

British Columbia Influenza Surveillance Bulletin

Influenza Season 2017-18, Number 22, Weeks 15 to 17

April 8 to 28, 2018

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End-of-season Summary: 2017-18 Influenza Season

The 2017-18 influenza season in BC was characterized by co-circulation of influenza A(H3N2) and B(Yamagata). Influenza activity remained at elevated levels for an extended period of time this season compared to recent seasons.

At the BCCDC Public Health Laboratory (PHL), influenza positivity peaked around weeks 52-3 (exceeding 40%), with approximately equal contribution of influenza A(H3N2) and B viruses during this peak period and throughout the season. Compared to prior recent seasons, influenza B activity began earlier and made greater contributions to the overall seasonal influenza epidemic.

Elderly adults ≥ 65 years old were disproportionately represented among influenza detections during the 2017-18 season, related in part to the co-dominant A(H3N2) and B activity and high number of long-term care facility (LTCF) outbreaks. Younger age groups were also represented, notably among influenza A(H1N1)pdm09 detections.

The cumulative tally of LTCF outbreaks reported from week 40 to week 17 of the 2017-18 season ($n=179$) is the second highest of the past 15 seasons, exceeded only by the 2016-17 A(H3N2)-dominant season ($n=198$). More outbreaks due to influenza B were reported compared to prior recent seasons, mirroring the greater influenza B contribution more generally this season.

This will be the final regular influenza surveillance bulletin of the 2017-18 season. Further bulletins will be issued as needed until the next regular reporting period begins for the 2018-19 season.

Prepared by BCCDC Influenza & Emerging Respiratory Pathogens Team

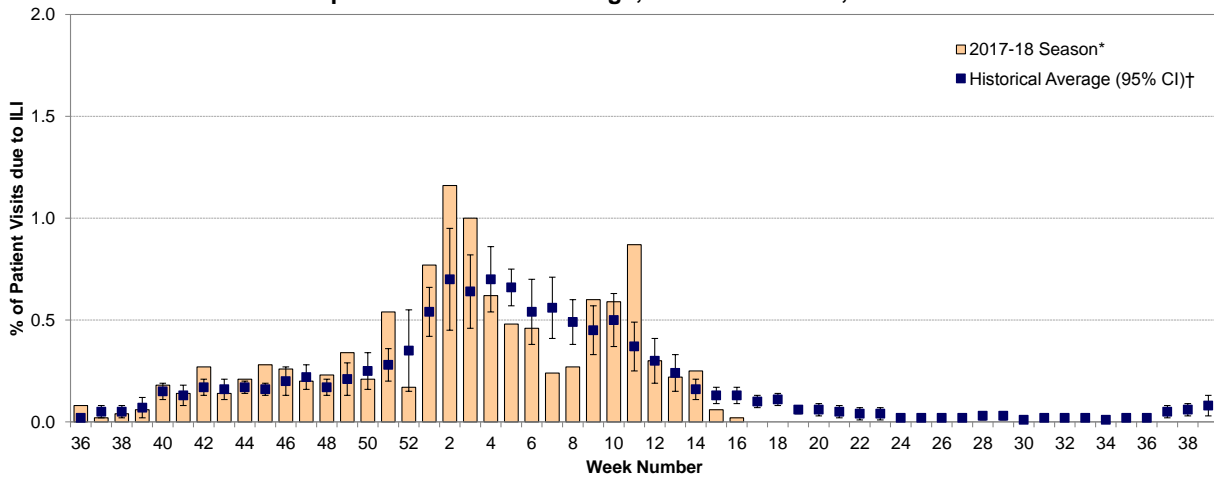
Report Disseminated: May 3, 2018

British Columbia

Sentinel Physicians

During the 2017-18 season, the proportion of patients with influenza-like illness (ILI) among those presenting to sentinel sites peaked in weeks 1-3 and week 11 and was significantly above the 10-year historical average during this period. In weeks 15-17, the proportion of visits decreased. So far, 45-65% of sites have reported data for weeks 15-17; rates are subject to change as data become more complete.

Percent of patient visits to sentinel physicians due to influenza-like illness (ILI) compared to historical average, British Columbia, 2017-18



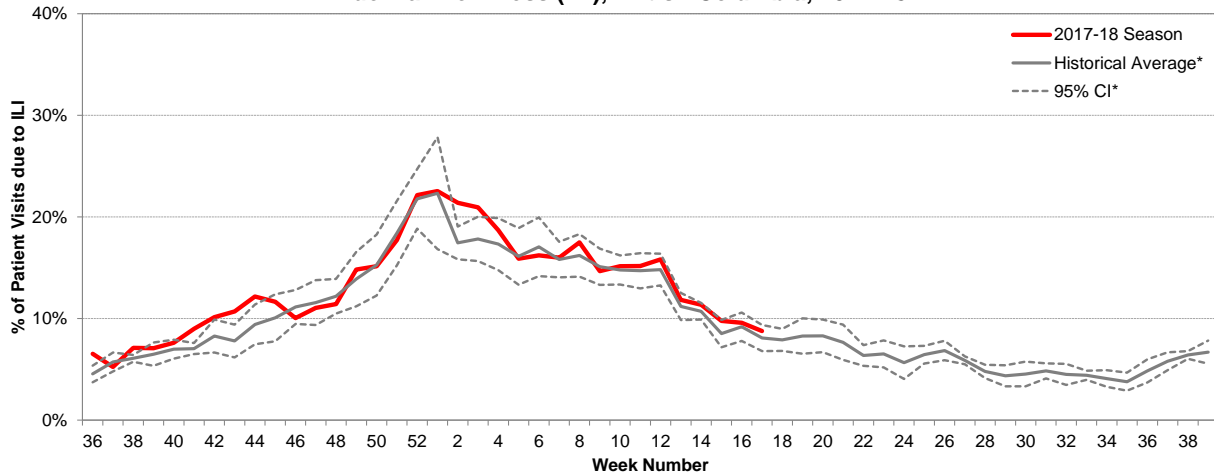
* Data are subject to change as reporting becomes more complete.

† 10-year historical average for 2017-18 season based on 2005-06 to 2016-2017 seasons, excluding 2008-09 and 2009-10 due to atypical seasonality; CI=confidence interval.

BC Children's Hospital Emergency Room

During the 2017-18 season, the proportion of visits to BC Children's Hospital Emergency Room (ER) attributed to ILI peaked at above 20% in weeks 52-3, and was slightly higher than the historical average for the past 5 seasons during this peak period. In weeks 15-17, ER visits attributed to ILI continued to decline to 9-10%, in keeping with expected levels at this time of year.

Percent of patients presenting to BC Children's Hospital ER attributed to influenza-like illness (ILI), British Columbia, 2017-18



Source: BCCCH Admitting, Discharge, Transfer database (ADT). Data includes records with a triage chief complaint of "flu" or "influenza" or "fever/cough."

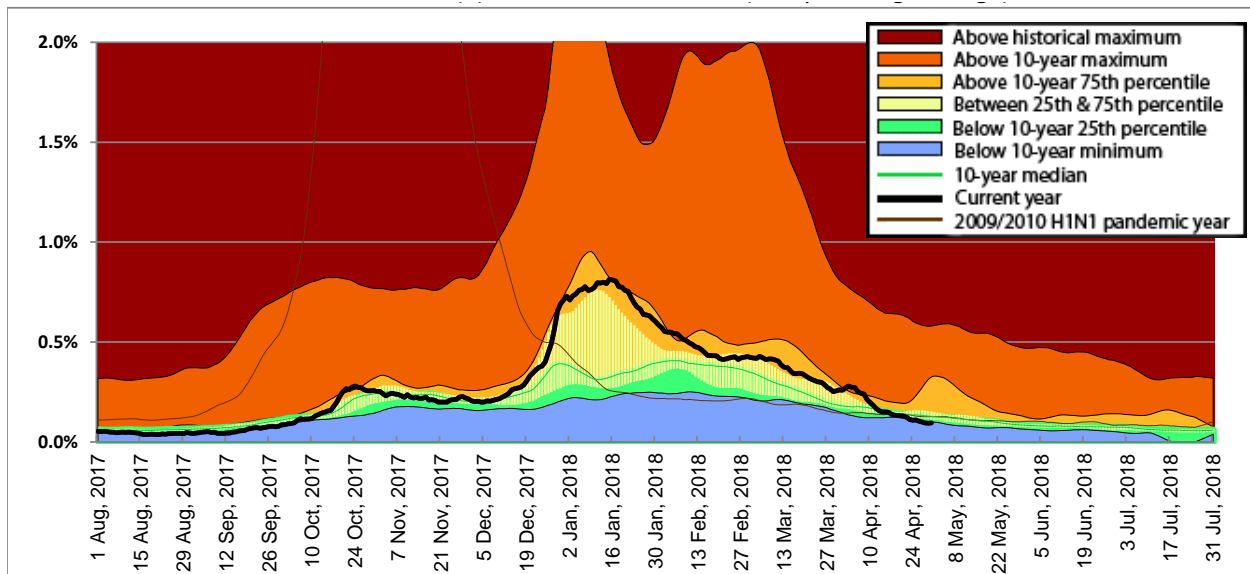
* 5-year historical average for 2017-18 season based on 2012-13 to 2016-17 seasons; CI=confidence interval.

Medical Services Plan

During the 2017-18 season, BC Medical Services Plan (MSP) general practitioner claims for influenza illness (II), as a proportion of all submitted MSP claims, increased sharply beginning in week 51, peaked in weeks 1-3 and, thereafter, gradually declined. Overall, provincial MSP rates exceeded expected seasonal values during the peak period and remained elevated for a prolonged period compared to historical data for the past 10 years. Some expected regional variation in the timing and intensity of II activity was observed across health authorities, notably in IHA where a sharper peak was observed exceeding 10-year maximums and VIHA where rates plateaued following a sharp increase but remained at median levels.

In weeks 15-17, MSP rates were at or below expected median levels for the province overall and in all regional health authorities.

Service claims submitted to MSP for influenza illness (II)* as a proportion of all submitted general practitioner service claims, British Columbia, 2017-18

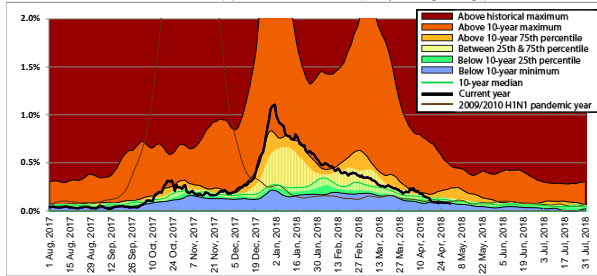


* Influenza illness is tracked as the percentage of all submitted MSP general practitioner claims with ICD-9 code 487 (influenza).

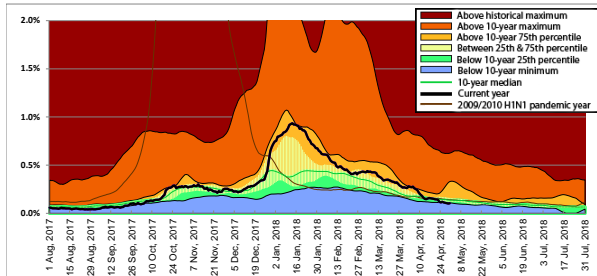
Data for the period August 1, 2009 to July 31, 2010 have been excluded from the 10-year median calculation due to atypical seasonality during the 2009/2010 H1N1 pandemic year. MSP data beginning August 1, 2017 corresponds to sentinel ILI week 31; data are current to April 30, 2018.

Data provided by Population Health Surveillance and Epidemiology, BC Ministry of Health Services.

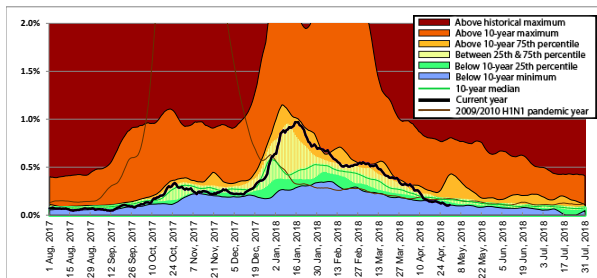
Interior



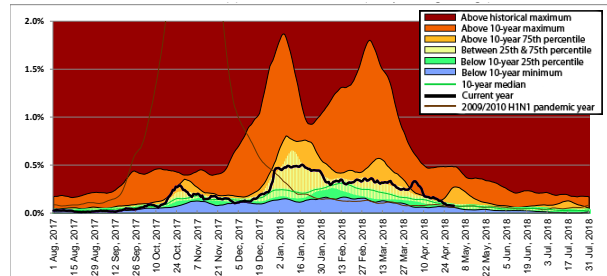
Fraser



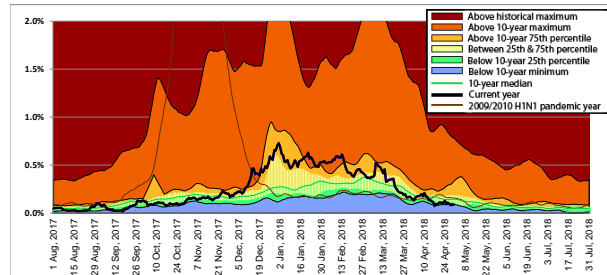
Vancouver Coastal



Vancouver Island



Northern



Laboratory Reports

BCCDC Public Health Laboratory

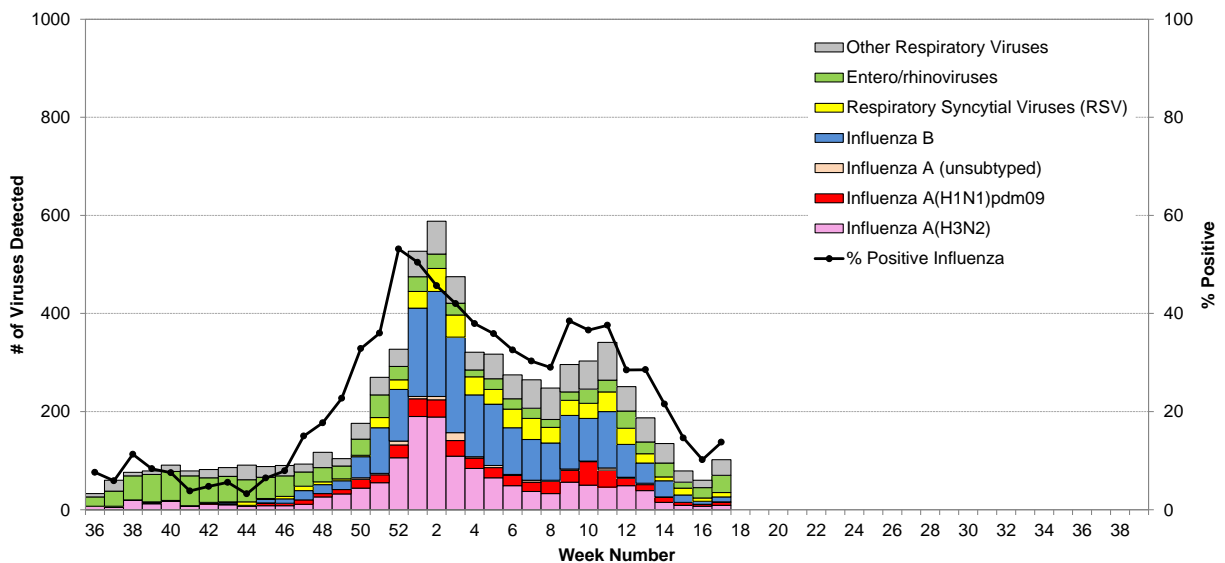
During the 2017-18 season (cumulatively since week 40, starting October 1, 2017), 3,762 (32%) patients tested positive for influenza at the BCCDC Public Health Laboratory (PHL), including 1,883 (50%) with influenza A [1,352 A(H3N2), 463 A(H1N1)pdm09 and 68 subtype pending], 1860 (49%) with influenza B and 19 patients who had both influenza A [15 with A(H3N2), three with A(H1N1)pdm09, and one with A(subtype pending)] and B detected during the season. Enterovirus was the most commonly detected non-influenza respiratory virus, in particular at the beginning of the season.

The 2017-18 season was characterized by co-circulation of influenza A(H3N2) and B(Yamagata). Overall influenza positivity at the BCCDC PHL began to increase in week 45, peaking around weeks 52-3 when positivity rates exceeded 40%. Influenza B viruses comprised an approximately equal proportion of influenza detections during this peak period and exceeded influenza A detections in most weeks thereafter. Influenza B activity began earlier and remained elevated throughout the season as compared to recent seasons, which were more typically characterized by late-season influenza B detections.

Elderly adults ≥ 65 years old were disproportionately represented among influenza detections during the 2017-18 season, related in part to the co-dominant A(H3N2) and B activity and high number of long-term care facility (LTCF) outbreaks, although younger age groups were also affected. Adults 20-64 years old and children aged 1-19 years old comprised a larger proportion of influenza A(H1N1)pdm09 detections.

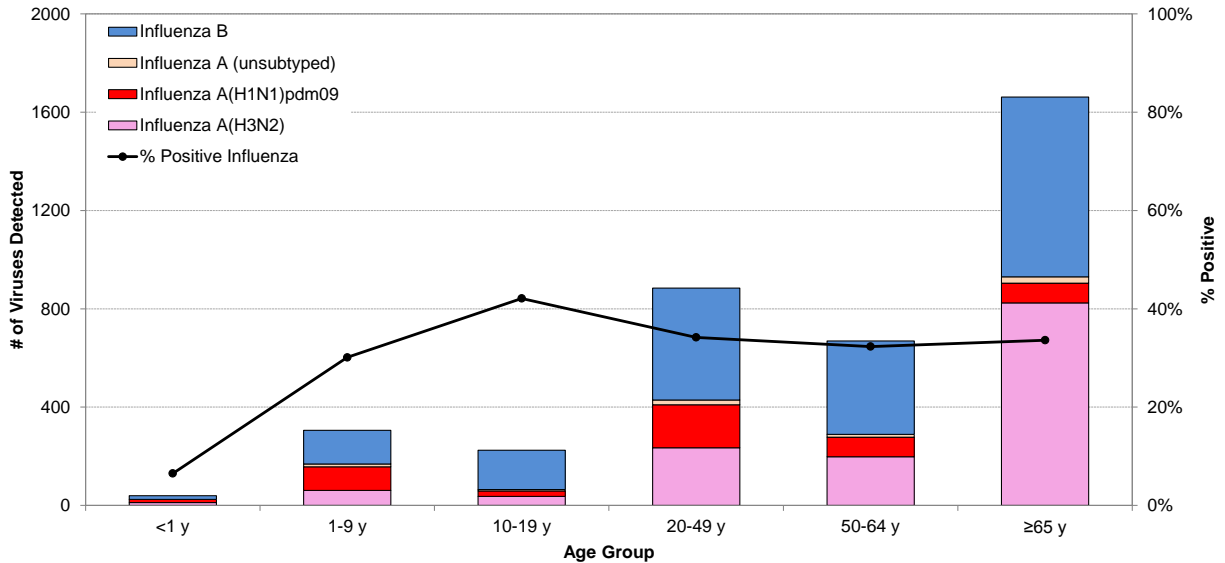
In weeks 15-17, 549 patients were tested for respiratory viruses at the BCCDC PHL. Of these, 73 (10%) tested positive for influenza including 42 (58%) with influenza A [25 A(H3N2), 16 A(H1N1)pdm09, and one A(subtype pending)] and 31 (42%) with influenza B. Overall influenza positivity remained between 10% and 15% in weeks 15-17. Influenza A viruses comprised a slightly greater proportion (~60%) of influenza detections during this period.

Influenza and other virus detections among respiratory specimens submitted to BCCDC Public Health Laboratory, 2017-18



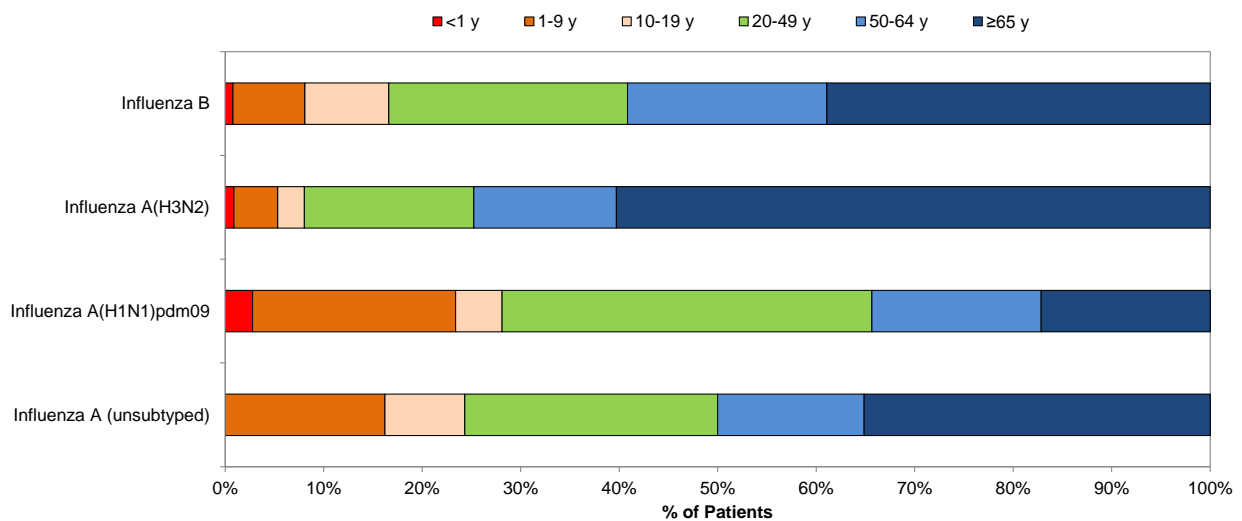
Source: BCCDC Public Health Laboratory (PHDRW); Data are current to May 2, 2018.

Cumulative number (since week 40) of influenza detections by type subtype and age group, BCCDC Public Health Laboratory, 2017-18



Source: BCCDC Public Health Laboratory (PHDRW); Data are current to May 2, 2018; figure includes cumulative influenza detections for specimens collected from weeks 40-17.

Age distribution of influenza detections (cumulative since week 40), BCCDC Public Health Laboratory, 2017-18



Source: BCCDC Public Health Laboratory (PHDRW); Data are current to May 2, 2018; figure includes cumulative influenza detections for specimens collected from weeks 40-17.

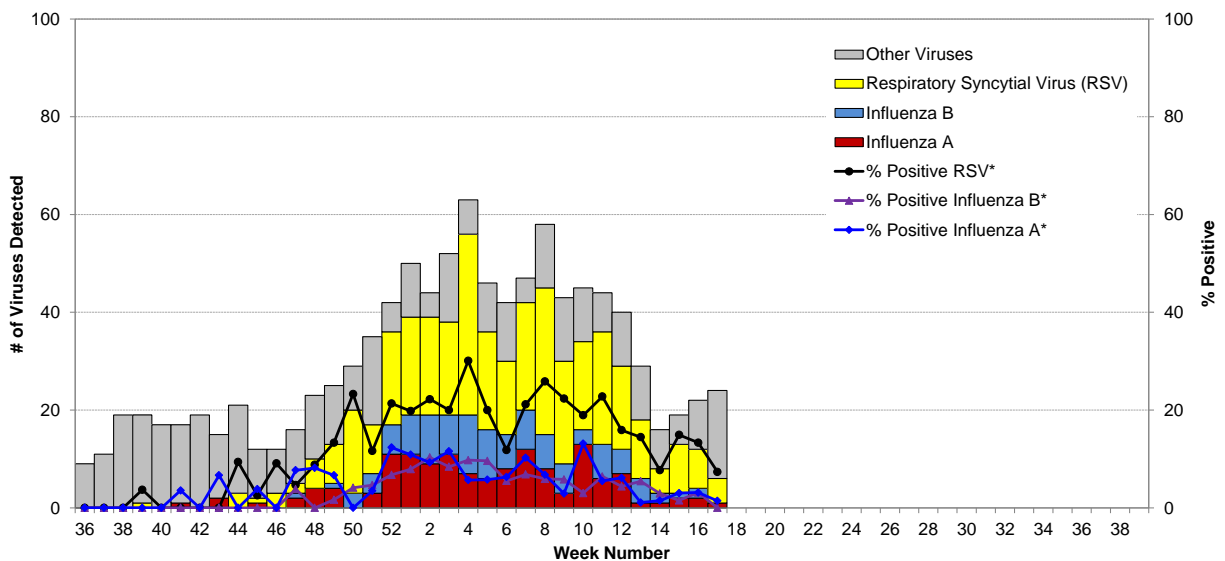
BC Children's and Women's Health Centre Laboratory

During the 2017-18 season (cumulatively since week 40, starting October 1, 2017) the BC Children's and Women's Health Centre (CWHC) laboratory conducted 2,261 tests for respiratory viruses. Of these, 136 (6%) were positive for influenza A and 116 (5%) were positive for influenza B. Influenza activity fluctuated around 10-20% from weeks 52-12, with co-circulation of influenza A and B throughout the season.

Respiratory syncytial viruses (RSV) were the dominant respiratory virus detected at the CWHC laboratory during the 2017-18 season with 371/2,254 (16%) tests positive cumulatively during the season. RSV positivity ranged from 12-30% from weeks 52-12.

In weeks 15-17, 200 tests for influenza viruses were conducted at the CWHC laboratory. Of these, 5 (3%) were positive for influenza A and 3 (2%) were positive for influenza B. RSV and rhinoviruses were the most commonly detected respiratory viruses during this period.

Influenza and other virus detections among respiratory specimens submitted to BC Children's and Women's Health Centre Laboratory, 2017-18



* Positive rates were calculated using aggregate data. The denominators for each rate represent the total number of tests; multiple tests may be performed for a single specimen and/or patient.

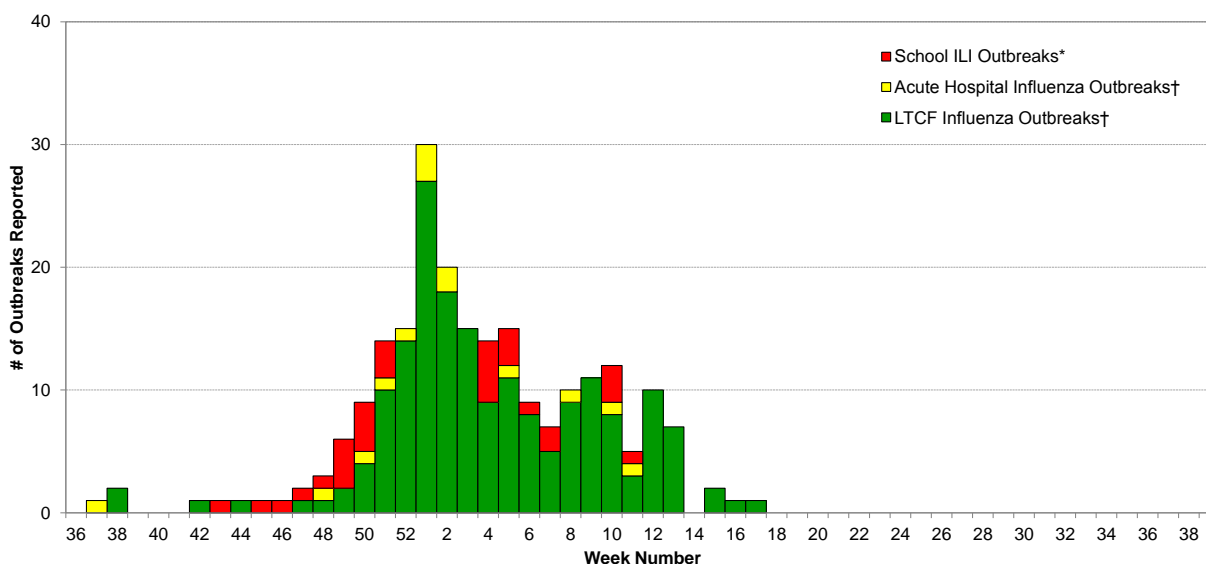
Influenza-like Illness (ILI) Outbreaks

During the 2017-18 season (cumulatively since week 37, starting September 10, 2017), a total of 195 laboratory-confirmed influenza outbreaks were reported including 181 in LTCFs, and 14 in acute care settings. The majority (113/195, 58%) of facility outbreaks reported this season had influenza B detected; however, a considerable number of outbreaks with influenza A were also reported (69/195, 35%) with the remaining 13 (7%) of outbreaks including both types A and B influenza detected. Of the influenza A outbreaks with subtype information available, 41/42 (98%) had A(H3N2) detected; only one A(H1N1)pdm09 outbreak was reported this season. Of the thirteen outbreaks with both influenza types detected, three included A(H3N2) and B and ten included influenza A with subtype unavailable and influenza B. There were 31 school ILI outbreaks reported without etiologic agent identified.

Compared to prior recent seasons, more outbreaks due to influenza B were reported this season, mirroring greater influenza B contribution more generally, notably B(Yamagata). Although the total count for the current season may change pending final data reconciliation activities, the number of LTCF outbreaks reported from week 40 to week 17 of the 2017-18 season (n=179) is the second highest for the same period of the past 15 seasons (since the 2003-04 season). The tally is lower than that of the same period during the A(H3N2) dominant epidemic in 2016-17 (n=198) but higher than during the A(H3N2) dominant epidemic in 2014-15 (n=165) and the recent A(H1N1)pdm09 dominant epidemics in 2013-14 (n=13) and 2015-16 (n=30).

Since our last bulletin three weeks ago, four new lab-confirmed influenza outbreaks were reported in long-term care facilities (LTCF); two with onset in week 15 in VIHA, one with onset in week 16 in NHA, and one with onset in week 17 in VIHA. Of the four outbreaks, three had influenza B detected and one had A(H3N2) detected.

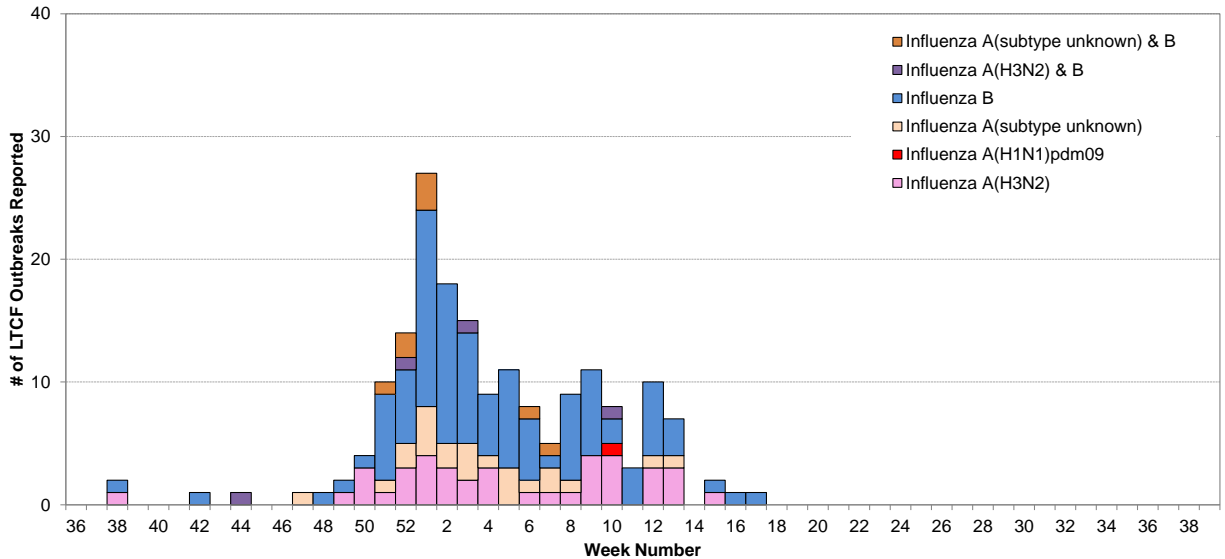
Number of influenza-like illness (ILI) outbreaks reported, British Columbia 2017-18



* School-based ILI outbreak defined as >10% absenteeism on any day, most likely due to ILI.

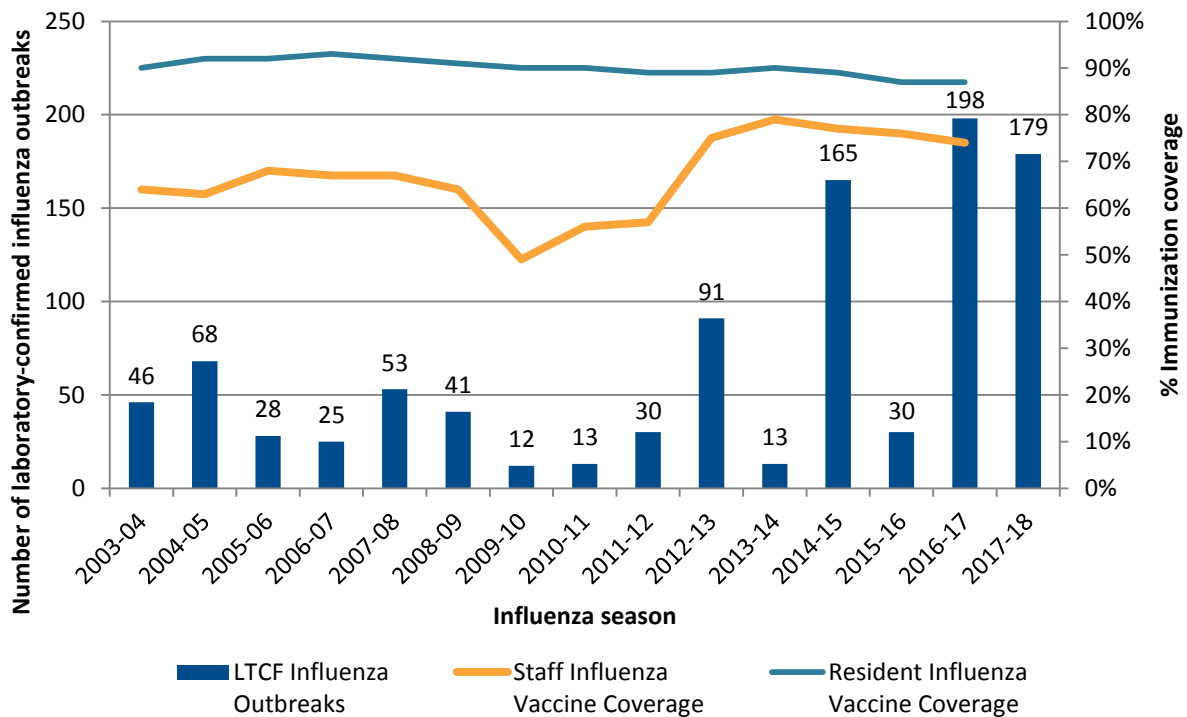
† Facility-based influenza outbreaks defined as 2 or more ILI cases within 7-day period, with at least one laboratory-confirmed case of influenza.

Number of influenza-like illness (ILI) outbreaks by Influenza Type/Subtype in long-term care facilities (LTCF), British Columbia 2017-18†



† Facility-based influenza outbreaks defined as 2 or more ILI cases within 7-day period, with at least one laboratory-confirmed case of influenza.

Number of Lab-confirmed Influenza Outbreaks and Staff/Resident Influenza Immunization Coverage in British Columbia Long-term Care Facilities (LTCFs) reported to BCCDC annually for the period spanning week 40 to week 17, 2003-04 to 2017-18 Seasons



* Immunization coverage estimates for the 2017-18 season are pending and total LTCF outbreak counts may also change pending final data reconciliation activities

National

FluWatch (week 16, April 15 to 21, 2018)

Overall, influenza activity in Canada continued to decrease, but parts of the country are still reporting localized activity. All indicators of influenza activity have either decreased or remained similar to the previous week. Detections of influenza A were greater than those of influenza B during week 16. To date this season, the majority of laboratory-confirmed cases, hospitalizations and deaths with influenza have been among adults 65 years of age and older. Details are available at: www.canada.ca/en/public-health/services/diseases/flu-influenza/influenza-surveillance/weekly-influenza-reports.html.

National Microbiology Laboratory (NML): Strain Characterization

From September 1, 2017 to May 3, 2018, the National Microbiology Laboratory (NML) received 3,358 influenza viruses from Canadian laboratories for antigenic characterization.

Influenza A(H3N2): Of the 1,426 influenza A(H3N2) viruses, only 375 (26%) had sufficient haemagglutination titre for antigenic characterization by haemagglutination inhibition (HI) assay. Of the 375 viruses characterized by HI assay, 291 (78%) were considered antigenically similar to a cell culture-propagated A/Hong Kong/4801/2014-like virus, the WHO-recommended A(H3N2) component for the 2017-18 northern hemisphere influenza vaccine, while 84 (22%) viruses (all belonging to genetic clade 3C.3a) showed reduced titre with ferret antisera raised against cell culture-propagated A/Hong Kong/4801/2014. Of the 375 viruses that were antigenically characterized with available sequencing information, 265 belonged to genetic clade 3C.2a, 26 belonged to subclade 3C.2a1 and 84 belonged to clade 3C.3a. Of the 1,051 viruses genetically characterized, 942 (90%) were reported to belong to genetic clade 3C.2a, which includes the A/Hong Kong/4801/2014 vaccine strain, while 107 (10%) belonged to subclade 3C.2a1 and 2 belonged to clade 3C.3a.

Influenza A(H1N1)pdm09: All of the 252 A(H1N1)pdm09 viruses characterized were antigenically similar to an A/Michigan/45/2015-like virus, the WHO-recommended influenza A(H1N1) component for the 2017-18 northern hemisphere influenza vaccine.

Influenza B: Of the 1,680 influenza B viruses characterized, 71 (4%) belonged to the B(Victoria) lineage and 1,609 (96%) belonged to the B(Yamagata) lineage. Among the 71 B(Victoria) viruses, 20 (28%) were characterized as antigenically similar to a B/Brisbane/60/2008(Victoria)-like virus, the WHO-recommended influenza B component for the 2017-18 northern hemisphere trivalent influenza vaccine, while 51 (72%) viruses showed reduced titre with ferret antisera produced against cell-propagated B/Brisbane/60/2008. Sequence analysis showed that 49 of the viruses that showed reduced titre had a two-amino acid deletion in the hemagglutinin (HA) gene; sequence is pending for the remaining 2 isolates. Among the 1,609 B(Yamagata) viruses, all were antigenically similar to a B/Phuket/3073/2013(Yamagata lineage)-like virus, the WHO-recommended influenza B component for the 2017-18 northern hemisphere quadrivalent influenza vaccine containing two influenza B strains.

National Microbiology Laboratory (NML): Antiviral Resistance

From September 1, 2017 to May 3, 2018, the NML received influenza viruses from Canadian laboratories for drug susceptibility testing.

Amantadine: Of the 1,741 influenza A viruses [1,485 A(H3N2) and 256 A(H1N1)pdm09] tested against amantadine, all were resistant except 8 A(H3N2) viruses which were sensitive.

Oseltamivir: Of the 1,450 influenza viruses [540 A(H3N2), 204 A(H1N1)pdm09, and 706 B] tested against oseltamivir, all were sensitive except one A(H3N2) virus and one A(H1N1)pdm09 virus with a H275Y mutation which were resistant.

Zanamivir: Of the 1,446 influenza viruses [536 A(H3N2), 204 A(H1N1)pdm09, and 706 B] tested against zanamivir, all were sensitive except two B viruses which were resistant.

Mid-season 2017-18 Vaccine Effectiveness Estimates

Canada

On February 1, 2018, Canadian researchers published the first estimates of mid-season influenza vaccine effectiveness (VE) for the 2017-18 season. Adjusted VE against A(H3N2) was low at 17% (95%CI: -14 to 40%). Higher adjusted VE was observed for influenza B at 55% (95%CI: 38 to 68%), despite prominent use of lineage-mismatched B(Victoria) trivalent vaccine in most regions. The full report is available as an open-access publication from *EuroSurveillance*:

<http://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2018.23.5.18-00035>

United States

On February 15, 2018, the US CDC published interim estimates of influenza vaccine effectiveness (VE) for the 2017-18 season. Adjusted VE against A(H3N2) was 25% (95% CI: 13 to 36%), comparable to Canadian estimates with both suggesting low protection against the dominant circulating strain. Adjusted VE against influenza B was 42% (95% CI: 25 to 56%), somewhat lower than previous Canadian findings despite the more prominent use of quadrivalent vaccines. The full report is available from *Morbidity and Mortality Weekly Report (MMWR)*:

https://www.cdc.gov/mmwr/volumes/67/wr/mm6706a2.htm?s_cid=mm6706a2_e

Spain (Navarre)

On February 15, 2018, Spanish researchers published interim estimates of influenza vaccine effectiveness (VE) for the 2017-18 season. The adjusted VE against influenza B, predominantly B(Yamagata), was 52% (95% CI: 12 to 74%) in the outpatient setting. This finding suggests moderate, cross-lineage protection against influenza B. The full report is available from *Eurosurveillance*:

<https://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2018.23.7.18-00057>

Hong Kong

On February 22, 2018, Hong Kong researchers published interim estimates of influenza vaccine effectiveness (VE) among hospitalized children for the 2017-18 season. The 2017-18 season in Hong Kong has been characterized by influenza B(Yamagata) activity. VE among children aged 6 months to 17 years of age was 65% (95% CI: 40 to 80) for influenza B. Differences in study design, patient populations and other epidemiological factors, as well as the use of predominantly quadrivalent influenza vaccine, which includes the B(Yamagata) lineage virus, should be taken into account in comparing these findings to other studies. The full report is available from *Eurosurveillance*:

<https://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2018.23.8.18-00062>

Europe (I-MOVE Group)

On March 1, 2018, European researchers from the I-MOVE multicentre case-control study published interim estimates of influenza vaccine effectiveness (VE) for the 2017-18 season. The 2017-18 season in I-MOVE countries has been characterised by predominant circulation of influenza B, with a greater proportion of A(H1N1)pdm09 than A(H3N2) among influenza A detections.

Adjusted VE against A(H3N2) was -16% (95% CI: -96 to 31) for all ages suggesting no protection, and consistent with Canadian findings of low VE. Despite predominant use of trivalent influenza vaccine containing lineage-mismatched influenza B(Victoria) antigen, adjusted VE against influenza B, that was predominantly B(Yamagata), was 39% (95% CI: 19 to 54) for all ages and 49% (95% CI: 19 to 67) when restricted to mismatched B(Yamagata) specimens. This finding suggests moderate, cross-lineage protection against influenza B, which has been observed previously for influenza B and is also consistent with Canadian findings. The full report is available from *Eurosurveillance*:

<https://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2018.23.9.18-00086>

Updated Antiviral Guidelines

The Association of Medical Microbiology and Infectious Disease Canada (AMMI Canada) previously released guidance on the use of antiviral drugs in anticipation of the low vaccine effectiveness for the 2017-18 influenza season. These guidelines are available at: <https://www.ammi.ca/Update/79.ENG.pdf>.

International

USA (week 16, April 15 to 21, 2018)

During week 16, influenza activity decreased in the United States. Overall, influenza A(H3N2) viruses have predominated this season. Since early March, influenza B viruses have been more frequently reported than influenza A viruses. The percentage of respiratory specimens testing positive for influenza in clinical laboratories decreased. The proportion of deaths attributed to pneumonia and influenza (P&I) was below the system-specific epidemic threshold in the National Center for Health Statistics (NCHS) Mortality Surveillance System. Four influenza-associated pediatric deaths were reported. A cumulative rate of 105.3 laboratory-confirmed influenza-associated hospitalizations per 100,000 population was reported. The proportion of outpatient visits for influenza-like illness (ILI) was 1.7%, which is below the national baseline of 2.2%. The geographic spread of influenza in four states was reported as widespread; Guam, Puerto Rico and nine states reported regional activity; 25 states reported local activity; the District of Columbia, the U.S. Virgin Islands and 10 states reported sporadic activity; and two states reported no influenza activity. Details are available at: www.cdc.gov/flu/weekly/.

WHO (April 30, 2018)

Influenza activity returned to inter-seasonal levels in most of the countries in the temperate zone of the northern hemisphere except for Eastern Europe. In the temperate zone of the southern hemisphere, influenza activity remained below the seasonal thresholds. Worldwide, seasonal influenza subtypes A and B accounted for approximately the same proportion of influenza detections.

From April 2, 2018 to April 15, 2018, the WHO GISRS laboratories tested more than 137,071 specimens, of which 21,639 (16%) were positive for influenza viruses: 12,034 (56%) were typed as influenza A and 9,605 (44%) as influenza B. Of the subtyped influenza A viruses, 3,077 (58%) were influenza A(H1N1)pdm09 and 2,211 (42%) were influenza A(H3N2). Of the characterized B viruses, 917 (89%) belonged to the B(Yamagata) lineage and 117 (11%) to the B(Victoria) lineage.

Previous updates are available at: www.who.int/influenza/surveillance_monitoring/updates/en/.

WHO Recommendations for Influenza Vaccines

WHO Recommendations for 2017-18 Northern Hemisphere Influenza Vaccine

On March 2, 2017, the WHO announced the recommended strain components for the 2017-18 northern hemisphere influenza vaccine:*

- an A/Michigan/45/2015 (H1N1)pdm09-like virus;†
- an A/Hong Kong/4801/2014 (H3N2)-like virus;
- a B/Brisbane/60/2008 (Victoria-lineage)-like virus;
- a B/Phuket/3073/2013 (Yamagata-lineage)-like virus (quadrivalent vaccines only).

* These recommended strains are the same as those recommended for the 2017 southern hemisphere vaccine and represent a change for one of the four components used for the 2016-17 northern hemisphere vaccine.

† Recommended strain represents a change from an A/California/7/2009-like virus, which had been retained as the A(H1N1)pdm09 component since the 2009 pandemic, to an A/Michigan/45/2015-like virus belonging to the phylogenetic subclade 6B.1.

For further details: www.who.int/influenza/vaccines/virus/recommendations/2017_18_north/en/.

WHO Recommendations for the 2018-19 Northern Hemisphere Influenza Vaccine

On February 22, 2018, the WHO announced recommended strain components for the 2018-19 northern hemisphere influenza vaccine:*

- an A/Michigan/45/2015 (H1N1)pdm09-like virus;†
- an A/Singapore/INFIMH-16-0019/2016 (H3N2)-like virus;‡
- a B/Colorado/06/2017-like (Victoria-lineage)virus.§
- a B/Phuket/3073/2013-like (Yamagata-lineage)virus (quadrivalent vaccines only).§

* Recommended strains represent a change for two of the four components used for the 2017-18 northern hemisphere vaccines. Recommended strains are similar to the 2018 southern hemisphere vaccine with the exception of the B/Colorado/06/2017-like virus which replaces the B/Brisbane/60/2008-like virus as the B(Victoria-lineage) virus component.

† Recommended strain is the same as recommended for the 2017-18 northern hemisphere and 2018 southern hemisphere vaccines. The A/Michigan/45/2015-like virus belongs to the phylogenetic subclade 6B.1.

‡ Recommended strain for the A(H3N2) component represents a phylogenetic clade-level change from a clade 3C.2a virus to a clade 3C.2a1 virus.

§ Recommended strain for the influenza B component represents a change for the B(Victoria)-lineage component compared to the 2017-18 northern hemisphere and 2018 southern hemisphere vaccines from a B/Brisbane/60/2008-like virus, which had been retained since the 2009-10 season, to a B/Colorado/06/2017-like virus, belonging to the clade 1A antigenic drift variant with a two-amino acid deletion at positions 162-163. The B(Yamagata)-lineage component, B/Phuket/3073/2013-like virus, recommended for quadrivalent vaccine remains unchanged from the 2017-18 northern hemisphere vaccine.

For further details: http://www.who.int/influenza/vaccines/virus/recommendations/2018_19_north/en/.

Additional Information

Explanatory Note:

The surveillance period for the 2017-18 influenza season is defined starting in week 40. Weeks 36-39 of the 2016-17 season are shown on graphs for comparison purposes.

List of Acronyms:

ACF: Acute Care Facility

AI: Avian influenza

FHA: Fraser Health Authority

HBoV: Human bocavirus

HMPV: Human metapneumovirus

HSDA: Health Service Delivery Area

IHA: Interior Health Authority

ILI: Influenza-Like Illness

LTCF: Long-Term Care Facility

MSP: BC Medical Services Plan

NHA: Northern Health Authority

NML: National Microbiological Laboratory

A(H1N1)pdm09: Pandemic H1N1 influenza (2009)

RSV: Respiratory syncytial virus

VCHA: Vancouver Coastal Health Authority

VIHA: Vancouver Island Health Authority

WHO: World Health Organization

Current AMMI Canada Guidelines on the Use of Antiviral Drugs for Influenza:

www.ammi.ca/Update/79.ENG.pdf

Web Sites:

BCCDC Emerging Respiratory Pathogen Updates:

<http://www.bccdc.ca/health-professionals/data-reports/communicable-diseases/emerging-respiratory-virus-updates>

Influenza Web Sites

Canada – Influenza surveillance (FluWatch): <https://www.canada.ca/en/public-health/services/diseases/flu-influenza/influenza-surveillance.html>

Washington State Flu Updates: <http://www.doh.wa.gov/portals/1/documents/5100/420-100-fluupdate.pdf>

USA Weekly Surveillance Reports: www.cdc.gov/flu/weekly/

Joint ECDC – WHO/Europe weekly influenza update (Flu News Europe): flunewseurope.org

WHO – Weekly Epidemiological Record: www.who.int/wer/en/

WHO Collaborating Centre for Reference and Research on Influenza (Australia): www.influenzacentre.org/

Australian Influenza Report:

www.health.gov.au/internet/main/publishing.nsf/content/cda-surveil-ozflu-flucurr.htm

New Zealand Influenza Surveillance Reports: www.surv.esr.cri.nz/virology/influenza_weekly_update.php

Avian Influenza Web Sites

WHO – Influenza at the Human-Animal Interface: www.who.int/csr/disease/avian_influenza/en/

World Organization for Animal Health: www.oie.int/eng/en_index.htm

Contact Us:

Tel: (604) 707-2510

Fax: (604) 707-2516

Email: InfluenzaFieldEpi@bccdc.ca

Communicable Disease Prevention and Control Services (CDPACS)

BC Centre for Disease Control

655 West 12th Ave, Vancouver BC V5Z 4R4

Online: <http://www.bccdc.ca/health-professionals/data-reports/communicable-diseases/influenza-surveillance-reports>

Influenza-Like Illness (ILI) Outbreak Summary Report Form

Please complete and email to ilioutbreak@bccdc.ca

Note: This form is for provincial surveillance purposes.

Please notify your local health unit per local guidelines/requirements.

ILI: Acute onset of respiratory illness with fever and cough and with one or more of the following: sore throat, arthralgia, myalgia, or prostration which *could* be due to influenza virus. In children under 5, gastrointestinal symptoms may also be present. In patients under 5 or 65 and older, fever may not be prominent.

Schools and work site outbreak: greater than 10% absenteeism on any day, most likely due to ILI.

Residential institutions (facilities) outbreak: two or more cases of ILI within a seven-day period.

A	<u>Reporting Information</u> Health unit/medical health officer notified? <input type="checkbox"/> Yes <input type="checkbox"/> No
	Person Reporting: _____ Title: _____
	Contact Phone: _____ Email: _____
	Health Authority: _____ HSDA: _____
	Full Facility Name: _____
	Is this report: <input type="checkbox"/> First Notification (<i>complete section B below; Section D if available</i>) <input type="checkbox"/> Update (<i>complete section C below; Section D if available</i>) <input type="checkbox"/> Outbreak Over (<i>complete section C below; Section D if available</i>)

B	<u>First Notification</u>														
	Type of facility: <input type="checkbox"/> LTCF <input type="checkbox"/> Acute Care Hospital <input type="checkbox"/> Senior's Residence <i>(if ward or wing, please specify name/number: _____)</i> <input type="checkbox"/> Workplace <input type="checkbox"/> School (grades: _____) <input type="checkbox"/> Other (_____)														
	Date of onset of first case of ILI (dd/mm/yyyy): <u>DD / MMM / YYYY</u>														
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%;">Numbers to date</th> <th style="width: 50%;">Residents/Students</th> <th style="width: 25%;">Staff</th> </tr> </thead> <tbody> <tr> <td>Total</td> <td></td> <td></td> </tr> <tr> <td>With ILI</td> <td></td> <td></td> </tr> <tr> <td>Hospitalized</td> <td></td> <td></td> </tr> <tr> <td>Died</td> <td></td> <td></td> </tr> </tbody> </table>	Numbers to date	Residents/Students	Staff	Total			With ILI			Hospitalized			Died	
Numbers to date	Residents/Students	Staff													
Total															
With ILI															
Hospitalized															
Died															

C	<u>Update AND Outbreak Declared Over</u>														
	Date of onset for most recent case of ILI (dd/mm/yyyy): <u>DD / MMM / YYYY</u>														
	If over, date outbreak declared over (dd/mm/yyyy): <u>DD / MMM / YYYY</u>														
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Total															
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Hospitalized															
Died															

D	<u>Laboratory Information</u>
	Specimen(s) submitted? <input type="checkbox"/> Yes (location: _____) <input type="checkbox"/> No <input type="checkbox"/> Don't know If yes, organism identified? <input type="checkbox"/> Yes (specify: _____) <input type="checkbox"/> No <input type="checkbox"/> Don't know