57.8%) |
| HIV-positive TB cases | 173 | (9.8%) |
| of these on ART | – | – |

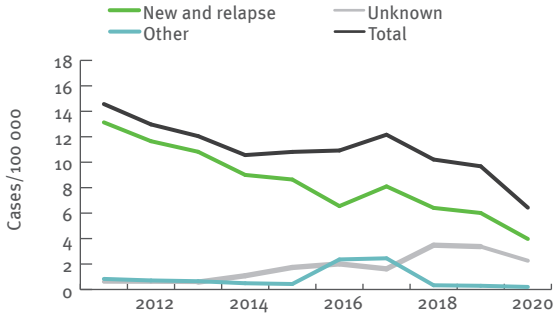
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

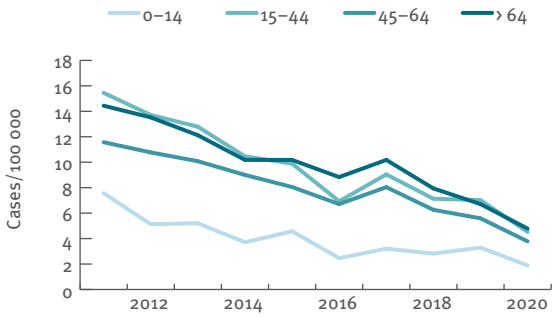
| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New culture-positive pulmonary TB cases notified in 2019[a] | | All RR/MDR-TB cases notified in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 1 507 | | 23 | |
| Success | 895 | (59.4%) | 5 | (21.7%) |
| Died | 95 | (6.3%) | 2 | (8.7%) |
| Failed | 0 | (0.0%) | 0 | (0.0%) |
| Lost to follow-up | 1 | (0.1%) | 0 | (0.0%) |
| Still on treatment | 22 | (1.5%) | 0 | (0.0%) |
| Not evaluated | 494 | (32.8%) | 16 | (69.6%) |

[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

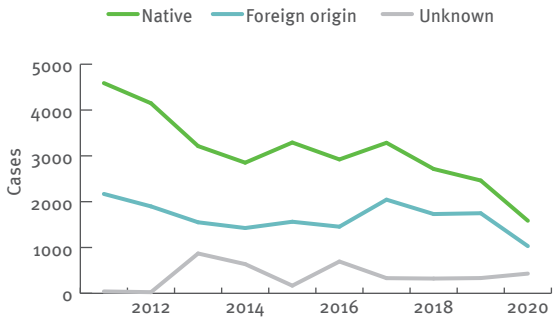
## TB notification rates by previous treatment history, 2011–2020



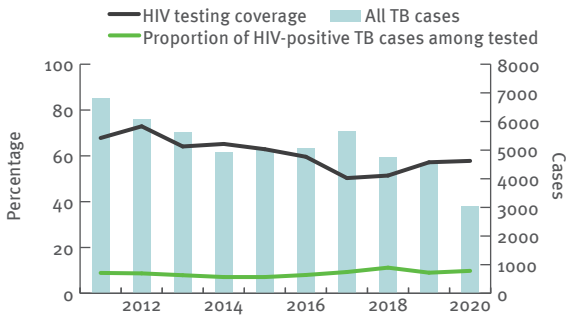

## New and relapse TB cases – notification rates by age group, 2011–2020



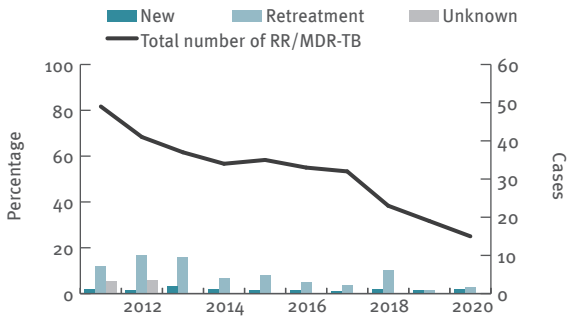

## TB cases by geographical origin, 2011–2020



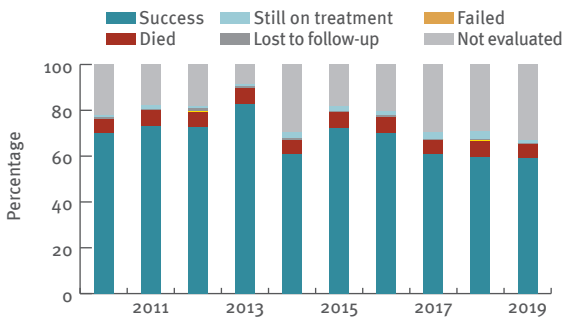

## TB/HIV coinfection, 2011–2020




## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new culture-confirmed pulmonary TB cases, 2010–2019




*Note:* in 2013, 2015 and 2016, only pulmonary RR/MDR-TB cases were reported.

# Sweden

Total population at 9 April 2021 by EUROSTAT: 10 327 589

## TB cases, 2020

| Notifications | | |
|---|---|---|
| Total number of cases | 328 | |
| Notification rate per 100 000 | 3.2 | |
| New[a] and relapse | 316 | |
| New[a] and relapse notification rate per 100 000 | 3.1 | |
| Pulmonary | 207 | (63.1%) |
| of which microscopy-positive | 76 | (36.7%) |
| of which laboratory-confirmed | 180 | (87.0%) |
| Laboratory-confirmed TB cases | 264 | (80.5%) |
| Mean age of new native TB cases | 47.3 years | |
| Mean age of new foreign TB cases | 37.6 years | |
| Foreign origin of all TB cases | 284 | (86.6%) |
| New (not previously treated) | 306 | (93.3%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 360 | [310–420] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | Yes | |
| Completeness of HIV data[b] | No | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 264 | (100.0%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 5 | [1–10] |
| Pulmonary RR/MDR-TB cases notified | 5 | (2.8%) |
| of which pre-XDR-TB cases | 2 | (40.0%) |
| Notified RR/MDR-TB | 6 | – |
| of which pre-XDR-TB cases | 2 | (33.3%) |
| TB cases tested for HIV | – | – |
| HIV-positive TB cases | – | – |
| of these on ART | – | – |

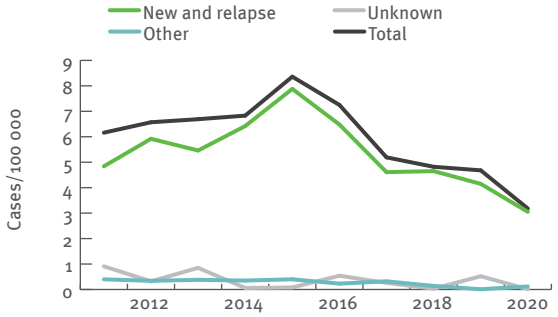
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

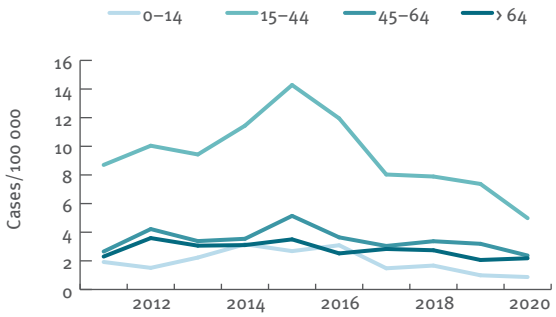
| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New culture-positive pulmonary TB cases notified in 2019[a] | | All RR/MDR-TB cases notified in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 235 | | 14 | |
| Success | 138 | (58.7%) | 14 | (100.0%) |
| Died | 8 | (3.4%) | 0 | (0.0%) |
| Failed | 0 | (0.0%) | 0 | (0.0%) |
| Lost to follow-up | 0 | (0.0%) | 0 | (0.0%) |
| Still on treatment | 4 | (1.7%) | 0 | (0.0%) |
| Not evaluated | 85 | (36.2%) | 0 | (0.0%) |

[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

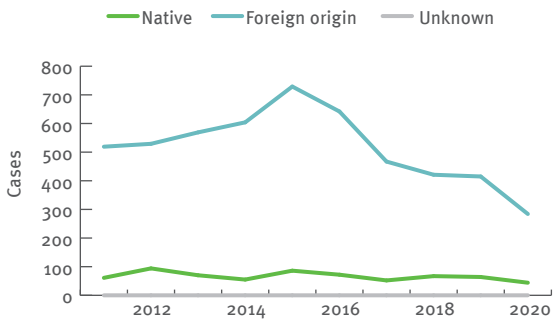
## TB notification rates by previous treatment history, 2011–2020




## New and relapse TB cases – notification rates by age group, 2011–2020



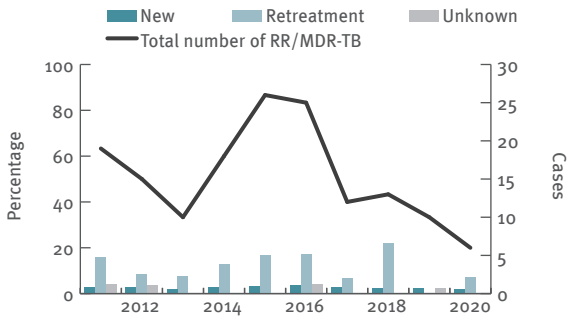

## TB cases by geographical origin, 2011–2020



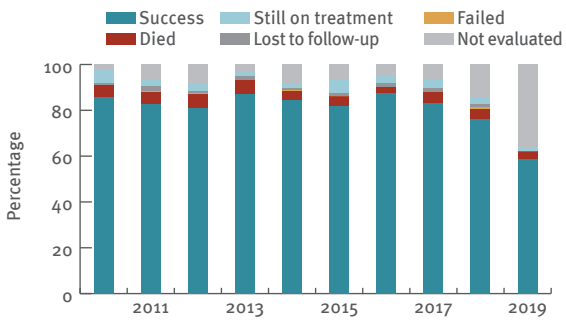

## TB/HIV coinfection, 2011–2020

Data not reported

## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new culture-confirmed pulmonary TB cases, 2010–2019



# Switzerland

Total population estimate 2020 by United Nations Statistical Database: 8 654 618

## TB cases, 2020

| Notifications | | |
|---|---|---|
| Total number of cases | 387 | |
| Notification rate per 100 000 | 4.5 | |
| New[a] and relapse | 351 | |
| New[a] and relapse notification rate per 100 000 | 4.1 | |
| Pulmonary | 314 | (81.1%) |
| of which microscopy-positive | – | – |
| of which laboratory-confirmed | 271 | (86.3%) |
| Laboratory-confirmed TB cases | – | – |
| Mean age of new native TB cases | 41.1 years | |
| Mean age of new foreign TB cases | – | |
| Foreign origin of all TB cases | 276 | (71.3%) |
| New (not previously treated) | 351 | (90.7%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 400 | [350–470] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | No | |
| Completeness of HIV data[b] | No | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 171 | (63.1%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 10 | [4–16] |
| Pulmonary RR/MDR-TB cases notified | 4 | (2.3%) |
| of which pre-XDR-TB cases | 2 | (50.0%) |
| Notified RR/MDR-TB | 5 | – |
| of which pre-XDR-TB cases | 1 | (20.0%) |
| TB cases tested for HIV | 0 | (0.0%) |
| HIV-positive TB cases | – | – |
| of these on ART | – | – |

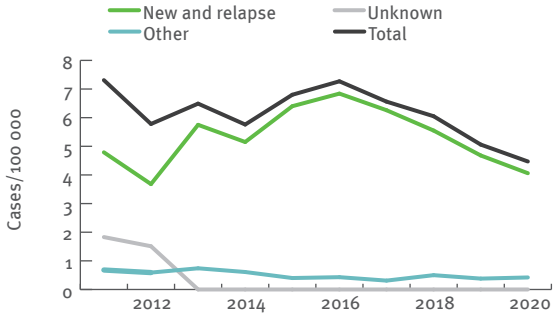
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New culture-positive pulmonary TB cases notified in 2019[a] | | RR/MDR TB cases enrolled into DR-TB treatment in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 391 | | 9 | |
| Success | 267 | (68.3%) | 6 | (66.7%) |
| Died | 10 | (2.6%) | 0 | (0.0%) |
| Failed | 0 | (0.0%) | 0 | (0.0%) |
| Lost to follow-up | 0 | (0.0%) | 0 | (0.0%) |
| Not evaluated | 114 | (29.2%) | 3 | (33.3%) |

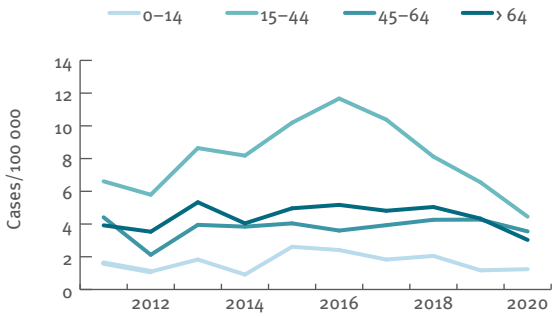
[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

## TB notification rates by previous treatment history, 2011–2020



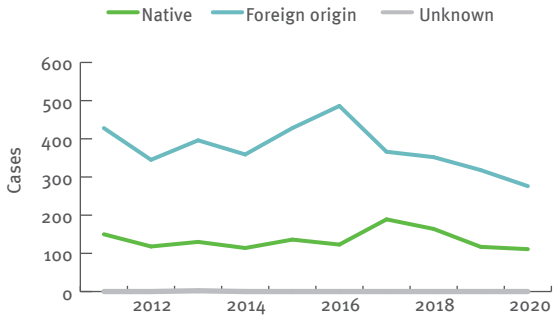

*Note:* starting from 2013 onward, cases with unknown history are included in new and relapses.

## New and relapse TB cases – notification rates by age group, 2011–2020

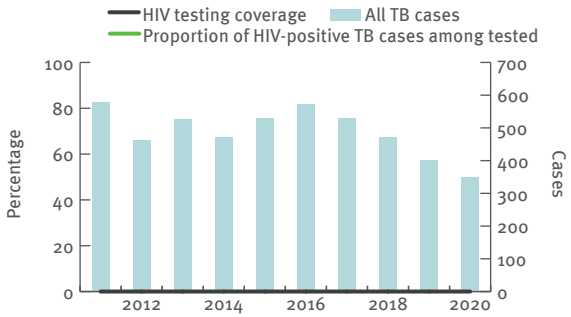



*Note:* data up to 2012 include new TB cases only.

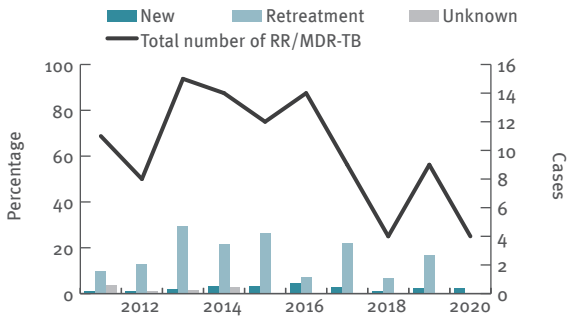
## TB cases by geographical origin, 2011–2020



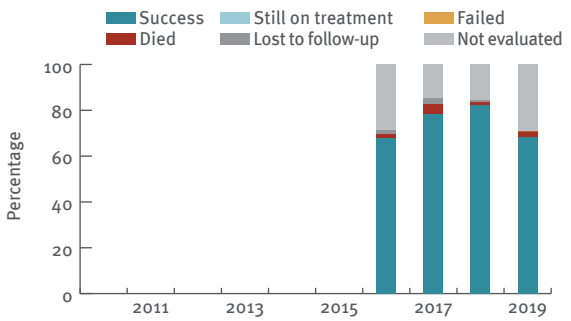

## TB/HIV coinfection, 2011–2020




## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new and relapse TB cases, 2010–2019



# Tajikistan

Total population estimate 2020 by United Nations Statistical Database: 9 537 642

## TB cases, 2020

**Notifications**

| | | |
|---|---|---|
| Total number of cases | 4 316 | |
| Notification rate per 100 000 | 45.3 | |
| New[a] and relapse | 4 148 | |
| New[a] and relapse notification rate per 100 000 | 43.5 | |
| Pulmonary | 2 925 | (67.8%) |
| of which microscopy-positive | – | – |
| of which laboratory-confirmed | 2 023 | (69.2%) |
| Laboratory-confirmed TB cases | – | – |
| Mean age of new native TB cases | 37.6 years | |
| Mean age of new foreign TB cases | – | |
| Foreign origin of all TB cases | – | – |
| New (not previously treated) | 3 759 | (87.1%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 8 000 | [6 100–10 000] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | Yes | |
| Completeness of HIV data[b] | Yes | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 2 023 | (100.0%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 560 | [520–590] |
| Pulmonary RR/MDR-TB cases notified | 555 | (27.4%) |
| of which pre-XDR-TB cases | 121 | (23.6%) |
| Notified RR/MDR-TB | 557 | – |
| of which pre-XDR-TB cases | 123 | (22.1%) |
| TB cases tested for HIV | 4 043 | (97.5%) |
| HIV-positive TB cases | 118 | (2.9%) |
| of these on ART | 116 | (98.3%) |

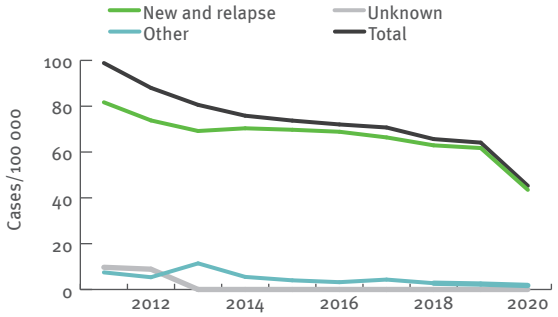
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New and relapse TB cases notified in 2019[a] | | RR/MDR TB cases enrolled into DR-TB treatment in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 5 114 | | 727 | |
| Success | 4 643 | (90.8%) | 510 | (70.2%) |
| Died | 179 | (3.5%) | 95 | (13.1%) |
| Failed | 60 | (1.2%) | 23 | (3.2%) |
| Lost to follow-up | 190 | (3.7%) | 88 | (12.1%) |
| Not evaluated | 42 | (0.8%) | 11 | (1.5%) |

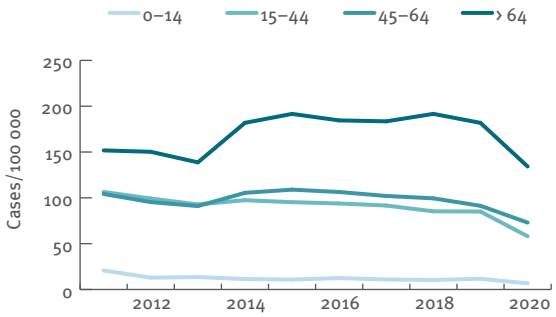
[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

## TB notification rates by previous treatment history, 2011–2020



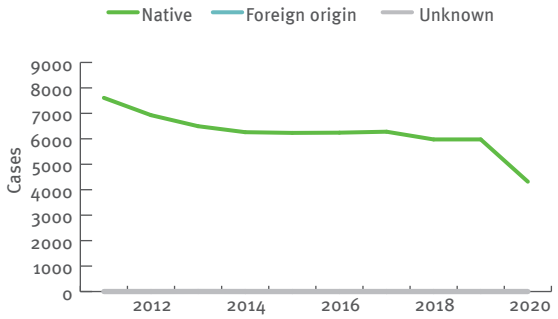

*Note:* starting from 2013 onward, cases with unknown history are included in new and relapses.

## New and relapse TB cases – notification rates by age group, 2011–2020

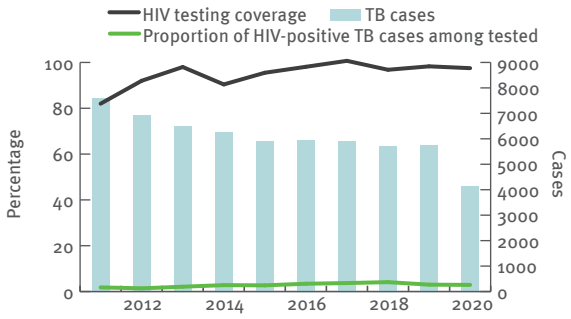



*Note:* data up to 2012 include new TB cases only.

## TB cases by geographical origin, 2011–2020

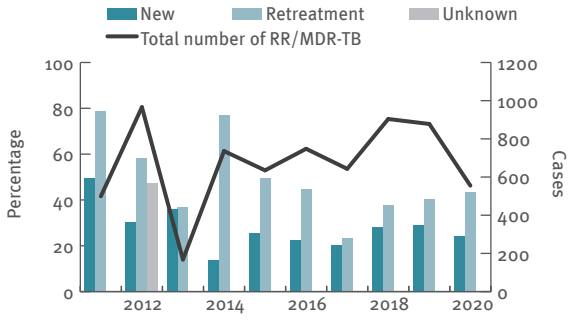



## TB/HIV coinfection, 2011–2020

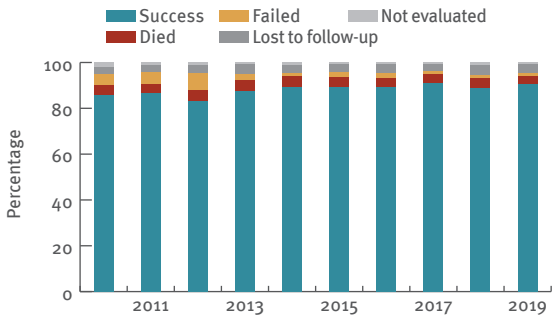



*Note:* data up to 2014 include all TB cases.

## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new and relapse TB cases, 2010–2019




*Note:* 2010–2011 cohorts include new cases only.

# Turkey

Total population estimate 2020 by United Nations Statistical Database: 84 339 067

## TB cases, 2020

**Notifications**

| | | |
|---|---|---|
| Total number of cases | 8 925 | |
| Notification rate per 100 000 | 10.6 | |
| New[a] and relapse | 8 830 | |
| New[a] and relapse notification rate per 100 000 | 10.5 | |
| Pulmonary | 5 802 | (65.0%) |
| of which microscopy-positive | – | – |
| of which laboratory-confirmed | 4 523 | (78.0%) |
| Laboratory-confirmed TB cases | – | – |
| Mean age of new native TB cases | 43.6 years | |
| Mean age of new foreign TB cases | – | |
| Foreign origin of all TB cases | 1 420 | (15.9%) |
| New (not previously treated) | 8 358 | (93.6%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 13 000 | [11 000–15 000] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | Yes | |
| Completeness of HIV data[b] | Yes | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 4 074 | (90.1%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 140 | [120–170] |
| Pulmonary RR/MDR-TB cases notified | 127 | (3.1%) |
| of which pre-XDR-TB cases | 14 | (14.1%) |
| Notified RR/MDR-TB | 149 | – |
| of which pre-XDR-TB cases | 14 | (9.4%) |
| TB cases tested for HIV | 7 062 | (80.0%) |
| HIV-positive TB cases | 83 | (1.2%) |
| of these on ART | 62 | (74.7%) |

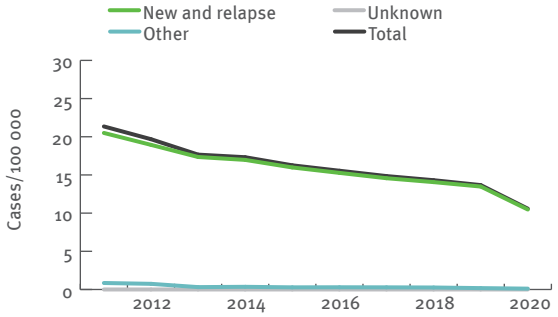
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New and relapse TB cases notified in 2019[a] | | RR/MDR TB cases enrolled into DR-TB treatment in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 11 095 | | 180 | |
| Success | 9 231 | (83.2%) | 99 | (55.0%) |
| Died | 973 | (8.8%) | 20 | (11.1%) |
| Failed | 22 | (0.2%) | 2 | (1.1%) |
| Lost to follow-up | 200 | (1.8%) | 9 | (5.0%) |
| Not evaluated | 669 | (6.0%) | 50 | (27.8%) |

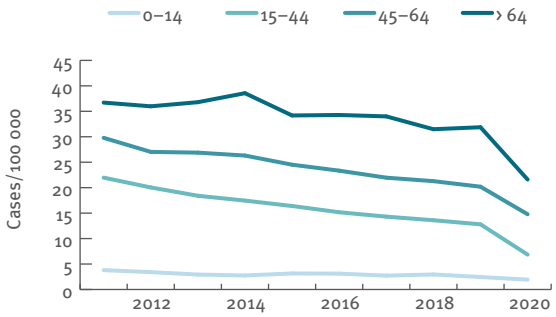
[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

## TB notification rates by previous treatment history, 2011–2020



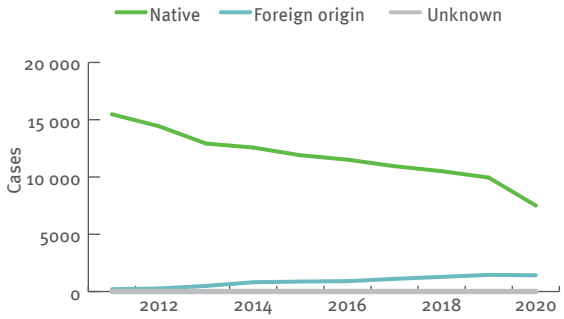

*Note:* starting from 2013 onward, cases with unknown history are included in new and relapses.

## New and relapse TB cases – notification rates by age group, 2011–2020

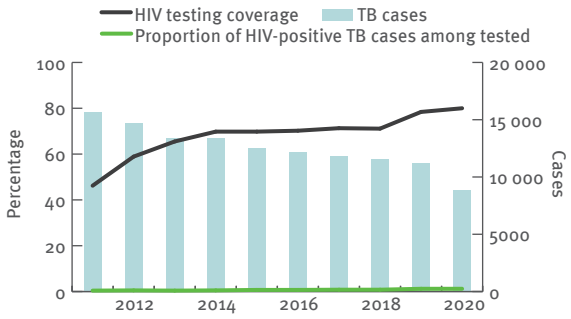



*Note:* data up to 2012 include new TB cases only.

## TB cases by geographical origin, 2011–2020

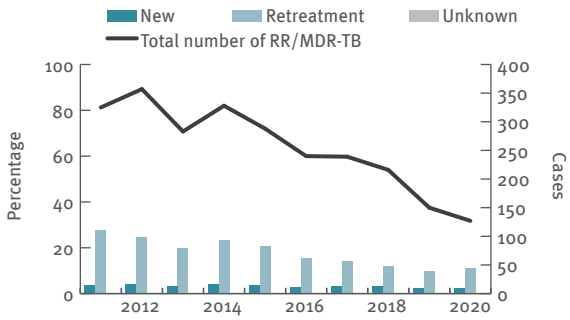



## TB/HIV coinfection, 2011–2020

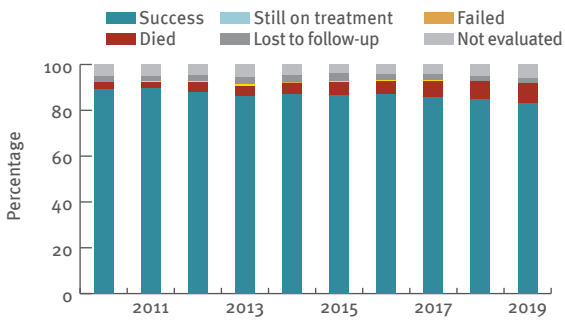



*Note:* data up to 2014 include all TB cases.

## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new and relapse TB cases, 2010–2019




*Note:* 2010–2011 cohorts include new cases only.

# Turkmenistan

Total population estimate 2020 by United Nations Statistical Database: 6 031 187

## TB cases, 2020

**Notifications**

| | | |
|---|---|---|
| Total number of cases | 2 610 | |
| Notification rate per 100 000 | 43.3 | |
| New[a] and relapse | 1 918 | |
| New[a] and relapse notification rate per 100 000 | 31.8 | |
| Pulmonary | 2 180 | (83.5%) |
| of which microscopy-positive | – | – |
| of which laboratory-confirmed | 833 | (38.2%) |
| Laboratory-confirmed TB cases | – | – |
| Mean age of new native TB cases | 40.6 years | |
| Mean age of new foreign TB cases | – | |
| Foreign origin of all TB cases | 0 | (0.0%) |
| New (not previously treated) | 1 603 | (61.4%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 2 800 | [2 200–3 600] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | No | |
| Completeness of HIV data[b] | No | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 833 | (100.0%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 290 | [260–310] |
| Pulmonary RR/MDR-TB cases notified | – | – |
| of which pre-XDR-TB cases | – | – |
| Notified RR/MDR-TB | 783 | – |
| of which pre-XDR-TB cases | 264 | (33.7%) |
| TB cases tested for HIV | – | – |
| HIV-positive TB cases | – | – |
| of these on ART | – | – |

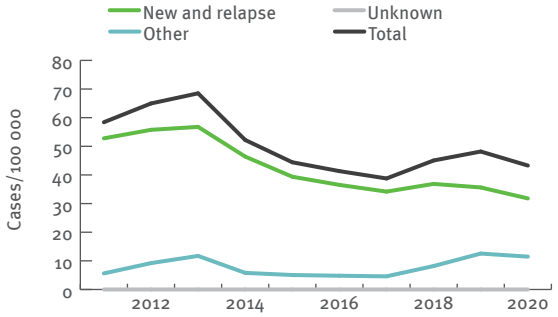
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New and relapse TB cases notified in 2019[a] | | RR/MDR TB cases enrolled into DR-TB treatment in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 2 117 | | 549 | |
| Success | 1 749 | (82.6%) | 248 | (45.2%) |
| Died | 90 | (4.3%) | 92 | (16.8%) |
| Failed | 135 | (6.4%) | 98 | (17.9%) |
| Lost to follow-up | 84 | (4.0%) | 92 | (16.8%) |
| Not evaluated | 59 | (2.8%) | 19 | (3.5%) |

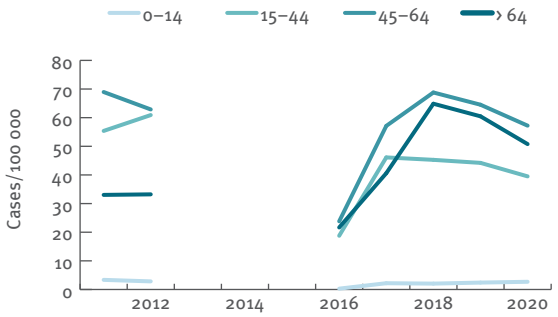
[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

## TB notification rates by previous treatment history, 2011–2020



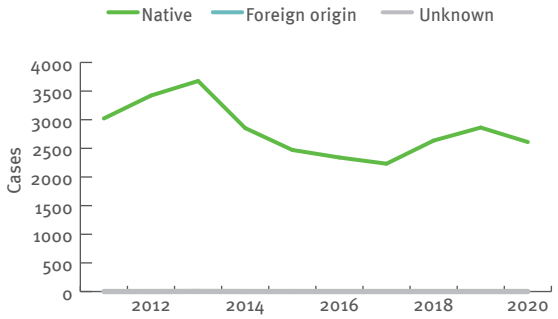

*Note:* starting from 2013 onward, cases with unknown history are included in new and relapses.

## New and relapse TB cases – notification rates by age group, 2011–2020

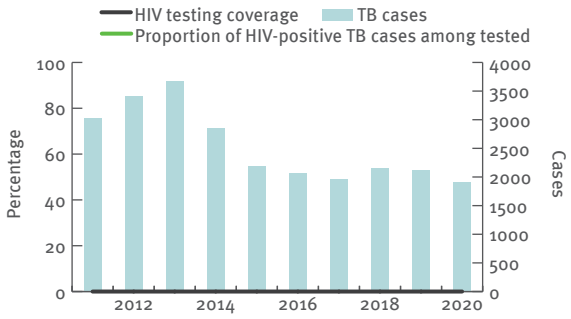



*Note:* data up to 2012 include new TB cases only.

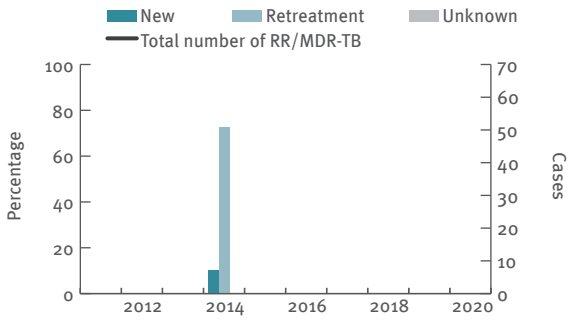
## TB cases by geographical origin, 2011–2020



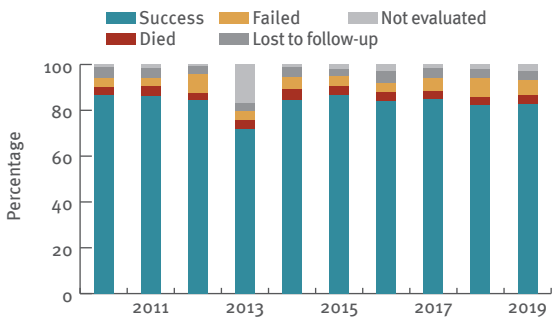

## TB/HIV coinfection, 2011–2020




## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new and relapse TB cases, 2010–2019




*Note:* 2010–2011 cohorts include new cases only.

# Ukraine

Total population estimate 2020 by United Nations Statistical Database: 43 733 759

## TB cases, 2020

**Notifications**

| | | |
|---|---|---|
| Total number of cases | 19 521 | |
| Notification rate per 100 000 | 44.6 | |
| New[a] and relapse | 17 533 | |
| New[a] and relapse notification rate per 100 000 | 40.1 | |
| Pulmonary | 17 915 | (91.8%) |
| of which microscopy-positive | – | – |
| of which laboratory-confirmed | 13 177 | (73.6%) |
| Laboratory-confirmed TB cases | – | – |
| Mean age of new native TB cases | 43.6 years | |
| Mean age of new foreign TB cases | – | |
| Foreign origin of all TB cases | 31 | (0.2%) |
| New (not previously treated) | 14 156 | (72.5%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 32 000 | [21 000–45 000] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | Yes | |
| Completeness of HIV data[b] | Yes | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 12 818 | (97.3%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 4 300 | [4 200–4 400] |
| Pulmonary RR/MDR-TB cases notified | 4 177 | (32.6%) |
| of which pre-XDR-TB cases | 1 120 | (26.8%) |
| Notified RR/MDR-TB | 4 257 | – |
| of which pre-XDR-TB cases | 1 172 | (27.5%) |
| TB cases tested for HIV | 17 375 | (99.1%) |
| HIV-positive TB cases | 3 794 | (21.8%) |
| of these on ART | 3 460 | (91.2%) |

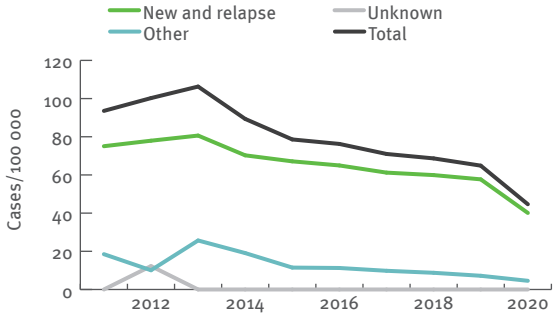
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases > 50%, DST done for C+ > 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New and relapse TB cases notified in 2019[a] | | RR/MDR TB cases enrolled into DR-TB treatment in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 19 414 | | 5 953 | |
| Success | 15 381 | (79.2%) | 3 006 | (50.5%) |
| Died | 1 816 | (9.4%) | 970 | (16.3%) |
| Failed | 1 180 | (6.1%) | 1 033 | (17.4%) |
| Lost to follow-up | 1 023 | (5.3%) | 926 | (15.6%) |
| Not evaluated | 14 | (0.1%) | 18 | (0.3%) |

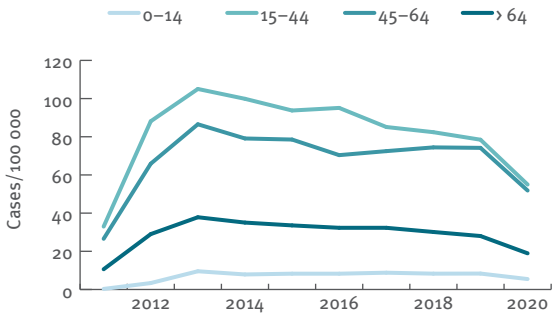
[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

## TB notification rates by previous treatment history, 2011–2020



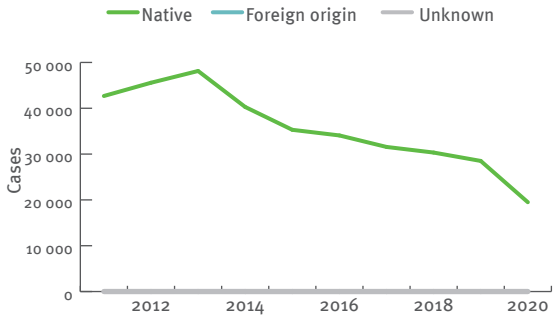

*Note:* starting from 2013 onward, cases with unknown history are included in new and relapses.

## New and relapse TB cases – notification rates by age group, 2011–2020

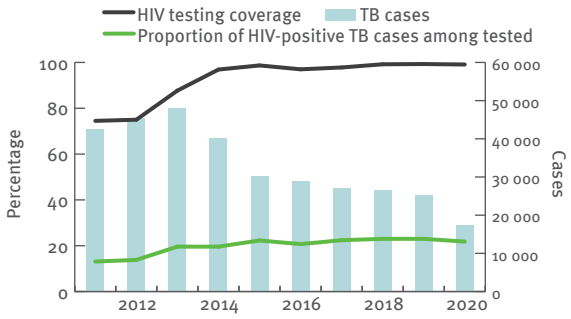



*Note:* data up to 2012 include new TB cases only.

## TB cases by geographical origin, 2011–2020

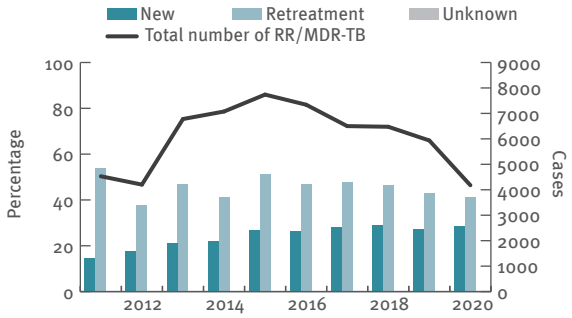



## TB/HIV coinfection, 2011–2020

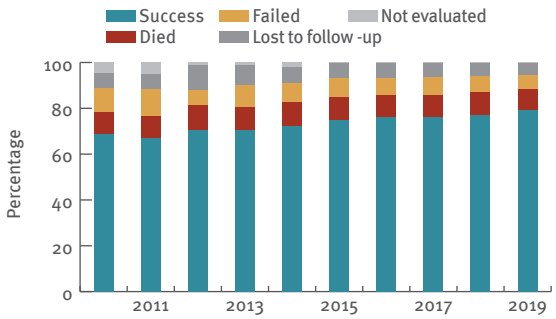



*Note:* data up to 2014 include all TB cases.

## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new and relapse TB cases, 2010–2019




*Note:* 2010–2011 cohorts include new cases only.

# United Kingdom

Total population at 9 April 2021 by EUROSTAT: 67 886 004

## TB cases, 2020

| Notifications | | |
|---|---|---|
| Total number of cases | 4 458 | |
| Notification rate per 100 000 | 6.6 | |
| New[a] and relapse | 4 185 | |
| New[a] and relapse notification rate per 100 000 | 6.2 | |
| Pulmonary | 2 419 | (54.3%) |
| of which microscopy-positive | – | – |
| of which laboratory-confirmed | 1 927 | (79.7%) |
| Laboratory-confirmed TB cases | – | – |
| Mean age of new native TB cases | 42.4 years | |
| Mean age of new foreign TB cases | – | |
| Foreign origin of all TB cases | 3 123 | (70.1%) |
| New (not previously treated) | 4 185 | (93.9%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 4 700 | [4 200–5 200] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | Yes | |
| Completeness of HIV data[b] | No | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 1 622 | (84.2%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 40 | [27–53] |
| Pulmonary RR/MDR-TB cases notified | 35 | (2.2%) |
| of which pre-XDR-TB cases | 8 | (25.0%) |
| Notified RR/MDR-TB | – | – |
| of which pre-XDR-TB cases | – | – |
| TB cases tested for HIV | – | – |
| HIV-positive TB cases | – | – |
| of these on ART | – | – |

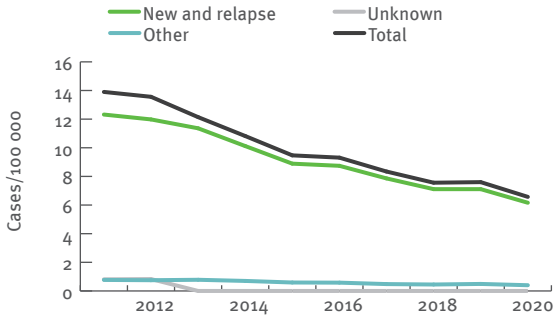
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

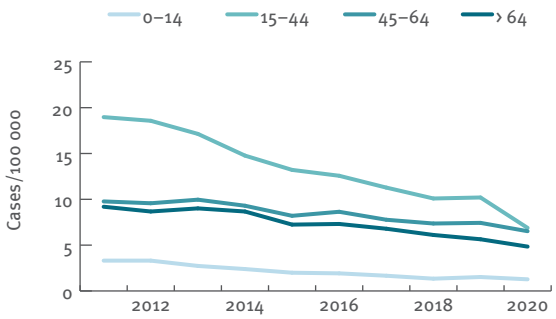
| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New culture-positive pulmonary TB cases notified in 2019[a] | | RR/MDR TB cases enrolled into DR-TB treatment in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 4 739 | | 40 | |
| Success | 3 675 | (77.5%) | 30 | (75.0%) |
| Died | 229 | (4.8%) | 2 | (5.0%) |
| Failed | 0 | (0.0%) | 0 | (0.0%) |
| Lost to follow-up | 208 | (4.4%) | 4 | (10.0%) |
| Still on treatment | 627 | (13.2%) | 4 | (10.0%) |
| Not evaluated | 72 | (3.7%) | 7 | (14.0%) |

[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

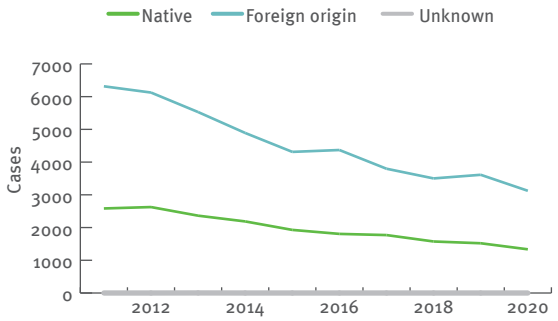
### TB notification rates by previous treatment history, 2011–2020



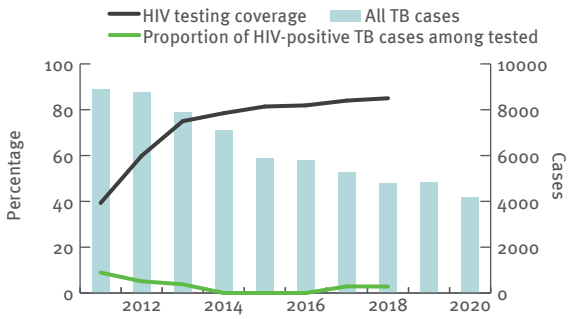

### New and relapse TB cases – notification rates by age group, 2011–2020



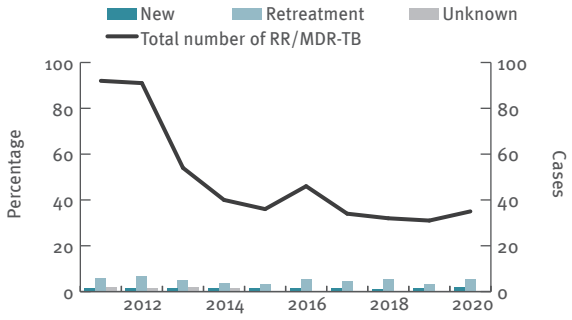

### TB cases by geographical origin, 2011–2020



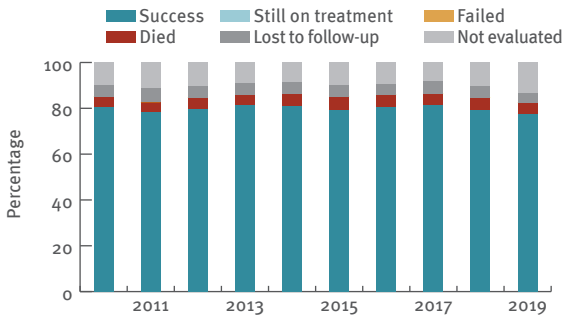

### TB/HIV coinfection, 2011–2020




### RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




### Treatment outcome, new culture-confirmed pulmonary TB cases, 2010–2019



# Uzbekistan

Total population estimate 2020 by United Nations Statistical Database: 33 469 199

## TB cases, 2020

| Notifications | | |
|---|---|---|
| Total number of cases | 14 127 | |
| Notification rate per 100 000 | 42.2 | |
| New[a] and relapse | 12 111 | |
| New[a] and relapse notification rate per 100 000 | 36.2 | |
| Pulmonary | 9 503 | (67.3%) |
| of which microscopy-positive | – | – |
| of which laboratory-confirmed | 5 713 | (60.1%) |
| Laboratory-confirmed TB cases | – | – |
| Mean age of new native TB cases | 40.6 years | |
| Mean age of new foreign TB cases | – | |
| Foreign origin of all TB cases | 0 | (0.0%) |
| New (not previously treated) | 10 893 | (77.1%) |
| **Estimates** | | |
| Estimated new and relapse cases N, best [low–high] | 22 000 | [15 000–30 000] |

[a] Cases with unknown previous TB history included in new cases.

## Drug resistance surveillance and TB/HIV coinfection, 2020

| | | |
|---|---|---|
| Completeness of DRS data[a] | Yes | |
| Completeness of HIV data[b] | Yes | |
| Case-linked data-reporting | Yes | |
| Cases with DST results | 5 713 | (100.0%) |
| Estimated RR-TB among notified bacteriologically confirmed pulmonary TB cases N, best [low–high] | 1 400 | [1 300–1 500] |
| Pulmonary RR/MDR-TB cases notified | 1 400 | (24.5%) |
| of which pre-XDR-TB cases | 378 | (27.0%) |
| Notified RR/MDR-TB | 1778 | – |
| of which pre-XDR-TB cases | 378 | (21.3%) |
| TB cases tested for HIV | 12 111 | (100.0%) |
| HIV-positive TB cases | 379 | (3.1%) |
| of these on ART | 287 | (75.7%) |

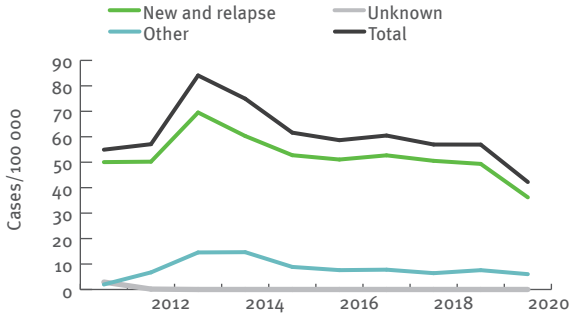
[a] National coverage 100% or culturing ≥ 90%, C+/all TB cases › 50%, DST done for C+ › 75%, EQA ≥ 95%.
[b] More than 50% of TB cases with reported HIV status.

## Treatment outcome monitoring

| Geographical coverage | National | | | |
|---|---|---|---|---|
| Outcome cohort | New and relapse TB cases notified in 2019[a] | | RR/MDR TB cases enrolled into DR-TB treatment in 2018[b] | |
| Case-linked data-reporting | Yes | | – | |
| Cases notified | 14 224 | | 2 039 | |
| Success | 12 820 | (90.1%) | 1 375 | (67.4%) |
| Died | 548 | (3.9%) | 278 | (13.6%) |
| Failed | 227 | (1.6%) | 120 | (5.9%) |
| Lost to follow-up | 353 | (2.5%) | 173 | (8.5%) |
| Not evaluated | 276 | (1.9%) | 93 | (4.6%) |

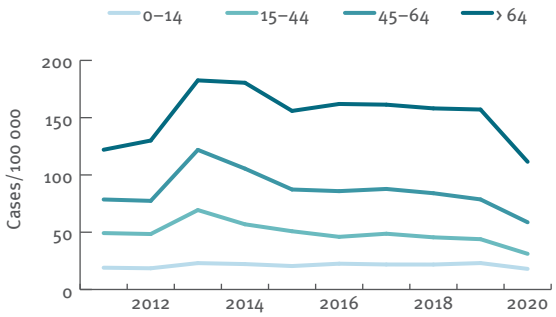
[a] Treatment outcome as presented is treatment outcome after 12 months.
[b] Treatment outcome as presented is treatment outcome after 24 months.

## TB notification rates by previous treatment history, 2011–2020



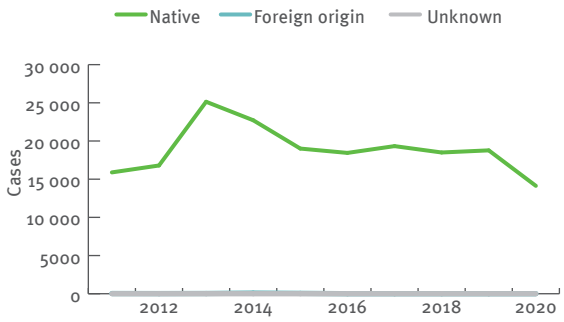

*Note:* starting from 2013 onward, cases with unknown history are included in new and relapses.

## New and relapse TB cases – notification rates by age group, 2011–2020

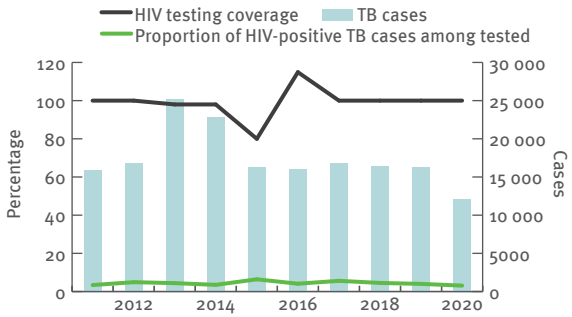



*Note:* data up to 2012 include new TB cases only.

## TB cases by geographical origin, 2011–2020

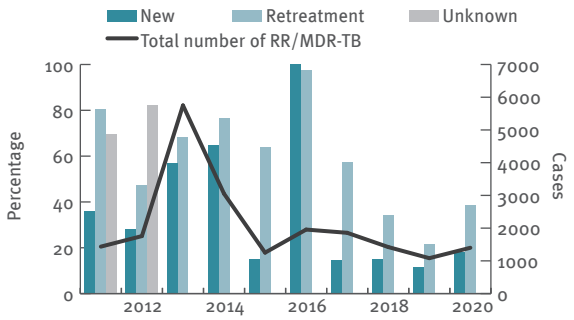



## TB/HIV coinfection, 2011–2020

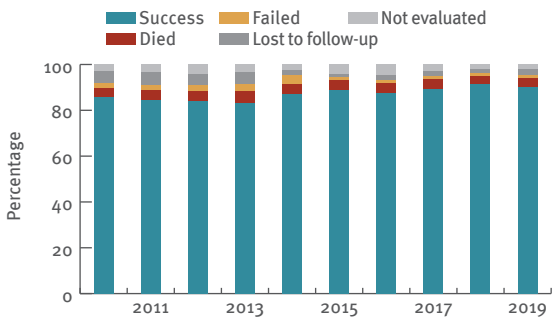



*Note:* data up to 2014 include all TB cases.

## RR/MDR-TB cases and percentage of RR/MDR-TB cases by previous treatment history among all TB cases, 2011–2020




## Treatment outcome, new and relapse TB cases, 2010–2019




*Note:* 2010–2011 cohorts include new cases only.

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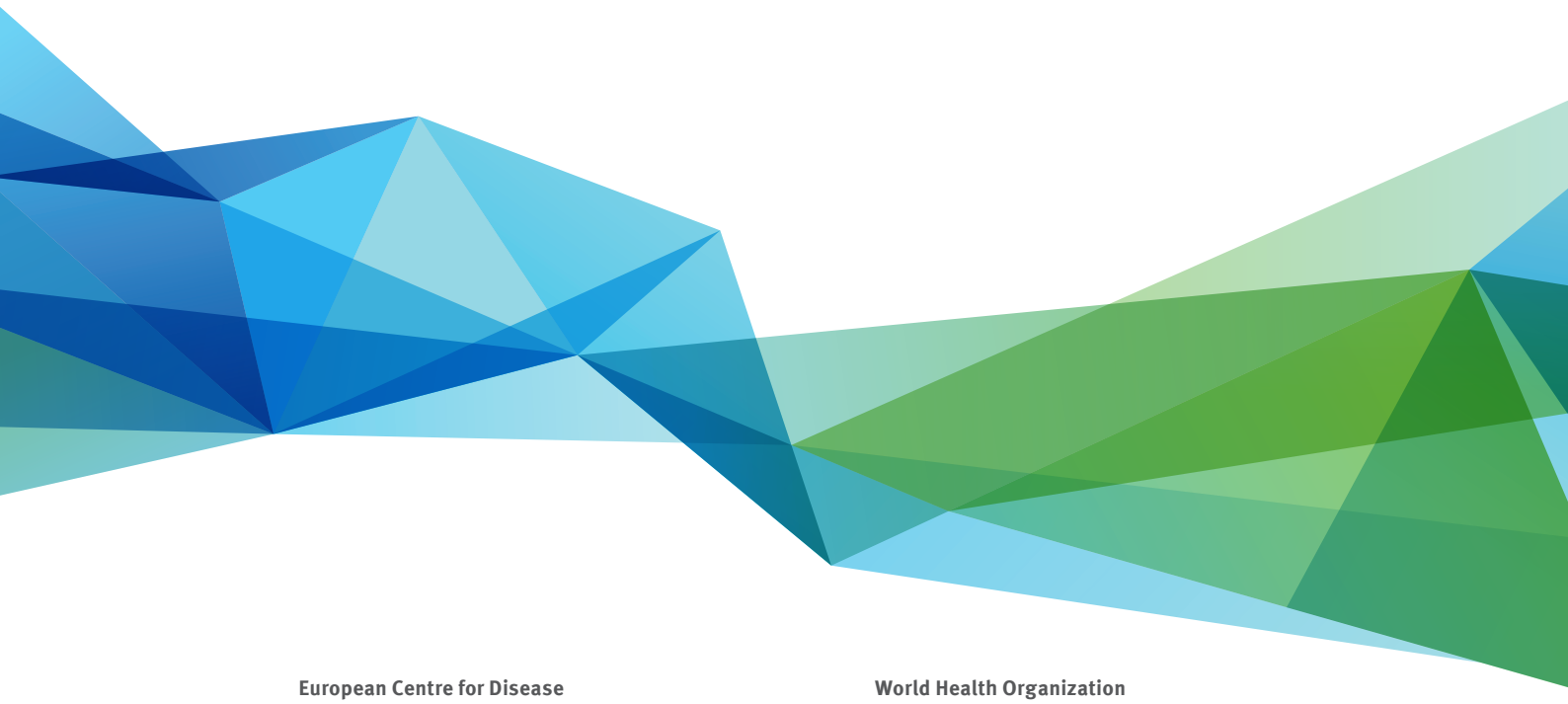

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