Pan American STEPS Survey
Noncommunicable Diseases and Risk Factors

Guyana
2016

Pan American STEPS Risk Factor Surveillance Survey Guyana 2016 Report

Message from the Minister of Public Health, Guyana

Guyana is a country of unique diversification which makes it stand out from among most countries within the region. Land of many waters; six rich ethnic cultures under the motto of One people, One nation, One destiny, only English speaking country in South America; these are but a few of the characteristics that set Guyana apart from all others. However, its health profile has made it not so unique, as we continue to share the same issues and challenges as those around us.

In this regard, our main disease burden is the formidable gamut of noncommunicable diseases solely responsible for most of our deaths for as long as we can remember. Sadly, the figures continue to rise despite our many efforts to control the growing epidemic. Tobacco smoke, abuse of alcohol, lack of physical activity and unhealthy diets have been the main contributing factors to the onset of the noncommunicable diseases groups; sad to say, these very same factors are avoidable and can over time reduce the complications and deaths arising from the myriad of conditions namely cancers, heart diseases, diabetes and chronic lung diseases.

Regrettably, Guyana has fallen into the same health profile as other countries for precisely the same reasons; people are walking and exercising less, cooking less, are more stressed mentally and have more disposable income to indulge in unhealthy lifestyles. The increased carbon foot prints have brought about more pollution which has added to the already unhealthy environment, and it is quite clear that in order for the desired outcomes to be achieved, intense changes in behavior and lifestyles must occur.

The Government has and continues to do its part in ensuring that there is a halt to the growing incidence of noncommunicable diseases. An investment in the much needed Stepwise Approach to Chronic Diseases Risk Factor Surveillance was undertaken. The STEPS Survey has provided the country with the baseline figures related to the risk factors and vulnerable groups linked to noncommunicable diseases. We are in a much better position, with this data, to develop and implement appropriate responses to the surging epidemic.

This report is a commitment from the Government in ensuring that the optimum quality of health care is provided at every level to the People of Guyana. The guarantee of providing essential health services and medications is resonant, and it is my hope that the report brings to the table those burning issues which MUST be urgently addressed. Further, the need for a multi-sectoral approach cannot be overstated, for this is the only way forward in finding the right solutions for the challenges that are contained within this report.

The STEPS report is an important document, for which the country remains grateful. Sincerest gratitude is extended to all those who played a part, regardless of how small, and I wish to appeal to all stakeholders to continue to work in close collaboration, with the earnest resolve of impacting effectively on noncommunicable diseases, as we seek to address the country's health in the most sustainable and equitable manner. Our peoples' health and well-being are pivotal to the development and progress of our beloved country.

Hon. Volda Ann Lawrence, M.P.

Minister of Public Health

Message from PAHO

Noncommunicable diseases (NCDs) are a complex public health matter and economic development challenge, which requires different interventions from the health sector, as well as sectors outside of health. The adoption of the Port of Spain Declaration in 2007 by Member States of the Caribbean Community (CARICOM), which focused on countries uniting to stop the epidemic of NCDs, and later the United Nations High Level meeting in 2011, represented a global struggle against NCDs. For the first time, Heads of States acknowledged that NCDs presented a major challenge to socioeconomic development.

The 2030 Agenda for Sustainable Development adopted at the United Nations Summit on Sustainable Development in September 2015, recognized NCDs as a major challenge for sustainable development. Countries have committed to develop national responses to the overall implementation of the Agenda, including the following goals related to NCDs:

- Reduce by one third premature mortality from NCDs
- Strengthen responses to reduce the harmful use of alcohol
- Achieve universal health coverage (UHC)
- Strengthen the implementation of the WHO Framework Convention on Tobacco Control (FCTC)
- Support the research and development of vaccines and medicines for NCDs that primarily affect developing countries
- Provide access to affordable essential medicines and vaccines for NCDs

Notwithstanding the implementation of interventions to reduce the growing global and regional burden, NCDs continue to be the leading cause of preventable and premature death and illness in Guyana.

The Pan American Health Organization/World Health Organization (PAHO/WHO) was pleased to provide the technical guidance for the first nationally representative Pan American STEPS Survey on Noncommunicable Diseases and Risk Factors. This survey was conducted in partnership with the Ministry of Public Health, Bureau of Statistics, and the Caribbean Public Health Agency and is a . The results of the survey provide baseline information on NCDs and their risk factors in the population.

PAHO/WHO is happy to report that the survey was conducted using an electronic device, instead of using printed materials; this made the data cleansing and primary analysis easier and less time consuming. This highlights the commitment of the Ministry of Public Health and the Bureau of Statistics to integrate modern IT technologies into its processes and interventions.

PAHO/WHO is confident that the findings from the survey will provide critical information to develop and guide evidence-driven interventions that address the growing burden of NCDs in Guyana. PAHO congratulates the Ministry of Public Health and its collaborating partners on the development of the Pan American STEPS Survey on Noncommunicable Diseases and Risk Factors and looks forward to providing sustained support for the implementation of interventions at the country and regional levels to reduce the growing burden of these diseases in Guyana.

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Abbreviations

BMI	Body Mass Index
CARICOM	Caribbean Community
CI	Confidence Interval
cm	Centimeters
DALY	Disability-Adjusted Life Year
DBP	Diastolic Blood Pressure
ED	Enumeration District
g	Grams
GMF	Global Monitoring Framework
GYD	Guyanese Dollar
GYTS	Global Youth Tobacco Survey
HDL	High Density Lipoprotein
HPV	Human Papillomavirus
LDL	Low Density Lipoprotein
LMIC	Low and Middle-Income County
mg/dl	Milligrams per Deciliter
mmHG	Millimetres of Mercury
mmol/L	Millimoles per Litre
NCD	Noncommunicable Disease
NCD CCS	NCD Country Capacity Survey
Pap	Papanicolaou test
PSU	Primary Sampling Unit
SBP	Systolic Blood Pressure
UHC	Universal Health Coverage
UMIC	Upper Middle-Income Country
UNHLM	United Nations High Level Meeting
USD	United States of America Dollar
VIA	Visual Inspection with Acetic Acid
WHO FCTC	World Health Organization Framework Convention on Tobacco Control

Executive Summary

Noncommunicable diseases (NCDs) and their risk factors are the leading cause of death worldwide. In Guyana, 68% of deaths in 2016 were attributed to NCDs, specifically, cardiovascular disease (34%), cancers (8%), diabetes (8%), and chronic respiratory diseases (3%). The risk of premature death (between the ages of 30-70 years) from NCDs is 31% in Guyana, which has negative impacts on the economic productivity and health care expenditures of the country(1).

The Pan American STEPS survey is version of the WHO STEPS wise approach methodology for the region of the Americas. In order to produce national estimates for the burden of NCDs and their risk factors and assess changes over time within a representative sample of the population, the World Health Organization (WHO) and Pan American Health Organization (PAHO) developed the Pan American STEPS Survey Noncommunicable Diseases and Risk Factors instrument. This Pan American STEPS Survey includes three different levels of data collection. Step 1 is a household questionnaire that gathers demographic and behavioral information; Step 2 collects physical measurements; and Step 3 collects blood and urine samples for biochemical analysis. In Guyana, Step 2 data collection included body weight, height, waist circumference, and blood pressure measurements. Wet blood samples (venous blood samples) were used for Step 3 that measured blood glucose, lipid profiles, and presence of hemoglobinopathies, such as sickle cell anemia and Thalassemia[1].

Guyana conducted the Pan American STEPS Survey version 3.1 from September 28 to October 26, 2016 using digital tablets. The Survey was implemented as a population-based survey of adults aged 18-69 years old. The sample size and allocation were based upon the 2012 census frame and included 288 enumeration districts from both the coastal and inland regions; 12 households were randomly selected within each enumeration district. A total of 3.456 households were selected for participation in Step 1 and 50% of this sample was randomly selected for participation in Step 3. Mapping and relisting of the 288 enumeration districts was conducted in July 2016 since the 2012 census was outdated.

The total sample size was 3,456 adults and the overall response rate was 77% for Steps 1 and 2. For Step 3, the total sample size was 1,728 and the overall response rate was 40%. The sampling methodology and weighting of the data in analysis facilitated the representativeness of the results for the population in Guyana. The use of STEPS as a standardized and validated tool also ensured the comparability of the results.

Of the 2,662 respondents, 40.1% (1,068) were males and 59.9% (1,594) were females. A majority (60.1%) of both males and females represented the younger age bracket, ages 18-44.

Tobacco control

Overall prevalence of current tobacco smoking was 15.4% (12.3-18.4) for both males and females across all age groups. Males were much more likely to be current smokers than females (26.6%, 21.2-32.0 and 3.3%, 2.3-4.4, respectively). Likewise, the pattern of consumption demonstrates

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[1] Data on hemoglobinopathies, such as sickle cell anemia and Thalassemia is reported elsewhere.

more daily smokers than occasional smokers within the adult population (10.8% and 4.6%, respectively). Older males aged 45-69 reported higher current daily smoking (24.6%, 19.3-30.0), yet also represented the largest group of former smokers (30.4%, 23.6-37.1). Excluding "other," manufactured cigarettes were the most common type of tobacco smoked among current smokers, followed by cigars, cheroots, cigarillos, and hand-rolled cigarettes (95.3%, 92.4-98.2; 7.0%, 2.4-11.6; and 7.0%, 3.2-10.8, respectively).

Nearly one third of adults (29.4%, 26.7-32.1) reported that they saw advertisements promoting cigarettes in stores within the last 30 days. Among current smokers, 85.9% (79.8-91.9) reported noticing health warnings on cigarette packages and of these, 63.5% (54.0-73.0) thought about quitting because of the warning labels. It is important to acknowledge that the 2016 Pan American STEPS Survey was conducted prior to the introduction of the Tobacco Control Act 2017, as such, there were no tobacco control policy in place at the time.

Alcohol

Alcohol consumption was more common among males than females with more than half of all males reporting drinking in the past 30 days (59.3%, 54.9-63.8 and 21.4%, 18.9-24.0, respectively). Heavy episodic drinking, defined as consuming at least 60 grams or more of pure alcohol on at least one occasion in the past 30 days, was also more common among males, particularly those 18-44 years old (38.4%, 32.7-44.2). This demonstrates patterns of alcohol use that may lead to acute consequences, such as violence and injuries.

Healthy diet and lifestyle

Consumption of the recommended five servings of fruits and vegetables per day was met by only 6.4% (5.0-7.8) of adults 18-69. Vegetables were consumed more frequently than fruits (4.8 days, 4.7-5.0 and 3.3 days, 3.2-3.4, respectively).

Information was also collected regarding self-reported salt consumption. Lowering salt in diet was acknowledged as very important (70.9%, 67.5-74.3); though less than half reported reading salt or sodium content on food labels and buying low sodium alternatives (40.2%, 37.0-43.4 and 35.8%, 32.7-38.9, respectively). This dichotomy suggests a gap between knowledge and practice in lowering salt intake.

Physical activity was also inadequate with 29.3% (26.9-31.8) not meeting the WHO recommendations. Both males and females reported physical activity from work and for transport, with less activity during leisure time (53.9%, 51.1-56.6; 33.9%, 31.2-36.6; and 12.3%, 10.7-13.8, respectively). Physical inactivity levels were reflected in prevalence of overweight and obesity. Half of adults were considered overweight (50.3%, 24.6-28.9) or obese (23.6%, 21.3-25.9). Physical inactivity was lower among females, as such, females were more likely to have a BMI higher than or equal to 25 kg/m^2 than males (61.8%, 58.6-65.0 and 39.8%, 34.6-44.9, respectively).

Health system response to NCDs and risk factors

Approximately one in four adults in Guyana have not had their blood pressure measured (24.1%, 21.0-27.2) and most adults have never had their blood sugar or total cholesterol measured

(52.4%, 49.9-54.9 and 72.1%, 69.8-74.3, respectively). However, one in every four (26.4%) adults had raised blood pressure (SBP ≥140 and/or DBP ≥ 90 mmHg or higher) or were currently on medication for raised blood pressure. Among those diagnosed with raised blood pressure, nearly half (45.5%) were unaware of their condition, suggesting there may be a large proportion of hypertension not yet diagnosed within the population. Less than one in every five (17.1%) adults aged 18-69 had controlled their raised blood pressure. Likewise, one in every ten (11.5%, 8.5-14.4) had high blood sugar or were on medication for diabetes and nearly half of all adults (50.1%, 45.7-54.5) had high cholesterol or were on medication for high cholesterol.

Females and those in the 45-69 age group were most likely to receive lifestyle advice from a doctor when compared to males aged 18-44. The most frequent lifestyle advice offered was related to diet and maintaining a healthy body weight, which may reflect the responsiveness of the health system to stem the overweight and obesity epidemic.

Health screenings are also important tools that when standardized can lead to early detection and prevention of disease. However, in Guyana, a majority of females have never had a screening test for cervical cancer, mammogram, or breast exam (77%, 73.9-80.1; 89.9%, 88.0-91.9; and 70.9%, 67.8-74.1, respectively); likewise, a majority of men never have had a prostate exam (6.7%, 5.2-8.3 have had an exam).

Finally, the Pan American STEPS Survey shows a majority (66.8%, 64.8-68.8) of adults in Guyana demonstrated 1-2 risk factors and nearly 75% (73.1-77.4) of those aged 18-44 years old fell into this category, suggesting the likelihood of developing chronic diseases is occurring at younger ages. Nearly one in every three adults (31.9%, 29.9-33.8) had 3 or more risk factors. This risk assessment considered current daily smoking habits, insufficient fruit and vegetable consumption, physical inactivity, obesity, and the existence of raised blood pressure.

Recommendations

The results of the Pan American STEPS Survey reinforce the need for continued focus and implementation of Guyana's Strategic Plan for the Integrated Prevention and Control of Chronic Noncommunicable Diseases and their Risk Factors, 2013-2020. As such, the following recommendations are presented to reduce the burden of NCDs and risk factors in Guyana and are based upon the respective priority actions of the WHO Global Action Plan for NCDs 2013:

Priority Action 1: Reigniting the political commitment

- NCDs should remain as a priority issue for attention and resources as outlined in Guyana's National Health Vision 2020 and adequate resources allocated for the sustained implementation of the Strategic Plan for the Integrated Prevention and Control of Chronic Noncommunicable Diseases and their Risk Factors, 2013-2020.

Priority Action 2 - Implement multisectoral NCDs plans of action

- Guyana should continue to work to build the capacity of the National NCDs Commission.
- Efforts to collate data on NCDs and related risk factors in the country from other health sectors should be defined.

- The country should also strengthen efforts to undertake health economic studies on NCDs to generate evidence on cost of NCDs and their impact in the country and the region to guide NCDs policies and plans.
- Guyana should continue to use the WHO Tools for developing, implementing and monitoring the implementation of the National Multisectoral Action Plan for NCDs.
- Efforts should be made to strengthen partnerships and collaboration with academic institutions, civil society organizations, and UN agencies, including PAHO, in an effort to harmonize and intensify efforts for NCDs prevention and control within the country.

Priority Action 3 – Implement regulatory policies on risk factors

- Guyana should strengthen efforts to support region-wide initiatives, to develop where necessary, and implement common regulations and legislations for tobacco control, alcohol, ultra -processed foods and sugar sweetened beverages as part of CARICOM's responsibility.
- There should be sustained advocacy and action for the inclusion of taxes in the country's national tobacco legislation in keeping with the benchmark of 70%.
- There should be finalization of the National Alcohol Policy and more aggressive efforts to develop and/or adopt policies to promote physical activity

Priority Action 4 - Work towards universal health coverage and universal access to health

- Guyana should continue to work aggressively towards the achievement of universal health coverage and universal access to health.
- The country should endeavor to utilize the PAHO strategic fund to improve access to quality NCDs medication at lower prices for greater investment in health at the primary health care level and implement human resources for health training in order to increase skills and competencies of personnel in NCDs prevention, screening and early detection, and NCDs management.
- The country should continue to work to strengthen the delivery of health services at the regional levels and foster better collaboration with other sectors outside of health, particularly the Ministry of Communities.

Priority Action 5 - Strengthen surveillance and data collection

- The country should focus to strengthen at least 4 of the key sources of information that are relevant for NCDs: mortality information system, population-based surveys collection data on youth and adult, cancer registry and primary health care information system.
- Guyana should strengthen their capacity to monitor its progress on the implementation of policies and measure the 25 indicators and 9 targets established at the Global Monitoring Framework on NCDs.
- Pan American STEPS Survey should be integrated at the national survey system established by the Guyana Bureau of Statistics to be implemented every 4 to 5 years with funds being planned and allocated for this activity as part of the national calendar.
- NCDs and their Risk Factors should be included in the national surveillance system response normative along with the communicable disease, violence and injuries.

Introduction

Commitments to Control and Prevent NCDs

In response to the growing burden of NCDs, global and regional commitments have been made over the past 15 years to raise the profile of NCDs and their risk factors in health, social protection, and economic development agendas.

The landmark 2007 Port of Spain Declaration of the Caribbean Community (CARICOM) was a crucial step towards the United Nations High Level Meeting on NCDs (UNHLM) and its political declaration adopted in 2011 (2, 3). The 2011 Political Declaration lead to efforts to respond to the burden of NCDs, including the development and endorsement of the Global (2013-2020) and Regional (2013-2019) Action Plans for the Prevention and Control of NCDs (4, 5). In addition to establishing objectives and lines of work, the Global Action Plan provides two important tools: a menu of policy options and cost-effective interventions that address the key NCDs and risk factors known as "NCDs Best Buys" and a Global Monitoring Framework (GMF) that is comprised of 9 voluntary targets and 25 indicators (6, 7).

During the second UNHLM on NCDs held in 2014, an outcome document was presented establishing the need to monitor progress in the implementation of the "NCDs Best Buys" (8). Then in 2015, world leaders formally adopted the 2030 Agenda for Sustainable Development at the United Nations, in which NCDs were included and developed 10 progress indicators to be used by the World Health Organization (WHO) to demonstrate progress achieved in the implementation of commitments included in the 2011 UN Political Declaration and 2014 UN Outcome Document on NCDs (9, 10). Most recently in 2018, the third UNHLM on NCDs was held calling for an acceleration of response to NCDs (11).

In Guyana, the Strategic Plan for the Integrated Prevention and Control of Chronic Noncommunicable Diseases and their Risk Factors, 2013-2020, aligns with Global and Regional action plan for the prevention and control of NCD (8, 12). This plan includes a framework of action that addresses the need for multisectoral policies and partnerships, NCD risk factors and protective factors, health system response, surveillance, and research.

To track progress toward achievements, Guyana's Strategic Plan for the Integrated Prevention and Control of Chronic Noncommunicable Diseases and their Risk Factors, 2013-2020 includes the 9 voluntary targets from the GMF (12). The timely measurement and reporting of these monitoring frameworks require a surveillance system that can produce and analyze data in a systematic, periodic, standardized, and sustainable manner. These data should be used to guide decision-making processes. Guyana's successful completion of this first Pan American STEPS Survey represents its commitment to produce a baseline to monitor NCDs and strengthen national surveillance capacity.

Overview of the burden of NCDs

NCDs are by far the major cause of deaths globally and in the Americas. In 2016, 81% of all deaths were due to NCDs. Among these deaths, 39% were between the ages of 30 to 70 years old. Cardiovascular diseases (34.9%), cancer (24.3%), diabetes (6.2%) and respiratory chronic

diseases (8.9%), are the four leading causes of NCD premature deaths (30-70 years old) in the Region. In 2016, a 30-year-old individual leaving in the Americas had a 15.1% chance of dying from any of the four major NCDs before reaching the age of 70. (13).

These four main NCDs share four modifiable risk factors: tobacco use, harmful use of alcohol, unhealthy diet, and physical inactivity. These in turn lead to other key metabolic/physiological changes, such as overweight and obesity, raised blood pressure, raised blood glucose, and higher cholesterol levels (7, 14). Comparisons of the prevalence of risk factors across the six WHO regions highlight the worrying state of health in the Americas.

The worldwide prevalence of overweight (BMI ≥ 25 kg/m^2) is 38.9% (15). However, in the Region of the Americas, 62.5% of persons are overweight (15). Likewise, the prevalence of obesity (BMI ≥ 30 kg/m^2) in the world is 13.1%, while in the Americas the prevalence is more than double that of the global average (28.6%) (15). This makes the Americas the most obese region in the world (16). Among school-age children and adolescents, overweight prevalence rates are steadily surging and are reaching, on average, one in four children (16).

Following a similar pattern, the Region ranks first among WHO Regions with the highest prevalence of insufficient physical activity (39.1%) and second in alcohol consumption per capita (8.2 grams of pure alcohol), exceeded only by the European region (17, 18). A decline in current tobacco smoking prevalence among adults has been recorded, changing from 22.1% in 2007 to 16.9% in 2016, mainly because countries have made progress implementing the WHO FCTC demand reduction measures (19).

The Americas are not among the top 3 WHO Regions with the highest prevalence of raised blood pressure and raised blood glucose, but it is a concern based on the current status of other key modifiable risk factors (20, 21). A strong response from the health care sector is required to prevent and control NCDs.

An assessment to identify countries' progress towards the implementation of the "Best Buys" was completed in 2015, prior to the implementation of the Pan American STEPS Survey in Guyana. The results of this assessment are presented through a set of indicators called the "10 progress indicators" reported in the Noncommunicable Diseases Progress Monitor (22, 23). These indicators provide an overview on the implementation status of the WHO "Best Buys," national surveillance capacity, and response from the health care system in the country and across the region of the Americas. The results of the progress indicators show that even though two countries in the Region (Costa Rica and Brazil) rank among the top 10 countries in the world for progress, this is not enough (23). Guyana fully achieved 3 indicators in 2015 and since implementing the Pan American STEPS Survey, fully achieved 4 indicators in 2017; however, more work needs to be done (22, 23).

There is an urgent need for countries to accelerate the implementation of the cost-effective "Best Buy" policies, especially among the Caribbean Countries. Of the 12 Non-Latin Caribbean countries assessed in the Noncommunicable Diseases Progress Monitor 2015, the majority have only fully achieved 3 or fewer of the progress indicators with Jamaica and Suriname achieving 9 and 7, respectively (22). Since then, the 2017 assessment was conducted and no significant improvements were made in Guyana or the Caribbean (23). This progress is inadequate and without immediate action, reaffirmed political commitment, and significant investment, Global and Regional targets to reduce the burden of NCDs and their risk factors will not be met.

The results of the Pan American STEPS Survey presents the status of NCDs and their risk factors and highlights the need for Guyana to accelerate the implementation of NCD policies. Significant progress toward fully achieving the progress indicators is expected from Guyana in the next Noncommunicable Diseases Progress Monitor assessment in 2021.

Survey Objectives

The implementation of Guyana's Pan American STEPS Survey allows countries to strengthen national surveillance capacity to monitor and report on NCDs and their risk factors.

The main objective of implementing the Pan American STEPS Survey is to produce nationally representative data for NCDs and their risk factors (modifiable and biological), to support the assessment and implementation of policies and programmes.

The following objectives are to be met through the conduction of this Pan American STEPS Survey:

- To produce current national estimates for NCDs and their risk factors by applying a gold standard protocol, especially on physical and biological measurements, and report on the global, regional and national NCDs monitoring framework; and
- To assess changes over time on the status of the NCDs and its modifiable and biological risk factors in a representative sample of the population, while exploring demographic and socioeconomic characteristics of this population.

Survey Methods

Scope

The Pan American STEPS Survey 3.1 was used to collect data on NCDs and their risk factors from September 28 to October 26, 2016. The Survey collects data and measures behavioral and biological risk factors across the population through 3 distinct "steps." In Guyana, the process was as follows:

> **Step 1** Collect demographic and behavioral information through face-to-face interview in household setting;
>
> **Step 2** Collect physical measurements in household setting;
>
> **Step 3** Collect blood samples in household setting.

Within each step, there are three levels of data collection which include core, expanded, and optional questions. The Guyana Survey included all three steps. Step 1 provides information from responses to the survey questionnaire about health history and behavior related to NCD risk factors. Step 2 provides information from non-invasive physical measurements, such as body weight, height, waist circumference, and blood pressure. Step 3 provides biochemical information from urine or blood tests; venous blood samples were used in Guyana. Optional modules on dietary salt, nutrition intake, mental health, and violence and injury were also implemented in Guyana.

Collected data includes:

- Demographic information (age; sex; years and level of education; ethnicity; marital status; employment status; household income)
- Behavioral (tobacco and alcohol use; diet, including salt intake and fruit and vegetable consumption; and physical activity)
- Physical measurements (blood pressure; height; weight; waist circumference; heart rate)
- Metabolic risk factors (blood glucose, lipid profiles, and presence of hemoglobinopathies, such as sickle cell anemia and Thalassemia)
- Lifestyle advice
- Cancer screening
- Health screening
- Violence and injury[2]
- Mental health/Suicide[2]

Target Population

All adults aged 18 to 69 residing in Guyana during the period of data collection.

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[2] This data will be presented at a later date in a separate report.

Sample size and sample allocation

The STEPS sample was prepared by the Guyana Bureau of Statistics following the recommended STEPS sample methodology.

Guyana is divided into 10 administrative regions (table 1) and each region is further divided into enumeration districts (EDs). Urban centers are located in regions 2, 4, 6, 7 and 10. The 2012 census frame was used for the selection of the EDs. A total of 288 EDs, which was determined to be adequate for the Survey, were allotted to each stratum proportional to its population size. Thereafter, within each stratum, the specified number of census EDs/Primary Sampling Units (PSUs) were selected systematically with probability proportional to size.

Table 1 . STEPS Listing by Regions

Regions	No. of EDs	No. of Listers by Region
Coastal regions		
Region 2	18	2
Region 3	42	6
Region 4	118	16
Region 5	20	3
Region 6	43	6
Region 7	8	4
Region 10	15	2
Inland regions		
Region 1	11	4
Region 8	4	4
Region 9	9	4
Total	**288**	**51**

For each of the 288 selected EDS, 12 households were identified for enumeration by simple random selection. Most of the household selection was done in the office with the use of the computer, while simple random tables were used in the field by the team supervisors for some remote areas. These were areas for which the ED population count could not have been communicated to the office for the selection to be done. This provides a total of 3,456 households selected for the survey from the 288 EDs.

For Step 3, which collects biochemical information, 50% of the sample was randomly selected for participation. The total sample size was 1,728.

The sample size was calculated using the following parameters:

$$n = \frac{t^2 * [p * (1 - p)]}{MOE^2 * r} * Deff * AgeGrp$$

Where

- t describes the level of uncertainty in the sample mean or prevalence as an estimate of the population mean or prevalence. Recommended value: 1.96 (for 95% confidence level)
- p is the estimated prevalence of the risk factors within the target population. Values closest to 50% are the most conservative. Recommended value: 0.5 if no previous data on population, else value closest to 0.5 from previous data
- Deff is the design effect which describes the loss of sampling efficiency due to using a complex sample design. Recommended value for sampling strategies that involve cluster sampling: 1.5
- AgeGrp is the number of age-sex groups for which estimates will be calculated. Two age groups [18-44 and 45-69 years] for both males and females were used for the Guyana Survey.
- MOE is the margin of error which is the expected half-width of the confidence interval. The smaller the margin of error, the larger the sample size needed. Recommended value: 0.05 (for small baseline levels, e.g. <.10, a smaller MOE of 0.02 or 0.01 is appropriate)
- r is the expected response rate. Recommended value: enter response rate from previous national/subnational household surveys, else use 0.8 as an estimate

With t = 1.96, p = 0.5 (due to limited availability of representative baseline data, a baseline level of 50% was selected to ensure the most appropriate sample), Deff = 1.5, AgeGrp = 4, MOE = 0.05, and r = 0.6668 (a response rate of 66.68% was selected based on the experience and response rates of other surveys over the years such as the recent Demographic Health Survey of 2009):

$$n = \frac{t^2 * [p * (1 - p)]}{MOE^2 * r} * Deff * AgeGrp$$

$$n = \frac{1.96^2 * [0.5 * (1 - 0.5)]}{0.05^2 * 0.6668} * 1.5 * 4 = 3,456$$

The distribution of the sample across urban and rural enumeration districts is shown below:

Table 2. Distribution of STEPS Sample by rural and urban areas

Stratum	2012 Census		
	Population by EDs	Sample EDs	Sample households
RURAL areas			
1 Barima – Waini	27,643	11	132
2 Pomeroon - Supenaam (rural)	35,514	14	168
3 West Dem - Essequibo Islands	107,785	42	504
4 Demerara-Mahaica (rural)	187,067	71	852
5 Mahaica - Rosignol	49,820	20	240
6 Berbice (rural)	78,869	31	372
7 Cuyuni - Mazaruni	9,479	4	48
8 Potaro - Siparuni	11,077	4	48
9 Upper Takatu - UpperEssequibo	24,238	9	108
10 Upper Demerara (rural)	10,622	4	48
URBAN areas			
11 Anna Regina	11,296	4	48
12 City of Georgetown	25,763	10	120
13 Suburbs - Georgetown	98,733	37	444
14 Corriverton and Rose Hall	15,143	6	72
15 New Amsterdam	15,640	6	72
16 Linden	29,370	11	132
17 Bartica	8,896	4	48
Guyana	**746,955**	**288**	**3,456**
Rural total		**210**	**2,250**
Urban total		**76**	**936**

Listing activities

The mapping and listing exercise was carried out on the coast from July 14-28, 2016, prior to the commencement of the field work. In the interior this exercise was carried out from September 29 to the October 25, 2016 during the actual field work activities. Unlike on the coast, where generally the listing was done and the sample was drawn in office, in the interior the listing was carried out by the data collection teams and most of the sample households were drawn in the field, prior to conducting interviews in those areas where it was difficult to relay the listing information to the office. There were fifty-one persons involved in the listing process with region four accounting for the largest number. Table 2 provides information by coastal and inland regions.

Relisting of the 288 EDs for the Pan American STEPS Survey was necessary since it was felt that the 2012 census list needed updating based on the dynamics of the Guyanese population with the many new emerging housing schemes.

The listing and mapping exercise utilized teams consisting of two persons in each team: one listed and the other mapped the cluster. All the teams were supervised by checkers. The main responsibilities of the checkers were to:

- Obtain base maps for all EDs selected for the survey;
- Identify the boundaries of each of the assigned ED;
- Ensure that all listing materials (Manual for Mapping and Household Listing, mapping and listing forms) were obtained before going to the field;
- Plan and organize fieldwork logistics (e.g. arranging for transport, identifying and contacting local officials and village elders in each ED to inform them about the listing operation and to obtain their cooperation); and
- Monitor and verify that the quality of work is acceptable.

Data Collection

Data was collected by 16 teams of 6 persons, including 1 supervisor, 1 technician, and 4 interviewers. Trained interviewers administered the Pan American STEPS Survey version 3.1 questionnaire face-to-face using digital tablets. Interviewers took physical measurements for Step 2, while trained health care workers administered the biochemical tests for Step 3 using wet blood samples.

For Step 3, the participant was notified of their selection to participate in Step 3 by the interviewer. Written informed consent was read to the participant. This was completed three times to ensure comprehension. The participant then provided informed consent to participate with a signature or a thumb print, which was affixed to the consent form.

Once informed consent was completed, the participant was informed of the requirement for fasting 8 hours prior to blood draw. The participant confirmed an appointment date and time for the phlebotomist to return to the house to draw blood samples. The appointment date was recorded on an appointment schedule that included a barcode unique to the participant. This barcode was used for linking results from Steps 1, 2, and 3 in analysis.

The phlebotomist returned to the household on the scheduled appointment date. The appointment schedule with the unique barcode was scanned by electronic tablet to confirm identity. Blood samples were drawn and the date, time, and participant's unique identifier were recorded on the sample test tube.

Samples were appropriately packaged, stored, and transported in a cooling chamber to the central laboratory in Georgetown. Samples were transported daily and tested immediately upon receipt. Results of the blood sample were shared every 2 to 3 days to the Office of the Coordinator.

Approaches to Data Analysis

The data were analyzed using Epi-Info. A separate quality assurance process with an independent analysis was undertaken using STATA. This separate analysis concurred with the first analysis.

Results

Demographics

The total sample size was 3,456 adults, aged 18-69. The overall response rate was 77% for Steps 1 and 2 and 40% for Step 3. The following section describes the demographic characteristics of the sample population[3].

Table 3. Distribution of respondents by sex and age groups

Age Group (years)	Males		Females		Both Sexes	
	N	%	N	%	N	%
18-44	601	22.6	1000	37.6	1601	60.1
45-69	467	17.5	594	22.3	1061	39.9
18-69	**1068**	**40.1**	**1594**	**59.9**	**2662**	**100**

Of the 2,662 respondents, 40.1% (1,068) were males and 59.9% (1,594) were females. A majority (60.1%) of both males and females represented the younger age bracket, ages 18-44.

Table 4. Mean number of years of education, by sex and age groups

Age Group (years)	Males		Females		Both Sexes	
	N	Mean	N	Mean	N	Mean
18-44	597	9.9	996	9.9	1593	9.9
45-69	461	9.1	584	8.6	1045	8.9
18-69	**1058**	**9.6**	**1580**	**9.4**	**2638**	**9.5**

The overall mean number of years of education reported for both sexes combined was 9.5 years, with only a small difference between males and females (9.6 years and 9.4 years, respectively). The mean number of years of education for both sexes combined was higher in the 18-44 years age group than in the 45-69 age group (9.9 years and 8.9 years, respectively). Furthermore, the difference in years of education was higher among younger females aged 18-44 (9.9 years) compared to females aged 45-69 (8.6 years), representing a difference of 1.3 years. This scenario is not seen among males.

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[3] The results presented in the Demographics section are unweighted.

Table 5. Highest level of education (%), both sexes by age groups

Age Group (years)	N	No formal schooling	Less than primary school	Primary school completed	Secondary school completed	Tertiary/ Technical completed	University completed	Post graduate degree completed
18-44	1601	2.2	5.4	40.0	38.2	10.7	3.1	0.4
45-69	1059	2.1	11.2	51.5	23.9	7.5	3.0	0.8
18-69	**2660**	**2.2**	**7.7**	**44.5**	**32.5**	**9.4**	**3.0**	**0.6**

Overall, the younger population had higher rates of secondary (38.2%) than tertiary and technical completed years of education (10.7%) compared with the older group (23.9% and 7.5% respectively). Conversely, higher proportions of the older population reported having only completed up to primary schooling.

Table 6. Ethnic group (%), both sexes by age groups

Age Group (years)	N	East Indian	African/Black	Amerindian	Chinese	Portuguese	Mixed	White
18-44	1600	36.6	28.2	13.8	0.1	0.3	20.7	0.3
45-69	1061	43.5	27.9	12.5	0	0.2	15.6	0.2
18-69	**2661**	**39.4**	**28.1**	**13.3**	**0.1**	**0.3**	**18.7**	**0.2**

Table 6 shows the distribution by ethnic group among the respondents to the survey. Those identified as *East Indian* accounted for more than one third of respondents (39.4%), followed by *African/Black* (28.1%), *Amerindian* (13.3%) and *mixed* (18.7%) and small numbers of *Portuguese* (0.3%), *White* (0.2%), and *Chinese* (0.1%) respondents. There were no differences in self-reported ethnic group between the two age groups.

Table 7. Marital status (%), both sexes by age groups

Age Group (years)	N	Never married	Currently married	Separated	Divorced	Widowed	Cohabiting/ Common-Law
18-44	1598	36.7	29.2	3.1	1.6	0.9	28.5
45-69	1060	18.8	44.7	7.1	4.9	11.1	13.4
18-69	**2658**	**29.6**	**35.4**	**4.7**	**2.9**	**5.0**	**22.5**

Of the respondents aged 18-69 years, 29.6% had never been married, 35.4% were currently married, 22.5% reported being in cohabitation/common law relationships, 5.0% were widowed, 4.7% were separated and 2.9% were divorced. No differences were seen in marital status between male and female respondents.

Table 8. Employment status (%), by sex and age groups

Age Group (years)	N	Government employee	Non-Government employee	Self-employed	Unpaid
Males					
18-44	600	16.2	31.3	43.8	8.7
45-69	467	13.7	19.7	43.0	23.6
18-69	**1067**	**15.1**	**26.2**	**43.5**	**15.2**
Females					
18-44	999	12.2	15.2	21.1	51.5
45-69	593	8.1	8.8	25.1	58.0
18-69	**1592**	**10.7**	**12.8**	**22.6**	**53.9**
Both Sexes					
18-44	1599	13.7	21.3	29.6	35.4
45-69	1060	10.6	13.6	33.0	42.8
18-69	**2659**	**12.4**	**18.2**	**31.0**	**38.4**

Of the survey respondents aged 18-69 years, 38.4% were unpaid, with more females reporting being unpaid (53.9%) than males (15.2%). Males reported being self-employed at about twice the percentage as females (43.5% for males as compared to 22.6% for females). This was also true for employment in the non-government sector where 26.2% of males were employed, as compared to 12.8% of females. Differences were smaller in the percentage of employment in the government sector (15.1% for males and 10.7% for females).

In terms of respondent income, 1,948 reported a mean annual per capita income of $428,354.2 in Guyanese dollars (approximately $2,056 USD).

NCDs and their risk factors

The information presented in the following sections were collected through face-to-face interviews. The results are weighted to create generalizable data representative of the entire population of Guyana.

Tobacco use

Information collected in this section provides a clear understanding of the patterns of consumption and the types of products used within the population of Guyana.

Figure 1. Percentage of adults 18-69 years old who currently smoke tobacco, by sex and age groups
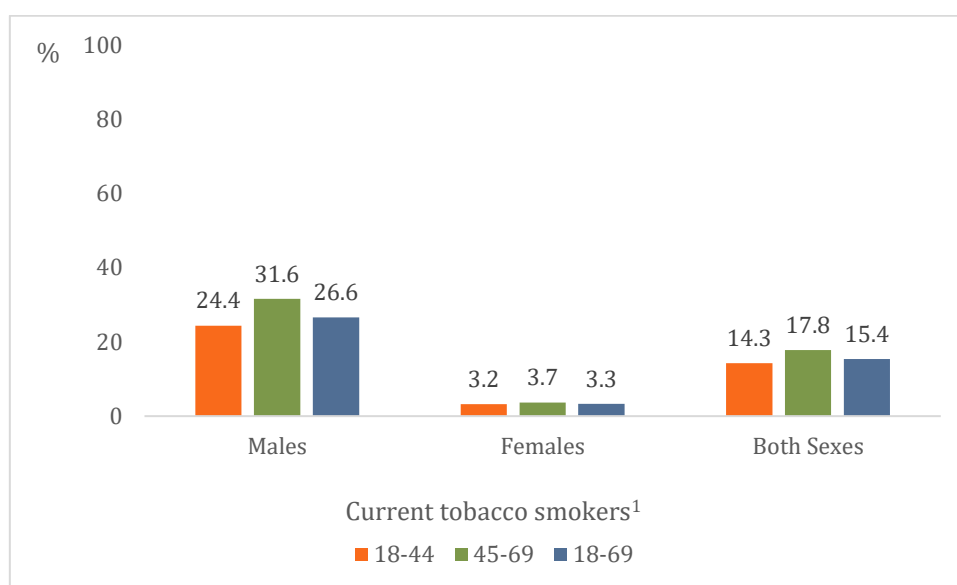
[1] Current tobacco smokers are defined as those who reported smoking either daily or less than daily

The prevalence of current tobacco smoking was 15.4% (12.3-18.4) for both males and females across all age groups. Nearly one third (31.6%, 24.1-39.2) of males aged 45-69 were current smokers, while less than one quarter (24.4%, 18.6-30.2) of males aged 18-44 reported current smoking.

Males were much more likely to be current smokers than females, as the responses reported by females for current smoking was very small and should be considered when interpreting the results presented.

Table 9. Percentage of adults 18-69 years old, by smoking status, sex, and age groups

Age Group (years)	Daily		Occasional		Former		Never	
	Percentage (95% CI)							
Males								
18-44	16.3	(11.3-21.4)	8.1	(5.5-10.6)	18.7	(14.6-22.8)	56.9	(51.7-62.2)
45-69	24.6	(19.3-30.0)	7.0	(3.2-10.8)	30.4	(23.6-37.1)	38.0	(31.3-44.7)
18-69	**18.8**	**(14.6-23.0)**	**7.8**	**(5.6-9.9)**	**22.2**	**(18.4-26.0)**	**51.3**	**(46.7-55.8)**
Females								
18-44	1.6	(0.7-2.6)	1.5	(0.4-2.6)	8.2	(6.0-10.4)	88.6	(86.1-91.1)
45-69	3.4	(1.8-5.0)	0.3	(0.0-0.7)	8.3	(4.7-12.0)	88.0	(83.9-92.1)
18-69	**2.2**	**(1.4-3.0)**	**1.1**	**(0.4-1.9)**	**8.3**	**(6.4-10.1)**	**88.4**	**(86.4-90.5)**
Both Sexes								
18-44	9.3	(6.6-12.1)	4.9	(3.5-6.3)	13.7	(11.2-16.1)	72.1	(69.0-75.1)
45-69	14.1	(11.2-17.1)	3.7	(1.7-5.7)	19.5	(15.9-23.0)	62.7	(57.7-67.7)
18-69	**10.8**	**(8.5-13.1)**	**4.6**	**(3.4-5.8)**	**15.5**	**(13.5-17.4)**	**69.2**	**(66.3-72.0)**

In Guyana, the pattern of consumption demonstrates more daily smokers than occasional smokers within the adult population (10.8% and 4.6%, respectively). Among current smokers, 70.8% (64.8-76.9) of males and 65.8% (50.3-81.3) of females are daily smokers.

Among adults aged 18-69, older males aged 45-69 reported higher current daily smoking (24.6%), yet also represented the largest group of former smokers (30.4%). This was similarly seen among older females in terms of daily smoking (3.4%); however, the proportion of former smoking for females was nearly the same for both age groups.

Table 10. Mean age of tobacco smoking initiation among current smokers, by sex and age groups

Age Group (years)	Males	Females
18-44	16.0	23.2
45-69	19.7	20.5
18-69	**17.5**	**21.9**

Current smokers are defined as those who reported smoking either daily or less than daily.

The mean age of smoking initiation among current male smokers aged 18-44 was 16.0 years, nearly four years younger than the older group (19.7 years). The opposite was true for females. The mean age of smoking initiation among current female smokers aged 18-44 was 23.2 years compared to 20.5 years for females aged 45-69 years.

Table 11. Percentage of adults 18-69 years old who are current and daily tobacco smokers and current and daily cigarette smokers, by sex and age groups

Age Group (years)	Tobacco Smokers				Cigarette Smokers			
	Current[1]		Daily		Current[1]		Daily	
	Percentage (95% CI)							
Males								
18-44	24.4	(18.6-30.2)	16.3	(11.3-21.4)	23.3	(17.4-29.2)	15.6	(10.6-20.7)
45-69	31.6	(24.1-39.2)	24.6	(19.3-30.0)	30.4	(22.9-37.9)	23.7	(18.3-29.0)
18-69	**26.6**	**(21.6-32.0)**	**18.8**	**(14.6-23.0)**	**25.4**	**(19.9-30.9)**	**18.0**	**(13.8-22.2)**
Females								
18-44	3.2	(1.8-4.5)	1.6	(0.7-2.6)	2.8	(1.4-4.1)	1.6	(0.7-2.6)
45-69	3.7	(2.0-5.3)	3.4	(1.8-5.0)	3.1	(1.6-4.7)	3.0	(1.4-4.5)
18-69	**3.3**	**(2.3-4.4)**	**2.2**	**(1.4-3.0)**	**2.9**	**(1.9-3.9)**	**2.1**	**(1.2-2.9)**
Both Sexes								
18-44	14.3	(11.0-17.5)	9.3	(6.6-12.1)	13.5	(10.2-16.8)	8.9	(6.2-11.7)
45-69	17.8	(13.7 – 22.0)	14.1	(11.2-17.1)	16.9	(12.6-21.0)	13.4	(10.5-16.4)
18-69	**15.4**	**(12.3-18.4)**	**10.8**	**(8.5-13.1)**	**14.5**	**(11.4-17.6)**	**10.3**	**(8.0-12.6)**

[1] Current smokers are defined as those who reported smoking either daily or less than daily.

Daily tobacco smokers are most likely to be daily cigarette smokers; there was little difference between the proportion of those who smoked tobacco and those who smoked cigarettes among daily smokers (10.8% and 10.3%).

Figure 2. Percentage of adults 18-69 years old who are current smokers of various smoked tobacco products, by sex and age groups
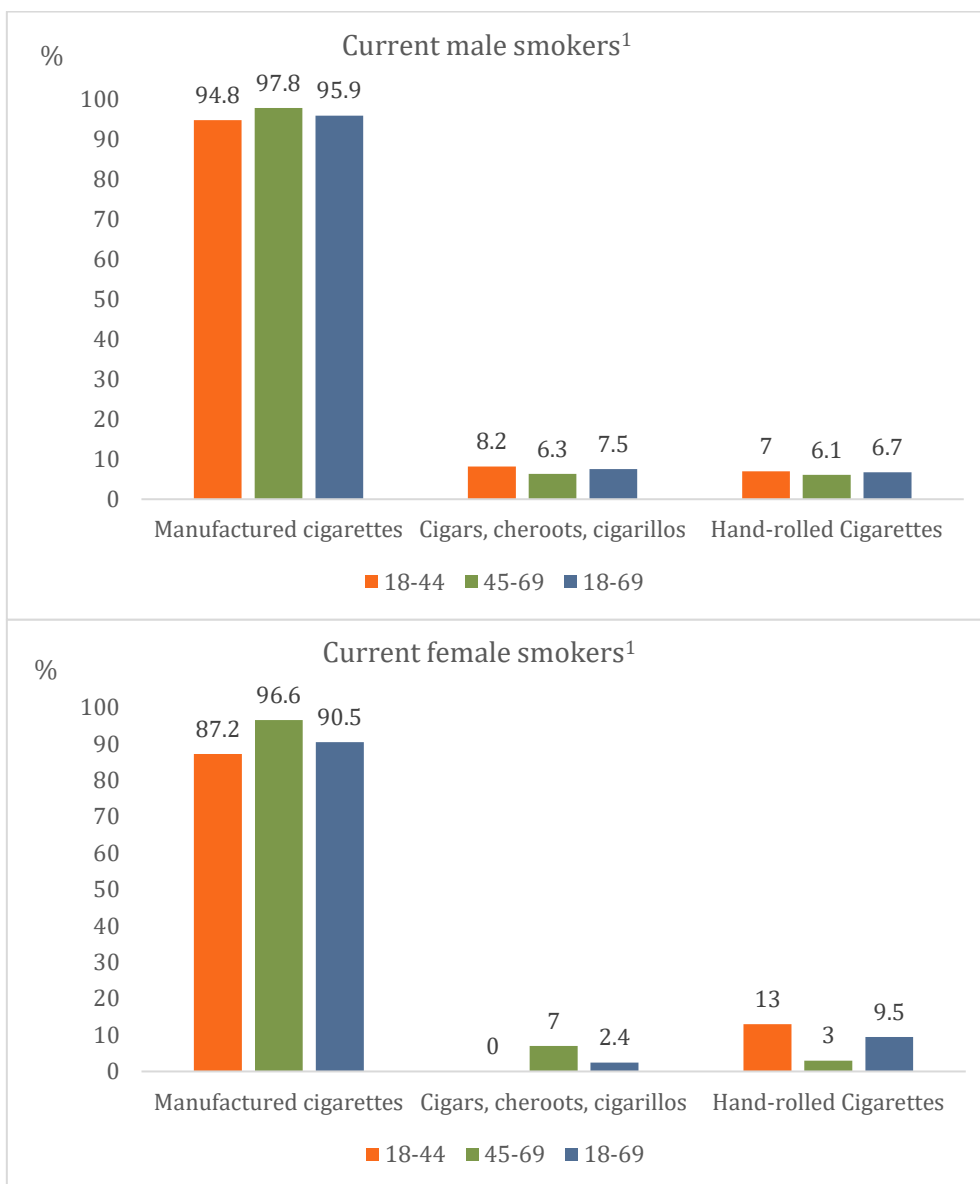
[1] Current tobacco smokers are defined as those who reported smoking either daily or less than daily

Manufactured cigarettes were the most common type of tobacco product smoked among male and female current smokers of all ages (95.9%, 92.9-98.8 and 90.5%, 82.3-98.7, respectively). In addition to manufactured cigarettes, current male smokers reported use of cigars, cheroots, and cigarillos, as well as hand-rolled cigarettes. Preference varied by age with the younger male age group using cigars, cheroots, and cigarillos (8.2%, 0.6-15.8) and other tobacco products not listed (8.2%, 3.5-12.9), more than the hand-rolled cigarettes (7.0%, 2.0-12.0). While the older males reported using cigars, cheroots, and cigarillos (6.3%, 0.9-11.8) in addition to hand-rolled cigarettes (6.1%, 1.7-10.6), more than other tobacco products (6.0%, 0.9-11.1).

Similar product preferences were seen among females, though greater variation in consumption patterns by age was demonstrated. In addition to manufactured cigarettes, the younger females reported use of hand-rolled cigarettes (13%, 0.0-34.3) and other tobacco products (12.3%, 0.0-

26.2), but not cigars, cheroots, or cigarillos (0%). Among the older females, cigars, cheroots, and cigarillos (7%, 4.6-9.4) were preferred to other tobacco products (3.5%, 0.0-10.6) and hand-rolled cigarettes (3%, 0.0-9.0).

Table 12. Mean number of manufactured or hand-rolled cigarettes smoked per day among daily smokers 18-69 years old, by sex and age groups

Age Group (years)	Mean number of manufactured or hand-rolled cigarettes smoked per day among daily cigarette smokers									
	< 5		5-9		10-14		15-24		≥ 25	
	Percentage (95% CI)									
Males										
18-44	32.3	(6.8-57.7)	13.8	(4.8-22.7)	32.5	(17.9-47.1)	18.5	(8.3-28.7)	3.0	(0.0-6.3)
45-69	25.0	(10.4-39.6)	23.7	(12.4-34.9)	25.3	(14.4-36.2)	22.2	(13.1-31.2)	3.8	(0.0-7.8)
18-69	**29.4**	**(8.9-49.9)**	**17.6**	**(9.7-25.6)**	**29.7**	**(18.6-40.8)**	**20.0**	**(12.0-27.9)**	**3.3**	**(0.8-5.9)**
Females										
18-44	29.4	(0.0-60.9)	40.5	(8.4-72.6)	11.5	(0.0-25.6)	15.4	(0.0-37.2)	3.2	(0.0-10.0)
45-69	8.0	(0.0-20.1)	14.6	(0.0-35.7)	41.1	(13.7-68.5)	32.1	(8.6-55.7)	4.2	(0.0-12.9)
18-69	**19.7**	**(0.0-39.5)**	**28.8**	**(7.9-49.7)**	**24.9**	**(8.5-41.3)**	**22.9**	**(6.7-39.1)**	**3.6**	**(0.0-9.2)**
Both Sexes										
18-44	32.0	(8.5-55.5)	16.1	(6.9-25.3)	30.6	(17.0-44.3)	18.2	(8.7-27.8)	3.0	(0.0-6.1)
45-69	23.1	(9.8-36.4)	22.7	(12.4-33.0)	27.1	(17.0-37.2)	23.3	(14.6-31.9)	3.9	(0.3-7.5)
18-69	**28.5**	**(9.6-47.3)**	**18.7**	**(11.1-26.4)**	**29.2**	**(18.9-39.6)**	**20.3**	**(12.8-27.7)**	**3.3**	**(1.0-5.7)**

On average, daily male smokers were more likely to report an average of 10-14 cigarettes smoked per day (29.7%), as opposed to females who were most likely to report an average of 5-9 cigarettes per day (28.8%).

Among daily smokers, males on average smoked 9.5 manufactured cigarettes per day with little variance between age groups. Females, however, reported a higher number of daily manufactured cigarettes within the older population (11.8) compared to the younger one (7.5). Cigars, cheerots, and cigarillos were popular among both sexes aged 45-69 reporting approximately 0.8 per day, while the 18-44 age bracket reported little to no use among males and females (0.2 and 0, respectively). Hand-rolled cigarettes were more popular among females aged 18-44 (0.6) than males of the same age (0.3).

Table 13. Percentage of current smokers 18-69 years old who attempted to quit smoking in the past 12 months, by sex and age groups

Age Group (years)	Attempted to quit	
	Percentage (95% CI)	
Males		
18-44	57.4	(48.3-66.5)
45-69	61.0	(47.9-74.0)
18-69	**58.7**	**(51.9-65.4)**
Females		
18-44	75.4	(59.0-91.8)
45-69	54.9	(32.6-77.1)
18-69	**68.3**	**(54.4-82.2)**
Both Sexes		
18-44	59.3	(51.1-67.5)
45-69	60.3	(48.4-72.3)
18-69	**59.7**	**(53.6-65.7)**

A majority of male and female current smokers reported attempts to stop smoking in the 12 months prior to the survey date (58.7% and 68.3%, respectively). Among the younger age group, males were slightly less likely to report an attempt to stop smoking compared to the older age group (57.4% and 61%, respectively). In contrast, among females aged 18-44 approximately 3 out of every 4 (75.4%) reported an attempt to stop smoking, while only slightly more than half (54.9%) of women aged 45-69 reported the same.

Table 14. Percentage of current smokers 18-69 years old who have been advised to quit smoking by a healthcare provider in the past 12 months, by sex and age groups

Age Group (years)	Advised to quit	
	Percentage (95% CI)	
Males		
18-44	32.5	(19.0-45.9)
45-69	41.9	(22.6-61.2)
18-69	**36.1**	**(22.0-50.2)**
Females		
18-44	23.0	(1.2-44.9)
45-69	22.9	(1.7-44.2)
18-69	**23.0**	**(6.4-39.5)**
Both Sexes		
18-44	31.4	(19.0-43.8)
45-69	40.1	(22.2-57.9)
18-69	**34.7**	**(21.6-47.7)**

Among male current smokers who had visited a doctor or other health worker in the past 12 months, a little more than one third (36.1%) reported being advised by a doctor to stop smoking. In contrast, less than one quarter (23%) of female smokers who visited a doctor reported being advised to quit.

Tobacco control policy

To assess tobacco policies, information was collected about awareness of anti-cigarette information in various media platforms, cigarette advertising within stores, and other cigarette promotions within the last 30 days. Among current smokers, information was collected regarding the awareness of health warnings on cigarette packages and the impact of these messages on the smokers' decision making.

Figure 3. Percentage of adults 18-69 years old who noticed anti-cigarette smoking information during the last 30 days in the media
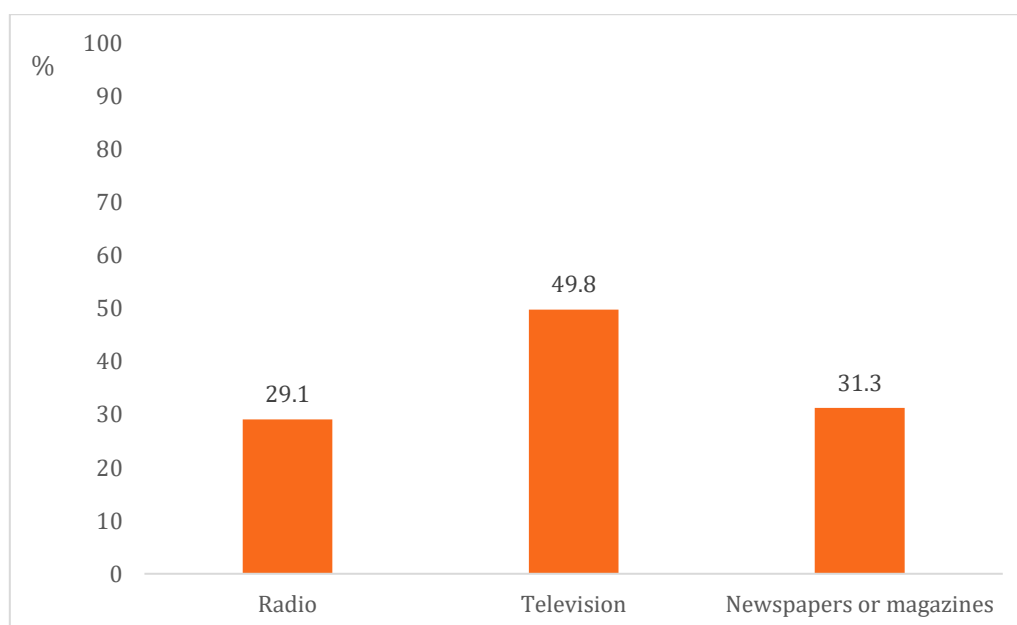
More adults (49.8%, 46.6-53.0) reporting seeing information on television about the dangers of smoking or that encourages quitting during than last 30 days than similar information on radio or newspaper/magazine outlets (29.1%, 5.8-32.3 and 31.3%, 28.3-34.4, respectively). There were no differences based on sex or age groups.

Figure 4. Percentage of adults 18-69 years old who noticed cigarette advertisement and promotion during the last 30 days in various places
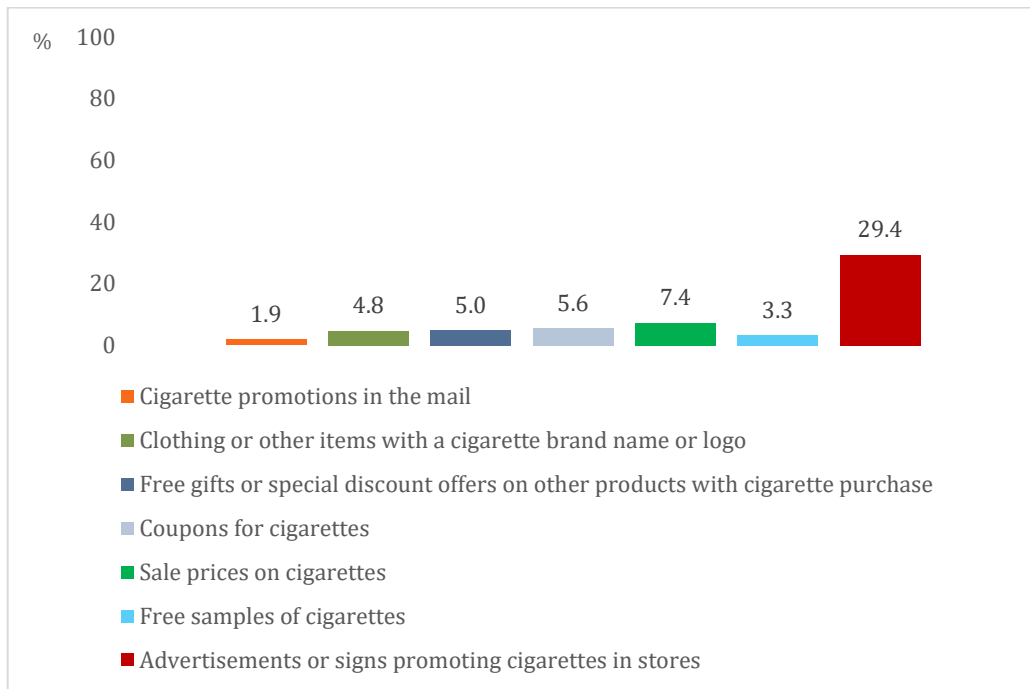
Nearly one third of adults (29.4%, 26.7-32.1) reported that they saw advertisements promoting cigarettes in stores within the last 30 days. Sale prices on cigarettes (7.4%, 6.0-8.8) was the second most frequently reported type of promotion. Younger females were slightly more likely to have noticed promotion of tobacco products, such as advertisements or signs in stores, free samples, sale prices, and coupons than did older females (31.0%, 27.0-35.0 and 22.9%, 18.3-27.4; 3.2%, 2.0-4.4 and 2.4%, 1.3-3.6; 8.3%, 5.9-10.8 and 5.0%, 3.0-7.0; 5.3%, 3.0-7.6 and 4.1%, 2.2-6.0, respectively). However, overall there was little variance in awareness of these promotions based on sex and age groups.

Table 15. Percentage of current smokers 18-69 years old who noticed health warning on cigarette packages and considered quitting because of the warning labels during the last 30 days, by sex and age groups

Age Group (years)	Current smokers[1] who…			
	Noticed health warnings on cigarette package		Thought about quitting because of warning label	
	Percentage (95% CI)			
Males				
18-44	86.6	(79.0-94.2)	66.7	(56.4-77.0)
45-69	88.7	(82.3-95.2)	55.9	(39.5-72.4)
18-69	**87.4**	**(81.5-93.2)**	**62.8**	**(52.5-73.2)**
Females				
18-44	71.4	(47.5-95.3)	79.9	(60.6-99.1)
45-69	72.5	(52.8-92.2)	56.8	(32.4-81.1)
18-69	**71.8**	**(55.0-88.6)**	**70.7**	**(56.3-85.0)**
Both Sexes				
18-44	85.2	(77.3-93.1)	67.7	(58.1-77.3)
45-69	87.0	(80.7-93.3)	56.0	(40.9-71.2)
18-69	**85.9**	**(79.8-91.9)**	**63.5**	**(54.0-73.0)**

[1] Current tobacco smokers are defined as those who reported smoking either daily or less than daily

Among current male smokers, 87.4% reported noticing health warnings on cigarette packaging with little variance based on age. Of these males, the younger group (66.7%) was more likely to consider quitting smoking after seeing the warning label, while only a little more than half (55.9%) of the older group experienced the same. Among females, 71.8% noticed the warning label and of these, 70.7% thought about quitting as a result with similar variances as seen among males between the younger and older groups (79.9% and 56.8%, respectively), suggesting the warning labels have a greater impact on smoking cessation efforts of younger generations, especially younger females. However, it must be reiterated that the results represent a small sample size of reporting female current smokers.

The average cigarette expenditure for 20 manufactured cigarettes was 430.6 GYD, approximately 2.07 USD. There were slight variances between age groups with males and females aged 18-44 purchasing at a lower price than those 45-69 years old (428.1 GYD or 2.05 USD and 436.1 GYD or 2.09 USD, respectively), which may be the result of purchasing the manufactured cigarettes individually. However, overall, there were no differences in the price reported by either age or sex.

Alcohol consumption

Another risk factor for NCDs is alcohol consumption. A series of questions were asked to assess the volume of alcohol consumed and patterns of drinking, such as the frequency of drinking and amount consumed per drinking occasion.

Table 16. Percentage of adults 18-69 years old, by alcohol consumption status, sex, and age groups

Age Group (years)	Current drinkers[1]		Not current drinkers[2]		Abstainers[3]		Lifetime abstainers[4]	
	Percentage (95% CI)							
Males								
18-44	63.8	(58.5-69.1)	13.6	(9.9-17.2)	10.2	(4.9-15.5)	12.4	(8.8-16.0)
45-69	48.9	(42.6-55.2)	14.6	(10.3-18.8)	19.1	(14.8-23.5)	17.4	(12.6-22.2)
18-69	**59.3**	**(54.9-63.8)**	**13.9**	**(10.8-17.0)**	**12.9**	**(8.4-17.3)**	**13.9**	**(10.7-17.1)**
Females								
18-44	25.3	(22.0-28.5)	21.7	(18.4-25.0)	16.3	(13.3-19.4)	36.7	(32.5-40.9)
45-69	13.1	(9.9-16.3)	11.8	(8.5-15.1)	24.7	(19.5-29.9)	50.4	(45.1-55.8)
18-69	**21.4**	**(18.9-24.0)**	**18.6**	**(16.2-21.0)**	**19.0**	**(16.3-21.6)**	**41.0**	**(37.4-44.6)**
Both Sexes								
18-44	45.4	(41.9-48.9)	17.5	(15.0-19.9)	13.1	(10.0-16.2)	24.0	(20.7-27.3)
45-69	31.2	(27.3-35.1)	13.2	(10.3-16.1)	21.9	(17.9-25.8)	33.7	(29.7-37.7)
18-69	**41.0**	**(38.1-44.0)**	**16.2**	**(14.2-18.1)**	**15.8**	**(12.9-18.8)**	**27.0**	**(24.1-29.9)**

[1]Current drinkers are those who report drinking in the past 30 days
[2]Not current drinkers are those who report drinking in the past 12 months
[3]Abstainers are those who report abstaining from alcohol in the past 12 months
[4]Lifetime abstainers are those who report not drinking

More than half of all males reported drinking in the past 30 days. Nearly six in every ten males (63.8%) between 18-44 years old reported drinking alcohol in the 30 days prior compared to nearly five in every ten males (48.9%) in the 45-69 age group. Females were less likely to report drinking alcohol (21.4%). Twice as many of the females in the younger age bracket (25.3%) compared to those 45-69 years old (13.1%) reported consuming alcohol in the past 30 days.

Table 17. Percentage of former drinkers 18-69 years old who stopped drinking due to health reasons, by sex and age groups

Age Group (years)	Stopped drinking	
	Percentage (95% CI)	
Males		
18-44	30.9	8.0-53.7
45-69	31.3	14.7-48.0
18-69	**31.1**	**20.8-41.3**
Females		
18-44	17.9	10.4-25.4
45-69	12.3	5.5-19.0
18-69	**15.6**	**10.1-21.1**
Both Sexes		
18-44	23.2	13.8-32.5
45-69	20.7	13.0-28.4
18-69	**22.1**	**17.1-27.1**

Of the former drinkers, those who report not drinking in the past 12 months, approximately one third (31.3%) of males responded they had stopped drinking for health reasons, such as a negative impact of drinking of their health or as per advice of a doctor or other health worker. Females were less likely than males to have stopped drinking for health reasons.

Table 18. Percentage of adults 18-69 years old who drank in the last 12 months, by alcohol consumption frequency, sex, and age groups

Age Group (years)	Daily		5-6 days/week		3-4 days/week		1-2 days/week		1-3 days/month		< once a month	
					Percentage (95% CI)							
Males												
18-44	2.3	(1.3-3.4)	3.3	(1.8-4.8)	2.7	(0.9-4.4)	5.1	(2.7-7.4)	21.8	(17.7-25.9)	30.8	(27.1-34.5)
45-69	3.5	(1.6-5.4)	4.6	(2.1-7.2)	4.9	(1.8-7.9)	5.5	(2.0-9.0)	19.1	(13.3-24.9)	21.9	(16.9-26.9)
18-69	**2.6**	**(1.7-3.6)**	**3.6**	**(2.3-5.0)**	**3.2**	**(1.8-4.7)**	**5.2**	**(3.2-7.1)**	**21.2**	**(18.0-24.4)**	**28.7**	**(25.7-31.7)**
Females												
18-44	0.6	(0.0-1.3)	0.4	(0.0-1.3)	1.5	(0.5-2.6)	8.6	(5.3-12.0)	25.1	(20.5-29.6)	63.7	(57.8-69.7)
45-69	0.5	(0.0-1.3)	1.7	(0.0-3.9)	1.5	(0.0-3.1)	6.7	(2.4-11.0)	17.3	(9.4-25.2)	73.3	(63.8-80.8)
18-69	**0.6**	**(0.1-1.2)**	**0.7**	**(0.0-1.5)**	**1.5**	**(0.6-2.4)**	**8.3**	**(5.5-11.0)**	**23.5**	**(19.6-27.5)**	**65.4**	**(60.1-70.6)**
Both Sexes												
18-44	2.3	(1.3-3.4)	1.9	(0.7-3.0)	3.8	(2.2-5.4)	21.8	(17.7-25.9)	30.8	(27.1-34.5)	39.4	(35.4-43.4)
45-69	3.5	(1.6-5.4)	4.0	(1.7-6.3)	4.4	(1.8-7.0)	19.1	(13.3-24.9)	21.9	(16.9-26.9)	47.1	(40.4-53.9)
18-69	**2.6**	**(1.7-3.6)**	**2.4**	**(1.4-3.4)**	**3.9**	**(2.6-5.3)**	**21.2**	**(18.0-24.4)**	**28.7**	**(25.7-31.7)**	**41.2**	**(37.9-44.6)**

Of those who reported drinking in the last 12 months, males were more likely to report drinking alcohol more frequently than females. A total of 9.4% of males of all ages reported drinking daily to at least 3-4 days every week compared to 2.8% of all females. Frequency of alcohol consumption also varied by age. Males and females aged 18-44 were less likely to drink daily, 5-6, or 3-4 times a week than those aged 45-69 (2.3% and 3.5%; 1.9% and 4%; 3.8% and 4.4%, respectively). This pattern of frequency of alcohol consumption continued among those 18-44 years old with 21.8% reporting consumption 1-2 days per week and 30.8% 1-3 days per month compared to that of males and females aged 45-69 reporting 19.1% and 21.9%, respectively.

Figure 5. Mean number of standard drinks[1] consumed per drinking occasion among current drinkers 18-69 years old, by sex and age groups
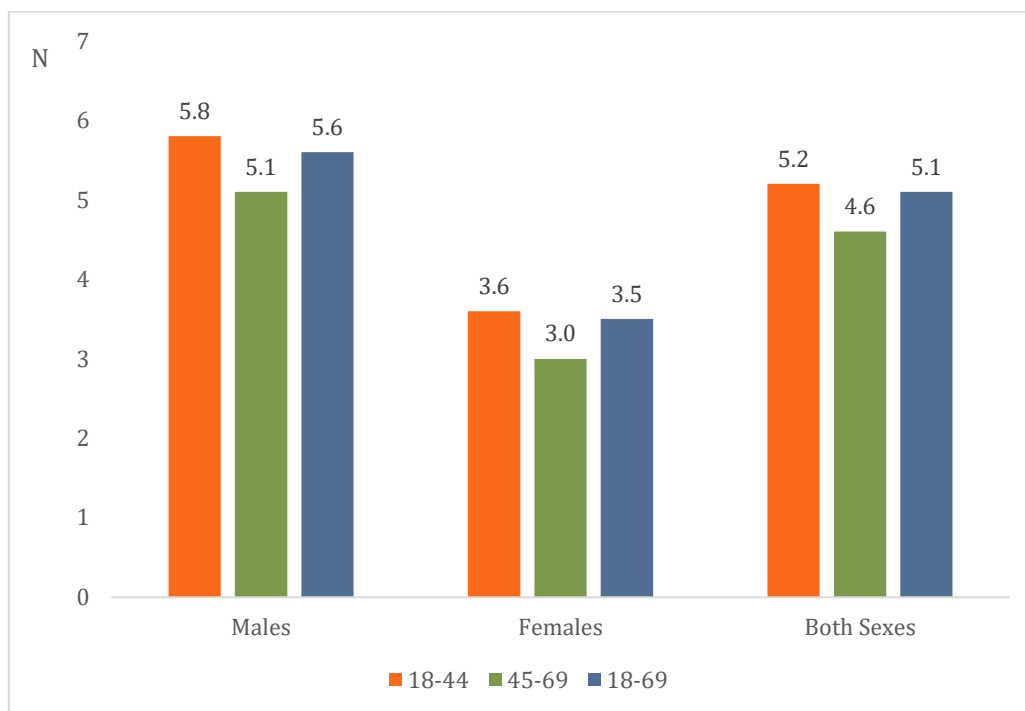
[1] A standard drink contains approximately 10g of pure alcohol.

In terms of the amount of alcohol consumed, the mean number of standard drinks per drinking occasion for males aged 18-69 was 5.6 (5.0-6.2). The average number for females aged 18-69 was 3.5 (3.1-3.9). Although both sexes in the younger group reported drinking slightly more than those in the older groups, there was no difference in the average number of drinks between the younger and older drinkers.

Figure 6. Percentage of adults 18-69 years old who consumed six or more drinks on a single occasion at least once during the past 30 days, by sex and age groups
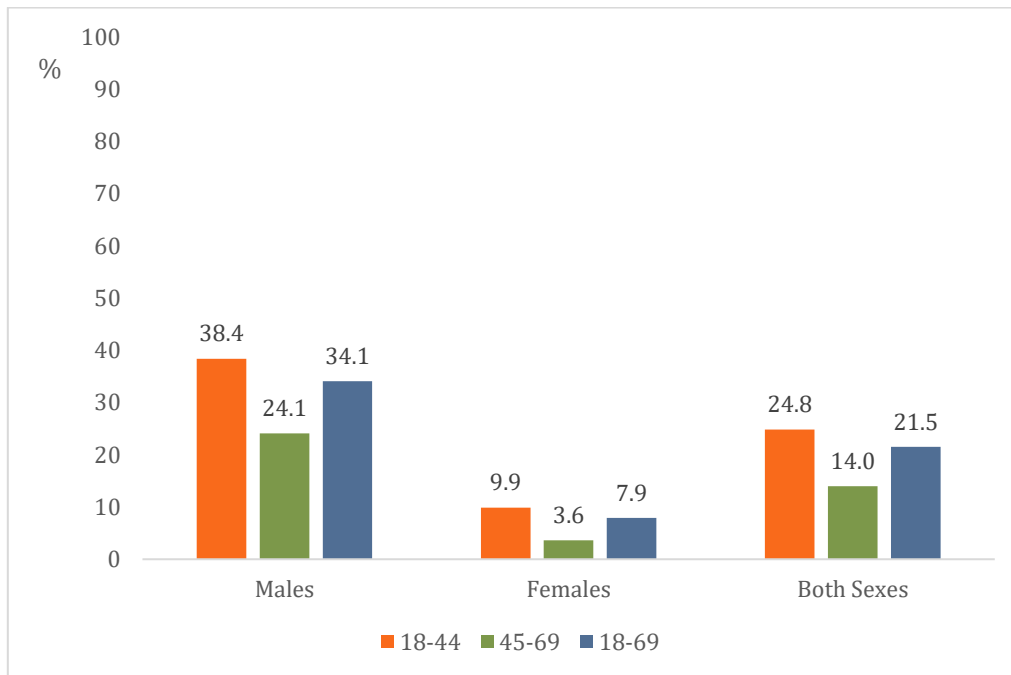
Heavy episodic drinking measures the consumption of at least 60 grams or more of pure alcohol on at least one occasion in the past 30 days. This indicator identifies patterns of alcohol use that may lead to acute consequences, such as injuries. Over one third (34.1%, 29.5-38.8) of all males reported having ≥ 6 drinks on a single drinking occasion during the past 30 days with higher reported frequency among males aged 18-44 than those 45-69 (38.4%, 32.7-44.2 and 24.1%, 18.7-29.4, respectively). Among females, 7.9% (6.3-9.5) reported having ≥ 6 drinks on a single drinking occasion, with a similar variances by age as seen among males.

Fruit and vegetable consumption

Fruit and vegetable consumption is a key indicator for healthy behaviors that can contribute to the prevention of NCDs. The WHO recommends no less than 400g per day of fruits and vegetables, equivalent to approximately 5 servings per day (24). Questions were asked regarding frequency and quantity of consumption on a daily and weekly basis.

Figure 7. Mean number of days per week of fruit consumption among adults 18-69 years old, by sex and age groups
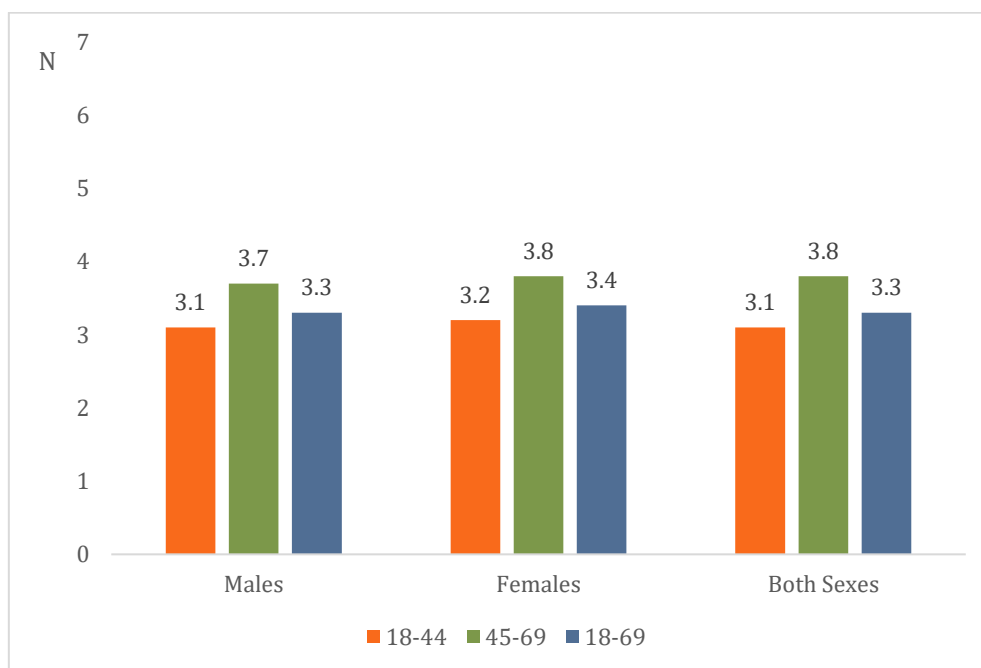
On average, males and females of all ages reported consuming fruit 3.3 (3.2-3.4) days per week. There was little difference between males and females (3.3 days, 3.1-3.5 and 3.4 days, 3.2-3.5, respectively) and only a slight variance between 18-44 and 45-69 age groups (3.1 days, 3.0-3.3 and 3.8 days, 3.6-4.0, respectively). Frequency of fruit consumption did not meet the WHO daily recommendation.

Figure 8. Mean number of fruit servings consumed per day among adults 18-69 years old, by sex and age groups
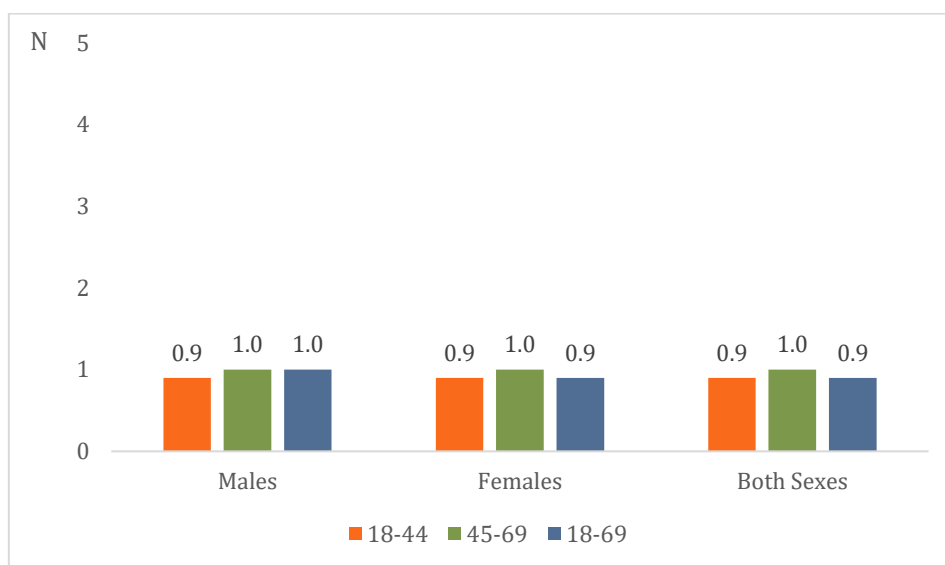
Of the days when fruit was consumed, males and females of all ages consumed approximately one serving (0.9, 0.9-1.0) of fruit, much less than the WHO recommendation. There was little variance by sex or age.

Figure 9. Mean number of days per week of vegetable consumption among adults 18-69 years old, by sex and age groups
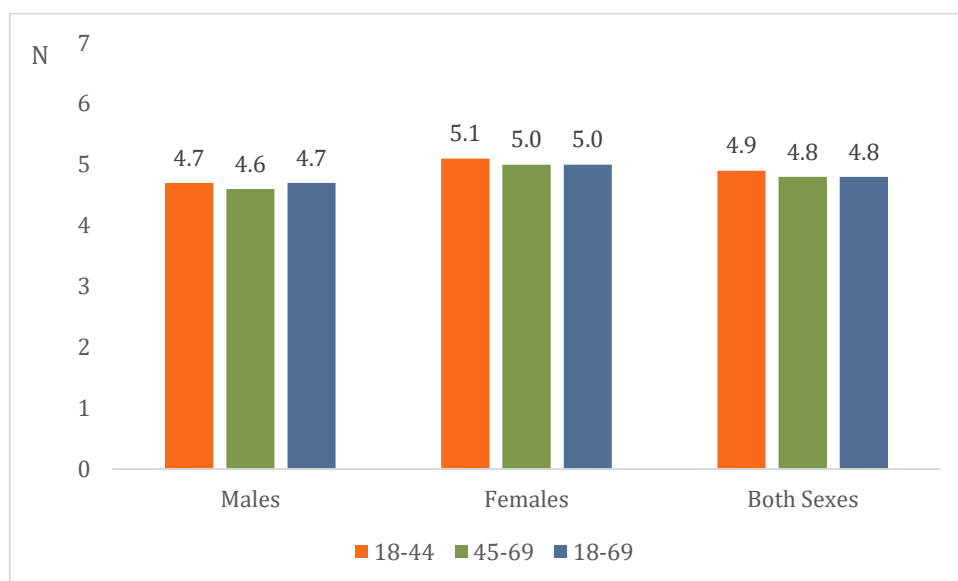
Males and females reported an increased number of days per week that vegetables were consumed compared to the number of days that fruits were consumed (4.8 days, 4.7-5.0 and 3.3 days, 3.2-3.4, respectively); nevertheless, frequency of vegetable consumption again did not meet the WHO daily recommendation. Females consumed vegetables more frequently than males (5.0 days, 4.9-5.2 and 4.7 days, 4.5-4.8, respectively). There was little variance in frequency of consumption by age.

Figure 10. Mean number of vegetable servings consumed per day among adults 18-69 years old, by sex and age groups
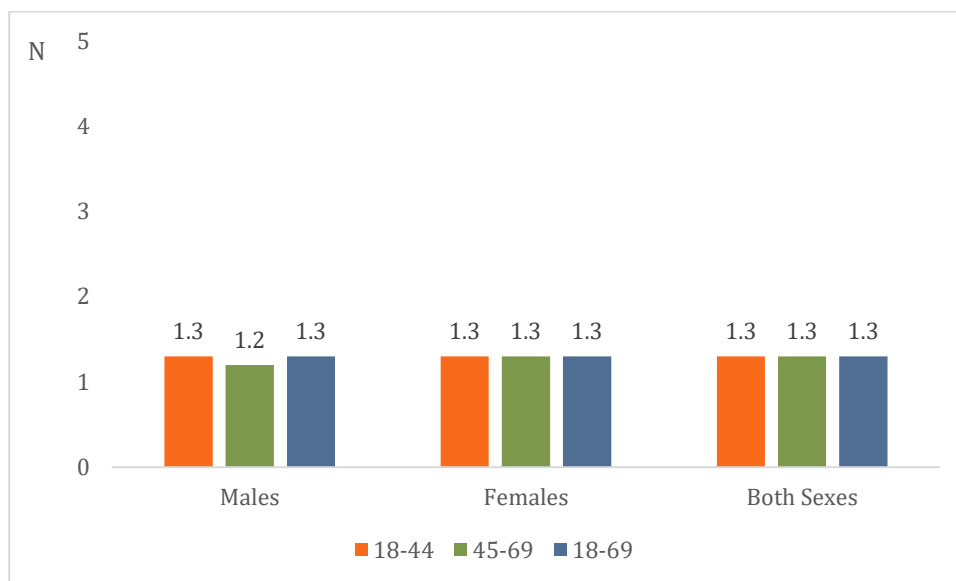
Of the days when vegetables were consumed, males and females of all ages consumed approximately one serving (1.3, 1.2-1.4) of vegetables, a slightly higher quantity than the average daily fruit consumption, though still much less than the WHO recommendation. There was little variance by sex or age.

Table 19. Percentage of adults 18-69 years old who consumed daily servings of fruit or vegetables, by consumption frequency, sex, and age groups

Age Group (years)	No fruit and/or vegetables		1-2 servings[1]		3-4 servings		≥5 servings	
Percentage (95% CI)								
Males								
18-44	19.3	(15.0-23.7)	54.9	(48.7-61.1)	18.5	(13.6-23.3)	7.3	(3.6-11.0)
45-69	15.5	(11.2-19.8)	60.3	(55.0-65.6)	17.7	(13.2-22.2)	6.5	(4.0-9.0)
18-69	**18.2**	**(14.6-21.8)**	**56.6**	**(51.8-61.3)**	**18.2**	**(14.1-22.4)**	**7.0**	**(4.5-9.6)**
Females								
18-44	17.0	(14.0-19.9)	61.1	(57.2-65.1)	16.7	(13.6-19.8)	5.2	(3.5-7.0)
45-69	13.6	(9.4-17.8)	58.3	(52.6-64.0)	21.1	(16.4-25.8)	7.0	(4.4-9.6)
18-69	**15.9**	**(13.6-18.2)**	**60.2**	**(57.0-63.4)**	**18.1**	**(15.3-20.9)**	**5.8**	**(4.3-7.3)**
Both Sexes								
18-44	18.2	(15.6-20.8)	57.9	(54.1-61.7)	17.6	(14.3-20.9)	6.3	(4.3-8.3)
45-69	14.6	(11.2-18.0)	59.3	(55.3-63.3)	19.4	(15.6-23.2)	6.7	(4.8-8.6)
18-69	**17.1**	**(14.9-19.3)**	**58.3**	**(55.2-61.5)**	**18.2**	**(15.1-21.2)**	**6.4**	**(5.0-7.8)**

[1] One serving is defined as approximately 80g of fruit or vegetable

While vegetable consumption was higher in frequency and quantity across both sexes and age groups, overall reported consumption of fruits and vegetables was much lower than WHO recommendations of 400g (or approximately 5 servings of 80g) of daily fruit and vegetable consumption (24). Only 6.4% of males and females aged 18-69 met the guidelines of at least 5 servings of fruit and/or vegetables per day, while 93.6% (92.2-95.0) did not and 17.1% reported zero daily consumption of fruits and/or vegetables. There were limited variances among sex or age groups.

Salt consumption

High levels of daily sodium intake are risk factors associated with high blood pressure that can contribute to coronary heart disease and stroke. Information was collected on consumption behavior related to the addition of salt to foods and consumption of processed foods, as well as self-reported quantities of salt consumed, awareness of the impacts of salt on health outcomes, and actions taken to reduce salt intake.

Table 20. Percentage of adults 18-69 years old by self-reported frequency of salt consumption, sex and age groups

Age Group (years)	Add salt *always or often* before eating		Add salt *always or often* when preparing food at home		*Always or often* consume processed food high in salt	
	Percentage (95% CI)					
Males						
18-44	11.9	(9.2-14.6)	72.6	(67.6-77.6)	16.4	(12.2-20.6)
45-69	9.9	(6.2-13.5)	69.2	(64.0-74.3)	7.1	(4.1-10.2)
18-69	**11.3**	**(9.2-13.4)**	**71.5**	**(67.5-75.6)**	**13.6**	**(10.5-16.7)**
Females						
18-44	12.4	(9.9-14.9)	75.2	(71.8-78.7)	12.5	(9.7-15.3)
45-69	10.5	(6.2-14.8)	67.3	(62.2-72.5)	6.6	(4.2-9.1)
18-69	**11.8**	**(9.6-14.0)**	**72.8**	**(69.8-75.7)**	**10.7**	**(8.6-12.7)**
Both Sexes						
18-44	12.2	(10.2-14.1)	73.9	(70.6-77.1)	14.5	(12.0-17.0)
45-69	10.2	(7.8-12.6)	68.3	(64.6-71.9)	6.9	(4.9-8.8)
18-69	**11.5**	**(10.0-13.1)**	**72.1**	**(69.4-74.9)**	**12.2**	**(10.4-14.0)**

Questions about adding salt to food or consuming foods high in salt, received relatively similar responses across both sex and age groups. Reported addition of salt before eating and consumption of processed food high in salt was similar (11.5% and 12.2%, respectively), with higher reported use among males and females in the 18-44 age group who were twice as likely to *always or often* consume processed food high in salt compared to those in the older age group (14.5% to 6.9%, respectively). A much larger proportion (72.1%) indicated they *always or often* added salt when cooking or preparing foods at home.

Table 21. Percentage of adults 18-69 years old who think lowering salt in their diet is very, somewhat, or not at all important, by sex and age groups

Age Group (years)	Very important		Somewhat important		Not at all important	
	Percentage (95% CI)					
Males						
18-44	64.3	(57.7-70.9)	19.1	(14.9-23.3)	16.6	(12.1-21.1)
45-69	74.3	(69.1-79.5)	14.8	(11.4-18.2)	10.9	(6.1-15.8)
18-69	**67.3**	**(61.8-72.8)**	**17.8**	**(14.8-20.8)**	**14.9**	**(10.9-18.9)**
Females						
18-44	71	(66.8-75.3)	17.5	(14.1-20.9)	11.5	(8.5-14.5)
45-69	82	(77.5-86.6)	12.6	(8.4-16.8)	5.4	(3.1-7.6)
18-69	**74.6**	**(71.5-77.6)**	**15.9**	**(13.1-18.7)**	**9.5**	**(7.4-11.7)**
Both Sexes						
18-44	67.6	(63.7-71.4)	18.3	(15.6-21.0)	14.1	(11.4-16.8)
45-69	78.2	(74.1-82.2)	13.7	(11.2-16.2)	8.1	(5.4-10.8)
18-69	**70.9**	**(67.5-74.3)**	**16.9**	**(14.7-19.1)**	**12.2**	**(10.0-14.5)**

A majority (79.9%, 77.9-81.8) of males and females of both age groups reported that they thought they generally consumed the right amount of salt. Only 9.1% reported consuming too much or far too much (6.9%, 5.6-8.3 and 2.2%, 1.5-3.0, respectively). However, most (70.9%) thought lowering salt in their diet was very important and 88% (85.7-90.3) thought consuming too much salt could cause serious health problems.

Table 22. Percentage of adults 18-69 years old who take specific action on a regular basis to control salt intake, by sex and age groups

Age Group (years)	Limit consumption of processed foods		Read salt or sodium content on food labels		Buy low salt/sodium alternatives		Use spices other than salt when cooking		Avoid eating foods prepared outside of home	
	Percentage (95% CI)									
Males										
18-44	58.6	(53.4-63.8)	32.4	(26.5-38.3)	29.0	(23.7-34.4)	60.1	(54.9-65.3)	49.4	(44.4-54.4)
45-69	63.9	(56.6-71.2)	40.1	(33.8-46.4)	38.4	(32.0-44.7)	57.4	(51.7-63.1)	62.4	(55.2-69.6)
18-69	**60.2**	**(55.2-65.1)**	**34.7**	**(29.8-39.7)**	**31.8**	**(27.1-36.5)**	**59.3**	**(55.3-63.2)**	**53.3**	**(49.2-57.3)**
Females										
18-44	65.1	(61.2-69.1)	43.7	(39.7-47.7)	37.6	(33.6-41.6)	68.1	(64.7-71.6)	61.4	(56.8-66.0)
45-69	71.5	(66.7-76.4)	51.3	(46.1-56.6)	45.1	(39.8-50.4)	65.6	(60.3-70.9)	72.6	(68.1-77.1)
18-69	**67.1**	**63.8-70.5)**	**46.1**	**(43.1-49.1)**	**40.0**	**(36.8-43.2)**	**67.3**	**(64.3-70.4)**	**64.9**	**(61.5-68.3)**
Both Sexes										
18-44	61.7	(58.6-64.8)	37.8	(34.0-41.6)	33.1	(29.7-36.6)	63.9	(60.8-67.1)	55.1	(51.6-58.6)
45-69	67.7	(63.5-71.8)	45.6	(41.1-50.2)	41.7	(37.0-46.4)	61.4	(57.4-65.5)	67.4	(63.2-71.7)
18-69	**63.5**	**(60.8-66.3)**	**40.2**	**(37.0-43.4)**	**35.8**	**(32.7-38.9)**	**63.2**	**(60.7-65.6)**	**58.9**	**(56.3-61.5)**

Females of all ages were more likely to take specific actions to lower salt intake in their diet. Overall, males and females aged 45-69 were more likely to report taking specific actions on a regular basis to control salt intake than the younger group.

Physical activity

When analyzing physical activity data, both continuous and categorical indicators are used. To calculate the categorical indicator according to the WHO recommended amount of physical activity, the total time spent in physical activity during a typical week and the intensity of the physical activity are considered. At a minimum, adults should meet the following weekly requirements, which may include activity during work, transport, and leisure time (25):

- 150 minutes of moderate-intensity physical activity; OR
- 75 minutes of vigorous-intensity physical activity; OR
- An equivalent combination of moderate- and vigorous-intensity physical activity achieving at least 600 metabolic equivalent (MET) minutes.

For comparison, three levels of physical activity used in former recommendations on physical activity were used to classify activity levels as low, moderate, and high. Details on these criteria are shown in the data book.

Table 23. Percentage of adults 18-69 years old who do not meet WHO recommendations on physical activity for health, by sex and age groups

Age Group (years)	Do not meet WHO recommendation	
	Percentage (95% CI)	
Males		
18-44	16.4	(12.4-20.4)
45-69	24.4	(18.5-30.3)
18-69	**18.9**	**(15.3-22.4)**
Females		
18-44	39.6	(35.7-43.6)
45-69	42.3	(37.0-47.6)
18-69	**40.5**	**(37.4-43.5)**
Both Sexes		
18-44	27.6	(24.5-30.6)
45-69	33.2	(29.3-37.2)
18-69	**29.3**	**(26.9-31.8)**

About twice as many females as compared to males did not meet the WHO recommendations on physical activity (40.5% and 18.9%, respectively). While there was little difference among age groups for females, males aged 45-69 were less likely to meet the WHO recommendation than males aged 18-44.

The mean minutes of total physical activity on average per day was 215.3 minutes (202.2–228.4 minutes) and the median minutes of total physical activity on average per day was 106.4 minutes (inter-quartile range 12.9 – 342.9 minutes). This varied by sex with males, especially those aged 18-44 years old, reporting longer periods of daily physical activity than females.

Figure 11. Percentage of adults 18-69 years old who meet low, moderate, and high levels of physical activity, by sex and age groups

High – a person reaching any of the following criteria is classified in this category:
- Vigorous-intensity activity on at least 3 days achieving a minimum of at least 1,500 MET-minutes/week; OR
- 7 or more days of any combination of walking, moderate- or vigorous-intensity activities achieving a minimum of at least 3,000 MET-minutes per week.

Moderate – a person not meeting the criteria for the "high" category, but meeting any of the following criteria is classified in this category:
- 3 or more days of vigorous-intensity activity of at least 20 minutes per day; OR
- 5 or more days of moderate-intensity activity or walking of at least 30 minutes per day; OR
- 5 or more days of any combination of walking, moderate- or vigorous-intensity activities achieving a minimum of at least 600 MET-minutes per week.

Low – a person not meeting any of the above-mentioned criteria falls in this category.

Differences in levels of physical activity between males and females were seen, with the majority (63.4%, 59.6-67.1) of males in all age groups reporting a high level of physical activity. In contrast, nearly half (46.7%, 43.5-50.0) of females of all ages reported low levels of physical activity. About twice as many females of all ages reported no vigorous physical activity than males (85%, 82.3-87.6 and 44.2%, 40.4-47.9, respectively).

Figure 12. Percentage of work, transport, and leisure activity that contribute to total activity among adults 18-69 years old, by sex and age groups
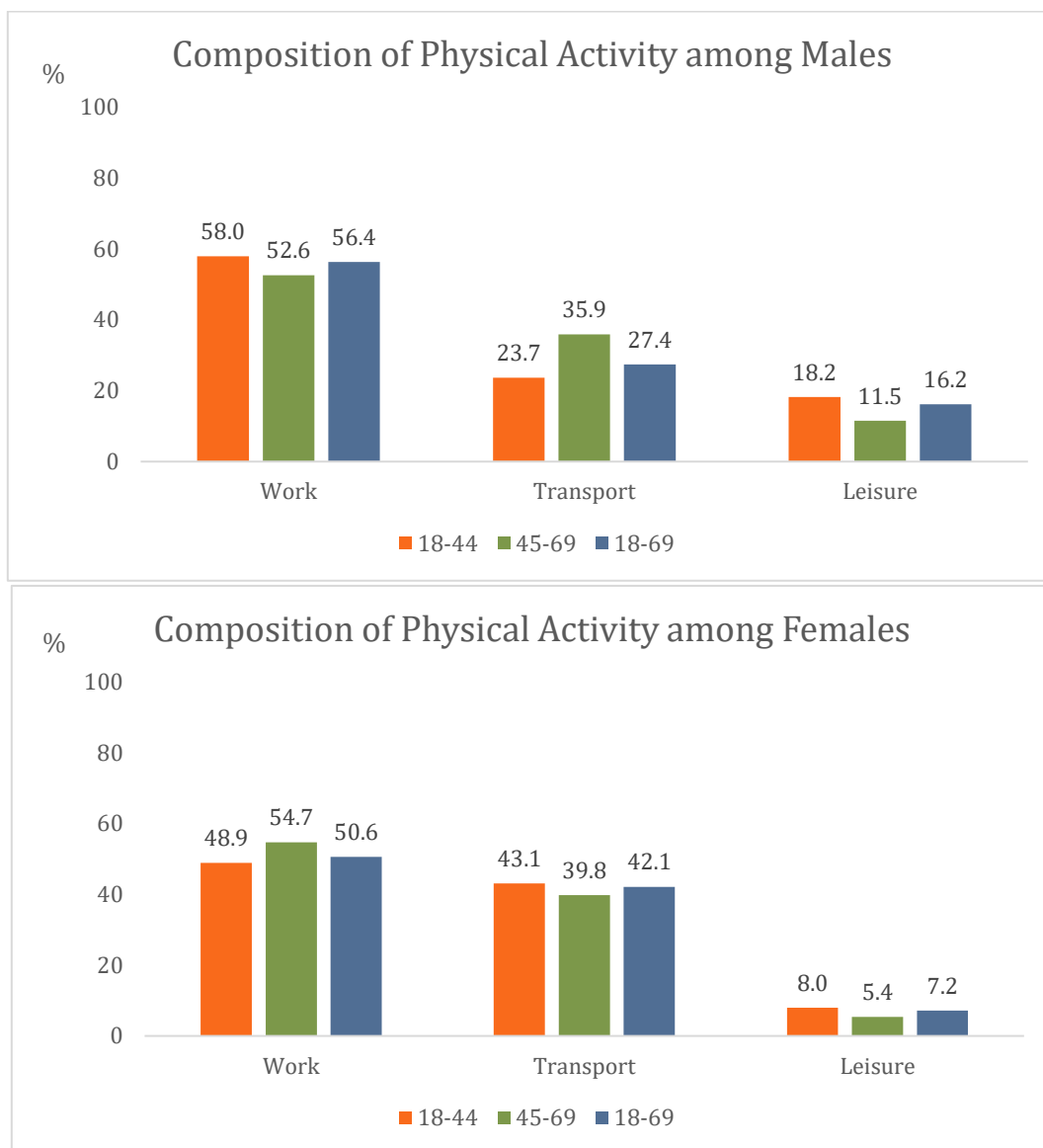
Both males and females reported a majority of their physical activity took place during work and transportation. Males of all ages were more likely to participate in leisure time physical activity than were females (16.2%, 13.9-18.5 and 7.2%, 5.6-8.8, respectively).

Levels of physical inactivity were reflected in body weight measurements. Maintaining a healthy body weight to prevent overweight and obesity is another risk factor for NCDs. Weight measurements were taken of all adults aged 18-69, excluding pregnant women.

Figure 13. Mean waist circumference (cm) of adults 18-69 years old, by sex and age groups
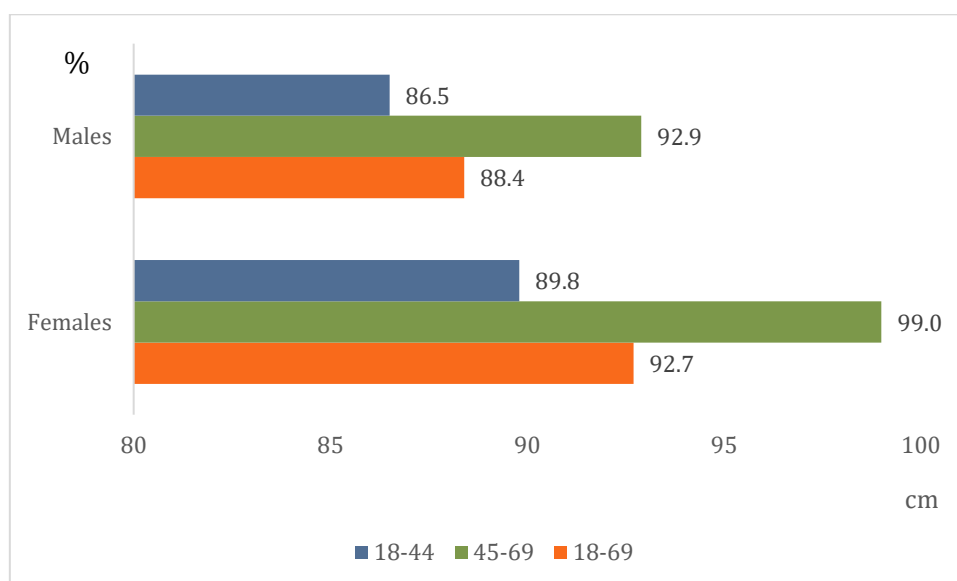
The average waist circumference for males was 88.4 cm (85.9-91.0 cm) and 92.7 cm for females (91.3-94.0 cm). Among both sexes, waist circumference increased with age, which was more evident in females (89.8 cm, 88.0-91.5 cm among 18-44 and 99.0 cm, 97.2-100.7 cm among 45-69).

Figure 14. Mean Body Mass Index (kg/m²) of adults 18-69 years old, by sex and age groups
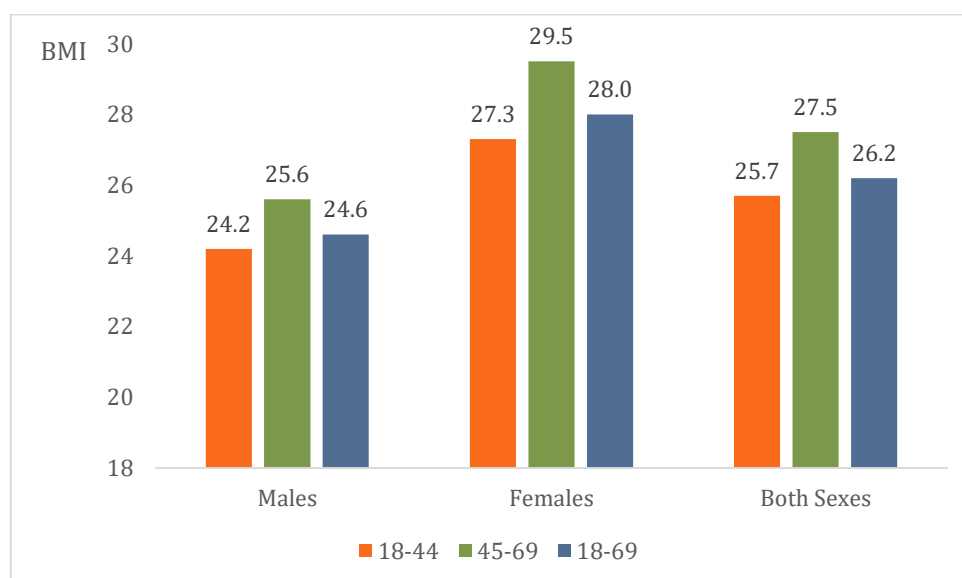
There was little difference in mean body mass index (BMI) between age groups within each sex. However, females had higher BMI than males (28.0 kg/m², 27.5-28.5 kg/m² and 24.6 kg/m², 24.0-25.3 kg/m², respectively).

Table 24. Percentage of adults 18-69 who are underweight, normal weight, overweight, and obese based on BMI, by sex and age groups

Age Group (years)	Under-weight BMI < 18.5		Normal weight BMI 18.5 - 24.9		Overweight BMI 25.0 - 29.9		Obese BMI ≥ 30.0	
				Percentage (95% CI)				
Males								
18-44	10.4	(6.8-14.0)	54.3	(49.9-58.7)	22.3	(17.9-26.7)	13.0	(9.6-16.5)
45-69	6.4	(2.4-10.5)	43.4	(37.0-49.8)	34.0	(27.8-40.2)	16.2	(12.0-20.4)
18-69	**9.2**	**(5.8-12.6)**	**51.0**	**(47.2-54.8)**	**25.8**	**(21.8-29.8)**	**14.0**	**(11.1-16.8)**
Females								
18-44	6.7	(4.6-8.9)	37.4	(33.5-41.2)	26.1	(22.3-30.0)	29.8	(26.0-33.6)
45-69	2.4	(0.9-3.8)	22.9	(18.7-27.2)	31.4	(26.9-35.8)	43.3	(38.1-48.6)
18-69	**5.4**	**(3.8-6.9)**	**32.8**	**(29.8-35.9)**	**27.8**	**(25.1-30.5)**	**34.0**	**(31.1-37.0)**
Both Sexes								
18-44	8.7	(6.6-10.8)	46.3	(43.2-49.3)	24.1	(21.5-26.7)	21.0	(18.0-23.9)
45-69	4.4	(2.3-6.6)	33.3	(29.4-37.3)	32.7	(29.0-36.5)	29.5	(26.1-32.9)
18-69	**7.4**	**(5.5-9.2)**	**42.3**	**(39.7-44.9)**	**26.7**	**(24.6-28.9)**	**23.6**	**(21.3-25.9)**

Males were more likely to be underweight or normal weight compared to females (60.2% and 38.2%, respectively). Likewise, females were more likely to be considered obese than males (34% and 14%, respectively). The likelihood of having a high BMI increased with age for both sexes.

Figure 15. Percentage of adults 18-69 years old classified as overweight and obesity (BMI ≥ 25), by sex and age groups
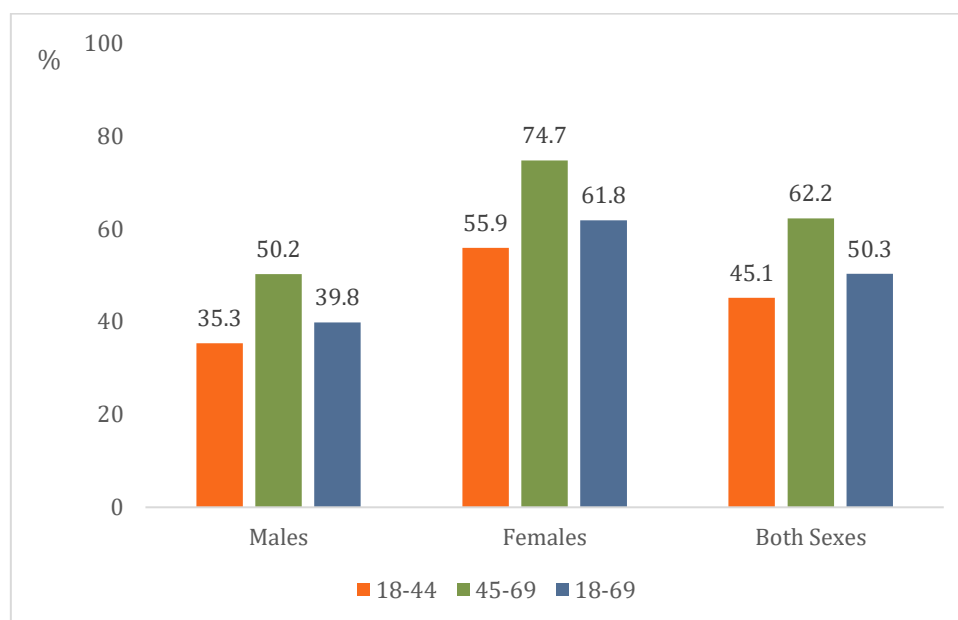
Half of adults were considered overweight (50.3%, 24.6-28.9). Females were more likely to have a BMI higher than or equal to 25 kg/m^2 than males (61.8%, 58.6-65.0 and 39.8%, 34.6-44.9, respectively).

History of raised blood pressure

High blood pressure is a common risk factor for NCDs. Information was self-reported regarding history of blood pressure measurements and steps taken to reduce high blood pressure. Physical measurements were also taken among those currently using and not using medication for raised blood pressure.

Table 25. Percentage of adults 18-69 years old who have had blood pressure measured by a health worker and received a diagnosis, by sex and age groups

Age Group (years)	Never measured		Measured, not diagnosed		Diagnosed, not within past 12 months		Diagnosed within past 12 months	
	Percentage (95% CI)							
Males								
18-44	43.2	(35.7-50.7)	45.0	(38.3-51.8)	3.5	(1.5-5.5)	8.3	(5.6-10.9)
45-69	11.8	(8.4-15.3)	52.7	(47.1-58.3)	9.7	(6.4-13.0)	25.8	(20.7-30.9)
18-69	**33.8**	**(28.5-39.1)**	**47.3**	**(42.2-52.4)**	**5.3**	**(3.6-7.1)**	**13.5**	**(11.1-16.0)**
Females								
18-44	17.0	(14.4-19.6)	65.9	(62.3-69.5)	5.7	(3.8-7.7)	11.3	(8.9-13.8)
45-69	6.7	(4.4-9.0)	46.9	(41.6-52.2)	10.8	(7.4-14.2)	35.6	(30.5-40.6)
18-69	**13.8**	**(11.9-15.7)**	**60.0**	**(57.0-62.9)**	**7.3**	**(5.6-9.0)**	**19.0**	**(16.5-21.4)**
Both Sexes								
18-44	30.7	(26.2-35.1)	55.0	(51.0-59.0)	4.6	(3.2-5.9)	9.8	(7.8-11.7)
45-69	9.3	(7.3-11.3)	49.8	(46.0-53.7)	10.2	(7.8-12.6)	30.6	(26.9-34.3)
18-69	**24.1**	**(21.0-27.2)**	**53.4**	**(50.3-56.5)**	**6.3**	**(5.0-7.6)**	**16.2**	**(14.4-17.9)**

Overall, males were less likely to have had their blood pressure measured. Almost a third (33.8%) of all males reported never having their blood pressure measured compared with females (13.8%). Both males and females aged 18-44 were less likely to have had their blood pressure measured, compared to those 45-69 years old (30.7% and 9.3%, respectively). Among females, 60% reported having their blood pressure measured and received a diagnosis of no high blood pressure, while 47.3% of all males reported the same. Overall, 18.8% of males and 26.3% of females reported being diagnosed with high blood pressure.

Figure 16. Percentage of adults 18-69 years old diagnosed with high blood pressure currently taking drugs (medication) for raised blood pressure or hypertension prescribed by a doctor or health worker, by sex and age groups
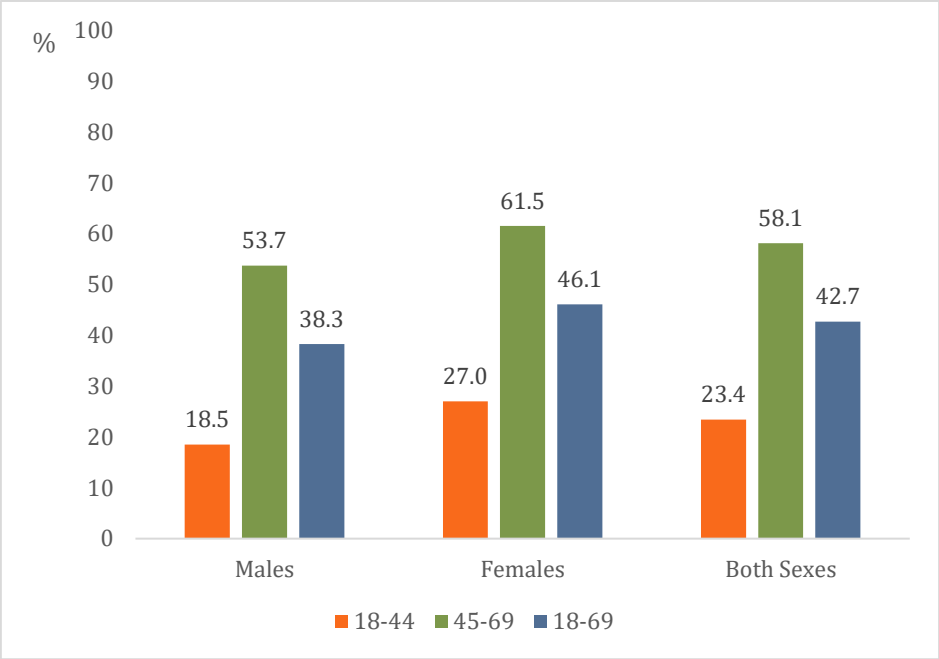
Among those diagnosed with high blood pressure, approximately one half of all females (46.1%, 40.4-51.8) and one third of males (38.3%, 29.9-46.8) reported taking medication for their raised blood pressure. Variances by age are evident with those aged 45-69 more likely to take medications compared to those 18-44 years old (58.1%, 52.4-63.8 and 23.4%, 17.3-29.5, respectively).

Figure 17. Percentage of adults 18-69 years old diagnosed with high blood pressure who have sought advice or received treatment from a traditional healer for raised blood pressure, both sexes by age groups
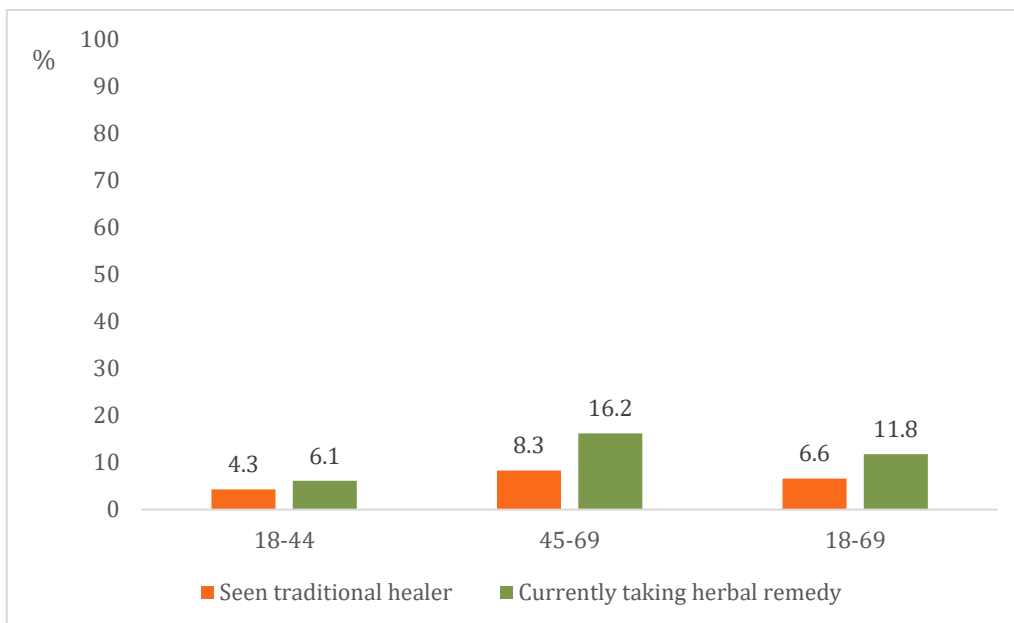
Persons with raised blood pressure who reported seeing a traditional healer for their ailment was generally low among both sexes and age groups (6.6%, 3.7-9.4). The most common group was males aged 45-69 years, of which 12.5% (95% CI, 2.2-22.7) indicated seeing a traditional healer. More males and females (11.8%, 8.3-15.3) reported taking herbal or traditional remedies for raised blood pressure, with again the highest likelihood among males aged 45-69 (17.7%, 6.6-28.8).

Figure 18. Mean systolic blood pressure (mmHg) of adults 18-69 years old, by sex and age groups
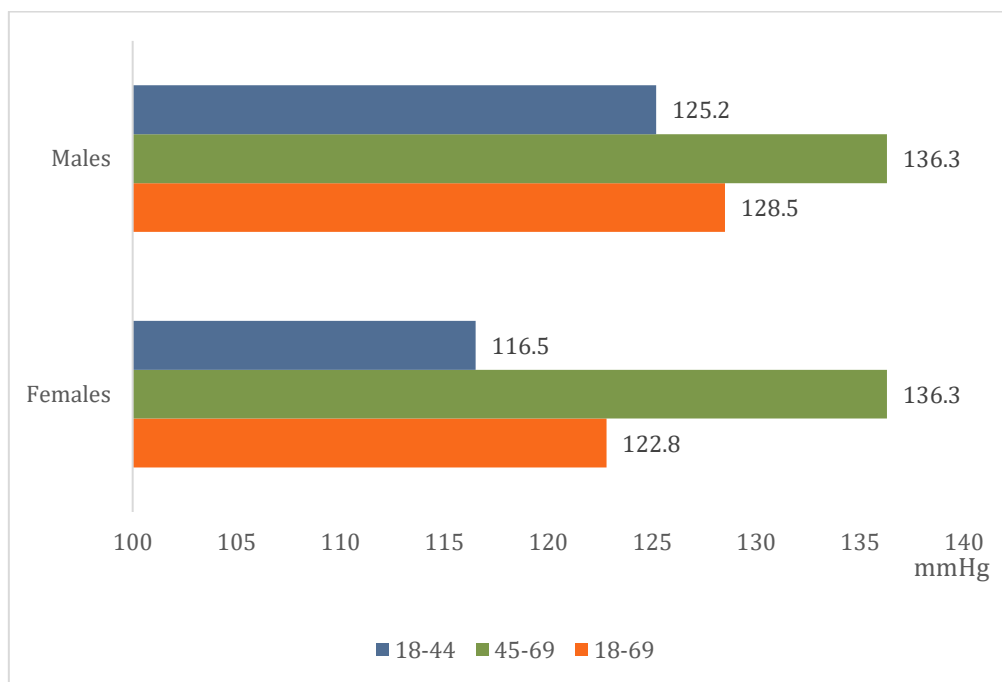
Blood pressure measurements were taken for all adults aged 18-69. The mean systolic blood pressure for both sexes and age groups, including those currently on medication for raised blood pressure, was 125.8/77.7 mmHg (124.8-126.7 and 77.0-78.4), which is only slightly higher than the optimal level of 120/80mmHg or lower. Mean systolic blood pressure was higher among males than females in the younger age group (125.2, 123.6-126.9 and 116.5, 115.3-117.8, respectively). It also increased with age for both sexes (121.1, 120.1-122.1 and 136.3, 134.2-138.4, respectively).

Table 26. Percentage of adults 18-69 years old with raised blood pressure (SBP ≥140 and/or DBP ≥ 90 mmHg or higher) or on medication for raised blood pressure, by sex and age groups

Age Group (years)	SBP ≥140 and/or DBP ≥ 90 mmHg or on medication	
	Percentage (95% CI)	
Males		
18-44	18.2	(14.0-22.4)
45-69	45.7	(40.3-51.1)
18-69	**26.4**	**(22.9-29.9)**
Females		
18-44	13.5	(10.6-16.3)
45-69	54.8	(49.4-60.2)
18-69	**26.2**	**(23.4-29.0)**
Both Sexes		
18-44	15.9	(13.5-18.4)
45-69	50.2	(46.6-53.7)
18-69	**26.3**	**(24.3-28.3)**

One in every four (26.4%) adults aged 18-69 had raised blood pressure (SBP ≥140 and/or DBP ≥ 90 mmHg or higher) or were currently on medication for raised blood pressure. Males aged 18-44 were more likely than females of the same age group to have raised blood pressure (18.2% and 13.5%, respectively); while the converse was seen among the older age group with males less likely than females aged 45-69 to have raised blood pressure (45.7% and 54.8%, respectively). Overall, the likelihood of raised blood pressure increased with age.

Table 27. Percentage of adults 18-69 years old with raised blood pressure (SBP ≥140 and/or DBP ≥ 90 mmHg or higher or on medication), by awareness, treatment and control status, sex, and age groups.

Age Group (years)	Not aware[1]		Aware, not treated		Aware, treated, not controlled		Aware, treated, controlled	
				Percentage (95% CI)				
Males								
18-44	76.8	(68.4-85.2)	10.3	(4.6-16.0)	10.3	(4.2-16.4)	2.6	(0.0-5.3)
45-69	40.8	(32.2-49.4)	13.9	(8.1-19.6)	27.5	(18.0-36.9)	17.8	(11.6-24.1)
18-69	**58.2**	**(51.2-65.1)**	**12.1**	**(8.3-16.0)**	**19.2**	**(13.0-25.4)**	**10.5**	**(6.8-14.1)**
Females								
18-44	40.9	(30.5-51.4)	21.3	(12.7-30.0)	10.6	(4.8-16.4)	27.1	(17.2-37.0)
45-69	26.9	(19.6-34.1)	17.8	(10.8-24.8)	32.6	(26.0-39.3)	22.7	(16.9-28.5)
18-69	**31.8**	**(25.6-38.0)**	**19.1**	**(13.6-24.6)**	**24.9**	**(19.6-30.1)**	**24.3**	**(19.1-29.4)**
Both Sexes								
18-44	62.3	(54.7-69.9)	14.8	(9.7-19.8)	10.4	(6.2-14.7)	12.5	(8.0-17.0)
45-69	33.3	(27.3-39.3)	16.0	(11.6-20.4)	30.2	(24.9-35.6)	20.4	(16.1-24.8)
18-69	**45.5**	**(40.2-50.7)**	**15.5**	**(12.1-18.8)**	**21.9**	**(18.0-25.8)**	**17.1**	**(13.8-20.4)**

[1] Not aware is defined as population that reported having received a diagnosis of raised blood pressure/hypertension by a health worker.

Among those with raised blood pressure (SBP ≥140 and/or DBP ≥ 90 mmHg or currently on medication), nearly half (45.5%) were unaware of their condition, which was more common among males than females (58.2% and 31.8%, respectively). As follows, females were more likely than males to have controlled their raised blood pressure (24.3% and 10.5%, respectively), though less than one in every five (17.1%) adults aged 18-69 had done so.

History of diabetes

Diabetes or history of diabetes is another common risk factor for NCDs. Information was self-reported regarding history of blood sugar measurements and use of medication prescribed for diabetes. Physical measurements were also taken for fasting blood glucose levels.

Table 28. Percentage of adults 18-69 years old who have had blood glucose measured by a health worker and received a diagnosis, by sex and age groups

Age Group (years)	Never measured		Measured, not diagnosed		Diagnosed, not within past 12 months		Diagnosed within past 12 months	
				Percentage (95% CI)				
Males								
18-44	70.0	(65.9-74.0)	26.7	(22.6-30.9)	2.2	(0.8-3.5)	1.1	(0.3-2.0)
45-69	35.1	(28.9-41.3)	50.0	(43.0-56.9)	2.7	(1.3-4.1)	12.3	(8.5-16.1)
18-69	**59.5**	**(56.1-62.9)**	**33.7**	**(30.1-37.3)**	**2.3**	**(1.3-3.4)**	**4.5**	**(3.0-5.9)**
Females								
18-44	53.2	(49.1-57.2)	41.4	(37.6-45.2)	1.4	(0.6-2.2)	4.0	(2.5-5.6)
45-69	26.1	(21.2-31.0)	46.2	(41.5-50.9)	3.8	(1.8-5.9)	23.8	(19.1-28.5)
18-69	**44.7**	**(41.3-48.0)**	**42.9**	**(40.0-45.8)**	**2.2**	**(1.2-3.1)**	**10.2**	**(8.1-12.3)**
Both Sexes								
18-44	62.0	(59.0-64.9)	33.7	(30.7-36.7)	1.8	(1.0-2.6)	2.5	(1.7-3.3)
45-69	30.7	(26.5-34.8)	48.1	(44.1-52.1)	3.2	(2.0-4.5)	18.0	(15.3-20.7)
18-69	**52.4**	**(49.9-54.9)**	**38.1**	**(35.8-40.5)**	**2.3**	**(1.5-3.0)**	**7.3**	**(6.2-8.4)**

Overall, males of all ages were more likely than females to never have had their blood glucose measured (59.5% and 44.7%, respectively). However, both males and females in the younger 18-44 age group were twice as likely to never have had the test compared to those in the 45-69 age group (62% and 30.7%, respectively). A large proportion of both males and females reported having their blood glucose measured, but not receiving a diagnosis of raised blood sugar or diabetes (33.7% and 42.9%, respectively). About twice as many males aged 45-69 years than those aged 18-44 reported having the test but not being diagnosed (50.0% and 26.7%, respectively). This age variance was not seen among females. A small proportion of both males and females reported having a diagnosis of high blood glucose, but not within the past 12 months (2.3%). A larger proportion (7.3%) reported receiving a diagnosis within the past 12 months; this was especially seen among those aged 45-69, with females twice as likely as males to have received a recent diagnosis (23.8% and 12.3%, respectively).

Figure 19. Percentage of adults 18-69 years old diagnosed with raised blood glucose or diabetes currently taking insulin or medication for diabetes prescribed by a doctor or health worker, both sexes by age groups
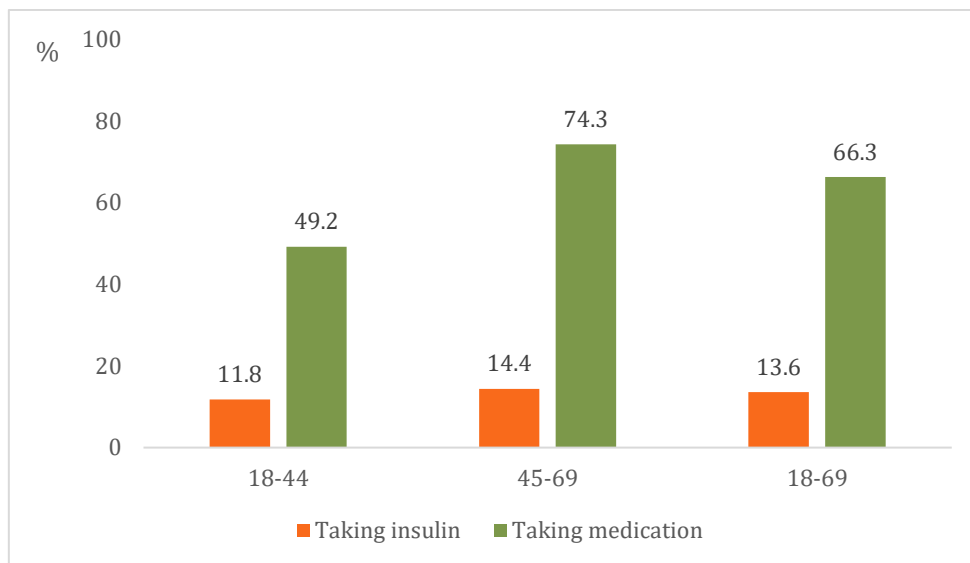
Overall, adults 18-69 with a diagnosis of raised blood glucose or diabetes were more far more likely to take medication as opposed to insulin to control the disease (66.3%, 59.8-72.9 and 13.6%, 8.3-18.9, respectively). Use of medication verses insulin was more evident among those in the 45-69 age group than those 18-44 years old (74.3%, 65.7-82.8 and 49.2%, 35.7-62.6, respectively).

There was not a lot of variance between sexes in terms of medication use. Of those diagnosed with raised blood glucose or diabetes, 60.7% (49.0-72.5) of males and 69.6% (61.6-77.6) of females reported taking medication for diabetes. Females aged 45-69 reported the highest use of medication (75.8%, 64.7-86.8) to treat diabetes among those diagnosed, with similar presentation in males of the same age group (71.5%, 57.5-85.5).

While medication to treat raised blood glucose or diabetes was more common, 16.0% (5.8-26.2) of males and 12.2% (6.4-18.0) of females reported they were prescribed insulin for this purpose. There was no variation in use of insulin between sexes, though this was seen between age groups. More males in the 18-44 age group reported taking insulin than did males in the older age group (21.4%, 0.0-43.0 and 13.2%, 4.7-21.7, respectively). The opposite was true for females; those aged 45-69 years were three times more likely to be taking insulin than those aged 18-44 (15.1%, 7.9-22.3 and 5.4%, 0.0-11.7, respectively).

Figure 20. Percentage of adults 18-69 years old diagnosed with raised blood glucose or diabetes who have sought advice or received treatment from a traditional healer for diabetes, both sexes by age groups
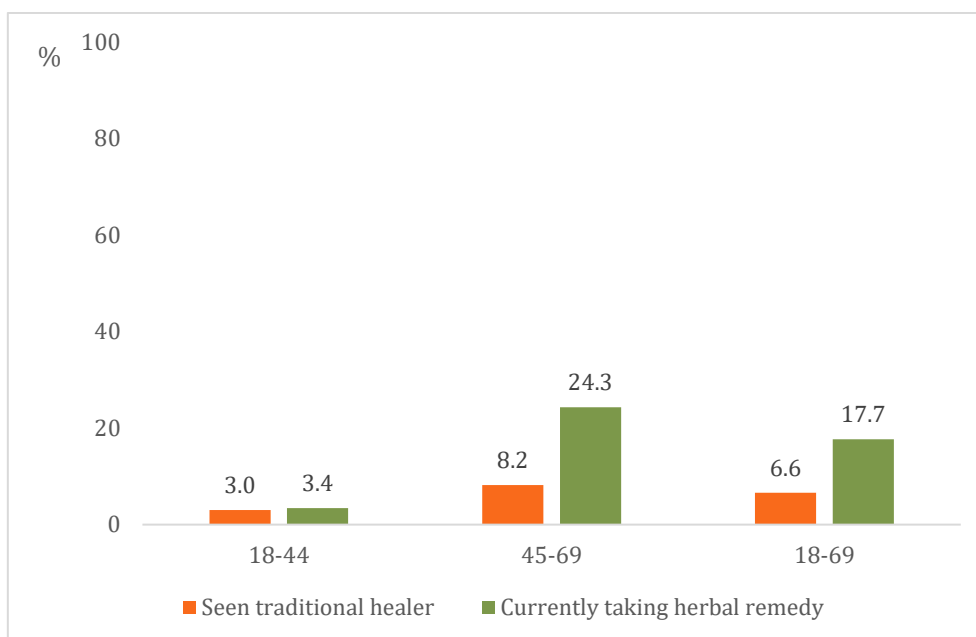
As previously seen for raised blood pressure, those who have a diagnosis of raised blood glucose or diabetes were more likely to take an herbal remedy for treatment of their condition than to seek advice from a traditional healer (17.7%, 11.7-23.8 and 6.6%, 3.6-9.6, respectively). Males aged 45-69 in particular were most likely of all groups to have seen a traditional healer or taken herbal treatment for diabetes (12.5%, 4.4-20.5 and 34%, 18.5-49.5, respectively).

Table 29. Percentage of adults 18-69 years old with impaired fasting glycaemia, raised blood glucose, or current on medication for diabetes, by sex and age

Age Group (years)	Impaired Fasting Glycaemia[1]		Raised blood glucose[2] or currently on medication for diabetes		Currently on medication for diabetes	
			Percentage (95% CI)			
Males						
18-44	3.0	(0.0-6.0)	4.0	(0.0-8.1)	1.8	(0.0-3.7)
45-69	8.8	(0.2-17.4)	15.0	(6.4-23.7)	12.5	(7.0-18.1)
18-69	**4.7**	**(1.5-8.0)**	**7.3**	**(3.3-11.3)**	**5.0**	**(2.8-7.2)**
Females						
18-44	3.6	(0.5-6.6)	9.7	(4.6-14.9)	3.0	(0.7-5.3)
45-69	10.5	(4.2-16.9)	27.7	(18.7-36.7)	24.4	(17.7-31.1)
18-69	**5.8**	**(2.9-8.8)**	**15.6**	**(11.1-20.2)**	**9.5**	**(6.7-12.2)**
Both Sexes						
18-44	3.3	(1.0-5.6)	6.8	(3.7-10.0)	2.4	(0.9-3.9)
45-69	9.7	(4.4-15.0)	21.7	(14.8-28.5)	18.5	(14.0-22.9)
18-69	**5.3**	**(3.0-7.6)**	**11.5**	**(8.5-14.4)**	**7.2**	**(5.4-9.0)**

[1] Impaired fasting glycaemia is defined as capillary whole blood value: ≥5.6mmol/L (100mg/dl) and <6.1mmol/L (110mg/dl)
[2] Raised blood glucose is defined as capillary whole blood value: ≥ 6.1 mmol/L (110 mg/dl)

Blood glucose measurements were taken for all adults aged 18-69. One in every ten adults had high blood sugar or were on medication for diabetes (11.5%, 8.5-14.4). Higher levels of impaired fasting glycaemia and raised blood glucose were seen among those aged 45-69 (9.7% and 21.7%, respectively). As such, this older age group was also more likely to currently be on medication for diabetes, which was even more prominent among women aged 45-69 (18.5% and 24.4%, respectively).

History of raised total cholesterol

A risk factor for NCDs is a history of raised total cholesterol, which can lead to an increased risk of cardiovascular disease. Information was self-reported regarding history of total cholesterol measurements and use of medication prescribed for raised total cholesterol. Physical measurements were also taken for total cholesterol and high-density lipoprotein (HDL) cholesterol.

Table 30. Percentage of adults 18-69 years old who have had cholesterol measured by a health worker and received a diagnosis, by sex and age groups

Age Group (years)	Never measured		Measured, not diagnosed		Diagnosed, not within past 12 months		Diagnosed within past 12 months	
	Percentage (95% CI)							
Males								
18-44	86.2	(83.0-89.4)	10.1	(7.3-12.9)	1.5	(0.4-2.6)	2.2	(1.0-3.4)
45-69	54.8	(49.0-60.7)	27.1	(22.2-32.1)	9.2	(5.8-12.6)	8.9	(5.9-11.8)
18-69	**76.8**	**(74.0-79.6)**	**15.2**	**(13.0-17.4)**	**3.8**	**(2.4-5.1)**	**4.2**	**(2.9-5.5)**
Females								
18-44	77.2	(74.0-80.5)	15.4	(12.7-18.1)	3.4	(2.0-4.9)	3.9	(2.5-5.3)
45-69	44.6	(39.1-50.0)	24.6	(20.2-29.0)	10.5	(7.3-13.7)	20.3	(15.7-24.9)
18-69	**67.0**	**(64.0-70.0)**	**18.3**	**(15.8-20.8)**	**5.6**	**(4.2-7.1)**	**9.1**	**(7.3-10.8)**
Both Sexes								
18-44	81.9	(79.3-84.5)	12.7	(10.5-14.9)	2.4	(1.5-3.3)	3.0	(2.0-4.0)
45-69	49.8	(45.6-53.9)	25.9	(22.7-29.1)	9.8	(7.6-12.1)	14.5	(12.0-17.0)
18-69	**72.1**	**(69.8-74.3)**	**16.7**	**(14.9-18.5)**	**4.7**	**(3.7-5.7)**	**6.5**	**(5.4-7.6)**

The majority (72.1%) of adults aged 18-69 have never had a blood cholesterol test, especially among males who were less likely to have been tested (76.8%) than females (67.0%). Those 18-44 years old represented the largest proportion untested (81.9%). As such, those 45-69 were more likely to have been tested; 50.2% of the older age group had their cholesterol tested compared to 18.1% in the younger group. Of those tested, females aged 45-69 were most likely to have received a diagnosis of raised cholesterol (30.8%).

Figure 21. Percentage of adults 18-69 years old diagnosed with raised total cholesterol currently taking oral treatment (medication) for raised total cholesterol prescribed by a doctor or health worker, by sex and age groups
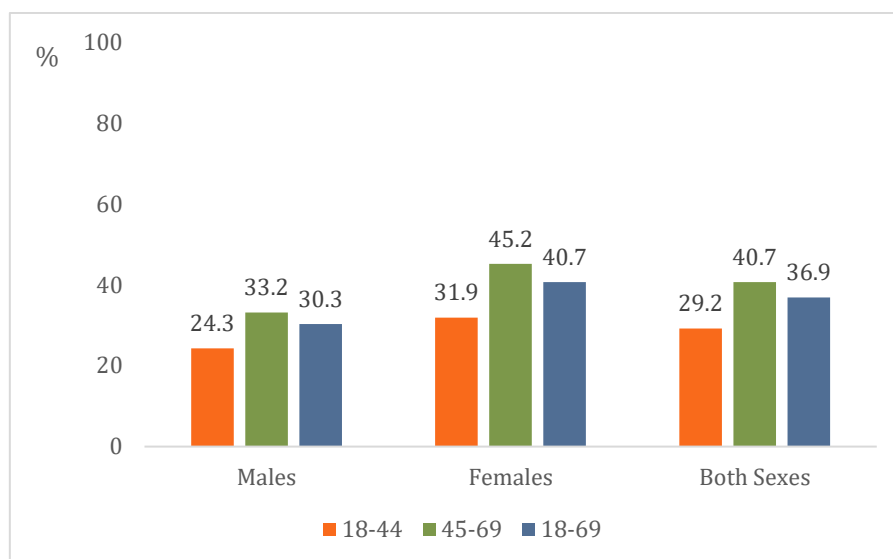
Less than half (36.9%, 30.3-43.4) of those with diagnosed high blood cholesterol reported taking prescribed medicine for their condition. More females (40.7%, 33.4-47.9) reported taking prescribed medication than males (30.3%, 19.4-41.3). The proportion of those taking medication increased with age among both sexes.

Figure 22. Percentage of adults 18-69 years old diagnosed with raised cholesterol who have sought advice or received treatment from a traditional healer for raised cholesterol, both sexes by age groups
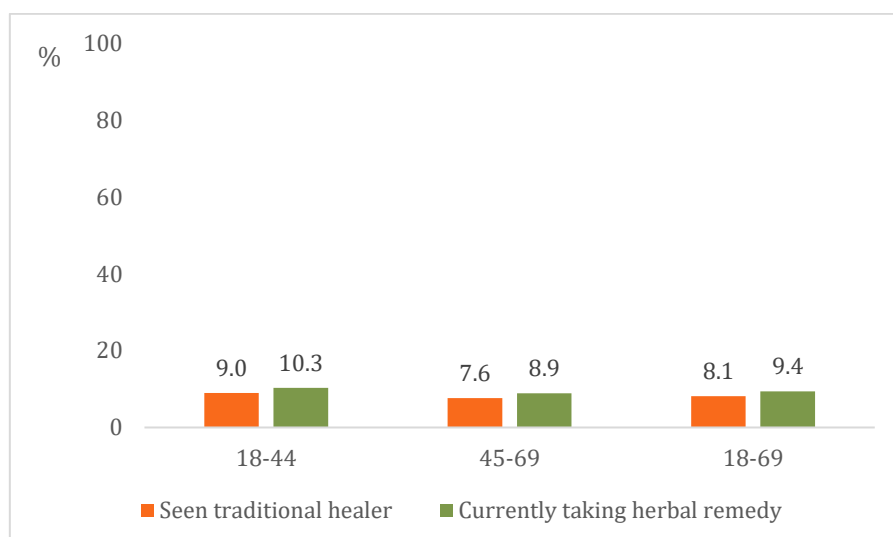
Seeing a traditional healer or taking herbal treatment was less common for raised cholesterol than what was reported for raised blood pressure and diabetes (8.1%, 4.0-12.2 and 9.4%, 4.7-14.0, respectively). Only 7.8% (4.6-10.9) of females and 8.6% (2.3-14.9) of males with diagnosed high blood cholesterol reported seeking a traditional healer for treatment. The proportion of those taking traditional herbs or remedies for their raised cholesterol was also not very high with only 6.4% (0.9-11.9) of males and 11.1% (6.3-15.9) of females reported receiving traditional treatment.

Table 31. Percentage of adults 18-69 years old with total cholesterol ≥ 5.0 mmol/L or ≥ 190 mg/dl, ≥ 6.2 mmol/L or ≥ 240 mg/dl, or currently on medication for raised cholesterol, by sex and age groups

Age Group (years)	Total cholesterol ≥ 5.0 mmol/L or ≥ 190 mg/dl[1]		Total cholesterol ≥ 6.2 mmol/L or ≥ 240 mg/dl[1]	
	Percentage (95% CI)			
Males				
18-44	38.8	(30.7-46.9)	10.5	(5.4-15.5)
45-69	65.0	(54.2-75.9)	22.1	(13.3-30.9)
18-69	**46.8**	**(40.1-53.5)**	**14.0**	**(9.6-18.4)**
Females				
18-44	44.4	(38.0-50.8)	8.6	(4.8-12.4)
45-69	73.2	(65.5-80.9)	33.5	(25.9-41.0)
18-69	**53.4**	**(48.2-58.6)**	**16.4**	**(12.7-20.0)**
Both Sexes				
18-44	41.6	(36.2-47.0)	9.5	(6.2-12.8)
45-69	69.2	(62.2-76.2)	27.9	(22.1-33.8)
18-69	**50.1**	**(45.7-54.5)**	**15.2**	**(12.3-18.1)**

[1] Or are currently on medication for raised cholesterol

Blood tests were conducted to measure total cholesterol. Nearly half of all adults (50.1%) had high cholesterol or were on medication for high cholesterol. Among both males and females, those aged 45-69 were more likely to have elevated blood cholesterol levels (69.2% and 27.9%). Results showed approximately one in five males (22.1%) and one in three females (33.5%) aged 44-69 had total cholesterol ≥ 6.2 mmol/L or ≥ 240 mg/dl or were currently on medication for raised cholesterol.

Table 32. Percentage of adults 18-69 years old with HDL <1.03 mmol/L or <40 mg/dl or HDL <1.03 mmol/L or <40 mg/dl, by sex and age groups

Age Group (years)	HDL < 1.03 mmol/L or < 40 mg/dl	
	Percentage (95% CI)	
Males		
18-44	26.6	(18.7-34.6)
45-69	44.9	(33.4-56.4)
18-69	**32.2**	**(25.8-38.6)**
	HDL < 1.29 mmol/L or < 50 mg/dl	
Females		
18-44	60.2	(53.6-66.8)
45-69	43.8	(35.8-51.8)
18-69	**55.1**	**(49.4-60.8)**

Blood tests were also conducted to measure high density lipoprotein (HDL). Older males were more likely to have lower HDL levels, which lead to an increased risk of cardiovascular disease, than were younger males (44.9% and 26.6%, respectively). However, the converse was seen among females with those aged 18-44 more likely to have lower HDL levels than those 45-69 years old (60.2% and 43.8%, respectively).

History of cardiovascular disease

Cardiovascular disease (CVD) is one of the four most common NCDs. As such, information was collected regarding the self-reported history of CVD and what practices are done regularly to prevent or treat heart disease.

Table 33. Percentage of adults 18-69 years old who report having a heart attack or chest pain from heart disease or a stroke, by sex and age groups

Age Group (years)	History of CVD	
	Percentage (95% CI)	
Males		
18-44	7.1	(3.8-10.4)
45-69	11.1	(7.0-15.2)
18-69	**8.3**	**(5.2-11.4)**
Females		
18-44	6.2	(4.3-8.1)
45-69	14.2	(10.0-18.5)
18-69	**8.7**	**(6.7-10.7)**
Both Sexes		
18-44	6.7	(4.5-8.8)
45-69	12.6	(9.1-16.1)
18-69	**8.5**	**(6.2-10.7)**

Overall, slightly more females (8.7%) than males (8.3%) reported ever having heart disease or a stroke. Those adults in the older age group were more likely to report having had an incident compared with those in the younger age group (12.6% and 6.7%, respectively).

Figure 23. Percentage of adults 18-69 years old regularly taking aspirin or statins to prevent or treat heart disease, both sexes by age groups
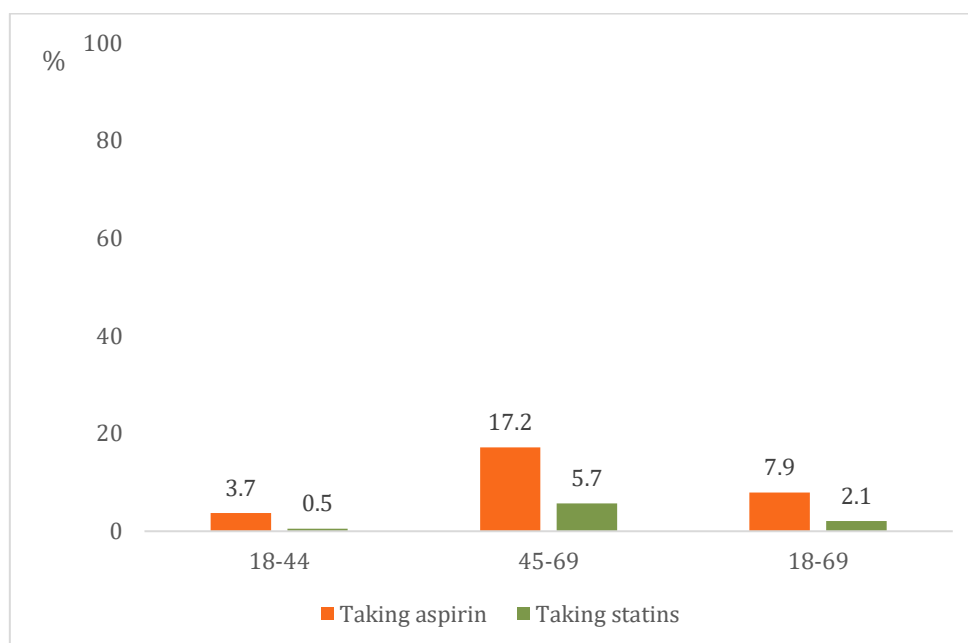
Regular use of aspirin to prevent or treat heart disease was more common than use of statins (7.9%, 5.7-10.0 and 2.1%, 1.5-2.8, respectively). There was little variance in use between the sexes; however, use did vary by age. Males and females 45-69 were more likely to use aspirin than their younger counterparts (17.2%, 13.5-20.9 and 3.7%, 1.8-5.6, respectively). This was also seen among use of statins with less than 1% (0.5%, 0.2-0.9) of adults 18-44 who reported use and 5.7% (3.9-7.6) of those aged 45-69.

Lifestyle advice given by a doctor or health worker

Information was collected regarding whether adults 18-69 received lifestyle advice from a doctor or health work within the past three years.

Figure 24. Percentage of adults 18-69 years old who received lifestyle advice from their doctor or health worker within the past 3 years, by sex
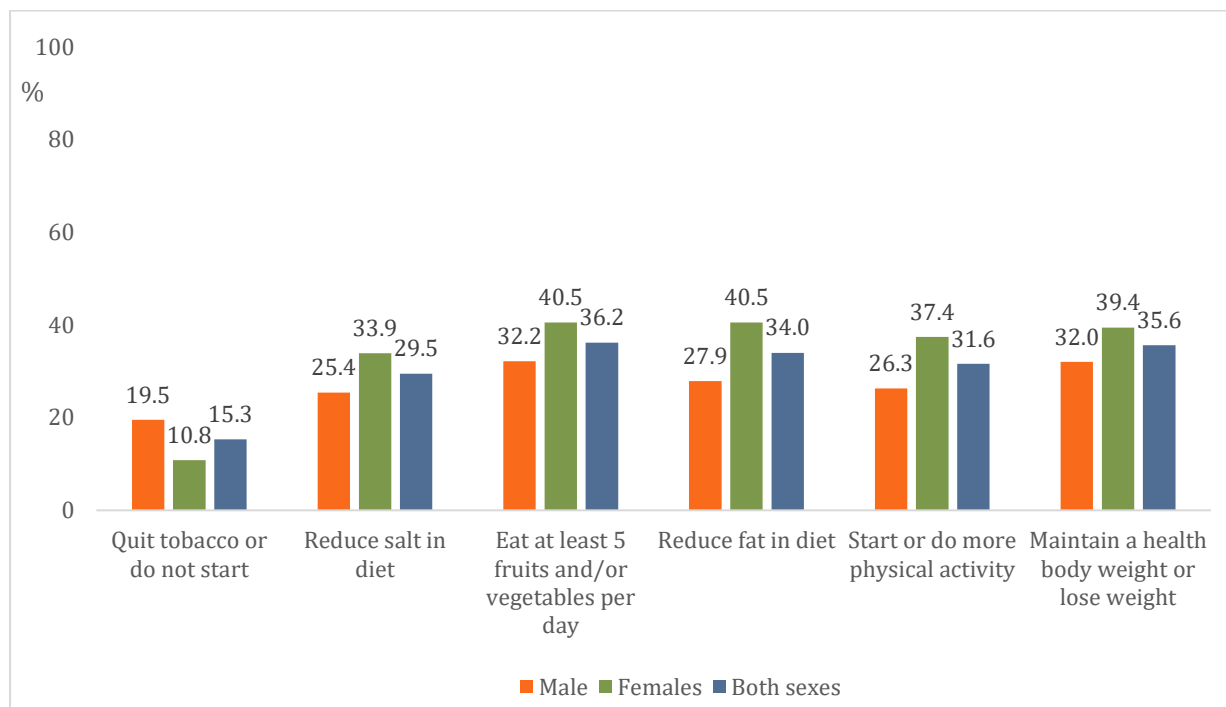
Females and those in the 45-69 age group were most likely to receive lifestyle advice from a doctor when compared to males aged 18-44. The most frequent lifestyle advice offered was related to diet and maintaining a healthy body weight. About one in five males (19.5%, 85% CI, 16.5-22.6) received advice from their doctor to quit using tobacco or not to start, with little variance between age groups.

Health Screening

Regular health screenings are an effective measure for preventing disease. Questions were asked regarding preventative cervical, breast, and prostate cancer screenings. Physical measurements were taken for body weight and BMI calculations.

Figure 25. Percentage of females 18-69 years old who have ever been screened for cervical cancer, by age groups
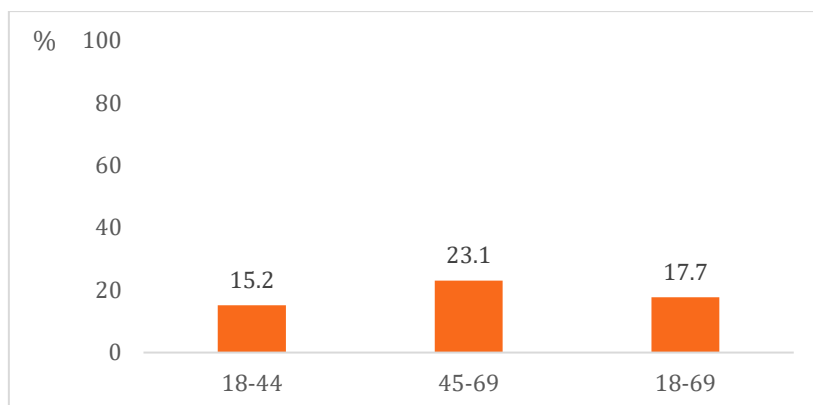
Females were asked if they had ever been screened for cervical cancer using visual inspection with acetic acid (VIA) or had a Papanicolaou (pap) test and Human Papillomavirus (HPV) test. About one in five females (17.7%, 15.3-20.0) aged 18-69 and one in four (23%, 19.2-26.8) females aged 30-49 reported ever having a cervical cancer test. The WHO recommends screening for all females to begin at age 30.

Figure 26. Percentage of females 18-69 years old who have been shown to do a breast self-examination, by age groups
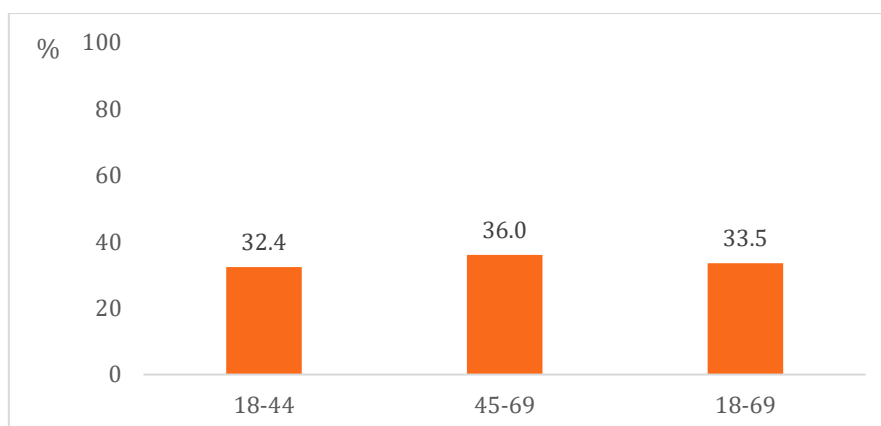
Females aged 18-69 were also asked if they have been shown how to conduct a breast self-exam. Approximately one in three (33.5%, 30.5-36.5) had been shown how to do this exam.

Table 34. Percentage of females 18-69 years old who have had a cytological test, breast exam, or mammogram, by age groups

Age Group (years)	≤ 1 year ago		> 1 and ≤ 2 years ago		> 2 years ago	
	Percentage (95% CI)					
Last pap or cytological test[1]						
18-44	6.3	(4.1-8.4)	5.0	(3.1-6.9)	9.3	(7.2-11.4)
45-69	5.3	(3.2-7.4)	3.4	(1.5-5.3)	19.5	(14.6-24.4)
18-69	**6.0**	**(4.4-7.5)**	**4.5**	**(3.2-5.9)**	**12.5**	**(10.4-14.7)**
Last breast exam						
18-44	11.9	(9.4-14.5)	5.2	(3.5-6.8)	10.6	(8.3-13.0)
45-69	17.4	(13.6-21.3)	1.9	(0.8-2.9)	12.7	(9.6-15.7)
18-69	**13.7**	**(11.5-15.9)**	**4.1**	**(2.9-5.3)**	**11.3**	**(9.3-13.3)**
Last mammogram[2]						
18-44	2.9	(0.9-4.9)	0.9	(0.2-1.6)	4.7	(3.1-6.4)
45-69	4.7	(2.6-6.7)	2.8	(1.0-4.5)	6.0	(3.9-8.0)
18-69	**3.5**	**(2.0-4.9)**	**1.5**	**(0.7-2.2)**	**5.1**	**(3.8-6.5)**

[1] WHO recommends pap tests or other cervical cancer screenings for women beginning at age 30
[2] WHO recommends organized population-based mammography screening programs for women aged 50-69 years, every 2 years

Very low coverage rates were reported for pap or other cytological tests, breast exams, and mammograms to prevent cervical and breast cancers. For breast cancer prevention, breast exams were more common than mammograms, though still extremely low.

Figure 27. Percentage of females 18-69 years old who have never had a cytological test, breast exam, or mammogram, by age groups
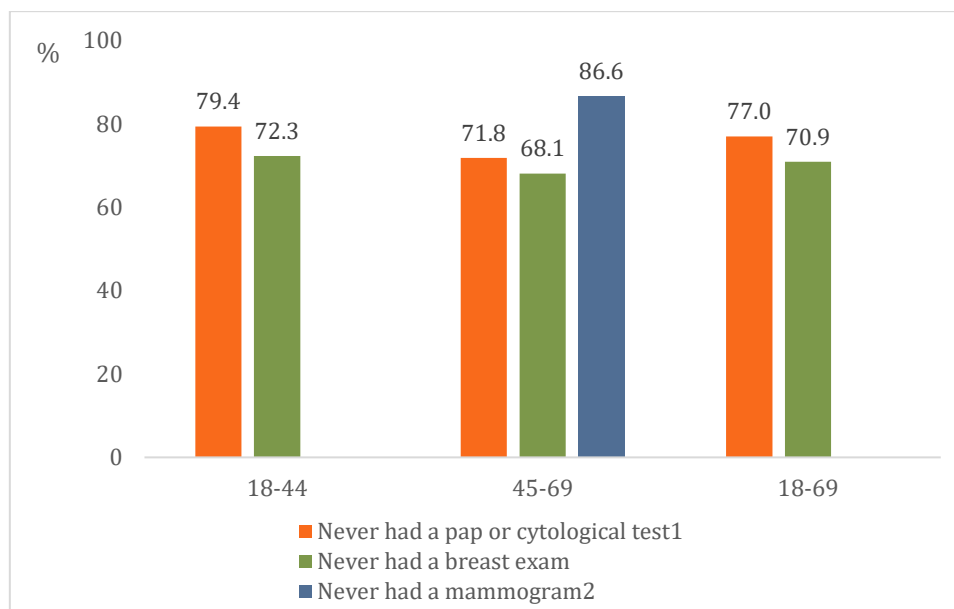
[1] WHO recommends pap tests or other cervical cancer screenings for women beginning at age 30
[2] WHO recommends organized population-based mammography screening programs for women aged 50-69 years, every 2 years; therefore, coverage is not represented in the 18-44 and 18-69 age groups

As follows females aged 18-69 who reported never having a pap or other cytological tests, breast exam, and/or mammogram was very high. These cervical and breast screenings are essential for effective cancer control and prevention.

Figure 28. Percentage of males 18-69 years old who have ever had a prostate exam, by age groups
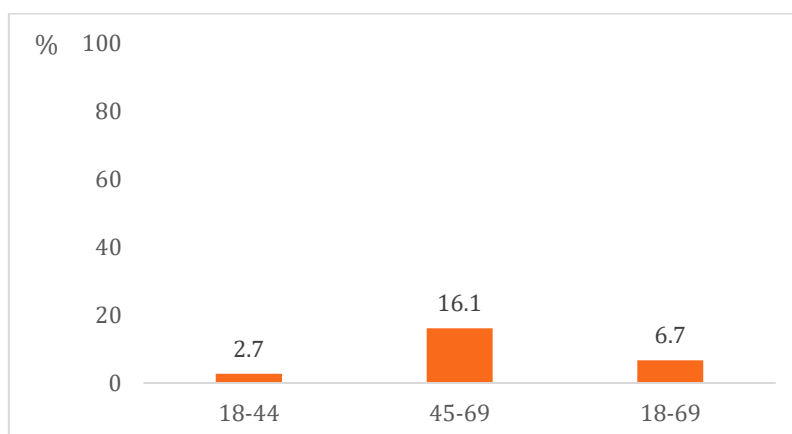
Only 16.1% (11.8-20.5) of males aged 45-69, the target screening age, reported ever having a prostate exam. These preventative exams are used to detect prostate cancer.

Table 35. Percentage of adults 18-69 years old who have ever had feces examined for hidden blood or a colonoscopy, by sex and age groups

Age Group (years)	Feces checked for hidden blood		Colonoscopy	
	Percentage (95% CI)			
Males				
18-44	10.9	(7.8-13.9)	1.2	(0.2-2.3)
45-69	17.3	(12.6-22.0)	5.5	(3.2-7.8)
18-69	**12.8**	**(10.4-15.2)**	**2.5**	**(1.5-3.5)**
Females				
18-44	13.6	(11.2-16.1)	1.3	(0.5-2.1)
45-69	13.9	(9.8-17.9)	1.6	(0.6-2.5)
18-69	**13.7**	**(11.9-15.5)**	**1.4**	**(0.8-2.0)**
Both Sexes				
18-44	12.2	(10.1-14.3)	1.3	(0.6-1.9)
45-69	15.6	(11.9-19.3)	3.6	(2.3-4.8)
18-69	**13.2**	**(11.7-14.8)**	**2.0**	**(1.4-2.6)**

Of males and females aged 18-69, 13.2% reported ever having fecal examination for hidden blood, while only around 2% indicated that they had ever had a colonoscopy. There was little variance by age or sex with only slight increases for both tests among males, 45-69 years old (17.3% and 5.5%, respectively). Tests that check for hidden blood in feces and colonoscopy are used for colorectal screening.

Summary of combined risk factors

The following rick factors were used to assess combined risk for NCDs:

- Current daily smoking
- Eating less than five servings of fruit and/or vegetables per day
- Not meeting WHO recommendations on physical activity for health (150 minutes of moderate-intensity physical activity per week or 75 minutes of vigorous-intensity physical activity per week or an equivalent combination of moderate- and vigorous-intensity physical activity)
- Overweight or obese (BMI ≥ 25 kg/m^2)
- Raised BP (SBP ≥ 140 mmHg and/or DBP ≥ 90 mmHg or currently on medication for raised BP

Figure 29. Percentage of adults 18-69 with risk factors for NCDs, both sexes and age groups
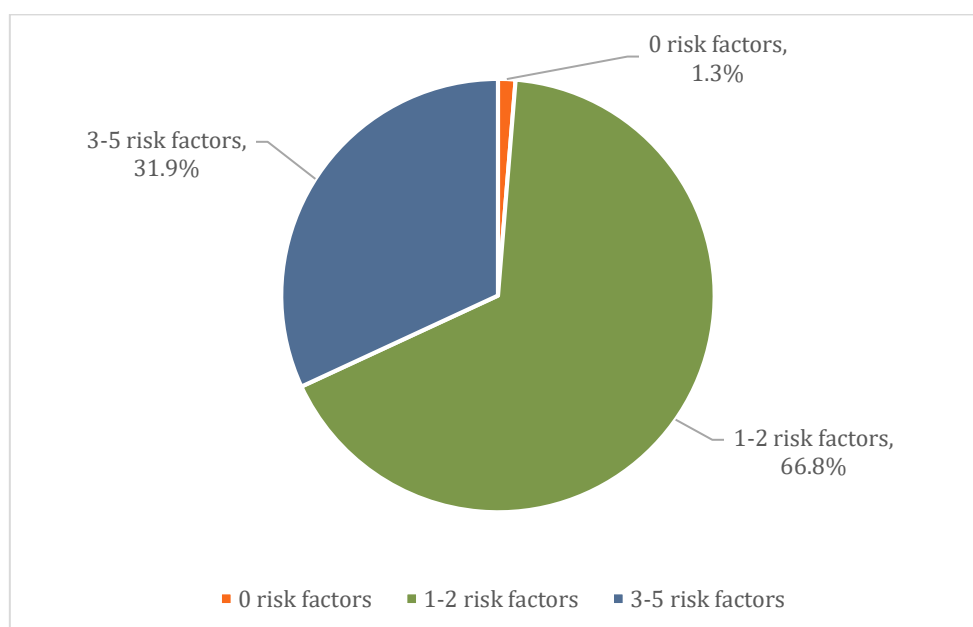
Very few adults aged 18-69 demonstrate 0 risk factors for NCDs (1.3%, 0.7-1.9). The majority (66.8%, 64.8-68.8) of all adults had 1-2 risk factors and those in the 18-44 age group were more likely to be in this category than those 45-69 years old (75.3%, 73.1-77.4 and 47.9%, 43.9-51.9, respectively). Likewise, those aged 45-69 were more likely to have 3-5 risk factors than the younger group (50.8%, 46.8-54.9 and 23.4%, 21.3-25.5, respectively).

Discussion

In 2016, the population of Guyana was 773,000 inhabitants. A total of 6,600 deaths occurred, of which, 68% were attributed to noncommunicable diseases (NCDs), specifically, cardiovascular disease (34%), cancers (8%), diabetes (8%), and chronic respiratory diseases (3%). The risk of premature death (between the ages of 30-70 years) from NCDs is 31% in Guyana, largely the result of preventable diseases that are caused by key risk factors, such as smoking prevalence, harmful use of alcohol, physical inactivity, and unhealthy diet. The effects of these risk factors are seen through raised blood pressure, which affects males more than females, and raised blood glucose or diabetes and obesity, both of which are higher among females in Guyana. According to Guyana's WHO Noncommunicable Diseases Country Profile 2018, raised blood pressure estimates demonstrate a decrease among males but an increase among females and both sexes project an increase in obesity over the next few years; these risk factor trends are far from reaching the recognized global targets to prevent NCDs. (1).

As of 2016, Guyana had established national targets for premature mortality from NCDs, harmful use of alcohol, physical inactivity, salt/sodium intake, and tobacco use; yet had not set targets for raised blood pressure, diabetes, or obesity (1). The 2016 Pan American STEPS Survey results quantify the prevalence of these risk factors within the population and demonstrate an urgent need for action in Guyana to reduce the burden of NCDs and meet global and regional commitments. If steps are not taken now, preventable deaths from NCDs will increase, economic development will decline, and the financial burden on health systems will continue.

To change this scenario, the WHO "Best Buys," which include cost-effective interventions and policy actions, must be prioritized. From the Pan American STEPS Survey results, use of tobacco and alcohol was seen predominately among males, unhealthy diets in terms of fruit and vegetable consumption and use of salt/sodium were common among all, females were likely to report insufficient physical exercise, and both males and females reported limited preventative screenings for NCDs. These risk factors can all be addressed through adopting the WHO "Best Buys," and as such, an estimated 6,000 lives can be saved by 2025 in Guyana (1).

It is important to recognize that significant progress has been made since the completion of the 2016 Pan American STEPS Survey, most notably Guyana's passage of a new Tobacco Control Act in July 2017, and these achievements are acknowledged appropriately.

Tobacco control

As a Party to the WHO Framework Convention on Tobacco Control (FCTC), Guyana has committed to fully implementing the FCTC measures and guidelines, through which specific demand-reduction measures are monitored. These include: increase excise taxes in tobacco products, establish smoke free policies in line with FCTC Guidelines, adopt large and clear health warnings on tobacco product packaging, and ban advertising, promotion and sponsorship by the tobacco industry. However, as of 2015, Guyana's smoke free policies only included health centers, schools, and universities; health warnings did not use images or specify size; and there were no bans on advertising, promotion, and sponsorship by the tobacco industry (26). As such, the 2016 Pan American STEPS Survey was conducted within this context.

STEPS results show the general prevalence of current tobacco smoking among adults 18-69 in Guyana is 15.4%, which is lower than the average prevalence of 16.9% among those 15 and older in the Region of the Americas (27). Smoking in Guyana is far more prevalent among males, with very few females reporting current or daily smoking habits. This contrasts with recent trends in the Americas that suggest a "feminization" of tobacco use with similar male and female current smoking prevalence (26). Guyana has yet to conduct a survey of smoking prevalence among those 15 and older; however, of the five non-Latin Caribbean countries who did report in 2016, Guyana would presumably rank among the highest with Saint Kitts and Nevis (8.0%) and Barbados (8.2%) the lowest, followed by the Bahamas (11.8%), and Jamaica (17.0%) (27). Similar to trends in the Americas, manufactured cigarettes were the primary type of tobacco smoked, though questions regarding use of smokeless tobacco were not included in this survey round and should be included in the future to better quantify smoking prevalence in Guyana.

Guyana's STEPS results demonstrate a need for two strategies: one to accelerate reduction in tobacco use among males and another to protect the relatively low rate of female smoking. As such, comprehensive population-based interventions considered in the MPOWER package are needed to monitor tobacco use and prevention policies; protect people from exposure to tobacco smoke; offer help to quit tobacco use; warn about the dangers of tobacco; enforce bans on tobacco advertising, promotion, and sponsorship; and raise tobacco taxes.

The STEPS results suggest the health warnings used on cigarette packages in Guyana were both noticed and effective, as nearly 86% of all current smokers noted the health warnings and of those, almost 64% considered quitting smoking as a result. This is noteworthy, as at the time, Guyana had not yet implemented legislation that mandated health warnings to be displayed on 60% of tobacco product packaging.

Since the completion of the 2016 Pan American STEPS Survey, Guyana passed their Tobacco Control Act 2017, which includes protections from exposure to second-hand smoke; limitations to tobacco advertising, promotion, and sponsorship; incorporation of health warnings on labelling and packaging regulations; enhanced sales requirements; and additional regulation, monitoring, and reporting of the tobacco industry (28). As such, it is expected that Guyana implementation and enforcement of the tobacco control policies related with the MPOWER will cause an impact on the health of the population.

However, more work needs to be done. Two key indicators measured within the Noncommunicable Diseases Progress Monitor include the reduction of affordability through the increase of excise taxes and prices on tobacco products and the implementation of effective mass media campaigns to raise public awareness about the harms of smoking/tobacco use and secondhand smoke (22). These two actions would not only directly reduce the purchase of tobacco, especially among men who are the majority of smokers in Guyana, but would also deter target populations from initiating, thus protecting the low rate of female smoking.

With the introduction of the Tobacco Control Act 2017 and recommended next steps of targeting tobacco affordability and launching educational mass media campaigns, Guyana is expected to see a reduction in the burden of tobacco use within the population if policies are enforced. In addition, because the Pan American STEPS Survey was completed prior to implementation of the

Tobacco Control Act 2017, impact measurements of these policies on smoking rates will be feasible through conduct of subsequent STEPS Surveys and/or use of the STEPS tobacco modules in other nationally representative health surveys.

Alcohol

In Guyana, the total alcohol consumption per capita of those aged 15 and above was 6.3 litres of pure alcohol in 2016, which was 4th lowest among the 12 other reporting Caribbean countries and slightly lower than the worldwide total consumption of 6.4 litres (18). The STEPS results demonstrate patterns of more frequent and higher quantities of alcohol consumption among males and those aged 18-44. As follows, the proportion of alcohol abstainers is predominately female, a trend also seen in results of STEPS surveys from other Caribbean countries. While frequency of alcohol consumption among current drinkers in Guyana is predominately 3 or fewer days per month for both sexes, the amount of consumption varies by sex and reveals patterns of heavy episodic drinking among males. Approximately one in three males (34.1%) in Guyana report consuming six or more alcoholic drinks in one setting within the past 30 days for an overall prevalence of 21.5% among both sexes. This prevalence of heavy episodic drinking is higher than that reported in the Region of the Americas (13.7%) and by other Caribbean countries, such as St. Vincent & the Grenadines in 2014 (9.0%), Bermuda in 2014 (13.5%), and Anguilla in 2016 (18.0%) (29-32).

The results of the Pan American STEPS Survey should be used to inform and support the the implementation of alcohol strategies that focus on high risk populations, particularly men and those aged 18-44. Currently, the Guyana NCD Strategic Plan 2013-2020 includes the following priority actions for alcohol control: enact and enforce legislation establishing the minimum age limit for the consumption and purchase of alcoholic beverages; regulate or ban alcohol advertising and promotion, especially those ads aimed at children and young people; and establish and enforce blood alcohol level limits in drivers (12).

With these activities, Guyana still is falling short of achieving the Noncommunicable Diseases Progress Monitor indicators, which include three measures from the WHO Global Strategy to Reduce the Harmful Use of Alcohol: enact and enforce restrictions on the physical availability of retailed alcohol (via reduced hours of sale); enact and enforce bans or comprehensive restrictions on exposure to alcohol advertising; and increase excise taxes on alcoholic beverages (22). To reduce the trends of heavy episodic drinking among key populations in Guyana, it is recommended that additional focus be placed on these three areas, all of which should be incorporated into the National Alcohol Policy currently in draft that requires sustained support for finalization and implementation.

Healthy diet and lifestyle

Similar to trends seen in other Caribbean countries, inadequate fruit and vegetable consumption, unhealthy use of salt/sodium, and physical inactivity are all areas for targeted behavior modifications in Guyana.

Consumption of fruits and vegetables is insufficient with less than one in ten adults 18-69 years of age reporting consumption of the recommended five servings. The average number of days of

fruit consumption was among the lowest (3.3 days per week) compared to St. Vincent & the Grenadines (3.3 days), Trinidad and Tobago (3.4 days), Saint Lucia (4.3 days), Anguilla (4.4 days), Grenada (4.5 days), Cayman Islands (4.7 days), and Bermuda (4.9 days); though average number of days of vegetable consumption was among the highest (29-31, 33-36). On average, adults 18-69 in Guyana reported 4.8 days of consuming vegetables per week; Cayman Islands reported the highest (5.1 days) and St. Lucia reported the lowest (1.1 days) (34, 36). These dietary habits are likely related to the "nutrition transition" and preferences for trans-fasts, salt, and sugar, instead of fruits and vegetables (12). While economic development is normally accompanied by improvements in a country's food supply, facilitating healthier nutritional status of the country's population, this is often accompanied by changes in the production, processing, distribution, and marketing of food.

Use of additional salt in food was also common in Guyana, though a majority (79.9%) reported their individual salt consumption was just right. The importance of reducing salt in diet was acknowledged and "too much" consumption of salt was recognized as something that could cause serious health problems. This is an important finding for public education aimed at reducing salt consumption. Campaigns that seek to modify this behavior may benefit from existing public awareness about the importance of lowering salt consumption and instead focus messaging on practical applications, such as cooking demonstrations that include low-sodium options.

Physical inactivity is another risk factor that can contribute to the prevention of NCDs, specifically ischemic heart disease, stroke, diabetes, and breast and colon cancer. In Guyana, nearly one third (29.3%) of adults aged 18-69 did not meet the WHO recommendations on physical activity for health. This is a trend seen within the Region of the Americas where the age-standardized prevalence estimate for 2010 in adults over 18 years of age show the Americas with the highest prevalence of insufficient physical activity (32%) within WHO Regions; this is likewise seen among other Caribbean countries, as well, with Anguilla reporting 25.9% of adults met the WHO recommendation, Bermuda 27.1%, and St. Vincent 24.4% (29-32). Guyana reported the highest median minutes of total physical activity on average per day compared to the other Caribbean countries (106.4 minutes). This, however, reflects a longer duration of physical activity among males, as females only reported a median of 38.6 minutes per day, which was a similar duration of time seen among females elsewhere in the Caribbean. As such, many females (40.5%) in Guyana did not meet the WHO recommendations on physical activity for health. Higher levels of physical activity among males and lower levels among females may be the result of increasingly sedentary workplace and lifestyle, accessibility of public transport, and perhaps limited access to recreational activities.

The impact of physical inactivity was demonstrated through body weight measurements. Within Guyana, the population is predominately overweight with a mean BMI of 26.2 kg/m^2. While nearly half of all adults in Guyana are overweight or obese, this is relatively lower than what is seen in other Caribbean countries. However, without lifestyle modifications, such as increased consumption of fruits and vegetables and physical activity, overweight and obesity rates will increase.

To combat unhealthy diets, the Ministry of Health introduced the Guyana Food and Nutrition Security Strategy, which seeks to facilitate availability and accessibility to food; promote consumption of health foods for increased nutrition; and improve food and nutrition security

(37). To address the need for more physical activity, the Ministry of Culture Youth and Sport developed a strategic plan to increase participation in sports and physical activity (12).

These two documents are referenced in Guyana's Strategic Plan for the Integrated Prevention and Control of Chronic Non-Communicable Diseases and their Risk Factors 2013-2020; however, additional targeted polices are required. Specific indicators in the Noncommunicable Diseases Progress Monitor include the adoption of national policies to reduce population salt/sodium consumption; adoption of national polices that limited saturated fatty acids and virtually eliminate industrially produced trans fatty acids in the food supply; incorporation of WHO recommendations on marketing of foods and non-alcoholic beverages to children; and implementation of a national public awareness and motivational communication for physical activity (22). These measures are also reflected in the Declaration of CARICOM (2). While efforts have been made to educate communities, especially school aged children, about the importance of healthy eating and lifestyle, access to fruits, vegetables, and a trans-fat free food supply is still limited. It is recommended that Guyana establish policies to limit sodium intake and consumption of saturated fats through the standardization of food labelling. In addition, focus has been placed on increasing knowledge about the importance of physical activity and developing accessible community grounds for public use; however, policy interventions supported by CARICOM that require physical activity in schools is also recommended.

Health system response to NCDs and risk factors

A combined risk approach was used to assess the likelihood of developing an NCD. This risk assessment considered current daily smoking habits, insufficient fruit and vegetable consumption, physical inactivity, obesity, and the existence of raised blood pressure. A majority (66.8%) of adults in Guyana demonstrated 1-2 risk factors and nearly 75% of those aged 18-44 years old fell into this category, suggesting the likelihood of developing chronic diseases is occurring at younger ages. Nearly one in every three adults (31.9%) had 3 or more risk factors.

Other risk factors, such as high blood sugar, cholesterol, and blood pressure contribute to cardiovascular disease and other NCDs, as well. Most adults in Guyana have never had their blood sugar or total cholesterol measured (52.4% and 72.1%, respectively). Biochemical measurement results from STEPS show few adults (5.3%) were pre-diabetic with impaired fasting glycaemia, while 11.5% had raised blood glucose or were currently on medication for diabetes and only 7.2% were diagnosed as diabetic. This is lower than the overall prevalence of raised blood glucose in the Americas from 2014 (8.5%) (32). Likewise, just over one in ten adults (15.2%) had borderline high cholesterol. Approximately one in four have not had their blood pressure measured (24.1%), though the average blood pressure measurements indicate pre-hypertension (125.7/77.7) within the population. Without lifestyle changes, these risk factors will continue to increase and potentially lead to higher rates of diabetes and cardiovascular disease.

Medication use varied and use of traditional medicine was low, aside from older males who used herbal treatment for diabetes (24.3%). Very few (8.5%) self-reported ever having a heart attack or chest pain from heart disease or a stroke, though use of statins to prevent or treat heart disease was not common either (2.1%). Aspirin, however, was used among the older age group for preventative and treatment purposes (17.2%).

Similarly, less than half of adults receive advice as to how to reduce risk factors from their doctor. When advice is offered, it is mainly about ensuring a healthy diet through increased fruit and vegetable consumption and reduced fat consumption and maintaining a healthy body weight (36.2%; 34%; and 35.6%, respectively).

In addition to routine blood sugar, cholesterol, and blood pressure tests, preventative screenings are critical for early cancer detection and diagnosis. A majority of females have never had a screening test for cervical cancer, mammogram, or breast exam (77%, 89.9%, and 70.9%, respectively); likewise, a majority of men never have had a prostate exam (6.7% have had an exam).

Guyana's Strategic Plan for the Integrated Prevention and Control of Chronic Non-Communicable Diseases and their Risk Factors 2013-2020 includes indicators and activities aimed at reducing the number of adults who present with high risk factors of hypertension, diabetes, high cholesterol, and obesity (12). It also seeks to increase HPV vaccine immunization coverage and access to VIA screening (Visual Inspection with Acetic Acid) among high risk populations for the prevention of cervical cancer (12).

However, to effectively manage the prevention and treatment of NCDs, the public health system in Guyana needs to be strengthened with an emphasis on primary care and the scaling up of NCD prevention and control services through a model of integrated management, which is a chronic care model with evidence-based guidelines, clinical information system, self-care, community support, and multidisciplinary team-based care. These services must also include provisions for drug therapy and counselling for high risk populations, such as increasing the lifestyle advice offered by doctors and health care professionals emphasizing the importance of risk factor reduction, which is a demonstrated gap in services from the STEPS results. In addition, protocols that facilitate the routinization of prevention tests and exams is critical as results from the Pan American STEPS Survey demonstrate that many adults have not received basic NCD screening tests; as such, there is additional need for these services. These steps are vital to the management of NCDs and are prioritized as NCD progress indicators (22).

In July 2016, Guyana transitioned from a lower middle-income country to an upper middle-income country classification by the World Bank as a result of an anticipated economic impact from the discovery of new oil reserves. This new classification brings both positives and negatives. The opportunity is for a portion of this new economic windfall to be earmarked for Universal Health Coverage (UHC), which would include greater access to and implementation of "WHO Best-Buys" services for NCDs. The converse is that economic development may be accompanied by increased importation, marketing, and consumption of unhealthy foods, sugary drinks, and alcohol.

Surveillance

Surveillance is a critical component of an effective NCD control and prevention strategy. Without surveillance, it is difficult to quantify and conceptualize the burden of disease in a country, which in turn informs national strategies and policies. The Noncommunicable Disease Progress Monitor incorporates surveillance strategies into four unique progress indicators that aims to set time-bound national targets, establish a system to generate mortality data, conduct a STEPS or

comprehensive health examination survey every five years, and encourages countries to develop a national multisectoral national strategy that integrates the major NCDs and their shared risk factors and (22).

The 2016 Pan American STEPS Survey report provides the first nationally representative survey results on NCDs and their risk factors in Guyana. With this information, targets established in Guyana's Strategic Plan for the Integrated Prevention and Control of Chronic Noncommunicable Diseases and their Risk Factors, 2013-2020 can be reinforced and extended beyond 2020 (12). As such, these results provide a significant opportunity for the Government of Guyana to review trends and advocate for accelerated progress on specific areas.

Information gained from the Guyana Pan American STEPS Survey can be best maximized when used concurrently with other available information systems, which include health outcome data from mortality and morbidity data systems or policy level information, such as tobacco use policy or cervical cancer monitoring information systems (23).

Likewise, the conduct of the Pan American STEPS Survey or other health surveys must be continued every five years to facilitate measurement of trends in NCD prevalence and risk factors in the adult population. Guyana has made progress on this indicator by not only conducting the Pan American STEPS Survey in 2016, but also the Global Youth Tobacco Survey in 2015 and the Global Adult Tobacco Survey in 2016.

Finally, Guyana has developed their Strategic Plan for the Integrated Prevention and Control of Chronic Noncommunicable Disease and their Risk Factors 2013-2020, which includes national targets for prevention and control of NCDs. The findings in this report are particularly relevant to any actions which Guyana may undertake to inform and strengthen national and subnational policies, actions, and strategies for NCD prevention and control. The Ministry of Health should consider timely and effective ways to disseminate fact sheets and key findings to engage multiple sectors that can play key roles in addressing specific NCD risk factors through coordinated actions, such as the implementation of the WHO "Best Buys" for reducing NCDs and their risk factors.

Therefore, while Guyana has made great strides in the conduct of surveillance for the prevention and control of NCDs and their risk factors, including the invaluable completion of the Pan American STEPS Survey in 2016 and development of the Strategic Plan for the Integrated Prevention and Control of Chronic Noncommunicable Disease and their Risk Factors 2013-2020 paired with the Tobacco Control Act 2017, continued focus on conducting routine surveillance is required.

Conclusion

As the first nationwide comprehensive health survey, the conduct of the 2016 Pan American STEPS Survey represents significant national commitment toward the management of NCDs and their risk factors. The results serve as a baseline for monitoring and evaluation and demonstrate the need for continued implementation and integration of Guyana's Strategic Plan for the Integrated Prevention and Control of Chronic Noncommunicable Disease and their Risk Factors 2013-2020. The following are key findings from the survey that can be used to guide future policies and strategies to reduce the health and economic burden of NCDs:

- Tobacco use is more prevalent among males than females and patterns of consumption demonstrate more daily than occasional smokers;
- Heavy episodic drinking is common and predominately seen among males 18-44;
- Adults 18-69 do not consume the recommended five servings of fruits and vegetables per day;
- A majority of adults believe they consume just the right amount of salt, but recognize the importance of lowering salt in their diet;
- Females are more likely than males to not meet the WHO recommendations on physical activity for health;
- Preventative screenings for cervical and breast cancers are insufficient and not widely or consistently conducted;
- Few adults have impaired fasting glycaemia, but one in ten have borderline high cholesterol;
- One in every four had raised blood pressure or were currently on medication for raised blood pressure and of those diagnosed with raised blood pressure, nearly half were unaware of their condition; less than one in every five had controlled their raised blood pressure; and
- More than half of adults 18-69 are overweight or obese.

Recommendations

The recommendations based on the findings of this survey are presented according to the respective priority actions of the WHO Global Action Plan for NCDs 2013 which aims to reduce the number of premature deaths from NCDs by 25% by 2025 through six priority actions.

Priority Action 1: Reigniting the political commitment

- There is need for sustained political commitment for the prevention and control of NCDs, as resources are needed to tackle the response on the health system and surveillance. NCDs should remain as a priority issue for attention and resources as outlined in Guyana's National Health Vision 2020 and adequate resources allocated for the sustained implementation of the Strategic Plan for the Integrated Prevention and Control of Chronic Noncommunicable Diseases and their Risk Factors, 2013-2020.

Priority Action 2 - Implement multisectoral NCDs plans of action

- Guyana should continue to work to build the capacity of the National NCDs Commission to effectively carry out its mandate within the country. Guyana's National NCDs Commission was launched in September 2014. The country is currently in the process of reviewing the leadership and composition of the Commission with a view to including additional members from other sectors, as well as reducing the role of the Ministry of Public Health in the coordination of the activities of the Commission.
- Efforts to collate data on NCDs and related risk factors in the country from other health sectors should be defined.
- The country should continue to use the WHO Tools for developing, implementing and monitoring the implementation of the National Multisectoral Action Plan for NCDs.
- Efforts should be made to strengthen partnerships and collaboration with academic institutions, civil society organizations, and UN agencies, including PAHO, in an effort to harmonize and intensify efforts for NCDs prevention and control within the country.

Priority Action 3 – Implement regulatory policies on risk factors

- Guyana should strengthen efforts to support region-wide initiatives, to develop where necessary, and implement common regulations and legislations for tobacco control, alcohol, ultra -processed foods and sugar sweetened beverages as part of CARICOM's responsibility.
- Guyana passed its National Tobacco Bill in 2017. There should be sustained advocacy for the inclusion of taxes in the country's national tobacco legislation in keeping with the benchmark of 70%.
- There should also be sustained support for the finalization of the National Alcohol Policy which is currently being drafted and there should be aggressive efforts to develop and/or adopt policies to promote physical activity, including school programmes, creating bike paths and closing streets for physical activity considering that the country is still to develop a formal policy for physical activity and limit salt content in foods.

Priority Action 4 - Work towards universal health coverage and universal access to health

- Guyana should continue to work aggressively towards the achievement of universal health coverage and universal access to health. In an effort to achieve this goal, the country should continue to use PAHO's universal access to health and universal health coverage page as a guide to developing national plan for universal access to health and universal health coverage. Even though the country has been working towards the full implementation of its Package of Essential Health Care Services in the quest to achieve universal health coverage guided by the findings from a Service Availability and Readiness Assessment tool, there are still existing gaps in the health care delivery system.

- The country should endeavor to utilize the PAHO strategic fund to improve access to quality NCDs medication at lower prices for greater investment in health at the primary health care level and implement human resources for health training in order to increase skills and competencies of personnel in NCDs prevention, screening and early detection, and NCDs management. The Government has been investing in training of skilled human resources with capacity building for health care staff through the allocation of fellowships and the creation of opportunities for post graduate studies, but these interventions should be strengthened and guided by a comprehensive human resources for health strategy.

- The country should continue to work to strengthen the delivery of health services at the regional levels and foster better collaboration with other sectors outside of health, particularly the Ministry of Communities. An assessment of the effectiveness of the Berbice Regional Health Authority was conducted and it is anticipated that the findings of this assessment will guide efforts to strengthen health care delivery at the regional level, thus improving access and coverage.

Priority Action 5 - Strengthen surveillance and data collection

- The country should focus to strengthen at least 4 of the key sources of information that are relevant for NCDs: mortality information system, population-based surveys collection data on youth and adult, cancer registry and primary health care information system.

- Guyana should strengthen their capacity to monitor its progress on the implementation of policies and measure the 25 indicators and 9 targets established at the Global Monitoring Framework on NCDs.

- Pan American STEPS Survey should be integrated at the national survey system established by the Guyana Bureau of Statistics to be implemented every 4 to 5 years with funds being planned and allocated for this activity as part of the national calendar.

- NCDs and their Risk Factors should be included in the national surveillance system response normative along with the communicable disease, violence and injuries.

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Annexes

Annex 1 : 2015 Progress Indicator Status

Annex 2: STEPS Factsheet

Annex 3: Tobacco Control Policies Factsheet

Annex 4 : Questionnaire

Annex 5: STEPS data book

Guyana

Total population: 795 000

Income group: Lower middle

Percentage of deaths from NCDs: 67%

Total number of NCD deaths: 4 000

Probability of premature mortality from NCDs: 37%

1	National NCD targets and indicators	○
2	Mortality data	◑
3	Risk factor surveys	○
4	National integrated NCD policy/strategy/action plan	●
5	Tobacco demand-reduction measures:	
	a. taxation	○
	b. smoke-free policies	◑
	c. health warnings	○
	d. advertising bans	○
6	Harmful use of alcohol reduction measures:	
	a. availability regulations	◑
	b. advertising and promotion bans	◑
	c. pricing policies	◑
7	Unhealthy diet reduction measures:	
	a. salt/sodium policies	○
	b. saturated fatty acids and trans-fats policies	○
	c. marketing to children restrictions	○
	d. marketing of breast-milk substitutes restrictions	●
8	Public awareness on diet and/or physical activity	●
9	Guidelines for the management of major NCDs	○
10	Drug therapy/counselling for high risk persons	○

○ = not achieved   ◑ = partially achieved   ● = fully achieved   — = documentation not available

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Annex 2: STEPS Factsheet

Annex 3: Tobacco Control Policies Factsheet

Annex 4 : Questionnaire

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Guyana STEPS Survey 2016

Fact Sheet

The STEPS survey of noncommunicable disease (NCD) risk factors in Guyana was carried out from September 28 to October 26, 2016. Guyana carried out Step 1, Step 2 and Step 3. Socio demographic and behavioural information was collected in Step 1. Physical measurements such as height, weight and blood pressure were collected in Step 2. Biochemical measurements were collected to assess blood glucose, lipid profiles and presence of hemoglobinopathies such as sickle cell anemia and Thalassemia in Step 3. The survey was a population-based survey of adults aged 18-69. A cluster sample design was used to produce representative data for that age range in Guyana. A total of 2662 adults participated in the survey. The overall response rate was 77% for Steps 1 and 2 and 40% for Step 3. A repeat survey is planned for 2021 if funds permit.

Results for adults aged 18-69 years (incl. 95% CI) *(adjust if necessary)*	Both Sexes	Males	Females
Step 1 Tobacco Use			
Percentage who currently smoke tobacco	15.4 (12.3-18.4)	26.6 (21.2-32.0)	3.3 (2.3-4.4)
Percentage who currently smoke tobacco daily	10.8 (8.5-13.1)	18.8 (14.6-23.0)	2.2 (1.4-3.0)
For those who smoke tobacco daily			
Average age started smoking (years)	**18.0 (-)**	**17.5 (-)**	**21.9 (-)**
Percentage of daily smokers smoking manufactured cigarettes	98.3 (96.0-100.6)	98.1 (95.5-100.7)	100.0 (100.0-100.0)
Mean number of manufactured cigarettes smoked per day (by smokers of manufactured cigarettes)	**9.5 (-)**	**9.5 (-)**	**9.6 (-)**
Step 1 Alcohol Consumption			
Percentage who are lifetime abstainers	**27.0 (24.1-30.0)**	**13.9 (10.7-17.1)**	**40.0 (37.4-44.6)**
Percentage who are past 12 month abstainers	**15.8 (12.9-18.8)**	**12.9 (8.4-17.3)**	**19.0 (16.3-21.6)**
Percentage who currently drink (drank alcohol in the past 30 days)	**41.0 (38.1-44.0)**	**59.3 (54.9-63.8)**	**21.4 (18.9-24.0)**
Percentage who engage in heavy episodic drinking (6 or more drinks on any occasion in the past 30 days)	**21.5 (18.8-24.1)**	**34.1 (29.5-38.8)**	**7.9 (6.3-9.5)**
Step 1 Fruit and Vegetable Consumption (in a typical week)			
Mean number of days fruit consumed	**3.3 (3.2-3.4)**	**3.3 (3.1-3.5)**	**3.4 (3.2-3.5)**
Mean number of servings of fruit consumed on average per day	**1.0 (1.0-1.0)**	**1.0 (1.0-1.1)**	**1.0 (0.9-1.0)**
Mean number of days vegetables consumed	**4.8 (4.7-4.9)**	**4.7 (4.5-4.8)**	**5.1 (4.9-5.2)**
Mean number of servings of vegetables consumed on average per day	**1.3 (1.2-1.5)**	**1.3 (1.2-1.4)**	**1.3 (1.2-1.4)**
Percentage who ate less than 5 servings of fruit and/or vegetables on average per day	**93.6 (92.2-95.0)**	**93.0 (90.4-95.5)**	**94.2 (94.7-95.7)**
Step 1 Physical Activity			
Percentage with insufficient physical activity (defined as < 150 minutes of moderate-intensity activity per week, or equivalent)*	15.8 (13.6-18.1)	12.2 (9.4-15.0)	19.7 (17.0-22.5)
Median time spent in physical activity on average per day (minutes) (presented with inter-quartile range)	**106.4 (12.9-342.9)**	**220.0 (36.4-454.3)**	**38.6 (0.0-180.0)**
Percentage not engaging in vigorous activity	**63.9 (61.3-66.6)**	**44.2 (40.4-48.0)**	**85.0 (82.3-87.6)**
Step 1 Cervical Cancer Screening			
Percentage of women aged 30-49 years who have ever had a screening test for cervical cancer			

* For complete definitions of insufficient physical activity, refer to the GPAQ Analysis Guide (http://www.who.int/chp/steps/GPAQ/en/index.html) or to the WHO Global recommendations on physical activity for health (http://www.who.int/dietphysicalactivity/factsheet_recommendations/en/index.html)

Guyana STEPS Survey 2016

Fact Sheet

Results for adults aged 18-69 years (incl. 95% CI) *(adjust if necessary)*	Both Sexes	Males	Females
Step 2 Physical Measurements			
Mean body mass index - BMI (kg/m^2)	**26.2** **(25.8-26.7)**	**24.6** **(24.0-25.3)**	**28.0** **(27.5-28.5)**
Percentage who are overweight (BMI ≥ 25 kg/m^2)	**50.3** **(47.2-53.5)**	**39.8** **(34.6-44.9)**	**61.8** **(58.6-65.0)**
Percentage who are obese (BMI ≥ 30 kg/m^2)	**23.6** **(21.3-25.9)**	**14.0** **(11.1-16.8)**	**34.0** **(31.1-37.0)**
Average waist circumference (cm)		**88.4** **(85.9-91.0)**	**92.7** **(91.3-94.0)**
Mean systolic blood pressure - SBP (mmHg), including those currently on medication for raised BP	**125.8** **(124.8-126.7)**	**128.5** **(127.1-130.0)**	**122.8** **(121.5-124.0)**
Mean diastolic blood pressure - DBP (mmHg), including those currently on medication for raised BP	**77.7** **(77.0-78.4)**	**78.6** **(77.5-79.7)**	**76.8** **(76.0-77.6)**
Percentage with raised BP (SBP ≥ 140 and/or DBP ≥ 90 mmHg or currently on medication for raised BP)	**26.3** **(24.3-28.3)**	**16.5** **(10.8-22.2)**	**22.9** **(17.9-28.0)**
Percentage with raised BP (SBP ≥ 140 and/or DBP ≥ 90 mmHg) who are not currently on medication for raised BP	**18.4** **(16.3-20.5)**	**20.7** **(17.0-24.4)**	**15.9** **(13.0-18.7)**
Step 3 Biochemical Measurement			
Mean fasting blood glucose, including those currently on medication for raised blood glucose [choose accordingly: mmol/L or mg/dl]	93.8 (-)	85.0 (-)	102.5 (-)
Percentage with impaired fasting glycaemia as defined below • plasma venous value ≥6.1 mmol/L (110 mg/dl) and <7.0 mmol/L (126 mg/dl) • capillary whole blood value ≥5.6 mmol/L (100 mg/dl) and <6.1 mmol/L (110 mg/dl)	5.3 (3.0-7.6)	4.7 (1.5-8.0)	5.8 (2.9-8.8)
Percentage with raised fasting blood glucose as defined below or currently on medication for raised blood glucose • plasma venous value ≥ 7.0 mmol/L (126 mg/dl) • capillary whole blood value ≥ 6.1 mmol/L (110 mg/dl)	7.2 (5.4- 9.0)	5.0 (2.8-7.2)	9.5 (6.7-12.2)
Mean total blood cholesterol, including those currently on medication for raised cholesterol [choose accordingly: mmol/L or mg/dl]	192.8 (-)	189 (-)	196.6 (-)
Percentage with raised total cholesterol (≥ 5.0 mmol/L or ≥ 190 mg/dl or currently on medication for raised cholesterol)	50.1 (45.7-54.5)	46.8 (40.1-53.5)	53.4 (48.2-58.6)
Cardiovascular disease (CVD) risk			
Percentage aged 40-69 years with a 10-year CVD risk ≥ 30%, or with existing CVD**			
Summary of combined risk factors • current daily smokers • less than 5 servings of fruits & vegetables per day • insufficient physical activity • overweight (BMI ≥ 25 kg/m^2) • raised BP (SBP ≥ 140 and/or DBP ≥ 90 mmHg or currently on medication for raised BP)			
Percentage with none of the above risk factors	**1.308** **(0.7-1.9)**	**1.3** **(0.4-2.3)**	**1.3** **(0.6-2.0)**
Percentage with three or more of the above risk factors, aged 18 to 44 years	**23.4** **(21.3-25.5)**	**19.1** **(15.0-23.1)**	**28.2** **(24.4-32.0)**
Percentage with three or more of the above risk factors, aged 45 to 69 years	**50.8** **(46.8-54.9)**	**45.2** **(39.0-51.4)**	**56.7** **(51.2-62.2)**
Percentage with three or more of the above risk factors, aged 18 to 69 years	**31.9** **(29.9-33.8)**	**27.0** **(23.5-30.5)**	**37.1** **(1.7-33.7)**

** A 10-year CVD risk of ≥30% is defined according to age, sex, blood pressure, smoking status (current smokers OR those who quit smoking less than 1 year before the assessment), total cholesterol, and diabetes (previously diagnosed OR a fasting plasma glucose concentration >7.0 mmol/l (126 mg/dl).

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Guyana STEPS Survey 2016

Tobacco Fact Sheet

The WHO STEPwise approach to surveillance (STEPS) is a simple, standardized method for collecting, analysing and disseminating data on noncommunicable diseases (NCDs) and risk factors. Data are collected on the established risk factors and NCD conditions that determine the major NCD burden, including tobacco use, harmful use of alcohol, unhealthy diet, insufficient physical activity, overweight and obesity, raised blood pressure, raised blood glucose, and abnormal blood lipids. Data from STEPS surveys can be used by countries to help monitor progress in meeting the global voluntary targets related to specific risk factors such as tobacco, alcohol, diet and physical inactivity. The tobacco indicators from STEPS can be used to evaluate and monitor existing tobacco-control policies and programs.*

The STEPS survey of noncommunicable disease (NCD) risk factors in Guyana was carried out from September 28 to October 26, 2016. Guyana carried out Step 1, Step 2 and Step 3. Socio demographic and behavioural information was collected in Step 1. Physical measurements such as height, weight and blood pressure were collected in Step 2. Biochemical measurements were collected to assess blood glucose, lipid profiles and presence of hemoglobinopathies such as sickle cell anemia and Thalassemia in Step 3. The survey was a population-based survey of adults aged 18-69. A cluster sample design was used to produce representative data for that age range in Guyana. A total of 2662 adults participated in the survey. The overall response rate was 77% for Steps 1 and 2 and 40% for Step 3. A repeat survey is planned for 2021 if funds permit.

Highlights

TOBACCO USE
- 26.6% of men, 3.3% of women, and 15.4% overall were current smokers of tobacco.

CESSATION
- 6 in 10 current smokers tried to stop smoking in the last 12 months.
- 3 in 10 current smokers were advised by a health care provider to stop smoking in the last 12 months

MEDIA
- 5 in 10 adults noticed anti-cigarette smoking information on the television or radio.
- 6 in 10 current smokers thought about quitting because of warning labels on cigarette packages.
- 3 in 10 adults noticed cigarette marketing in stores where cigarettes are sold.
- 1 in 10 adults noticed cigarette promotions.

ECONOMCIS
- Average monthly expenditure on manufactured cigarettes was GUY$ 11,602.16

Data presented in this fact sheet relate only to select tobacco indicators. Additional information on tobacco or other NCD risk factors from the survey is available from sources listed below.

Results for adults aged 18-69 years	Overall % (95% CI)	Males % (95% CI)	Females % (95% CI)
Tobacco Use			
Current tobacco users (smoked and/or smokeless)[1]			
Current tobacco users			
Current daily tobacco users			
Current tobacco smokers			
Current tobacco smokers	15.4 (12.3-18.4)	26.6 (21.2-32.0)	3.3 (2.3-4.4)
Current cigarette smokers [2]	14.5 (11.4-17.6)	25.4 (19.9-30.9)	2.8 (1.9-3.9)
Current daily tobacco smokers	10.8 (8.5-13.1)	18.8 (14.6-23.0)	2.2 (1.4-3.0)
Current daily cigarette smokers	10.3 (8.0-12.6)	18.0 (13.8-22.3)	2.1 (1.3-2.9)
Average age started tobacco smoking (years)	17.9	17.5	21.9
Average number of cigarettes smoked per day (among daily cigarette smokers)	9.5	9.5	9.6
Current smokeless tobacco users			
Current smokeless tobacco users			
Current daily smokeless tobacco users			
Current non-users (smoked and/or smokeless)[1]			
Former tobacco users[3]			
Former tobacco smokers[4]	15.5 (13.5-17.4)	22.2 (18.4-26.0)	8.3 (6.4-10.1)
Never users			
Exposure to Second-hand smoke			
Adults exposed to second-hand smoke at home*			
Adults exposed to second-hand smoke in the closed areas in their workplace*			
Tobacco Cessation			
Current smokers who tried to stop smoking in past 12 months	59.7 (53.6-65.7)	58.7 (51.9-65.4)	68.3 (54.4-82.2)
Current smokers advised by a health care provider to stop smoking in past 12 months [5]	34.7 (21.6-47.7)	36.1 (22.0-50.2)	23.0 (6.4-39.5)
Health Warnings			
Current smokers who thought about quitting because of a warning label*	63.5 (54.0-73.0)	62.4 (52.5-73.2)	70.7 (56.3-85.0)
Adults who noticed anti-cigarette smoking information on the television or radio *	49.8 (46.6-53.0)	50.1 (45.9-54.4)	49.5 (45.9-53.2)
Adults who noticed anti-cigarette smoking information in newspapers or magazines*	31.3 (28.2-34.4)	31.4 (27.2-35.6)	31.3 (27.6-35.0)
Tobacco Advertisement and Promotion			
Adults who noticed cigarette marketing in stores where cigarettes are sold*	29.4 (26.7-32.1)	30.3 (25.4-35.1)	28.4 (25.3-31.5)
Adults who noticed any cigarette promotions*	15.0 (13.0-17.0)	17.1 (13.4-20.7)	12.9 (10.8-14.9)
Economics	**Local Currency [XXX]**		
Average amount spent on 20 manufactured cigarettes [IN LOCAL CURRENCY]	GUY$ 924.54		
Average monthly expenditure on manufactured cigarettes [IN LOCAL CURRENCY]	GUY$ 11,602.16		
Cost of 100 packs of manufactured cigarettes as a percentage of per capita Gross Domestic Product (GDP) [YEAR][6]	11.3%		

1 Current use refers to daily and less than daily use. 2 Includes manufactured cigarettes and hand-rolled cigarettes. Adapted for other products as per country situation. 3 Current non-users. 4 Current non-smokers. 5 Among those who visited a health care provider in past 12 months. 6 [Source and year for per capita GDP]. * During the past 30 days. † Promotions include free cigarette sample, cigarettes at sale prices, coupons for cigarettes, free gifts upon purchase of cigarettes, clothing or other items with cigarette brand name or logo and cigarette promotions in mail. Adults refer to persons age 18-69 years. Data have been weighted to be nationally representative of all men and women age 18-69 years. Technical assistance for the survey was provided by the World Health Organization (WHO). This document has been produced with a partial grant from the CDC Foundation, with financial support from the Bloomberg Initiative to Reduce Tobacco Use, a program of Bloomberg Philanthropies. The contents of this document are the sole responsibility of the authors and can under no circumstances be regarded to reflect the positions of the CDC Foundation.

STEPS Q-by-Q Guide
for Chronic Disease Risk Factor Surveillance

Guyana

<table>
<tr><td colspan="3" align="center">Survey Information</td></tr>
</table>

Location and Date	Response	Code
Ennumeration District Number *Record Cluster, Centre or Village ID from list provided*	└─┴─┴─┴─┘	I1
Village Number *Insert Cluster, Centre or Village name as appropriate*		I2
Interviewer ID *Record interviewer's identification*	└─┴─┴─┘	I3
Date of completion of the instrument *Record date when instrument actually completed*	└─┴─┘ └─┴─┘ └─┴─┴─┴─┘ dd mm year	I4

✂ - ✂

	Participant Id Number └─┴─┴─┴─┴─┴─┴─┘	
Consent, Interview Language and Name	**Response**	**Code**
Consent has been read and obtained *Circle relevant response.*	Yes 1 No 2 **If NO, END**	I5
Interview Language *[English]* *Circle relevant response.*	English 1	I6
Time of interview (24 hour clock) *Record time interview started.*	└─┴─┘ : └─┴─┘ hrs mins	I7
Family/Surname **Write family surname (reassure the participant on the confidential nature of this information and that this is only needed for follow up).**		I8
First Name *Write first name of respondent.*		I9
Additional Information that may be helpful		
Contact phone number where possible *Record phone number.*		I10

Record and file identification information (I5 to I10) separately from the completed questionnaire.

Step 1   Demographic Information

CORE: Demographic Information

Question	Response	Code
Sex (*Record Male / Female as observed*) *Circle Male / Female as observed.*	Male 1 Female 2	C1
What is your date of birth? *Don't Know 77 77 7777* *Record date of birth of participant.*	⌊_⌊_⌋ ⌊_⌊_⌋ ⌊_⌊_⌊_⌋ *If known, Go to C4* dd mm year	C2
How old are you? *Help participant estimate their age by interviewing them about their recollection of widely known major events.*	Years ⌊_⌊_⌋	C3
In total, how many years have you spent at school or in full-time study (excluding pre-school)? *Record total number of years of education (excluding pre-school and kindergarten).*	Years ⌊_⌊_⌋	C4

EXPANDED: Demographic Information

Question	Response	Code
What is the **highest level of education** you have completed? *If a person attended a few months of the first year of secondary school but did not complete the year, record "primary school completed". If a person only attended a few years of primary school, record "less than primary school".* *Circle appropriate response.*	No formal schooling 1 Less than primary school 2 Primary school completed 3 Secondary school completed 4 Tertiary/Technical completed 5 College/University completed 6 Post graduate degree 7 Refused 88	C5
What is your *ethnic group*? *Record the relevant ethnic/cultural group to which the participant belongs.*	East Indian 1 *African/Black* 2 Amerindian 3 Chinese 4 Portuguese 5 Mixed 6 White 7 Refused 88	C6
What is your **marital status**? *Record the appropriate response.*	Never married 1 Currently married 2 Separated 3 Divorced 4 Widowed 5 Cohabiting 6 Refused 88	C7
	Government employee 1	C8

Which of the following best describes your **main work** status over the past 12 months? *The purpose of this question is to help answer other questions such as whether or not health status contributes to unemployment, or whether people in different kinds of occupations may be confronted with different risk factors.* Record appropriate response	Non-government employee 2 Self-employed 3 Non-paid 4 Student 5 Homemaker 6 Retired 7 Unemployed (able to work) 8 Unemployed (unable to work) 9 Refused 88	
How many people older than 18 years, including yourself, live in your household? *Record the total number of people living in the household who are 18 years or older.*	Number of people └──┴──┘	C9

EXPANDED: Demographic Information, Continued

Question	Response	Code
Taking **the past year**, can you tell me what the average earnings of the household have been? *(RECORD ONLY ONE, NOT ALL 3)* *Record the average earnings of the household by week, month, or year. If refused to answer, skip to C11.*	Per week └──┴──┴──┴──┴──┴──┘ *Go to T1a*	C10a
	OR per month └──┴──┴──┴──┴──┴──┘ *Go to T1a*	C10b
	OR per year └──┴──┴──┴──┴──┴──┘ *Go to T1a*	C10c
	Refused 88	C10d
If you don't know the amount, can you give an **estimate** of the annual household income if I read some options to you? Is it *(READ OPTIONS)* *Record the quintile value which is the closest to the annual household income.*	≤ $500,000	1	C11
	More than $500,000 ≤ $700,000	2	
	More than $700,000 ≤ $900,000	3	
	More than $900,000 ≤ $1,100,000	4	
	More than $1,100,000 ≤ $1,500,000	5	
	More than $1,500,000 ≤ $2,300,000	6	
	More than $2,300,000 ≤ $3,500,000	7	
	More than $3,500,000	8	
	Don't Know	77	
	Refused	88	

Step 1 Behavioural Measurements

CORE: Tobacco Use		
Now I am going to ask you some questions about tobacco use.		
Question	**Response**	**Code**
Do you **currently** smoke any **tobacco** products, such as cigarettes, cigars or pipes? *(USE SHOWCARD)* *Ask the participant to think of any tobacco products he/she is smoking currently.*	Yes 1 No 2 *If No, go to T8*	T1
Do you currently smoke tobacco products **daily**? *This question is only for current smokers of tobacco products.*	Yes 1 No 2	T2
How old were you when you **first started** smoking? *For current smokers only. Ask the participant to think of the time when he/she started to smoke any tobacco products.*	Age (years) Don't know 77 └──┴──┘ *If Known, go to T5a/T5aw*	T3
Do you remember how long ago it was? *(RECORD ONLY 1, NOT ALL 3)* *Don't know 77* *If the participant doesn't remember his/her age when started smoking, then record the time in years, months or weeks as appropriate.*	In Years └──┴──┘ *If Known, go to T5a/T5aw*	T4a
	OR in Months └──┴──┘ *If Known, go to T5a/T5aw*	T4b
	OR in Weeks └──┴──┘	T4c

		DAILY↓ WEEKLY↓	
On average, **how many** of the following products do you smoke **each day/week?** *(IF LESS THAN DAILY, RECORD WEEKLY)* *(RECORD FOR EACH TYPE, USE SHOWCARD)* *Don't Know 7777* *For current smokers only.* *Specify zero if no products were used in each category instead of leaving categories blank.* *Record daily consumption for daily smokers. If products are smoked less than daily by daily smokers, enter weekly consumption. Also enter weekly consumption for current, non-daily smokers.*	Manufactured cigarettes	└─┴─┴─┴─┴─┘ └─┴─┴─┴─┴─┘	T5a/T5aw
	Hand-rolled cigarettes	└─┴─┴─┴─┴─┘ └─┴─┴─┴─┴─┘	T5b/T5bw
	Pipes full of tobacco	└─┴─┴─┴─┴─┘ └─┴─┴─┴─┴─┘	T5c/T5cw
	Cigars, cheroots, cigarillos	└─┴─┴─┴─┴─┘ └─┴─┴─┴─┴─┘	T5d/T5dw
	Number of Shisha sessions	└─┴─┴─┴─┴─┘ └─┴─┴─┴─┴─┘	T5e/T5ew
	Other	└─┴─┴─┴─┴─┘ └─┴─┴─┴─┴─┘ *If Other, go to T5other, else go to T6*	T5f/T5fw
	Other (please specify):	└─┴─┴─┴─┴─┴─┘	T5other/ T5otherw

During the past 12 months, have you tried to **stop smoking**? *For current smokers only. Ask the participant to think of any quit attempt during the past 12 months.*	Yes 1 No 2	T6
During any visit to a doctor or other health worker in the past 12 months, were you advised to quit smoking tobacco?	Yes 1 *Go to next section* No 2 *Go to next section*	T7

For current smokers only. Ask the participant to think of visits to a doctor or other health worker during the past 12 months. If no visit, select "no visit during the past 12 months".	No visit during the past 12 months 3 *Go to next section*	
In the past, did you **ever smoke** any tobacco products? *(USE SHOWCARD)* *Ask the participant to think of the time when he/she may have been smoking tobacco products.*	Yes 1 No 2 *If No, go to next section*	T8
In the past, did you **ever** smoke **daily**? *Ask the participant to think of the time when he/she may have been smoking tobacco products on a daily basis.*	Yes 1 No 2	T9

CORE: Alcohol Consumption

The next questions ask about the consumption of alcohol.

Question	Response	Code
Have you ever consumed any alcohol such as beer, wine, spirits or fermented cider? *(USE SHOWCARD OR SHOW EXAMPLES)* *Ask the participant to think of any drinks that contain alcohol, with the exception of alcohol-based medication that is taken due to health reasons.*	Yes 1 No 2 *If No, go to A16*	A1
Have you consumed any alcohol within the **past 12 months**? *Ask the participant to think of any drinks that contain alcohol, with the exception of alcohol-based medication that is taken due to health reasons.*	Yes 1 *If Yes, go to A4* No 2	A2
Have you stopped drinking due to health reasons, such as a negative impact on your health or on the advice of your doctor or other health worker? *This question is for those participants that did not drink during the past 12 months, but that have drunk in their lifetime.*	Yes 1 *If Yes, go to A16* No 2 *If No, go to A16*	A3
During the past 12 months, **how frequently** have you had at least one **standard alcoholic drink**? *(READ RESPONSES, USE SHOWCARD)* *For those that have consumed alcohol in the past 12 months. A "standard drink" is the amount of ethanol contained in standard glasses of beer, wine, fortified wine such as sherry, and spirits. Depending on the country, these amounts will vary between 8 and 13 grams of ethanol. See showcard.*	Daily 1 5-6 days per week 2 3-4 days per week 3 1-2 days per week 4 1-3 days per month 5 Less than once a month 6	A4
Have you consumed any alcohol within the **past 30 days**? *Select the appropriate response.*	Yes 1 No 2 *If No, go to A13*	A5
During the past 30 days, on how many **occasions** did you have at least one standard alcoholic drink? *Ask the participant to think of the past 30 days only. Record the number of occasions. Note that there can be more than one occasion in which alcohol is consumed in a given day.*	Number Don't know 77 └─┴─┴─┘	A6
During the past 30 days, when you drank alcohol, how many **standard drinks on average** did you have during one drinking occasion? *(USE SHOWCARD)*	Number Don't know 77 └─┴─┴─┘	A7

Help the participant to average out the total number of drinks by using the showcard that shows standard alcoholic drinks.		
During the past 30 days, what was the **largest number** of standard drinks you had on a single occasion, counting all types of alcoholic drinks together? *Ask the participant to think of the past 30 days only. This question is about the largest number of drinks that the participant had on one single occasion.*	Largest number Don't Know 77 ⌊_⌊_⌊_⌋	A8
During the past 30 days, how many times did you have **six or more** standard drinks in a single drinking occasion? *Ask the participant to think of the past 30 days only, and to report the number of occasions when he/she had six or more standard drinks.*	Number of times Don't Know 77 ⌊_⌊_⌊_⌋	A9
During each of the **past 7 days**, how many standard drinks did you have each day? *(USE SHOWCARD)* *Don't Know 77* *Ask the participant to think of each of the past 7 days. Use the showcard that shows standard alcoholic drinks to help the participant report the number of standard drinks for each of the past 7 days.* *Record for each day the number of standard drinks. If no drinks record 0.*	Monday ⌊_⌊_⌋	A10a
	Tuesday ⌊_⌊_⌋	A10b
	Wednesday ⌊_⌊_⌋	A10c
	Thursday ⌊_⌊_⌋	A10d
	Friday ⌊_⌊_⌋	A10e
	Saturday ⌊_⌊_⌋	A10f
	Sunday ⌊_⌊_⌋	A10g

CORE: Alcohol Consumption, continued

I have just asked you about your consumption of alcohol during the past 7 days. The questions were about alcohol in general, while the next questions refer to your consumption of homebrewed alcohol, alcohol brought over the border/from another country, any alcohol not intended for drinking or other untaxed alcohol. Please only think about these types of alcohol when answering the next questions.

During the **past 7 days**, did you consume any **homebrewed** alcohol, any alcohol **brought over the border/from another country**, any alcohol **not intended for drinking** or other **untaxed** alcohol? *(USE SHOWCARD)* *Ask the participant to only think of homebrewed alcohol, any alcohol brought over the border/from another country, any alcohol not intended for drinking or other untaxed alcohol.*	Yes 1 No 2 *If No, go to A13*	A11
On average, **how many standard drinks** of the following did you consume **during the past 7 days**? *(USE SHOWCARD)* *Don't Know 77* *Ask the participant to think of the past 7 days.* *Use the showcard that specifies what standard drinks are for each type of alcohol. Alcohol not intended for drinking should be treated like spirits.* *Record for each type of alcohol the number of standard drinks. If no drinks record 0.*	Homebrewed spirits, e.g. moonshine ⌊_⌊_⌋	A12a
	Homebrewed beer or wine, e.g. beer, palm or fruit wine ⌊_⌊_⌋	A12b
	Alcohol brought over the border/from another country ⌊_⌊_⌋	A12c
	Alcohol not intended for drinking, e.g. alcohol-based medicines, perfumes, after shaves ⌊_⌊_⌋	A12d
	Other untaxed alcohol in the country ⌊_⌊_⌋	A12e

CORE: Diet

The next questions ask about the fruits and vegetables that you usually eat. I have a nutrition card here that shows you some examples of local fruits and vegetables. Each picture represents the size of a serving. As you answer these questions please think of a typical week in the last year.

	Question	Response	Code
	In a typical week, on how many days do you **eat fruit**? *(USE SHOWCARD)* *Think of any fruit on the show card. A typical week means a "normal" week when your diet is not affected by cultural, religious, or other events. Do not report an average over a period.*	Number of days Don't Know 77 └─┴─┘ *If Zero days, go to D3*	D1
	How many **servings** of fruit do you eat on **one** of those days? *(USE SHOWCARD)* *Think of one day the participant can recall easily.*	Number of servings Don't Know 77 └─┴─┘	D2
	In a typical week, on how many days do you **eat vegetables**? *(USE SHOWCARD)* *Think of any vegetable on the show card. A typical week means a "normal" week when your diet is not affected by cultural, religious, or other events. Do not report an average over a period.*	Number of days Don't Know 77 └─┴─┘ *If Zero days, go to D5*	D3
	How many **servings** of vegetables do you eat on one of those days? *(USE SHOWCARD)* *Think of one day the participant can recall easily.*	Number of servings Don't know 77 └─┴─┘	D4

CORE: Dietary salt

The next questions ask about your knowledge, attitudes and behaviour towards dietary salt. Dietary salt includes ordinary table salt, unrefined salt such as sea salt, iodized salt and salty sauces such as soya sauce or fish sauce (see showcard). The following questions are on adding salt to the food right before you eat it, on how food is prepared in your home, on eating processed foods that are high in salt such as *[insert country specific examples]*, and questions on controlling your salt intake. Please answer the questions even if you consider yourself to eat a diet low in salt.

	Question	Response		Code
	How often do you **add salt** to your food before you eat it or as you are eating it? *(SELECT ONLY ONE)* *(USE SHOWCARD)* *Record the appropriate response*	Always Often Sometimes Rarely Never Don't know	1 2 3 4 5 77	D5
	How often is **salt added** in cooking or preparing foods in your household? *Record the appropriate response*	Always Often Sometimes Rarely Never Don't know	1 2 3 4 5 77	D6

Question	Response		Code
How often do you eat **processed food high in salt**, such as *corn beef, sausages, and chips, salted, cured or smoked meats*? *Record the appropriate response* *(USE SHOWCARD)*	Always Often Sometimes Rarely Never Don't know	1 2 3 4 5 77	D7
How much salt do you think you consume? *Record the appropriate response*	Far too much Too much Just the right amount Too little Far too little Don't know	1 2 3 4 5 77	D8
How important to you is **lowering the salt** in your diet? *Record the appropriate response*	Very important Somewhat important Not at all important Don't know	1 2 3 77	D9
Do you think that too much salt in your diet could cause a serious **health problem**? *Record the appropriate response*	Yes No Don't know	1 2 77	D10

CORE: Dietary salt, Continued

Question	Response		Code
Do you do anything of the following on a regular basis to **control your salt intake**? *(RECORD FOR EACH)* *Record the appropriate response for each of the following.*			
Limit consumption of processed foods	Yes No	1 2	D11a
Look at the salt or sodium labels on food	Yes No	1 2	D11b
Buy low salt/sodium alternatives	Yes No	1 2	D11c
Use spices other than salt when cooking	Yes No	1 2	D11d
Avoid eating foods processed outside of home	Yes No	1 2	D11e
Do other things specifically to reduce salt intake	Yes 1 *If Yes, go to S7other* No 2		D11f
Other (please specify)	└─┴─┴─┴─┴─┴─┴─┘		D11other

EXPANDED: Diet

Question	Response		Code
What type of **oil or fat is most often** used for meal preparation in your household?	Vegetable oil Lard or suet	1 2	D12

(USE SHOWCARD) *(SELECT ONLY ONE)* *Record the appropriate response.*	Butter or ghee 3 Margarine 4 Other 5 *If Other, go to D5 other* None in particular 6 None used 7 Don't know 77			
	Other └─┴─┴─┴─┴─┴─┴─┴─┘			D12other
On average, how many meals per week do you eat that were not prepared at a home? By meal, I mean breakfast, lunch and dinner. *Record the number of meals.*	Number Don't know 77 └─┴─┴─┘			D13
In a typical week, on how many days do you eat fried foods and/or fast foods, such as (fried chicken, chips, fish and chips, Chinese food, pizza, burgers)? *Record the number of days*	Number Don't know 77 └─┴─┴─┘ *If Zero days, go to X3*			X1
How many times on **one** of those days do you eat fried foods and/or fast foods? *Record the number of times*	Number of days Don't Know 77 └─┴─┴─┘ *If Zero days, go to X3*			X2
Do you eat more red meats, such as (beef, pork, lamb, wild meats) and organ meats, such as (liver, giblets, and kidney) than white meats such as (fish, chicken, turkey). *Record the appropriate response.*	Yes 1 No 2			X3
In a typical week, how often you consume sugar-containing snacks, such as (cookies, candies, chocolate, pastries, cakes, fruits canned with sugar) or other servings of at least one <u>tablespoon</u> of sugar or honey (in cereal, porridge, coffee, juices and drinks)? *Record the appropriate response.*	Almost daily	1		X4
	About 2-3 times a week	2		
	About once a week	3		
	More than once per day	4		
	Never/rarely	5		
In a typical week, how often do you consume soft drinks that contain sugar (not artificially-sweetened)? *Record the appropriate response.*	More than 4 drinks each day	1		X5
	1-4 drinks each day	2		
	2-6 drinks each week	3		
	About 1 drink a week	4		
	Never/ rarely	5		

ACCESS TO INFORMATION: Diet			
Were you ever provided with information on healthy eating habits and meal preparation? *Record the appropriate response.*	Yes	1	X6
	No	2 *If No, go to P1*	
	Health centre	1	X7

Where were you provided with information of healthy eating and meal preparation *Record the appropriate response.*	Health post	2	
	Hospital	3	
	Health fair	**4**	
	Workplace talk	5	
	Community/village talk	6	
	Television	7	
	Radion	8	
	other	9	
	Refused	88	

CORE: Physical Activity

Next I am going to ask you about the time you spend doing different types of physical activity in a typical week. Please answer these questions even if you do not consider yourself to be a physically active person.

Think first about the time you spend doing work. Think of work as the things that you have to do such as paid or unpaid work, study/training, household chores, harvesting food/crops, fishing or hunting for food, seeking employment. In answering the following questions 'vigorous-intensity activities' are activities that require hard physical effort and cause large increases in breathing or heart rate, 'moderate-intensity activities' are activities that require moderate physical effort and cause small increases in breathing or heart rate.

Read this opening statement out loud. It should not be omitted. The respondent will have to think first about the time he/she spends doing work (paid or unpaid work, household chores, harvesting food, fishing or hunting for food, seeking employment [Insert other examples if needed]), then about the time he/she travels from place to place, and finally about the time spent in vigorous as well as moderate physical activity during leisure time.
Remind the respondent when he/she answers the following questions that 'vigorous-intensity activities' are activities that require hard physical effort and cause large increases in breathing or heart rate, 'moderate-intensity activities' are activities that require moderate physical effort and cause small increases in breathing or heart rate. Don't forget to use the showcard which will help the respondent when answering to the questions.

Question	Response	Code
Work		
Does your work involve vigorous-intensity activity that causes large increases in breathing or heart rate like *[carrying or lifting heavy loads, digging or construction work]* for at least 10 minutes continuously? (USE SHOWCARD) *Activities are regarded as vigorous intensity if they cause a large increase in breathing and/or heart rate*	Yes 1 No 2 *If No, go to P 4*	P1
In a typical week, on how many days do you do vigorous-intensity activities as part of your work? *"Typical week" means a week when a person is doing vigorous intensity activities and not an average over a period. Valid responses range from 1-7.*	Number of days └─┴─┘	P2
How much time do you spend doing vigorous-intensity activities at work on a typical day? *Think of one day you can recall easily. Consider only those activities undertaken continuously for 10 minutes or more. Probe very high responses (over 4 hrs) to verify.*	Hours : minutes └─┴─┴─┘ : └─┴─┴─┘ hrs mins	P3 (a-b)
Does your work involve moderate-intensity activity, that causes small increases in breathing or heart rate such as	Yes 1	P4

Question	Response	Code
brisk walking *[or carrying light loads]* for at least 10 minutes continuously? *USE SHOWCARD)* *Activities are regarded as moderate intensity if they cause a small increase in breathing and/or heart rate.*	No 2 *If No, go to P 7*	
In a typical week, on how many days do you do moderate-intensity activities as part of your work? *Valid responses range from 1-7*	Number of days ⎿⎽⎽⏌	P5
How much time do you spend doing moderate-intensity activities at work on a typical day? *Think of one day you can recall easily. Consider only those activities undertaken continuously for 10 minutes or more. Probe very high responses (over 4 hrs) to verify.*	Hours : minutes ⎿⎽⎽⎽⏌ : ⎿⎽⎽⎽⏌ hrs mins	P6 (a-b)

Travel to and from places

The next questions exclude the physical activities at work that you have already mentioned.
Now I would like to ask you about the usual way you travel to and from places. For example to work, for shopping, to market, to place of worship, social events.

*The introductory statement to the following questions on transport-related physical activity is very important. It asks and helps the participant to now think about how they travel around getting from place-to-place. This statement **should not** be omitted.*

Question	Response	Code
Do you walk or use a bicycle *(pedal cycle)* for at least 10 minutes continuously to get to and from places? *Record the appropriate response*	Yes 1 No 2 *If No, go to P 10*	P7
In a typical week, on how many days do you walk or bicycle for at least 10 minutes continuously to get to and from places? *Valid responses range from 1-7*	Number of days ⎿⎽⎽⏌	P8
How much time do you spend walking or bicycling for travel on a typical day? *Think of one day you can recall easily. Consider the total amount of time walking or bicycling for trips of 10 minutes or more. Probe very high responses (over 4 hrs) to verify.*	Hours : minutes ⎿⎽⎽⎽⏌ : ⎿⎽⎽⎽⏌ hrs mins	P9 (a-b)

CORE: Physical Activity, Continued

Question	Response	Code
Recreational activities		

The next questions exclude the work and transport activities that you have already mentioned.
Now I would like to ask you about sports, fitness and recreational activities (leisure),

*This introductory statement directs the participant to think about recreational activities. This can also be called discretionary or leisure time. It includes sports and exercise but is not limited to participation competitions. Activities reported should be done regularly and not just occasionally. It is important to focus on only recreational activities and not to include any activities already mentioned. This statement **should not** be omitted.*

Question	Response	Code
Do you do any vigorous-intensity sports, fitness or recreational *(leisure)* activities that cause large increases in breathing or heart rate like *[running or football, cricket, lawn tennis, table tennis, rugby]* for at least 10 minutes continuously? *(USE SHOWCARD)* *Activities are regarded as vigorous intensity if they cause a*	Yes 1 No 2 *If No, go to P 13*	P10

In a typical week, on how many days do you do vigorous-intensity sports, fitness or recreational *(leisure)* activities? *Valid responses range from 1-7.*	Number of days └─┘	P11
How much time do you spend doing vigorous-intensity sports, fitness or recreational activities on a typical day? *Think of one day you can recall easily. Consider the total amount of time doing vigorous recreational activities for periods of 10 minutes or more. Probe very high responses (over 4 hrs).*	Hours : minutes └─┴─┘ : └─┴─┘ hrs mins	P12 (a-b)
Do you do any moderate-intensity sports, fitness or recreational *(leisure)* activities that cause a small increase in breathing or heart rate such as brisk walking*, [cycling, swimming, volleyball]* for at least 10 minutes continuously? *(USE SHOWCARD)* *Activities are regarded as moderate intensity if they cause a small increase in breathing and/or heart rate.*	Yes 1 No 2 *If No, go to P16*	P13
In a typical week, on how many days do you do moderate-intensity sports, fitness or recreational *(leisure)* activities? *Valid responses range from 1-7*	Number of days └─┘	P14
How much time do you spend doing moderate-intensity sports, fitness or recreational *(leisure)* activities on a typical day? *Think of one day you can recall easily. Consider the total amount of time doing moderate recreational activities for periods of 10 minutes or more. Probe very high responses (over 4 hrs).*	Hours : minutes └─┴─┘ : └─┴─┘ hrs mins	P15 (a-b)

EXPANDED: Physical Activity			
Sedentary behaviour			
The following question is about sitting or reclining at work, at home, getting to and from places, or with friends including time spent sitting at a desk, sitting with friends, traveling in car, bus, reading, playing cards or watching television, but do not include time spent sleeping. *(USE SHOWCARD)*			
74	How much time do you usually spend sitting or reclining on a typical day? *Consider total time spent at work sitting, in an office, reading, watching television, using a computer, doing hand craft like knitting, resting etc. Do not include time spent sleeping.*	Hours : minutes └─┴─┘ : └─┴─┘ hrs mins	P16 (a-b)

ACCESS TO INFORMATION: Physical Activity				
75	Were you ever provided with information on physical activity/ exercise? *Record the appropriate response.*	Yes	1	X8
		No	2 *If No, go to H1*	
76	Where were you provided with information physical activity/ exercise? *Record the appropriate response.*	Health centre	1	X9
		Health post	2	
		Hospital	3	
		Health fair	**4**	
		Workplace talk	5	
		Community/village talk	6	
		Television	7	
		Radion	8	
		other	9	
		Refused	88	

CORE: History of Raised Blood Pressure		
Question	**Response**	**Code**
Have you ever had your blood pressure measured by a doctor or other health worker? *Ask the participant to only consider measurements done by a doctor or other health worker.*	Yes 1 No 2 *If No, go to H6*	H1
Have you ever been told by a doctor or other health worker that you have raised blood pressure or hypertension? *Select the appropriate response.*	Yes 1 No 2 *If No, go to H6*	H2a
Have you been told in the past 12 months? *Only for those that have previously been diagnosed with raised blood pressure.*	Yes 1 No 2	H2b
In the past two weeks, have you taken any drugs (medication) for raised blood pressure prescribed by a doctor or other health worker? *Ask the participant to only consider drugs for raised blood pressure prescribed by a doctor or other health worker.*	Yes 1 No 2	H3
Have you ever seen a traditional healer for raised blood pressure or hypertension? *Select the appropriate response.*	Yes 1 No 2	H4

Are you currently taking any herbal or traditional remedy for your raised blood pressure? *Select the appropriate response.*	Yes 1 No 2	H5

ACCESS TO INFORMATION: Raised Blood Pressure

Were you ever provided with information on prevention of raised blood pressure? *Record the appropriate response.*	Yes	1	X10
	No	2 *If No, go to H6*	
Where were you provided with information prevention of raised blood pressure? *Record the appropriate response.*	Health centre	1	X11
	Health post	2	
	Hospital	3	
	Health fair	4	
	Workplace talk	5	
	Community/village talk	6	
	Television	7	
	Radion	8	
	other	9	
	Refused	88	

CORE: History of Diabetes

Question	Response	Code
Have you ever had your blood sugar measured by a doctor or other health worker? *Ask the participant to only consider measurements done by a doctor or other health worker.*	Yes 1 No 2 If No, go to H12	H6
Have you ever been told by a doctor or other health worker that you have raised blood sugar or diabetes? *Select the appropriate response.*	Yes 1 No 2 If No, go to H12	H7a
Have you been told in the past 12 months? *Only for those that have previously been diagnosed with diabetes.*	Yes 1 No 2	H7b
In the past two weeks, have you taken any drugs (medication) for diabetes prescribed by a doctor or other health worker? *Ask the participant to only consider drugs for diabetes prescribed by a doctor or other health worker.*	Yes 1 No 2	H8
Are you currently taking insulin for diabetes prescribed by a doctor or other health worker? *Ask the participant to only consider insulin that was prescribed by a doctor or other health worker.*	Yes 1 No 2	H9
Have you ever seen a traditional healer for diabetes or raised blood sugar? *Select the appropriate response.*	Yes 1 No 2	H10
Are you currently taking any herbal or traditional remedy for your diabetes? *Select the appropriate response.*	Yes 1 No 2	H11

ACCESS TO INFORMATION: Raised Blood Sugar

Were you ever provided with information on prevention of raised blood sugar? *Record the appropriate response.*	Yes	1	X12
	No	2 *If No, go to L1a*	
Where were you provided with information prevention of raised blood sugar? *Record the appropriate response.*	Health centre	1	X13
	Health post	2	
	Hospital	3	
	Health fair	4	
	Workplace talk	5	
	Community/village talk	6	
	Television	7	
	Radion	8	
	other	9	
	Refused	88	

CORE: History of Raised Total Cholesterol

Questions	Response	Code
Have you ever had your cholesterol (fat levels in your blood) measured by a doctor or other health worker? *Ask the participant to only consider measurements done by a doctor or other health worker.*	Yes 1 No 2 *If No, go to H17*	H12
Have you ever been told by a doctor or other health worker that you have raised cholesterol? *Select the appropriate response.*	Yes 1 No 2 *If No, go to H17*	H13a
Have you been told in the past 12 months? *Only for those that have previously been diagnosed with raised total cholesterol.*	Yes 1 No 2	H13b
In the past two weeks, have you taken any oral treatment (medication) for raised total cholesterol prescribed by a doctor or other health worker? *Ask the participant to only consider drugs for raised total cholesterol prescribed by a doctor or other health worker.*	Yes 1 No 2	H14
Have you ever seen a traditional healer for raised cholesterol? *Select the appropriate response.*	Yes 1 No 2	H15
Are you currently taking any herbal or traditional remedy for your raised cholesterol? *Select the appropriate response.*	Yes 1 No 2	H16

CORE: History of Cardiovascular Diseases

Question	Response	Code
Have you ever had a heart attack or chest pain from heart disease (angina) or a stroke (cerebrovascular accident or incident)? *Select the appropriate response.*	Yes 1 No 2	H17
Are you currently taking aspirin regularly to prevent or treat heart disease? *"Regularly" means on a daily or almost daily basis.*	Yes 1 No 2	H18

Are you currently taking statins (Lovastatin/Simvastatin/Atorvastatin or any other statin) regularly to prevent or treat heart disease? *"Regularly" means on a daily or almost daily basis.*	Yes 1 No 2	H19

ACCESS TO INFORMATION: Raised Total Cholesterol

101	Were you ever provided with information on prevention of raised total cholesterol? *Record the appropriate response.*	Yes	1	X14
		No	2 *If No, go to F1a*	
102	Where were you provided with information prevention of raised total cholesterol? *Record the appropriate response.*	Health centre	1	X15
		Health post	2	
		Hospital	3	
		Health fair	4	
		Workplace talk	5	
		Community/village talk	6	
		Television	7	
		Radion	8	
		other	9	
		Refused	88	

CORE: Lifestyle Advice

Questions	Response	Code
During the past three years, has a doctor or other health worker advised you to do any of the following? *(RECORD FOR EACH)* *Select the appropriate response. Ask the participant to only consider advice from a doctor or other health worker.*		
Quit using tobacco or don't start	Yes 1 No 2	H20a
Reduce salt in your diet	Yes 1 No 2	H20b
Eat at least five servings of fruit and/or vegetables each day	Yes 1 No 2	H20c
Reduce fat in your diet	Yes 1 No 2	H20d
Start or do more physical activity	Yes 1 No 2	H20e
Maintain a healthy body weight or lose weight	Yes 1 *If C1=1 go to M1* No 2 *If C1=1 go to M1*	H20f

CORE (for women only): Cervical Cancer Screening

The next question asks about cervical cancer prevention. Screening tests for cervical cancer prevention can be done in different ways, including Visual Inspection with Acetic Acid/vinegar (VIA), pap smear and Human Papillomavirus (HPV) test. VIA is an inspection of the

surface of the uterine cervix after acetic acid (or vinegar) has been applied to it. For both pap smear and HPV test, a doctor or nurse uses a swab to wipe from inside your vagina, take a sample and send it to a laboratory. It is even possible that you were given the swab yourself and asked to swab the inside of your vagina. The laboratory checks for abnormal cell changes if a pap smear is done, and for the HP virus if an HPV test is done.

Read this opening statement out loud. It should not be omitted.

Question	Response	Code
Have you ever had a screening test for cervical cancer, using any of these methods described above? *Select the appropriate response.*	Yes 1 No 2 Don't know 77	CX1

Step 1   Optional modules

Section: Health Screening	Response	Code
Have you ever had your feces examined to look for hidden blood? *Record the appropriate response*	Yes 1 No 2	S1
Have you ever had a colonoscopy? *Record the appropriate response*	Yes 1 No 2	S2
This question is for men only: Have you ever had an examination of your prostate? *Record the appropriate response*	Yes 1 No 2	S3
The following questions are for women only: Have you been shown how to examine your breasts? *Record the appropriate response*	Yes 1 No 2	S4
When was the last time you had an examination of your breasts? *Record the appropriate response*	1 year or less 1 Between 1 and 2 years 2 More than 2 years 3 Never 4 Don't know 77	S5
When was the last time you had a mammogram? *Record the appropriate response*	1 year or less 1 Between 1 and 2 years 2 More than 2 years 3 Never 4 Don't know 77	S6
When was the last time you had a Pap test or VIA? *Record the appropriate response*	1 year or less 1 Between 1 and 2 years 2 More than 2 years 3 Never 4 Don't know 77	S7

Violence and Injury

The next questions are about different experiences and behaviours that are related to road traffic injuries.

Core Questions	Response		Code
In the past 30 days, how often did you use a seat belt when you were the driver or passenger of a motor vehicle? *Record the appropriate response*	All of the time	1	V1
	Sometimes	2	
	Never	3	
	Have not been in a vehicle in past 30 days	4	
	No seat belt in the car I usually drive	5	
	Don't Know	7	
	Refused	8	
In the past 30 days, how often did you wear a helmet when you drove or rode as a passenger on a motorcycle or motor-scooter? *Record the appropriate response*	All of the time	1	V2
	Sometimes	2	
	Never	3	
	Have not been on a motorcycle or motor-scooter in past 30 days	4	
	Do not have a helmet	5	
	Don't Know	7	
	Refused	8	
In the past 12 months, have you been involved in a road traffic crash as a passenger, driver or pedestrian? *Record the appropriate response*	Yes (as driver)	1	V3
	Yes (as passenger)	2	
	Yes (as pedestrian)	3	
	No	4 Go to V5	
	Don't know	7 Go to V5	
	Refused	8 Go to V5	
Did you have any injuries in this road traffic crash which required medical attention? *Record the appropriate response*	Yes	1	V4
	No	2	
	Don't know	7	
	Refused	8	

The next questions ask about the most serious accidental injury you have had in the last twelve months

In the past 12 months, were you injured accidentally, other than the road traffic crashes which required medical attention? *Record the appropriate response*	Yes	1	V5
	No	2 Go to V8	
	Don't know	7 Go to V8	
	Refused	8 Go to V8	
Please indicate which of the following was the cause of this injury? *Record the appropriate response*	Fall	1	V6
	Burn	2	
	Poisoning	3	
	Near-drowning	4	
	Animal bite	5	

	Other (specify) 6	
	Don't know 7	
	Refused 8	
	Other (please specify) └─┴─┴─┴─┴─┴─┴─┘	V6other

Core Questions	Response	Code
Where were you when you had this injury? *Record the appropriate response*	Home 1 School 2 Workplace 3 Road/Street/Highway 4 Farm 5 Sports/athletic area 6 Other (specify) 66 Don't know 77 Refused 88	V7
	Other (please specify) └─┴─┴─┴─┴─┴─┴─┘	V7other

EXPANDED: Unintentional Injury

The next questions ask about behaviours related to your safety and whether or not you drink alcohol while driving or being a passenger.

In the past 30 days how often did you wear a helmet when you rode a bicycle or pedal cycle? *Record the appropriate response*	Always 1 Sometimes 2 Never 3 Did not ride in the past 30 days 4 Don't Know 7 Refused 8	V8
In the past 30 days, how many times have you driven a motorized vehicle when you have had 2 or more alcoholic drinks? *Record the number of times* *USE SHOW CARDS*	Number of times └─┴─┴─┘ Don't Know 77 Refused 88	V9
In the past 30 days, how many times have you ridden in a motorized vehicle where the driver has had 2 or more alcoholic drinks? *Record the number of times* *USE SHOW CARDS*	Number of times └─┴─┴─┘ Don't Know 77 Refused 88	V10

5-1-18

The following questions are about different experiences and behaviours that are related to violence.

Core Questions	Response	Code
In the past 12 months, how many times were you in a violent incident in which you were injured and required medical attention? *Record the appropriate response*	Never 1 *Go to V14* Rarely (1- 2 times) 2 Sometimes (3 – 5 times) 3 Often (6 or more times) 4 Don't know 7 *Go to V14* Refused 8 *Go to V14*	V11

The next questions ask about the most serious violent incidence you have had in the last twelve months.

Please indicate which of the following caused your most serious injury in the last 12 months? *USE SHOW CARDS* *Record the appropriate response*	Being shot with a firearm 1 A weapon (other than a firearm) was used by the person who injured me. 2 Being injured without any weapon (slapped, pushed…) 3 Don't know 7 Refused 8	V12
Please indicate the relationship between yourself and the person(s) who caused your injury. *Record the appropriate response*	Intimate partner 1 Parent 2 Child, sibling, or other relative 3 Friend or acquaintance 4 Unrelated caregiver 5 Stranger 6 Official or legal authorities 7 Other (specify) 66 Refused 8	V13
	Other (please specify) └─┴─┴─┴─┴─┴─┴─┘	V13other
Looking back on your childhood (before age 18 years), did a parent or adult in the household ever push, grab, shove, slap, hit, burn, or throw something at you? *Record the appropriate response*	Never 1 Very rarely 2 Once a month 3 Once a week 4 Almost daily 5 Don't know 7 Refused 8	V14

Looking back on your childhood, did an adult or anyone at least five years older than you ever touch you sexually or try to make you touch them sexually or force you to have sex?	Yes 1 No 2 Refused 88	V15
Since your 18th birthday, have you ever experienced a sex act involving either vaginal, oral, or anal penetration **against your will**?	Never 1 Once 2 A few times (2 to 3 times) 3	V16

	Many times (4 or more times)	4	
	Don't know	77	
	Refused	88	

EXPANDED: Violence

The next questions ask about behaviours related to your safety.

Question	Response		Code
In the past 12 months, have you been frightened for the safety of yourself or your family because of the anger or threats of another person(s)?	Yes	1	V17
	No	2 *If no, go to V19*	
	Refused	88 *If refused, go to V19*	
Please specify of whom you were most often frightened.	Intimate partner	1	V18
	Parent	2	
	Child, sibling, or other relative	3	
	Friend or acquaintance	4	
	Unrelated caregiver	5	
	Stranger	6	
	Official or legal authority	7	
	Other (specify)	8	
	Refused	88	
	Other (please specify) ╙─┴─┴─┴─┴─┴─┴─┘		V18other
Have you carried a loaded firearm on your person outside the home in the last 30 days?	No	1	V19
	Yes, for protection	2	
	Yes, for work	3	
	Yes, for sport (e.g. hunting target practice)	4	
	Refused	88	

Mental health / Suicide

Mental health / Suicide

The next questions ask about thoughts, plans, and attempts of suicide. Please answer the questions even if no one usually talks about these issues.

Question	Response			Code
During the **past 12 months**, have you seriously **considered** attempting suicide?	Yes	1		MH1
	No	2	*If No, go to MH3*	
	Refused	88		
Did you seek **professional help** for these thoughts?	Yes	1		MH2
	No	2		
	Refused	88		
During the **past 12 months**, have you made **a plan about how** you would attempt suicide?	Yes	1		MH3
	No	2		
	Refused	88		
Have you **ever attempted suicide**?	Yes	1		MH4
	No	2	*If No, go to MH9*	
	Refused	88		
During the **past 12 months**, have you **attempted suicide**	Yes	1		MH5
	No	2		
	Refused	88		
What was the main **method you used** the last time you attempted suicide? *(SELECT ONLY ONE)*	Razor, knife or other sharp instrument	1		MH6
	Overdose of medication (e. g. prescribed, over-the-counter)	2		
	Overdose of other substance (e.g. heroin, crack, alcohol)	3		
	Poisoning with pesticides (e.g. rat poison, insecticide, weed-killer)	4		
	Other poisoning (e.g. plant/seed, household product)	5		
	Poisonous gases from charcoal	6		
	Other	7	*If Other, go to MH6other*	
	Refused	88		
	Other (specify)	⌊_⌊_⌊_⌊_⌊_⌊_⌊_⌋		MH6other
Did you seek **medical care** for this attempt?	Yes	1		MH7
	No	2	*If No, go to MH9*	
	Refused	88		
Were you **admitted to hospital overnight** because of this attempt?	Yes	1		MH8
	No	2		
	Refused	88		
Has anyone in **your close family** (mother, father, brother, sister or children) ever attempted suicide?	Yes	1		MH9
	No	2		

		Refused 88	
Has anyone in **your close family** (mother, father, brother, sister or children) ever died from suicide?		Yes 1 No 2 Refused 88	MH10

Step 2   Physical Measurements

CORE: Blood Pressure		
Interviewer ID	└─┴─┴─┴─┘	M1
Device ID for blood pressure	└─┴─┴─┘	M2
Cuff size used	Small 1 Medium 2 Large 3	M3
Reading 1	Systolic (mmHg) └─┴─┴─┴─┘	M4a
	Diastolic (mmHg) └─┴─┴─┴─┘	M4b
Reading 2	Systolic (mmHg) └─┴─┴─┴─┘	M5a
	Diastolic (mmHg) └─┴─┴─┴─┘	M5b
Reading 3	Systolic (mmHg) └─┴─┴─┴─┘	M6a
	Diastolic (mmHg) └─┴─┴─┴─┘	M6b
During the past two weeks, have you been treated for raised blood pressure with drugs (medication) prescribed by a doctor or other health worker?	Yes 1 No 2	M7
CORE: Height and Weight		
Question	**Response**	**Code**
For women: Are you pregnant?	Yes 1 *If Yes, go to M 16* No 2	M8
Interviewer ID	└─┴─┴─┴─┘	M9
Device IDs for height and weight	Height └─┴─┴─┘	M10a
	Weight └─┴─┴─┘	M10b
Height	in Centimetres (cm) └─┴─┴─┴─┘ . └─┘	M11
Weight *If too large for scale 666.6*	in Kilograms (kg) └─┴─┴─┴─┘ . └─┘	M12

CORE: Waist		
Device ID for waist	|_|_|_|	M13
Waist circumference	in Centimetres (cm) |_|_|_| . |_|	M14

Step 3   Biochemical Measurements

CORE: Blood Glucose		
Question	**Response**	**Code**
During the past 12 hours have you had anything to eat or drink, other than water? *It is essential that the participant has fasted.*	Yes 1 No 2	B1
Technician ID *Record ID of the person taking the measurement.*	|_|_|_|	B2
Device ID *Record device ID.*	|_|_|	B3
Time of day blood specimen taken (24 hour clock) *Enter time measurement started.*	Hours : minutes |_|_| : |_|_| hrs mins	B4
Fasting blood glucose *Double check that the participant has fasted.*	mg/dl |_|_|_| . |_|	B5
Today, have you taken insulin or other drugs (medication) that have been prescribed by a doctor or other health worker for raised blood glucose? *Select appropriate response.*	Yes 1 No 2	B6
CORE: Blood Lipids		
Device ID *Record device ID.*	|_|_|	B7
Total cholesterol *Record value for total cholesterol.*	mg/dl |_|_|_| . |_|	B8
During the past two weeks, have you been treated for raised cholesterol with drugs (medication) prescribed by a doctor or other health worker? *Select appropriate response.*	Yes 1 No 2	B9

EXPANDED: Triglycerides and HDL Cholesterol		
Triglycerides *Record value for triglycerides.*	mg/dl |_|_|_| . |_|	B16

5-1-23

HDL Cholesterol *Record value for HDL cholesterol.*	mg/dl └─┴─┴─┘ . └─┘	B17

COUNTRY-SPECIFIC: LDL and VLDL		
LDL *Record value for LDL.*	└─┴─┴─┘ . └─┘ mg/dl	LDL
VLDL *Record value for HDL cholesterol.*	mg/dl └─┴─┴─┘ . └─┘	VLDL

PAHO/WHO STEPS

Noncommunicable Disease
Risk Factor Surveillance

DATA BOOK FOR

GUYANA

Table of Contents

IMPORTANT:
- You need to run the Epi Info programs **AgeRange1869** and **MissingAgeSex** prior to running any of the programs in the data book. You should only need to run these programs <u>one time</u>. If age and/or sex can be entered for any records missing this information, then enter this missing information and run **Rerun_AgeRange1869** followed by **MissingAgeSex**.
- ALL questions that report results by age and/or sex use the variables **AgeRange**, **Sex**, and **Valid**. These variables are created in the above AgeRange and MissingAgeSex programs using the variables **C1**, **C2**, and **C3**.
- ALL weighted programs use the variables **PSU, Stratum,** and one of either **WStep1, WStep2,** or **WStep3**.
- Unweighted tables will not have confidence intervals associated with them.

Demographic Information Results

Age group by sex

Description: Summary information by age group and sex of the respondents.

Instrument question:
- Sex
- What is your date of birth?

Age group and sex of respondents							
Age Group (years)	Men			Women		Both Sexes	
	n	%		n	%	n	%
18-44	601	22.6		1000	37.6	1601	60.1
45-69	467	17.5		594	22.3	1061	39.9
18-69	1068	40.1		1594	59.9	2662	100.0

Analysis Information:
- Questions used: C1, C2, C3
- Epi Info program name: Cagesex (unweighted)

Education

Description: Mean number of years of education among respondents.

Instrument question:
- In total, how many years have you spent at school or in full-time study (excluding pre-school)?

Mean number of years of education							
Age Group (years)	Men			Women		Both Sexes	
	n	Mean		n	Mean	n	Mean
18-44	597	9.9		996	9.9	1593	9.9
45-69	461	9.1		584	8.6	1045	8.9
18-69	1058	**9.6**		**1580**	**9.4**	**2638**	**9.5**

Analysis Information:
- Questions used: C4
- Epi Info program name: Ceduyears (unweighted)

Highest level of education

Description: Highest level of education achieved by the survey respondents.

Instrument question:

- What is the highest level of education you have completed?

Highest level of education								
	Men							
Age Group (years)	n	% No formal schooling	% Less than primary school	% Primary school completed	% Secondary school completed	% Tertiary/ Technical completed	% College/ University completed	% Post graduate degree completed
18-44	601	1.7	6.7	40.4	35.8	13.3	1.8	0.3
45-69	466	1.7	11.2	50.6	24.9	7.1	3.2	1.3
18-69	1067	1.7	8.6	44.9	31.0	10.6	2.4	0.7

Highest level of education								
	Women							
Age Group (years)	n	% No formal schooling	% Less than primary school	% Primary school completed	% Secondary school completed	% Tertiary/ Technical completed	% College/ University completed	% Post graduate degree completed
18-44	1000	2.6	4.6	39.7	39.7	9.1	3.8	0.5
45-69	593	2.4	11.3	52.1	23.1	7.8	2.9	0.5
18-69	1593	2.5	7.1	44.3	33.5	8.6	3.5	0.5

Highest level of education								
	Both Sexes							
Age Group (years)	n	% No formal schooling	% Less than primary school	% Primary school completed	% Secondary school completed	% Tertiary/ Technical completed	% College/ University completed	% Post graduate degree completed
18-44	1601	2.2	5.4	40.0	38.2	10.7	3.1	0.4
45-69	1059	2.1	11.2	51.5	23.9	7.5	3.0	0.8
18-69	2660	2.2	7.7	44.5	32.5	9.4	3.0	0.6

Analysis Information:

- Questions used: C5
- Epi Info program name: Ceduhigh (unweighted)

Ethnicity   Description: Summary results for the ethnicity of the respondents.

Instrument Question:
- What is your [insert relevant ethnic group/racial group/cultural subgroup/others] background?

Ethnic group of respondents								
Age Group (years)	Both Sexes							
	n	% East Indian	% African/ Black	% Amerindian	% Chinese	% Portuguese	% Mixed	% White
18-44	1600	36.6	28.2	13.8	0.1	0.3	20.7	0.3
45-69	1061	43.5	27.9	12.5	0.0	0.2	15.6	0.2
18-69	2661	39.4	28.1	13.3	0.1	0.3	18.7	0.2

Analysis Information:
- Questions used: C6
- Epi Info program name: Cethnic (unweighted)

Maritbmal status Description: Marital status of survey respondents.

Instrument question:
- What is your marital status?

			Marital status				
			Men				
Age Group (years)	n	% Never married	% Currently married	% Separated	% Divorced	% Widowed	% Cohabiting/ Common-Law
18-44	599	44.4	26.7	2.8	1.2	0.2	24.7
45-69	466	18.0	47.9	9.7	5.2	4.3	15.0
18-69	1065	32.9	36.0	5.8	2.9	2.0	20.5

			Marital status				
			Women				
Age Group (years)	n	% Never married	% Currently married	% Separated	% Divorced	% Widowed	% Cohabiting/ Common-Law
18-44	999	32.1	30.6	3.3	1.8	1.3	30.8
45-69	594	19.4	42.3	5.1	4.7	16.5	12.1
18-69	1593	27.4	35.0	4.0	2.9	7.0	23.9

			Marital status				
			Both Sexes				
Age Group (years)	n	% Never married	% Currently married	% Separated	% Divorced	% Widowed	% Cohabiting/ Common-Law
18-44	1598	36.7	29.2	3.1	1.6	0.9	28.5
45-69	1060	18.8	44.7	7.1	4.9	11.1	13.4
18-69	2658	29.6	35.4	4.7	2.9	5.0	22.5

Analysis Information:
- Questions used: C7
- Epi Info program name: Cmaritalstatus (unweighted)

Employment status
Description: Proportion of respondents in paid employment and those who are unpaid. Unpaid includes persons who are non-paid, students, homemakers, retired, and unemployed.

Instrument question:
- Which of the following best describes your main work status over the past 12 months?

Employment status					
	Men				
Age Group (years)	n	% Government employee	% Non-government employee	% Self-employed	% Unpaid
18-44	600	16.2	31.3	43.8	8.7
45-69	467	13.7	19.7	43.0	23.6
18-69	1067	15.1	26.2	43.5	15.2

Employment status					
	Women				
Age Group (years)	n	% Government employee	% Non-government employee	% Self-employed	% Unpaid
18-44	999	12.2	15.2	21.1	51.5
45-69	593	8.1	8.8	25.1	58.0
18-69	1592	10.7	12.8	22.6	53.9

Employment status					
	Both Sexes				
Age Group (years)	n	% Government employee	% Non-government employee	% Self-employed	% Unpaid
18-44	1599	13.7	21.3	29.6	35.4
45-69	1060	10.6	13.6	33.0	42.8
18-69	2659	12.4	18.2	31.0	38.4

Analysis Information:
- Questions used: C8
- Epi Info program name: Cworkpaid (unweighted)

Unpaid work and unemployed

Description: Proportion of respondents in unpaid work.

Instrument question:
- Which of the following best describes your main work status over the past 12 months?

Unpaid work and unemployed							
	Men						
Age Group (years)						Unemployed	
	n	% Non-paid	% Student	% Home-maker	% Retired	% Able to work	% Not able to work
18-44	52	7.7	34.6	1.9	3.8	50.0	1.9
45-69	110	4.5	0.0	1.8	51.8	21.8	20.0
18-69	162	5.6	11.1	1.9	36.4	30.9	14.2

Unpaid work and unemployed							
	Women						
Age Group (years)						Unemployed	
	n	% Non-paid	% Student	% Home-maker	% Retired	% Able to work	% Not able to work
18-44	514	1.9	4.5	70.0	0.2	22.4	1.0
45-69	344	4.9	0.0	60.2	16.3	8.1	10.5
18-69	858	3.1	2.7	66.1	6.6	16.7	4.8

Unpaid work and unemployed							
	Both Sexes						
Age Group (years)						Unemployed	
	n	% Non-paid	% Student	% Home-maker	% Retired	% Able to work	% Not able to work
18-44	566	2.5	7.2	63.8	0.5	24.9	1.1
45-69	454	4.8	0.0	46.0	24.9	11.5	12.8
18-69	1020	3.5	4.0	55.9	11.4	18.9	6.3

Analysis Information:
- Questions used: C8
- Epi Info program name: Cworknotpaid (unweighted)

Per capita annual income

Description: Mean reported per capita annual income of respondents in local currency.

Instrument questions:
- How many people older than 18 years, including yourself, live in your household?
- Taking the past year, can you tell me what the average earning of the household has been?

Mean annual per capita income	
n	Mean
1948	$428,354.2

Analysis Information:
- Questions used: C9, C10a-c
- Epi Info program name: Cmeanincome (unweighted)

Estimated household earnings

Description: summary of participant household earnings by quintile.

Instrument question:
- If you don't know the amount, can you give an estimate of the annual household income if I read some options to you?

Estimated household earnings								
n	% ≤ $500,000	% $500,000-$700,000	% $700,000-$900,000	% $900,000-$1,100,000	% $1,100,000-$1,500,000	% $1,500,000-$2,300,00	% $2,300,000-$3,500,000	% More than $3,500,000
192	71.9%	15.1%	7.3%	4.7%	1.0%	1.5%	1.0%	1.5%

Analysis Information:
- Questions used: C11
- Epi Info program name: Cquintile (unweighted)

Tobacco Use

Current smoking   Description: Current smokers among all respondents.

Instrument question:
- Do you currently smoke any tobacco products, such as cigarettes, cigars, or pipes?

	Percentage of current smokers										
	Men				**Women**				**Both Sexes**		
Age Group (years)	n	% Current smoker	95% CI		n	% Current smoker	95% CI		n	% Current smoker	95% CI
18-44	601	24.4	18.6-30.2		1000	3.2	1.8-4.5		1601	14.3	11.0-17.5
45-69	467	31.6	24.1-39.2		594	3.7	2.0-5.3		1061	17.8	13.7-22.0
18-69	1068	26.6	21.2-32.0		1594	3.3	2.3-4.4		2662	15.4	12.3-18.4

Analysis Information:
- Questions used: T1, T2, T8
- Epi Info program name: Tsmokestatus (unweighted); TsmokestatusWT (weighted)

Smoking Status

Description: Smoking status of all respondents.

Instrument questions:
- Do you currently smoke any tobacco products, such as cigarettes, cigars, or pipes?
- Do you currently smoke tobacco products daily?
- In the past, did you ever smoke any tobacco products?

Smoking status									
Men									
Age Group (years)	N	Current smoker				Non-smokers			
		% Daily	95% CI	% Non-daily	95% CI	% Former smoker	95% CI	% Never smoker	95% CI
18-44	601	16.3	11.3-21.4	8.1	5.5-10.6	18.7	14.6-22.8	56.9	51.7-62.2
45-69	467	24.6	19.3-30.0	7.0	3.2-10.8	30.4	23.6-37.1	38.0	31.3-44.7
18-69	1068	18.8	14.6-23.0	7.8	5.6-9.9	22.2	18.4-26.0	51.3	46.7-55.8

Smoking status									
Women									
Age Group (years)	N	Current smoker				Non-smokers			
		% Daily	95% CI	% Non-daily	95% CI	% Former smoker	95% CI	% Never smoker	95% CI
18-44	1000	1.6	0.7-2.6	1.5	0.4-2.6	8.2	6.0-10.4	88.6	86.1-91.1
45-69	594	3.4	1.8-5.0	0.3	0.0-0.7	8.3	4.7-12.0	88.0	83.9-92.1
18-69	1594	2.2	1.4-3.0	1.1	0.4-1.9	8.3	6.4-10.1	88.4	86.4-90.5

Smoking status									
Both Sexes									
Age Group (years)	N	Current smoker				Non-smokers			
		% Daily	95% CI	% Non-daily	95% CI	% Former smoker	95% CI	% Never smoker	95% CI
18-44	1601	9.3	6.6-12.1	4.9	3.5-6.3	13.7	11.2-16.1	72.1	69.0-75.1
45-69	1061	14.1	11.2-17.1	3.7	1.7-5.7	19.5	15.9-23.0	62.7	57.7-67.7
18-69	2662	10.8	8.5-13.1	4.6	3.4-5.8	15.5	13.5-17.4	69.2	66.3-72.0

Analysis Information:
- Questions used: T1, T2, T8
- Epi Info program name: Tsmokestatus (unweighted); TsmokestatusWT (weighted)

Daily smoking

Description: Percentage of current daily smokers among smokers.

Instrument questions:
- Do you currently smoke any tobacco products, such as cigarettes, cigars, or pipes?
- Do you currently smoke tobacco products daily?

Current daily smokers among smokers									
Age Group (years)	Men			Women			Both Sexes		
	N	% Daily smokers	95% CI	n	% Daily smokers	95% CI	n	% Daily smokers	95% CI
18-44	151	66.9	57.4-76.5	28	51.8	28.9-74.6	179	65.3	56.7-74.0
45-69	144	77.8	68.9-86.7	21	92.3	81.5-100.0	165	79.3	71.1-87.5
18-69	295	70.8	64.8-76.9	49	65.8	50.3-81.3	344	70.3	65.0-75.6

Analysis Information:
- Questions used: T1, T2
- Epi Info program name: Tsmokefreq (unweighted); TsmokefreqWT (weighted)

Initiation and duration of smoking

Description: Mean age of initiation and mean duration of smoking, in years, among smokers (no total age group for mean duration of smoking as age influences these values).

Instrument questions:
- Do you currently smoke any tobacco products, such as cigarettes, cigars, or pipes?
- How old were you when you first started smoking?
- Do you remember how long ago it was?

Mean age started smoking									
Age Group (years)	Men			Women			Both Sexes		
	N	Mean age	95% CI	n	Mean age	95% CI	n	Mean age	95% CI
18-44	95	16.0		16	23.2		111	16.6	
45-69	114	19.7		19	20.5		133	19.8	
18-69	209	17.5		35	21.9		244	17.9	

Mean duration of smoking									
Age Group (years)	Men			Women			Both Sexes		
	N	Mean duration	95% CI	n	Mean duration	95% CI	n	Mean duration	95% CI
18-44	95	17.8		16	9.2		111	17.1	
45-69	114	33.7		19	32.1		133	33.5	
18-69	209	24.2		35	20.4		244	23.8	

Analysis Information:
- Questions used: T1, T2, T3, T4a-c
- Epi Info program name: Tsmokeagetime (unweighted); TsmokeagetimeWT (weighted)

Manufactured cigarette smokers

Description: Percentage of smokers who use manufactured cigarettes among daily smokers and among current smokers.

Instrument questions:
- Do you currently smoke any tobacco products, such as cigarettes, cigars, or pipes?
- Do you currently smoke tobacco products daily?
- On average, how many of the following products do you smoke each day?

Manufactured cigarette smokers among daily smokers										
	Men				**Women**				**Both Sexes**	
Age Group (years)	N	% Manufactured cigarette smoker	95% CI		n	% Manufactured cigarette smoker	95% CI		n	% Manufactured cigarette smoker	95% CI
18-44	95	97.4	93.3-100.0		17	100.0	100.0-100.0		112	97.6	93.9-100.0
45-69	113	99.1	97.5-100.0		19	100.0	100.0-100.0		132	99.2	97.8-100.0
18-69	208	98.1	95.5-100.0		36	100.0	100.0-100.0		**244**	98.3	96.0-100.0

Manufactured cigarette smokers among current smokers										
	Men				**Women**				**Both Sexes**	
Age Group (years)	N	% Manufactured cigarette smoker	95% CI		n	% Manufactured cigarette smoker	95% CI		n	% Manufactured cigarette smoker	95% CI
18-44	148	96.1	92.2-100.0		27	91.0	77.5-100.0		175	95.6	91.8-99.4
45-69	143	98.2	96.0-100.0		21	96.6	89.9-100.0		164	98.0	95.9-100.0
18-69	**291**	96.9	94.1-99.6		**48**	93.0	84.8-100.0		**339**	96.5	93.8-99.1

Analysis Information:
- Questions used: T1, T2, T5a, T5aw
- Epi Info program name: Tsmokeman (unweighted); TsmokemanWT (weighted)

Amount of tobacco used among daily smokers by type

Description: Mean amount of tobacco used by daily smokers per day, by type.

Instrument questions:
- Do you currently smoke any tobacco products, such as cigarettes, cigars, or pipes?
- Do you currently smoke tobacco products daily?
- On average, how many of the following products do you smoke each day?

Age Group (years)	n	Mean # of manufactured cig.	95% CI	n	Mean # of hand-rolled cig.	95% CI	N	Mean # of pipes of tobacco	95% CI
					Men				
18-44	95	9.3	-	92	0.3	-	95	0.0	-
45-69	113	9.8	-	111	0.1	-	110	0.0	-
18-69	208	9.5	**-**	203	0.2	**-**	205	0.0	**-**

Mean amount of tobacco used by daily smokers by type

Age Group (years)	n	Mean # of cigars, cheerots, cigarillos	95% CI	n	Mean # of shisha sessions	95% CI	N	Mean # of other type of tobacco	95% CI
					Men				
18-44	95	0.2	-	94	0.0	-	95	1.0	-
45-69	111	0.8	-	110	0.0	-	111	0.0	-
18-69	206	0.4	**-**	204	0.0	**-**	206	0.6	**-**

Mean amount of tobacco used by daily smokers by type

Age Group (years)	n	Mean # of manufactured cig.	95% CI	n	Mean # of hand-rolled cig.	95% CI	N	Mean # of pipes of tobacco	95% CI
					Women				
18-44	17	7.5	-	17	0.6	-	17	0.0	-
45-69	19	11.8	-	17	0.0	-	17	0.0	-
18-69	36	9.6	**-**	34	0.4	**-**	34	0.0	**-**

Mean amount of tobacco used by daily smokers by type									
Women									
Age Group (years)	n	Mean # of cigars, cheerots, cigarillos	95% CI	n	Mean # of shisha sessions	95% CI	N	Mean # of other type of tobacco	95% CI
18-44	17	0.0	-	17	0.0	-	17	1.0	-
45-69	18	0.8	-	17	0.0	-	17	0.4	-
18-69	35	0.4	**-**	34	0.0	**-**	34	0.7	**-**

Mean amount of tobacco used by daily smokers by type									
Both Sexes									
Age Group (years)	n	Mean # of manufactured cig.	95% CI	n	Mean # of hand-rolled cig.	95% CI	N	Mean # of pipes of tobacco	95% CI
18-44	112	9.1	-	109	0.4	-	112	0.0	-
45-69	132	10.0	-	128	0.1	-	127	0.0	-
18-69	244	9.5	**-**	237	0.3	**-**	239	0.0	**-**

Mean amount of tobacco used by daily smokers by type									
Both Sexes									
Age Group (years)	n	Mean # of cigars, cheerots, cigarillos	95% CI	n	Mean # of shisha sessions	95% CI	N	Mean # of other type of tobacco	95% CI
18-44	112	0.1	-	111	0.0	-	112	1.0	-
45-69	129	0.8	-	127	0.0	-	128	0.1	-
18-69	241	0.4	**-**	238	0.0	**-**	240	0.6	**-**

Analysis Information:
- Questions used: T1, T2, T5a-T5f
- Epi Info program name: Tsmoketype (unweighted); TsmoketypeWT (weighted)

Smoked tobacco consumption

Description: Percentage of current smokers who smoke each of the following products.

Instrument questions:
- Do you currently smoke any tobacco products, such as cigarettes, cigars, or pipes?
- Do you currently smoke tobacco products daily?
- On average, how many of the following products do you smoke each day/week?

Percentage of current smokers smoking each of the following products							
Age Group (years)	Men						
	N	% Manuf. cigs.	95% CI	% Hand-rolled cigs.	95% CI	% Pipes of tobacco	95% CI
18-44	151	94.8	90.4-99.2	7.0	2.0-12.0	1.3	0.0-3.5
45-69	144	97.8	95.4-100.0	6.1	1.7-10.6	0.0	0.0-0.0
18-69	295	95.9	92.9-98.8	6.7	2.8-10.6	0.9	0.0-2.3

Percentage of current smokers smoking each of the following products							
Age Group (years)	Men						
	N	% Cigars, cheroots, cigarillos	95% CI	% Shisha	95% CI	% Other	95% CI
18-44	151	8.2	0.6-15.8	2.1	0.0-5.0	8.2	3.5-12.9
45-69	144	6.3	0.9-11.8	0.4	0.0-1.2	6.0	0.9-11.1
18-69	295	7.5	2.5-12.5	1.5	0.0-3.4	7.4	3.4-11.5

Percentage of current smokers smoking each of the following products							
Age Group (years)	Women						
	N	% Manuf. cigs.	95% CI	% Hand-rolled cigs.	95% CI	% Pipes of tobacco	95% CI
18-44	28	87.2	73.8-100.0	13.0	0.0-34.3	0	-
45-69	21	96.6	89.9-100.0	3.0	0.0-9.0	0	-
18-69	49	90.5	82.3-98.7	9.5	0.0-23.9	**0**	**-**

Percentage of current smokers smoking each of the following products							
Age Group (years)	Women						
	n	% Cigars, cheroots, cigarillos	95% CI	% Shisha	95% CI	% Other	95% CI
18-44	28	0.0	0.0-0.0	0	-	12.3	0.0-26.2
45-69	21	7.0	4.6-9.4	0	-	3.5	0.0-10.6
18-69	49	2.4	1.9-2.9	**0**	**-**	9.3	0.0-18.7

Percentage of current smokers smoking each of the following products							
Age Group (years)	Both Sexes						
	n	% Manuf. cigs.	95% CI	% Hand-rolled cigs.	95% CI	% Pipes of tobacco	95% CI
18-44	179	94.0	89.7-98.3	7.7	2.6-12.7	1.2	0.0-3.1
45-69	165	97.7	95.4-99.9	5.8	1.8-9.8	0.0	0.0-0.0
18-69	344	95.3	92.4-98.2	7.0	3.2-10.8	0.8	0.0-2.0

Percentage of current smokers smoking each of the following products							
Age Group (years)	Both Sexes						
	n	% Cigars, cheroots, cigarillos	95% CI	% Shisha	95% CI	% Other	95% CI
18-44	179	7.3	0.4-14.3	1.9	0.0-4.5	8.6	4.1-13.1
45-69	165	6.4	1.4-11.5	0.4	0.0-1.1	5.8	1.1-10.4
18-69	344	7.0	2.4-11.6	1.3	0.0-3.0	7.6	3.9-11.4

Analysis Information:

- Questions used: T1, T2, T5a-T5fw
- Epi Info program name: Tsmoketypeprev (unweighted); TsmoketypeprevWT (weighted)

Frequency of daily cigarette smoking

Description: Percentage of daily cigarette smokers smoking given quantities of manufactured or hand-rolled cigarettes per day.

Instrument questions:
- Do you currently smoke any tobacco products, such as cigarettes, cigars, or pipes?
- Do you currently smoke tobacco products daily?
- On average, how many of the following products do you smoke each day?

Percentage of daily smokers smoking given quantities of manufactured or hand-rolled cigarettes per day											
Men											
Age Group (years)	n	% <5 Cigs.	95% CI	% 5-9 Cigs.	95% CI	% 10-14 Cigs.	95% CI	% 15-24 Cigs.	95% CI	% ≥ 25 Cigs.	95% CI
18-44	90	32.3	6.8-57.7	13.8	4.8-22.7	32.5	17.9-47.1	18.5	8.3-28.7	3.0	0.0-6.3
45-69	109	25.0	10.4-39.6	23.7	12.4-34.9	25.3	14.4-36.2	22.2	13.1-31.2	3.8	0.0-7.8
18-69	199	29.4	8.9-49.9	17.6	9.7-25.6	29.7	18.6-40.8	20.0	12.0-27.9	3.3	0.8-5.9

Percentage of daily smokers smoking given quantities of manufactured or hand-rolled cigarettes per day											
Women											
Age Group (years)	n	% <5 Cigs.	95% CI	% 5-9 Cigs.	95% CI	% 10-14 Cigs.	95% CI	% 15-24 Cigs.	95% CI	% ≥ 25 Cigs.	95% CI
18-44	17	29.4	0.0-60.9	40.5	8.4-72.6	11.5	0.0-25.6	15.4	0.0-37.2	3.2	0.0-10.0
45-69	17	8.0	0.0-20.1	14.6	0.0-35.7	41.1	13.7-68.5	32.1	8.6-55.7	4.2	0.0-12.9
18-69	34	19.7	0.0-39.5	28.8	7.9-49.7	24.9	8.5-41.3	22.9	6.7-39.1	3.6	0.0-9.2

Percentage of daily smokers smoking given quantities of manufactured or hand-rolled cigarettes per day											
Both Sexes											
Age Group (years)	n	% <5 Cigs.	95% CI	% 5-9 Cigs.	95% CI	% 10-14 Cigs.	95% CI	% 15-24 Cigs.	95% CI	% ≥ 25 Cigs.	95% CI
18-44	107	32.0	8.5-55.5	16.1	6.9-25.3	30.6	17.0-44.3	18.2	8.7-27.8	3.0	0.0-6.1
45-69	126	23.1	9.8-36.4	22.7	12.4-33.0	27.1	17.0-37.2	23.3	14.6-31.9	3.9	0.3-7.5
18-69	233	28.5	9.6-47.3	18.7	11.1-26.4	29.2	18.9-39.6	20.3	12.8-27.7	3.3	1.0-5.7

Analysis Information:
- Questions used: T1, T2, T5a, T5b
- Epi Info program name: Tcig (unweighted); TcigWT (weighted)

Cessation   Description: Percentage of current smokers who have tried to stop smoking during the past 12 months.

Instrument questions:
- Do you currently smoke any tobacco products, such as cigarettes, cigars, or pipes?
- During the past 12 months, have you tried to stop smoking?

	Current smokers who have tried to stop smoking								
	Men				**Women**			**Both Sexes**	
Age Group (years)	n	% Tried to stop smoking	95% CI	n	% Tried to stop smoking	95% CI	n	% Tried to stop smoking	95% CI
18-44	151	57.4	48.3-66.5	28	75.4	59.0-91.8	179	59.3	51.1-67.5
45-69	144	61.0	47.9-74.0	21	54.9	32.6-77.1	165	60.3	48.4-72.3
18-69	295	58.7	51.9-65.4	49	68.3	54.4-82.2	344	59.7	53.6-65.7

Analysis Information:
- Questions used: T1, T2, T6
- Epi Info program name: Tcessation (unweighted); TcessationWT (weighted)

Advice to stop smoking   Description: Percentage of current smokers who have been advised by a doctor or other health worker to stop smoking, among those smokers who have had a visit to a doctor or other health worker in the past 12 months.

Instrument questions:
- Do you currently smoke any tobacco products, such as cigarettes, cigars, or pipes?
- During any visit to a doctor or other health worker in the past 12 months, were you advised to quit smoking tobacco?

	Current smokers who have been advised by doctor to stop smoking								
	Men				**Women**			**Both Sexes**	
Age Group (years)	n	% Advised to stop smoking	95% CI	n	% Advised to stop smoking	95% CI	n	% Advised to stop smoking	95% CI
18-44	110	32.5	19.0-45.9	22	23.0	1.2-44.9	132	31.4	19.0-43.8
45-69	119	41.9	22.6-61.2	17	22.9	1.7-44.2	136	40.1	22.2-57.9
18-69	229	36.1	22.0-50.2	39	23.0	6.4-39.5	268	34.7	21.6-47.7

Analysis Information:
- Questions used: T1, T2, T7
- Epi Info program name: Tcessation (unweighted); TcessationWT (weighted)

Tobacco Policy

Anti-cigarette information

Description: Percentage of all respondents who noticed information in newspapers or magazines, television or radio about the dangers of smoking or that encourages quitting during the past 30 days.

Instrument questions:
- During the past 30 days, have you noticed information about the dangers of smoking cigarettes or that encourages quitting through the following media?
  - Newspapers or magazines

Noticed information in newspapers or magazines about dangers of smoking or that encourages quitting									
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-44	601	31.2	25.9-36.6	1000	31.3	26.8-35.9	1601	31.3	27.6-35.0
45-69	467	31.7	25.9-37.5	594	31.3	26.1-36.4	1061	31.5	27.2-35.7
18-69	1068	31.4	27.2-35.6	1594	31.3	27.6-35.0	2662	31.3	28.3-34.4

Noticed information on television about dangers of smoking or that encourages quitting									
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-44	601	49.5	44.6-54.5	1000	49.7	45.3-54.2	1601	49.6	46.0-53.2
45-69	467	51.5	45.3-57.7	594	49.0	43.7-54.4	1061	50.3	45.7-54.8
18-69	1068	50.1	45.9-54.4	1594	49.5	45.9-53.2	2662	49.8	46.6-53.0

Noticed information on the radio about dangers of smoking or that encourages quitting									
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-44	601	29.4	23.7-35.0	1000	26.5	22.7-30.3	1601	28.0	24.1-31.9
45-69	467	34.1	28.3-39.9	594	28.7	23.3-34.1	1061	31.4	27.2-35.7
18-69	1068	30.8	26.1-35.5	1594	27.2	24.2-30.2	2662	29.1	25.8-32.3

Analysis Information:
- Questions used: TP1a-c
- Epi Info program name: TPdanger (unweighted); TPdangerWT (weighted)

Cigarette advertising Description: Percentage of all respondents who noticed advertisements or signs promoting cigarettes in stores where cigarettes are sold during the past 30 days.

Instrument questions:
- During the past 30 days, have you noticed any advertisements or signs promoting cigarettes in stores where cigarettes are sold?

Age Group (years)	Noticed advertisements or signs promoting cigarettes in stores								
	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-44	600	29.2	23.5-34.9	997	31.0	27.0-35.0	1597	30.1	26.8-33.3
45-69	467	32.8	26.6-39.0	592	22.9	18.3-27.4	1059	27.9	23.8-32.0
18-69	1067	30.3	25.4-35.1	1589	28.4	25.3-31.5	2656	29.4	26.7-32.1

Analysis Information:
- Questions used: TP2
- Epi Info program name: TPcigads (unweighted); TPcigadsWT (weighted)

Cigarette promotion Description: Percentage of all respondents who noticed cigarette promotions during the past 30 days.

Instrument questions:
- During the past 30 days, have you noticed any of the following types of cigarette promotions?

Age Group (years)	Noticed free samples of cigarettes								
	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-44	601	3.0	1.5-4.5	1000	3.2	2.0-4.4	1601	3.1	2.1-4.1
45-69	467	5.1	2.2-8.0	594	2.4	1.3-3.6	1061	3.8	2.2-5.4
18-69	1068	3.6	2.2-5.0	1594	3.0	2.1-3.9	2662	3.3	2.4-4.2

Age Group (years)	Noticed sale prices on cigarettes								
	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-44	601	7.9	5.0-10.8	1000	8.3	5.9-10.8	1601	8.1	6.3-9.9
45-69	467	6.5	3.3-9.7	594	5.0	3.0-7.0	1061	5.8	3.8-7.7
18-69	1068	7.5	5.2-9.8	1594	7.3	5.6-9.0	2662	7.4	6.0-8.8

Noticed coupons for cigarettes											
Age Group (years)	**Men**				**Women**				**Both Sexes**		
	n	%	95% CI		n	%	95% CI		n	%	95% CI
18-44	601	6.6	3.9-9.3		1000	5.3	3.0-7.6		1601	6.0	4.3-7.6
45-69	467	5.4	3.0-7.9		594	4.1	2.2-6.0		1061	4.8	3.1-6.4
18-69	1068	6.3	4.3-8.2		1594	4.9	3.2-6.6		2662	5.6	4.4-6.8

Noticed free gifts or special discount offers on other products when buying cigarettes											
Age Group (years)	**Men**				**Women**				**Both Sexes**		
	n	%	95% CI		n	%	95% CI		n	%	95% CI
18-44	601	6.2	3.5-8.9		1000	3.6	2.4-4.8		1601	5.0	3.4-6.5
45-69	467	6.7	3.9-9.6		594	3.4	1.9-4.9		1061	5.1	3.5-6.7
18-69	1068	6.4	4.3-8.4		1594	3.6	2.6-4.5		2662	5.0	3.8-6.2

Noticed clothing or other items with a cigarette brand name or logo											
Age Group (years)	**Men**				**Women**				**Both Sexes**		
	n	%	95% CI		n	%	95% CI		n	%	95% CI
18-44	601	5.8	3.3-8.2		1000	3.3	1.9-4.7		1601	4.6	3.1-6.1
45-69	467	7.5	4.5-10.4		594	2.9	1.5-4.4		1061	5.2	3.5-7.0
18-69	1068	6.3	4.3-8.2		1594	3.2	2.1-4.3		2662	4.8	3.6-5.9

Noticed cigarette promotions in the mail											
Age Group (years)	**Men**				**Women**				**Both Sexes**		
	n	%	95% CI		n	%	95% CI		n	%	95% CI
18-44	601	1.8	0.7-2.9		1000	2.4	0.6-4.2		1601	2.1	1.1-3.1
45-69	467	1.0	0.0-1.9		594	2.0	0.8-3.2		1061	1.5	0.8-2.2
18-69	1068	1.6	0.7-2.4		1594	2.3	1.0-3.6		2662	1.9	1.2-2.6

Analysis Information:
- Questions used: TP3a-TP3f
- Epi Info program name: TPcigpromos (unweighted); TPcigpromosWT (weighted)

Cigarette package health warnings

Description: Percentage of current smokers who noticed health warnings on cigarette packages during the past 30 days.

Instrument questions:
- During the past 30 days, did you notice any health warnings on cigarette packages?

Current smokers who noticed health warnings on cigarette packages									
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-44	146	86.6	79.0-94.2	24	71.4	47.5-95.3	170	85.2	77.3-93.1
45-69	135	88.7	82.3-95.2	21	72.5	52.8-92.2	156	87.0	80.7-93.3
18-69	281	87.4	81.5-93.2	45	71.8	55.0-88.6	326	85.9	79.8-91.9

Analysis Information:
- Questions used: TP4
- Epi Info program name: TPwarnings (unweighted); TPwarningsWT (weighted)

Quitting

Description: Percentage of current smokers who noticed health warnings on cigarette packages during the past 30 days that thought about quitting due to the health warnings they saw.

Instrument questions:
- During the past 30 days, did you notice any health warnings on cigarette packages?
- During the past 30 days, have warning labels on cigarette packages led you to think about quitting?

Current smokers who saw health warnings on cigarette packages that thought of quitting									
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-44	121	66.7	56.4-77.0	18	79.9	60.6-99.1	139	67.7	58.1-77.3
45-69	112	55.9	39.5-72.4	14	56.8	32.4-81.1	126	56.0	40.9-71.2
18-69	233	62.8	52.5-73.2	32	70.7	56.3-85.0	265	63.5	54.0-73.0

Analysis Information:
- Questions used: TP4, TP5
- Epi Info program name: TPquitting (unweighted); TPquittingWT (weighted)

Cigarette costs

Description: Average price paid for 20 manufactured cigarettes, based on the last manufactured cigarette purchase.

Instrument questions:
- The last time you bought manufactured cigarettes for yourself, how many cigarettes did you buy in total?
- In total, how much money did you pay for this purchase?

Average price paid for 20 manufactured cigarettes											
	Men				**Women**				**Both Sexes**		
Age Group (years)	n	Mean [insert currency]	95% CI		n	Mean [insert currency]	95% CI		n	Mean [insert currency]	95% CI
18-44	78	427.5	-		14	432.0	-		92	428.1	-
45-69	70	435.7	-		11	439.5	-		81	436.1	-
18-69	148	430.2	-		25	434.3	-		173	430.6	-

Analysis Information:
- Questions used: TP6, TP7
- Epi Info program name: TPcost (unweighted); TPcostWT (weighted)

Alcohol Consumption

Alcohol consumption status

Description: Alcohol consumption status of all respondents.

Instrument questions:
- Have you ever consumed any alcohol such as …?
- Have you consumed any alcohol in the past 12 months?
- Have you consumed any alcohol in the past 30 days?

Alcohol consumption status								
Men								
Age Group (years)	n	% Current drinker (past 30 days)	95% CI	% Drank in past 12 months, not current	95% CI	% Past 12 months abstainer	95% CI	% Lifetime abstainer	95% CI
18-44	601	63.8	58.5-69.1	13.6	9.9-17.2	10.2	4.9-15.5	12.4	8.8-16.0
45-69	467	48.9	42.6-55.2	14.6	10.3-18.8	19.1	14.8-23.5	17.4	12.6-22.2
18-69	1068	59.3	54.9-63.8	13.9	10.8-17.0	12.9	8.4-17.3	13.9	10.7-17.1

Alcohol consumption status								
Women								
Age Group (years)	n	% Current drinker (past 30 days)	95% CI	% Drank in past 12 months, not current	95% CI	% Past 12 months abstainer	95% CI	% Lifetime abstainer	95% CI
18-44	1000	25.3	22.0-28.5	21.7	18.4-25.0	16.3	13.3-19.4	36.7	32.5-40.9
45-69	594	13.1	9.9-16.3	11.8	8.5-15.1	24.7	19.5-29.9	50.4	45.1-55.8
18-69	1594	21.4	18.9-24.0	18.6	16.2-21.0	19.0	16.3-21.6	41.0	37.4-44.6

Alcohol consumption status								
Both Sexes								
Age Group (years)	n	% Current drinker (past 30 days)	95% CI	% Drank in past 12 months, not current	95% CI	% Past 12 months abstainer	95% CI	% Lifetime abstainer	95% CI
18-44	1601	45.4	41.9-48.9	17.5	15.0-19.9	13.1	10.0-16.2	24.0	20.7-27.3
45-69	1061	31.2	27.3-35.1	13.2	10.3-16.1	21.9	17.9-25.8	33.7	29.7-37.7
18-69	2662	41.0	38.1-44.0	16.2	14.2-18.1	15.8	12.9-18.8	27.0	24.1-29.9

Analysis Information:
- Questions used: A1, A2, A5
- Epi Info program name: Aconsumption (unweighted); AconsumptionWT (weighted)

Stopping drinking due to health reasons

Description: Percentage of former drinkers (those who did not drink during the past 12 months) who stopped drinking due to health reasons, such as a negative impact of drinking on your health or as per advice of a doctor or other health worker among those respondents who drank in their lifetime, but not in the last 12 months.

Instrument questions:
- Have you consumed any alcohol in the past 12 months?
- Did you stop drinking due to health reasons, such as a negative impact of drinking on your health or as per advice of your doctor or other health worker?

Stopping drinking due to health reasons												
	Men				Women				Both Sexes			
Age Group (years)	n	% stopping due to health reasons	95% CI		n	% stopping due to health reasons	95% CI		n	% stopping due to health reasons	95% CI	
18-44	53.0	30.9	8.0-53.7		166.0	17.9	10.4-25.4		219.0	23.2	13.8-32.5	
45-69	85.0	31.3	14.7-48.0		118.0	12.3	5.5-19.0		203.0	20.7	13.0-28.4	
18-69	138.0	31.1	20.8-41.3		284.0	15.6	10.1-21.1		422.0	22.1	17.1-27.1	

Analysis Information:
- Questions used: A1, A2, A3
- Epi Info program name: Astopdrink (unweighted); AstopdrinkWT (weighted)

Frequency of alcohol consumption

Description: Frequency of alcohol consumption in the past 12 months among those respondents who drank in the last 12 months.

Instrument question:

- During the past 12 months, how frequently have you had at least one alcoholic drink?

Frequency of alcohol consumption in the past 12 months													
Men													
Age Group (years)	n	% Daily	95% CI	% 5-6 days/ week	95% CI	% 3-4 days/ week	95% CI	% 1-2 days/ week	95% CI	% 1-3 days/ month	95% CI	% < once a month	95% CI
18-44	920	2.3	1.3-3.4	3.3	1.8-4.8	2.7	0.9-4.4	5.1	2.7-7.4	21.8	17.7-25.9	30.8	27.1-34.5
45-69	449	3.5	1.6-5.4	4.6	2.1-7.2	4.9	1.8-7.9	5.5	2.0-9.0	19.1	13.3-24.9	21.9	16.9-26.9
18-69	**1369**	2.6	1.7-3.6	3.6	2.3-5.0	3.2	1.8-4.7	5.2	3.2-7.1	21.2	18.0-24.4	28.7	25.7-31.7

Frequency of alcohol consumption in the past 12 months													
Women													
Age Group (years)	n	% Daily	95% CI	% 5-6 days/ week	95% CI	% 3-4 days/ week	95% CI	% 1-2 days/ week	95% CI	% 1-3 days/ month	95% CI	% < once a month	95% CI
18-44	488	0.6	0.0-1.3	0.4	0.0-1.3	1.5	0.5-2.6	8.6	5.3-12.0	25.1	20.5-29.6	63.7	57.8-69.7
45-69	164	0.5	0.0-1.3	1.7	0.0-3.9	1.5	0.0-3.1	6.7	2.4-11.0	17.3	9.4-25.2	73.3	63.8-80.8
18-69	602	0.6	0.1-1.2	0.7	0.0-1.5	1.5	0.6-2.4	8.3	5.5-11.0	23.5	19.6-27.5	65.4	60.1-70.6

Frequency of alcohol consumption in the past 12 months													
Both Sexes													
Age Group (years)	n	% Daily	95% CI	% 5-6 days/ week	95% CI	% 3-4 days/ week	95% CI	% 1-2 days/ week	95% CI	% 1-3 days/ month	95% CI	% < once a month	95% CI
18-44		2.3	1.3-3.4	1.9	0.7-3.0	3.8	2.2-5.4	21.8	17.7-25.9	30.8	27.1-34.5	39.4	35.4-43.4
45-69		3.5	1.6-5.4	4.0	1.7-6.3	4.4	1.8-7.0	19.1	13.3-24.9	21.9	16.9-26.9	47.1	40.4-53.9
18-69		2.6	1.7-3.6	2.4	1.4-3.4	3.9	2.6-5.3	21.2	18.0-24.4	28.7	25.7-31.7	41.2	37.9-44.6

Analysis Information:

- Questions used: A1, A2, A4
- Epi Info program name: Afrequency (unweighted); AfrequencyWT (weighted)

Drinking occasions in the past 30 days

Description: Mean number of occasions with at least one drink in the past 30 days among current (past 30 days) drinkers.

Instrument question:
- During the past 30 days, on how many occasions did you have at least one alcoholic drink?

Mean number of drinking occasions in the past 30 days among current (past 30 days) drinkers									
Age Group (years)	**Men**			**Women**			**Both Sexes**		
	n	Mean	95% CI	n	Mean	95% CI	n	Mean	95% CI
18-44	385.0	4.2	3.7-4.8	252	2.4	2.0-2.8	637	3.7	3.3-4.2
45-69	220.0	3.8	3.0-4.7	80	2.6	1.6-3.6	300	3.6	2.8-4.3
18-69	605.0	4.1	3.6-4.6	332	2.4	2.0-2.8	937	3.7	3.3-4.1

Analysis Information:
- Questions used: A1, A2, A5, A6
- Epi Info program name: Aoccasions (unweighted); AoccasionsWT (weighted)

Standard drinks per drinking occasion

Description: Mean number of standard drinks consumed on a drinking occasion among current (past 30 days) drinkers.

Instrument question:
- During the past 30 days, when you drank alcohol, on average, how many standard alcoholic drinks did you have during one occasion?

Mean number of standard drinks per drinking occasion among current (past 30 days) drinkers									
Age Group (years)	**Men**			**Women**			**Both Sexes**		
	n	Mean	95% CI	n	Mean	95% CI	n	Mean	95% CI
18-44	381	5.8	5.1-6.5	253	3.6	3.1-4.0	634	5.2	4.6-5.8
45-69	221	5.1	4.1-6.0	81	3.0	2.5-3.5	302	4.6	3.9-5.4
18-69	602	5.6	5.0-6.2	334	3.5	3.1-3.9	936	5.1	4.6-5.6

Analysis Information:
- Questions used: A1, A2, A5, A7
- Epi Info program name: Anumdrinkperday (unweighted); AnumdrinkperdayWT (weighted)

Average volume drinking levels among all respondents

Description: Percentage of respondents with different drinking levels.
A standard drink contains approximately 10g of pure alcohol.

Instrument questions:
- During the past 30 days, on how many occasions did you have at least one alcoholic drink?
- During the past 30 days, when you drank alcohol, on average, how many standard alcoholic drinks did you have during one occasion?

Drinking at high-end level among all respondents (≥60g of pure alcohol on average per occasion among men and ≥40g of pure alcohol on average per occasion among women)									
Age Group (years)	Men			Women			Both Sexes		
	n	% ≥60g	95% CI	n	% ≥40g	95% CI	n	% high-end level	95% CI
18-44	137	22.1	17.3-26.9	82	8.9	6.4-11.4	221.0	15.8	13.1-18.4
45-69	66	13.8	9.5-18.0	23	3.6	1.9-5.3	140.0	8.7	6.4-11.1
18-69	203	19.6	15.9-23.3	105	7.2	5.4-9.1	361.0	13.6	11.5-15.7

Drinking at intermediate level among all respondents (40-59.9g of pure alcohol on average per occasion among men and 20-39.9g of pure alcohol on average per occasion among women)									
Age Group (years)	Men			Women			Both Sexes		
	n	% 40-59.9g	95% CI	n	% 20-39.9g	95% CI	n	% intermediate level	95% CI
18-44	77	13.0	9.5-16.5	117	10.4	8.3-12.5	221	11.7	9.6-13.9
45-69	42	7.8	4.6-10.9	31	5.2	3.2-7.3	140	6.5	4.6-8.4
18-69	119	11.4	8.7-14.1	148	8.8	7.2-10.4	361	10.1	8.5-11.8

Drinking at lower-end level among all respondents (<40g of pure alcohol on average per occasion among men and <20g of pure alcohol on average per occasion among women)									
Age Group (years)	Men			Women			Both Sexes		
	n	% <40g	95% CI	n	% <20g	95% CI	n	% lower-end level	95% CI
18-44	167	28.3	23.2-33.3	54	5.8	3.7-7.9	221	17.5	14.2-20.8
45-69	113	27.1	21.4-32.9	27	4.0	2.2-5.9	140	15.7	12.4-19.0
18-69	280	28.3	23.2-33.3	81	5.3	3.7-6.8	361	16.9	14.1-19.8

Analysis Information:
- Questions used: A1, A2, A5, A6, A7
- Epi Info program name: Acategories (unweighted); AcategoriesWT (weighted)

Average volume drinking levels among current (past 30 days) drinkers

Description: Percentage of current (past 30 days) drinkers with different drinking levels.
A standard drink contains approximately 10g of pure alcohol.

Instrument questions:
- During the past 30 days, on how many occasions did you have at least one alcoholic drink?
- During the past 30 days, when you drank alcohol, on average, how many standard alcoholic drinks did you have during one occasion?

High-end, intermediate, and lower-end level drinking among current (past 30 days) drinkers							
	Men						
Age Group (years)	n	% high-end (≥60g)	95% CI	% intermediate (40-59.9g)	95% CI	% lower-end (<40g)	95% CI
18-44	381.0	34.9	28.3-41.5	20.5	15.4-25.5	44.6	36.9-52.4
45-69	221.0	28.3	20.5-36.1	16.0	9.6-22.3	55.7	46.7-64.8
18-69	602.0	33.3	27.7-38.9	19.3	15.1-23.6	47.4	40.6-54.2

High-end, intermediate, and lower-end level drinking among current (past 30 days) drinkers							
	Women						
Age Group (years)	n	% high-end (≥40g)	95% CI	% intermediate (20-39.9g)	95% CI	% lower-end (<20g)	95% CI
18-44	743.0	8.9	6.4-11.4	10.4	8.3-12.5	5.8	3.7-7.9
45-69	512.0	3.6	1.9-5.3	5.2	3.2-7.3	4.0	2.2-5.9
18-69	1255.0	7.2	5.4-9.1	8.8	7.2-10.4	5.3	3.7-6.8

High-end, intermediate, and lower-end level drinking among current (past 30 days) drinkers							
	Both sexes						
Age Group (years)	n	% high-end	95% CI	% intermediate	95% CI	% lower-end	95% CI
18-44	634.0	35.0	29.8-40.2	26.1	21.7-30.5	38.9	32.1-45.6
45-69	302.0	28.2	21.5-34.9	21.1	15.1-27.0	50.7	42.8-58.7
18-69	936.0	33.4	28.9-38.0	24.9	21.0-28.8	41.6	35.6-47.7

Analysis Information:
- Questions used: A1, A2, A5, A6, A7
- Epi Info program name: Acategories (unweighted); AcategoriesWT (weighted)

Largest number of drinks in the past 30 days

Description: Largest number of drinks consumed during a single occasion in the past 30 days among current (past 30 days) drinkers.

Instrument question:
- During the past 30 days, what was the largest number of standard alcoholic drinks you had on a single occasion, counting all types of alcoholic drinks together?

Mean maximum number of standard drinks consumed on one occasion in the past 30 days											
	Men				**Women**				**Both Sexes**		
Age Group (years)	n	Mean maximum number	95% CI		n	Mean maximum number	95% CI		n	Mean maximum number	95% CI
18-44	381.0	7.8	6.9-8.7		251	4.836	4.0-5.7		632.0	7.0	6.3-7.8
45-69	217.0	5.9	4.8-7.0		80	3.378	2.8-4.0		297.0	5.4	4.5-6.2
18-69	598.0	7.3	6.6-3.3		331	4.562	3.9-5.3		929.0	6.6	6.0-7.3

Analysis Information:
- Questions used: A1, A2, A5, A8
- Epi Info program name: Alargestnum (unweighted); AlargestnumWT (weighted)

Six or more drinks on a single occasion

Description: Percentage of respondents who had six or more drinks on any occasion in the past 30 days during a single occasion among the total population.

Instrument question:
- During the past 30 days, how many times did you have **six or more** standard alcoholic drinks in a single drinking occasion?

Age Group (years)	Men			Women			Both Sexes		
	n	% ≥ 6 drinks	95% CI	n	% ≥ 6 drinks	95% CI	n	% ≥ 6 drinks	95% CI
18-44	224	38.4	32.7-44.2	100	9.9	7.6-12.1	344	24.8	21.5-28.1
45-69	117	24.1	18.7-29.4	26	3.6	2.0-5.3	143	14.0	11.0-16.9
18-69	361	34.1	29.5-38.8	126	7.9	6.3-9.5	487	21.5	18.8-24.1

Six or more drinks on a single occasion at least once during the past 30 days among total population

Analysis Information:
- Questions used: A1, A2, A5, A9
- Epi Info program name: Aepisodic (unweighted); AepisodicWT (weighted)

Six or more drinks on a single occasion

Description: Mean number of times in the past 30 days on which current (past 30 days) drinkers consumed six or more drinks during a single occasion.

Instrument question:
- During the past 30 days, how many times did you have **six or more** standard alcoholic drinks in a single drinking occasion?

Age Group (years)	Men			Women			Both Sexes		
	n	Mean number of times	95% CI	n	Mean number of times	95% CI	n	Mean number of times	95% CI
18-44	374	1.791	1.5-2.1	250	0.996	0.7-1.3	624.0	1.6	1.3-1.8
45-69	215	2.17	1.5-2.9	79	0.916	0.4-1.5	294.0	1.9	1.3-2.5
18-69	589	1.884	1.6-2.2	329	0.981	0.7-1.3	918.0	1.7	1.4-1.9

Mean number of times with six or more drinks during a single occasion in the past 30 days among current drinkers

Analysis Information:
- Questions used: A1, A2, A5, A9
- Epi Info program name: Aepisodic (unweighted); AepisodicWT (weighted)

Past 7 days drinking

Description: Frequency of alcohol consumption in the past 7 days by current (past 30 days) drinkers.

Instrument question:
- During each of the past 7 days, how many standard drinks of any alcoholic drink did you have each day?

Frequency of alcohol consumption in the past 7 days											
	Men										
Age Group (years)	n	% Daily	95% CI	% 5-6 days	95% CI	% 3-4 days	95% CI	% 1-2 days	95% CI	% 0 days	95% CI
18-44	390	3.5	1.7-5.2	2.1	0.7-3.5	9.7	6.1-13.4	65.0	58.8-71.2	19.7	14.6-24.8
45-69	225	6.6	3.2-10.0	2.0	0.0-4.4	8.6	5.0-12.3	54.3	45.2-63.4	28.5	20.3-36.6
18-69	615	4.3	2.6-5.9	2.1	0.9-3.3	9.4	6.5-12.4	62.3	56.8-67.9	21.9	17.2-26.5

Frequency of alcohol consumption in the past 7 days											
	Women										
Age Group (years)	n	% Daily	95% CI	% 5-6 days	95% CI	% 3-4 days	95% CI	% 1-2 days	95% CI	% 0 days	95% CI
18-44	257.0	1.5	0.0-3.3	0.0	0.0-0.0	7.6	3.5-11.6	50.8	42.8-58.8	40.2	32.1-48.3
45-69	82.0	5.5	0.0-12.1	0.9	0.0-2.6	0.6	0.0-1.8	49.8	37.1-62.4	43.3	30.4-56.2
18-69	339.0	2.2	0.3-4.1	0.2	0.0-0.5	6.2	2.9-9.6	50.6	43.4-57.8	40.8	33.5-48.1

Frequency of alcohol consumption in the past 7 days											
	Both Sexes										
Age Group (years)	n	% Daily	95% CI	% 5-6 days	95% CI	% 3-4 days	95% CI	% 1-2 days	95% CI	% 0 days	95% CI
18-44	647.0	2.9	1.6-4.3	1.6	0.5-2.6	9.1	6.3-12.0	61.2	56.5-65.9	25.1	21.1-29.2
45-69	307.0	6.4	3.4-9.4	1.8	0.0-3.7	7.0	4.1-9.9	53.3	45.9-60.8	31.5	24.7-38.3
18-69	954.0	3.7	2.4-5.1	1.6	0.7-2.5	8.6	6.4-10.9	59.4	55.1-63.7	26.6	22.9-30.3

Analysis Information:
- Questions used: A1, A2, A5, A10a-g
- Epi Info program name: Apastweek (unweighted); ApastweekWT (weighted)

Standard drinks per day in the past 7 days

Description: Mean number of standard drinks consumed on average per day in the past 7 days among current (past 30 days) drinkers.

Instrument question:
- During each of the past 7 days, how many standard drinks of any alcoholic drink did you have each day?

Mean number of standard drinks consumed on average per day in the past 7 days among current drinkers									
Age Group (years)	**Men**				**Women**			**Both Sexes**	
	n	Mean number	95% CI	n	Mean number	95% CI	n	Mean number	95% CI
	390.0	1.038	0.843-1.2	257.0	0.436	0.3-0.5	647.0	0.878	0.73
	225.0	1.143	0.634-1.7	82.0	0.456	0.2-0.8	307.0	1.001	0.591
	615.0	1.064	0.867-1.3	339.0	0.44	0.3-0.5	954.0	0.907	0.758

Analysis Information:
- Questions used: A1, A2, A5, A10a-g
- Epi Info program name: Apastweek (unweighted); ApastweekWT (weighted)

Consumption of unrecorded alcohol

Description: Percentage of respondents that consumed unrecorded alcohol (homebrewed alcohol, alcohol brought over the border, not intended for drinking or other untaxed alcohol) during the past 7 days among current (past 30 days) drinkers.

Instrument questions:
- Have you consumed any alcohol within the past 30 days?
- During the past 7 days, did you consume any homebrewed alcohol, any alcohol brought over the border, not intended for drinking or other untaxed alcohol?

Consumption of unrecorded alcohol									
Age Group (years)	**Men**				**Women**			**Both Sexes**	
	n	% consuming unrecorded alcohol	95% CI	n	% consuming unrecorded alcohol	95% CI	n	% consuming unrecorded alcohol	95% CI
18-44	27	5.7	2.8-8.7	17	5.3	2.7-8.0	44	5.6	3.2-8.1
45-69	16	7.1	2.4-11.9	3	2.6	0.0-5.6	19	6.2	2.3-10.1
18-69	43	6.1	3.5-8.6	20	4.8	2.5-7.1	63	5.8	3.6-7.9

Analysis Information:
- Questions used: A1, A2, A5, A10a-g, A11
- Epi Info program name: Aunrecorded (unweighted); AunrecordedWT (weighted)

Fruit and Vegetable Consumption

Mean number of days of fruit and vegetable consumption

Description: mean number of days fruit and vegetables consumed.

Instrument questions:
- In a typical week, on how many days do you eat fruit?
- In a typical week, on how many days do you eat vegetables?

Mean number of days fruit consumed in a typical week											
	Men				**Women**				**Both Sexes**		
Age Group (years)	n	Mean number of days	95% CI		n	Mean number of days	95% CI		n	Mean number of days	95% CI
18-44	589	3.1	2.8-3.3		988	3.2	3.0-3.4		1577	3.1	**3.0-3.3**
45-69	465	3.7	3.4-4.1		590	3.8	3.5-4.0		1055	3.8	**3.6-4.0**
18-69	1054	3.3	3.1-3.5		1578	3.4	3.2-3.5		2632	3.3	**3.2-3.4**

Mean number of days vegetables consumed in a typical week											
	Men				**Women**				**Both Sexes**		
Age Group (years)	n	Mean number of days	95% CI		n	Mean number of days	95% CI		n	Mean number of days	95% CI
18-44	595	4.7	**4.5-4.9**		995	5.1	**4.9-5.2**		1590	4.9	**4.7-5.0**
45-69	466	4.6	**4.3-4.8**		592	5.0	**4.8-5.3**		1058	4.8	**4.6-5.0**
18-69	1061	4.7	**4.5-4.8**		1587	5.0	**4.9-5.2**		2648	4.8	**4.7-5.0**

Analysis Information:
- Questions used: D1, D3
- Epi Info program name: Ddays (unweighted); DdaysWT (weighted)

Mean number of servings of fruit and vegetable consumption

Description: mean number of fruit, vegetable, and combined fruit and vegetable servings on average per day.

Instrument questions:
- In a typical week, on how many days do you eat fruit?
- How many servings of fruit do you eat on one of those days?
- In a typical week, on how many days do you eat vegetables?
- How many servings of vegetables do you eat on one of those days?

Mean number of servings of fruit on average per day										
	Men				Women				Both Sexes	
Age Group (years)	n	Mean number of servings	95% CI		n	Mean number of servings	95% CI		n	Mean number of servings	95% CI
18-44	587	0.9	**0.8-1.1**		985	0.9	**0.8-1.0**		1572	0.9	0.8-1.0
45-69	465	1.0	**0.9-1.1**		590	1.0	**0.9-1.2**		1055	1.0	0.9-1.1
18-69	1052	1.0	**0.8-1.1**		1575	0.9	**0.9-1.0**		2627	0.9	0.9-1.0

Mean number of servings of vegetables on average per day										
	Men				Women				Both Sexes	
Age Group (years)	n	Mean number of servings	95% CI		n	Mean number of servings	95% CI		n	Mean number of servings	95% CI
18-44	592	1.3	1.2-1.4		995	1.3	**1.2-1.4**		1587	1.3	**1.2-1.4**
45-69	466	1.2	1.1-1.3		592	1.3	**1.2-1.5**		1058	1.3	**1.2-1.4**
18-69	1058	1.3	1.2-1.4		1587	1.3	**1.2-1.4**		2645	1.3	**1.2-1.4**

Mean number of servings of fruit and/or vegetables on average per day										
	Men				Women				Both Sexes	
Age Group (years)	n	Mean number of servings	95% CI		n	Mean number of servings	95% CI		n	Mean number of servings	95% CI
18-44	594	2.2	**2.0-2.5**		998	2.2	**2.1-2.3**		1592	2.2	**2.1-2.3**
45-69	466	2.2	**2.1-2.4**		594	2.4	**2.2-2.6**		1060	2.3	**2.2-2.4**
18-69	1060	2.2	**2.0-2.4**		1592	2.2	**2.1-2.3**		2652	2.2	**2.1-2.3**

Analysis Information:
- Questions used: D1, D2 , D3, D4
- Epi Info program name: Dservings (unweighted); DservingsWT (weighted)

Fruit and vegetable consumption per day

Description: Frequency of fruit and/or vegetable consumption.

Instrument questions:
- In a typical week, on how many days do you eat fruit?
- How many servings of fruit do you eat on one of those days?
- In a typical week, on how many days do you eat vegetables?
- How many servings of vegetables do you eat on one of those days?

Age Group (years)	n	% no fruit and/or vegetables	95% CI	% 1-2 servings	95% CI	% 3-4 servings	95% CI	% ≥5 servings	95% CI
Number of servings of fruit and/or vegetables on average per day									
Men									
18-44	594	19.3	15.0-23.7	54.9	48.7-61.1	18.5	13.6-23.3	7.3	3.6-11.0
45-69	466	15.5	11.2-19.8	60.3	55.0-65.6	17.7	13.2-22.2	6.5	4.0-9.0
18-69	1060	18.2	14.6-21.8	56.6	51.8-61.3	18.2	14.1-22.4	7.0	4.5-9.6

Age Group (years)	n	% no fruit and/or vegetables	95% CI	% 1-2 servings	95% CI	% 3-4 servings	95% CI	% ≥5 servings	95% CI
Number of servings of fruit and/or vegetables on average per day									
Women									
18-44	998	17.0	14.0-19.9	61.1	57.2-65.1	16.7	13.6-19.8	5.2	3.5-7.0
45-69	594	13.6	9.4-17.8	58.3	52.6-64.0	21.1	16.4-25.8	7.0	4.4-9.6
18-69	1592	15.9	13.6-18.2	60.2	57.0-63.4	18.1	15.3-20.9	5.8	4.3-7.3

Age Group (years)	n	% no fruit and/or vegetables	95% CI	% 1-2 servings	95% CI	% 3-4 servings	95% CI	% ≥5 servings	95% CI
Number of servings of fruit and/or vegetables on average per day									
Both Sexes									
18-44	1592	18.2	15.6-20.8	57.9	54.1-61.7	17.6	14.3-20.9	6.3	4.3-8.3
45-69	1060	14.6	11.2-18.0	59.3	55.3-63.3	19.4	15.6-23.2	6.7	4.8-8.6
18-69	2652	17.1	14.9-19.3	58.3	55.2-61.5	18.2	15.1-21.2	6.4	5.0-7.8

Analysis Information:
- Questions used: D1, D2 , D3, D4
- Epi Info program name: Dfiveormore (unweighted); DfiveormoreWT (weighted)

Fruit and vegetable consumption per day

Description: Percentage of those eating less than five servings of fruit and/or vegetables on average per day.

Instrument questions:
- In a typical week, on how many days do you eat fruit?
- How many servings of fruit do you eat on one of those days?
- In a typical week, on how many days do you eat vegetables?
- How many servings of vegetables do you eat on one of those days?

	\multicolumn{3}{c}{Men}	\multicolumn{3}{c}{Women}	\multicolumn{3}{c}{Both Sexes}
Age Group (years)	n	% < five servings per day	95% CI	n	% < five servings per day	95% CI	n	% < five servings per day	95% CI
18-44	594	92.7	89.0-96.4	998	94.8	93.0-96.5	1592	93.7	91.7-95.7
45-69	466	93.5	91.0-96.0	594	93.0	90.4-95.6	1060	93.3	91.4-95.2
18-69	1060	93.0	90.4-95.5	1592	94.2	92.7-95.7	2652	93.6	92.2-95.0

Table heading: Less than five servings of fruit and/or vegetables on average per day

Analysis Information:
- Questions used: D1, D2 , D3, D4
- Epi Info program name: Dfiveormore (unweighted); DfiveormoreWT (weighted)

Adding salt at meal

Description: Percentage of all respondents who always or often add salt or salty sauce to their food before eating or as they are eating.

Instrument question:
- How often do you add salt or a salty sauce such as soya sauce to your food right before you eat it or as you are eating it?

Age Group (years)	Add salt always or often before eating or when eating								
	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-44	601	11.9	9.2-14.6	999	12.4	9.9-14.9	1600	12.2	10.2-14.1
45-69	467	9.9	6.2-13.5	594	10.5	6.2-14.8	1061	10.2	7.8-12.6
18-69	1068	11.3	9.2-13.4	1593	11.8	9.6-14.0	2661	11.5	10.0-13.1

Analysis Information:
- Question used: D5
- Epi Info program name: Deating (unweighted); DeatingWT (weighted)

Adding salt when cooking

Description: Percentage of all respondents who always or often add salt to their food when cooking or preparing foods at home.

Instrument question:
- How often is salt, salty seasoning or a salty sauce added in cooking or preparing foods in your household?

Age Group (years)	Add salt always or often when cooking or preparing food at home								
	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-44	598	72.6	67.6-77.6	997	75.2	71.8-78.7	1595	73.9	70.6-77.1
45-69	465	69.2	64.0-74.3	594	67.3	62.2-72.5	1059	68.3	64.6-71.9
18-69	1063	71.5	67.5-75.6	1591	72.8	69.8-75.7	2654	72.1	69.4-74.9

Analysis Information:
- Question used: D6
- Epi Info program name: Dcooking (unweighted); DcookingWT (weighted)

Salty processed food consumption

Description: Percentage of all respondents who always or often eat processed foods high in salt.

Instrument question:
- How often do you eat processed food high in salt?

<table>
<thead>
<tr><th colspan="10">Always or often consume processed food high in salt</th></tr>
<tr><th rowspan="2">Age Group (years)</th><th colspan="3">Men</th><th colspan="3">Women</th><th colspan="3">Both Sexes</th></tr>
<tr><th>n</th><th>%</th><th>95% CI</th><th>n</th><th>%</th><th>95% CI</th><th>n</th><th>%</th><th>95% CI</th></tr>
</thead>
<tbody>
<tr><td>18-44</td><td>599</td><td>16.4</td><td>12.2-20.6</td><td>998</td><td>12.5</td><td>9.7-15.3</td><td>1597</td><td>14.5</td><td>12.0-17.0</td></tr>
<tr><td>45-69</td><td>467</td><td>7.1</td><td>4.1-10.2</td><td>594</td><td>6.6</td><td>4.2-9.1</td><td>1061</td><td>6.9</td><td>4.9-8.8</td></tr>
<tr><td>18-69</td><td>1066</td><td>13.6</td><td>10.5-16.7</td><td>1592</td><td>10.7</td><td>8.6-12.7</td><td>2658</td><td>12.2</td><td>10.4-14.0</td></tr>
</tbody>
</table>

Analysis Information:
- Question used: D7
- Epi Info program name: Dprocessed (unweighted); DprocessedWT (weighted)

Salt consumption

Description: Percentage of all respondents who think they consume far too much or too much salt.

Instrument question:
- How much salt or salty sauce do you think you consume?

<table>
<thead>
<tr><th colspan="10">Think they consume far too much or too much salt</th></tr>
<tr><th rowspan="2">Age Group (years)</th><th colspan="3">Men</th><th colspan="3">Women</th><th colspan="3">Both Sexes</th></tr>
<tr><th>n</th><th>%</th><th>95% CI</th><th>n</th><th>%</th><th>95% CI</th><th>n</th><th>%</th><th>95% CI</th></tr>
</thead>
<tbody>
<tr><td>18-44</td><td>577</td><td>9.6</td><td>6.4-12.8</td><td>970</td><td>9.9</td><td>7.2-12.6</td><td>1547</td><td>9.7</td><td>7.6-11.9</td></tr>
<tr><td>45-69</td><td>457</td><td>6.0</td><td>3.6-8.4</td><td>579</td><td>9.8</td><td>5.6-14.0</td><td>1036</td><td>7.9</td><td>5.5-10.3</td></tr>
<tr><td>18-69</td><td>1034</td><td>8.5</td><td>6.1-10.9</td><td>1549</td><td>9.9</td><td>7.8-11.9</td><td>2583</td><td>9.2</td><td>7.6-10.7</td></tr>
</tbody>
</table>

Age Group (years)	n	% Far too much	95% CI	% Too much	95% CI	% Just the right amount	95% CI	% Too little	95% CI	% Far too little	95% CI
						Self-reported quantity of salt consumed					
						Men					
18-44	577	3.4	1.6-5.3	6.2	3.8-8.5	81.5	77.1-85.9	7.8	4.9-10.7	1.1	0.2-2.0
45-69	457	1.3	0.2-2.3	4.7	2.5-6.9	78.5	74.3-82.7	12.7	9.0-16.4	2.9	1.1-4.6
18-69	1034	2.8	1.5-4.1	5.7	3.9-7.6	80.6	77.2-84.0	9.2	6.9-11.6	1.6	0.8-2.5

Age Group (years)	n	% Far too much	95% CI	% Too much	95% CI	% Just the right amount	95% CI	% Too little	95% CI	% Far too little	95% CI
						Self-reported quantity of salt consumed					
						Women					
18-44	970	1.4	0.7-2.2	8.5	5.9-11.0	80.9	77.7-84.2	7.5	5.6-9.4	1.7	0.8-2.6
45-69	579	2.0	0.3-3.8	7.8	4.0-11.6	75.0	70.2-79.9	12.5	9.3-15.7	2.7	1.2-4.1
18-69	1549	1.6	0.9-2.4	8.2	6.3-10.2	79.1	76.6-81.6	9.1	7.3-10.9	2.0	1.2-2.8

Age Group (years)	n	% Far too much	95% CI	% Too much	95% CI	% Just the right amount	95% CI	% Too little	95% CI	% Far too little	95% CI
						Self-reported quantity of salt consumed					
						Both Sexes					
18-44	1547	2.5	1.4-3.5	7.3	5.5-9.0	81.2	78.4-84.0	7.6	5.9-9.3	1.4	0.7-2.1
45-69	1036	1.6	0.6-2.6	6.2	4.0-8.5	76.8	73.7-79.8	12.6	10.2-15.0	2.8	1.6-4.0
18-69	2583	2.2	1.5-3.0	6.9	5.6-8.3	79.9	77.9-81.8	9.2	7.7-10.6	1.8	1.2-2.4

Analysis Information:
- Question used: D8
- Epi Info program name: Dsaltquantity (unweighted); DsaltquantityWT (weighted)

Lowering salt Description: Percentage of respondents who think lowering salt in diet is very, somewhat or not at all important.

Instrument question:
- How important to you is lowering the salt in your diet?

Importance of lowering salt in diet							
	Men						
Age Group (years)	n	% Very important	95% CI	% Somewhat important	95% CI	% Not at all important	95% CI
18-44	563	64.3	57.7-70.9	19.1	14.9-23.3	16.6	12.1-21.1
45-69	450	74.3	69.1-79.5	14.8	11.4-18.2	10.9	6.1-15.8
18-69	1013	67.3	61.8-72.8	17.8	14.8-20.8	14.9	10.9-18.9

Importance of lowering salt in diet							
	Women						
Age Group (years)	n	% Very important	95% CI	% Somewhat important	95% CI	% Not at all important	95% CI
18-44	966	71.0	66.8-75.3	17.5	14.1-20.9	11.5	8.5-14.5
45-69	584	82.0	77.5-86.6	12.6	8.4-16.8	5.4	3.1-7.6
18-69	1550	74.6	71.5-77.6	15.9	13.1-18.7	9.5	7.4-11.7

Importance of lowering salt in diet							
	Both Sexes						
Age Group (years)	n	% Very important	95% CI	% Somewhat important	95% CI	% Not at all important	95% CI
18-44	1529	67.6	63.7-71.4	18.3	15.6-21.0	14.1	11.4-16.8
45-69	1034	78.2	74.1-82.2	13.7	11.2-16.2	8.1	5.4-10.8
18-69	2563	70.9	67.5-74.3	16.9	14.7-19.1	12.2	10.0-14.5

Analysis Information:
- Question used: D9
- Epi Info program name: Dlower (unweighted); DlowerWT (weighted)

Salt knowledge   Description: Percentage of respondents who think consuming too much salt could cause a serious health problem.

Instrument question:
- Do you think that too much salt or salty sauce in your diet could cause a health problem?

Think consuming too much salt could cause serious health problem										
Age Group (years)	Men				Women				Both Sexes		
	n	%	95% CI		n	%	95% CI		n	%	95% CI
18-44	601	82.3	77.8-86.8		1000	90.4	87.5-93.3		1601	86.2	83.3-89.0
45-69	467	89.9	85.7-94.1		594	94.7	92.5-96.8		1061	92.2	89.8-94.6
18-69	1068	84.5	80.6-88.4		1594	91.7	89.7-93.8		2662	88.0	85.7-90.3

Analysis Information:
- Question used: D10
- Epi Info program name: Dhealth (unweighted); DhealthWT (weighted)

Controlling salt intake

Description: Percentage of respondents who take specific action on a regular basis to control salt intake.

Instrument question:
- Do you do any of the following on a regular basis to control your salt intake?

Limit consumption of processed foods											
Age Group (years)	Men				Women				Both Sexes		
	n	%	95% CI		n	%	95% CI		n	%	95% CI
18-44	601	58.6	53.4-63.8		1000	65.1	61.2-69.1		1601	61.7	58.6-64.8
45-69	467	63.9	56.6-71.2		594	71.5	66.7-76.4		1061	67.7	63.5-71.8
18-69	1068	60.2	55.2-65.1		1594	67.1	63.8-70.5		2662	63.5	60.8-66.3

Look at the salt or sodium content on food labels											
Age Group (years)	Men				Women				Both Sexes		
	n	%	95% CI		n	%	95% CI		n	%	95% CI
18-44	601	32.4	26.5-38.3		1000	43.7	39.7-47.7		1601	37.8	34.0-41.6
45-69	467	40.1	33.8-46.4		594	51.3	46.1-56.6		1061	45.6	41.1-50.2
18-69	1068	34.7	29.8-39.7		1594	46.1	43.1-49.1		2662	40.2	37.0-43.4

Buy low salt/sodium alternatives											
Age Group (years)	Men				Women				Both Sexes		
	n	%	95% CI		n	%	95% CI		n	%	95% CI
18-44	601	29.0	23.7-34.4		1000	37.6	33.6-41.6		1601	33.1	29.7-36.6
45-69	467	38.4	32.0-44.7		594	45.1	39.8-50.4		1061	41.7	37.0-46.4
18-69	1068	31.8	27.1-36.5		1594	40.0	36.8-43.2		2662	35.8	32.7-38.9

Use spices other than salt when cooking											
Age Group (years)	Men				Women				Both Sexes		
	n	%	95% CI		n	%	95% CI		n	%	95% CI
18-44	601	60.1	54.9-65.3		1000	68.1	64.7-71.6		1601	63.9	60.8-67.1
45-69	467	57.4	51.7-63.1		594	65.6	60.3-70.9		1061	61.4	57.4-65.5
18-69	1068	59.3	55.3-63.2		1594	67.3	64.3-70.4		2662	63.2	60.7-65.6

Avoid eating foods prepared outside of a home											
Age Group (years)	Men				Women				Both Sexes		
	n	%	95% CI		n	%	95% CI		n	%	95% CI
18-44	601	49.4	44.4-54.4		1000	61.4	56.8-66.0		1601	55.1	51.6-58.6
45-69	467	62.4	55.2-69.6		594	72.6	68.1-77.1		1061	67.4	63.2-71.7
18-69	1068	53.3	49.2-57.3		1594	64.9	61.5-68.3		2662	58.9	56.3-61.5

Do other things specifically to control your salt intake										
Age Group (years)	Men				Women				Both Sexes	
	n	%	95% CI		n	%	95% CI		n	%	95% CI
18-44	601	11.6	8.7-14.6		1000	10.0	7.7-12.3		1601	10.9	8.8-12.9
45-69	467	12.4	8.6-16.2		594	15.0	11.3-18.7		1061	13.7	11.0-16.4
18-69	1068	11.9	9.6-14.1		1594	11.6	9.6-13.5		2662	11.7	10.2-13.3

Analysis Information:
- Questions used: D11a-f
- Epi Info program name: Dcontrol (unweighted); DcontrolWT (weighted)

Type of oil used most frequently

Description: Type of oil or fat most often used for meal preparation in households (presented only for both sexes because results are for the household not individuals).

Instrument question:
- What type of oil or fat is most often used for meal preparation in your household?

Type of oil or fat most often used for meal preparation in household								
n (house -holds)	% Vegetable oil	95% CI	% Lard	95% CI	% Butter	95% CI	% Margarine	95% CI
26	92.6	91.2-94.0	0.1	0.0-0.3	0.2	0.0-0.5	0.2	0.0-0.4

Type of oil or fat most often used for meal preparation in household						
n (house -holds)	% none in particular	95% CI	% None used	95% CI	% Other	95% CI
26	-	-	-	-	6.0	4.7-7.3

Analysis Information:
- Question used: D12
- Epi Info program name: Doil (unweighted); DoilWT (weighted)

Eating outside home

Description: Mean number of meals per week eaten outside a home.

Instrument question:

- On average, how many meals per week do you eat that were not prepared at a home? By meal, I mean breakfast, lunch and dinner.

Age Group (years)	Men			Women			Both Sexes		
	n	mean	95% CI	n	mean	95% CI	n	mean	95% CI
18-44	591	2.3	591	978	1.2	978	1569	1.8	1569
45-69	461	1.0	461	585	0.9	585	1046	0.9	1046
18-69	1052	1.9	1052	1563	1.1	1563	2615	1.5	2615

Mean number of meals eaten outside a home

Analysis Information:

- Question used: D13
- Epi Info program name: Dmealsout (unweighted); DmealsoutWT (weighted)

Physical Activity

Introduction A population's physical activity (or inactivity) can be described in different ways. The two most common ways are
(1) to estimate a population's mean or median physical activity using a continuous indicator such as MET-minutes per week or time spent in physical activity, and
(2) to classify certain percentages of a population in specific groups by setting up cut-points for a specific amount of physical activity.

When analyzing GPAQ data, both continuous as well as categorical indicators are used.

Metabolic Equivalent (MET) METs (Metabolic Equivalents) are commonly used to express the intensity of physical activities, and are also used for the analysis of GPAQ data.

Applying MET values to activity levels allows us to calculate total physical activity. MET is the ratio of a person's working metabolic rate relative to the resting metabolic rate. One MET is defined as the energy cost of sitting quietly, and is equivalent to a caloric consumption of 1 kcal/kg/hour. For the analysis of GPAQ data, existing guidelines have been adopted: It is estimated that, compared to sitting quietly, a person's caloric consumption is four times as high when being moderately active, and eight times as high when being vigorously active.

Therefore, for the calculation of a person's total physical activity using GPAQ data, the following MET values are used:

Domain	MET value
Work	• Moderate MET value = 4.0 • Vigorous MET value = 8.0
Transport	Cycling and walking MET value = 4.0
Recreation	• Moderate MET value = 4.0 • Vigorous MET value = 8.0

WHO global recommendations on physical activity for health For the calculation of the categorical indicator on the recommended amount of physical activity for health, the total time spent in physical activity during a typical week and the intensity of the physical activity are taken into account.

Throughout a week, including activity for work, during transport and leisure time, adults should do at least
- 150 minutes of moderate-intensity physical activity OR
- 75 minutes of vigorous-intensity physical activity OR
- An equivalent combination of moderate- and vigorous-intensity physical activity achieving at least 600 MET-minutes.

Former recommendations for comparison purposes

For comparison purposes, tables presenting cut-offs from former recommendations are also included in GPAQ data analysis.

The three levels of physical activity suggested for classifying populations were low, moderate, and high. The criteria for these levels are shown below.

- **High**
A person reaching any of the following criteria is classified in this category:
- Vigorous-intensity activity on at least 3 days achieving a minimum of at least 1,500 MET-minutes/week OR
- 7 or more days of any combination of walking, moderate- or vigorous-intensity activities achieving a minimum of at least 3,000 MET-minutes per week.

- **Moderate**
A person not meeting the criteria for the "high" category, but meeting any of the following criteria is classified in this category:
- 3 or more days of vigorous-intensity activity of at least 20 minutes per day OR
- 5 or more days of moderate-intensity activity or walking of at least 30 minutes per day OR
- 5 or more days of any combination of walking, moderate- or vigorous-intensity activities achieving a minimum of at least 600 MET-minutes per week.

- **Low**
A person not meeting any of the above mentioned criteria falls in this category.

Not meeting WHO recommendations on physical activity for health

Description: Percentage of respondents not meeting WHO recommendations on physical activity for health (respondents doing less than 150 minutes of moderate-intensity physical activity per week, or equivalent).

Instrument questions
- activity at work
- travel to and from places
- recreational activities

Not meeting WHO recommendations on physical activity for health											
	Men				**Women**				**Both Sexes**		
Age Group (years)	n	% not meeting recs	95% CI		n	% not meeting recs	95% CI		n	% not meeting recs	95% CI
18-44	584	16.4	12.4-20.4		985	39.6	35.7-43.6		1569	27.6	24.5-30.6
45-69	463	24.4	18.5-30.3		584	42.3	37.0-47.6		1047	33.2	29.3-37.2
18-69	1047	18.9	15.3-22.4		1569	40.5	37.4-43.5		2616	29.3	26.9-31.8

Analysis Information:
- Questions used: P1-P15b
- Epi Info program name: Pnotmeetingrecs (unweighted); PnotmeetingrecsWT (weighted)

Levels of total physical activity according to former recommendations

Description: Percentage of respondents classified into three categories of total physical activity according to former recommendations.

Instrument questions:
- activity at work
- travel to and from places
- recreational activities

Age Group (years)							

Level of total physical activity according to former recommendations

Men

Age Group (years)	n	% Low	95% CI	% Moderate	95% CI	% High	95% CI
18-44	584	21.4	17.3-25.5	11.0	7.5-14.5	67.6	63.4-71.8
45-69	463	31.3	23.7-38.9	15.0	11.3-18.7	53.7	46.2-61.2
18-69	1047	24.4	20.4-28.5	12.2	9.4-15.0	63.4	59.6-67.1

Level of total physical activity according to former recommendations

Women

Age Group (years)	n	% Low	95% CI	% Moderate	95% CI	% High	95% CI
18-44	985	46.9	42.6-51.1	20.9	17.5-24.3	32.3	28.6-36.0
45-69	584	46.4	41.1-51.8	17.2	13.0-21.4	36.4	31.0-41.7
18-69	1569	46.7	43.5-50.0	19.7	17.0-22.5	33.5	30.7-36.4

Level of total physical activity according to former recommendations

Both Sexes

Age Group (years)	n	% Low	95% CI	% Moderate	95% CI	% High	95% CI
18-44	1569	33.6	30.5-36.8	15.7	13.1-18.4	50.6	47.6-53.7
45-69	1047	38.8	34.3-43.2	16.1	13.3-18.8	45.1	40.9-49.3
18-69	2616	35.2	32.5-38.0	15.8	13.6-18.1	48.9	46.5-51.4

Analysis Information:
- Questions used: P1-P15b
- Epi Info program name: Ptotallevels (unweighted); PtotallevelsWT (weighted)

Total physical activity- mean

Description: Mean minutes of total physical activity on average per day.

Instrument questions
- activity at work
- travel to and from places
- recreational activities

Mean minutes of total physical activity on average per day											
Age Group (years)	**Men**				**Women**				**Both Sexes**		
	n	Mean minutes	95% CI		n	Mean minutes	95% CI		n	Mean minutes	95% CI
18-44	584	324.6	296.9-352.2		985	128.0	**112.7-143.4**		1569	230.3	**212.9-247.6**
45-69	463	222.4	187.0-257.7		584	140.0	**115.5-164.5**		1047	181.8	**161.5-202.0**
18-69	1047	293.6	271.7-315.6		1569	131.8	**118.5-145.0**		2616	215.3	**202.2-228.4**

Analysis Information:
- Questions used: P1-P15b
- Epi Info program name: Ptotal (unweighted); PtotalWT (weighted)

Total physical activity- median

Description: Median minutes of total physical activity on average per day.

Instrument questions
- activity at work
- travel to and from places
- recreational activities

Median minutes of total physical activity on average per day											
Age Group (years)	**Men**				**Women**				**Both Sexes**		
	n	Median minutes	Inter-quartile range (P25-P75)		n	Median minutes	Inter-quartile range (P25-P75)		n	Median minutes	Inter-quartile range (P25-P75)
18-44	584	268.6	60.0-482.9		985	40.0	1.4-180.0		1569	124.3	15.0-375.0
45-69	463	120.0	22.9-342.9		584	34.3	0.0-180.0		1047	85.7	8.6-280.7
18-69	**1047**	**220.0**	**36.4-454.3**		**1569**	**38.6**	**0.0-180.0**		**2616**	**106.4**	**12.9-342.9**

Analysis Information:
- Questions used: P1-P15b
- Epi Info program name: Ptotal (unweighted); PtotalmedianWT (weighted)

Domain-specific physical activity-mean

Description: Mean minutes spent in work-, transport- and recreation-related physical activity on average per day.

Instrument questions:
- activity at work
- travel to and from places
- recreational activities

Mean minutes of work-related physical activity on average per day									
Age Group (years)	**Men**			**Women**			**Both Sexes**		
	n	Mean minutes	95% CI	n	Mean minutes	95% CI	n	Mean minutes	95% CI
18-44	584	232.4	209.4-255.5	985	90.6	**77.9-103.4**	1569	164.4	**149.3-179.5**
45-69	463	159.6	130.9-188.2	584	97.8	**79.7-115.9**	1047	129.2	**113.6-144.7**
18-69	1047	210.4	193.3-227.4	1569	92.9	**82.2-103.6**	2616	153.5	**142.3-164.7**

Mean minutes of transport-related physical activity on average per day									
Age Group (years)	**Men**			**Women**			**Both Sexes**		
	n	Mean minutes	95% CI	n	Mean minutes	95% CI	n	Mean minutes	95% CI
18-44	584	55.0	**43.7-66.4**	985	29.0	**23.9-34.2**	1569	42.5	**35.9-49.2**
45-69	463	41.4	**33.7-49.0**	584	34.5	**26.5-42.6**	1047	38.0	**32.1-44.0**
18-69	1047	50.9	**42.0-59.7**	1569	30.8	**26.5-35.0**	2616	41.1	**35.9-46.4**

Mean minutes of recreation-related physical activity on average per day									
Age Group (years)	**Men**			**Women**			**Both Sexes**		
	n	Mean minutes	95% CI	n	Mean minutes	95% CI	**n**	**Mean minutes**	**95% CI**
18-44	584	37.1	**28.0-46.2**	985	8.4	**5.9-10.9**	1569	23.3	**18.4-28.2**
45-69	463	21.4	**13.2-29.6**	584	7.6	**3.3-11.9**	1047	14.6	**9.7-19.5**
18-69	1047	32.4	**25.5-39.2**	1569	8.1	**6.0-10.3**	2616	20.7	**16.9-24.4**

Analysis Information:
- Questions used: P1-P15b
- Epi Info program name: Psetspecific (unweighted); PsetspecificWT (weighted)

Domain-specific physical activity - median

Description: Median minutes spent on average per day in work-, transport- and recreation-related physical activity.

Instrument questions:
- activity at work
- travel to and from places
- recreational activities

Median minutes of work-related physical activity on average per day									
Age Group (years)	Men			Women			Both Sexes		
	n	Median minutes	Inter-quartile range (P25-P75)	n	Median minutes	Inter-quartile range (P25-P75)	n	Median minutes	Inter-quartile range (P25-P75)
18-44	584	171.4	0.0-411.4	985	0.0	0.0-120.0	1569	38.6	0.0-300.0
45-69	463	36.4	0.0-261.4	584	0.0	0.0-130.0	1047	17.1	0.0-210.0
18-69	**1047**	**120.0**	**0.0-1440.0**	**1569**	**0.0**	**0.0-122.0**	**2616**	**30.0**	**0.0-260.0**

Median minutes of transport-related physical activity on average per day									
Age Group (years)	Men			Women			Both Sexes		
	n	Median minutes	Inter-quartile range (P25-P75)	n	Median minutes	Inter-quartile range (P25-P75)	n	Median minutes	Inter-quartile range (P25-P75)
18-44	584	15.0	0.0-60.0	985	7.1	0.0-30.0	1569	10.0	0.0-40.0
45-69	463	15.0	0.0-53.6	584	5.7	0.0-32.1	1047	10.0	0.0-42.9
18-69	**1047**	**15.0**	**0.0-60.0**	**1569**	**7.1**	**0.0-30.0**	**2616**	**10.0**	**0.0-42.9**

Median minutes of recreation-related physical activity on average per day									
Age Group (years)	Men			Women			Both Sexes		
	n	Median minutes	Inter-quartile range (P25-P75)	n	Median minutes	Inter-quartile range (P25-P75)	n	Median minutes	Inter-quartile range (P25-P75)
18-44	584	0.0	0.0-42.9	985	0.0	0.0-0.0	1569	0.0	0.0-15.0
45-69	463	0.0	0.0-6.4	584	0.0	0.0-0.0	1047	0.0	0.0-0.0
18-69	**1047**	**0.0**	**0.0-30.0**	**1569**	**0.0**	**0.0-0.0**	**2616**	**0.0**	**0.0-6.4**

Analysis Information:
- Questions used: P1-P15b
- Epi Info program name: Psetspecific (unweighted); PsetspecificmedianWT (weighted)

No physical activity by domain

Description: Percentage of respondents classified as doing no work-, transport- or recreational-related physical activity.

Instrument questions:
- activity at work
- travel to and from places
- recreational activities

	No work-related physical activity								
	Men			**Women**			**Both Sexes**		
Age Group (years)	n	% no activity at work	95% CI	n	% no activity at work	95% CI	n	% no activity at work	95% CI
18-44	584	33.0	28.3-37.7	985	53.5	49.3-57.7	1569	42.8	39.6-46.1
45-69	463	39.6	33.6-45.7	584	50.9	45.6-56.2	1047	45.2	40.8-49.5
18-69	1047	35.0	31.3-38.8	1569	52.7	49.4-56.0	2616	43.6	40.9-46.2

	No transport-related physical activity								
	Men			**Women**			**Both Sexes**		
Age Group (years)	n	% no activity for transport	95% CI	n	% no activity for transport	95% CI	n	% no activity for transport	95% CI
18-44	584	36.1	28.7-43.4	985	42.0	37.4-46.6	1569	38.9	33.9-44.0
45-69	463	33.4	26.0-40.8	584	44.9	39.5-50.4	1047	39.1	34.9-43.3
18-69	1047	35.3	28.7-41.9	1569	42.9	39.4-46.4	2616	39.0	34.9-43.1

	No recreation-related physical activity								
	Men			**Women**			**Both Sexes**		
Age Group (years)	n	% no activity at recreation	95% CI	n	% no activity at recreation	95% CI	n	% no activity at recreation	95% CI
18-44	584	58.9	52.7-65.1	985	83.3	80.3-86.4	1569	70.6	67.3-73.9
45-69	463	72.8	67.5-78.1	584	87.7	83.8-91.6	1047	80.1	76.4-83.8
18-69	1047	63.1	58.9-67.3	1569	84.7	82.1-87.2	2616	73.5	71.0-76.0

Analysis Information:
- Questions used: P1-P15b
- Epi Info program name: Pnoactivitybyset (unweighted); PnoactivitybysetWT (weighted)

Composition of total physical activity

Description: Percentage of work, transport and recreational activity contributing to total activity.

Instrument questions:
- activity at work
- travel to and from places
- recreational activities

Composition of total physical activity							
Men							
Age Group (years)	n	% Activity from work	95% CI	% Activity for transport	95% CI	% Activity during leisure time	95% CI
18-44	522	58.0	52.9-63.2	23.7	**20.1-27.3**	18.2	**14.9-21.5**
45-69	393	52.6	47.5-57.7	35.9	**30.2-41.7**	11.5	**7.2-15.8**
18-69	915	56.4	52.7-60.1	27.4	**24.1-30.7**	16.2	**13.9-18.5**

Composition of total physical activity							
Women							
Age Group (years)	n	% Activity from work	95% CI	% Activity for transport	95% CI	% Activity during leisure time	95% CI
18-44	752	48.9	**44.6-53.1**	43.1	**38.9-47.3**	8.0	**5.9-10.1**
45-69	416	54.7	**49.9-59.6**	39.8	**35.2-44.5**	5.4	**3.4-7.4**
18-69	1168	50.6	**47.2-54.0**	42.1	**38.8-45.5**	7.2	**5.6-8.8**

Composition of total physical activity							
Both Sexes							
Age Group (years)	n	% Activity from work	95% CI	% Activity for transport	95% CI	% Activity during leisure time	95% CI
18-44	1274	54.0	**50.5-57.5**	32.3	**29.4-35.1**	13.7	**11.6-15.9**
45-69	809	53.5	**49.9-57.2**	37.6	**33.4-41.9**	8.8	**6.3-11.4**
18-69	2083	53.9	**51.1-56.6**	33.9	**31.2-36.6**	12.3	**10.7-13.8**

Analysis Information:
- Questions used: P1-P15b
- Epi Info program name: Pcomposition(unweighted); PcompositionWT (weighted)

No vigorous physical activity

Description: Percentage of respondents not engaging in vigorous physical activity.

Instrument questions:
- activity at work
- recreational activities

Age Group (years)	Men			Women			Both Sexes		
	n	% no vigorous activity	95% CI	n	% no vigorous activity	95% CI	n	% no vigorous activity	95% CI
18-44	584	38.3	33.9-42.6	985	83.8	80.5-87.1	1569	60.1	57.0-63.2
45-69	463	57.7	50.6-64.8	584	87.6	83.8-91.3	1047	72.4	68.3-76.5
18-69	1047	44.2	40.4-47.9	1569	85.0	82.3-87.6	2616	63.9	61.3-66.6

Analysis Information:
- Questions used: P1-P15b
- Epi Info program name: Pnovigorous(unweighted); PnovigorousWT (weighted)

Sedentary Description: Minutes spent in sedentary activities on a typical day.

Instrument question:
- sedentary behaviour

Age Group (years)	n	Mean minutes	95% CI	Median minutes	Inter-quartile range (P25-P75)
Minutes spent in sedentary activities on average per day					
Men					
18-44	601	185.8	171.7-200.0		
45-69	467	194.3	171.9-216.7		
18-69	1068	188.4	177.3-199.4		

Age Group (years)	n	Mean minutes	95% CI	Median minutes	Inter-quartile range (P25-P75)
Minutes spent in sedentary activities on average per day					
Women					
18-44	1000	198.5	**185.2-211.8**		
45-69	594	183.2	**167.2-199.1**		
18-69	1594	193.7	**183.2-204.1**		

Age Group (years)	n	Mean minutes	95% CI	Median minutes	Inter-quartile range (P25-P75)
Minutes spent in sedentary activities on average per day					
Both Sexes					
18-44	1601	191.9	**182.3-201.4**		
45-69	1061	188.8	**174.9-202.7**		
18-69	2662	190.9	**182.9-199.0**		

Analysis Information:
- Question used : P16a-b
  - Epi Info program name: Psedentary (unweighted); PsedentaryWT and PsedentarymedianWT (weighted)

History of Raised Blood Pressure

Blood pressure measurement and diagnosis

Description: Blood pressure measurement and diagnosis among all respondents.

Instrument questions:
- Have you ever had your blood pressure measured by a doctor or other health worker?
- Have you ever been told by a doctor or other health worker that you have raised blood pressure or hypertension?
- Have you been told in the past 12 months?

Blood pressure measurement and diagnosis								
Men								
Age Group (years)	n	% Never measured	95% CI	% measured, not diagnosed	95% CI	% diagnosed, but not within past 12 months	95% CI	% diagnosed within past 12 months	95% CI
18-44	601	43.2	35.7-50.7	45.0	38.3-51.8	3.5	1.5-5.5	8.3	5.6-10.9
45-69	467	11.8	8.4-15.3	52.7	47.1-58.3	9.7	6.4-13.0	25.8	20.7-30.9
18-69	1068	33.8	28.5-39.1	47.3	42.2-52.4	5.3	3.6-7.1	13.5	11.1-16.0

Blood pressure measurement and diagnosis								
Women								
Age Group (years)	n	% Never measured	95% CI	% measured, not diagnosed	95% CI	% diagnosed, but not within past 12 months	95% CI	% diagnosed within past 12 months	95% CI
18-44	1000	17.0	14.4-19.6	65.9	62.3-69.5	5.7	3.8-7.7	11.3	8.9-13.8
45-69	594	6.7	4.4-9.0	46.9	41.6-52.2	10.8	7.4-14.2	35.6	30.5-40.6
18-69	1594	13.8	11.9-15.7	60.0	57.0-62.9	7.3	5.6-9.0	19.0	16.5-21.4

Blood pressure measurement and diagnosis								
Both sexes								
Age Group (years)	n	% Never measured	95% CI	% measured, not diagnosed	95% CI	% diagnosed, but not within past 12 months	95% CI	% diagnosed within past 12 months	95% CI
18-44	1601	30.7	26.2-35.1	55.0	51.0-59.0	4.6	3.2-5.9	9.8	7.8-11.7
45-69	1061	9.3	7.3-11.3	49.8	46.0-53.7	10.2	7.8-12.6	30.6	26.9-34.3
18-69	2662	24.1	21.0-27.2	53.4	50.3-56.5	6.3	5.0-7.6	16.2	14.4-17.9

Analysis Information:
- Questions used: H1, H2a, H2b
- Epi Info program name: Hbloodpressure (unweighted); HbloodpressureWT (weighted)

Blood pressure treatment among those diagnosed

Description: Raised blood pressure treatment results among those previously diagnosed with raised blood pressure.

Instrument questions:
- Have you ever had your blood pressure measured by a doctor or other health worker?
- Have you ever been told by a doctor or other health worker that you have raised blood pressure or hypertension?
- In the past two weeks, have you taken any drugs (medication) for raised blood pressure prescribed by a doctor or other health worker?

Currently taking drugs (medication) for raised blood pressure prescribed by doctor or health worker among those diagnosed											
Age Group (years)	**Men**				**Women**				**Both Sexes**		
	n	% taking meds	95% CI		n	% taking meds	95% CI		n	% taking meds	95% CI
18-44	75	18.5	9.6-27.5		193	27.0	19.0-35.1		268	23.4	17.3-29.5
45-69	152	53.7	42.2-65.1		272	61.5	53.8-69.2		424	58.1	52.4-63.8
18-69	227	38.3	29.9-46.8		465	46.1	40.4-51.8		692	42.7	38.1-47.3

Analysis Information:
- Questions used: H1, H2a, H3
- Epi Info program name: Hbloodpressure (unweighted); HbloodpressureWT (weighted)

Blood pressure advice by a traditional healer

Description: Percentage of respondents who have sought advice or received treatment from a traditional healer for raised blood pressure among those previously diagnosed with raised blood pressure.

Instrument questions:
- Have you ever had your blood pressure measured by a doctor or other health worker?
- Have you ever been told by a doctor or other health worker that you have raised blood pressure or hypertension?
- Have you ever seen a traditional healer for raised blood pressure?
- Are you currently taking any herbal or traditional remedy for your high blood pressure?

Seen a traditional healer among those previously diagnosed											
	Men				Women				Both Sexes		
Age Group (years)	n	% seen trad. healer	95% CI		n	% seen trad. healer	95% CI		n	% seen trad. healer	95% CI
18-44	75	1.2	0.0-3.6		193	6.7	2.0-11.4		268	4.3	1.5-7.1
45-69	152	12.5	2.2-22.7		272	5.1	2.1-8.0		424	8.3	3.6-13.0
18-69	227	7.5	1.5-13.6		465	5.8	3.2-8.4		692	6.6	3.7-9.4

Currently taking herbal or traditional remedy for raised blood pressure among those previously diagnosed											
	Men				Women				Both Sexes		
Age Group (years)	n	% taking trad. meds	95% CI		n	% taking trad. meds	95% CI		n	% taking trad. meds	95% CI
18-44	75	5.4	0.3-10.5		193	6.7	2.1-11.3		268	6.1	2.8-9.5
45-69	152	17.7	6.6-28.8		272	15.0	9.9-20.2		424	16.2	10.7-21.8
18-69	227	12.3	5.4-19.3		465	11.3	8.0-14.6		692	11.8	8.3-15.3

Analysis Information:
- Questions used: H1, H2a, H4, H5
- Epi Info program name: Hraisedbptrad (unweighted); HraisedbptradWT (weighted)

History of Diabetes

Blood sugar measurement and diagnosis

Description: Blood sugar measurement and diagnosis among all respondents.

Instrument questions:

- Have you ever had your blood sugar measured by a doctor or other health worker?
- Have you ever been told by a doctor or other health worker that you have raised blood sugar or diabetes?
- Have you been told in the past 12 months?

Blood sugar measurement and diagnosis									
Men									
Age Group (years)	n	% Never measured	95% CI	% measured, not diagnosed	95% CI	% diagnosed, but not within past 12 months	95% CI	% diagnosed within past 12 months	95% CI
18-44	601	70.0	65.9-74.0	26.7	22.6-30.9	2.2	0.8-3.5	1.1	0.3-2.0
45-69	467	35.1	28.9-41.3	50.0	43.0-56.9	2.7	1.3-4.1	12.3	8.5-16.1
18-69	1068	59.5	56.1-62.9	33.7	30.1-37.3	2.3	1.3-3.4	4.5	3.0-5.9

Blood sugar measurement and diagnosis									
Women									
Age Group (years)	n	% Never measured	95% CI	% measured, not diagnosed	95% CI	% diagnosed, but not within past 12 months	95% CI	% diagnosed within past 12 months	95% CI
18-44	1000	53.2	49.1-57.2	41.4	37.6-45.2	1.4	0.6-2.2	4.0	2.5-5.6
45-69	594	26.1	21.2-31.0	46.2	41.5-50.9	3.8	1.8-5.9	23.8	19.1-28.5
18-69	1594	44.7	41.3-48.0	42.9	40.0-45.8	2.2	1.2-3.1	10.2	8.1-12.3

Blood sugar measurement and diagnosis									
Both sexes									
Age Group (years)	n	% Never measured	95% CI	% measured, not diagnosed	95% CI	% diagnosed, but not within past 12 months	95% CI	% diagnosed within past 12 months	95% CI
18-44	1601	62.0	59.0-64.9	33.7	30.7-36.7	1.8	1.0-2.6	2.5	1.7-3.3
45-69	1061	30.7	26.5-34.8	48.1	44.1-52.1	3.2	2.0-4.5	18.0	15.3-20.7
18-69	2662	52.4	49.9-54.9	38.1	35.8-40.5	2.3	1.5-3.0	7.3	6.2-8.4

Analysis Information:

- Questions used: H6, H7a, H7b
- Epi Info program name: Hdiabetes (unweighted); HdiabetesWT (weighted)

	Description: Diabetes treatment results among those previously diagnosed with raised blood sugar or diabetes.

Diabetes treatment among those diagnosed

Description: Diabetes treatment results among those previously diagnosed with raised blood sugar or diabetes.

Instrument questions:
- Have you ever had your blood sugar measured by a doctor or other health worker?
- Have you ever been told by a doctor or other health worker that you have raised blood sugar or diabetes?
- In the past two weeks, have you taken any drugs (medication) for diabetes prescribed by a doctor or other health worker?
- Are you currently taking insulin for diabetes prescribed by a doctor or other health worker?

Currently taking insulin prescribed for diabetes among those previously diagnosed									
Age Group (years)	Men			Women			Both Sexes		
	n	% taking insulin	95% CI	n	% taking insulin	95% CI	n	% taking insulin	95% CI
18-44	21	21.4	0.0-43.	54	5.4	0.0-11.7	75	11.8	1.8-21.9
45-69	75	13.2	4.7-21.7	150	15.1	7.9-22.3	225	14.4	8.9-20.0
18-69	96	16.0	5.8-26.2	204	12.2	6.4-18.0	300	13.6	8.3-18.9

Currently taking medication prescribed for diabetes among those previously diagnosed									
Age Group (years)	Men			Women			Both Sexes		
	n	% taking meds	95% CI	n	% taking meds	95% CI	n	% taking meds	95% CI
18-44	21	39.8	15.7-63.9	54	55.4	38.5-72.3	75	49.2	35.7-62.6
45-69	75	71.5	57.5-85.5	150	75.8	64.7-86.8	225	74.3	65.7-82.8
18-69	96	60.7	49.0-72.5	204	69.6	61.6-77.6	300	66.3	59.8-72.9

Analysis Information:
- Questions used: H6, H7a, H8, H9
- Epi Info program name: Hdiabetes (unweighted); HdiabetesWT (weighted)

Diabetes advice by traditional healer

Description: Percentage of respondents who are have sought advice or treatment from a traditional healer for diabetes among those previously diagnosed.

Instrument questions:
- Have you ever had your blood sugar measured by a doctor or other health worker?
- Have you ever been told by a doctor or other health worker that you have raised blood sugar or diabetes?
- Have you ever seen a traditional healer for diabetes or raised blood sugar?
- Are you currently taking any herbal or traditional remedy for your diabetes?

Seen a traditional healer for diabetes among those previously diagnosed											
Age Group (years)	Men				Women				Both Sexes		
	n	% seen trad. healer	95% CI		n	% seen trad. healer	95% CI		n	% seen trad. healer	95% CI
18-44	21	5.5	0.0-16.2		54	1.4	0.0-4.2		75	3.0	0.0-7.6
45-69	75	12.5	4.4-20.5		150	5.9	1.6-10.2		225	8.2	4.4-12.1
18-69	96	10.1	3.7-16.4		204	4.5	1.4-7.7		300	6.6	3.6-9.6

Currently taking herbal or traditional treatment for diabetes among those previously diagnosed											
Age Group (years)	Men				Women				Both Sexes		
	n	% taking trad. meds	95% CI		n	% taking trad. meds	95% CI		n	% taking trad. meds	95% CI
18-44	21	1.2	0.0-3.7		54	4.9	0.1-9.7		75	3.4	0.3-6.5
45-69	75	34.0	18.5-49.5		150	19.0	11.5-26.5		225	24.3	16.4-32.3
18-69	96	22.8	10.7-35.0		204	14.7	9.2-20.3		300	17.7	11.7-23.8

Analysis Information:
- Questions used: H6, H7a, H10, H11
- Epi Info program name: Hdiabetestrad (unweighted); HdiabetestradWT (weighted)

History of Raised Total Cholesterol

Cholesterol measurement and diagnosis

Description: Total cholesterol measurement and diagnosis among all respondents.

Instrument questions:
- Have you ever had your cholesterol (fat levels in your blood) measured by a doctor or other health worker?
- Have you ever been told by a doctor or other health worker that you have raised cholesterol?
- Have you been told in the past 12 months?

Total cholesterol measurement and diagnosis									
Men									
Age Group (years)	n	% Never measured	95% CI	% measured, not diagnosed	95% CI	% diagnosed, but not within past 12 months	95% CI	% diagnosed within past 12 months	95% CI
18-44	601	86.2	83.0-89.4	10.1	7.3-12.9	1.5	0.4-2.6	2.2	1.0-3.4
45-69	467	54.8	49.0-60.7	27.1	22.2-32.1	9.2	5.8-12.6	8.9	5.9-11.8
18-69	1068	76.8	74.0-79.6	15.2	13.0-17.4	3.8	2.4-5.1	4.2	2.9-5.5

Total cholesterol measurement and diagnosis									
Women									
Age Group (years)	n	% Never measured	95% CI	% measured, not diagnosed	95% CI	% diagnosed, but not within past 12 months	95% CI	% diagnosed within past 12 months	95% CI
18-44	1000	77.2	74.0-80.5	15.4	12.7-18.1	3.4	2.0-4.9	3.9	2.5-5.3
45-69	594	44.6	39.1-50.0	24.6	20.2-29.0	10.5	7.3-13.7	20.3	15.7-24.9
18-69	1594	67.0	64.0-70.0	18.3	15.8-20.8	5.6	4.2-7.1	9.1	7.3-10.8

Total cholesterol measurement and diagnosis									
Both sexes									
Age Group (years)	n	% Never measured	95% CI	% measured, not diagnosed	95% CI	% diagnosed, but not within past 12 months	95% CI	% diagnosed within past 12 months	95% CI
18-44	1601	81.9	79.3-84.5	12.7	10.5-14.9	2.4	1.5-3.3	3.0	2.0-4.0
45-69	1061	49.8	45.6-53.9	25.9	22.7-29.1	9.8	7.6-12.1	14.5	12.0-17.0
18-69	2662	72.1	69.8-74.3	16.7	14.9-18.5	4.7	3.7-5.7	6.5	5.4-7.6

Analysis Information:
- Questions used: H12, H13a, H13b
- Epi Info program name: Hchol (unweighted); HcholWT (weighted)

Cholesterol treatment among those diagnosed

Description: Cholesterol treatment results among those previously diagnosed with raised cholesterol.

Instrument questions:
- Have you ever had your cholesterol (fat levels in your blood) measured by a doctor or other health worker?
- Have you ever been told by a doctor or other health worker that you have raised cholesterol?
- In the past two weeks, have you taken oral treatment (medication) for raised total cholesterol prescribed by a doctor or other health worker?

Currently taking oral treatment (medication) prescribed for raised total cholesterol among those previously diagnosed											
Age Group (years)	**Men**				**Women**				**Both Sexes**		
	n	% taking meds	95% CI		n	% taking meds	95% CI		n	% taking meds	95% CI
18-44	21	24.3	4.1-44.5		73	31.9	21.9-41.9		94	29.2	17.1-41.3
45-69	87	33.2	21.7-44.8		180	45.2	36.2-54.3		267	40.7	33.7-47.7
18-69	108	30.3	19.4-41.3		253	40.7	33.4-47.9		361	36.9	30.3-43.4

Analysis Information:
- Questions used: H12, H13a, H14
- Epi Info program name: Hchol (unweighted); HcholWT (weighted)

Cholesterol advice by traditional healer

Description: Percentage of respondents who are have sought advice or treatment from a traditional healer for raised cholesterol among those previously diagnosed.

Instrument questions:
- Have you ever had your cholesterol (fat levels in your blood) measured by a doctor or other health worker?
- Have you ever been told by a doctor or other health worker that you have raised cholesterol?
- Have you ever seen a traditional healer for raised cholesterol?
- Are you currently taking any herbal or traditional remedy for your raised cholesterol?

Seen a traditional healer for raised cholesterol among those previously diagnosed									
	Men			**Women**			**Both Sexes**		
Age Group (years)	n	% seen trad. healer	95% CI	n	% seen trad. healer	95% CI	n	% seen trad. healer	95% CI
18-44	21	8.1	0.0-20.2	73	9.4	6.1-12.6	94	9.0	0.0-18.5
45-69	87	8.8	1.4-16.2	180	6.9	2.5-11.4	267	7.6	3.9-11.3
18-69	108	8.6	2.3-14.9	253	7.8	4.6-10.9	361	8.1	4.0-12.2

Currently taking herbal or traditional treatment for raised cholesterol among those previously diagnosed									
	Men			**Women**			**Both Sexes**		
Age Group (years)	n	% taking trad. meds	95% CI	n	% taking trad. meds	95% CI	n	% taking trad. meds	95% CI
18-44	21	4.4	0.0-13.4	73	13.5	7.8-19.2	94	10.3	0.7-19.9
45-69	87	7.4	0.8-14.0	180	9.8	4.0-15.7	267	8.9	4.6-13.3
18-69	108	6.4	0.9-11.9	253	11.1	6.3-15.9	361	9.4	4.7-14.0

Analysis Information:
- Questions used: H12, H13a, H15, H16
- Epi Info program name: Hcholtrad (unweighted); HcholtradWT (weighted)

History of Cardiovascular Diseases

History of cardio-vascular diseases

Description: Percentage of respondents who have ever had a heart attack or chest pain from heart disease (angina) or a stroke among all respondents.

Instrument questions:
- Have you ever had a heart attack or chest pain from heart disease (angina) or a stroke (cerebrovascular accident or incident)?

	Having ever had a heart attack or chest pain from heart disease or a stroke									
	Men				**Women**				**Both Sexes**		
Age Group (years)	n	% CVD history	95% CI		n	% CVD history	95% CI		n	% CVD history	95% CI
18-44	601	7.1	3.8-10.4		1000	6.2	4.3-8.1		1601	6.7	4.5-8.8
45-69	467	11.1	7.0-15.2		594	14.2	10.0-18.5		1061	12.6	9.1-16.1
18-69	1068	8.3	5.2-11.4		1594	8.7	6.7-10.7		2662	8.5	6.2-10.7

Analysis Information:
- Question used: H17
- Epi Info program name: Hcvd (unweighted); HcvdWT (weighted)

Prevention and treatment of heart disease

Description: Percentage of respondents who are currently taking aspirin or statins regularly to prevent or treat heart disease.

Instrument questions:
- Are you currently taking aspirin regularly to prevent or treat heart disease?
- Are you currently taking statins (Lovostatin/Simvastatin/Atorvastatin or any other statin) regularly to prevent or treat heart disease?

Age Group (years)	Men			Women			Both Sexes		
	n	% taking aspirin	95% CI	n	% taking aspirin	95% CI	n	% taking aspirin	95% CI
18-44	601	4.1	0.5-7.7	1000	3.3	1.7-4.9	1601	3.7	1.8-5.6
45-69	467	16.9	12.3-21.6	594	17.5	13.2-21.7	1061	17.2	13.5-20.9
18-69	1068	7.9	4.6-11.3	1594	7.8	6.1-9.4	2662	7.9	5.7-10.0

Currently taking aspirin regularly to prevent or treat heart disease

Age Group (years)	Men			Women			Both Sexes		
	n	% taking statins	95% CI	n	% taking statins	95% CI	n	% taking statins	95% CI
18-44	601	0.6	0.0-1.2	1000	0.4	0.0-0.9	1601	0.5	0.2-0.9
45-69	467	4.2	1.8-6.7	594	7.3	4.7-9.8	1061	5.7	3.9-7.6
18-69	1068	1.7	0.8-2.6	1594	2.6	1.7-3.4	2662	2.1	1.5-2.8

Currently taking statins regularly to prevent or treat heart disease

Analysis Information:
- Questions used: H18, H19
- Epi Info program name: Hcvdmeds (unweighted); HcvdmedsWT (weighted)

Lifestyle Advice

Lifestyle advice

Description: Percentage of respondents who received lifestyle advice from a doctor or health worker during the past three years among all respondents.

Instrument question:

- During the past three years, has a doctor or other health worker advised you to do any of the following?

Advised by doctor or health worker to quit using tobacco or don't start									
Age Group (years)	**Men**				**Women**			**Both Sexes**	
	n	% advised	95% CI		n	% advised	95% CI	n	% advised	95% CI
18-44	601	19.3	14.8-23.8		1000	10.6	7.8-13.4	1601	15.1	12.3-17.9
45-69	467	20.1	15.2-25.0		594	11.1	7.6-14.7	1061	15.7	12.5-18.9
18-69	1068	19.5	16.5-22.6		1594	10.8	8.2-13.3	2662	15.3	13.3-17.4

Advised by doctor or health worker to reduce salt in the diet									
Age Group (years)	**Men**				**Women**			**Both Sexes**	
	n	% advised	95% CI		n	% advised	95% CI	n	% advised	95% CI
18-44	601	23.1	18.7-27.6		1000	28.2	24.3-32.1	1601	25.6	22.4-28.8
45-69	467	30.6	24.8-36.4		594	46.2	41.0-51.5	1061	38.3	34.0-42.6
18-69	1068	25.4	22.0-28.7		1594	33.9	30.9-36.9	2662	29.5	27.1-31.9

Advised by doctor or health worker to eat at least five servings of fruit and/or vegetables each day									
Age Group (years)	**Men**				**Women**			**Both Sexes**	
	n	% advised	95% CI		n	% advised	95% CI	n	% advised	95% CI
18-44	601	31.2	25.4-37.0		1000	38.2	34.4-42.0	1601	34.5	30.9-38.2
45-69	467	34.5	29.1-40.0		594	45.6	40.3-50.8	1061	40.0	36.0-44.0
18-69	1068	32.2	27.5-36.9		1594	40.5	37.4-43.7	2662	36.2	33.3-39.1

Advised by doctor or health worker to reduce fat in the diet									
Age Group (years)	**Men**				**Women**			**Both Sexes**	
	n	% advised	95% CI		n	% advised	95% CI	n	% advised	95% CI
18-44	601	26.0	21.7-30.2		1000	35.7	32.0-39.4	1601	30.6	27.7-33.6
45-69	467	32.3	26.7-37.9		594	51.1	46.2-56.0	1061	41.6	38.0-45.2
18-69	1068	27.9	24.4-31.3		1594	40.5	37.3-43.7	2662	34.0	31.5-36.5

Age Group (years)	Men			Women			Both Sexes		
Advised by doctor or health worker to start or do more physical activity									
	n	% advised	95% CI	n	% advised	95% CI	n	% advised	95% CI
18-44	601	23.1	19.3-26.8	1000	33.5	29.8-37.2	1601	28.1	25.5-30.6
45-69	467	33.7	28.3-39.1	594	45.7	40.5-50.9	1061	39.6	35.8-43.5
18-69	1068	26.3	23.0-29.5	1594	37.4	34.2-40.5	2662	31.6	29.3-33.9

Age Group (years)	Men			Women			Both Sexes		
Advised by doctor or health worker to maintain a healthy body weight or to lose weight									
	n	% advised	95% CI	n	% advised	95% CI	n	% advised	95% CI
18-44	601	30.3	25.3-35.3	1000	35.2	31.3-39.1	1601	32.7	29.7-35.6
45-69	467	36.0	30.5-41.5	594	48.7	43.3-54.0	1061	42.3	38.1-46.4
18-69	1068	32.0	27.9-36.2	1594	39.4	36.2-42.7	2662	35.6	32.9-38.3

Analysis Information:

- Questions used: H20a-f
- Epi Info program name: Hlifestyle (unweighted); HlifestyleWT (weighted)

Cervical Cancer Screening

Cervical cancer screening

Description: Percentage of female respondents who have ever had a screening test for cervical cancer among all female respondents.

Instrument question:
- Have you ever had a screening test for cervical cancer, using any of these methods described above?

Age Group (years)	Women		
	n	% ever tested	95% CI
18-44	1000	15.2	12.5-17.9
45-69	593	23.1	18.4-27.7
18-69	1593	17.7	15.3-20.0

Analysis Information:
- Question used: CX1
- Epi Info program name: Hcervcancer (unweighted); HcervcancerWT (weighted)

Cervical cancer screening among women aged 30-49 years

Description: Percentage of female respondents aged 30-49 years who have ever had a screening test for cervical cancer among all female respondents aged 30-49 years.

Instrument question:
- Have you ever had a screening test for cervical cancer, using any of these methods described above?

Age Group (years)	Women		
	n	% ever tested	95% CI
30-49	683	23.0	19.2-26.8

Analysis Information:
- Question used: CX1
- Epi Info program name: Hcervcancer (unweighted); HcervcancerWT (weighted)

Health Screening

Prostate and Rectal Exams

Description: Participants who had prostate exam, who had feces checked for hidden blood, and those who have had colonoscopy.

Instrument questions:
- Have you ever had your feces examined to look for hidden blood?
- Have you ever had a colonoscopy?
- Have you ever had an examination of your prostate?

	Had prostate exam		
Age Group (years)	Men		
	n	%	95% CI
18-44	601	2.7	1.3-4.1
45-69	467	16.1	11.8-20.5
18-69	1068	6.7	5.2-8.3

	Had feces checked for hidden blood								
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-44	601	10.9	7.8-13.9	1000	13.6	11.2-16.1	1601	12.2	10.1-14.3
45-69	467	17.3	12.6-22.0	594	13.9	9.8-17.9	1061	15.6	11.9-19.3
18-69	1068	12.8	10.4-15.2	1594	13.7	11.9-15.5	2662	13.2	11.7-14.8

	Has had colonoscopy								
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-44	601	1.2	0.2-2.3	1000	1.3	0.5-2.1	1601	1.3	0.6-1.9
45-69	467	5.5	3.2-7.8	594	1.6	0.6-2.5	1061	3.6	2.3-4.8
18-69	1068	2.5	1.5-3.5	1594	1.4	0.8-2.0	2662	2.0	1.4-2.6

Analysis Information:
- Questions used: S1, S2, S3
- Epi Info program name: PAHO_Hprostaterectal (unweighted); PAHO_HprostaterectalWT (weighted)

Breast Cancer Knowledge and Breast Exam

Description: Percentage of women who were shown how to examine breasts and date of last breast exam.

Instrument questions:
- Have you been shown how to examine your breasts?
- When was the last time you had an examination of your breasts?

Shown how to examine breasts			
Age Group (years)	Women		
	n	%	95% CI
18-44	1000	32.4	28.7-36.1
45-69	594	36.0	31.5-40.5
18-69	1594	33.5	30.5-36.5

Last Breast Exam									
Age Group (years)	Women								
	n	% 1 year ago or less	95% CI	% Between 1 and 2 years ago	95% CI	% More than 2 years ago	95% CI	% Never had a breast exam	95% CI
18-44	984	11.9	9.4-14.5	5.2	3.5-6.8	10.6	8.3-13.0	72.3	68.4-76.1
45-69	592	17.4	13.6-21.3	1.9	0.8-2.9	12.7	9.6-15.7	68.1	63.4-72.7
18-69	1576	13.7	11.5-15.9	4.1	2.9-5.3	11.3	9.3-13.3	70.9	67.8-74.1

Analysis Information:
- Questions used: S4, S5
- Epi Info program name: PAHO_Hbreastcancer (unweighted); PAHO_HbreastcancerWT (weighted)

Date of last mammogram

Description: Date of last mammogram.

Instrument questions:
- When was the last time you had a mammogram?

		Last mammogram							
		Women							
Age Group (years)	n	% 1 year ago or less	95% CI	% Between 1 and 2 years ago	95% CI	% More than 2 years ago	95% CI	% Never had a mammogram	95% CI
18-44	997	2.9	0.9-4.9	0.9	0.2-1.6	4.7	3.1-6.4	91.5	89.0-93.9
45-69	592	4.7	2.6-6.7	2.8	1.0-4.5	6.0	3.9-8.0	86.6	83.2-90.0
18-69	1589	3.5	2.0-4.9	1.5	0.7-2.2	5.1	3.8-6.5	89.9	88.0-91.9

Analysis Information:
- Questions used: S6
- Epi Info program name: PAHO_Hmammogram (unweighted); PAHO_HmammogramWT (weighted)

Date of last pap test exam

Description: Date of last pap test exam.

Instrument questions:
- When was the last time you had a Pap test?

		Last pap test of cytological test							
		Women							
Age Group (years)	n	% 1 year ago or less	95% CI	% Between 1 and 2 years ago	95% CI	% More than 2 years ago	95% CI	% Never had a pap test or cytological test	95% CI
18-44	997	6.3	4.1-8.4	5.0	3.1-6.9	9.3	7.2-11.4	79.4	76.4-82.5
45-69	593	5.3	3.2-7.4	3.4	1.5-5.3	19.5	14.6-24.4	71.8	66.5-77.0
18-69	1590	6.0	4.4-7.5	4.5	3.2-5.9	12.5	10.4-14.7	77.0	73.9-80.1

Analysis Information:
- Questions used: S7
- Epi Info program name: PAHO_Hcervicalcancer (unweighted); PAHO_Hcervicalcancer (weighted)

Violence and Injury

Percentage of drivers or passengers not always using seat belt

Description: Percentage of drivers or passengers of a motor vehicle who did not always use a seat belt or were otherwise unrestrained during the past 30 days.

Instrument question:
- In the past 30 days, how often did you use a seat belt when you were the driver or passenger of a motor vehicle?

Percentage of drivers or passengers not always using a seat belt									
	Men			**Women**			**Both Sexes**		
Age Group (years)	n	% Not always using seat belt	95% CI	n	% Not always using seat belt	95% CI	n	% Not always using seat belt	95% CI
18-44	253	48.2	42.1-54.3	421	48.9	44.5-53.3	674	48.5	44.6-52.5
45-69	214	54.5	46.1-62.9	248	51.2	45.4-57.0	462	52.9	47.5-58.2
18-69	467	50.1	44.6-55.5	669	49.6	46.1-53.2	1136	49.9	46.3-53.5

Analysis Information:
- Questions used: V1
- Epi Info program name: Vseatbelt (unweighted); VseatbeltWT (weighted)

Percentage of motorcycle or motor-scooter drivers not always using helmet

Description: Percentage of drivers or passengers of a motorcycle or motor-scooter who did not always wear a helmet during the past 30 days.

Instrument question:
- In the past 30 days, how often did you wear a helmet when you drove or rode as a passenger on a motorcycle or motor-scooter?

Percentage of drivers or passengers of a motorcycle or motor-scooter not always using a helmet									
	Men			**Women**			**Both Sexes**		
Age Group (years)	n	% Not always using helmet	95% CI	n	% Not always using helmet	95% CI	n	% Not always using helmet	95% CI
18-44	294.0	25.4	19.4-31.5	451.0	18.0	13.2-22.8	745.0	22.0	18.0-25.9
45-69	214.0	20.8	14.0-27.6	277.0	10.0	5.3-14.7	491.0	15.8	11.6-20.0
18-69	508.0	24.0	19.0-29.1	728.0	15.6	11.8-19.4	1236.0	20.1	16.9-23.3

Analysis Information:
- Questions used: V2
- Epi Info program name: Vhelmet (unweighted); VhelmetWT (weighted)

Past 12 months involvement in a road traffic crash

Description: Percentage of respondents who have been involved in a road traffic crash during the past 12 months.

Instrument question:
- In the past 12 months, have you been involved in a road traffic crash as a passenger, driver, or pedestrian?

	Men			**Women**			**Both Sexes**		
Age Group (years)	n	% Involved in road traffic crashes	95% CI	n	% Involved in road traffic crashes	95% CI	n	% Involved in road traffic crashes	95% CI
18-44	599	70.0	-	999	68.6	-	1598	69.3	-
45-69	467	30.0	-	593	31.4	-	1060	30.7	-
18-69	**1066**	**100.0**		**1592**	**100.0**		**2658**	**100.0**	

Percentage of respondents involved in a road traffic crash during the past 12 months

Analysis Information:
- Questions used: V3
- Epi Info program name: Vcrash (unweighted); VcrashWT (weighted)

Percentage of serious injury among those involved in a road traffic crash

Description: Percentage of passengers, drivers, or pedestrians that had serious injuries requiring medical attention from a road traffic crash among those involved in a road traffic crash in the past 12 months.

Instrument questions:
- Did you have any injuries in this road traffic crash which required medical attention?
- In the past 12 months, have you been involved in a road traffic crash as a passenger, driver, or pedestrian?

	Men			**Women**			**Both Sexes**		
Age Group (years)	n	% Seriously injured	95% CI	n	% Seriously injured	95% CI	n	% Seriously injured	95% CI
18-44	50.0	71.6	56.6-86.7	30.0	57.5	40.2-74.7	80.0	67.0	54.6-79.5
45-69	25.0	64.2	46.7-81.6	16.0	29.5	2.6-56.5	41.0	51.0	35.0-67.1
18-69	75.0	69.8	57.5-82.1	46.0	49.3	32.8-65.8	121.0	62.9	52.4-73.3

Percentage of respondents seriously injured as a result of road traffic crash among those involved in a road traffic crash

Analysis Information:
- Questions used: V3, V4
- Epi Info program name: Vcrashinjury (unweighted); VcrashinjuryWT (weighted)

Percentage of serious accidental injuries

Description: Percentage of respondents injured in a non-road traffic related accident that required medical attention.

Instrument question:
- In the past 12 months, were you injured accidentally, other than the road traffic crash, which required medical attention?

Age Group (years)	Men			Women			Both Sexes		
	n	% Seriously injured	95% CI	n	% Seriously injured	95% CI	n	% Seriously injured	95% CI
18-44	600.0	92.4	89.8-94.9	999.0	97.5	96.2-98.7	1599.0	94.8	93.4-96.3
45-69	467.0	92.7	88.8-96.6	593.0	98.1	97.0-99.1	1060.0	95.3	93.3-97.4
18-69	1067.0	92.5	90.2-94.7	1592.0	97.7	96.7-98.6	2659.0	95.0	93.8-96.2

Table title: Percentage of respondents seriously injured in a non-road traffic accident

Analysis Information:
- Questions used: V5
- Epi Info program name: Vinjury (unweighted); VinjuryWT (weighted)

Causes of Serious Injury

Description: Causes of serious injuries among respondents who were injured accidentally from something other than a road traffic crash.

Instrument questions:
- Please indicate which of the following was the cause of the most serious accidental injury?
- In the past 12 months, were you injured accidentally other than the road traffic crashes which required medical attention?

Percentage of respondents who were seriously injured other than road traffic crashes																
Men																
Age Group (years)	n	% Fall	95% CI	% Burn	95% CI	% Poisoning	95% CI	% Cut	95% CI	% Near drowning	95% CI	% Animal Bites	95% CI	% Other	95% CI
18-44	46.0	41.9	25.1-58.7	24.2	11.0-37.4	0.0	0.0-0.0	46.0	41.9	25.1-58.7	24.2	11.0-37.4	0.0	0.0-0.0	46.0
45-69	34.0	54.9	36.6-73.2	32.3	14.4-50.2	1.6	0.0-4.8	34.0	54.9	36.6-73.2	32.3	14.4-50.2	1.6	0.0-4.8	34.0
18-69	80.0	45.7	31.4-60.0	26.6	15.4-37.8	0.5	0.0-1.4	80.0	45.7	31.4-60.0	26.6	15.4-37.8	0.5	0.0-1.4	80.0

Percentage of respondents who were seriously injured other than road traffic crashes																
Women																
Age Group (years)	n	% Fall	95% CI	% Burn	95% CI	% Poisoning	95% CI	% Cut	95% CI	% Near drowning	95% CI	% Animal Bites	95% CI	% Other	95% CI
18-44	24	58.0	29.0-87.0	2.1	0.0-6.4	5.8	0.0-15.3	20.5	0.0-43.7	58.0	29.0-87.0	2.1	0.0-6.4	5.8	0.0-15.3
45-69	17	55.1	28.5-81.7	4.4	0.0-13.4	10.2	5.7-14.8	7.1	0.0-21.3	55.1	28.5-81.7	4.4	0.0-13.4	10.2	5.7-14.8
18-69	**41**	57.3	34.1-80.4	2.7	0.0-6.8	6.9	0.0-14.0	17.0	0.0-34.9	57.3	34.1-80.4	2.7	0.0-6.8	6.9	0.0-14.0

Age Group (years)	n	% Fall	95% CI	% Burn	95% CI	% Poisoning	95% CI	% Cut	95% CI	% Near drowning	95% CI	% Animal Bites	95% CI	% Other	95% CI
						Percentage of respondents who were seriously injured other than road traffic crashes									
						Both Sexes									
18-44	70	45.7	31.4-59.9	0.5	0.0-1.5	19.9	9.9-30.0	4.8	0.0-10.7	29.1	15.4-42.9	70	45.7	31.4-59.9	0.5
45-69	51	54.9	39.6-70.3	0.9	0.0-2.8	27.8	12.9-42.6	2.7	0.0-6.7	13.7	2.5-24.9	51	54.9	39.6-70.3	0.9
18-69	121	48.3	36.5-60.1	0.6	0.0-1.5	22.1	13.5-30.8	4.2	0.0-8.6	24.8	13.7-35.8	121	48.3	36.5-60.1	0.6

Analysis Information:

- Questions used: V5,V6
- Epi Info program name: Vinjurycause (unweighted); VinjurycauseWT (weighted)

Location of accidental serious injuries

Description: Location of serious accidental injuries among those respondents who were seriously injured in the last 12 months.

Instrument questions:
- In the past 12 months, were you injured accidentally, other than the road traffic crashes which required medical attention?
- Where were you when you had your most serious injury in the past 12 months?

	Location of accidental serious injuries among respondents seriously injured												
	Men												
Age Group (years)	n	% Home	95% CI	% School/workplace	95% CI	% Road-Street-Highway	95% CI	% Farm	95% CI	% Sports-Athletic area	95% CI	% other	95% CI
18-44	46	12.6	2.8-22.5	41.1	26.4-55.9	23.2	9.4-37.0	4.2	0.0-9.9	11.0	1.7-20.2	12.6	2.8-22.5
45-69	34	32.2	10.2-54.3	29.9	9.2-50.6	17.1	4.9-29.4	16.4	0.0-43.3	0.0	0.0-0.0	32.2	10.2-54.3
18-69	**80**	18.3	8.9-27.8	37.9	26.2-49.5	21.4	10.5-32.3	7.8	0.0-17.4	7.8	1.2-14.3	18.3	8.9-27.8

	Location of accidental serious injuries among respondents seriously injured												
	Women												
Age Group (years)	n	% Home	95% CI	% School/workplace	95% CI	% Road-Street-Highway	95% CI	% Farm	95% CI	% Sports-Athletic area	95% CI	% other	95% CI
18-44	24.0	65.5	39.8-91.3	10.7	0.0-25.6	15.8	0.0-33.2	1.4	0.0-4.3	6.5	0.0-17.0	24.0	65.5
45-69	17.0	59.6	33.1-86.1	2.2	1.2-3.2	13.4	0.0-31.6	14.7	0.0-35.1	10.0	0.0-24.8	17.0	59.6
18-69	41.0	64.0	42.6-85.4	8.5	0.0-19.6	15.2	1.0-29.4	4.9	0.0-10.5	7.4	0.0-16.4	41.0	64.0

Age Group (years)	n	% Home	95% CI	% School/workplace	95% CI	% Road-Street-Highway	95% CI	% Farm	95% CI	% Sports-Athletic area	95% CI	% other	95% CI
						Location of accidental serious injuries among respondents seriously injured							
						Both Sexes							
18-44	70	25.0	13.1-36.9	34.0	21.5-46.6	21.5	9.8-33.1	3.6	0.0-7.9	8.4	0.8-16.0	25.0	13.1-36.9
45-69	51	37.8	18.9-56.8	24.2	8.5-40.0	16.4	6.0-26.8	16.1	0.0-37.7	0.0	0.0-0.0	37.8	18.9-56.8
18-69	**121**	28.6	18.9-38.4	31.2	21.7-40.8	20.0	11.0-29.0	7.1	0.0-14.6	6.0	0.5-11.6	28.6	18.9-38.4

Analysis Information:

- Questions used: V5,V7
- Epi Info program name: Vinjuryplace (unweighted); VinjuryplaceWT (weighted)

Percentage of cyclists not always wearing a helmet

Description: Percentage of cyclists who did not always wear a helmet among those riding a bike in the past 30 days.

Instrument question:
- In the past 30 days how often did you wear a helmet when you rode a bicycle or pedal cycle?

Percentage of cyclists that did not always use helmets when ridding among those riding a bike										
Age Group (years)	Men				Women				Both Sexes		
	n	% Not always using helmets for cyclists	95% CI		N	% Not always using helmets for cyclists	95% CI		n	% Not always using helmets for cyclists	95% CI
18-44	356.0	12.2	8.1-16.4		527.0	6.5	3.9-9.0		883.0	9.5	7.1-12.0
45-69	268.0	8.8	4.2-13.4		313.0	3.1	0.6-5.5		581.0	6.2	3.4-9.0
18-69	356.0	12.2	8.1-16.4		840.0	5.4	3.4-7.4		1464.0	8.5	6.6-10.4

Analysis Information:
- Questions used: V8
- Epi Info program name: Vbicycle (unweighted); VbicycleWT (weighted)

Driving under the effects of alcohol

Description: Percentage of respondents who have driven a motorized vehicle after having had 2 or more alcoholic drinks.

Instrument question:
- In the past 30 days, how many times have you driven a motorized vehicle when you have had 2 or more alcoholic drinks?

Driving under the effects of alcohol										
Age Group (years)	Men				Women				Both Sexes		
	n	% drove after drinking	95% CI		n	% drove after drinking	95% CI		n	% drove after drinking	95% CI
18-44	572.0	10.6	7.2-13.9		933.0	2.0	1.0-3.1		1505.0	6.6	4.7-8.5
45-69	444.0	5.1	2.3-7.9		554.0	0.1	0.0-0.3		998.0	2.7	1.2-4.1
18-69	1016.0	8.9	6.4-11.4		1487.0	1.4	0.7-2.2		2503.0	5.4	4.0-6.8

Analysis Information:
- Questions used: V9
- Epi Info program name: Vdrovedrunk (unweighted); VdrovedrunkWT (weighted)

Riding in a vehicle with a driver under the effect of alcohol

Description: Percentage of respondents who rode in a motorized vehicle where the driver has had 2 or more alcoholic drinks.

Instrument question:
- In the past 30 days, how many times have you ridden in a motorized vehicle where the driver has had 2 or more alcoholic drinks?

Riding in a vehicle with a driver under the effect of alcohol											
	Men				**Women**				**Both Sexes**		
Age Group (years)	n	% rode with driver who drank	95% CI		n	% rode with driver who drank	95% CI		n	% rode with driver who drank	95% CI
18-44	535.0	83.3	78.6-87.9		856	91.2	88.7-93.6		1391.0	86.9	84.3-89.6
45-69	406.0	94.9	92.6-97.3		509	96.4	94.3-98.5		915.0	95.6	94.1-97.2
18-69	941.0	86.7	83.4-90.1		1365	92.8	90.9-94.6		2306.0	89.6	87.6-91.5

Analysis Information:
- Questions used: V10
- Epi Info program name: Vdriverdrunk (unweighted); VdriverdrunkWT (weighted)

Percentage of respondents involved in a violent incident resulting in a serious injury

Description: Percentage of respondents involved in a violent incident during the past 12 months resulting in an injury.

Instrument question:
- In the past 12 months, how many times were you in a violent incident in which you were injured and required medical attention?

Percentage of respondents seriously injured from violent incidents											
	Men				**Women**				**Both Sexes**		
Age Group (years)	n	% Seriously injured from violent incidents	95% CI		n	% Seriously injured from violent incidents	95% CI		n	% Seriously injured from violent incidents	95% CI
18-44	599.0	97.9	96.5-99.2		996.0	98.6	97.3-99.8		1595.0	98.2	97.2-99.1
45-69	466.0	98.1	96.4-99.9		592.0	98.2	97.0-99.5		1058.0	98.2	97.1-99.3
18-69	1065.0	97.9	96.9-99.0		1588.0	98.5	97.5-99.4		2653.0	98.2	97.4-99.0

Analysis Information:
- Questions used: V11
- Epi Info program name: Vviolentinjury (unweighted); VviolentinjuryWT (weighted)

Serious injuries caused by firearms or other weapons

Description: Causes of injury from a violent incident among respondents involved in a violent incident during the past 12 months

Instrument questions:
- In the past 12 months, how many times were you in a violent incident in which you were injured and required medical attention?
- Please indicate which of the following caused your injury?

Causes of injury from a violent incident among respondents involved in a violent incident							
	Men						
Age Group (years)	n	% Firearm	95% CI	% other weapon	95% CI	% Injured without a weapon	95% CI
18-44	16	0	-	30.8	16.5-45.0	69.2	55.0-83.5
45-69	5	0	-	55.9	0.0-100.0	44.1	0.0-100.0
18-69	**21**	**0**	**-**	37.4	13.6-61.2	62.6	38.8-86.4

Causes of injury from a violent incident among respondents involved in a violent incident							
	Women						
Age Group (years)	n	% Firearm	95% CI	% other weapon	95% CI	% Injured without a weapon	95% CI
18-44	7.0	0	-	34.1	0.0-76.9	65.9	23.1-100.0
45-69	7.0	0	-	41.9	14.6-69.3	58.1	30.7-85.4
18-69	14.0	**0**	**-**	37.6	4.0-71.1	62.4	28.9-96.0

Causes of injury from a violent incident among respondents involved in a violent incident							
	Both Sexes						
Age Group (years)	n	% Firearm	95% CI	% other weapon	95% CI	% Injured without a weapon	95% CI
18-44	23.0	0	-	31.6	14.6-48.6	68.4	51.4-85.4
45-69	12.0	0	-	50.1	7.9-92.3	49.9	7.7-92.1
18-69	35.0	**0**	**-**	37.5	17.6-57.4	62.5	42.6-82.4

Analysis Information:
- Questions used: V11, V12
- Epi Info program name: Vviolentinjurycause (unweighted); VviolentinjurycauseWT (weighted)

Persons causing violent injury

Description: Relationship status between respondents and those that have caused their injuries during a violent incident in the past 12 months.

Instrument questions:
- In the past 12 months, how many times were you in a violent incident in which you were injured and required medical attention?
- Please indicate the relationship between yourself and the person(s) who caused your injury.

Percentage of those receiving violent injuries caused by different persons																	
									Men								
Age Group	n	% Intimate partner	95% CI	% Parent	95% CI	% Child, sibling, or other relative	95% CI	% Friend or acquaint-tance	95% CI	% Unrelated caregiver	95% CI	% Stranger	95% CI	%Official or legal authorities	95% CI	% Other	95% CI
18-44	16	9.8	6.3-13.3			0.5	0.0-1.6	51.1	33.4-68.7			17.0	0.0-37.6			21.7	8.9-34.4
45-69	6	0.0	0.0-0.0			0.0	0.0-0.0	31.4	0.0-73.2			68.6	26.8-100.0			0.0	0.0-0.0
18-69	22	7.1	5.3-8.9			0.4	0.0-1.1	45.7	32.9-58.6			31.0	11.6-50.4			15.8	7.8-23.7

Percentage of those receiving violent injuries caused by different persons																	
									Women								
Age Group	n	% Intimate partner	95% CI	% Parent	95% CI	% Child, sibling, or other relative	95% CI	% Friend or acquaint-tance	95% CI	% Unrelated caregiver	95% CI	% Stranger	95% CI	%Official or legal authorities	95% CI	% Other	95% CI
18-44	8	47.3	8.5-86.1			8.1	0.0-27.7	41.0	7.8-74.2			3.6	0.0-14.6			0.0	0.0-0.0
45-69	7	23.8	10.4-37.2			3.3	1.4-5.2	16.0	0.0-53.6			43.6	16.2-71.1			13.3	5.8-20.8
18-69	15	39.8	6.3-73.4			6.6	0.0-21.1	33.1	9.3-56.8			16.3	0.0-33.4			4.2	2.3-6.1

						Percentage of those receiving violent injuries caused by different persons											
						Both Sexes											
Age Group	n	% Intimate partner	95% CI	% Parent	95% CI	% Child, sibling, or other relative	95% CI	% Friend or acquaint-tance	95% CI	% Unrelated caregiver	95% CI	% Stranger	95% CI	%Official or legal authorities	95% CI	% Other	95% CI
18-44	24	23.1	3.6-42.5			3.2	0.0-9.2	47.5	21.2-73.9			12.3	0.0-25.7			14.0	0.0-36.7
45-69	13	9.6	0.0-28.6			1.3	0.5-2.1	25.2	0.0-51.6			58.5	28.7-88.3			5.4	0.0-16.5
18-69	37	19.2	2.8-35.6			2.7	0.0-7.0	41.1	25.6-56.5			25.6	13.8-37.3			11.5	0.0-28.8

Analysis Information:

• Questions used: V11, V13

• Epi Info program name: Vviolentinjuryrel (unweighted); VviolentinjuryrelWT (weighted)

Percentage of respondents being physically abused during childhood

Description: Percentage of respondents who reported being physically abused during childhood by a parent or other adult in the household.

Instrument question:
- Looking back on your childhood (before age 18 years), did a parent or adult in the household ever push, grab, shove, slap, hit, burn, or throw something at you?

Percentage of respondents being physically abused during childhood									
Age Group (years)	Men			Women			Both Sexes		
	n	% physical childhood abuse	95% CI	n	% physical childhood abuse	95% CI	n	% physical childhood abuse	95% CI
18-44	256	40.7	33.9-47.4	435	40.0-47.9	43.9	691	42.2	38.0-46.5
45-69	184	39.0	32.0-46.0	246	40.9-52.0	46.5	430	42.7	38.7-46.7
18-69	440	40.2	34.5-45.9	681	41.3-48.2	44.7	**1121**	42.4	39.1-45.7

Analysis Information:
- Questions used: V14
- Epi Info program name: Vphysicalabuse (unweighted); VphysicalabuseWT (weighted)

Percentage of respondents being sexually abused during childhood

Description: Percentage of respondents being sexually abused during childhood.

Instrument question:
- Looking back on your childhood, did an adult or anyone at least five (5) years older than you ever touch you sexually or try to make you touch them sexually or force you to have sex?

Percentage of respondents being sexually abused during childhood									
Age Group (years)	Men			Women			Both Sexes		
	n	% sexual childhood abuse	95% CI	n	% sexual childhood abuse	95% CI	n	% sexual childhood abuse	95% CI
18-44	16	2.3	1.0-3.7	57	6.3	4.0-8.7	73	4.2	3.0-5.5
45-69	11	2.0	0.6-3.4	38	7.1	3.8-10.4	49	4.5	2.8-6.3
18-69	27	2.2	1.2-3.3	95	6.6	4.8-8.4	**122**	4.3	3.3-5.3

Analysis Information:
- Questions used: V15
- Epi Info program name: Vsexabusechild (unweighted); VsexabusechildWT (weighted)

Percentage of respondents being sexually abused during adulthood

Description: Percentage of respondents being sexually abused during adulthood.

Instrument question:
- Since your 18th birthday, have you ever experienced a sex act involving either: vaginal, oral, or anal penetration against your will?

	Percentage of respondents being sexually abused during adulthood								
	Men			**Women**			**Both Sexes**		
Age Group (years)	n	% of respondents sexually abused in adulthood	95% CI	n	% of respondents sexually abused in adulthood	95% CI	n	% of respondents sexually abused in adulthood	95% CI
18-44	24	3.6	1.8-5.4	61	5.7	3.5-8.0	85	4.6	3.4-5.9
45-69	13	2.0	0.8-3.3	29	3.7	2.1-5.3	42	2.9	1.8-3.9
18-69	**37**	3.1	1.8-4.4	**90**	5.1	3.5-6.7	**127**	4.1	3.2-5.0

Analysis Information:
- Questions used: V16
- Epi Info program name: Vsexabuseadult (unweighted); VsexabuseadultWT (weighted)

Percentage of those frightened for safety because of anger or threats of another person

Description: Percentage of respondents who reported being frightened for the safety of themselves or their families because of the anger or threats of another person.

Instrument question:
- In the past 12 months, have you been frightened for the safety of yourself or your family because of the anger or threats of another person (s)?

	Percentage of respondents frightened for their safety because of another person								
	Men			**Women**			**Both Sexes**		
Age Group (years)	n	% frightened for safety	95% CI	n	% frightened for safety	95% CI	n	% frightened for safety	95% CI
18-44	57	11.1	6.0-16.3	110	12.0	7.9-16.2	167	11.6	7.3-15.9
45-69	36	8.7	4.8-12.6	57	8.3	5.8-10.7	93	8.5	6.2-10.7
18-69	**93**	10.4	5.9-14.9	**167**	10.8	8.0-13.7	**260**	10.6	7.2-14.1

Analysis Information:
- Questions used: V17
- Epi Info program name: Vfear (unweighted); VfearWT (weighted)

Percentage of respondents frightened, by type of person of whom they were frightened

Description: Percentage of respondents who reported being frightened by each of the types of people in the table below.

Instrument question:
- In the past 12 months, have you been frightened for the safety of yourself or your family because of the anger or threats of another person (s)?
- Please specify of whom you were most often frightened.

| | | Percentage of respondents frightened by each of the following types of people | | | | | | | | | | | |
| | | Men | | | | | | | | | | | |
Age Group (years)	n	% Someone within the family	95% CI	% Friend or acquaintance	95% CI	% Unrelated caregiver	95% CI	% Stranger	95% CI	% Official or legal authority	95% CI	% Other	95% CI
18-44	15	44.7	14.2-75.3	6.4	0.0-13.0	0.0	0.0-0.0	38.5	14.9-62.2	0.0	0.0-0.0	10.3	0.5-20.3
45-69	11	40.2	10.8-69.6	26.5	5.5-47.6	2.2	0.0-6.7	15.5	0.4-30.5	1.8	0.0-5.5	13.8	0.7-26.8
18-69	**26**	43.6	14.4-72.8	11.4	3.1-19.8	0.6	0.0-1.7	32.8	13.5-52.0	0.5	0.0-1.3	**11.2**	**2.4-20.02**

| | | Percentage of respondents frightened by each of the following types of people | | | | | | | | | | | |
| | | Women | | | | | | | | | | | |
Age Group (years)	n	% Someone within the family	95% CI	% Friend or acquaintance	95% CI	% Unrelated caregiver	95% CI	% Stranger	95% CI	% Official or legal authority	95% CI	% Other	95% CI
18-44		52.5	42.4-62.6	4.8	0.6-9.0	0.3	0.0-1.0	35.4	25.0-45.8	0.0	0.0-0.0	6.9	1.4-12.5
45-69		27.6	14.7-40.4	15.1	3.0-27.1	3.3	0.0-9.6	42.5	26.8-58.2	1.2	0.0-3.7	10.4	1.0-19.8
18-69		46.5	37.5-55.6	7.3	2.6-11.9	1.0	0.0-2.7	37.1	28.1-46.1	0.3	0.0-0.9	7.7	2.5-13.1

Age Group (years)		Percentage of respondents frightened by each of the following types of people												
		Both Sexes												
	n	% Someone within the family	95% CI	% Friend or acquaintance	95% CI	% Unrelated caregiver	95% CI	% Stranger	95% CI	% Official or legal authority	95% CI	% Other	95% CI
18-44	73	48.6	31.8-65.5	5.6	1.5-9.7	0.2	0.0-0.5	37.0	24.6-49.3	0.0	0.0-0.0	48.6	31.8-65.5
45-69	28	34.1	16.9-51.2	21.0	9.3-32.6	2.7	0.0-6.6	28.6	16.3-40.9	1.5	0.0-3.7	34.1	16.9-51.2
18-69	**101**	45.1	28.4-61.7	9.4	4.3-14.4	0.8	0.0-1.8	34.9	24.2-45.7	0.4	0.0-0.9	45.1	28.4-61.7

Analysis Information:

- Questions used: V18
- Epi Info program name: Vfearwho (unweighted); VfearwhoWT (weighted)

Percentage of respondents carrying a gun for protection outside the home

Description: Percentage of respondents carrying a loaded firearm outside the home during the past 30 days for protection.

Instrument question:
- Have you carried a loaded firearm on your person outside the home in the last 30 days?

	Percentage of respondents who carried a loaded firearm for protection outside of the home								
	Men			**Women**			**Both Sexes**		
Age Group (years)	n	% carried a loaded firearm for protection outside home	95% CI	n	% carried a loaded firearm for protection outside home	95% CI	n	% carried a loaded firearm for protection outside home	95% CI
18-44	6	0.8	0.1-1.4	3	0.1	0.0-0.3	9	0.5	0.1-0.8
45-69	13	1.5	0.5-2.5	0	0.0	0.0-0.0	13	0.8	0.3-1.3
18-69	**19**	1.0	0.5-1.5	**3**	0.1	0.0-0.2	**22**	0.6	0.3-0.9

Analysis Information:
- Questions used: V19
- Epi Info program name: Vweapon (unweighted); VweaponWT (weighted)

Mental health / Suicide

Population having considered attempting suicide in past 12 months

Description: Percentage of respondents who seriously considered attempting suicide in the last 12 months among all respondents.

Instrument question:
- During the past 12 months, have you seriously considered attempting suicide?

	Percentage having considered attempting suicide in the last 12 months								
	Men			**Women**			**Both Sexes**		
Age Group (years)	n	% considered attempting suicide	95% CI	n	% considered attempting suicide	95% CI	n	% considered attempting suicide	95% CI
18-44	600	2.1	1.0-3.2	999	8.2	5.9-10.4	1599	5.0	3.8-6.2
45-69	466	3.9	0.2-7.6	593	2.2	0.9-3.5	1059	3.1	1.1-5.1
18-69	1066	2.6	1.4-3.9	1592	6.3	4.7-7.9	2658	4.4	3.2-5.6

Analysis Information:
- Questions used: MH1
- Epi Info program name: MHconsidered (unweighted); MHconsideredWT (weighted)

Population having sought professional help

Description: Percentage of respondents who sought professional help among those who considered attempting suicide in the past 12 months.

Instrument question:
- During the past 12 months, have you seriously considered attempting suicide?
- Did you seek professional help for these thoughts?

	Percentage having sought professional help								
	Men			**Women**			**Both Sexes**		
Age Group (years)	n	% sought professional help	95% CI	n	% sought professional help	95% CI	n	% sought professional help	95% CI
18-44	17	1.1	0.0-3.5	73	24.3	13.2-35.5	90	19.3	9.5-29.0
45-69	11	21.1	0.0-53.9	17	42.7	12.8-72.6	28	28.8	2.5-55.2
18-69	28	10.0	0.0-23.6	90	26.4	15.5-37.2	118	21.3	11.3-31.3

Analysis Information:
- Questions used: MH1, MH2
- Epi Info program name: MHhelp (unweighted); MHhelpWT (weighted)

Population having planned how to attempt suicide

Description: Percentage of respondents who made a plan about how to attempt suicide in the past 12 months.

Instrument question:
- During the past 12 months, have you made a plan about how you would attempt suicide?

		Percentage having sought professional help								
	Men				**Women**				**Both Sexes**		
Age Group (years)	n	% planned how to attempt suicide	95% CI		n	% planned how to attempt suicide	95% CI		n	% planned how to attempt suicide	95% CI
18-44	600	2.1	1.0-3.2		999	8.2	5.9-10.4		1599	5.0	3.8-6.2
45-69	466	3.9	0.2-7.6		593	2.2	0.9-3.5		1059	3.1	1.1-5.1
18-69	1066	2.6	1.4-3.9		1592	6.3	4.7-7.9		2658	4.4	3.2-5.6

Analysis Information:
- Questions used: MH3
- Epi Info program name: MHplan (unweighted); MHplanWT (weighted)

Population having ever attempted suicide

Description: Percentage of respondents who have ever attempted suicide among all respondents.

Instrument question:
- Have you ever attempted suicide?

		Percentage having ever attempted suicide								
	Men				**Women**				**Both Sexes**		
Age Group (years)	n	% attempted suicide	95% CI		n	% attempted suicide	95% CI		n	% attempted suicide	95% CI
18-44	598	1.3	0.4-2.2		999	5.4	3.4-7.4		1597	3.2	2.1-4.3
45-69	467	2.3	0.8-3.8		593	2.9	1.4-4.4		1060	2.6	1.5-3.7
18-69	1065	1.6	0.8-2.4		1592	4.6	3.2-6.0		2657	3.0	2.2-3.9

Analysis Information:
- Questions used: MH4
- Epi Info program name: MHattempted (unweighted); MHattemptedWT (weighted)

Population having attempted suicide in the last 12 months

Description: Percentage of respondents who have attempted suicide in the past 12 months among those who have ever attempted suicide.

Instrument question:
- Have you ever attempted suicide?
- During the past 12 months, have you attempted suicide?

	Percentage having attempted suicide in the last 12 months								
	Men			**Women**			**Both Sexes**		
Age Group (years)	n	% attempted suicide in past 12 months	95% CI	n	% attempted suicide in past 12 months	95% CI	n	% attempted suicide in past 12 months	95% CI
18-44	9	43.8	3.4-84.3	45	36.7	18.3-55.0	54	38.1	21.5-54.8
45-69	13	31.8	9.6-54.1	18	27.1	1.6-52.6	31	29.2	8.7-49.7
18-69	22	38.6	13.5-63.7	63	34.8	19.7-49.8	85	35.8	22.6-49.0

Analysis Information:
- Questions used: MH4, MH5
- Epi Info program name: MHattemptedyear (unweighted); MHattemptedyearWT (weighted)

Method used last time suicide was attempted

Description: Percentage of different methods used the last time suicide was attempted among those respondents who have ever attempted suicide.

Instrument questions:
- Have you ever attempted suicide?
- What was the main method you used the last time you attempted suicide?

Method used last time suicide was attempted							
Men							
Age Group (years)	n	% razor, knife or other sharp instrument	95% CI	% overdose of medication	95% CI	% overdose of other substance	95% CI
18-44	9	43.8	3.4-84.3	-	-	9.7	0.0-31.9
45-69	13	11.8	0.2-23.3	-	-	12.7	0.0-38.2
18-69	22	29.9	4.5-55.2	-	-	11.0	0.0-27.8

Method used last time suicide was attempted									
Men									
Age Group (years)	n	% poisoning with pesticides	95% CI	% other poisoning	95% CI	% poisonous gases from charcoal	95% CI	% other	95% CI
18-44	9	25.2	0.0-59.0	0.0	0.0-0.0	-	-	21.2	11.5-31.0
45-69	13	6.4	0.0-15.4	10.3	0.0-32.1	-	-	58.9	29.2-88.6
18-69	**22**	17.0	0.0-37.3	4.5	0.0-14.2	-	-	37.7	19.4-55.9

Method used last time suicide was attempted							
Women							
Age Group (years)	n	% razor, knife or other sharp instrument	95% CI	% overdose of medication	95% CI	% overdose of other substance	95% CI
18-44	8	12.3	0.5-24.2	26.5	10.9-42.1	12.2	7.4-17.1
45-69	4	0.0	0.0-0.0	41.0	12.1-69.9	0.0	0.0-0.0
18-69	12	10.3	0.2-20.4	28.9	15.2-42.6	10.2	6.6-13.9

	Method used last time suicide was attempted								
	Women								
Age Group (years)	n	% poisoning with pesticides	95% CI	% other poisoning	95% CI	% poisonous gases from charcoal	95% CI	% other	95% CI
18-44	8	29.2	7.4-50.9	5.2	0.0-10.5	-	-	-	-
45-69	4	24.2	0.5-47.9	0.0	0.0-0.0	-	-	-	-
18-69	12	28.3	10.0-46.7	4.4	0.0-8.8	-	-	-	-

Method used last time suicide was attempted							
Both Sexes							
Age Group (years)	n	% razor, knife or other sharp instrument	95% CI	% overdose of medication	95% CI	% overdose of other substance	95% CI
18-44	10	19.1	5.3-32.8	20.9	8.6-33.1	11.7	6.1-17.3
45-69	11	6.1	0.0-14.8	19.9	2.3-37.4	6.5	0.0-19.1
18-69	21	15.9	4.9-26.9	20.6	11.0-30.2	10.4	5.5-15.4

Method used last time suicide was attempted									
Both Sexes									
Age Group (years)	n	% poisoning with pesticides	95% CI	% other poisoning	95% CI	% poisonous gases from charcoal	95% CI	% other	95% CI
18-44	10	28.3	10.0-46.6	4.1	0.0-8.3				
45-69	11	15.0	2.6-27.4	5.3	0.0-15.8				
18-69	21	25.1	10.4-39.7	4.4	0.3-8.5				

Analysis Information:

- Questions used: MH4, MH6
- Epi Info program name: MHmethod (unweighted); MHmethodWT (weighted)

Population seeking medical care after last suicide attempt

Description: Percentage of respondents who sought medical care the last time they attempted suicide among those who have ever attempted suicide.

Instrument question:
- Have you ever attempted suicide?
- Did you seek medical care for this attempt?

	Men				Women				Both Sexes		
Percentage having sought medical care after last suicide attempt											
Age Group (years)	n	% sought care	95% CI		n	% sought care	95% CI		n	% sought care	95% CI
18-44	9	38.8	4.3-73.3		45	46.1	25.3-66.9		54	44.6	26.2-62.9
45-69	12	18.2	0.0-40.0		18	29.9	7.7-52.1		30	25.0	8.6-41.4
18-69	21	30.5	7.6-53.4		63	42.9	24.1-61.6		84	39.6	23.6-55.7

Analysis Information:
- Questions used: MH4, MH7
- Epi Info program name: MHsoughtcare (unweighted); MHsoughtcareWT (weighted)

Population admitted to hospital for suicide attempt

Description: Percentage of respondents who were admitted to the hospital due to the last time they attempted suicide among those who sought medical care for having ever attempted suicide.

Instrument question:
- Have you ever attempted suicide?
- Did you seek medical care for this attempt?
- Were you admitted to hospital overnight because of this attempt?

	Men				Women				Both Sexes		
Percentage having been admitted to the hospital due to suicide attempt											
Age Group (years)	n	% admitted to hospital	95% CI		n	% admitted to hospital	95% CI		n	% admitted to hospital	95% CI
18-44	4	95.4	73.2-100.0		19	66.6	51.0-82.2		23	71.8	59.5-84.1
45-69	2	100.0	100.0-100.0		7	89.5	68.0-100.0		9	92.7	77.6-100.0
18-69	6	96.5	79.4-100.0		26	69.8	57.7-81.8		32	75.1	65.2-85.1

Analysis Information:
- Questions used: MH4, MH7, MH8
- Epi Info program name: MHhospital (unweighted); MHhospitalWT (weighted)

Population having close family attempt suicide

Description: Percentage of respondents who have ever had anyone in their close family attempt suicide.

Instrument question:
- Has anyone in your close family (mother, father, brother, sister or children) ever attempted suicide?

Percentage having close family who attempted suicide											
	Men				**Women**				**Both Sexes**		
Age Group (years)	n	% close family attempt suicide	95% CI		n	% close family attempt suicide	95% CI		n	% close family attempt suicide	95% CI
18-44	587	7.4	4.4-10.4		990	10.8	8.2-13.4		1577	9.0	7.2-10.9
45-69	458	11.7	8.2-15.3		590	12.5	8.4-16.6		1048	12.1	9.7-14.6
18-69	1045	8.7	6.3-11.2		1580	11.3	9.2-13.5		2625	10.0	8.4-11.6

Analysis Information:
- Questions used: MH9
- Epi Info program name: MHfamilyattempt (unweighted); MHfamilyattemptWT (weighted)

Population having close family die from suicide

Description: Percentage of respondents who have ever had anyone in their close family die from suicide.

Instrument question:
- Has anyone in your close family (mother, father, brother, sister or children) ever died from suicide?

Percentage having close family who died from suicide											
	Men				**Women**				**Both Sexes**		
Age Group (years)	n	% close family died from suicide	95% CI		n	% close family died from suicide	95% CI		n	% close family died from suicide	95% CI
18-44	593	6.8	4.1-9.6		990	9.0	6.4-11.6		1583	7.9	6.0-9.7
45-69	462	12.0	7.9-16.2		591	14.2	10.1-18.3		1053	13.1	10.5-15.7
18-69	1055	8.4	6.3-10.5		1581	10.6	8.5-12.7		2636	9.5	7.9-11.1

Analysis Information:
- Questions used: MH10
- Epi Info program name: MHfamilydeath (unweighted); MHfamilydeathWT (weighted)

Physical Measurements

Blood pressure

Description: Mean blood pressure among all respondents, including those currently on medication for raised blood pressure.

Instrument question:
- Reading 1-3 systolic and diastolic blood pressure

Mean systolic blood pressure (mmHg)											
Age Group (years)	Men				Women				Both Sexes		
	n	Mean	95% CI		n	Mean	95% CI		n	Mean	95% CI
18-44	597	125.2	123.6-126.9		995	116.5	115.3-117.8		1592	121.1	120.1-122.1
45-69	464	136.3	132.7-139.9		589	136.3	134.1-138.5		1053	136.3	134.2-138.4
18-69	1061	128.5	127.1-130.0		1584	122.8	121.5-124.0		2645	125.7	124.8-126.7

Mean diastolic blood pressure (mmHg)											
Age Group (years)	Men				Women				Both Sexes		
	n	Mean	95% CI		n	Mean	95% CI		n	Mean	95% CI
18-44	597	76.3	74.8-77.9		995	73.4	72.5-74.3		1592	74.9	74.0-75.8
45-69	464	83.9	81.8-86.0		589	84.2	82.7-85.7		1053	84.0	82.8-85.3
18-69	1061	78.6	77.5-79.7		1584	76.8	76.0-77.6		2645	77.7	77.0-78.4

Analysis Information:
- Questions used: M4a, M4b, M5a, M5b, M6a, M6b
- Epi Info program name: Mbloodpressure (unweighted); MbloodpressureWT (weighted)

Raised blood pressure

Description: Percentage of respondents with raised blood pressure.

Instrument question:
- Reading 1-3 systolic and diastolic blood pressure
- During the past two weeks, have you been treated for raised blood pressure with drugs (medication) prescribed by a doctor or other health worker?

SBP ≥140 and/or DBP ≥ 90 mmHg, excluding those on medication for raised blood pressure										
Age Group (years)	**Men**				**Women**				**Both Sexes**	
	n	%	95% CI		n	%	95% CI		n	%	95% CI
18-44	575	15.9	11.8-19.9		933	8.8	6.2-11.4		1508	12.5	10.2-14.8
45-69	371	31.2	25.7-36.8		387	34.9	28.0-41.8		758	32.9	29.0-36.9
18-69	946	19.8	16.1-23.5		1320	15.2	12.3-18.1		2266	17.7	15.6-19.8

SBP ≥140 and/or DBP ≥ 90 mmHg or currently on medication for raised blood pressure										
Age Group (years)	**Men**				**Women**				**Both Sexes**	
	n	%	95% CI		n	%	95% CI		n	%	95% CI
18-44	593	18.2	14.0-22.4		989	13.5	10.6-16.3		1582	15.9	13.5-18.4
45-69	457	45.7	40.3-51.1		571	54.8	49.4-60.2		1028	50.2	46.6-53.7
18-69	1050	26.4	22.9-29.9		1560	26.2	23.4-29.0		2610	26.3	24.3-28.3

SBP ≥160 and/or DBP ≥ 100 mmHg, excluding those on medication for raised blood pressure										
Age Group (years)	**Men**				**Women**				**Both Sexes**	
	n	%	95% CI		n	%	95% CI		n	%	95% CI
18-44	575	3.6	1.7-5.5		933	1.6	0.8-2.4		1508	2.7	1.6-3.7
45-69	371	10.6	7.3-14.0		387	12.1	8.0-16.2		758	11.3	8.5-14.1
18-69	946	5.4	3.7-7.1		1320	4.2	3.0-5.4		2266	4.8	3.7-6.0

SBP ≥160 and/or DBP ≥ 100 mmHg or currently on medication for raised blood pressure										
Age Group (years)	**Men**				**Women**				**Both Sexes**	
	n	%	95% CI		n	%	95% CI		n	%	95% CI
18-44	593	6.2	3.9-8.6		989	6.7	4.7-8.6		1582	6.5	4.9-8.0
45-69	457	29.4	24.4-34.5		571	39.0	33.7-44.2		1028	34.1	30.6-37.6
18-69	1050	13.1	11.0-15.3		1560	16.6	14.3-19.0		2610	14.8	13.2-16.4

Analysis Information:
- Questions used: M4a, M4b, M5a, M5b, M6a, M6b, M7
- Epi Info program name: Mraisedbp (unweighted); MraisedbpWT (weighted)

Blood pressure diagnosis, treatment and control

Description: Raised blood pressure diagnosis, treatment and control among participants with raised blood pressure or taking medication for raised blood pressure.

Instrument questions:
- Have you ever had your blood pressure measured by a doctor or other health worker?
- Have you ever been told by a doctor or other health worker that you have raised blood pressure or hypertension?
- During the past two weeks, have you been treated for raised blood pressure with drugs (medication) prescribed by a doctor or other health worker?
- Reading 1-3 systolic and diastolic blood pressure

Raised blood pressure diagnosis, treatment and control								
Men								
Age Group (years)	n	% with raised blood pressure, not previously diagnosed	95% CI	% with previously diagnosed raised blood pressure, not on medication	95% CI	% with previously diagnosed raised blood pressure, on medication but not controlled	95% CI	% with previously diagnosed raised blood pressure, on medication and blood pressure controlled	95% CI
18-44	115	76.8	68.4-85.2	10.3	4.6-16.0	10.3	4.2-16.4	2.6	0.0-5.3
45-69	214	40.8	32.2-49.4	13.9	8.1-19.6	27.5	18.0-36.9	17.8	11.6-24.1
18-69	329	58.2	51.2-65.1	12.1	8.3-16.0	19.2	13.0-25.4	10.5	6.8-14.1

Raised blood pressure diagnosis, treatment and control								
Women								
Age Group (years)	n	% with raised blood pressure, not previously diagnosed	95% CI	% with previously diagnosed raised blood pressure, not on medication	95% CI	% with previously diagnosed raised blood pressure, on medication but not controlled	95% CI	% with previously diagnosed raised blood pressure, on medication and blood pressure controlled	95% CI
18-44	133	40.9	30.5-51.4	21.3	12.7-30.0	10.6	4.8-16.4	27.1	17.2-37.0
45-69	309	26.9	19.6-34.1	17.8	10.8-24.8	32.6	26.0-39.3	22.7	16.9-28.5
18-69	442	31.8	25.6-38.0	19.1	13.6-24.6	24.9	19.6-30.1	24.3	19.1-29.4

Age Group (years)	n	% with raised blood pressure, not previously diagnosed	95% CI	% with previously diagnosed raised blood pressure, not on medication	95% CI	% with previously diagnosed raised blood pressure, on medication but not controlled	95% CI	% with previously diagnosed raised blood pressure, on medication and blood pressure controlled	95% CI
Raised blood pressure diagnosis, treatment and control									
Both sexes									
18-44	248	62.3	54.7-69.9	14.8	9.7-19.8	10.4	6.2-14.7	12.5	8.0-17.0
45-69	523	33.3	27.3-39.3	16.0	11.6-20.4	30.2	24.9-35.6	20.4	16.1-24.8
18-69	771	45.5	40.2-50.7	15.5	12.1-18.8	21.9	18.0-25.8	17.1	13.8-20.4

Mean heart rate

Description: Mean heart rate (beats per minute).

Instrument question:
- Reading 1-3 heart rate

Age Group (years)	Men			Women			Both Sexes		
	N	mean	95% CI	n	mean	95% CI	n	mean	95% CI
18-44	597	76.6	75.2-78.1	996	83.3	**82.3-84.3**	1593	79.8	**78.8-80.8**
45-69	464	77.1	75.5-78.7	590	80.9	**79.7-82.2**	1054	79.0	**77.9-80.1**
18-69	1061	76.8	75.5-78.0	1586	82.5	**81.7-83.3**	2647	79.6	**78.7-80.4**

Table title: **Mean heart rate (beats per minute)**

Analysis Information:
- Questions used: M16a, M16b, M16c
- Epi Info program name: Mheartrate (unweighted); MheartrateWT (weighted)

Height, weight and BMI

Description: Mean height, weight, and body mass index among all respondents (excluding pregnant women).

Instrument questions:
- For women: Are you pregnant?
- Height
- Weight

Mean height (cm)							
Age Group (years)	Men				Women		
	n	Mean	95% CI		n	Mean	95% CI
18-44	598	169.4	**167.7-171.1**		987	157.5	**156.6-158.4**
45-69	464	168.1	**166.8-169.3**		589	156.1	**154.9-157.3**
18-69	1062	169.0	**167.7-170.2**		1576	157.1	**156.3-157.8**

Mean weight (kg)							
Age Group (years)	Men				Women		
	n	Mean	95% CI		n	Mean	95% CI
18-44	598	69.6	**66.8-72.4**		987	67.7	**65.8-69.5**
45-69	464	73.2	**70.8-75.6**		588	72.7	**70.7-74.6**
18-69	1062	70.7	**68.3-73.1**		1575	69.2	**67.8-70.7**

Mean BMI (kg/m^2)											
Age Group (years)	Men				Women				Both Sexes		
	n	Mean	95% CI		N	Mean	95% CI		n	Mean	95% CI
18-44	592	24.2	**23.5-24.9**		975	27.3	**26.7-27.9**		1567	25.7	**25.2-26.2**
45-69	461	25.6	**24.9-26.3**		578	29.5	**28.8-30.2**		1039	27.5	**27.0-28.1**
18-69	1053	24.6	**24.0-25.3**		1553	28.0	**27.5-28.5**		2606	26.2	**25.8-26.7**

Analysis Information:
- Questions used: M8, M11, M12
- Epi Info program name: Mbmi (unweighted); MbmiWT (weighted)

BMI categories   Description: Percentage of respondents (excluding pregnant women) in each BMI category.

Instrument questions:
- For women: Are you pregnant?
- Height
- Weight

BMI classifications									
Men									
Age Group (years)	n	% Under-weight <18.5	95% CI	% Normal weight 18.5-24.9	95% CI	% BMI 25.0-29.9	95% CI	% Obese ≥30.0	95% CI
18-44	592	10.4	6.8-14.0	54.3	49.9-58.7	22.3	17.9-26.7	13.0	9.6-16.5
45-69	461	6.4	2.4-10.5	43.4	37.0-49.8	34.0	27.8-40.2	16.2	12.0-20.4
18-69	1053	9.2	5.8-12.6	51.0	47.2-54.8	25.8	21.8-29.8	14.0	11.1-16.8

BMI classifications									
Women									
Age Group (years)	n	% Under-weight <18.5	95% CI	% Normal weight 18.5-24.9	95% CI	% BMI 25.0-29.9	95% CI	% Obese ≥30.0	95% CI
18-44	975	6.7	4.6-8.9	37.4	33.5-41.2	26.1	22.3-30.0	29.8	26.0-33.6
45-69	578	2.4	0.9-3.8	22.9	18.7-27.2	31.4	26.9-35.8	43.3	38.1-48.6
18-69	1553	5.4	3.8-6.9	32.8	29.8-35.9	27.8	25.1-30.5	34.0	31.1-37.0

BMI classifications									
Both Sexes									
Age Group (years)	n	% Under-weight <18.5	95% CI	% Normal weight 18.5-24.9	95% CI	% BMI 25.0-29.9	95% CI	% Obese ≥30.0	95% CI
18-44	1567	8.7	6.6-10.8	46.3	43.2-49.3	24.1	21.5-26.7	21.0	18.0-23.9
45-69	1039	4.4	2.3-6.6	33.3	29.4-37.3	32.7	29.0-36.5	29.5	26.1-32.9
18-69	2606	7.4	5.5-9.2	42.3	39.7-44.9	26.7	24.6-28.9	23.6	21.3-25.9

Analysis Information:
- Questions used: M8, M11, M12
- Epi Info program name: Mbmiclass (unweighted); MbmiclassWT (weighted)

BMI ≥25   Description: Percentage of respondents (excluding pregnant women) classified as overweight (BMI≥25).

Instrument questions:
- For women: Are you pregnant?
- Height
- Weight

Age Group (years)	Men			Women			Both Sexes		
	n	% BMI≥25	95% CI	n	% BMI≥25	95% CI	n	% BMI≥25	95% CI
18-44	592	35.3	29.8-40.8	975	55.9	51.9-59.9	1567	45.1	41.6-48.6
45-69	461	50.2	42.9-57.5	578	74.7	70.3-79.1	1039	62.2	57.9-66.6
18-69	1053	39.8	34.6-44.9	1553	61.8	58.6-65.0	2606	50.3	47.2-53.5

Analysis Information:
- Questions used: M8, M11, M12
- Epi Info program name: Mbmiclass (unweighted); MbmiclassWT (weighted)

Waist circumference   Description: Mean waist circumference among all respondents (excluding pregnant women).

Instrument questions:
- For women: Are you pregnant?
- Waist circumference measurement

Waist circumference (cm)							
Age Group (years)	Men				Women		
	n	Mean	95% CI		n	Mean	95% CI
18-44	598	86.5	84.5-88.5		987	89.8	**88.0-91.5**
45-69	464	92.9	88.1-97.8		588	99.0	**97.2-100.7**
18-69	1062	88.4	85.9-91.0		1575	92.7	**91.3-94.0**

Analysis Information:
- Questions used: M8, M14
- Epi Info program name: Mwaist (unweighted); MwaistWT (weighted)

Biochemical Measurements

Mean fasting blood glucose

Description: mean fasting blood glucose results including those currently on medication for diabetes (non-fasting recipients excluded).

Instrument questions:
- During the last 12 hours have you had anything to eat or drink, other than water?
- Blood glucose measurement

Mean fasting blood glucose (mmol/L)											
Age Group (years)	**Men**				**Women**				**Both Sexes**		
	n	Mean	95% CI		n	Mean	95% CI		n	Mean	95% CI
18-44	109	79.5			199	93.9			308	86.6	
45-69	83	97.6			124	120.2			207	109.4	
18-69	192	85.0			323	102.5			515	93.8	

Analysis Information:

- Questions used: B1, B5
- Epi Info program name:
  - measurement in mmol/L: Bglucose (unweighted); BglucoseWT (weighted)
  - measurement in mg/dl: BglucoseMg (unweighted); BglucoseMgWT (weighted)

Raised blood glucose

Description: Categorization of respondents into blood glucose level categories and percentage of respondents currently on medication for raised blood glucose (non-fasting recipients excluded).

Instrument questions:
- In the past two weeks, have you taken any drugs (medication) for diabetes prescribed by a doctor or other health worker?
- Are you currently taking insulin for diabetes prescribed by a doctor or other health worker?
- During the last 12 hours have you had anything to eat or drink, other than water?
- Blood glucose measurement
- Today, have you taken insulin or other drugs (medication) that have been prescribed by a doctor or other health worker?

Impaired Fasting Glycaemia*											
Age Group (years)	**Men**				**Women**				**Both Sexes**		
	n	%	95% CI		n	%	95% CI		n	%	95% CI
18-44	111	3.0	0.0-6.0		200	3.6	0.5-6.6		311	3.3	1.0-5.6
45-69	83	8.8	0.2-17.4		125	10.5	4.2-16.9		208	9.7	4.4-15.0
18-69	194	4.7	1.5-8.0		325	5.8	2.9-8.8		519	5.3	3.0-7.6

Raised blood glucose or currently on medication for diabetes**											
Age Group (years)	**Men**				**Women**				**Both Sexes**		
	n	%	95% CI		n	%	95% CI		n	%	95% CI
18-44	111	4.0	0.0-8.1		200	9.7	4.6-14.9		311	6.8	3.7-10.0
45-69	83	15.0	6.4-23.7		125	27.7	18.7-36.7		208	21.7	14.8-28.5
18-69	194	7.3	3.3-11.3		325	15.6	11.1-20.2		519	11.5	8.5-14.4

Currently on medication for diabetes											
Age Group (years)	**Men**				**Women**				**Both Sexes**		
	n	%	95% CI		n	%	95% CI		n	%	95% CI
18-44	261	1.8	0.0-3.7		444	3.0	0.7-5.3		705	2.4	0.9-3.9
45-69	197	12.5	7.0-18.1		276	24.4	17.7-31.1		473	18.5	14.0-22.9
18-69	458	5.0	2.8-7.2		720	9.5	6.7-12.2		1178	7.2	5.4-9.0

* Impaired fasting glycaemia is defined as either
- capillary whole blood value: $\geq$5.6mmol/L (100mg/dl) and <6.1mmol/L (110mg/dl)

** Raised blood glucose is defined as either
- capillary whole blood value: $\geq$ 6.1 mmol/L (110 mg/dl)

Analysis Information:
- Questions used: H8, H9, B1, B5, B6

Epi Info program name:
- measurement in mmol/L: Bglucose (unweighted); BglucoseWT (weighted)
- measurement in mg/dl: BglucoseMg (unweighted); BglucoseMgWT (weighted)

Total cholesterol

Description: Mean total cholesterol among all respondents including those currently on medication for raised cholesterol.

Instrument question:
- Total cholesterol measurement

Mean total cholesterol (mmol/L)											
Age Group (years)	**Men**				**Women**				**Both Sexes**		
	n	Mean	95% CI		n	Mean	95% CI		n	Mean	95% CI
18-44	182	181.8			340	186.5	181.2-191.9		522	184.2	179.2-189.2
45-69	149	205.4			216	219.0	210.3-227.6		365	212.3	205.9-218.7
18-69	331	189.0			556	196.6	192.0-201.3		887	192.8	188.8-196.9

Analysis Information:
- Questions used: B8
- Epi Info program name:
    - measurement in mmol/L: Btotallipids (unweighted); BtotallipidsWT (weighted)
    - measurement in mg/dl: BtotallipidsMg (unweighted); BtotallipidsMgWT (weighted)

Raised total cholesterol

Description: Percentage of respondents with raised total cholesterol and percentage of respondents currently on medication for raised cholesterol.

Instrument questions:
- Total cholesterol measurement
- During the past two weeks, have you been treated for raised cholesterol with drugs (medication) prescribed by a doctor or other health worker?

Total cholesterol ≥ 5.0 mmol/L or ≥ 190 mg/dl or currently on medication for raised cholesterol									
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-44	182	38.8	30.7-46.9	340	44.4	38.0-50.8	522	41.6	36.2-47.0
45-69	149	65.0	54.2-75.9	216	73.2	65.5-80.9	365	69.2	62.2-76.2
18-69	331	46.8	40.1-53.5	556	53.4	48.2-58.6	887	50.1	45.7-54.5

Total cholesterol ≥ 6.2 mmol/L or ≥ 240 mg/dl or currently on medication for raised cholesterol									
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-44	182	10.5	5.4-15.5	340	8.6	4.8-12.4	522	9.5	6.2-12.8
45-69	149	22.1	13.3-30.9	216	33.5	25.9-41.0	365	27.9	22.1-33.8
18-69	331	14.0	9.6-18.4	556	16.4	12.7-20.0	887	15.2	12.3-18.1

Analysis Information:
- Questions used: B8, B9
- Epi Info program name:
  - measurement in mmol/L: Btotallipids (unweighted); BtotallipidsWT (weighted)
  - measurement in mg/dl: BtotallipidsMg (unweighted); BtotallipidsMgWT (weighted)

High density lipoprotein (HDL)

Description: Mean HDL among all respondents and percentage of respondents with low HDL.

Instrument question:
- HDL cholesterol measurement

Mean HDL (mmol/L)											
Age Group (years)	**Men**				**Women**				**Both Sexes**		
	n	Mean	95% CI		n	Mean	95% CI		n	Mean	95% CI
18-44	182	51.5			342	48.8	**46.4-51.1**		524	50.1	**48.1-52.1**
45-69	149	47.6			218	54.4	**51.5-57.3**		367	51.1	**48.5-53.7**
18-69	331	50.3			560	50.5	**48.5-52.5**		891	50.4	**48.7-52.1**

Percentage of respondents with HDL <1.03mmol/L or <40 mg/dl			
Age Group (years)	**Men**		
	n	%	95% CI
18-44	182	26.6	18.7-34.6
45-69	149	44.9	33.4-56.4
18-69	331	32.2	25.8-38.6

Percentage of respondents with HDL <1.29mmol/L or <50 mg/dl			
Age Group (years)	**Women**		
	n	%	95% CI
18-44	342	60.2	53.6-66.8
45-69	218	43.8	35.8-51.8
18-69	560	55.1	49.4-60.8

Analysis Information:
- Questions used: B11
- Epi Info program name:
  - measurement in mmol/L: Bhdlipids (unweighted); BhdlipidsWT (weighted)
  - measurement in mg/dl: BhdlipidsMg (unweighted); BhdlipidsMgWT (weighted)

Triglycerides Description: Mean fasting triglycerides among all respondents and percentage of respondents with raised fasting triglycerides (non-fasting recipients excluded).

Instrument questions:
- During the last 12 hours have you had anything to eat or drink, other than water?
- Triglyceride measurement

Mean fasting triglycerides (mg/L)									
Age Group (years)	Men			Women			Both Sexes		
	n	Mean	95% CI	n	Mean	95% CI	n	Mean	95% CI
18-44	109	149.6	109	202	136.6	202	311	143.2	311
45-69	84	177.0	84	123	176.7	123	207	176.8	207
18-69	193	158.0	193	325	149.4	325	518	153.7	518

Percentage of respondents with fasting triglycerides ≥ 1.7 mmol/L or ≥ 150 mg/dl									
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-44	109	39.5	28.7-50.4	202	32.9	25.0-40.8	311	36.2	29.4-43.1
45-69	84	52.7	36.6-68.7	123	48.9	37.6-60.2	207	50.7	40.9-60.6
18-69	193	43.5	33.9-53.1	325	38.0	31.6-44.5	518	40.8	34.9-46.6

Percentage of respondents with fasting triglycerides ≥ 2.0 mmol/L or ≥ 180 mg/dl									
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-44	109	30.7	21.2-40.2	202	22.5	15.9-29.2	311	26.7	20.7-32.7
45-69	84	44.3	28.9-59.7	123	36.5	27.1-46.0	207	40.3	31.3-49.3
18-69	193	34.8	26.4-43.3	325	27.0	21.3-32.8	518	30.9	25.8-36.0

Analysis Information:
- Questions used: B1, B10
- Epi Info program name:
    - measurement in mmol/L: Btriglyceride (unweighted); BtriglycerideWT (weighted)
    - measurement in mg/dl: BtriglycerideMg (unweighted); BtriglycerideMgWT (weighted)

Summary of Combined Risk Factors

Summary of Combined Risk Factors

Description: Percentage of respondents with 0, 1-2, or 3-5 of the following risk factors:

- Current daily smoking
- Less than five servings of fruit and/or vegetables per day
- Not meeting WHO recommendations on physical activity for health (<150 minutes of moderate activity per week, or equivalent)
- Overweight or obese (BMI $\geq$ 25 kg/m^2)
- Raised BP (SBP $\geq$ 140 and/or DBP $\geq$ 90 mmHg or currently on medication for raised BP).

Instrument questions: combined from Step 1 and Step 2

Summary of Combined Risk Factors							
Men							
Age Group (years)	N	% with 0 risk factors	95% CI	% with 1-2 risk factors	95% CI	% with 3-5 risk factors	95% CI
18-44	569	1.3	0.2-2.4	79.6	75.6-83.7	19.1	15.0-23.1
45-69	456	1.4	0.3-2.5	53.4	47.1-59.7	45.2	39.0-51.4
18-69	1025	1.3	0.4-2.3	71.7	68.0-75.3	27.0	23.5-30.5

Summary of Combined Risk Factors							
Women							
Age Group (years)	N	% with 0 risk factors	95% CI	% with 1-2 risk factors	95% CI	% with 3-5 risk factors	95% CI
18-44	957	1.3	0.5-2.2	70.5	66.6-74.3	28.2	24.4-32.0
45-69	567	1.1	0.0-2.4	42.1	36.7-47.6	56.7	51.2-62.2
18-69	1524	1.3	0.6-2.0	61.6	58.2-65.0	37.1	33.7-40.5

Summary of Combined Risk Factors							
Both Sexes							
Age Group (years)	N	% with 0 risk factors	95% CI	% with 1-2 risk factors	95% CI	% with 3-5 risk factors	95% CI
18-44	1526	1.3	0.6-2.0	75.3	73.1-77.4	23.4	21.3-25.5
45-69	1023	1.3	0.4-2.2	47.9	43.9-51.9	50.8	46.8-54.9
18-69	2549	1.3	0.7-1.9	66.8	64.8-68.8	31.9	29.9-33.8

Analysis Information:

- Questions used: T1, T2, D1-D4, P1-P15b, M4a-M6b, M7, M8, M11, M12
- Epi Info program name: Raisedrisk (unweighted); RaisedriskWT (weighted)