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# **STEPS RISK FACTOR SURVEY REPORT**

**August 2010**

**Ministry of Health and Social Development  
In collaboration with BVI Social Security Board  
&  
CAREC/PAHO/WHO**

Ministry of Health and Social Development  
Government of the Virgin Islands

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## List of Abbreviations

- CNCD**-chronic non-communicable disease  
**NCD**-non-communicable disease  
**NGO**-non-governmental organization  
**GDP**-gross domestic product  
**BP**-blood pressure  
**BMI**-body mass index  
**DBP**-diastolic blood pressure  
**SBP**-systolic blood pressure  
**PDA**s – handheld personal organizer



## Message from the Minister of Health & Social Development



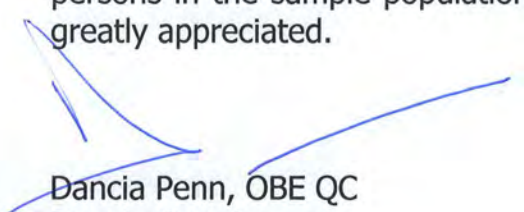
Over the last 20-30 years there have been socio-economic, lifestyles and dietary changes in our society caused by a shift in the disease pattern of communicable to non-communicable diseases (NCDs) such as diabetes, obesity, cardiovascular diseases, cancer and high blood pressure. These new diseases are posing a challenge to the Health Care Service and if they are not stemmed could alter the social and economic growth made in the Territory's development over the last 30 years.

In this report, the NCD risk factors (tobacco use, alcohol, diet, physical activity, body weight, blood pressure, blood glucose and lipids) a profile of the Virgin Islands is articulated. The results are based on a Territory-wide survey of the Virgin Islands population which was done in 2009. This survey is part of a regional effort to collect important information for public health planning, and to establish sustainable Risk Factor Surveillance in order to influence changes in public policy and support the implementation of interventions aimed at preventing and controlling the growing economic burden of NCD in the region.

The survey results have shown that a larger number of our population is at risk for NCDs and therefore a territorial response will be urgently needed to improve the health and quality of life of the people and these islands.

I wish to thank the BVI Social Security Board, the Caribbean Epidemiology Center, CAREC, Pan American Health Organization (PAHO) and the World Health Organization (PAHO) for collaborating with the Ministry of Health & Social Development on this important project. Without the financial and technical support from these agencies, this project would not have been possible.

I also would like to thank the health team for the important role played in the planning and implementing of this study. I would also like to thank the survey field team and persons in the sample population who participated in the survey. All your efforts were greatly appreciated.

  
Dancia Penn, OBE QC  
Deputy Premier and  
Minister for Health & Social Development



## Foreword



Chronic non-communicable diseases are the leading causes of death and ill health in the Virgin Islands. These conditions cannot be cured and available treatments have to be used for the remaining life time once a person is diagnosed with one of these conditions. The result is a growing socioeconomic burden, in addition to the loss of productive years for those who are affected by these conditions.

The risk factors for these conditions are well known. Fortunately, many of the risk factors are modifiable and lend themselves to modification. It is thus prudent that the Ministry of Health determine the prevalence of these factors to enable the development of targeted programs and interventions to address the mortality, morbidity, financial and social cost associated with these conditions. Thus the WHO risk factor survey which is a study of the risk factors that predisposes the population to chronic non-communicable diseases was conducted in the Virgin Islands in 2009.

The findings of this survey provide information on population characteristics and the risk factors. They will be used to support the development of the National NCD Policy, Plans and Programs. This document provides baseline information that will enable the Territory to assess the impact of the strategies and activities for the prevention and control of CNCDs.

A handwritten signature in black ink, appearing to read 'I. Potter'.

Dr. Irad Potter  
Chief Medical Officer  
Ministry of Health & Social Development



## Executive Summary

The Chronic Disease STEPS Survey was conducted in the Virgin Islands from February 2009 to June 2009. The BVI STEPS survey is a population based survey conducted in the Virgin Islands to assess the risk factors of CNDs in adults in the Virgin Islands. A stratified simple random sample design was used to produce representative data for the age group Survey of adults, age 25 to 64 years living in the BVI for at least a year. Established inclusion and exclusion criteria were used which included adults of both sexes living in the Territory on Tortola, Anegada, Virgin Gorda and Jost Van Dyke. One thousand, one hundred and five persons actually participated in the study. The overall response rate was 61.4%.

Chronic non-communicable diseases (CNCDs) have been on the increase worldwide. In the Virgin Islands there has been a significant increase over the last twenty (20) years and this trend is growing. Obesity and its co-morbidities; hypertension, diabetes and cancers are major contributors to the burden of disease in the population. The complications from these conditions utilize a significant portion of the national health budget annually.

Risk factor surveys globally have provided accurate information to better address the increasing incidences of CNCDs. According to the World Health Organization (WHO), if these risk factors were eliminated at least 80% of all premature heart disease, stroke, and type 2 diabetes and over 40% of cancers would be prevented.

The purpose of the BVI STEPS Risk Factor Survey is essentially to provide scientific data on health behaviours and bio-chemical test results to be used in the following ways:-

- To estimate the prevalence of risk factors and to identify groups at risk for NCDs in the population.
- To provide baseline data on prevalence of the risk factors for chronic non-communicable diseases by 20 years strata by male and females aged 25-64.
- To establish a NCD surveillance system
- To provide future reference for similar surveys to be done within 5 years.
- To utilize the information for developing a national strategy for NCDs prevention and control.

The report highlights findings of poor lifestyle practices such as high levels of alcohol consumption, low fruit and vegetable intake and low levels of physical activity. It also gives findings for physical risk factors and biochemical risk factors, with concomitant recommendations.

Questions asked about cancer screenings are also discussed.



## **Behavioral Risk Factors**

As was expected, the rate of tobacco use in the Territory was low; only 6.4% of adults (age 25-64) smoked and –3.1% of the population smoke tobacco daily. The Ministry of Health will continue to advocate for the strict enforcement of the Tobacco Control Act which bans smoking in work areas and public places in the Virgin Islands.

On the other hand, the use of alcohol, especially among the male population, showed that 50% of the males drank alcohol in the past 30 days. Twenty-seven percent of the males also engaged in heavy episodic drinking (men who had five or more drinks and women who had four or more drinks on any day in thirty days).

Consumption of fruit and vegetable was very low among both sexes. The prevalence of those who report eating less than five servings of fruit and or vegetable on average per day is 92% over all.

In the area of Physical Activity, 61% of the population was classified as being physically inactive with less than 600 MET- minutes of physical activity per week. It is interesting to note that males were more physically active than females. For example 62% of males participated in high level of activity defined as  $\geq 3000$  MET- minutes per week where as only 33.4% of the female.

## **Physical Risk Factors**

The study revealed that a large percentage of the population ages 25-64 is overweight. Seventy five (75%) of both sexes had BMI greater the 25 KG/m<sup>2</sup>. Among the female population 44% had BMI greater than 30 KG/m<sup>2</sup>.

The prevalence of raised blood pressure in the population is also high and with a higher incidence among males. The results show that sixty nine percent of the surveyed population had raised BP greater than 140 mmHg and greater than 90mmHg who are not currently on medication for this condition.

## **Biochemical Risk Factors**

### **Combined Factors**

The survey investigated five common and important risk factors for NCDs. These are daily smoking, eating less than 5 servings of fruits and vegetables per day, low level of physical activity, overweight (BMI $\geq$ 25 Kg/m<sup>2</sup>), raised BP (SBP $\geq$ 140 and/or (BP $\geq$ 90 mm hg or currently on medication for raised BP). Forty-six percent of the surveyed population within the age group 25-64 years had three or more of the above risk factors.



Forty-one (41%) of the population in the age group 25 to 44 years had three or more of the five risk factors. Among the 45 to 64 years, 52% had three of the five risk factors. Based on the findings of the survey, it is significant to note that there was not much difference between those in the age 25 to 44 years and the age group 45 to 64 years. This has serious implications for the labour force as more persons will acquire a chronic non-communicable disease and become ill during their most productive years. The cost associated with complications from acquiring chronic diseases at an earlier age can be significant given the need for longer treatment and care.

### **Cancer Screening**

Among the female population who were surveyed, eighty two percent (82%) reported that they were shown how to examine their breasts (self-exam/screening) Forty-three percent of the respondents had feces checked for hidden blood. This is in contrast to only 16% of the respondents who have had a colonoscopy. A large percentage of the female population reported doing regular pap smear and mamogram tests.

### **Conclusion**

The outcome of the survey indicates a high prevalence of NCDs Risk Factors in the population. There is clear evidence for a coordinated, comprehensive integrated NCDs strategy addressing lifestyle, environmental and policy changes across all sectors.

## **1. BACKGROUND**

### **1.1 DEMOGRAPHIC PROFILE**

The population of the Virgin Islands is approximately twenty eight thousand, eight hundred and eighty two (28,882) of which fifty percent (50%) female and almost fifty percent (49.9%) male. Fifty percent (50%) of the population is made up of Native Virgin Islands with the remainder comprised largely of nationals from other Caribbean countries. Eight two percent (82%) of the population is of African descent, three percent (3%) East Indian, seven percent (7%) White Caucasian, six percent (6%) Mixed, two percent (2%) Other and Not Stated.

The Territory is comprised of approximately 50 islands, cays and rocks, 15 of which are inhabited, and is located between 18°20 North Latitude, and 64°30 West Longitude. It has a total land mass of 59.3 square miles spread over 1,330 square miles in the North Eastern Caribbean Sea. The four largest islands are Tortola (21.5 square miles), Anegada (15.2 sq miles), Virgin Gorda (8.5 square miles) and Jost Van Dyke (3.2 square miles). The topography of the Virgin Islands varies from extremely flat in Anegada to mountainous and rugged in Tortola with the highest point Mount Sage, at 1780 feet above sea level.

The Capital, Road Town is located on Tortola. A fairly extensive network of roads provides access to settlements on the four largest islands. There is no government owned public transportation system in the Territory but private vehicle ownership is high and private transportation services are readily available. Inter island transportation is mostly by ferry boat, with limited air taxi services between Tortola, Virgin Gorda, and Anegada.

### **1.2 ECONOMY**

The Virgin Islands has a stable and prosperous economy fuelled mainly by tourism and financial services. Other active industries include construction, fishing, livestock cultivation and rum production. Due to traditional close links with the United States Virgin Islands, (formerly the Danish West Indies) the Virgin Islands has used the United States dollar as its currency since 1959. The financial service industry mainly through the incorporation of international business company fees, is the major source of government revenue, while tourism the major contributor to economic growth, providing jobs and income to a vast majority of residents, mainly imported workers. Other industries, such as construction, communication, real estate and house renting contribute to the gross domestic product of the Territory.



### **1.3 GOVERNMENT**

The Territory is a United Kingdom Overseas Territory with a locally elected government that is responsible for the Territory's internal and financial affairs. The House of Assembly consists of 13 members. There are nine electoral districts representatives and four at large members. Elections to the House of Assembly are held every four years. A crown appointed Governor possesses reserved Cabinet powers in the areas of defense and internal security, external affairs, conditions of service of the Public Service and the judiciary. The Cabinet is headed by a Premier and four other ministers all of whom are selected from among the duly elected members of the House of Assembly.

### **1.4 HEALTH SYSTEM AND HEALTH STATUS**

The BVI has a forty-four (53) bed public hospital, Peebles Hospital, and an eight (8) bed private hospital the Bougainvillea Clinic. Both are located in Road Town. Peebles Hospital offers inpatient, obstetrical and gynecological, pediatrics, general surgery, ophthalmological, psychiatric services and some neonatal intensive care services. Basic support diagnostic services such as biomedical tests, X-ray, ultrasound and CT Scans are available.

The life expectancy at birth ranges from 75 years to 81 years males and for females 79 years to 91 years. Infant mortality rate stood at 7.59 % in the year 2007.

Chronic non-communicable diseases, mainly diabetes and hypertension, contribute significantly to morbidity and mortality in adults. Obesity, particularly among women and children is one of the major health risks facing the BVI. This is felt to be related to a lack of physical activity and a diet high in sugar, fats and processed or refined foods.

### **1.5 CHRONIC NON-COMMUNICABLE DISEASE STUDIES**

No studies have been done on the prevalence of non-communicable disease in the Territory. Available morbidity data is based on hospital admissions and discharges. There are registers in the community health clinics for hypertension and diabetes.

## **2 RATIONALE**

Over the last fifteen years cancers, diabetes, heart diseases and high blood pressure have been on the increase in the population of the Virgin Islands. Statistics from the BVI Health Services Authority show that in 1995 these diseases combined accounted for 36% of the total deaths in the Territory. It has been projected that this percentage may be significantly higher given the lifestyle changes among the population

CNCDs are among the five leading causes of death in the Territory of the Virgin Islands. The burden of disease caused by CNCDs is increasing rapidly and will have significant social, economic and health consequences in the Territory. The increasing trend among NCDs represents a growing disease burden on the people, the Ministry of Health and the economy.



Prior to the 2009 BVI Risk Factor Survey there were no available risk factor data to inform programs and other interventions to address the prevention and control of these diseases. A risk factor refers to any behavioral or biological characteristic which increases the likelihood of developing a chronic disease.

### **Risk factors common to major non-communicable diseases**

| <b>Risk Factor</b>    | <b>Condition</b>               |                 |               |                               |
|-----------------------|--------------------------------|-----------------|---------------|-------------------------------|
|                       | <b>Cardio Vascular Disease</b> | <b>Diabetes</b> | <b>Cancer</b> | <b>Respiratory Conditions</b> |
| Smoking               | X                              | x               | x             | x                             |
| Alcohol               | X                              |                 | x             |                               |
| Poor Nutrition        | X                              | x               | x             | x                             |
| Physical inactivity   | X                              | x               | x             |                               |
| Obesity               | X                              | x               | x             | x                             |
| Raised Blood Pressure | X                              | x               |               |                               |
| Raised Blood Glucose  | X                              | x               | x             |                               |
| Raised Blood Lipids   | X                              | x               |               |                               |

The major risk factors for CNCD are likely to affect one or more of the other CNCDs, including heart disease, stroke, hypertension, Chronic-obstructive pulmonary disease and asthma.

In recognition of the increased burden of CNCDs, WHO has given CNCDs prevention, control and surveillance high priority in its work program, and CNCD's surveillance is seen as a necessary tool in designing prevention and control programs with specific goals and measurable outcomes. Country-specific data on risk factors are essential in order to set priorities, develop targeted programs, and monitor interventions in CNCDs.

The data collected in the survey will be used in the following ways:-

- To estimate the prevalence of risk factors and to identify groups at risk for NCDs in the population.
- To provide base line data on prevalence of the risk factors for chronic non-communicable diseases among adults aged 25-64.
- To establish a NCD surveillance system
- To provide future reference for similar surveys to be done within 5 years.
- For predicting the future caseload of CNCDs.
- To utilize the information for developing a national strategy for NCDs prevention and control.



### **3 PLANNING AND CONDUCTING THE RISK FACTOR SURVEY IN THE BRITISH VIRGIN ISLANDS**

As part of the preliminary preparation for the CNCD Risk Factor Survey, a workshop was held in the Virgin Islands with all of the United Kingdom Overseas Territories on July 22-24 2008. The purpose was to build capacity in preparation for conducting the Risk Factor Survey using the STEPS methodology.

In preparation for the survey a planning committee was formed. Regular meetings were held during a period of seven (7) months which facilitated the completion of the implementation plan outlining the budget, training and survey instruments. Training and technical support in planning and sampling was provided by the CAREC and WHO teams. Quality assurance, consistency and reliability of the data collection procedure were bolstered by the assignment of a field supervisor, three community health nurses and one social worker, technical and administrative staff, training, validation and pilot testing procedures.

A follow up workshop for training interviewers was conducted in January 2009. Twenty-five (25) persons participated in a pilot survey which was conducted on January 30, 2009. All preparations for the pilot survey replicated those planned for the field survey.

The risk factor survey was funded by the Ministry of Health and Social Development in collaboration with the BVI Social Security Board with technical Support from PAHO/WHO/CAREC.

#### **3.1 SURVEY OBJECTIVES**

- 3.1.1 To estimate the prevalence of smoking, alcohol consumption, low fruit and vegetable intake, physical inactivity, obesity and overweight, raised blood pressure, raised blood glucose and raised cholesterol.
- 3.1.2 To estimate the prevalence of risk factors and to identify those most at risk for NCDs in the population.
- 3.1.3 To gather/collect the information to support the development of a national strategy for NCDs prevalence and control.

#### **3.2 METHODOLOGY**

##### **3.2.1 SCOPE of survey**

The BVI STEPS survey was based on the WHO STEPwise approach to surveillance for NCD risk factors. The WHO STEPS approach employed a systematic approach utilizing steps 1, 2 and 3 core and expanded questions for collecting data on CNCD risk factors



within the population. The survey was intended to provide current information on NCD risk factors within the population. Observing trends within groups by age and sex strata, through the use of WHO STEPS standardized tools and protocol will provide a scientific basis for action and future planning and strategies geared at reducing and delaying the incidence of NCD in the Territory.

**STEP 1-**Demographic, behavioural measurement including tobacco use, alcohol consumption, fruit and vegetable consumption were collected utilizing a questionnaire. In addition, expanded questions were included such as physical activity, history of raised blood pressure, history of diabetes and family history. A cancer health screening module was also added to assess prostate and breast screening frequency. These were deemed necessary in formulating a complete assessment of CNCDs risk factors in the population.

**STEP 2-**Physical measurements of health such as blood pressure, height, weight and waist circumference were collected. The expanded questions on hip circumference and heart rate were also included.

**STEP 3-** Selected participants were given appointment dates for home or clinic visits. Biochemical measurements such as blood glucose and blood lipids were done. Prior to taking the biochemical measurement participants were asked to fast for at least 8 hours. The finger stick was used to access biochemical measurements. Results were generated instantly and communicated to participants. Biochemical measurements such as blood glucose and blood lipids were collected on a randomly selected 25% of the population.

### **3.2.2 Sampling Methods**

#### **Survey Population and Sampling Frame**

The study survey population frame consisted of the adult population of the British Virgin Islands aged 25-64 years of both sexes living on the main island (Tortola) and the sister islands (Anegada, Virgin Gorda, Jost Van Dyke). Other inhabited islands have been omitted due to the small number of inhabitants and inclusion of these islands is cost-prohibitive. The survey sampling frame was based on the current Electricity Consumers listing supplied by the BVI Electricity Corporation.

#### **Inclusion Criteria**

All residents (25 – 64) years of age, who are residents of the Territory and have lived in the Territory for at least one year at the time of implementation of the survey.

#### **Exclusion Criteria**

Temporary residents and visitors, those living in institutional settings, persons who are bed-bound and pregnant women were not included in the survey.



## Sample Design

A cross sectional stratified random sample, stratified by age and sex was conducted on a representative sample of the population. The WHO Stepwise approach was adopted, collecting data on risk factors that contribute to major non-communicable diseases.

## Sample Allocation

The sample was selected from the four main islands in the BVI using probability proportional to size (PPS). The final sample size of 1802 was allocated to the selected islands as follows: Tortola – 1,598, Virgin Gorda – 179, Jost Van Dyke – 12 and Anegada – 13.

Households were randomly selected from the Electricity Consumers list. At the household level, participants were selected based on the KISH method.

## Sample size

The calculated sample size was one thousand seven hundred and forty-two (1,742), however for ease of calculation this figure has been rounded off to one thousand eight hundred (1,802) households.

The 2008 population estimate supplied by Development Planning Unit was used to compute the sample size. (**See Appendix 5**). The formula used to calculate the sample size is given.

The following values were used to generate the sample size for the survey:

|                         |        |
|-------------------------|--------|
| Level of confidence     | - 1.96 |
| Margin of error         | - 0.05 |
| Baseline indicator      | - 0.5  |
| Design effect           | - 1.0  |
| (Random sampling)       |        |
| Expected response rate. | - 0.8  |

The baseline estimate of 0.5 was used as there is no current information available on the prevalence of chronic non-communicable diseases (CNCDs) in the Virgin Islands. The response rate of 80% was selected based on previous surveys done in the Territory during the period 2001-2008. This information was supplied by the Development Planning Unit (DPU)-Virgin Islands (British).

## Survey timeframe

The BVI STEPS survey data collection procedure commenced on February 9 and ended June 30, 2009. The survey was conducted simultaneously in all localities; namely Tortola, Virgin Gorda, Jost Van Dyke and Anegada.

### 3.2.3 Data Collection and Data Entry

The data was collected by trained interviewers in a face-to-face setting. All interviewers were trained at the same venue and time to ensure standardization of the data collection process. Information was collected and entered using handheld PDA HPIPAQ Classic with running windows Mobile 6.0 Classic. Collection of data commenced in February 2009.

### Staff Recruitment and Training

Significant emphasis was placed on recruitment and training to ensure standardization of the data collected. Randomly selected participants were visited by survey staff (interviewers). Demonstration and role play was also a feature of the training.

Survey interviewers were selected from a wide cross section of the population, with the following criteria:-

- Completion of High School
- Attaining the age of 18
- Nursing background (3)

In addition, three (3) Spanish-speaking interviewers were selected to assist with the Spanish-speaking population in the Territory. All interviewers were trained by PAHO/CAREC/WHO, on January 26 – 30, 2009. The following topics were covered during the workshop:-

- Introduction to PDA Based Data Collection
- Selecting an individual within selected households: the Kish method
- Interview Tracking Form (**See Appendix 3**)
- Informing participants and obtaining consent
- The BVI Risk Factor Survey Instrument Question by Question Guide and Show Cards (**See Appendix 4**)
- Techniques in interviewing/skills
- Recording and checking information on PDAs
- Collecting demographic and behavioral risk factor information (STEP 1)
- Taking and recording physical measurements (STEP 2)
- Referrals and procedures for biochemical parameters (STEP 3)

### Pilot Study

A convenient sample was used for the pilot study on January 30, 2009. Two (2) random sites were chosen on Tortola. A total of fourteen (14) participants were selected randomly and interviewed. The KISH method was used to select participants to be included in the pilot study.



## **Data Collection Procedure**

Information was collected and entered using handheld PDA HPIPAQ Classic with running windows Mobile 6.0 Classic. The WHO STEPS questionnaire was used to collect the data on all participants. STEPS 1 and 2 were done using the PDA and STEP 3 was done manually from 25% of the sample. The core and expanded questions were used in STEPS 1 and 2 except for Hip circumference and Heart Rate in STEP 2.

The expanded questions of triglycerides, HDL cholesterol and oral glucose tolerance were omitted in STEP 3. The core questions: blood glucose and blood lipids were done. The questionnaire was adapted to the BVI by adding local fermented beverages to the traditional list of alcohol. Show cards were used to graphically represent typical fruit and vegetable serving sizes, list of tobacco products, and levels of physical activity. The questionnaire was translated in Spanish and read by the Spanish-speaking interviewer to Spanish-speaking participants.

Initially, there were 21 interviewers; however 17 interviewers completed the survey using 10 PDAs. Four supervisors were assigned during the data collection process which commenced in February and ended in June. Meetings were held weekly with the coordinators and supervisors. Interviews were done in homes and at workplaces.

The following process was used during the data collection:

Step 1-Interview on Behavioural risk factors using a structured questionnaire

Step 2-Physical measurements

Step 3-Biochemical risk factor measurements

### **3.2.4 Data Analysis**

Data analyses were conducted using Epi info Version 3.5.1.

## **Weighting of data**

The data was weighed to allow the analysis to produce estimates that would have been obtained if the entire population of the Territory was surveyed.

Weighted frequency estimates with 95% confidence intervals were calculated for all categorical variables, by 10 year age group and gender. Descriptive statistics including weighted sample means with 95% confidence intervals were calculated for all continuous variables. Statistically significant differences between groups were identified by non-overlapping 95% confidence intervals ( $1.96 \times$  standard error) for either weighted proportions or weighted means. All numbers in Tables are presented as weighted values, rounded to whole numbers.

Analyses of fasting blood glucose and blood lipids were performed on a sub-sample of 297 participants. Weighting was computed for the sub-sample providing an estimate of fasting glucose and blood lipids of the entire population.

## 4. RESULTS

### Characteristics of the Sample

The sample size calculated for the survey was 1629. One thousand one hundred and five (1105) interviews were completed, thereby achieving an overall response rate of 67.8%.

The survey comprised 455 (41 %) men and 650(59%) women. Table 2 indicates the age and gender distribution of the sample. Eighty-eight percent (88%) of the respondents were of negro or African decent, 4.5% were Caucasians and 7.5% were classified as other. Forty-one (41%) were never married, 44% were married, 4.2% were separated, 7.7% were divorced, 2.6% widowed and 0.5% were in cohabiting relationships.

**TABLE 1: Age and gender of persons surveyed**

| <b>Age Group<br/>(years)</b> | <b>Male</b> | <b>Female</b> | <b>Total</b> | <b>%</b>   |
|------------------------------|-------------|---------------|--------------|------------|
| 25-34                        | 115         | 153           | 268          | 24.2       |
| 35-44                        | 143         | 226           | 369          | 33.4       |
| 45-54                        | 134         | 175           | 309          | 28.0       |
| 55-64                        | 63          | 96            | 159          | 14.4       |
| <b>25-64</b>                 | <b>455</b>  | <b>650</b>    | <b>1105</b>  | <b>100</b> |

Most persons were employed in the private sector (58.3%), with 25.7% being government employees and 10.2% being self employed. A small segment of the sample (5.8%) was classified as unpaid, in the categories of students, homemakers, retired and unemployed.

As shown in Table 2, less than 1% of the sample had no formal schooling (0.1%), 21.4% had completed Primary School and more than half had completed at least secondary school or above.



**TABLE 2: Educational level attained by gender**

| <b>Educational Level</b>       | <b>Male<br/>%</b> | <b>Female<br/>%</b> |
|--------------------------------|-------------------|---------------------|
| No formal schooling            | 0.2               | 0.0                 |
| Less than primary school       | 0.2               | 0.6                 |
| Primary school completed       | 26.5              | 17.6                |
| Secondary school completed     | 21.9              | 20.3                |
| High school completed          | 23.9              | 25.7                |
| College/university completed   | 24.6              | 30.0                |
| Post graduate degree completed | 2.7               | 5.6                 |

Less than half (44.1%) of the population were currently married, with 41% being never married and the remainder being separated, divorced, widowed or cohabiting. **(See Appendix 6 for more information).**

## **PREVALENCE OF RISK FACTORS**

Prevalence estimates for males and females were calculated for the all the risk factors collected in the survey: tobacco use, alcohol consumption, low fruit and vegetable intake, physical inactivity, obesity and overweight, raised blood pressure, raised blood glucose and raised cholesterol.

## **BEHAVIOURAL RISK FACTORS**

### **Smoking in the BVI**

Smoking of tobacco was relatively low in the BVI population, with a prevalence of current smoking of 6.4% (95% CI 5.7-7.0). As shown in Figure 1, the proportion of smokers is higher among males (8.8%; 95% CI 3.9-13.7) as compared to females (3.6%; 95% CI 0.3-6.9). Of the population that uses tobacco, only 3.1% (CI 2.9-3.3) currently smoke tobacco daily. Smoking initiation commenced at 18.6 years for males and 21.7 for females.

Exposure to secondhand smoke was a bigger problem in the BVI, with almost a fifth (16.3%; 95% CI 8.6-24.0) of men and 7% (95% CI 5.6-8.5) of women reporting that they were exposed to smoke in the workplace.

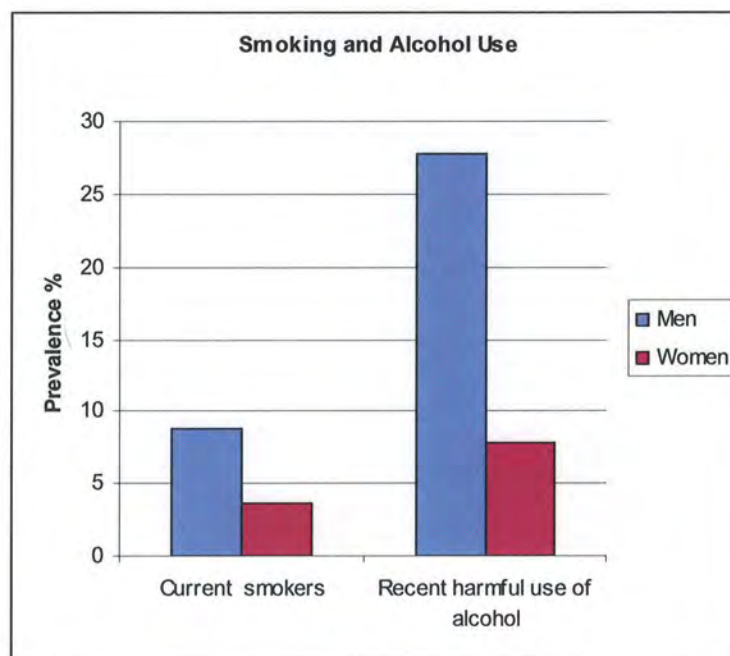
### **Alcohol Consumption**

The rates of alcohol consumption in the population was 34%, (95% CI 24.8-43.3) with 49.6% (39.1-60.0) of men and 16%, 95% CI 15.5-16.4) of women being classified as current drinkers, having consumed an alcoholic drink in the last 30 days.

Almost half (47.1%) of the current drinkers, rarely or never consume alcohol with meals. **(See Appendix 6).**

Just under a fifth (17.8%) of all current alcohol drinkers were using alcohol at levels which can be harmful to health<sup>1</sup>. The problem is considerably more prevalent among the men with over a quarter (27.7%; 95% CI 21.6-33.8) engaging in harmful use of alcohol as compared to women (7.8%; 95% CI 4.3-11.3)). **(See Appendix 6).**

**FIGURE 1: Smoking and Alcohol Use in the Population**



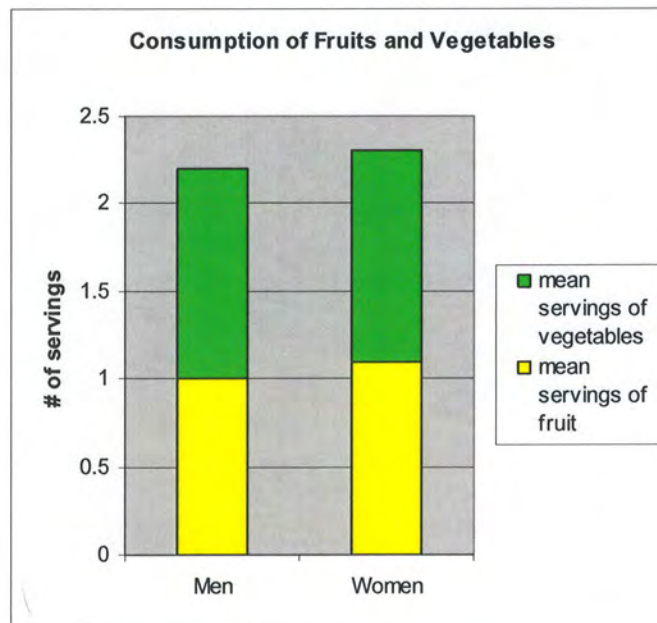
## Fruit and Vegetable Consumption

As shown in Figure 3, on average, just over one serving each of fruits (mean servings 1.1; 95% CI 1.0-1.3) and vegetables (mean servings 1.2; 95% CI 1.2-1.2) was consumed by women on a daily basis, with the men in the BVI consuming just one serving of fruit (mean servings 1; 95%; CI 0.6-1.5) each day and just over a serving (mean servings 1.2; 95% CI 1.1-1.3) of vegetables. The same proportion of males (92.3%) and females (92.4%) ate less than 5 servings of fruit and vegetables on average per day.

<sup>1</sup> Harmful drinking for males was defined as males having had 5 or more standard drinks on at least one day in the previous week, and for females having had 4 or more standard drinks on at least one day in the previous week.



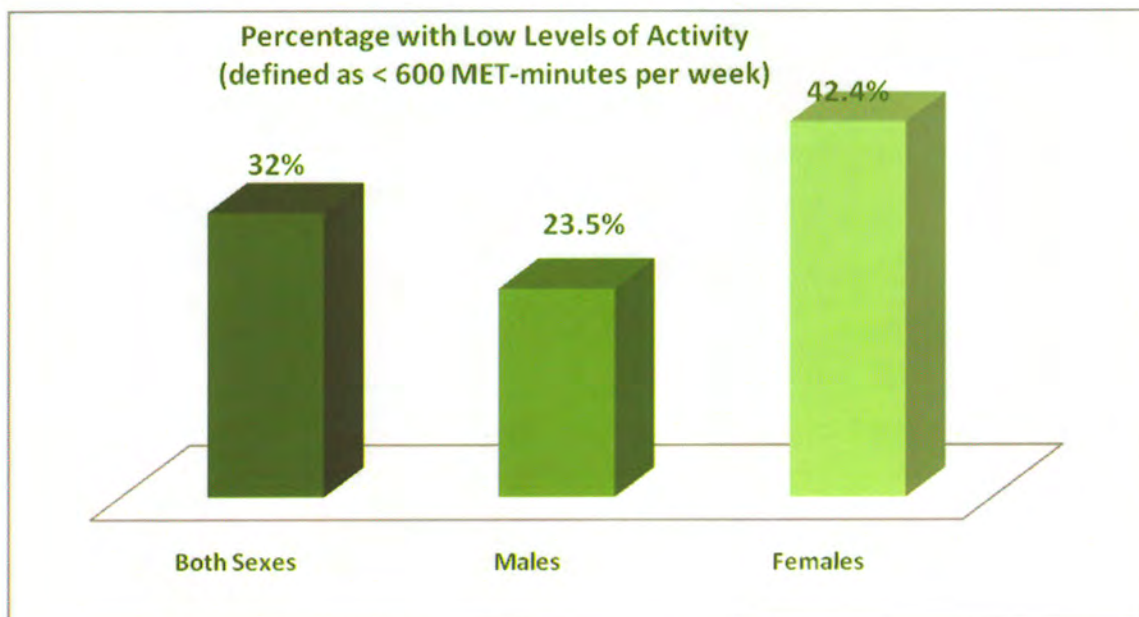
**FIGURE 2: Consumption of Fruits and Vegetables in the Population**



### Physical Activity

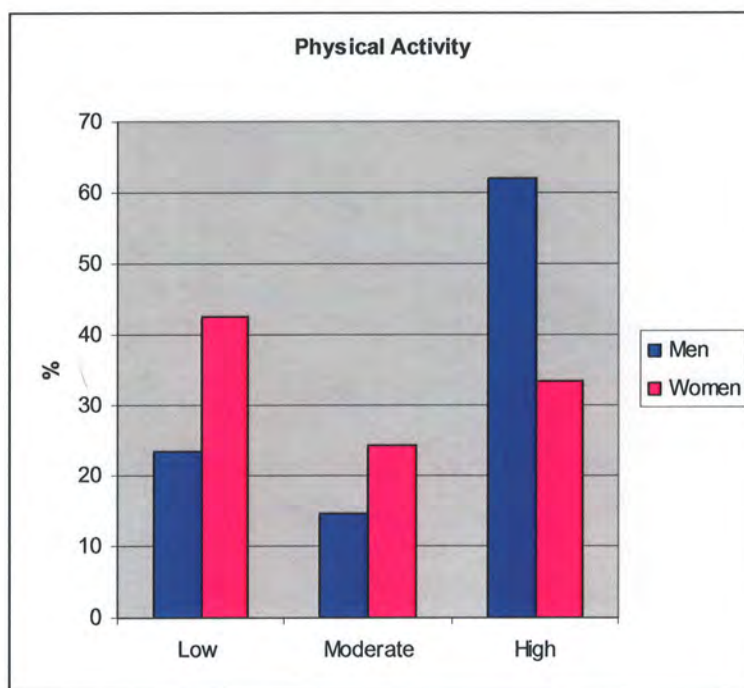
In the BVI population women had lower levels of physical activity when compared to men. Almost a quarter of males (23.5%; 95%CI 13.7-33.2) and almost half of females (42.5%; 95%CI 35.2-49.7) were classified as having low levels of physical activity.

**Figure 3: Percentage of low levels of activity**



Only a third (33.4%; 95%CI 28.3-38.4) of females was classified as having high levels of physical activity<sup>2</sup> (Figure 4). The percentage of the population with moderate levels of physical activity was less than a fifth (19%; 95% CI 17.7-20.3). The results indicate that most of the physical activity done was work related. The amount of physical activity undertaken during leisure time was considerably less than that done during work for both males and females.

**FIGURE 4: Levels of Physical Activity in the Population**



As shown in Figure #, 61.4 (95% CI 48.8-74.1)% of the population reported not being engaged in vigorous activity.

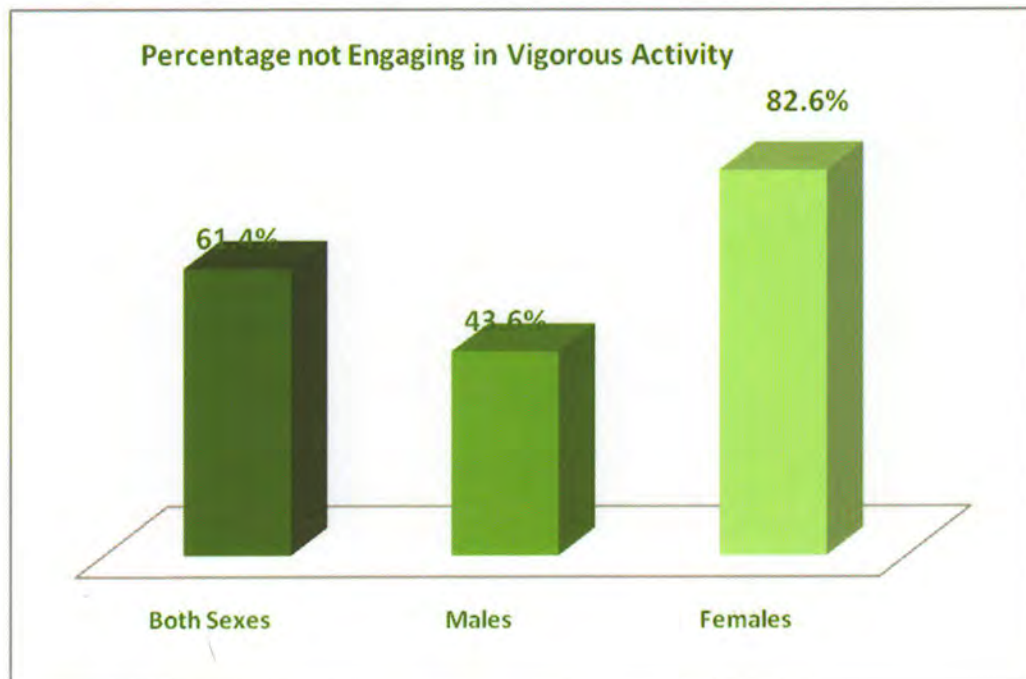
<sup>2</sup> Low levels of physical activity is defined as less than 5 or more days of moderate-intensity activity or 30 minutes walking (<600 metabolic (MET) minutes per week).

Moderate levels of physical activity is defined as 5 or more days of moderate-intensity activity or 30 minutes walking (600 metabolic (MET) minutes per week).

High levels of physical activity is defined as 7 or more days of any combination of walking for 30 minutes, moderate or vigorous-intensity activity (3000 metabolic (MET) minutes per week).



**Figure 5: Percentage not engaging in vigorous activity**



## **BIOLOGICAL RISK FACTORS**

### **Blood Pressure and Blood Sugar Screening**

Only 2.1% (95% CI 2.0-2.2) of the BVI population has never had their blood pressure measured. Of those who had been screened, more than a fifth (21.5%) of the population had been told by a health worker that they had hypertension or raised blood pressure; 13.3% (95% CI 12.1-14.5) had been diagnosed within the last 12 months, significantly more women (16.1% 95% CI 14.5-17.7) than men (10.9%; 95% CI 9.4-12.4) had been diagnosed with hypertension or raised blood pressure in the last year.

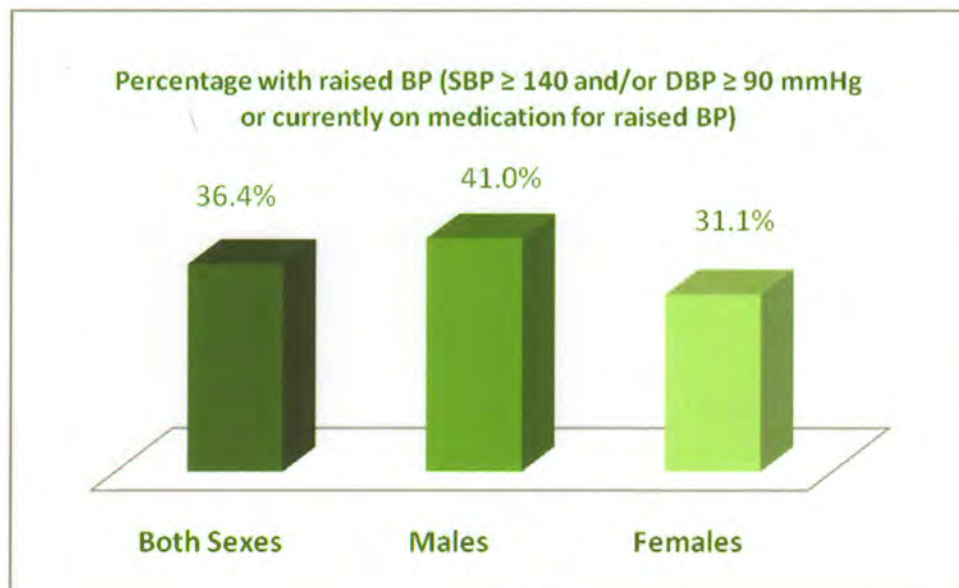
Of those diagnosed with hypertension or raised blood pressure, more than half (58.6%; 95% CI 54.5-62.8) had been taking medication. The percentage of males and females taking medication for hypertension or raised blood pressure was similar. **(See Appendix 6).**

Advice on lifestyle changes was given to those diagnosed with hypertension or raised blood pressure by health workers. Almost three-quarters (68.5%; 95% CI 66.5-70.5) of those diagnosed with hypertension or raised blood pressure were told to reduce salt intake; significantly more men (84% 95% CI 70.9-97.1) reported receiving advice on reducing salt intake as compared to women. More men than women received advice to stop smoking. **(See Appendix 6).**

## Raised Blood Pressure

The mean systolic blood pressure (SBP) and diastolic blood pressure (DBP) in the BVI population was 134.2/80.9 mmHg in males and 130.5/80.3 mmHg in females. More than a third of the men (34.7%) and more than a fifth (21.1%) of the women in the BVI, who were not taking medication for hypertension at the time of the survey, had raised blood pressures reading of  $\geq 140/90$  mmHg and 8.2% of males and 4.9% of females had raised blood pressures reading of  $\geq 160/100$  mmHg. When persons who were taking medication for hypertension are included, the percentage of persons with raised blood pressures reading of  $\geq 140/90$  mmHg increased to almost half (41%) of men and nearly a third (31.1%) for women with almost a fifth of men (17.1%) and women (16.9%) having blood pressures  $\geq 160/100$  mmHg.

**Figure 6: Percentage with raised blood pressure or currently on medication for raised blood pressure**



## Advice on Lifestyle Changes

Advice on lifestyle changes was given by health workers to those diagnosed with hypertension or raised blood pressure. Significantly more men (84% 95% CI 70.9-97.1) reported being told to reduce salt intake than women (57.8% 95% CI 53.4-62.2). As expected less women (2.7% 95% CI 0.6-4.8) received advice to reduce smoking than men (16.6% 95% CI 3.5-29.7). A similar percentage of males (57.9%; 95% CI 41.2-74.6) and females (56.4%; 95% CI 53.4-59.5) were given advice by health workers to lose weight. In relation to exercise, (63.4% 95% CI 62.9-73.8) of males and (64.4% 95% CI 61.5-67.3) of females reported receiving such advice from health workers.



## Use of Traditional Healers for Hypertension

Only a small number of those diagnosed with hypertension or raised blood pressure reported using traditional healers for care. Just under ten percent of males (8.5%) and females (7.2%), had seen a traditional healer for raised blood pressure. However a slightly higher percentage of females (11.8%) as compared to males (6%) reported currently taking herbal or traditional remedies for hypertension.

## History of Raised Blood Sugar

Almost a fifth (15.3% 95% CI 12.2-18.5) of the population had never been screened for raised blood sugar. For males 19.4% (95%CI 16.3-22.5) reported never having their blood sugar measured, while 10.7% (95% 9.3-12) of females reported this. Just over twelve percent (12.1%) had received a diagnosis, of raised blood sugar, with 6.4 % of men and 6.5% of women having been diagnosed in the last year. **(See Appendix 6)**. Just under a fifth (19.8%) of the women diagnosed with raised blood sugar were currently on insulin, while (13.3%) of the men diagnosed with raised blood sugar were on currently insulin. Over two-thirds of men (68.2 95% CI 61.4-74.9) and 63.1% 95% CI 44.3-81.8) of women reported taking oral drugs prescribed for diabetes.

Among those previously diagnosed with raised blood sugar or diabetes, significantly more males (59.8% 95% CI 53.1-66.5) than females (46.4% 95% CI 37.1-55.7) reported received advice from a doctor or other health worker to have a specially prescribed diet. Other advice given included advice on smoking cessation, exercise and loss of weight. **(See Appendix 6)**.

More than a fifth (21.6%) of those diagnosed with raised blood glucose or diabetes was seeing a traditional healer for care for their diabetes. A smaller percentage (5.3%) was currently taking herbal or traditional treatment for diabetes.

A third (33% 95% CI 29.4-36.6) of male diabetics and 15.9% (95% CI 8.4-23.3) of female diabetics had never had their eyes examined as part of diabetic control. As shown in the Table # overall more males reported having had an eye exam as part of their diabetic control. In relation to foot examination as part of diabetic control, almost half (46.1% 95% CI 28.5-63.7) of diabetics reported never having had their foot examined.

**Table 3: Examinations received for Diabetic Control**

| Exam      | Never                    | Within 2 yrs             | >2 yrs                   |
|-----------|--------------------------|--------------------------|--------------------------|
| Eye Exam  | 25% (95% CI 19.7-30.3)   | 59.2% (95% CI 51.5-67.0) | 15.7% (95%CI 13.3-18.2)  |
|           | Never                    | Within 1 yr              | >1 yr                    |
| Foot exam | 46.1% (95% CI 28.5-63.7) | 29.8% (95% CI 25.4-34.2) | 24.2% (95% CI 10.8-37.5) |



## History of Raised Blood Cholesterol

Just under a fifth (16.1% (95% CI 13.5-18.7) of the population had been told by a doctor or health worker that they had raised cholesterol, with two thirds (65.7% 95% CI 59.4-72.1) reporting having been diagnosed in the last year. Slightly more men (70.2% 95% CI 51.3-89.1) reported that they had been diagnosed in that period compared to the women (61.8% CI 57.7-65.9).

Advice to begin or increase exercise was the advice given more frequently by health workers. Females (60.8% 95% CI 58.7-62.9) in particular reported having received this advice for raised cholesterol when compared to males (48.9% 95% CI 19.5-78.3). Advice was also given on smoking cessation, use of specially prescribed diets and loss of weight, with 50.4%; (95% CI 47-53.9), reporting having been given advice to lose weight. Very limited use of traditional healers was reported for raised cholesterol. **(See Appendix 6).**

## Family History of Chronic Diseases

Almost two-thirds (64.3%; 95% CI 59.9-68.7) of the population reported having a family history of raised blood pressure, while 59.4%; (95% CI 58.5-60.3) and 24.8%; (95% CI 24.2-25.4) reported having family members with a history of stroke. One third (33.1%; 95% CI 30.7-35.6) reported having had a family history of cancer, other conditions reported were raised cholesterol and early myocardial infarctions **(See Table 4).**

**Table4: Family History of Reported Chronic Disease Conditions**

| <b>Disease Conditions</b>    | <b>Females<br/>% (95% CI)</b> | <b>Males<br/>% (95% CI)</b> | <b>Total<br/>% (95% CI)</b> |
|------------------------------|-------------------------------|-----------------------------|-----------------------------|
| Raised blood pressure        | 71.6 (66.1-77)                | 58.1 (48.1-68)              | 64.3(59.8-68.7)             |
| Diabetes or high blood sugar | 61.4 (60.1-62.7)              | 57.7 (56.3-59.1)            | 59.4(58.5-60.3)             |
| Raised cholesterol           | 27.9 (27.4-28.4)              | 21.5(20.4-22.6)             | 24.5(24.4-24.6)             |
| Stroke                       | 23.9 (22.7-25.1)              | 25.6( 23.5-27.6)            | 24.8 (24.2-25.4)            |
| Early Myocardial Infarction  | 11.5 (8.7-14.3)               | 8.9 (1.7-16.2)              | 10.1(4.7-15.6)              |
| Cancer or malignant tumor    | 36.1(34.6-37.7)               | 30.5 (27.8-33.3)            | 33.1 (30.7-35.6)            |

## Overweight and Obesity

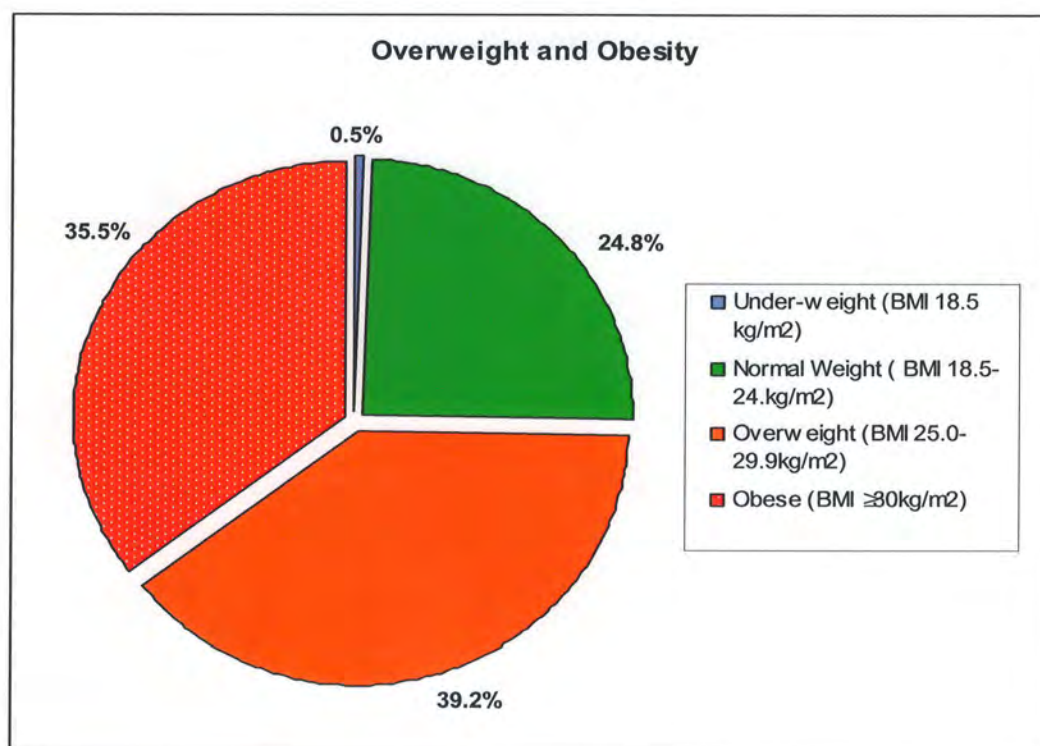
Three-quarters (74.7%) of the BVI population were classified as overweight (defined as BMI $\geq$ 25 kg/m<sup>2</sup>)<sup>3</sup> with more than a third (35.5%; 95% CI 34.5-36.5) of the population being classified as obese (BMI  $\geq$ 30kg/ m<sup>2</sup>) as shown in Figure 5. Among males, almost

<sup>3</sup> Overweight and obesity combined



three-quarters (73.4%) were classified as overweight with almost a third (28.4%; 95%CI 26.9-29.9) of all men being obese. For females, more than three quarters (76.1%) were classified as overweight with almost half of all women (43.9% ; 95% CI 40.9-46.9) being obese. There was no significant difference between the different age groupings in the population. **(See Appendix 6).**

**FIGURE 7: Overweight and Obesity in the Population**



### Abdominal Obesity

There was no significant difference between the average waist size of men when compared to the women in the BVI. Mean waist circumferences for males and females were 37.4 inches (95.0 cm); 95% CI (37. 2-37.6) and 37.1inches (94.2cm); 95% CI (36.8-37.3) respectively. **(See Appendix 6).**

### Measured Blood Pressure

Mean measured blood pressure for both sexes was SBP 130.5/DBP 80.3 mmHg. The males had higher systolic blood pressure measurements across all ages when compared to females. **(See Appendix 6).** As shown in the table below, almost three-quarters (69.5%) of the population who were not on medication had blood pressure reading of SBP ≥140 and/or DBP ≥90 mmHg and 36.4% of person who were on medication had such blood pressure readings. It is important to note that 17% of those on medication had blood pressure readings SBP ≥160 and/or DBP ≥90.

**Table 5: Blood pressure measurement and diagnosis among all respondents**

|               | Mean BP<br>mmHg | SBP $\geq$ 140 and/or DBP<br>$\geq$ 90<br>% |                  | SBP $\geq$ 160 and/or DBP<br>$\geq$ 100<br>% |                    |
|---------------|-----------------|---------------------------------------------|------------------|----------------------------------------------|--------------------|
|               |                 | Without<br>Medication                       | On<br>Medication | Without<br>Medication                        | With<br>Medication |
| Male          | 134.2/80.9      | 76.4                                        | 41               | 8.2                                          | 17.1               |
| Female        | 126.2/79.6      | 59.1                                        | 31.1             | 4.9                                          | 16.9               |
| Both<br>Sexes | 130.5/80.3      | 69.5                                        | 36.4             | 6.7                                          | 17                 |

Less than a fifth (13.1%; 95% CI 8.2-18) of those on medication for hypertension or raised blood pressure had blood pressure readings SBP <140 and DBP <90 mmHg. Just under 10 percent (9.4%; 95% CI 0.0-18.9) of males, while 18.8% (95% CI 13.5-24.2) of women had blood pressure readings of that level.

### Health Seeking Behaviour

Almost half (42.8; 95% CI 39.2-46.4) of the women reported never having had a mammogram. A quarter (26.4 (95% CI 24.2-28.3) had a mammogram one year ago or less (see Appendix). More than three-quarters (82.1%; 95% CI 78.9-85.3) of the women reported having been shown how to examine their breast and 13.4% (95% CI 12.6-14.3) reported never having had a clinical breast examination. **(See Table 6).**

Only a small number (6% 95% CI 4.6-7.4) of women reported never having had a Pap Smear Test. Almost half of the women reported having had a Pap Smear Test one year ago or less, with 26.1% (95% CI 22.4-29.8) reporting having had the test more than 2 years ago **(see Table 6).**

Less than a fifth (16.4%; 95% CI 9.2-23.8) of the population reported ever having had a colonoscopy. Almost a half (43.4; 95% CI 30-56.8) of the population reported having their faeces checked for hidden blood **(see Appendix 6).**

Half (48.3; 95% CI 44.9-51.7) of the men reported having had a prostate exam. Over three-quarters of the men  $\geq$ 45 years reported having such as a prostate exam **(see Appendix 6).**



**Table 6: Screening Practices (Women)**

| Type of Screening    | Never<br>% 95% CI | ≤1 year<br>% 95% CI | 1-2 years<br>% 95% CI | > 2 years<br>% 95% CI |
|----------------------|-------------------|---------------------|-----------------------|-----------------------|
| Mammogram            | 42.8 (29.2-46.4)  | 26.4 (24.4-28.3)    | 13.7 (12.5-14.9)      | 17.1(15.3-18.9)       |
| Clinical Breast Exam | 13.4 (12.6-14.3)  | 51.3(47.3-55.4)     | 16.4 (14.9-17.9)      | 18.8 (13.8-23.8)      |
| Cytological Test     | 6.0 (4.6-7.4)     | 49.5 (41.4-57.6)    | 18,4 (12.7-24)        | 26.1(22.4-29.8)       |

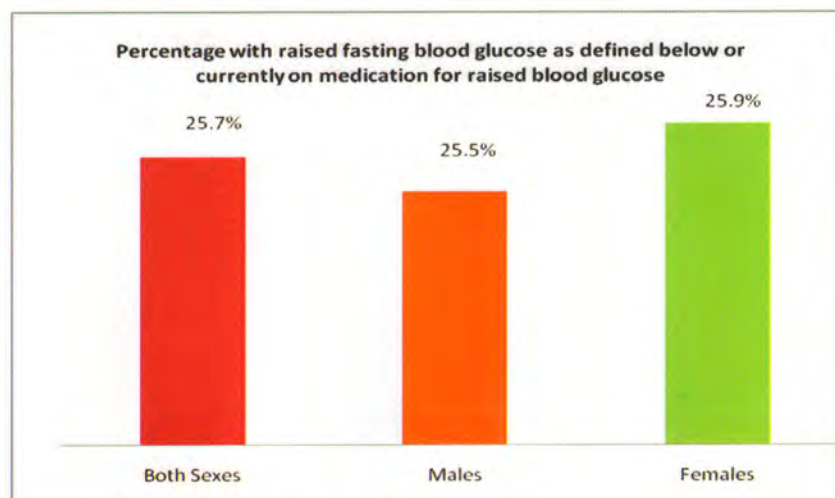
## Biochemical Measurements

Attempts were made to assess biochemical measurements (fasting blood glucose and total cholesterol) on a smaller percentage of the sample population. However the numbers of persons in the population cooperating in this part of the survey was limited. As a consequence, these results are not representative of the BVI population. The presentation of the results only reflects the sample which participated in the biochemical measurements.

### Fasting Blood Glucose (mmol/L) and Fasting Cholesterol

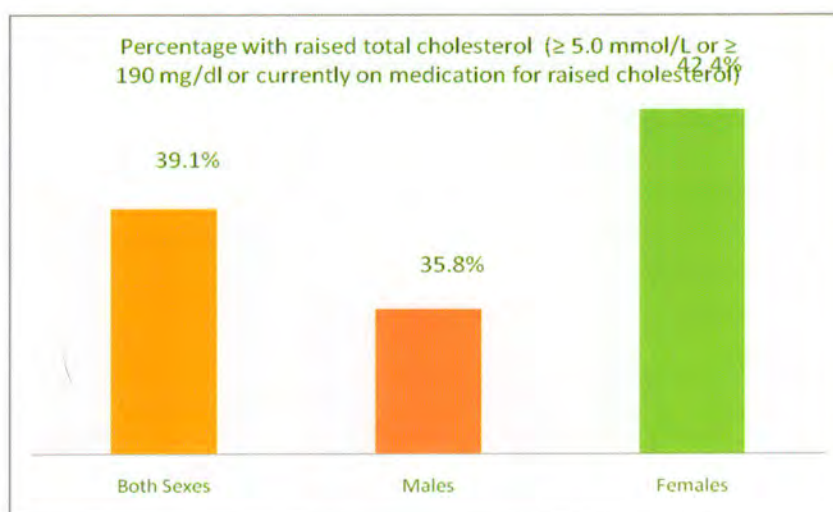
All participants would have fasted for twelve hours before the fasting blood glucose test was done. The mean fasting blood glucose for all respondents including those currently on medication for raised blood glucose was 101 mmol/L. **(See Appendix 6)**. Nine percent (9%) of persons measured had borderline raised fasting blood glucose >5.6 mmol/L (100 mg/dl) but <6.1 mmol/L (110 mg/dl). More than a quarter (26% ) of those measured had raised fasting blood glucose as defined by those below or currently on medication for raised blood glucose  $\geq 6.1$  mmol/L (110 mg/dl). **(See Figure 8)**.

**Figure 8: Raised Fasting Blood Glucose**



The mean total blood cholesterol for all respondents including those currently on medication for raised cholesterol was 381 mmol/L. Almost half (42.4%) of the females measured including those currently on medication for raised cholesterol, while more than a third (35.8%) of the men measured had had raised cholesterol  $\geq 5.1$  mmol/L or  $\geq 198$  mg/dl.

**Figure 9: Raised total cholesterol**



### Increased Risk for Chronic Diseases

There are five common risk factors for chronic non-communicable diseases which includes current daily smokers, overweight and obesity ( $\text{BMI} \geq 25 \text{ kg/m}^2$ ), raised blood pressure ( $\text{SBP} \geq 140$  and /or  $\text{DBP} \geq 90 \text{ mmHg}$  or currently on medication for raised BP), consumption of less than 5 servings of fruits and vegetables per day and low levels of physical activity ( $< 600$  metabolic (MET) minutes per week). Only 0.9 % of the BVI population were classified at low risk for NCDs (that is having none of the 5 risk factors) while more than half (57.6%) of the productive population aged less than 45 years had 1-2 risk factors with slightly less than half (41.4%) classified as being at increased risk for NCDs with at least three of the key risk factors. **(See Table 7)**

**TABLE 7: Raised Risk for Chronic Diseases in the Population**

| Age Groupings | %<br>0 Risk Factors | %<br>1-2 Risk factors | %<br>3-5 Risk factors |
|---------------|---------------------|-----------------------|-----------------------|
| 25-44         | 1.0                 | 57.6                  | 41.4                  |
| 45-64         | 0.9                 | 48.0                  | 51.1                  |
| 25-64         | 0.9                 | 53.2                  | 45.9                  |



The survey showed that both men and women in the BVI were at increased risk of chronic diseases with almost half (45.5%; 95% CI 41.7-49.3) of men and women (46.4%; 95% CI 42.3-50.5) having 3 or more risk factors for chronic diseases.

## **DISCUSSION**

The BVI STEPS survey has provided valuable empirical data to guide policy and provide up-to-date evidence on the burden of Chronic Non Communicable Diseases (CNCDs) and associated risk factors. Long-term programme planning and evaluation of strategies based on evidence highlighted in this report will ultimately improve lifestyle behaviours that predispose the population to chronic non-communicable diseases.

The changes in lifestyle of the population threaten the nation's health. These factors require a multi-sectoral strategic approach that is generic, age and population specific. The epidemics of the future will not only be those classified under infectious diseases but also CNCD. While the risk of outbreaks, such as a new influenza pandemic will require constant vigilance, it is the "invisible" epidemics of heart disease, stroke, diabetes, cancer and other chronic diseases that in the future will contribute the greatest burden of morbidity and mortality.

### **Smoking**

Smoking tobacco does not seem to be a major risk factor for chronic disease in the BVI population given that the prevalence of current smokers was 6.4 % (95%CI 5.7-7.0). Of the population that uses tobacco only 3.1% currently smoke tobacco daily. The proportion of smokers is however higher among males (8.8%; 95%CI 3.9-13.7) as compared to females (3.6%; 95%CI 0.3-6.9). Efforts to promote smoking cessation were enacted in the Territory when the BVI Tobacco Control Act 2007 was passed in the Legislative Council. The Act came into effect on World No Tobacco Day on May 31, 2007. The Act prohibits tobacco smoking in public places, as well as other control measures in compliance with the Framework Convention on Tobacco Control. Given the low rate of tobacco usage it is likely that the compliance rate for this legislation maybe high. Nevertheless, it is noteworthy that the survey highlighted that exposure to second hand smoke is a concern.

The survey highlighted that exposure to second hand smoke remains a concern. Men were more exposed (16%; 95%CI 8.6-24.0) than women reporting 7 % (95%CI 5.6-8.5).

Although such significant achievement of compliance is plausible there is no room for complacency as these achievements are easily reversible with passing generations. There is a plethora of scientific evidence linking smoking to chronic diseases such as cancers and heart diseases therefore, if the Territory is able to maintain its low smoking status among the population further gains will be realized.



## **Alcohol consumption**

Excessive alcohol use is of concern in the BVI particularly among men. This is occurring in all age groups. It is notable that more than a quarter of the men 27.7% (95%CI 21.6-33.8) and almost ten percent (7.8%; 95%CI 4.3-11.3) of women were drinking at levels which can be harmful to health. The percentage of abstainers within the last 12 months was on 25% of the population. Use of alcohol at levels which can be harmful to health can predispose the users to contracting chronic diseases.

## **Consumption of fruits and vegetables**

Consumption of fruits and vegetables in adequate amounts (5 servings per day) is a protective factor against chronic diseases. However, the use of fruits and vegetables in the diets of the BVI population falls very short of this protective target. The vast majority (92.4%) of the population ate less than 5 servings of fruits and or vegetables on average per day. There was not significant difference between consumption patterns among men and women in this area, as men consumed on average 2.2 servings of fruits and vegetables (95%CI 1.7-2.7) as compared to women consuming an average of 2.3 (95%CI 2.2-2.5). Limited availability and cost may be the some of the obstacles for low consumption of fruits and vegetable in the BVI. Almost all the fruits and vegetables eaten in the BVI are imported. Local cultivation in homes and community gardens should be encouraged to complement imported produce. The establishment of community fruit and vegetable co-operatives and food markets should be encouraged as a strategy for reducing cost and boosting local production. Reduction of excise duties on imported fruits and vegetables should be considered by Legislators as a strategy for lowering cost and ultimately boosting consumption.

## **Physical Activity**

Physical activity is highly promoted in the Territory through walks and other sporting activities. However, participation in these activities is usually limited. Physical is another protective factor for the prevention of chronic diseases. The study show in the BVI, men were more physically active than women, with almost a half of females (42.5%, 95%CI 35.2-49.7) categorized as having low level of activity<sup>4</sup> compared to that 23.5%, 95%CI 13.7-33.2) of males. Physical inactivity is one of the major risk factors for chronic diseases (WHO, 2005). As a result, such levels of low physical activity put the BVI population and women in particular at increased risk for chronic diseases.

## **Overweight and Obesity**

The prevalence of obesity in adult Caribbean women is 25%. This is twice as many as their male counterpart (CFNI 2001). This data is consistent with data derived from this survey. Alarming and of great concern to Ministry of Health & Social Development is that three-quarters (74.7%) of the population were overweight<sup>4</sup> which is a major risk

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<sup>4</sup> BMI<sub>or</sub> = 25 kg/m<sup>2</sup>



factor and markers for chronic disease in the population. The proportions of obese women were greater than men. Almost a half of all women or 43.9.0% (95%CI 40.9-46.9) were obese<sup>5</sup>, While a third (28.4%; 95%CI 26.9-29.9) of all men were obese. Raising public knowledge about the harmful effects of obesity is needed to stem the social norm concerning body size.

A high waist circumference or a greater level of abdominal fat is associated with an increased risk for type 2 diabetes, high cholesterol, high blood pressure and cardiovascular disease. It is noteworthy that there was not significant difference in waist size for men (37.4 inches (95.0cm); 95%CI (37.2-37.6)) and women (37.1 inches (94.2cm); 95%CI (36.8-37.3) in the BVI. While the mean waist circumference of males (37.4 inches) was within acceptable levels<sup>7</sup>; the waist size of females exceeded the acceptable level of  $\leq 35$  inches (88.9cm). Therefore, women in the BVI seem to be at increased risk for the aforementioned chronic conditions when compared to men.

### **Abdominal Obesity**

The risk associated with type 2 diabetes and other chronic diseases as a result of central obesity is well documented and based on the findings it can be inferred that women are more at risk for these condition in the BVI.

It is therefore prudent that based on the statistics presented the risks identified if not reduced the projections for chronic diseases among women is of great concern.

Lifestyle factors such as low physical activity and over nutrition are the major contributing factors to obesity in the Territory.

### **Raised Blood Pressure high blood sugar**

There is a significantly high percentage of persons with raised blood pressure who are currently not on any medication. This data provides evidence and indicates that patients who should be on anti-hypertensive medications have uncontrolled hypertension.

Alarming, 80.9% 95%CI (76.7-85.2) of men and 71.1%; 95%CI (65.2-77.0) of women had measurements for high blood pressure but were not diagnosed and 68.8%; 95%CI (67.7-69.8) of men and 77.1%; 95%CI (76.1-78.0) of women had high blood sugar measurement and not diagnosed. This has serious implications for individuals who could suffer major serious complications and cause an ill-prepared health system to become over-burdened due to lack of preparation for complications of high blood pressure.

### **Cancer Screening**

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<sup>5</sup> BMI  $\geq 30$ kg/m<sup>2</sup>



Based on the Peebles Hospital Medical Records Annual Report 2008, there were twenty-three (23) deaths due to cancer at the Peebles Hospital which represents (23%) of the overall deaths with the leading cause of cancer being prostate for men and Diabetes/hypertension for women.

Regarding screening for cancer among women, only a limited percentage (26.4%; 95%CI 24.2-28.3) reported having had a mammogram. However a high percentage of the women (82.1%; 95%CI 78.9-85.3) had been shown how to examine their breasts. While it is important that women do regular breast examinations, it is recommended that mammograms are done by women over the age of 40 years. The majority of women (94%) reported having had a pap smear test. This indicates that women in the BVI are accessing screening for the prevention of cervical cancer.

With respect to screening for breast cancer, 13.4%; 95%CI (12.6-14.3) of women have never had a breast examination done and forty-three percent -42.8 %;95%CI(39.2-46.4) never had a mammogram done, while 6%;95%CI(4.6-7.4) never had a pap smear or cytological test done. However, fifty percent (50%) of respondents had a pap smear done within a year ago or less, (26.4%) had a mammogram done within a year ago or less. 48.3% of men have done a prostate examination.

It is therefore important that regular targeted population screening, especially mammograms and pap's smears for women, be encouraged. Much effort has been made by various organizations both private and public to provide cancer screening opportunities for the population. These efforts are commendable; however an even greater effort is needed to address barriers to health seeking behaviors within the most at-risk populations.

Cancer research and the implementation of a cancer register has been identified by the Ministry of Health as the way forward in the next step to assess and plan for the implementation of programmes to guide cancer education and prevention.

### **Combined risks**

The risk factors for chronic non-communicable diseases assessed in this study include; current daily smoker, consumption of less than 5 servings of fruits and vegetables per day, low levels of physical activity<sup>6</sup>, overweight or obese<sup>7</sup> raised BP<sup>8</sup>.

The survey revealed that half of the population or 46.4% as shown in Table 7, had three or more of the risk factors for chronic diseases as aforementioned. Of great concern is that there is only a point eight percent (.8%) difference in the combined risk factors for the age group 25 to 44 and 45 to 65, therefore the probability is increased

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<sup>6</sup> <600 MET –minutes per week

<sup>7</sup> BMI >=25kg/m<sup>2</sup>

<sup>8</sup> BP>= 140 and /or DBP>= 90 or currently on medication for raised BP.



for the population's most productive age-group to acquire a chronic disease at an even earlier age than their predecessors.

### **The Value of the Survey**

The results of the study will be used to guide strategies, policies and legislation aimed at reducing the incidence and burden of chronic diseases in the population including the increasing cost associated with long term treatment and care of the proliferation of people developing chronic disease at an early age.

Invaluable research skills and knowledge was imparted to members of the interview and research team who were staff of the Ministry of Health and Health Services Authority as well as some members of the general population, thus developing a cadre of people capable of conducting future health related research in country.

Participants identified as high risk for chronic diseases were referred for further medical attention and follow –up thus preventing complications associated with chronic disease of those who would not seek treatment or have never been screened.

The funding provided by the Social Security Board facilitated the procurement of equipment such as hand held computers, scales, blood pressure apparatus that have been re-used in the recently conducted 2010 Global School Health Survey. The use of the hand held computers reduced the length of the survey, negated the need for the use of stationary thereby reducing cost and improving accuracy and efficiency.

Technical assistance provided was provided by WHO/PAHO/CAREC ensured that the survey was conducted scientifically and that the results can be generalized to the population.

Valuable information about chronic diseases and their risk factors was provided to the population through nationwide media publicity of the survey before, during and after the survey. In addition, messages were delivered by the Minister responsible for Health and the Health Promotion Officer. These were also complemented by promotion activities at the community level.

The task at hand is to continue the momentum to address the many challenges in reducing the risk factors for chronic diseases in the population.

Below is an outline of recommendations for action based on the findings of the BVI STEPS survey.

### **RECOMMENDATIONS FOR ACTION**



## **Obesity**

- Incorporate food, nutrition and lifestyle issues into national development plans and align food imports and local production policies in the context of global trade to the recommended population food goals.
- Institute laws, regulations and regulatory practices that will enable people to make healthy dietary choices, restrict advertising of high/sugar fat foods to children, make more food available to support nutritionally desirable diets and promote physical activity in all population groups.
- Ensure that the private sector, all government sectors, civic organizations, and the media are fully aware of food, nutrition and health relationships, and participate in the implementations of the dietary recommendations for the improvement of public health.
- Incorporate principles, concepts and skills training about healthy eating and regular physical exercise into all levels of school from pre-school to the tertiary level.
- Launch healthy lifestyle programmes at the worksite for employee and their families, both in government and private sectors as well as in the community at large.
- Prepare health care personnel, at the basic and post-basic levels, in the field of food and nutrition and its relationship to health.
- Orient the health services towards health promotion, particularly with regard to diet and other lifestyle factors in the prevention of chronic diseases.
- Encourage local farmer markets and back yard gardening to reduce importation of expensive fruits and vegetables and enabling low income earners to consume the recommended servings of fruits and vegetables.

## **PUBLIC HEALTH INTERVENTIONS**

- Strengthen the capacity of health care workers through in-service training and seminars to identify and monitor patients through the use of chronic disease registers.
- Build public awareness about the harmful consequences of excessive alcohol consumption, smoking, low levels of physical activity and poor dietary practices.
- Promote annual physical examination and self-help care through the use of monitoring devices such as glucose meters, and blood pressure machines.
- Implement smoking cessation, and drinking abstainer's programmes to encourage lifelong commitment to healthy living
- Develop initiatives such as educational talks, peer counseling, sharing of research information on the ill effects of smoking and partnerships with guidance counselors and social clubs in schools with health promotion specialist to prevent early initiation of smoking among young people.



- Promote a multi-sectoral approach to NCD strategy implementation through coalitions and collaborations between private, government and NGO involved in food and nutrition, physical activity, and other risk factor reduction.
- Strengthen the enforcement through collaboration with the Police.
- Develop National Screening protocols of the anti-tobacco legislation.

## **RESEARCH**

- Conduct 2014 STEPS risk factor survey to evaluate strategies implemented due to findings from this survey and broaden the research to include sexually transmitted infections.
- Conduct a cancer research study in 2010 to assess the burden of cancers in the population.

## **REFERENCES**

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Caribbean Community Secretariat (CARICOM)**

**WHO STEPS Surveillance Manual, 2008**

**ToKela NCD Risk Factors STEPS Report  
December 2007**

**Epidemiology, Biostatistics and Preventative Medicine 2<sup>nd</sup> Edition  
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**NAURU NCD Risk Factors STEPS Report, Republic of NAURU, March 2007**

**The Virgin Islands Budget Estimates 2008**



## APPENDIX 1

### Pan American STEPS Version For Chronic Disease Risk Factor Surveillance

Tortola, British Virgin Islands

#### SURVEY INFORMATION

| Location and Date |                                      | Response | Code |
|-------------------|--------------------------------------|----------|------|
| 1                 | Cluster/Village ID                   |          | 11   |
| 2                 | Cluster/Village name                 |          | 12   |
| 3                 | Interviewer ID                       |          | 13   |
| 4                 | Date of completion of the instrument |          | 14   |

Participant Id Number -----

| Consent, Interview Language and Name              |                                               | Response                          | Code |
|---------------------------------------------------|-----------------------------------------------|-----------------------------------|------|
| 5                                                 | Consent has been read and obtained            | Yes 1<br>No 2 <b>If No, END</b>   | 15   |
| 6                                                 | Consent has been obtained (verbal or written) | Yes 1<br>No 2 <b>If NO, END</b>   | 16   |
| 7                                                 | Time of interview (24 hour clock)             | _____:_____<br>Hours      minutes | 17   |
| 8                                                 | Family Surname                                |                                   | 18   |
| 9                                                 | First name                                    |                                   | 19   |
| <b>Additional Information that may be helpful</b> |                                               |                                   |      |
| 10                                                | Contact phone number where possible           |                                   | I10  |

# Step 1 Demographic Information

| CORE: Demographic Information |                                                                                                           |                                                                                                                                                                                                                                             |      |
|-------------------------------|-----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| Question                      |                                                                                                           | Response                                                                                                                                                                                                                                    | Code |
| 11                            | Sex (Record Male/Female as observed)                                                                      | Male 1<br>Male 2                                                                                                                                                                                                                            | C1   |
| 12                            | What is your date of birth?<br>Do you know 77 777 7777                                                    | ----- if known, Go to C4<br>dd/mm/year                                                                                                                                                                                                      | C2   |
| 13                            | How old are you?                                                                                          | Years -----                                                                                                                                                                                                                                 | C3   |
| 14                            | In total, how many years have you spent at school or in full-time study (excluding pre-school)?           | Years -----                                                                                                                                                                                                                                 | C4   |
| 15                            | What is the <b>highest level of education</b> you have completed?<br>[INSERT COUNTRY-SPECIFIC CATEGORIES] | No formal schooling<br>1<br>Less than primary school<br>2<br>Primary school completed<br>3<br>Secondary school completed<br>4<br>High school completed<br>5<br>College/University completed 6<br>Post graduate degree<br>7<br>Refused<br>88 | C5   |
| 16                            | What is your [insert relevant ethnic                                                                      | Negro/African descent<br>1                                                                                                                                                                                                                  | C6   |



|                                                 |                                                                                                                                                       |                                                                                                                                                                                                                      |              |
|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
|                                                 | group/racial group/cultural subgroup/others] <b>background?</b>                                                                                       | Caucasian<br>2<br>Other<br>3                                                                                                                                                                                         |              |
| <b>CORE: Demographic Information, continued</b> |                                                                                                                                                       |                                                                                                                                                                                                                      |              |
|                                                 | <b>Question</b>                                                                                                                                       | <b>Response</b>                                                                                                                                                                                                      | <b>Code</b>  |
| 17                                              | What is your <b>marital status</b> ?                                                                                                                  | Never married 1<br>Currently married 2<br>Separated 3<br>Divorced 4<br>Widowed 5<br>Cohabitation 6<br>Refused 88                                                                                                     | C7           |
| 18                                              | Which of the following best describes your <b>main work</b> status over the past 12 months?<br>[INSERT COUNTRY-SPECIFIC CATEGORIES]<br>(USE SHOWCARD) | Government employee 1<br>Non-government employee 2<br>Self-employed 3<br>Volunteer/Non-paid 4<br>Student 5<br>Homemaker 6<br>Retired 7<br>Unemployed (able to work) 8<br>Unemployed (unable to work) 9<br>Refused 88 | C8           |
| 19                                              | How many people older than 18 years, including yourself, live in your household?                                                                      | Number of people                                                                                                                                                                                                     | C9           |
| 20                                              | Taking <b>the past year</b> , can you tell me what the average earnings of the                                                                        | Per week _____ Go to T1<br>OR per month _____ Go to T1                                                                                                                                                               | C10a<br>C10b |

|    |                                                                                                                                                                                                |                                                                                                                                                 |      |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|------|
|    | household have been? (RECORD ONLY ONE, NOT ALL 3)                                                                                                                                              | OR per year _____ Go to T1                                                                                                                      | C10c |
|    |                                                                                                                                                                                                | Refused 88                                                                                                                                      | C10d |
| 21 | If you don't know the amount, can you give an <b>estimate</b> of the annual household income if I read some options to you? It is [INSERT QUINTILE VALUES IN LOCAL CURRENCY]<br>(READ OPTIONS) | ≤ Quintile (Q) 1 1<br>More than Q1, ≤ Q 2 2<br>More than Q2, ≤ Q 3 3<br>More than Q3, ≤ Q 4 4<br>More than Q 4 5<br>Don't Know 77<br>Refused 88 |      |

### Step 1 Behavioural Measurements

#### CORE: Tobacco Use

Now I am going to ask you some questions about various health behaviours. This includes things like smoking, drinking alcohol, eating fruits and vegetables and physical activity. Lets start with tobacco.

| Question                                                                                                    | Response                                                                             | Code              |
|-------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-------------------|
| 22 Do you currently smoke any <b>tobacco products</b> , such as cigarettes, cigars or pipes? (USE SHOWCARD) | Yes 1<br>No 2 If No, go to T6                                                        | T1                |
| 23 Do you currently smoke tobacco products <b>daily</b> ?                                                   | Yes 1<br>No 2 If No, go to T6                                                        | T2                |
| 24 How old were you when you <b>first started</b> smoking daily?                                            | Age (years)<br>Don't know 77 ---- if known, go to T5a                                | T3                |
| 25 Do you remember how long ago it was?<br><br>(RECORD ONLY 1, NOT ALL 3) Don't know 77                     | In years--- if known, go to T5a<br>Or in Months – if known, go to T5a<br>Or in weeks | T4a<br>T4b<br>T4c |
| 26 On average, <b>how many</b> of the following                                                             | Manufactured cigarettes<br>Hand-rolled cigarettes                                    | T5a<br>T5b        |



|  |                                                                                                |                                                                                                                                                               |                                                 |
|--|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
|  | <p>do you smoke each day?</p> <p>(RECORD FOR EACH TYPE, USE SHOWCARD)</p> <p>Don't know 77</p> | <p>Pipes full of tobacco</p> <p>Cigars, cheroots, cigarillos</p> <p>Other- If other go to T5 other, else go to T9</p> <p>Other (please specify): Go to T9</p> | <p>T5c</p> <p>T5d</p> <p>T5e</p> <p>T5other</p> |
|--|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|

Participant Identification Number: \_\_\_\_\_

| <b>EXPANDED: Tobacco Use</b> |                                                                                                                          |                                                                                                                                                  |                                                  |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|
| <b>Question</b>              |                                                                                                                          | <b>Response</b>                                                                                                                                  | <b>Code</b>                                      |
| 27                           | In the past, did you <b>ever</b> smoke <b>daily</b> ?                                                                    | Yes 1<br>No 2 If No, go to T9                                                                                                                    | T6                                               |
| 28                           | How old were you when you <b>stopped</b> smoking <b>daily</b> ?                                                          | Age (years)<br>Don't know 77—If known, go to T9                                                                                                  | T7                                               |
| 29                           | How <b>long ago</b> did you stop smoking daily?<br>Don't know 77                                                         | Years ago ----If known, go to T9<br>Or months ago – If known, go to T9<br>Or weeks ago                                                           | T8a<br>T8b<br>T8c                                |
| 30                           | Do you <b>currently use</b> any <b>smokeless tobacco</b> such as [snuff, chewing tobacco, betel] (USE SHOWCARD)          | Yes 1<br>No 2 If No, go to T12                                                                                                                   | T9                                               |
| 31                           | Do you <b>currently use smokeless tobacco</b> products <b>daily</b> ?                                                    | Yes 1<br>No 2 If No, go to T12                                                                                                                   | T10                                              |
| 32                           | On average, how many <b>times a day</b> do you use ...<br>(RECORD FOR EACH TYPE, USE SHOWCARD)<br>Don't know 77          | Snuff, by mouth<br>Snuff, by nose<br>Chewing tobacco<br>Betel, quid<br>Other ----If other, go to T11<br>other, else go to T13<br>Other (specify) | T11a<br>T11b<br>T11c<br>T11d<br>T11e<br>T11other |
| 33                           | In the <b>past</b> , did you <b>ever use</b> smokeless tobacco such as [snuff, chewing tobacco, or betel] <b>daily</b> ? | Yes 1<br>No 2                                                                                                                                    | T12                                              |



Participant Identification Number: \_\_\_\_\_

**EXPANDED: Tobacco Use, continued**

| Question                                                                                                                                                                             | Response                                                       | Code |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|------|
| 34 During the past 7 days, on how many days did someone <b>in your home</b> smoke when you were present?                                                                             | Number of days<br>Don't know 77 -----                          | T13  |
| 35 During the past 7 days, on how many days did someone smoke in closed areas <b>in your workplace</b> (in the building, in a work area or a specific office) when you were present? | Number of days<br>Don't know or don't work in a closed area 77 | T14  |

**CORE: Alcohol Consumption**

The next questions ask about the consumption of alcohol.

| Question                                                                                                                                                                 | Response                                                                                                  | Code |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|------|
| 36 Have you <b>ever</b> consumed an alcoholic drink such as beer, wine, spirits, fermented cider or mauby, guava berry, sorrel, stout<br>(USE SHOWCARD OR SHOW EXAMPLES) | Yes 1<br>No 2 If No, go to D1                                                                             | A1a  |
| 37 Have you consumed an alcoholic drink within the <b>past 12 months</b> ?                                                                                               | Yes 1<br>No 2 If No, go to D1                                                                             | A1b  |
| 38 During the past 12 months, <b>how frequently</b> have you had at least one alcoholic drink?                                                                           | Daily 1<br>5-6 days per week 2<br>1-4 days per week 3<br>1-3 days per month 4<br>Less than once a month 5 | A2   |

Participant Identification Number: \_\_\_\_\_

| CORE: Alcohol Consumption, continued |                                                                                                                                                                           |                                        |      |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|------|
| Question                             |                                                                                                                                                                           | Response                               | Code |
| 39                                   | Have you consumed an alcoholic drink within the <b>past 30 days</b> ?                                                                                                     | Yes 1<br>No 2 If No, go to D1          | A3   |
| 40                                   | During the past 30 days on how many <b>occasions</b> did you have at least one alcoholic drink?                                                                           | Number<br>Don't know 77 -----          | A4   |
| 41                                   | During the past 30 days, when you drank alcohol, <b>on average</b> , how many <b>standard alcoholic drinks</b> did you have during one drinking occasion?                 | Number<br>Don't know 77 -----          | A5   |
| 42                                   | During the past 30 days, what was the <b>largest number</b> of standard alcoholic drinks you had on a single occasion, counting all types of alcoholic drinks together?   | Largest number<br>Don't know 77 -----  | A6   |
| 43                                   | During the past 30 days, how many times did you have for <b>men: five or more</b> for <b>women: four or more</b> standard alcoholic drinks in a single drinking occasion? | Number of times<br>Don't know 77 ----- | A7   |

| EXPANDED: Alcohol Consumption |                                                                                                                                      |                                                                                             |  |                                 |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|--|---------------------------------|
| 44                            | During the past 30 days, when you consumed an alcoholic drink, how often was it with meals, Please do not count snacks.              | Usually with meals 1<br>Sometimes with meals 2<br>Rarely with meals 3<br>Never with meals 4 |  | A8                              |
| 45                            | During each of the <b>past 7 days</b> , how many standard alcoholic drinks did you have each day?<br>(USE SHOWCARD)<br>Don't know 77 | Monday<br>Tuesday<br>Wednesday<br>Thursday<br>Friday                                        |  | A9a<br>A9b<br>A9c<br>A9d<br>A9e |



|                                                                                                                                                                                                                                                                                                      |                                                                                                                                      |                                                                                                                                                               |                                       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
|                                                                                                                                                                                                                                                                                                      |                                                                                                                                      | Saturday                                                                                                                                                      | A9f                                   |
|                                                                                                                                                                                                                                                                                                      |                                                                                                                                      | Sunday                                                                                                                                                        | A9g                                   |
| <b>CORE: Diet</b>                                                                                                                                                                                                                                                                                    |                                                                                                                                      |                                                                                                                                                               |                                       |
| 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. |                                                                                                                                      |                                                                                                                                                               |                                       |
| <b>Question</b>                                                                                                                                                                                                                                                                                      |                                                                                                                                      | <b>Response</b>                                                                                                                                               | <b>Code</b>                           |
| 46                                                                                                                                                                                                                                                                                                   | In a typical week, on how many days do you <b>eat fruit</b> ? (USE SHOWCARD)                                                         | Number of days<br>Don't know 77 -----If zero, go to D3                                                                                                        | D1                                    |
| 47                                                                                                                                                                                                                                                                                                   | How many <b>servings</b> of fruit do you eat on <b>one</b> of those days? (USE SHOWCARD)                                             | Number of servings<br>Don't know -- -----                                                                                                                     | D2                                    |
| 48                                                                                                                                                                                                                                                                                                   | In a typical week, on how many days do you <b>eat vegetables</b> ? (USE SHOWCARD)                                                    | Number of days<br>Don't know 77 ---- if zero days, go to D4                                                                                                   | D3                                    |
| 49                                                                                                                                                                                                                                                                                                   | How many <b>servings</b> of vegetables do you eat on one of those days? (USE SHOWCARD)                                               | Number of servings<br>Don't know 77 -----                                                                                                                     | D4                                    |
| <b>EXPANDED: Diet</b>                                                                                                                                                                                                                                                                                |                                                                                                                                      |                                                                                                                                                               |                                       |
| 50                                                                                                                                                                                                                                                                                                   | What type of <b>oil or fat is most often</b> used for meal preparation in your household?<br><br>(USE SHOWCARD)<br>(SELECT ONLY ONE) | Vegetable oil 1<br>Lard of suet 2<br>Butter or ghee 3<br>Margarine 4<br>Other 5 If other, go to D5 other<br>None in particular 6<br>None used 7<br>Don't know | D5<br><br><br><br><br><br><br>D5other |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                       |                                              |             |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|-------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                       | 77<br>Other                                  |             |
| 51                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 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.                                                                                                                         | Number<br>Don't know 77 -----                | D6          |
| <b>CORE: Physical Activity</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                       |                                              |             |
| <p>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.</p> <p>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. [insert other examples if needed]. 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.</p> |                                                                                                                                                                                                                                                       |                                              |             |
| <b>Question</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                       | <b>Response</b>                              | <b>Code</b> |
| <b>Work</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                       |                                              |             |
| 52                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 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? [INSERT EXAMPLES] (USE SHOWCARD) | Yes 1<br>No 2 If No, go to P4                | P1          |
| 53                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | In a typical week, on how many days do you do vigorous-intensity activities as part of your work?                                                                                                                                                     | Number of days -----                         | P2          |
| 54                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | How much time do you spend doing vigorous-intensity activities at work on a typical day?                                                                                                                                                              | Hours : minutes -----:-----<br>hrs :<br>mins | P3<br>(a-b) |



Participant Identification Number: \_\_\_\_\_

| Question                                                                                                                                                                                                                                                                        | Response                           | Code        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|-------------|
| 55 Does your work involve moderate-intensity activity, that causes small increases in breathing or heart rate such as brisk walking [or carrying light loads] for at least 10 minutes continuously? [INSERT EXAMPLES] (USE SHOWCARD)                                            | Yes 1<br><br>No 2 If No, go to P7  | P4          |
| 56 In a typical week, on how many days do you do moderate-intensity activities as part of your work?                                                                                                                                                                            | Number of days                     | P5          |
| 57 How much time do you spend doing moderate-intensity activities at work on a typical day?                                                                                                                                                                                     | Hours : minutes                    | P6<br>(a-b) |
| <b>Travel to and from places</b>                                                                                                                                                                                                                                                |                                    |             |
| 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. [insert other examples if needed] |                                    |             |
| 58 Do you walk or use a bicycle (pedal cycle) for at least 10 minutes continuously to get to and from places?                                                                                                                                                                   | Yes 1<br><br>No 2 If No, go to P10 | P7          |
| 59 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?                                                                                                                                                   | Number of days                     | P8          |
| 60 How much time do you spend walking or bicycling for travel on a typical day?                                                                                                                                                                                                 | Hours:minutes                      | P9<br>(a-b) |

Participant Identification Number: \_\_\_\_\_

| <b>CORE: Physical Activity, Continued</b>                                                                                                                                                                     |                                                                                                                                                                                                                                                                               |                                |              |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|--------------|
| <b>Question</b>                                                                                                                                                                                               |                                                                                                                                                                                                                                                                               | <b>Response</b>                | <b>Code</b>  |
| <b>Recreational activities</b>                                                                                                                                                                                |                                                                                                                                                                                                                                                                               |                                |              |
| The next questions exclude the work and transport activities that you have already mentioned. Now would like to ask you about sports, fitness and recreational activities (leisure), [insert relevant terms]. |                                                                                                                                                                                                                                                                               |                                |              |
| 61                                                                                                                                                                                                            | 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] for at least 10 minutes continuously?                                                                  | Yes 1<br>No 2 if No, go to P13 | P10          |
| 62                                                                                                                                                                                                            | In a typical week, on how many days do you do vigorous-intensity sports, fitness or recreational (leisure) activities?                                                                                                                                                        | Number of days                 | P11          |
| 63                                                                                                                                                                                                            | How much time do you spend doing vigorous-intensity sports, fitness or recreational activities on a typical day?                                                                                                                                                              | Hours: minutes                 | P12          |
| 64                                                                                                                                                                                                            | 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?<br>[INSERT EXAMPLES] (USE SHOWCARD) | Yes 1<br>No 2 If no, go to P16 | P13          |
| 65                                                                                                                                                                                                            | In a typical week, on how many days do you do moderate-intensity sports, fitness or recreational (leisure) activities?                                                                                                                                                        | Number of days                 | P14          |
| 66                                                                                                                                                                                                            | How much time do you spend doing moderate-intensity sports, fitness or recreational (leisure) activities on a typical day?                                                                                                                                                    | Hours:minutes                  | P15<br>(a-b) |



Participant Identification Number: \_\_\_\_\_

### 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 care, bus, train, reading, playing cards or watching television, but do not include time spent sleeping. [INSERT EXAMPLES] (USE SHOWCARD)

|    |                                                                           |               |              |
|----|---------------------------------------------------------------------------|---------------|--------------|
| 67 | How much time do you usually spend sitting or reclining on a typical day? | Hours:minutes | P16<br>(a-b) |
|----|---------------------------------------------------------------------------|---------------|--------------|

### CORE: History of Raised Blood Pressure

| Question |                                                                                                                 | Response                      | Code |
|----------|-----------------------------------------------------------------------------------------------------------------|-------------------------------|------|
| 68       | Have you ever had your blood pressure measured by a doctor or other health worker?                              | Yes 1<br>No 2 If No, go to H6 | H1   |
| 69       | Have you ever been told by a doctor or other health worker that you have raised blood pressure or hypertension? | Yes 1<br>No 2 If No, go to H6 | H2a  |
| 70       | Have you been told in the past 12 months?                                                                       | Yes 1<br>No 2                 | H2b  |

Participant Identification Number: \_\_\_\_\_

| <b>EXPANDED: History of Raised Blood Pressure</b>                                                                                                |                                                                                           |               |     |
|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|---------------|-----|
| <b>Are you currently receiving any of the following treatments/advice for high blood pressure prescribed by a doctor or other health worker?</b> |                                                                                           |               |     |
| 71                                                                                                                                               | Drugs (medication) that you have taken in the past two weeks                              | Yes 1<br>No 2 | H3a |
|                                                                                                                                                  | Advice to reduce salt intake                                                              | Yes 1<br>No 2 | H3b |
|                                                                                                                                                  | Advice or treatment to lose weight                                                        | Yes 1<br>No 2 | H3c |
|                                                                                                                                                  | Advice or treatment to stop smoking                                                       | Yes 1<br>No 2 | H3d |
|                                                                                                                                                  | Advice to start or do more exercise                                                       | Yes 1<br>No 2 | H3e |
| 72                                                                                                                                               | Have you ever seen naturalist/bush doctor for raised blood pressure or hypertension       | Yes 1<br>No 2 | H4  |
| 73                                                                                                                                               | Are you currently taking any herbal or traditional remedy for your raised blood pressure? | Yes 1<br>No 2 | H5  |

| <b>CORE: History of Diabetes</b> |                                                                                                          |                               |             |
|----------------------------------|----------------------------------------------------------------------------------------------------------|-------------------------------|-------------|
| <b>Question</b>                  |                                                                                                          | <b>Response</b>               | <b>Code</b> |
| 74                               | Have you ever had your blood sugar measured by a doctor or other health worker?                          | Yes 1<br>No 2 If No, go to M1 | H6          |
| 75                               | Have you ever been told by a doctor or other health worker that you have raised blood sugar or diabetes? | Yes 1<br>No 2 If No, go to M1 | H7a         |
| 76                               | Have you been told in the past 12 months?                                                                | Yes 1<br>No 2                 | H7b         |



Participant Identification Number: \_\_\_\_\_

| <b>EXPANDED: History of Diabetes</b>                                                                                                  |                                                                                  |                                                                                                    |     |
|---------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-----|
| <b>Are you currently receiving any of the following treatments/advice for diabetes prescribed by a doctor or other health worker?</b> |                                                                                  |                                                                                                    |     |
| 77                                                                                                                                    | Insulin                                                                          | Yes 1<br>No 2                                                                                      | H8a |
|                                                                                                                                       | Drugs (medication) that you have taken in the past two weeks                     | Yes 1<br>No 2                                                                                      | H8b |
|                                                                                                                                       | Special prescribed diet                                                          | Yes 1<br>No 2                                                                                      | H8c |
|                                                                                                                                       | Advice or treatment to lose weight                                               | Yes 1<br>No 2                                                                                      | H8d |
|                                                                                                                                       | Advice or treatment to stop smoking                                              | Yes 1<br>No 2                                                                                      | H8e |
|                                                                                                                                       | Advice to start or do more exercise                                              | Yes 1<br>No 2                                                                                      | H8f |
| 78                                                                                                                                    | Have you ever seen a bush doctor for diabetes or raised blood sugar?             | Yes 1<br>No 2                                                                                      | H9  |
| 79                                                                                                                                    | Are you currently taking any herbal or traditional remedy for your diabetes?     | Yes 1<br>No 2                                                                                      | H10 |
| 80                                                                                                                                    | When was the last time your eyes were examined as part of your diabetes control? | Within the past 2 years      1<br>More than 2 years ago      2<br>Never<br>3<br>Don't know      77 | H11 |
| 81                                                                                                                                    | When was the last time your feet were examined as part of your diabetes control? | Within the past year      1<br>More than 1 year ago      2<br>Never<br>3<br>Don't know      77     | H12 |

Participant Identification Number: \_\_\_\_\_

| CORE: History of raised total cholesterol |                                                                                                                                          |                                |      |
|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------|
| Question                                  |                                                                                                                                          | Response                       | Code |
| 82                                        | Have you ever had your cholesterol measured by a doctor or other health worker?                                                          | Yes 1<br>No 2 If No, go to F1a | L1a  |
| 83                                        | Have you ever been told by a doctor or other health worker that you have raised cholesterol?                                             | Yes 1<br>No 2 If No, go to F1a | L2a  |
| 84                                        | Were you told in the past 12 months?                                                                                                     | Yes 1<br>No 2                  | L2b  |
| 85                                        | Are you currently receiving any of the following treatments/advice for raised cholesterol prescribed by a doctor or other health worker? |                                |      |
| 86                                        | Oral treatment (medication) taken in the last 2 weeks                                                                                    | Yes 1<br>No 2                  | L3a  |
|                                           | Special prescribed diet                                                                                                                  | Yes 1<br>No 2                  | L3b  |
|                                           | Advice or treatment to lose weight                                                                                                       | Yes 1<br>No 2                  | L3c  |
|                                           | Advice or treatment to stop smoking                                                                                                      | Yes 1<br>No 2                  | L3d  |
|                                           | Advice to start to do more exercise                                                                                                      | Yes 1<br>No 2                  | L3e  |
|                                           | During the past 12 months have you seen a bush doctor/healer for raised cholesterol?                                                     | Yes 1<br>No 2                  | L4   |
| 87                                        | Are you currently taking any herbal or traditional remedy for your raised cholesterol?                                                   | Yes 1<br>No 2                  | L5   |

Participant Identification Number: \_\_\_\_\_



**EXPANDED: Family history**

| Question |                                                                              | Response | Code |
|----------|------------------------------------------------------------------------------|----------|------|
| 88       | Have some of your family members been diagnosed with the following diseases? |          |      |
|          | Diabetes or blood sugar                                                      | Yes 1    | F1a  |
|          |                                                                              | No 2     |      |
|          | Raised blood pressure                                                        | Yes 1    | F1b  |
|          |                                                                              | No 2     |      |
|          | Stroke                                                                       | Yes 1    | F1c  |
|          |                                                                              | No 2     |      |
|          | Cancer or malignant tumor                                                    | Yes 1    | F1d  |
|          |                                                                              | No 2     |      |
|          | Raised Cholesterol                                                           | Yes 1    | F1e  |
|          |                                                                              | No 2     |      |
|          | Early heart attack (below age 55 for men<br>and below age 65 for women)      | Yes 1    | F1f  |
|          |                                                                              | No 2     |      |

Participant Identification Number: \_\_\_\_\_

Step 2 Physical Measurement

**CORE: Height and Weight**

| Question                                  | Response                       | Code |
|-------------------------------------------|--------------------------------|------|
| 89 Interviewer ID                         |                                | M1   |
| 90 Device IDs for height and weight       | Height _____<br>Weight _____   | M2   |
| 91 Height                                 | In centimeters (cm)<br>_____   | M3   |
| 92 Weight<br>If too large for scale 666.6 | In kilograms (kg)<br>_____     | M4   |
| 93 <b>For women:</b> Are you pregnant?    | Yes 1 If Yes, go to M8<br>No 2 | M5   |

**CORE: Waist**

|                        |                              |    |
|------------------------|------------------------------|----|
| 94 Device ID for waist | _____                        | M6 |
| 95 Waist circumference | In centimeters (cm)<br>_____ | M7 |

**CORE: Blood Pressure**

|                                                                                |                                |      |
|--------------------------------------------------------------------------------|--------------------------------|------|
| 96 Interviewer ID                                                              | _____                          | M8   |
| 97 Device ID for blood pressure                                                | _____                          | M9   |
| 98 Cuff size used                                                              | Small 1<br>Medium 2<br>Large 3 | M10  |
| 99 Reading 1                                                                   | Systolic (mmHg) _____          | M11a |
|                                                                                | Diastolic (mmHg) _____         | M11b |
| 100 Reading 2                                                                  | Systolic (mmHg) _____          | M12a |
|                                                                                | Diastolic (mmHg) _____         | M12b |
| 101 Reading 3                                                                  | Systolic (mmHg) _____          | M13a |
|                                                                                | Diastolic (mmHg) _____         | M13b |
| 102 During the past two weeks, have you been treated for raised blood pressure | Yes 1<br>No 2                  | M14  |



|  |                                                                           |  |  |
|--|---------------------------------------------------------------------------|--|--|
|  | with drugs (medication) prescribed by a<br>doctor or other health worker? |  |  |
|--|---------------------------------------------------------------------------|--|--|

Participant Identification Number: \_\_\_\_\_

Step 3 Biochemical Measurements

| CORE: Blood Glucose |                                                                                                                                                  |                              |      |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|------|
|                     | Question                                                                                                                                         | Response                     | Code |
| 105                 | During the past 12 hours have you had anything to eat or drink, other than water?                                                                | Yes 1<br>No 2                | B1   |
| 106                 | Technician ID                                                                                                                                    | _____                        | B2   |
| 107                 | Device ID                                                                                                                                        | _____                        | B3   |
| 108                 | Time of day blood specimen taken (24 hour clock)                                                                                                 | Hours: minutes<br>_____:____ | B4   |
| 109                 | Fasting blood glucose                                                                                                                            | mmol/l _____                 | B5   |
| 110                 | Today, have you taken insulin or other drugs (medication) that have been prescribed by a doctor or other health worker for raised blood glucose? | Yes 1<br>No 2                | B6   |
| CORE: Blood Lipids  |                                                                                                                                                  |                              |      |
| 111                 | Device ID                                                                                                                                        | _____                        | B7   |
| 112                 | Total Cholesterol                                                                                                                                | mmol/l _____:____            | B8   |
| 113                 | During the past two weeks, have you been treated for raised cholesterol with drugs (medication) prescribed by a doctor or other health worker?   | Yes 1<br>No 2                | B9   |



Participant Identification Number: \_\_\_\_\_

Step 1 Optional Module

| Section: Health Screening |                                                                                                            |                                                                                                |      |
|---------------------------|------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------|
| Question                  | Response                                                                                                   |                                                                                                | Code |
| 117                       | Have you ever had your fasces examined to look for hidden blood?                                           | Yes 1<br>No 2                                                                                  | S1   |
| 118                       | Have you ever had a colonoscopy?                                                                           | Yes 1<br>No 2                                                                                  | S2   |
| 119                       | <b><u>This following questions are for men only:</u></b> Have you ever had a examination of your prostate? | Yes 1<br>No 2                                                                                  | S3   |
| 120                       | <b><u>The following questions are for women only:</u></b> Have you been shown how to examine your breasts? | Yes 1<br>No 2                                                                                  | S4   |
| 120                       | When was the last time you had an examination of your breasts?                                             | 1 year or less 1<br>Between 1 and 2 years 2<br>More than 2 years 3<br>Never 4<br>Don't know 77 | S5   |
| 121                       | When was the last time you had a mammogram?                                                                | 1 year or less 1<br>Between 1 and 2 years 2<br>More than 2 years 3<br>Never 4<br>Don't know 77 | S6   |
| 122                       | When was the last time you had a Pap test?                                                                 | 1 year or less 1<br>Between 1 and 2 years 2<br>More than 2 years 3<br>Never 4<br>Don't know 77 | S7   |

## **Appendix 2**

### **STEPS Survey Coordination and Management Committee:**

Athelene Linton, Health Surveillance Officer  
Tracia Smith, Health Information Officer  
Maurice Turnbull, Statistician, Department of Planning  
Ivy George, Health Promotion Officer, Focal Point for CNCDs &  
Project Coordinator  
Althea Kellman, Field Supervisor

### **Survey Field Workers:**

Christian Allen, Ann Husbands, Loraine Williams, Phillip Jacobus, Engrid  
Malone, Drusilla Fahie, Carolyn Johnson, Alice Potter, Rhea Powell, Lorna  
George, Tanya Barnes, Lorna Tom, Roselia Dawson, Berta McKelly,  
Darlene Jackson, Jennel Maduro, Shalma Nibbs, Rhona Grant, Avian  
Lewis, Marion Levons and FrauVaun Farrington.



**END OF REPORT**

Cluster No. \_\_\_\_\_  
Interviewer ID \_\_\_\_\_

\_\_\_\_\_

[illegible]

- Fill in form by using “y/n” for At Home (corresponds with participant at home yes/no) and using an “x” for the correct responses in Male, Female, Step 1, Step 2, Step 3



## Appendix 4



# Ministry of Health and Social Development GOVERNMENT OF THE BRITISH VIRGIN ISLANDS

## Alcohol Consumption

This show card relates to: STEP: step 1 Section: A ITEMS: A1 to A9 a-g

**1 STANDARD  
BOTTLE OF  
BEER**

1 SERVING

**285ml**



**1 SINGLE  
MEASURE  
OF SPIRITS**

1 SERVING

**30ml**



**1 MEDIUM  
SIZE OF  
WINE**

1 SERVING

**120ml**



**1 MEASURE  
OF APERTIF**

1 SERVING

**60ml**



**Note:** net alcohol content of a standard drink is approximately 10g of ethanol. However, standard drinks in different countries can contain different amounts of ethanol. Therefore, countries may have to adapt this measure according to their own standards and will report this measure if different from the standard above.



## Appendix 4



# Ministry of Health and Social Development

## GOVERNMENT OF THE BRITISH VIRGIN ISLANDS

### PHYSICAL ACTIVITY (paid or unpaid work, training, household chores, etc.)

This show card relates to: **STEP: Core Physical Activity** Section: **ITEMS: P1 to P16**

Recreation activity is considered to be sports, fitness, etc.

Recreation activity is considered to be sports, fitness, etc.

EXAMPLES

**VIGOROUS INTENSITY  
SPORTS FOR AT  
LEAST 10 MINUTES  
CONTINUOUSLY**

CAUSES  
LARGE  
INCREASE IN  
BREATHING  
OR HEART  
RATE



**MODERATE INTENSITY  
SPORTS**

CAUSES  
SMALL  
INCREASE IN  
BREATHING  
OR HEART  
RATE



**SEDENTARY  
BEHAVIOUR**

WATCHING TV,  
READING,  
COMPUTER OR  
DESK WORK,  
SITTING  
RELAXING



**HIGH INTENSITY  
WORK ACTIVITY**

CAUSES  
LARGE  
INCREASE IN  
BREATHING  
OR HEART  
RATE



**MODERATE INTENSITY  
WORK ACTIVITY**

CAUSES  
SMALL  
INCREASE IN  
BREATHING  
OR HEART  
RATE













# Ministry of Health and Social Development

GOVERNMENT OF THE BRITISH VIRGIN ISLANDS

## DIET: TYPICAL FRUIT AND VEGETABLE SERVING SIZES

This show card relates to: **STEP: step 1**    **Section: D**    **ITEMS: D1 to D4**

| VEGETABLES<br>are considered to be:        | 1 SERVING              | EXAMPLES                                                                              |
|--------------------------------------------|------------------------|---------------------------------------------------------------------------------------|
| Raw green leafy<br>vegetables              | 1 cup                  |    |
| Other vegetables<br>cooked, chopped or raw | ½ cup                  |     |
| Vegetable juice                            | ½ cup                  |  |
| FRUITS are considered to be:               | 1 SERVING              | EXAMPLES                                                                              |
| Banana, Apple, Orange                      | 1 medium<br>size piece |   |
| Chopped, cooked and<br>canned fruits       | ½ cup                  |  |
| Fruit juice                                | ½ cup                  |  |

**Serving size:** Serving Size: One Standard = 80 Gram (Translated into different units of cups, depending on the type of vegetable and standard cup measures available in the country).

**Note:** Tubers such as potatoes and cassava should not be included.











# Ministry of Health and Social Development

GOVERNMENT OF THE BRITISH VIRGIN ISLANDS

## DIET: TYPICAL FRUIT AND VEGETABLE SERVING SIZES

This show card relates to: STEP: step 1 Section: D ITEMS: D1 to D4

| VEGETABLES<br>are considered to be:        | 1 SERVING              | EXAMPLES                                                                              |
|--------------------------------------------|------------------------|---------------------------------------------------------------------------------------|
| Raw green leafy<br>vegetables              | 1 cup                  |    |
| Other vegetables<br>cooked, chopped or raw | $\frac{1}{2}$ cup      |     |
| Vegetable juice                            | $\frac{1}{2}$ cup      |  |
| FRUITS are considered to be:               | 1 SERVING              | EXAMPLES                                                                              |
| Banana, Apple, Orange                      | 1 medium<br>size piece |  |
| Chopped, cooked and<br>canned fruits       | $\frac{1}{2}$ cup      |  |
| Fruit juice                                | $\frac{1}{2}$ cup      |  |

**Serving size:** Serving Size: One Standard = 80 Gram (Translated into different units of cups, depending on the type of vegetable and standard cup measures available in the country).

**Note:** Tubers such as potatoes and cassava should not be included.





# Ministry of Health and Social Development

GOVERNMENT OF THE BRITISH VIRGIN ISLANDS

## TOBACCO USE

This show card relates to: STEP: step 1 Tobacco Use Section: T ITEMS: T1 to T14

### LIST OF TOBACCO PRODUCTS

Cigars  
Cherobts  
Cigarillos  
Cigarettes

Bidas  
Chutas  
Goza/Hookas  
Local Tobacco Products

## PIPES



## BIDI



## CHEWING TOBACCO

eg. Plug, Loose leaf, Chimo, Toombak, Gutka or Twist



## BETEL NUT



## WATER PIPE

Also known as Shisha, Hookah or Hubble Bubble



## APPENDIX 5

| Age    | 2008 Tortola |        |       | 2008 Virgin Gorda |        |       | 2008 Anegada |        |       | 2008 Jost Van Dyke |        |       | 2008 Outer Islands |        |       | 2008 Boaters |        |       | 2008 Total |        |       |
|--------|--------------|--------|-------|-------------------|--------|-------|--------------|--------|-------|--------------------|--------|-------|--------------------|--------|-------|--------------|--------|-------|------------|--------|-------|
|        | Male         | Female | Total | Male              | Female | Total | Male         | Female | Total | Male               | Female | Total | Male               | Female | Total | Male         | Female | Total | Male       | Female | Total |
| 0-4    | 926          | 893    | 1819  | 152               | 142    | 295   | 11           | 18     | 29    | 5                  | 8      | 13    | 1                  | 0      | 1     | 0            | 0      | 0     | 1096       | 1062   | 2158  |
| 5-9    | 1000         | 1011   | 2011  | 172               | 158    | 330   | 9            | 6      | 15    | 4                  | 12     | 16    | 0                  | 0      | 0     | 0            | 0      | 0     | 1184       | 1188   | 2372  |
| 10-14  | 910          | 949    | 1859  | 111               | 161    | 271   | 9            | 8      | 17    | 12                 | 7      | 20    | 0                  | 0      | 0     | 0            | 0      | 0     | 1042       | 1125   | 2166  |
| 15-19  | 836          | 774    | 1610  | 116               | 139    | 254   | 6            | 6      | 12    | 6                  | 6      | 12    | 0                  | 0      | 0     | 0            | 0      | 0     | 964        | 924    | 1889  |
| 20-24  | 871          | 886    | 1756  | 160               | 146    | 306   | 5            | 11     | 16    | 15                 | 8      | 23    | 4                  | 5      | 9     | 0            | 0      | 0     | 1054       | 1056   | 2110  |
| 25-29  | 1002         | 1139   | 2141  | 202               | 171    | 373   | 12           | 18     | 30    | 11                 | 11     | 22    | 15                 | 12     | 27    | 5            | 0      | 5     | 1247       | 1352   | 2599  |
| 30-34  | 1134         | 1260   | 2394  | 216               | 216    | 432   | 18           | 23     | 41    | 10                 | 17     | 27    | 10                 | 4      | 13    | 2            | 0      | 2     | 1391       | 1519   | 2910  |
| 35-39  | 1160         | 1231   | 2391  | 240               | 218    | 458   | 16           | 12     | 28    | 22                 | 10     | 32    | 4                  | 2      | 6     | 4            | 0      | 4     | 1445       | 1474   | 2918  |
| 40-44  | 1019         | 1000   | 2020  | 177               | 159    | 336   | 9            | 7      | 16    | 14                 | 8      | 22    | 0                  | 5      | 5     | 0            | 2      | 2     | 1219       | 1183   | 2401  |
| 45-49  | 755          | 817    | 1572  | 135               | 122    | 257   | 15           | 6      | 21    | 9                  | 8      | 17    | 5                  | 5      | 10    | 2            | 0      | 2     | 921        | 958    | 1879  |
| 50-54  | 635          | 573    | 1208  | 116               | 75     | 190   | 7            | 2      | 10    | 14                 | 10     | 23    | 4                  | 0      | 4     | 10           | 7      | 17    | 785        | 667    | 1452  |
| 55-59  | 513          | 448    | 961   | 59                | 81     | 140   | 10           | 4      | 13    | 15                 | 8      | 23    | 2                  | 5      | 7     | 6            | 12     | 18    | 605        | 558    | 1163  |
| 60-64  | 284          | 227    | 511   | 50                | 33     | 83    | 5            | 10     | 15    | 7                  | 8      | 16    | 1                  | 4      | 5     | 11           | 10     | 21    | 359        | 291    | 650   |
| 65-69  | 172          | 196    | 368   | 44                | 16     | 60    | 6            | 5      | 11    |                    | 1      | 1     | 6                  | 5      | 11    | 7            | 12     | 19    | 236        | 234    | 470   |
| 70-74  | 146          | 150    | 296   | 20                | 23     | 43    | 6            | 11     | 17    | 2                  | 8      | 11    | 4                  | 0      | 4     | 4            | 11     | 15    | 182        | 203    | 385   |
| 75-79  | 106          | 127    | 232   | 15                | 19     | 34    | 6            | 1      | 7     | 2                  | 1      | 4     | 4                  | 0      | 4     | 11           | 0      | 11    | 144        | 148    | 292   |
| 80-84  | 81           | 101    | 183   | 12                | 17     | 29    |              | 1      | 1     | 2                  | 0      | 2     | 0                  | 0      | 0     | 0            | 0      | 0     | 96         | 119    | 215   |
| 85plus | 77           | 78     | 156   | 6                 | 4      | 10    | 5            | 0      | 5     | 6                  | 7      | 13    | 0                  | 0      | 0     | 0            | 0      | 0     | 95         | 89     | 184   |
| Total  | 11627        | 11859  | 23486 | 2003              | 1900   | 3903  | 155          | 150    | 305   | 156                | 141    | 297   | 59                 | 46     | 105   | 63           | 54     | 117   | 14063      | 14150  | 28213 |

Source: Development Planning Unit, Government of the British Virgin Islands





# **WHO STEPS**

## **Chronic Disease Risk Factor Surveillance**

### **DATA BOOK FOR THE VIRGIN ISLANDS (UK)**

#### **APPENEDIX 6**

## Sampling and Response Proportions

---

**Response proportions**      Description: Summary results for overall response proportions.

| Response proportions |          |            |   |          |            |   |             |                     |
|----------------------|----------|------------|---|----------|------------|---|-------------|---------------------|
| Age Group<br>(years) | Men      |            |   | Women    |            |   | Both Sexes  |                     |
|                      | Eligible | Responded  |   | Eligible | Responded  |   | Eligible    | Responded           |
|                      | n        | n          | % | n        | n          | % | n           | n      %            |
| 25-34                |          | 115        |   |          | 153        |   |             | 268                 |
| 35-44                |          | 143        |   |          | 226        |   |             | 369                 |
| 45-54                |          | 134        |   |          | 175        |   |             | 309                 |
| 55-64                |          | 63         |   |          | 96         |   |             | 159                 |
| <b>25-64</b>         |          | <b>455</b> |   |          | <b>650</b> |   | <b>1629</b> | <b>1105    67.8</b> |

### Analysis Information:

- Questions used: interview tracking form
  - Epi Info program name: Response Overall (unweighted)
-



## 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           | %            |
| 25-34                            | 115        | 10.4        | 153        | 13.8        | 268         | 24.3         |
| 35-44                            | 143        | 12.9        | 226        | 20.5        | 369         | 33.4         |
| 45-54                            | 134        | 12.1        | 175        | 15.8        | 309         | 28.0         |
| 55-64                            | 63         | 5.7         | 96         | 8.7         | 159         | 14.4         |
| <b>25-64</b>                     | <b>455</b> | <b>41.2</b> | <b>650</b> | <b>58.8</b> | <b>1105</b> | <b>100.0</b> |

### Analysis Information:

- Questions used: C1, C2
- 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        |
| 25-34                             | 112        | 12.2        | 152        | 12.7        | 264         | 12.5        |
| 35-44                             | 138        | 12.3        | 216        | 12.0        | 354         | 12.1        |
| 45-54                             | 123        | 11.9        | 169        | 11.6        | 292         | 11.7        |
| 55-64                             | 61         | 10.9        | 81         | 11.3        | 142         | 11.2        |
| <b>25-64</b>                      | <b>434</b> | <b>12.0</b> | <b>618</b> | <b>11.9</b> | <b>1052</b> | <b>12.0</b> |

### 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 | % High school completed | % College/ University completed | % Post graduate degree completed |
| 25-34                      | 114        | 0.0                   | 0.0                        | 19.3                       | 25.4                         | 26.3                    | 26.3                            | 2.6                              |
| 35-44                      | 143        | 0.7                   | 0.7                        | 21.7                       | 20.3                         | 27.3                    | 25.9                            | 3.5                              |
| 45-54                      | 132        | 0.0                   | 0.0                        | 29.5                       | 21.2                         | 21.2                    | 25.8                            | 2.3                              |
| 55-64                      | 63         | 0.0                   | 0.0                        | 44.4                       | 20.6                         | 17.5                    | 15.9                            | 1.6                              |
| <b>25-64</b>               | <b>452</b> | <b>0.2</b>            | <b>0.2</b>                 | <b>26.5</b>                | <b>21.9</b>                  | <b>23.9</b>             | <b>24.6</b>                     | <b>2.7</b>                       |

| Highest level of education |            |                       |                            |                            |                              |                         |                                 |                                  |
|----------------------------|------------|-----------------------|----------------------------|----------------------------|------------------------------|-------------------------|---------------------------------|----------------------------------|
| Women                      |            |                       |                            |                            |                              |                         |                                 |                                  |
| Age Group (years)          | n          | % No formal schooling | % Less than primary school | % Primary school completed | % Secondary school completed | % High school completed | % College/ University completed | % Post graduate degree completed |
| 25-34                      | 150        | 0.0                   | 0.0                        | 4.7                        | 18.7                         | 29.3                    | 40.7                            | 6.7                              |
| 35-44                      | 224        | 0.0                   | 0.0                        | 12.1                       | 20.5                         | 29.5                    | 31.7                            | 6.3                              |
| 45-54                      | 175        | 0.0                   | 1.1                        | 25.1                       | 21.7                         | 24.6                    | 22.9                            | 4.6                              |
| 55-64                      | 90         | 0.0                   | 2.2                        | 38.9                       | 20.0                         | 12.2                    | 22.2                            | 4.4                              |
| <b>25-64</b>               | <b>639</b> | <b>0.0</b>            | <b>0.6</b>                 | <b>17.7</b>                | <b>20.3</b>                  | <b>25.7</b>             | <b>30.0</b>                     | <b>5.6</b>                       |

| Highest level of education |             |                       |                            |                            |                              |                         |                                 |                                  |
|----------------------------|-------------|-----------------------|----------------------------|----------------------------|------------------------------|-------------------------|---------------------------------|----------------------------------|
| Both Sexes                 |             |                       |                            |                            |                              |                         |                                 |                                  |
| Age Group (years)          | n           | % No formal schooling | % Less than primary school | % Primary school completed | % Secondary school completed | % High school completed | % College/ University completed | % Post graduate degree completed |
| 25-34                      | 264         | 0.0                   | 0.0                        | 11.0                       | 21.6                         | 28.0                    | 34.5                            | 4.9                              |
| 35-44                      | 367         | 0.3                   | 0.3                        | 15.8                       | 20.4                         | 28.6                    | 29.4                            | 5.2                              |
| 45-54                      | 307         | 0.0                   | 0.7                        | 27.0                       | 21.5                         | 23.1                    | 24.1                            | 3.6                              |
| 55-64                      | 153         | 0.0                   | 1.3                        | 41.2                       | 20.3                         | 14.4                    | 19.6                            | 3.3                              |
| <b>25-64</b>               | <b>1091</b> | <b>0.1</b>            | <b>0.5</b>                 | <b>21.4</b>                | <b>21.0</b>                  | <b>24.9</b>             | <b>27.8</b>                     | <b>4.4</b>                       |

**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<br>(years)        | Both Sexes  |                               |             |            |
|                             | n           | %<br>Negro/African<br>Descent | % Caucasian | % Other    |
| 25-34                       | 267         | 88.4                          | 4.5         | 7.1        |
| 35-44                       | 368         | 87.0                          | 3.0         | 10.1       |
| 45-54                       | 308         | 88.3                          | 5.8         | 5.8        |
| 55-64                       | 158         | 89.2                          | 5.1         | 5.7        |
| <b>25-64</b>                | <b>1101</b> | <b>88.0</b>                   | <b>4.5</b>  | <b>7.5</b> |

**Analysis Information:**

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

**Marital 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 |
| 25-34             | 115        | 70.4            | 24.3                | 0.9         | 2.6        | 0.0        | 1.7          |
| 35-44             | 143        | 33.6            | 53.8                | 7.0         | 3.5        | 1.4        | 0.7          |
| 45-54             | 132        | 29.5            | 53.8                | 4.5         | 11.4       | 0.0        | 0.8          |
| 55-64             | 63         | 12.7            | 55.6                | 1.6         | 15.9       | 14.3       | 0.0          |
| <b>25-64</b>      | <b>453</b> | <b>38.9</b>     | <b>46.6</b>         | <b>4.0</b>  | <b>7.3</b> | <b>2.4</b> | <b>0.9</b>   |

| Marital status    |            |                 |                     |             |            |            |              |
|-------------------|------------|-----------------|---------------------|-------------|------------|------------|--------------|
| Women             |            |                 |                     |             |            |            |              |
| Age Group (years) | n          | % Never married | % Currently married | % Separated | % Divorced | % Widowed  | % Cohabiting |
| 25-34             | 152        | 62.5            | 31.6                | 3.9         | 2.0        | 0.0        | 0.0          |
| 35-44             | 224        | 44.2            | 39.7                | 5.4         | 10.3       | 0.4        | 0.0          |
| 45-54             | 174        | 35.6            | 46.0                | 4.6         | 9.8        | 4.0        | 0.0          |
| 55-64             | 95         | 18.9            | 58.9                | 2.1         | 8.4        | 9.5        | 2.1          |
| <b>25-64</b>      | <b>645</b> | <b>42.5</b>     | <b>42.3</b>         | <b>4.3</b>  | <b>7.9</b> | <b>2.6</b> | <b>0.3</b>   |

| Marital status    |             |                 |                     |             |            |            |              |
|-------------------|-------------|-----------------|---------------------|-------------|------------|------------|--------------|
| Both Sexes        |             |                 |                     |             |            |            |              |
| Age Group (years) | n           | % Never married | % Currently married | % Separated | % Divorced | % Widowed  | % Cohabiting |
| 25-34             | 267         | 65.9            | 28.5                | 2.6         | 2.2        | 0.0        | 0.7          |
| 35-44             | 367         | 40.1            | 45.2                | 6.0         | 7.6        | 0.8        | 0.3          |
| 45-54             | 306         | 33.0            | 49.3                | 4.6         | 10.5       | 2.3        | 0.3          |
| 55-64             | 158         | 16.5            | 57.6                | 1.9         | 11.4       | 11.4       | 1.3          |
| <b>25-64</b>      | <b>1098</b> | <b>41.0</b>     | <b>44.1</b>         | <b>4.2</b>  | <b>7.7</b> | <b>2.6</b> | <b>0.5</b>   |

**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   |
| 25-34             | 115        | 25.2                  | 67.0                      | 5.2             | 2.6        |
| 35-44             | 143        | 23.8                  | 60.8                      | 14.7            | 0.7        |
| 45-54             | 133        | 27.1                  | 51.1                      | 21.8            | 0.0        |
| 55-64             | 63         | 15.9                  | 46.0                      | 25.4            | 12.7       |
| <b>25-64</b>      | <b>454</b> | <b>24.0</b>           | <b>57.5</b>               | <b>15.9</b>     | <b>2.6</b> |

| Employment status |            |                       |                           |                 |            |
|-------------------|------------|-----------------------|---------------------------|-----------------|------------|
| Women             |            |                       |                           |                 |            |
| Age Group (years) | n          | % Government employee | % Non-government employee | % Self-employed | % Unpaid   |
| 25-34             | 152        | 26.3                  | 66.4                      | 1.3             | 5.9        |
| 35-44             | 225        | 29.8                  | 62.2                      | 2.7             | 5.3        |
| 45-54             | 175        | 26.3                  | 56.6                      | 10.3            | 6.9        |
| 55-64             | 96         | 21.9                  | 43.8                      | 14.6            | 19.8       |
| <b>25-64</b>      | <b>648</b> | <b>26.9</b>           | <b>59.0</b>               | <b>6.2</b>      | <b>8.0</b> |

| Employment status |             |                       |                           |                 |            |
|-------------------|-------------|-----------------------|---------------------------|-----------------|------------|
| Both Sexes        |             |                       |                           |                 |            |
| Age Group (years) | n           | % Government employee | % Non-government employee | % Self-employed | % Unpaid   |
| 25-34             | 267         | 25.8                  | 66.7                      | 3.0             | 4.5        |
| 35-44             | 368         | 27.4                  | 61.7                      | 7.3             | 3.5        |
| 45-54             | 308         | 26.6                  | 54.2                      | 15.3            | 3.9        |
| 55-64             | 159         | 19.5                  | 44.7                      | 18.9            | 17.0       |
| <b>25-64</b>      | <b>1102</b> | <b>25.7</b>           | <b>58.3</b>               | <b>10.2</b>     | <b>5.8</b> |

**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 |          |            |             |              |            |                |                    |
|----------------------------|----------|------------|-------------|--------------|------------|----------------|--------------------|
| Age Group (years)          | Men      |            |             |              |            |                |                    |
|                            | n        | % Non-paid | % Student   | % Home-maker | % Retired  | Unemployed     |                    |
|                            |          |            |             |              |            | % Able to work | % Not able to work |
| 25-34                      | 3        | 0.0        | 33.3        | 0.0          | 0.0        | 66.7           | 0.0                |
| 35-44                      | 1        | 0.0        | 0.0         | 0.0          | 0.0        | 100.0          | 0.0                |
| 45-54                      | 8        | 0.0        | 0.0         | 0.0          | 75.0       | 25.0           | 0.0                |
| 55-64                      | 12       | 0.0        | 8.3         | 0.0          | 50.0       | 41.7           | 0.0                |
| <b>25-64</b>               | <b>3</b> | <b>0.0</b> | <b>33.3</b> | <b>0.0</b>   | <b>0.0</b> | <b>66.7</b>    | <b>0.0</b>         |

| Unpaid work and unemployed |           |            |            |              |             |                |                    |
|----------------------------|-----------|------------|------------|--------------|-------------|----------------|--------------------|
| Age Group (years)          | Women     |            |            |              |             |                |                    |
|                            | n         | % Non-paid | % Student  | % Home-maker | % Retired   | Unemployed     |                    |
|                            |           |            |            |              |             | % Able to work | % Not able to work |
| 25-34                      | 9         | 0.0        | 0.0        | 33.3         | 0.0         | 55.6           | 11.1               |
| 35-44                      | 12        | 0.0        | 8.3        | 33.3         | 8.3         | 50.0           | 0.0                |
| 45-54                      | 12        | 0.0        | 0.0        | 16.7         | 16.7        | 58.3           | 8.3                |
| 55-64                      | 19        | 0.0        | 0.0        | 31.6         | 52.6        | 15.8           | 0.0                |
| <b>25-64</b>               | <b>52</b> | <b>0.0</b> | <b>1.9</b> | <b>28.8</b>  | <b>25.0</b> | <b>40.4</b>    | <b>3.8</b>         |

| Unpaid work and unemployed |            |            |            |              |             |                |                    |
|----------------------------|------------|------------|------------|--------------|-------------|----------------|--------------------|
| Age Group (years)          | Both Sexes |            |            |              |             |                |                    |
|                            | n          | % Non-paid | % Student  | % Home-maker | % Retired   | Unemployed     |                    |
|                            |            |            |            |              |             | % Able to work | % Not able to work |
| 25-34                      | 12         | 0.0        | 8.3        | 25.0         | 0.0         | 58.3           | 8.3                |
| 35-44                      | 13         | 0.0        | 7.7        | 30.8         | 7.7         | 53.8           | 0.0                |
| 45-54                      | 12         | 0.0        | 0.0        | 16.7         | 16.7        | 58.3           | 8.3                |
| 55-64                      | 27         | 0.0        | 0.0        | 22.2         | 59.3        | 18.5           | 0.0                |
| <b>25-64</b>               | <b>64</b>  | <b>0.0</b> | <b>3.1</b> | <b>23.4</b>  | <b>29.7</b> | <b>40.6</b>    | <b>3.1</b>         |

**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 question:

- 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        |
| 181                           | \$22,836.40 |

**Analysis Information:**

- Questions used: C9, C10a-d
  - 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 (USD) |                |                             |                               |                               |                                  |                |
|------------------------------------|----------------|-----------------------------|-------------------------------|-------------------------------|----------------------------------|----------------|
| n                                  | %<br>≤\$10,000 | %<br>>10,000 and<br>≤20,000 | %<br>>\$20,000 and<br>≤30,000 | %<br>>\$30,000 and<br>≤40,000 | %<br>>\$40,000 and ≤<br>\$50,000 | %<br>≥\$50,000 |
| 706                                | 6.1%           | 19.7%                       | 20.4%                         | 16.0%                         | 12.2%                            | 25.6%          |

**Analysis Information:**

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

## Tobacco Use

**Current smoking** Description: Current smokers among all respondents.

Instrument questions:

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

| Percentage of current smokers |            |                  |                 |            |                  |                |             |                  |                |
|-------------------------------|------------|------------------|-----------------|------------|------------------|----------------|-------------|------------------|----------------|
| Age Group (years)             | Men        |                  |                 | Women      |                  |                | Both Sexes  |                  |                |
|                               | n          | % Current smoker | 95% CI          | n          | % Current smoker | 95% CI         | n           | % Current smoker | 95% CI         |
| 25-34                         | 115        | 8.8              | 5.8-11.9        | 152        | 2.1              | 1.6-2.5        | 267         | 5.8              | 5.3-6.4        |
| 35-44                         | 143        | 8.8              | 6.9-10.8        | 225        | 2.2              | 1.6-2.7        | 368         | 5.8              | 4.6-7.0        |
| 45-54                         | 133        | 5.7              | 0.0-11.9        | 175        | 5.5              | 0.0-14.7       | 308         | 5.6              | 4.1-7.1        |
| 55-64                         | 63         | 13.4             | 0.0-28.1        | 96         | 4.6              | 3.1-6.1        | 159         | 9.4              | 3.2-15.5       |
| <b>25-64</b>                  | <b>454</b> | <b>8.8</b>       | <b>3.9-13.7</b> | <b>648</b> | <b>3.6</b>       | <b>0.3-6.9</b> | <b>1102</b> | <b>6.4</b>       | <b>5.7-7.0</b> |

### Analysis Information:

- Questions used: T1
- 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?

| Smoking status    |            |                |                |             |                |                  |                  |
|-------------------|------------|----------------|----------------|-------------|----------------|------------------|------------------|
| Men               |            |                |                |             |                |                  |                  |
| Age Group (years) | n          | Current smoker |                |             |                | % Does not smoke | 95% CI           |
|                   |            | % Daily        | 95% CI         | % Non-daily | 95% CI         |                  |                  |
| 25-34             | 115        | 5.3            | 0.0-10.8       | 3.5         | 1.1-6.0        | 91.2             | 88.1-94.2        |
| 35-44             | 143        | 3.5            | 1.2-5.7        | 5.4         | 2.0-8.8        | 91.2             | 89.2-93.1        |
| 45-54             | 133        | 2.9            | 0.0-6.0        | 2.9         | 0.0-6.0        | 94.3             | 88.1-100.0       |
| 55-64             | 63         | 3.3            | 0.0-7.0        | 10.0        | 0.0-21.1       | 86.6             | 71.9-100.0       |
| <b>25-64</b>      | <b>454</b> | <b>3.8</b>     | <b>0.2-7.3</b> | <b>5.0</b>  | <b>3.6-6.4</b> | <b>91.2</b>      | <b>86.3-96.1</b> |

| Smoking status    |            |                |                |             |                |                  |                  |
|-------------------|------------|----------------|----------------|-------------|----------------|------------------|------------------|
| Women             |            |                |                |             |                |                  |                  |
| Age Group (years) | n          | Current smoker |                |             |                | % Does not smoke | 95% CI           |
|                   |            | % Daily        | 95% CI         | % Non-daily | 95% CI         |                  |                  |
| 25-34             | 152        | 1.0            | 0.8-1.3        | 1.0         | 0.8-1.3        | 97.9             | 97.5-98.4        |
| 35-44             | 225        | 1.4            | 0.5-2.4        | 0.7         | 0.3-1.2        | 97.8             | 97.3-98.4        |
| 45-54             | 175        | 4.2            | 0.0-14.4       | 1.3         | 0.4-2.2        | 94.5             | 85.3-100.0       |
| 55-64             | 96         | 2.3            | 0.0-5.1        | 2.3         | 1.1-3.6        | 95.4             | 93.9-96.9        |
| <b>25-64</b>      | <b>648</b> | <b>2.3</b>     | <b>0.0-6.3</b> | <b>1.2</b>  | <b>0.6-1.9</b> | <b>96.4</b>      | <b>93.1-99.7</b> |

| Smoking status    |             |                |                |             |                |                  |                  |
|-------------------|-------------|----------------|----------------|-------------|----------------|------------------|------------------|
| Both Sexes        |             |                |                |             |                |                  |                  |
| Age Group (years) | n           | Current smoker |                |             |                | % Does not smoke | 95% CI           |
|                   |             | % Daily        | 95% CI         | % Non-daily | 95% CI         |                  |                  |
| 25-34             | 267         | 3.4            | 1.1-5.7        | 2.4         | 0.7-4.2        | 94.2             | 93.6-94.7        |
| 35-44             | 368         | 2.5            | 1.8-3.3        | 3.3         | 1.5-5.0        | 94.2             | 93.0-95.4        |
| 45-54             | 308         | 3.5            | 0.2-6.8        | 2.1         | 0.2-4.0        | 94.4             | 92.9-95.9        |
| 55-64             | 159         | 2.9            | 2.2-3.5        | 6.5         | 1.0-12.0       | 90.6             | 84.5-96.8        |
| <b>25-64</b>      | <b>1102</b> | <b>3.1</b>     | <b>2.9-3.3</b> | <b>3.3</b>  | <b>2.6-3.9</b> | <b>93.6</b>      | <b>93.0-94.3</b> |

**Analysis Information:**

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

- Frequency of smoking** Description: Percentage of current daily smokers among smokers.
- Instrument question:
- 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           |
| 25-34                               | 8         | 60.0            | 0.4-100.0        | 3         | 50.0            | 50.0-50.0         | 11         | 58.4            | 9.6-100.0        |
| 35-44                               | 11        | 39.0            | 0.0-81.2         | 5         | 66.7            | 46.3-87.1         | 16         | 43.7            | 15.3-72.0        |
| 45-54                               | 7         | 50.0            | 50.0-50.0        | 8         | 76.9            | 37.8-100.0        | 15         | 62.9            | 1.8-100.0        |
| 55-64                               | 7         | 25.0            | 25.0-25.0        | 4         | 50.0            | 19.4-80.6         | 11         | 30.7            | 11.2-50.2        |
| <b>25-64</b>                        | <b>33</b> | <b>42.8</b>     | <b>18.4-67.2</b> | <b>20</b> | <b>65.3</b>     | <b>29.6-100.0</b> | <b>53</b>  | <b>48.6</b>     | <b>40.3-57.0</b> |

**Analysis Information:**

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

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

Instrument questions:

- How old were you when you first started smoking daily?
- 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           |
| 25-34                    | 4         | 20.7        | -        | 1         | 16.0        | -                | 5          | 20.0        | -                |
| 35-44                    | 4         | 16.3        | -        | 2         | 16.3        | 13.1-19.6        | 6          | 16.3        | 15.6-17.0        |
| 45-54                    | 3         | 16.6        | -        | 5         | 25.0        | 15.4-34.6        | 8          | 21.5        | 11.4-31.6        |
| 55-64                    | 3         | 20.3        | -        | 2         | 19.0        | 11.7-26.3        | 5          | 19.8        | 16.7-22.9        |
| <b>25-64</b>             | <b>14</b> | <b>18.6</b> | <b>-</b> | <b>10</b> | <b>21.7</b> | <b>14.5-29.0</b> | <b>24</b>  | <b>19.7</b> | <b>16.1-23.3</b> |

| 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    |
| 25-34                    | 4   | 9.1           | -      | 1     | 12.0          | -         | 5          | 9.5           | -         |
| 35-44                    | 4   | 24.3          | -      | 2     | 27.0          | 22.1-31.9 | 6          | 24.8          | 24.4-25.3 |
| 45-54                    | 3   | 33.8          | -      | 5     | 24.9          | 21.4-28.4 | 8          | 28.6          | 21.8-35.4 |
| 55-64                    | 3   | 37.7          | -      | 2     | 42.7          | 41.0-44.3 | 5          | 39.5          | 37.5-41.5 |

**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.

Instrument question:

- On average, how many of the following do you smoke each day?

| Manufactured cigarette smokers among daily smokers |           |                                 |                  |           |                                 |                    |            |                                 |
|----------------------------------------------------|-----------|---------------------------------|------------------|-----------|---------------------------------|--------------------|------------|---------------------------------|
| Age Group (years)                                  | Men       |                                 |                  | Women     |                                 |                    | Both Sexes |                                 |
|                                                    | n         | % Manufactured cigarette smoker | 95% CI           | n         | % Manufactured cigarette smoker | 95% CI             | n          | % Manufactured cigarette smoker |
| 25-34                                              | 4         | 88.9                            | 88.9-88.9        | 1         | 100.0                           | 100.0-100.0        | 5          | 90.4                            |
| 35-44                                              | 4         | 85.7                            | 85.7-85.7        | 3         | 100.0                           | 100.0-100.0        | 7          | 89.4                            |
| 45-54                                              | 3         | 100.0                           | 100.0-100.0      | 5         | 100.0                           | 100.0-100.0        | 8          | 100.0                           |
| 55-64                                              | 3         | 66.7                            | 66.7-66.7        | 2         | 100.0                           | 100.0-100.0        | 5          | 79.0                            |
| <b>25-64</b>                                       | <b>14</b> | <b>86.9</b>                     | <b>86.9-86.9</b> | <b>11</b> | <b>100.0</b>                    | <b>100.0-100.0</b> | <b>25</b>  | <b>91.5</b>                     |

**Analysis Information:**

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

**Amount of tobacco used among smokers by type**

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

**Instrument question:**

- On average, how many of the following do you smoke each day?

| Mean amount of tobacco used by daily smokers by type |           |                                     |           |           |                                   |           |           |                                     |           |           |                                          |           |
|------------------------------------------------------|-----------|-------------------------------------|-----------|-----------|-----------------------------------|-----------|-----------|-------------------------------------|-----------|-----------|------------------------------------------|-----------|
| Age Group (years)                                    | Men       |                                     |           |           |                                   |           |           |                                     |           |           |                                          |           |
|                                                      | n         | Mean # of manu-<br>factured<br>cig. | 95%<br>CI | N         | Mean # of<br>hand-<br>rolled cig. | 95%<br>CI | n         | Mean #<br>of pipes<br>of<br>tobacco | 95%<br>CI | n         | Mean #<br>of other<br>type of<br>tobacco | 95%<br>CI |
| 25-34                                                | 4         | 3.9                                 | -         | 4         | 0.2                               | -         | 4         | 0.0                                 | -         | 4         | 0.0                                      | -         |
| 35-44                                                | 4         | 6.6                                 | -         | 4         | 0.0                               | -         | 4         | 0.0                                 | -         | 4         | 0.6                                      | -         |
| 45-54                                                | 3         | 11.6                                | -         | 3         | 0.0                               | -         | 3         | 0.0                                 | -         | 3         | 0.0                                      | -         |
| 55-64                                                | 3         | 13.3                                | -         | 3         | 0.0                               | -         | 3         | 0.0                                 | -         | 3         | 0.0                                      | -         |
| <b>25-64</b>                                         | <b>14</b> | <b>7.7</b>                          | <b>-</b>  | <b>14</b> | <b>0.1</b>                        | <b>-</b>  | <b>14</b> | <b>0.0</b>                          | <b>-</b>  | <b>14</b> | <b>0.2</b>                               | <b>-</b>  |

| Mean amount of tobacco used by daily smokers by type |           |                                     |                  |          |                                   |           |          |                                     |           |          |                                          |           |
|------------------------------------------------------|-----------|-------------------------------------|------------------|----------|-----------------------------------|-----------|----------|-------------------------------------|-----------|----------|------------------------------------------|-----------|
| Age Group (years)                                    | Women     |                                     |                  |          |                                   |           |          |                                     |           |          |                                          |           |
|                                                      | n         | Mean # of manu-<br>factured<br>cig. | 95% CI           | n        | Mean # of<br>hand-<br>rolled cig. | 95%<br>CI | n        | Mean #<br>of pipes<br>of<br>tobacco | 95%<br>CI | n        | Mean #<br>of other<br>type of<br>tobacco | 95%<br>CI |
| 25-34                                                | 1         | 15.0                                | -                | 0        | 0.0                               | -         | 0        | 0.0                                 | -         | 0        | 0.0                                      | -         |
| 35-44                                                | 3         | 6.5                                 | 1.4-11.6         | 2        | 0.0                               | -         | 2        | 0.0                                 | -         | 2        | 0.0                                      | -         |
| 45-54                                                | 5         | 10.1                                | 5.9-14.3         | 4        | 0.0                               | -         | 4        | 0.0                                 | -         | 4        | 0.0                                      | -         |
| 55-64                                                | 2         | 17.3                                | 10.8-23.9        | 2        | 0.0                               | -         | 2        | 0.0                                 | -         | 2        | 0.0                                      | -         |
| <b>25-64</b>                                         | <b>11</b> | <b>11.3</b>                         | <b>10.7-11.8</b> | <b>8</b> | <b>0.0</b>                        | <b>-</b>  | <b>8</b> | <b>0.0</b>                          | <b>-</b>  | <b>8</b> | <b>0.0</b>                               | <b>-</b>  |

| Mean amount of tobacco used by daily smokers by type |            |                                     |                 |           |                                  |                |           |                                     |           |           |                                          |                |
|------------------------------------------------------|------------|-------------------------------------|-----------------|-----------|----------------------------------|----------------|-----------|-------------------------------------|-----------|-----------|------------------------------------------|----------------|
| Age Group (years)                                    | Both Sexes |                                     |                 |           |                                  |                |           |                                     |           |           |                                          |                |
|                                                      | n          | Mean # of manu-<br>factured<br>cig. | 95% CI          | n         | Mean # of<br>hand-rolled<br>cig. | 95% CI         | n         | Mean #<br>of pipes<br>of<br>tobacco | 95%<br>CI | n         | Mean #<br>of other<br>type of<br>tobacco | 95% CI         |
| 25-34                                                | 5          | 5.4                                 | -               | 4         | 0.2                              | -              | 4         | 0.0                                 | -         | 4         | 0.0                                      | -              |
| 35-44                                                | 7          | 6.6                                 | 5.2-7.9         | 6         | 0.0                              | -              | 6         | 0.0                                 | -         | 6         | 0.5                                      | 0.3-0.6        |
| 45-54                                                | 8          | 10.7                                | 9.1-12.4        | 7         | 0.0                              | -              | 7         | 0.0                                 | -         | 7         | 0.0                                      | -              |
| 55-64                                                | 5          | 14.8                                | 13.5-16.1       | 5         | 0.0                              | -              | 5         | 0.0                                 | -         | 5         | 0.0                                      | -              |
| <b>25-64</b>                                         | <b>25</b>  | <b>8.9</b>                          | <b>7.8-10.0</b> | <b>22</b> | <b>0.1</b>                       | <b>0.0-0.1</b> | <b>22</b> | <b>0.0</b>                          | <b>-</b>  | <b>22</b> | <b>0.1</b>                               | <b>0.0-0.2</b> |

**Analysis Information:**

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



**Percentage of ex daily smokers in the population**

Description: Percentage of ex-daily smokers among all respondents and the mean duration, in years, since ex-daily smokers quit smoking daily.

Instrument question:

- In the past did you ever smoke daily?
- How old were you when you stopped smoking daily?

| Ex-daily smokers among all respondents |            |                    |                 |            |                    |                |             |                    |                 |
|----------------------------------------|------------|--------------------|-----------------|------------|--------------------|----------------|-------------|--------------------|-----------------|
| Age Group (years)                      | Men        |                    |                 | Women      |                    |                | Both Sexes  |                    |                 |
|                                        | n          | % ex daily smokers | 95% CI          | n          | % ex daily smokers | 95% CI         | n           | % ex daily smokers | 95% CI          |
| 25-34                                  | 111        | 12.4               | 1.6-23.2        | 151        | 0.0                | 0.0-0.0        | 262         | 6.8                | 0.0-15.3        |
| 35-44                                  | 139        | 11.2               | 8.7-13.7        | 222        | 0.7                | 0.0-2.2        | 361         | 6.4                | 4.4-8.4         |
| 45-54                                  | 130        | 11.7               | 5.3-18.2        | 170        | 4.0                | 1.5-6.4        | 300         | 8.0                | 4.8-11.1        |
| 55-64                                  | 60         | 20.7               | 5.2-36.2        | 94         | 0.8                | 0.4-1.2        | 154         | 11.5               | 0.3-22.8        |
| <b>25-64</b>                           | <b>440</b> | <b>13.3</b>        | <b>5.3-21.3</b> | <b>637</b> | <b>1.5</b>         | <b>1.3-1.8</b> | <b>1077</b> | <b>7.8</b>         | <b>2.2-13.4</b> |

| Mean years since cessation |           |             |                  |          |             |                  |            |             |                  |
|----------------------------|-----------|-------------|------------------|----------|-------------|------------------|------------|-------------|------------------|
| Age Group (years)          | Men       |             |                  | Women    |             |                  | Both Sexes |             |                  |
|                            | n         | Mean years  | 95% CI           | n        | Mean years  | 95% CI           | n          | Mean years  | 95% CI           |
| 25-34                      | 10        | 5.6         | 3.5-7.7          | 0        | 0.0         | 0.0-0.0          | 10         | 5.6         | 3.5-7.7          |
| 35-44                      | 13        | 10.3        | 6.1-14.4         | 2        | 16.0        | 3.1-28.9         | 15         | 10.6        | 7.6-13.5         |
| 45-54                      | 13        | 16.2        | 12.8-19.7        | 6        | 19.6        | -                | 19         | 17.0        | 15.4-18.7        |
| 55-64                      | 10        | 24.9        | 18.9-30.9        | 1        | 1.0         | -                | 11         | 24.1        | 18.2-29.9        |
| <b>25-64</b>               | <b>46</b> | <b>14.4</b> | <b>13.3-15.4</b> | <b>9</b> | <b>17.4</b> | <b>16.0-18.8</b> | <b>55</b>  | <b>14.6</b> | <b>13.6-15.7</b> |

**Analysis Information:**

- Questions used: T2, T6, T7, T8a-c
- Epi Info program name: Tsmokeexdaily (unweighted); TsmokeexdailyWT (weighted)

**Current Users of smokeless tobacco**

Description: Percentage of current users of smokeless tobacco among all respondents.

Instrument question:

- Do you currently use any smokeless tobacco such as [snuff, chewing tobacco, betel]?

| Current users of smokeless tobacco |            |                 |          |            |                 |          |              |                 |          |
|------------------------------------|------------|-----------------|----------|------------|-----------------|----------|--------------|-----------------|----------|
| Age Group (years)                  | Men        |                 |          | Women      |                 |          | Both Sexes   |                 |          |
|                                    | n          | % Current users | 95% CI   | n          | % Current users | 95% CI   | n            | % Current users | 95% CI   |
| 25-34                              | 115        | 0.0             | -        | 152        | 0.0             | -        | 25-34        | 0.0             | -        |
| 35-44                              | 143        | 0.0             | -        | 225        | 0.0             | -        | 35-44        | 0.0             | -        |
| 45-54                              | 133        | 0.0             | -        | 175        | 0.0             | -        | 45-54        | 0.0             | -        |
| 55-64                              | 63         | 0.0             | -        | 96         | 0.0             | -        | 55-64        | 0.0             | -        |
| <b>25-64</b>                       | <b>454</b> | <b>0.0</b>      | <b>-</b> | <b>648</b> | <b>0.0</b>      | <b>-</b> | <b>25-64</b> | <b>0.0</b>      | <b>-</b> |

**Analysis Information:**

- Questions used: T9, T10
- Epi Info program name: Tsmokelessstatus (unweighted); TsmokelessstatusWT (weighted)



**Smokeless tobacco use** Description: Status of using smokeless tobacco among all respondents.

Instrument questions:

- Do you currently use any smokeless tobacco such as [snuff, chewing tobacco, betel]?
- Do you currently use smokeless tobacco products daily?

| Smokeless tobacco use |            |              |            |             |            |                                  |                    |
|-----------------------|------------|--------------|------------|-------------|------------|----------------------------------|--------------------|
| Men                   |            |              |            |             |            |                                  |                    |
| Age Group (years)     | n          | Current user |            |             |            | % Does not use smokeless tobacco | 95% CI             |
|                       |            | % Daily      | 95% CI     | % Non-daily | 95% CI     |                                  |                    |
| 25-34                 | 115        | 0.0          | 0.0        | 0.0         | 0.0        | 100.0                            | 100.0-100.0        |
| 35-44                 | 143        | 0.0          | 0.0        | 0.0         | 0.0        | 100.0                            | 100.0-100.0        |
| 45-54                 | 133        | 0.0          | 0.0        | 0.0         | 0.0        | 100.0                            | 100.0-100.0        |
| 55-64                 | 63         | 0.0          | 0.0        | 0.0         | 0.0        | 100.0                            | 100.0-100.0        |
| <b>25-64</b>          | <b>454</b> | <b>0.0</b>   | <b>0.0</b> | <b>0.0</b>  | <b>0.0</b> | <b>100.0</b>                     | <b>100.0-100.0</b> |

| Smokeless tobacco use |            |              |            |             |            |                                  |                    |
|-----------------------|------------|--------------|------------|-------------|------------|----------------------------------|--------------------|
| Women                 |            |              |            |             |            |                                  |                    |
| Age Group (years)     | n          | Current user |            |             |            | % Does not use smokeless tobacco | 95% CI             |
|                       |            | % Daily      | 95% CI     | % Non-daily | 95% CI     |                                  |                    |
| 25-34                 | 152        | 0.0          | 0.0        | 0.0         | 0.0        | 100.0                            | 100.0-100.0        |
| 35-44                 | 225        | 0.0          | 0.0        | 0.0         | 0.0        | 100.0                            | 100.0-100.0        |
| 45-54                 | 175        | 0.0          | 0.0        | 0.0         | 0.0        | 100.0                            | 100.0-100.0        |
| 55-64                 | 96         | 0.0          | 0.0        | 0.0         | 0.0        | 100.0                            | 100.0-100.0        |
| <b>25-64</b>          | <b>648</b> | <b>0.0</b>   | <b>0.0</b> | <b>0.0</b>  | <b>0.0</b> | <b>100.0</b>                     | <b>100.0-100.0</b> |

| Smokeless tobacco use |             |              |            |             |            |                                  |                    |
|-----------------------|-------------|--------------|------------|-------------|------------|----------------------------------|--------------------|
| Both Sexes            |             |              |            |             |            |                                  |                    |
| Age Group (years)     | n           | Current user |            |             |            | % Does not use smokeless tobacco | 95% CI             |
|                       |             | % Daily      | 95% CI     | % Non-daily | 95% CI     |                                  |                    |
| 25-34                 | 267         | 0.0          | 0.0        | 0.0         | 0.0        | 100.0                            | 100.0-100.0        |
| 35-44                 | 368         | 0.0          | 0.0        | 0.0         | 0.0        | 100.0                            | 100.0-100.0        |
| 45-54                 | 308         | 0.0          | 0.0        | 0.0         | 0.0        | 100.0                            | 100.0-100.0        |
| 55-64                 | 159         | 0.0          | 0.0        | 0.0         | 0.0        | 100.0                            | 100.0-100.0        |
| <b>25-64</b>          | <b>1102</b> | <b>0.0</b>   | <b>0.0</b> | <b>0.0</b>  | <b>0.0</b> | <b>100.0</b>                     | <b>100.0-100.0</b> |

**Analysis Information:**

- Questions used: T9, T10
- Epi Info program name: Tsmokelessstatus (unweighted); TsmokelessstatusWT (weighted)

**Percentage of ex daily users of smokeless tobacco in the population**

Description: Percentage of ex-daily users of smokeless tobacco among all respondents.

Instrument question:

- In the past, did you ever use smokeless tobacco such as [snuff, chewing tobacco, betel] daily?

| Ex-daily smokeless tobacco users |            |                  |                |            |                  |                |             |                  |                |
|----------------------------------|------------|------------------|----------------|------------|------------------|----------------|-------------|------------------|----------------|
| Age Group (years)                | Men        |                  |                | Women      |                  |                | Both Sexes  |                  |                |
|                                  | n          | % Ex daily users | 95% CI         | n          | % Ex daily users | 95% CI         | n           | % Ex daily users | 95% CI         |
| 25-34                            | 115        | 0.0              | 0.0-0.0        | 152        | 0.0              | 0.0-0.0        | 267         | 0.0              | 0.0-0.0        |
| 35-44                            | 143        | 1.0              | 0.3-1.6        | 225        | 0.0              | 0.0-0.0        | 368         | 0.5              | 0.2-0.9        |
| 45-54                            | 133        | 0.0              | 0.0-0.0        | 175        | 0.4              | 0.1-0.7        | 308         | 0.2              | 0.0-0.4        |
| 55-64                            | 63         | 0.0              | 0.0-0.0        | 96         | 0.0              | 0.0-0.0        | 159         | 0.0              | 0.0-0.0        |
| <b>25-64</b>                     | <b>454</b> | <b>0.3</b>       | <b>0.0-0.6</b> | <b>648</b> | <b>0.1</b>       | <b>0.1-0.2</b> | <b>1102</b> | <b>0.2</b>       | <b>0.1-0.4</b> |

**Analysis Information:**

- Questions used: T9, T10, T12
- Epi Info program name: Tsmokelessexdaily (unweighted); TsmokelessexdailyWT (weighted)



**Current tobacco users**

Description: Percentage of daily and current (daily plus non-daily) tobacco users, includes smoking and smokeless, among all respondents.

Instrument questions:

- Do you currently smoke tobacco products daily?
- Do you currently use smokeless tobacco products daily?

| Daily tobacco users |            |               |                |            |               |                |             |               |                |
|---------------------|------------|---------------|----------------|------------|---------------|----------------|-------------|---------------|----------------|
| Age Group (years)   | Men        |               |                | Women      |               |                | Both Sexes  |               |                |
|                     | n          | % Daily users | 95% CI         | n          | % Daily users | 95% CI         | n           | % Daily users | 95% CI         |
| 25-34               | 115        | 5.3           | 0.0-10.8       | 152        | 1.0           | 0.8-1.3        | 267         | 3.4           | 1.1-5.7        |
| 35-44               | 143        | 3.5           | 1.2-5.7        | 225        | 1.4           | 0.5-2.4        | 368         | 2.5           | 1.8-3.3        |
| 45-54               | 133        | 2.9           | 0.0-6.0        | 175        | 4.2           | 0.0-14.4       | 308         | 3.5           | 0.2-6.8        |
| 55-64               | 63         | 3.3           | 0.0-7.0        | 96         | 2.3           | 0.0-5.1        | 159         | 2.9           | 2.2-3.5        |
| <b>25-64</b>        | <b>454</b> | <b>3.8</b>    | <b>0.2-7.3</b> | <b>648</b> | <b>2.3</b>    | <b>0.0-6.3</b> | <b>1102</b> | <b>3.1</b>    | <b>2.9-3.3</b> |

| Current tobacco users |            |                 |                 |            |                 |                |             |                 |                |
|-----------------------|------------|-----------------|-----------------|------------|-----------------|----------------|-------------|-----------------|----------------|
| Age Group (years)     | Men        |                 |                 | Women      |                 |                | Both Sexes  |                 |                |
|                       | n          | % Current users | 95% CI          | n          | % Current users | 95% CI         | n           | % Current users | 95% CI         |
| 25-34                 | 115        | 8.8             | 5.8-11.9        | 152        | 2.1             | 1.6-2.5        | 267         | 5.8             | 5.3-6.4        |
| 35-44                 | 143        | 8.8             | 6.9-10.8        | 225        | 2.2             | 1.6-2.7        | 368         | 5.8             | 4.6-7.0        |
| 45-54                 | 133        | 5.7             | 0.0-11.9        | 175        | 5.5             | 0.0-14.7       | 308         | 5.6             | 4.1-7.1        |
| 55-64                 | 63         | 13.4            | 0.0-28.1        | 96         | 4.6             | 3.1-6.1        | 159         | 9.4             | 3.2-15.5       |
| <b>25-64</b>          | <b>454</b> | <b>8.8</b>      | <b>3.9-13.7</b> | <b>648</b> | <b>3.6</b>      | <b>0.3-6.9</b> | <b>1102</b> | <b>6.4</b>      | <b>5.7-7.0</b> |

**Analysis Information:**

- Questions used: T1, T2, T9, T10
- Epi Info program name: Tdailyuser (unweighted); TdailyuserWT (weighted)

**Exposure to ETS in home in past 7 days** Description: Percentage of respondents exposed to environmental tobacco smoke in the home on one or more days in the past 7 days.

Instrument question:

- In the past 7 days, how many days did someone in the house smoke when you were present?

| Exposed to ETS in home on 1 or more of the past 7 days |            |            |                |            |            |                |            |            |                |
|--------------------------------------------------------|------------|------------|----------------|------------|------------|----------------|------------|------------|----------------|
| Age Group (years)                                      | Men        |            |                | Women      |            |                | Both Sexes |            |                |
|                                                        | n          | % Exposed  | 95% CI         | n          | % Exposed  | 95% CI         | n          | % Exposed  | 95% CI         |
| 25-34                                                  | 103        | 0.7        | 0.0-1.4        | 123        | 4.4        | 3.3-5.6        | 226        | 2.2        | 0.5-4.0        |
| 35-44                                                  | 129        | 2.7        | 0.8-4.6        | 183        | 0.0        | 0.0-0.0        | 312        | 1.5        | 0.4-2.6        |
| 45-54                                                  | 117        | 4.6        | 0.0-10.4       | 150        | 1.9        | 0.4-3.4        | 267        | 3.3        | 0.0-6.7        |
| 55-64                                                  | 57         | 2.4        | 0.0-7.2        | 76         | 4.9        | 0.7-9.0        | 133        | 3.4        | 0.0-7.9        |
| <b>25-64</b>                                           | <b>406</b> | <b>2.6</b> | <b>0.3-4.9</b> | <b>532</b> | <b>2.5</b> | <b>1.2-3.8</b> | <b>938</b> | <b>2.5</b> | <b>0.7-4.4</b> |

**Analysis Information:**

- Questions used: T13
- Epi Info program name: Tetshome (unweighted); TetshomeWT (weighted)

**Exposure to ETS in the workplace in past 7 days** Description: Percentage of respondents exposed to environmental tobacco smoke in the workplace on one or more days in the past 7 days.

Instrument question:

- In the past 7 days, how many days did someone smoke in closed areas in your workplace (in the building, in a work area or a specific office) when you were present?

| Exposed to ETS in the workplace on 1 or more of the past 7 days |            |             |                 |            |            |                |            |             |                 |
|-----------------------------------------------------------------|------------|-------------|-----------------|------------|------------|----------------|------------|-------------|-----------------|
| Age Group (years)                                               | Men        |             |                 | Women      |            |                | Both Sexes |             |                 |
|                                                                 | n          | % Exposed   | 95% CI          | n          | % Exposed  | 95% CI         | n          | % Exposed   | 95% CI          |
| 25-34                                                           | 103        | 19.6        | 0.0-48.3        | 123        | 5.7        | 4.2-7.3        | 226        | 13.8        | 0.0-32.7        |
| 35-44                                                           | 129        | 16.2        | 13.5-18.8       | 183        | 6.4        | 4.4-8.5        | 312        | 12.0        | 10.9-13.1       |
| 45-54                                                           | 120        | 14.8        | 12.8-16.7       | 150        | 6.7        | 3.1-10.2       | 270        | 10.8        | 9.9-11.8        |
| 55-64                                                           | 58         | 14.1        | 7.9-20.3        | 76         | 10.7       | 3.4-18.1       | 134        | 12.7        | 11.0-14.4       |
| <b>25-64</b>                                                    | <b>410</b> | <b>16.3</b> | <b>8.6-24.0</b> | <b>532</b> | <b>7.0</b> | <b>5.6-8.5</b> | <b>942</b> | <b>12.2</b> | <b>7.4-17.1</b> |

**Analysis Information:**

- Questions used: T14
- Epi Info program name: Tetswork (unweighted); TetsworkWT (weighted)



# Alcohol Consumption

## Alcohol consumption status

Description: Alcohol consumption status of all respondents.

Instrument questions:

- Have you ever consumed an alcoholic drink such as ...?
- Have you consumed an alcoholic drink in the past 12 months?
- Have you consumed an alcoholic drink 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          |
| 25-34                      | 115        | 54.7                             | 44.2-65.2        | 25.9                                   | 19.1-32.7        | 7.7                        | 2.8-12.5         | 11.8                 | 0.0-24.0        |
| 35-44                      | 143        | 54.2                             | 47.3-61.1        | 8.4                                    | 5.5-11.3         | 14.3                       | 12.6-16.0        | 23.2                 | 20.8-25.5       |
| 45-54                      | 133        | 45.1                             | 30.0-60.3        | 13.7                                   | 12.2-15.2        | 20.6                       | 17.9-23.3        | 20.5                 | 4.0-37.1        |
| 55-64                      | 63         | 41.1                             | 28.0-54.3        | 22.3                                   | 5.7-38.8         | 23.3                       | 0.6-46.1         | 13.3                 | 6.1-20.5        |
| <b>25-64</b>               | <b>454</b> | <b>49.6</b>                      | <b>39.1-60.0</b> | <b>16.9</b>                            | <b>12.0-21.8</b> | <b>15.8</b>                | <b>10.8-20.9</b> | <b>17.7</b>          | <b>7.6-27.8</b> |

| 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           |
| 25-34                      | 152        | 18.8                             | 14.7-22.8        | 24.0                                   | 18.3-29.6        | 16.1                       | 14.2-18.1        | 41.1                 | 37.7-44.6        |
| 35-44                      | 225        | 17.6                             | 9.8-25.5         | 19.8                                   | 16.9-22.7        | 25.2                       | 24.0-26.3        | 37.4                 | 32.0-42.8        |
| 45-54                      | 175        | 15.1                             | 12.6-17.7        | 17.2                                   | 14.6-19.9        | 32.0                       | 17.0-46.9        | 35.7                 | 23.7-47.6        |
| 55-64                      | 96         | 10.8                             | 7.8-13.8         | 8.5                                    | 7.8-9.1          | 28.6                       | 15.9-41.2        | 52.1                 | 39.8-64.4        |
| <b>25-64</b>               | <b>648</b> | <b>16.0</b>                      | <b>15.5-16.4</b> | <b>18.1</b>                            | <b>17.4-18.7</b> | <b>25.6</b>                | <b>17.3-33.9</b> | <b>40.3</b>          | <b>32.0-48.6</b> |

| 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           |
| 25-34                      | 267         | 38.8                             | 27.4-50.1        | 25.0                                   | 18.4-31.7        | 11.4                       | 7.8-15.0         | 24.8                 | 10.5-39.1        |
| 35-44                      | 368         | 37.7                             | 30.0-45.3        | 13.5                                   | 10.5-16.5        | 19.2                       | 18.2-20.2        | 29.6                 | 25.8-33.4        |
| 45-54                      | 308         | 30.4                             | 20.9-40.0        | 15.4                                   | 14.3-16.6        | 26.2                       | 18.8-33.5        | 27.9                 | 12.3-43.6        |
| 55-64                      | 159         | 27.2                             | 15.4-39.0        | 16.0                                   | 5.5-26.5         | 25.7                       | 18.4-33.0        | 31.1                 | 16.6-45.5        |
| <b>25-64</b>               | <b>1102</b> | <b>34.0</b>                      | <b>24.8-43.3</b> | <b>17.4</b>                            | <b>15.1-19.8</b> | <b>20.4</b>                | <b>19.7-21.0</b> | <b>28.1</b>          | <b>16.6-39.7</b> |

## Analysis Information:

- Questions used: A1a, A1b, A3
- Epi Info program name: Aconsumption (unweighted); AconsumptionWT (weighted)

**Frequency of alcohol consumption**

Description: Frequency of alcohol consumption in the past 12 months among those respondents who have drunk 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 |            |            |                 |                    |                 |                    |                  |                     |                  |                  |                  |
|--------------------------------------------------------|------------|------------|-----------------|--------------------|-----------------|--------------------|------------------|---------------------|------------------|------------------|------------------|
| Age Group (years)                                      | Men        |            |                 |                    |                 |                    |                  |                     |                  |                  |                  |
|                                                        | n          | % Daily    | 95% CI          | % 5-6 days p. week | 95% CI          | % 1-4 days p. week | 95% CI           | % 1-3 days p. month | 95% CI           | % < once a month | 95% CI           |
| 25-34                                                  | 85         | 3.7        | 0.0-18.4        | 5.2                | 0.0-11.6        | 26.7               | 0.0-55.5         | 36.3                | 14.3-58.2        | 28.2             | 12.7-43.6        |
| 35-44                                                  | 88         | 8.8        | 0.1-17.4        | 5.6                | 1.5-9.7         | 26.4               | 23.7-29.1        | 34.4                | 21.9-46.9        | 24.8             | 10.9-38.7        |
| 45-54                                                  | 78         | 10.7       | 6.2-15.1        | 8.7                | 0.0-18.4        | 24.3               | 23.1-25.5        | 30.1                | 19.2-41.1        | 26.2             | 20.4-32.0        |
| 55-64                                                  | 36         | 14.5       | 8.9-20.2        | 0.0                | 0.0-0.0         | 9.1                | 3.8-14.5         | 32.7                | 23.5-42.0        | 43.7             | 35.7-51.7        |
| <b>25-64</b>                                           | <b>287</b> | <b>8.5</b> | <b>0.1-17.0</b> | <b>5.3</b>         | <b>0.0-11.0</b> | <b>23.1</b>        | <b>16.6-29.7</b> | <b>33.7</b>         | <b>33.3-34.1</b> | <b>29.3</b>      | <b>20.0-38.7</b> |

| Frequency of alcohol consumption in the past 12 months |            |            |                |                    |                |                    |                |                     |                  |                  |                  |
|--------------------------------------------------------|------------|------------|----------------|--------------------|----------------|--------------------|----------------|---------------------|------------------|------------------|------------------|
| Age Group (years)                                      | Women      |            |                |                    |                |                    |                |                     |                  |                  |                  |
|                                                        | n          | % Daily    | 95% CI         | % 5-6 days p. week | 95% CI         | % 1-4 days p. week | 95% CI         | % 1-3 days p. month | 95% CI           | % < once a month | 95% CI           |
| 25-34                                                  | 57         | 0.0        | 0.0-0.0        | 3.8                | 2.4-5.1        | 3.8                | 2.4-5.1        | 21.3                | 13.3-29.2        | 71.2             | 60.5-82.0        |
| 35-44                                                  | 83         | 0.0        | 0.0-0.0        | 1.0                | 0.0-1.9        | 6.9                | 0.3-13.6       | 28.7                | 12.0-45.4        | 63.4             | 54.2-72.5        |
| 45-54                                                  | 56         | 5.4        | 0.0-20.7       | 2.7                | 0.2-5.2        | 4.1                | 0.0-10.5       | 20.3                | 16.4-24.2        | 67.5             | 45.8-89.3        |
| 55-64                                                  | 19         | 0.0        | 0.0-0.0        | 4.0                | 0.9-7.1        | 11.9               | 0.0-53.7       | 16.0                | 3.5-28.6         | 68.1             | 41.3-94.9        |
| <b>25-64</b>                                           | <b>215</b> | <b>1.6</b> | <b>0.0-6.2</b> | <b>2.6</b>         | <b>0.7-4.6</b> | <b>5.6</b>         | <b>1.8-9.4</b> | <b>22.7</b>         | <b>19.8-25.6</b> | <b>67.5</b>      | <b>59.2-75.7</b> |

| Frequency of alcohol consumption in the past 12 months |            |            |                 |                    |                |                    |                  |                     |                  |                  |                  |
|--------------------------------------------------------|------------|------------|-----------------|--------------------|----------------|--------------------|------------------|---------------------|------------------|------------------|------------------|
| Age Group (years)                                      | Both Sexes |            |                 |                    |                |                    |                  |                     |                  |                  |                  |
|                                                        | n          | % Daily    | 95% CI          | % 5-6 days p. week | 95% CI         | % 1-4 days p. week | 95% CI           | % 1-3 days p. month | 95% CI           | % < once a month | 95% CI           |
| 25-34                                                  | 142        | 2.6        | 0.0-13.7        | 4.8                | 0.3-9.3        | 19.9               | 0.0-44.6         | 31.8                | 17.7-45.9        | 40.9             | 23.4-58.3        |
| 35-44                                                  | 171        | 5.9        | 0.0-11.8        | 4.1                | 1.2-7.0        | 20.0               | 17.0-23.1        | 32.5                | 20.3-44.8        | 37.4             | 25.5-49.4        |
| 45-54                                                  | 134        | 8.9        | 2.0-15.7        | 6.7                | 0.6-12.8       | 17.5               | 12.5-22.4        | 26.8                | 17.4-36.2        | 40.1             | 25.5-54.8        |
| 55-64                                                  | 55         | 11.5       | 6.2-16.7        | 0.8                | 0.0-2.0        | 9.7                | 7.5-11.9         | 29.2                | 20.8-37.6        | 48.8             | 35.6-62.0        |
| <b>25-64</b>                                           | <b>502</b> | <b>6.4</b> | <b>0.0-14.2</b> | <b>4.5</b>         | <b>0.5-8.5</b> | <b>17.8</b>        | <b>10.2-25.5</b> | <b>30.4</b>         | <b>28.2-32.5</b> | <b>40.9</b>      | <b>27.3-54.4</b> |

**Analysis Information:**

- Questions used: A1a, Alb, A2
- 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         |
| 25-34                                                                                       | 50         | 7.4        | 4.0-10.8       | 26        | 3.3        | -              | 76         | 6.5        | 3.0-9.9        |
| 35-44                                                                                       | 73         | 5.0        | 3.6-6.4        | 35        | 3.3        | 1.8-4.8        | 108        | 4.7        | 3.9-5.5        |
| 45-54                                                                                       | 55         | 8.5        | 5.8-11.1       | 27        | 5.3        | 0.0-14.9       | 82         | 7.7        | 4.5-10.9       |
| 55-64                                                                                       | 22         | 3.0        | 1.4-4.6        | 11        | 2.9        | 0.0-8.2        | 33         | 3.0        | 2.3-3.7        |
| <b>25-64</b>                                                                                | <b>200</b> | <b>6.2</b> | <b>4.7-7.7</b> | <b>99</b> | <b>3.8</b> | <b>0.8-6.9</b> | <b>299</b> | <b>5.7</b> | <b>3.9-7.5</b> |

**Analysis Information:**

- Questions used: A1a, A1b, A3, A4
- Epi Info program name: Aoccasions (unweighted); AoccasionsWT (weighted)

**Standard drinks per drinking day** Description: Mean number of standard drinks consumed on a drinking occasion among current (past 30 days) drinker.

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         |
| 25-34                                                                                      | 56         | 4.0        | 2.3-5.7        | 26         | 1.6        | -              | 82         | 3.5        | 2.6-4.3        |
| 35-44                                                                                      | 75         | 3.5        | 3.3-3.8        | 39         | 1.8        | 1.5-2.0        | 114        | 3.2        | 2.8-3.5        |
| 45-54                                                                                      | 56         | 2.7        | 1.6-3.7        | 28         | 1.9        | 1.8-2.0        | 84         | 2.5        | 1.6-3.4        |
| 55-64                                                                                      | 23         | 3.1        | 0.0-7.1        | 11         | 1.8        | 1.1-2.4        | 34         | 2.9        | 0.0-6.3        |
| <b>25-64</b>                                                                               | <b>210</b> | <b>3.4</b> | <b>2.6-4.2</b> | <b>104</b> | <b>1.8</b> | <b>1.7-1.8</b> | <b>314</b> | <b>3.0</b> | <b>2.4-3.7</b> |

**Analysis Information:**

- Questions used: A1a, A1b, A3, A5
- Epi Info program name: Anumdrinkperday (unweighted); AnumdrinkperdayWT (weighted)

**Average volume drinking categories among all respondents**

Description: Percentage of respondents engaging in category II and category III drinking.

Category III is defined as drinking  $\geq 60$ g of pure alcohol on average per day for men and  $\geq 40$  g for women.

Category II is defined as drinking 40-59.9g of pure alcohol on average per day for men and 20-39.9g for women.

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?

| Category III drinking among all respondents |            |                |                |            |                |          |             |                |                |
|---------------------------------------------|------------|----------------|----------------|------------|----------------|----------|-------------|----------------|----------------|
| Age Group (years)                           | Men        |                |                | Women      |                |          | Both Sexes  |                |                |
|                                             | n          | % Category III | 95% CI         | n          | % Category III | 95% CI   | n           | % Category III | 95% CI         |
| 25-34                                       | 108        | 1.9            | 0.1-3.6        | 152        | 0              | 0        | 260         | 1.0            | 0.4-1.6        |
| 35-44                                       | 139        | 1.5            | 0.6-2.4        | 219        | 0              | 0        | 358         | 0.8            | 0.3-1.3        |
| 45-54                                       | 130        | 0.6            | 0.0-3.2        | 173        | 0              | 0        | 303         | 0.3            | 0.0-1.6        |
| 55-64                                       | 62         | 0.0            | 0.0-0.0        | 94         | 0              | 0        | 156         | 0.0            | 0.0-0.0        |
| <b>25-64</b>                                | <b>439</b> | <b>1.1</b>     | <b>0.2-1.9</b> | <b>638</b> | <b>0</b>       | <b>0</b> | <b>1077</b> | <b>0.6</b>     | <b>0.2-1.0</b> |

| Category II drinking among all respondents |            |               |                |            |               |                |             |               |                |
|--------------------------------------------|------------|---------------|----------------|------------|---------------|----------------|-------------|---------------|----------------|
| Age Group (years)                          | Men        |               |                | Women      |               |                | Both Sexes  |               |                |
|                                            | n          | % Category II | 95% CI         | n          | % Category II | 95% CI         | n           | % Category II | 95% CI         |
| 25-34                                      | 108        | 0.0           | 0.0-0.0        | 152        | 1.0           | 0.8-1.3        | 260         | 0.5           | 0.2-0.8        |
| 35-44                                      | 139        | 0.5           | 0.2-0.8        | 219        | 0.0           | 0.0-0.0        | 358         | 0.3           | 0.1-0.4        |
| 45-54                                      | 130        | 1.2           | 0.0-5.3        | 173        | 1.3           | 0.0-4.8        | 303         | 1.2           | 0.0-4.8        |
| 55-64                                      | 62         | 0.0           | 0.0-0.0        | 94         | 0.0           | 0.0-0.0        | 156         | 0.0           | 0.0-0.0        |
| <b>25-64</b>                               | <b>439</b> | <b>0.5</b>    | <b>0.0-1.5</b> | <b>638</b> | <b>0.6</b>    | <b>0.0-1.7</b> | <b>1077</b> | <b>0.5</b>    | <b>0.0-1.5</b> |

**Analysis Information:**

- Questions used: A1a, A1b, A3, A4, A5
- Epi Info program name: Acategories (unweighted); AcategoriesWT (weighted)



**Average volume drinking categories among current (past 30 days) drinkers**

Description: Percentage of current (last 30 days) drinker engaging in category I, category II and category III drinking.  
 Category III is defined as drinking  $\geq 60$ g of pure alcohol on average per day for men and  $\geq 40$  g for women.  
 Category II is defined as drinking 40-59.9g of pure alcohol on average per day for men and 20-39.9g for women.  
 Category I is defined as drinking  $< 40$ g of pure alcohol on average per day for men and  $< 20$  for women.  
 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?

| Category I, II and III drinking among current (past 30 days) drinkers |            |                |                |               |                |              |                  |
|-----------------------------------------------------------------------|------------|----------------|----------------|---------------|----------------|--------------|------------------|
| Age Group (years)                                                     | Men        |                |                |               |                |              |                  |
|                                                                       | n          | % Category III | 95% CI         | % Category II | 95% CI         | % Category I | 95% CI           |
| 25-34                                                                 | 50         | 3.5            | 0.0-7.3        | 0.0           | 0.0-0.0        | 96.5         | 92.7-100.0       |
| 35-44                                                                 | 72         | 2.8            | 0.8-4.8        | 0.9           | 0.3-1.6        | 96.2         | 93.5-98.9        |
| 45-54                                                                 | 55         | 1.3            | 0.0-7.1        | 2.6           | 0.0-11.3       | 96.1         | 82.3-100.0       |
| 55-64                                                                 | 22         | 0.0            | 0.0-0.0        | 0.0           | 0.0-0.0        | 100.0        | 100.0-100.0      |
| <b>25-64</b>                                                          | <b>199</b> | <b>2.2</b>     | <b>0.2-4.2</b> | <b>1.0</b>    | <b>0.0-3.0</b> | <b>96.8</b>  | <b>94.2-99.4</b> |

| Category I, II and III drinking among current (past 30 days) drinkers |           |                |          |               |                 |              |                   |
|-----------------------------------------------------------------------|-----------|----------------|----------|---------------|-----------------|--------------|-------------------|
| Age Group (years)                                                     | Women     |                |          |               |                 |              |                   |
|                                                                       | n         | % Category III | 95% CI   | % Category II | 95% CI          | % Category I | 95% CI            |
| 25-34                                                                 | 26        | 0.0            | -        | 5.6           | 5.6-5.6         | 94.4         | 94.4-94.4         |
| 35-44                                                                 | 35        | 0.0            | -        | 0.0           | 0.0-0.0         | 100.0        | 100.0-100.0       |
| 45-54                                                                 | 27        | 0.0            | -        | 8.8           | 0.0-44.9        | 91.2         | 55.1-100.0        |
| 55-64                                                                 | 10        | 0.0            | -        | 0.0           | 0.0-0.0         | 100.0        | 100.0-100.0       |
| <b>25-64</b>                                                          | <b>98</b> | <b>0.0</b>     | <b>-</b> | <b>4.4</b>    | <b>0.0-13.8</b> | <b>95.6</b>  | <b>86.2-100.0</b> |

**Analysis Information:**

- Questions used: A1a, A1b, A3, A4, A5
- 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) drinker).

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 drinks consumed on one occasion in the past 30 days |            |                     |                |           |                     |                |            |                     |                |
|----------------------------------------------------------------------------|------------|---------------------|----------------|-----------|---------------------|----------------|------------|---------------------|----------------|
| Age Group (years)                                                          | Men        |                     |                | Women     |                     |                | Both Sexes |                     |                |
|                                                                            | n          | Mean maximum number | 95% CI         | n         | Mean maximum number | 95% CI         | n          | Mean maximum number | 95% CI         |
| 25-34                                                                      | 54         | 3.7                 | 2.8-4.6        | 25        | 1.9                 | -              | 79         | 3.3                 | 2.2-4.4        |
| 35-44                                                                      | 74         | 4.2                 | 4.0-4.3        | 36        | 1.8                 | 1.5-2.1        | 110        | 3.7                 | 3.4-4.0        |
| 45-54                                                                      | 56         | 3.6                 | 2.5-4.6        | 28        | 2.1                 | 1.9-2.2        | 84         | 3.2                 | 2.4-4.0        |
| 55-64                                                                      | 20         | 3.4                 | 0.0-9.6        | 10        | 1.6                 | 0.8-2.4        | 30         | 3.2                 | 0.0-8.3        |
| <b>25-64</b>                                                               | <b>204</b> | <b>3.8</b>          | <b>2.7-4.8</b> | <b>99</b> | <b>1.9</b>          | <b>1.8-1.9</b> | <b>303</b> | <b>3.4</b>          | <b>2.5-4.3</b> |

**Analysis Information:**

- Questions used: A1a, A1b, A3, A6
- Epi Info program name: Alargestnum (unweighted); AlargestnumWT (weighted)



**Five/four or more drinks on a single occasion** Description: Percentage of men who had five or more/women who had four or more drinks on any day 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  
for men: **five or more**  
for women: **four or more**  
standard alcoholic drinks in a single drinking occasion?

| Five/four or more drinks on a single occasion at least once during the past 30 days among total population |            |             |                  |            |             |                 |
|------------------------------------------------------------------------------------------------------------|------------|-------------|------------------|------------|-------------|-----------------|
| Age Group (years)                                                                                          | Men        |             |                  | Women      |             |                 |
|                                                                                                            | n          | % ≥5 drinks | 95% CI           | n          | % ≥ 4drinks | 95% CI          |
| 25-34                                                                                                      | 115        | 24.1        | 22.1-26.2        | 152        | 7.8         | 6.1-9.5         |
| 35-44                                                                                                      | 143        | 31.5        | 26.3-36.8        | 225        | 10.1        | 3.9-16.3        |
| 45-54                                                                                                      | 133        | 28.6        | 23.3-33.8        | 175        | 6.7         | 4.1-9.4         |
| 55-64                                                                                                      | 63         | 25.6        | 6.1-45.0         | 96         | 6.2         | 2.8-9.5         |
| <b>25-64</b>                                                                                               | <b>454</b> | <b>27.7</b> | <b>21.6-33.8</b> | <b>648</b> | <b>7.8</b>  | <b>4.3-11.3</b> |

**Analysis Information:**

- Questions used: A1a, A1b, A3, A7
- Epi Info program name: Aepisodicmen and Aepisodicwomen (unweighted); AepisodicmenWT and AepisodicwomenWT (weighted)

**Five/four or more drinks on a single occasion** Description: Mean number of times in the past 30 days on which current (past 30 days) drinker drank five (for men)/four (for women) or more drinks during a single occasion among current (past 30 days) drinkers.

Instrument question:

- During the past 30 days, how many times did you have  
for men: **five or more**  
for women: **four or more**  
standard alcoholic drinks in a single drinking occasion?

| Mean number of times with five/four or more drinks during a single occasion in the past 30 days among current drinkers |            |                      |                |            |                      |                |
|------------------------------------------------------------------------------------------------------------------------|------------|----------------------|----------------|------------|----------------------|----------------|
| Age Group (years)                                                                                                      | Men        |                      |                | Women      |                      |                |
|                                                                                                                        | n          | Mean number of times | 95% CI         | n          | Mean number of times | 95% CI         |
| 25-34                                                                                                                  | 56         | 0.9                  | 0.6-1.1        | 26         | 0.9                  | -              |
| 35-44                                                                                                                  | 76         | 1.7                  | 1.6-1.8        | 41         | 0.9                  | 0.0-2.4        |
| 45-54                                                                                                                  | 57         | 2.6                  | 1.1-4.1        | 29         | 1.1                  | 1.0-1.1        |
| 55-64                                                                                                                  | 23         | 2.4                  | 0.0-5.7        | 11         | 1.4                  | 0.6-2.2        |
| <b>25-64</b>                                                                                                           | <b>212</b> | <b>1.8</b>           | <b>0.9-2.6</b> | <b>107</b> | <b>1.0</b>           | <b>0.5-1.5</b> |

**Analysis Information:**

- Questions used: A1a, A1b, A3, A7
- Epi Info program name: Aepisodicmen and Aepisodicwomen (unweighted); AepisodicmenWT and AepisodicwomenWT (weighted)

**Drinking with meals** Description: Percentage of current (past 30 days) drinkers who usually, sometimes, rarely or never drink with meals.

Instrument questions:

- During the past 30 days, when you consumed an alcoholic drink, how often was it with meals? Please do not count snacks.

| Drinking with meals among current drinker |            |                      |                  |                        |                  |                     |                 |                    |                 |
|-------------------------------------------|------------|----------------------|------------------|------------------------|------------------|---------------------|-----------------|--------------------|-----------------|
| Men                                       |            |                      |                  |                        |                  |                     |                 |                    |                 |
| Age Group (years)                         | n          | % Usually with meals | 95% CI           | % Sometimes with meals | 95% CI           | % Rarely with meals | 95% CI          | % Never with meals | 95% CI          |
| 25-34                                     | 57         | 42.0                 | 34.5-49.5        | 21.5                   | 17.8-25.2        | 11.8                | 0.0-24.2        | 24.8               | 4.7-44.8        |
| 35-44                                     | 76         | 24.6                 | 14.9-34.3        | 25.5                   | 15.1-35.9        | 23.6                | 7.2-40.0        | 26.4               | 0.0-62.6        |
| 45-54                                     | 58         | 10.1                 | 2.2-18.1         | 36.7                   | 7.8-65.6         | 17.7                | 2.3-33.2        | 35.4               | 0.0-87.3        |
| 55-64                                     | 23         | 21.7                 | 0.0-52.5         | 24.3                   | 0.0-52.2         | 5.4                 | 0.0-13.1        | 48.6               | 0.0-100.0       |
| <b>25-64</b>                              | <b>214</b> | <b>25.6</b>          | <b>13.3-37.9</b> | <b>26.9</b>            | <b>12.6-41.3</b> | <b>16.0</b>         | <b>1.2-30.9</b> | <b>31.4</b>        | <b>0.0-72.3</b> |

| Drinking with meals among current drinker |            |                      |                  |                        |                 |                     |                 |                    |                  |
|-------------------------------------------|------------|----------------------|------------------|------------------------|-----------------|---------------------|-----------------|--------------------|------------------|
| Women                                     |            |                      |                  |                        |                 |                     |                 |                    |                  |
| Age Group (years)                         | n          | % Usually with meals | 95% CI           | % Sometimes with meals | 95% CI          | % Rarely with meals | 95% CI          | % Never with meals | 95% CI           |
| 25-34                                     | 26         | 19.4                 | 19.4-19.4        | 13.9                   | 13.9-13.9       | 41.7                | 41.7-41.7       | 25.0               | 25.0-25.0        |
| 35-44                                     | 41         | 36.7                 | 16.6-56.9        | 18.4                   | 0.7-36.1        | 20.4                | 0.0-51.4        | 24.5               | 17.7-31.3        |
| 45-54                                     | 29         | 47.2                 | 8.1-86.3         | 25.0                   | 0.0-66.4        | 8.3                 | 1.4-15.2        | 19.4               | 14.8-24.0        |
| 55-64                                     | 12         | 35.8                 | 6.1-65.5         | 21.5                   | 1.9-41.0        | 0.0                 | 0.0-0.0         | 42.7               | 15.8-69.6        |
| <b>25-64</b>                              | <b>108</b> | <b>34.7</b>          | <b>32.1-37.2</b> | <b>19.4</b>            | <b>2.8-35.9</b> | <b>20.7</b>         | <b>4.2-37.2</b> | <b>25.3</b>        | <b>21.0-29.6</b> |

| Drinking with meals among current drinker |            |                      |                  |                        |                  |                     |                 |                    |                 |
|-------------------------------------------|------------|----------------------|------------------|------------------------|------------------|---------------------|-----------------|--------------------|-----------------|
| Both Sex                                  |            |                      |                  |                        |                  |                     |                 |                    |                 |
| Age Group (years)                         | n          | % Usually with meals | 95% CI           | % Sometimes with meals | 95% CI           | % Rarely with meals | 95% CI          | % Never with meals | 95% CI          |
| 25-34                                     | 83         | 37.1                 | 34.8-39.5        | 19.9                   | 17.0-22.7        | 18.2                | 2.5-33.9        | 24.8               | 9.1-40.5        |
| 35-44                                     | 117        | 27.1                 | 23.0-31.3        | 24.0                   | 18.0-29.9        | 22.9                | 5.3-40.5        | 26.0               | 0.0-53.4        |
| 45-54                                     | 87         | 19.2                 | 0.8-37.5         | 33.9                   | 20.8-46.9        | 15.4                | 4.0-26.9        | 31.5               | 0.0-74.0        |
| 55-64                                     | 35         | 24.2                 | 0.0-48.5         | 23.8                   | 0.0-48.1         | 4.4                 | 0.0-10.1        | 47.6               | 0.0-100.0       |
| <b>25-64</b>                              | <b>322</b> | <b>27.6</b>          | <b>17.2-37.9</b> | <b>25.3</b>            | <b>17.3-33.3</b> | <b>17.0</b>         | <b>2.5-31.6</b> | <b>30.1</b>        | <b>0.0-62.5</b> |

#### Analysis Information:

- Questions used: A1a, A1b, A3, A8
- Epi Info program name: Ameals (unweighted); AmealsWT (weighted)



**Past 7 days drinking**

Description: Frequency and quantity of drinks consumed in the past 7 days by current (past 30 days) drinkers, grouped into three categories.

Instrument question:

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

| Frequency and quantity of drinks consumed in the past 7 days |            |                    |                  |                        |                 |                        |                 |
|--------------------------------------------------------------|------------|--------------------|------------------|------------------------|-----------------|------------------------|-----------------|
| Men                                                          |            |                    |                  |                        |                 |                        |                 |
| Age Group (years)                                            | n          | % Drank on 4+ days | 95% CI           | % 5+ drinks on any day | 95% CI          | % 20+ drinks in 7 days | 95% CI          |
| 25-34                                                        | 54         | 11.1               | 0.0-26.6         | 7.8                    | 0.0-15.7        | 3.3                    | 0.0-7.4         |
| 35-44                                                        | 76         | 30.0               | 28.8-31.2        | 14.6                   | 11.6-17.5       | 8.2                    | 0.4-16.0        |
| 45-54                                                        | 57         | 35.9               | 23.3-48.5        | 17.9                   | 7.8-27.9        | 7.7                    | 0.6-14.7        |
| 55-64                                                        | 22         | 22.2               | 0.0-48.0         | 19.4                   | 0.0-41.6        | 19.4                   | 0.0-41.6        |
| <b>25-64</b>                                                 | <b>209</b> | <b>24.9</b>        | <b>21.9-28.0</b> | <b>14.1</b>            | <b>7.3-21.0</b> | <b>8.3</b>             | <b>5.9-10.6</b> |

| Frequency and quantity of drinks consumed in the past 7 days |            |                    |                 |                        |                |                        |          |
|--------------------------------------------------------------|------------|--------------------|-----------------|------------------------|----------------|------------------------|----------|
| Women                                                        |            |                    |                 |                        |                |                        |          |
| Age Group (years)                                            | n          | % Drank on 4+ days | 95% CI          | % 4+ drinks on any day | 95% CI         | % 15+ drinks in 7 days | 95% CI   |
| 25-34                                                        | 25         | 5.7                | 5.7-5.7         | 14.3                   | 14.3-14.3      | 0.0                    | -        |
| 35-44                                                        | 39         | 8.5                | 0.0-22.0        | 6.4                    | 0.0-16.5       | 0.0                    | -        |
| 45-54                                                        | 29         | 19.4               | 0.0-44.7        | 2.8                    | 0.0-21.2       | 0.0                    | -        |
| 55-64                                                        | 10         | 0.0                | 0.0-0.0         | 0.0                    | 0.0-0.0        | 0.0                    | -        |
| <b>25-64</b>                                                 | <b>103</b> | <b>10.2</b>        | <b>6.1-14.3</b> | <b>7.0</b>             | <b>6.4-7.6</b> | <b>0.0</b>             | <b>-</b> |

| Frequency and quantity of drinks consumed in the past 7 days |            |                    |                  |
|--------------------------------------------------------------|------------|--------------------|------------------|
| Both Sexes                                                   |            |                    |                  |
| Age Group (years)                                            | n          | % Drank on 4+ days | 95% CI           |
| 25-34                                                        | 79         | 10.0               | 0.0-23.2         |
| 35-44                                                        | 115        | 25.6               | 22.6-28.6        |
| 45-54                                                        | 86         | 31.8               | 27.1-36.6        |
| 55-64                                                        | 32         | 18.8               | 0.0-38.6         |
| <b>25-64</b>                                                 | <b>312</b> | <b>21.8</b>        | <b>20.0-23.6</b> |

**Analysis Information:**

- Questions used: A1a, A1b, A3, A9a-g
- Epi Info program name: Aheavydrinking (unweighted); AheavydrinkingWT (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 |            |                     |                |            |                     |                |             |                     |                |
|------------------------------------------------------|------------|---------------------|----------------|------------|---------------------|----------------|-------------|---------------------|----------------|
| Age Group (years)                                    | Men        |                     |                | Women      |                     |                | Both Sexes  |                     |                |
|                                                      | n          | Mean number of days | 95% CI         | n          | Mean number of days | 95% CI         | n           | Mean number of days | 95% CI         |
| 25-34                                                | 114        | 3.5                 | 3.2-3.8        | 150        | 4.3                 | 4.0-4.5        | 264         | 3.8                 | 3.7-3.9        |
| 35-44                                                | 141        | 3.9                 | 3.7-4.1        | 221        | 4.6                 | 4.2-5.0        | 362         | 4.2                 | 3.9-4.5        |
| 45-54                                                | 131        | 4.5                 | 3.5-5.5        | 172        | 4.8                 | 4.5-5.1        | 303         | 4.6                 | 4.3-5.0        |
| 55-64                                                | 63         | 4.8                 | 3.5-6.1        | 96         | 5.4                 | 5.1-5.7        | 159         | 5.0                 | 4.3-5.8        |
| <b>25-64</b>                                         | <b>449</b> | <b>4.1</b>          | <b>4.0-4.2</b> | <b>639</b> | <b>4.7</b>          | <b>4.5-4.9</b> | <b>1088</b> | <b>4.4</b>          | <b>4.3-4.5</b> |

| Mean number of days vegetables consumed in a typical week |            |                     |                |            |                     |                |             |                     |                |
|-----------------------------------------------------------|------------|---------------------|----------------|------------|---------------------|----------------|-------------|---------------------|----------------|
| Age Group (years)                                         | Men        |                     |                | Women      |                     |                | Both Sexes  |                     |                |
|                                                           | n          | Mean number of days | 95% CI         | n          | Mean number of days | 95% CI         | n           | Mean number of days | 95% CI         |
| 25-34                                                     | 112        | 4.3                 | 3.8-4.8        | 151        | 5.0                 | 4.8-5.1        | 263         | 4.6                 | 4.5-4.7        |
| 35-44                                                     | 143        | 4.8                 | 4.6-4.9        | 224        | 5.1                 | 4.7-5.5        | 367         | 4.9                 | 4.8-5.1        |
| 45-54                                                     | 133        | 5.5                 | 5.3-5.7        | 174        | 5.3                 | 5.1-5.5        | 307         | 5.4                 | 5.2-5.6        |
| 55-64                                                     | 63         | 5.3                 | 4.7-5.8        | 96         | 5.6                 | 5.6-5.7        | 159         | 5.4                 | 5.1-5.8        |
| <b>25-64</b>                                              | <b>451</b> | <b>4.9</b>          | <b>4.8-5.1</b> | <b>645</b> | <b>5.2</b>          | <b>5.1-5.3</b> | <b>1096</b> | <b>5.1</b>          | <b>5.0-5.1</b> |

### 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 |            |                         |                |            |                         |                |             |                         |                |
|-----------------------------------------------------|------------|-------------------------|----------------|------------|-------------------------|----------------|-------------|-------------------------|----------------|
| Age Group (years)                                   | Men        |                         |                | Women      |                         |                | Both Sexes  |                         |                |
|                                                     | n          | Mean number of servings | 95% CI         | n          | Mean number of servings | 95% CI         | n           | Mean number of servings | 95% CI         |
| 25-34                                               | 113        | 0.8                     | 0.3-1.2        | 150        | 1.0                     | 0.9-1.0        | 263         | 0.9                     | 0.6-1.1        |
| 35-44                                               | 141        | 1.0                     | 0.9-1.1        | 221        | 1.1                     | 1.1-1.1        | 362         | 1.1                     | 1.0-1.1        |
| 45-54                                               | 131        | 1.3                     | 0.2-2.5        | 172        | 1.1                     | 1.0-1.2        | 303         | 1.2                     | 0.6-1.9        |
| 55-64                                               | 63         | 1.1                     | 0.8-1.3        | 96         | 1.4                     | 0.9-2.0        | 159         | 1.2                     | 1.1-1.4        |
| <b>25-64</b>                                        | <b>448</b> | <b>1.0</b>              | <b>0.6-1.5</b> | <b>639</b> | <b>1.1</b>              | <b>1.0-1.3</b> | <b>1087</b> | <b>1.1</b>              | <b>0.8-1.4</b> |

| Mean number of servings of vegetables on average per day |            |                         |                |            |                         |                |             |                         |                |
|----------------------------------------------------------|------------|-------------------------|----------------|------------|-------------------------|----------------|-------------|-------------------------|----------------|
| Age Group (years)                                        | Men        |                         |                | Women      |                         |                | Both Sexes  |                         |                |
|                                                          | n          | Mean number of servings | 95% CI         | n          | Mean number of servings | 95% CI         | n           | Mean number of servings | 95% CI         |
| 25-34                                                    | 112        | 1.0                     | 0.8-1.2        | 151        | 1.1                     | 1.1-1.1        | 263         | 1.1                     | 1.0-1.2        |
| 35-44                                                    | 143        | 1.1                     | 0.9-1.2        | 224        | 1.1                     | 1.0-1.3        | 367         | 1.1                     | 1.0-1.3        |
| 45-54                                                    | 132        | 1.4                     | 1.1-1.8        | 174        | 1.2                     | 1.1-1.3        | 306         | 1.3                     | 1.1-1.6        |
| 55-64                                                    | 63         | 1.2                     | 0.9-1.5        | 95         | 1.4                     | 1.3-1.5        | 158         | 1.3                     | 1.1-1.4        |
| <b>25-64</b>                                             | <b>450</b> | <b>1.2</b>              | <b>1.1-1.3</b> | <b>644</b> | <b>1.2</b>              | <b>1.2-1.2</b> | <b>1094</b> | <b>1.2</b>              | <b>1.1-1.2</b> |

| Mean number of servings of fruit and/or vegetables on average per day |            |                         |                |            |                         |                |             |                         |                |
|-----------------------------------------------------------------------|------------|-------------------------|----------------|------------|-------------------------|----------------|-------------|-------------------------|----------------|
| Age Group (years)                                                     | Men        |                         |                | Women      |                         |                | Both Sexes  |                         |                |
|                                                                       | n          | Mean number of servings | 95% CI         | n          | Mean number of servings | 95% CI         | n           | Mean number of servings | 95% CI         |
| 25-34                                                                 | 115        | 1.8                     | 1.1-2.4        | 152        | 2.1                     | 2.0-2.1        | 267         | 1.9                     | 1.6-2.2        |
| 35-44                                                                 | 143        | 2.1                     | 2.0-2.2        | 225        | 2.2                     | 2.2-2.3        | 368         | 2.1                     | 2.1-2.2        |
| 45-54                                                                 | 132        | 2.8                     | 1.2-4.3        | 175        | 2.3                     | 2.1-2.5        | 307         | 2.5                     | 1.6-3.4        |
| 55-64                                                                 | 63         | 2.3                     | 1.8-2.7        | 96         | 2.8                     | 2.2-3.4        | 159         | 2.5                     | 2.4-2.6        |
| <b>25-64</b>                                                          | <b>453</b> | <b>2.2</b>              | <b>1.7-2.7</b> | <b>648</b> | <b>2.3</b>              | <b>2.2-2.5</b> | <b>1101</b> | <b>2.3</b>              | <b>1.9-2.6</b> |

**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?

| Number of servings of fruit and/or vegetables on average per day |            |                              |                  |                |                  |                |                  |               |                 |
|------------------------------------------------------------------|------------|------------------------------|------------------|----------------|------------------|----------------|------------------|---------------|-----------------|
| Age Group (years)                                                | Men        |                              |                  |                |                  |                |                  |               |                 |
|                                                                  | n          | % no fruit and/or vegetables | 95% CI           | % 1-2 servings | 95% CI           | % 3-4 servings | 95% CI           | % ≥5 servings | 95% CI          |
| 25-34                                                            | 115        | 28.8                         | 11.1-46.6        | 50.6           | 43.4-57.7        | 17.1           | 5.6-28.5         | 3.5           | 2.9-4.2         |
| 35-44                                                            | 143        | 24.1                         | 19.6-28.7        | 51.7           | 41.9-61.6        | 20.2           | 14.7-25.7        | 3.9           | 3.9-4.0         |
| 45-54                                                            | 132        | 10.9                         | 6.3-15.6         | 58.0           | 32.0-84.0        | 16.1           | 14.0-18.1        | 15.0          | 0.0-43.6        |
| 55-64                                                            | 63         | 8.9                          | 0.0-25.5         | 65.6           | 59.2-72.1        | 16.7           | 0.0-35.2         | 8.8           | 2.1-15.5        |
| <b>25-64</b>                                                     | <b>453</b> | <b>19.1</b>                  | <b>14.0-24.2</b> | <b>55.6</b>    | <b>53.5-57.7</b> | <b>17.6</b>    | <b>16.0-19.3</b> | <b>7.7</b>    | <b>0.0-16.1</b> |

| Number of servings of fruit and/or vegetables on average per day |            |                              |                  |                |                  |                |                  |               |                 |
|------------------------------------------------------------------|------------|------------------------------|------------------|----------------|------------------|----------------|------------------|---------------|-----------------|
| Age Group (years)                                                | Women      |                              |                  |                |                  |                |                  |               |                 |
|                                                                  | n          | % no fruit and/or vegetables | 95% CI           | % 1-2 servings | 95% CI           | % 3-4 servings | 95% CI           | % ≥5 servings | 95% CI          |
| 25-34                                                            | 152        | 17.2                         | 16.2-18.2        | 57.8           | 56.8-58.8        | 17.2           | 13.5-20.9        | 7.8           | 4.1-11.5        |
| 35-44                                                            | 225        | 13.7                         | 9.0-18.3         | 58.6           | 54.1-63.2        | 22.3           | 19.7-24.9        | 5.4           | 3.1-7.7         |
| 45-54                                                            | 175        | 13.0                         | 8.4-17.6         | 59.2           | 56.4-62.1        | 21.5           | 14.6-28.3        | 6.3           | 0.8-11.8        |
| 55-64                                                            | 96         | 10.8                         | 8.9-12.7         | 45.4           | 34.6-56.1        | 30.9           | 26.1-35.7        | 12.9          | 0.0-30.0        |
| <b>25-64</b>                                                     | <b>648</b> | <b>13.8</b>                  | <b>12.1-15.6</b> | <b>56.3</b>    | <b>52.7-59.9</b> | <b>22.3</b>    | <b>18.1-26.4</b> | <b>7.6</b>    | <b>1.6-13.6</b> |

| Number of servings of fruit and/or vegetables on average per day |             |                              |                  |                |                  |                |                  |               |                 |
|------------------------------------------------------------------|-------------|------------------------------|------------------|----------------|------------------|----------------|------------------|---------------|-----------------|
| Age Group (years)                                                | Both Sexes  |                              |                  |                |                  |                |                  |               |                 |
|                                                                  | n           | % no fruit and/or vegetables | 95% CI           | % 1-2 servings | 95% CI           | % 3-4 servings | 95% CI           | % ≥5 servings | 95% CI          |
| 25-34                                                            | 267         | 23.7                         | 15.7-31.6        | 53.8           | 50.8-56.8        | 17.1           | 12.4-21.9        | 5.4           | 5.0-5.9         |
| 35-44                                                            | 368         | 19.4                         | 18.6-20.2        | 54.8           | 51.5-58.2        | 21.2           | 17.0-25.4        | 4.6           | 3.6-5.6         |
| 45-54                                                            | 307         | 11.9                         | 9.9-14.0         | 58.6           | 43.9-73.3        | 18.7           | 15.9-21.6        | 10.7          | 0.0-28.7        |
| 55-64                                                            | 159         | 9.8                          | 1.9-17.6         | 56.4           | 53.5-59.2        | 23.2           | 9.0-37.4         | 10.7          | 1.9-19.5        |
| <b>25-64</b>                                                     | <b>1101</b> | <b>16.7</b>                  | <b>15.1-18.2</b> | <b>55.9</b>    | <b>53.2-58.6</b> | <b>19.8</b>    | <b>16.5-23.0</b> | <b>7.6</b>    | <b>0.3-15.0</b> |

**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?

| Less than five servings of fruit and/or vegetables on average per day |            |                           |                   |            |                           |                  |             |                           |                  |
|-----------------------------------------------------------------------|------------|---------------------------|-------------------|------------|---------------------------|------------------|-------------|---------------------------|------------------|
| Age Group (years)                                                     | Men        |                           |                   | Women      |                           |                  | Both Sexes  |                           |                  |
|                                                                       | n          | % < five servings per day | 95% CI            | n          | % < five servings per day | 95% CI           | n           | % < five servings per day | 95% CI           |
| 25-34                                                                 | 115        | 96.5                      | 95.8-97.1         | 152        | 92.2                      | 88.5-95.9        | 267         | 94.6                      | 94.1-95.0        |
| 35-44                                                                 | 143        | 96.1                      | 96.0-96.1         | 225        | 94.6                      | 92.3-96.9        | 368         | 95.4                      | 94.4-96.4        |
| 45-54                                                                 | 132        | 85.0                      | 56.4-100.0        | 175        | 93.7                      | 88.2-99.2        | 307         | 89.3                      | 71.3-100.0       |
| 55-64                                                                 | 63         | 91.2                      | 84.5-97.9         | 96         | 87.1                      | 70.0-100.0       | 159         | 89.3                      | 80.5-98.1        |
| <b>25-64</b>                                                          | <b>453</b> | <b>92.3</b>               | <b>83.9-100.0</b> | <b>648</b> | <b>92.4</b>               | <b>86.4-98.4</b> | <b>1101</b> | <b>92.4</b>               | <b>85.1-99.7</b> |

**Analysis Information:**

- Questions used: D1, D2 , D3, D4
- Epi Info program name: Dfiveormore (unweighted); DfiveormoreWT (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 (households)                                                       | % Vegetable oil | 95% CI    | % Lard | 95% CI  | % Butter | 95% CI  | % Margarine | 95% CI  |
| 1096                                                                 | 66.2            | 63.9-68.4 | 0.1    | 0.0-0.2 | 3.1      | 2.9-3.4 | 2.3         | 2.0-2.6 |

| Type of oil or fat most often used for meal preparation in household |                      |         |             |         |         |           |
|----------------------------------------------------------------------|----------------------|---------|-------------|---------|---------|-----------|
| n (households)                                                       | % none in particular | 95% CI  | % None used | 95% CI  | % Other | 95% CI    |
| 1096                                                                 | 1.4                  | 0.3-2.5 | 1.1         | 0.7-1.5 | 25.8    | 24.4-27.2 |

**Analysis Information:**

- Questions used: D5
- 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.

| Mean number of meals eaten outside a home |     |      |         |       |      |         |            |      |         |
|-------------------------------------------|-----|------|---------|-------|------|---------|------------|------|---------|
| Age Group (years)                         | Men |      |         | Women |      |         | Both Sexes |      |         |
|                                           | n   | mean | 95% CI  | n     | mean | 95% CI  | n          | mean | 95% CI  |
| 25-34                                     | 114 | 2.6  | 2.1-3.2 | 151   | 2.2  | 2.2-2.2 | 265        | 2.4  | 2.2-2.7 |
| 35-44                                     | 142 | 3.0  | 2.5-3.5 | 223   | 2.0  | 1.5-2.4 | 365        | 2.5  | 2.4-2.6 |
| 45-54                                     | 133 | 2.5  | 2.2-2.9 | 173   | 2.0  | 1.1-2.9 | 306        | 2.3  | 1.8-2.7 |
| 55-64                                     | 63  | 1.7  | 0.8-2.6 | 93    | 1.0  | 0.8-1.1 | 156        | 1.4  | 1.0-1.7 |
| 25-64                                     | 452 | 2.6  | 2.2-2.9 | 640   | 1.9  | 1.6-2.1 | 1092       | 2.2  | 2.1-2.4 |

**Analysis Information:**

- Questions used: D6
- 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 a certain percentage of a population as 'inactive' by setting up a cut-point 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       | <ul style="list-style-type: none"><li>• Moderate MET value = 4.0</li><li>• Vigorous MET value = 8.0</li></ul> |
| Transport  | Cycling and walking MET value = 4.0                                                                           |
| Recreation | <ul style="list-style-type: none"><li>• Moderate MET value = 4.0</li><li>• Vigorous MET value = 8.0</li></ul> |

**Categorical indicator** For the calculation of a categorical indicator, the total time spent in physical activity during a typical week, the number of days as well as the intensity of the physical activity are taken into account.

The three levels of physical activity suggested for classifying populations are 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.

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- Levels of total physical activity**
- Description: Percentage of respondents classified into three categories of total physical activity.
- Instrument questions:
- activity at work
  - travel to and from places
  - recreational activities

| Level of total physical activity |            |             |                  |             |                  |             |                  |
|----------------------------------|------------|-------------|------------------|-------------|------------------|-------------|------------------|
| Age Group (years)                | Men        |             |                  |             |                  |             |                  |
|                                  | n          | % Low       | 95% CI           | % Moderate  | 95% CI           | % High      | 95% CI           |
| 25-34                            | 112        | 28.5        | 20.0-37.0        | 13.3        | 2.2-24.5         | 58.2        | 38.5-77.8        |
| 35-44                            | 139        | 22.6        | 12.6-32.6        | 12.3        | 10.2-14.4        | 65.1        | 56.0-74.3        |
| 45-54                            | 133        | 18.8        | 4.1-33.6         | 18.3        | 17.4-19.1        | 62.9        | 47.6-78.1        |
| 55-64                            | 62         | 24.7        | 17.5-31.9        | 14.6        | 11.8-17.5        | 60.7        | 55.9-65.4        |
| <b>25-64</b>                     | <b>446</b> | <b>23.5</b> | <b>13.7-33.2</b> | <b>14.6</b> | <b>12.3-17.0</b> | <b>61.9</b> | <b>49.8-73.9</b> |

| Level of total physical activity |            |             |                  |             |                  |             |                  |
|----------------------------------|------------|-------------|------------------|-------------|------------------|-------------|------------------|
| Age Group (years)                | Women      |             |                  |             |                  |             |                  |
|                                  | n          | % Low       | 95% CI           | % Moderate  | 95% CI           | % High      | 95% CI           |
| 25-34                            | 148        | 46.8        | 39.2-54.4        | 21.8        | 17.0-26.6        | 31.4        | 19.0-43.8        |
| 35-44                            | 215        | 45.7        | 36.7-54.7        | 19.5        | 13.4-25.6        | 34.8        | 31.8-37.9        |
| 45-54                            | 166        | 33.6        | 29.3-37.9        | 29.2        | 24.5-33.9        | 37.2        | 35.7-38.6        |
| 55-64                            | 90         | 46.5        | 40.8-52.2        | 26.3        | 24.2-28.5        | 27.1        | 22.7-31.5        |
| <b>25-64</b>                     | <b>619</b> | <b>42.5</b> | <b>35.2-49.7</b> | <b>24.2</b> | <b>21.8-26.5</b> | <b>33.4</b> | <b>28.3-38.4</b> |

| Level of total physical activity |             |             |                  |             |                  |             |                  |
|----------------------------------|-------------|-------------|------------------|-------------|------------------|-------------|------------------|
| Age Group (years)                | Both Sexes  |             |                  |             |                  |             |                  |
|                                  | n           | % Low       | 95% CI           | % Moderate  | 95% CI           | % High      | 95% CI           |
| 25-34                            | 260         | 36.7        | 24.7-48.6        | 17.1        | 7.0-27.2         | 46.2        | 24.2-68.2        |
| 35-44                            | 354         | 33.0        | 23.3-42.7        | 15.5        | 12.2-18.9        | 51.5        | 44.8-58.1        |
| 45-54                            | 299         | 25.9        | 15.0-36.8        | 23.5        | 22.2-24.7        | 50.6        | 40.3-61.0        |
| 55-64                            | 152         | 34.4        | 26.6-42.2        | 19.8        | 17.7-22.0        | 45.8        | 38.2-53.4        |
| <b>25-64</b>                     | <b>1065</b> | <b>32.1</b> | <b>21.6-42.7</b> | <b>19.0</b> | <b>17.7-20.3</b> | <b>48.9</b> | <b>37.1-60.6</b> |

#### 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             |
| 25-34                                                      | 112        | 218.4        | 184.3-252.6        | 148        | 139.7        | 133.0-146.4        | 260         | 183.4        | 145.5-221.2        |
| 35-44                                                      | 139        | 269.3        | 232.3-306.3        | 215        | 150.5        | 144.7-156.3        | 354         | 215.6        | 191.9-239.4        |
| 45-54                                                      | 133        | 256.9        | 239.2-274.5        | 166        | 186.4        | 139.3-233.6        | 299         | 223.3        | 194.7-251.9        |
| 55-64                                                      | 62         | 308.2        | 206.7-409.6        | 90         | 141.4        | 137.0-145.9        | 152         | 234.1        | 160.3-307.8        |
| <b>25-64</b>                                               | <b>446</b> | <b>259.4</b> | <b>219.9-298.9</b> | <b>619</b> | <b>157.2</b> | <b>140.8-173.5</b> | <b>1065</b> | <b>212.7</b> | <b>176.9-248.6</b> |

**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) |
| 25-34                                                        | 112        | 207.8          | 17.1-377.1                     | 148        | 42.8           | 0-282.8                        | 260         | 88.5           | 8.5-342.8                      |
| 35-44                                                        | 139        | 257.1          | 34.2-394.2                     | 215        | 51.4           | 0-307.1                        | 354         | 128.5          | 17.1-360                       |
| 45-54                                                        | 133        | 248.5          | 59.2-368.5                     | 166        | 111.4          | 17.1-302.8                     | 299         | 205.7          | 34.2-347.1                     |
| 55-64                                                        | 62         | 240.0          | 34.2-424.2                     | 90         | 50.0           | 4.2-257.1                      | 152         | 128.5          | 17.1-360                       |
| <b>25-64</b>                                                 | <b>446</b> | <b>240.0</b>   | <b>38.5-385.7</b>              | <b>619</b> | <b>60.0</b>    | <b>4.2-300</b>                 | <b>1065</b> | <b>128.5</b>   | <b>17.1-349.2</b>              |

**Analysis Information:**

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



|                                               |                                                                                                                                                                    |
|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Domain-specific physical activity-mean</b> | Description: Mean minutes spent in work-, transport- and recreation-related physical activity on average per day.                                                  |
|                                               | Instrument questions: <ul style="list-style-type: none"> <li>• activity at work</li> <li>• travel to and from places</li> <li>• recreational activities</li> </ul> |

| 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             |
| 25-34                                                             | 112        | 176.9        | 168.2-185.7        | 148        | 106.4        | 101.3-111.5        | 260         | 145.5        | 132.5-158.5        |
| 35-44                                                             | 139        | 211.7        | 168.7-254.7        | 215        | 123.2        | 114.1-132.4        | 354         | 171.7        | 143.3-200.2        |
| 45-54                                                             | 133        | 224.4        | 216.5-232.4        | 166        | 152.7        | 141.8-163.6        | 299         | 190.2        | 183.2-197.2        |
| 55-64                                                             | 62         | 224.5        | 186.3-262.6        | 90         | 115.6        | 112.6-118.7        | 152         | 176.1        | 144.3-207.9        |
| <b>25-64</b>                                                      | <b>446</b> | <b>208.4</b> | <b>192.5-224.3</b> | <b>619</b> | <b>126.6</b> | <b>118.7-134.6</b> | <b>1065</b> | <b>171.1</b> | <b>151.7-190.5</b> |

| 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          |
| 25-34                                                                  | 112        | 11.4         | 0.0-23.2        | 148        | 10.5         | 6.0-14.9        | 260         | 11.0         | 2.3-19.7        |
| 35-44                                                                  | 139        | 25.3         | 22.0-28.6       | 215        | 11.4         | 9.3-13.6        | 354         | 19.0         | 16.4-21.7       |
| 45-54                                                                  | 133        | 14.8         | 0.0-33.8        | 166        | 19.6         | 0.0-58.0        | 299         | 17.1         | 0.0-41.6        |
| 55-64                                                                  | 62         | 69.0         | 0.0-151.2       | 90         | 12.5         | 8.4-16.6        | 152         | 43.9         | 0.0-95.0        |
| <b>25-64</b>                                                           | <b>446</b> | <b>26.5</b>  | <b>4.2-48.7</b> | <b>619</b> | <b>13.8</b>  | <b>1.8-25.9</b> | <b>1065</b> | <b>20.7</b>  | <b>4.4-37.0</b> |

| 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           |
| 25-34                                                                   | 112        | 30.1         | 0.0-62.7         | 148        | 22.9         | 20.1-25.7        | 260         | 26.9         | 8.6-45.2         |
| 35-44                                                                   | 139        | 32.3         | 29.4-35.2        | 215        | 15.8         | 14.2-17.5        | 354         | 24.9         | 22.7-27.0        |
| 45-54                                                                   | 133        | 17.6         | 15.9-19.4        | 166        | 14.1         | 12.0-16.3        | 299         | 16.0         | 14.4-17.5        |
| 55-64                                                                   | 62         | 14.7         | 2.2-27.2         | 90         | 13.3         | 9.9-16.8         | 152         | 14.1         | 5.8-22.4         |
| <b>25-64</b>                                                            | <b>446</b> | <b>24.5</b>  | <b>19.5-29.5</b> | <b>619</b> | <b>16.7</b>  | <b>13.6-19.7</b> | <b>1065</b> | <b>20.9</b>  | <b>18.5-23.4</b> |

#### Analysis Information:

- Questions used: P1-P15b
- Epi Info program name: Pssetspecific (unweighted); PssetspecificWT (weighted)

|                                                   |                                                                                                                                                                    |
|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Domain-specific physical activity - median</b> | Description: Median minutes spent on average per day in work-, transport- and recreation-related physical activity.                                                |
|                                                   | Instrument questions: <ul style="list-style-type: none"> <li>• activity at work</li> <li>• travel to and from places</li> <li>• recreational activities</li> </ul> |

| 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) |
| 25-34                                                               | 112        | 162.8          | 0-342.8                        | 148        | 0.0            | 0-257.1                        | 260         | 25.7           | 0-300                          |
| 35-44                                                               | 139        | 214.2          | 0-342.8                        | 215        | 8.5            | 0-291.4                        | 354         | 51.4           | 0-308.5                        |
| 45-54                                                               | 133        | 222.8          | 0-342.8                        | 166        | 85.7           | 0-300                          | 299         | 171.4          | 0-308.5                        |
| 55-64                                                               | 62         | 240.0          | 0-360                          | 90         | 0.0            | 0-257.1                        | 152         | 85.7           | 0-342.8                        |
| <b>25-64</b>                                                        | <b>446</b> | <b>205.7</b>   | <b>0-342.8</b>                 | <b>619</b> | <b>6.4</b>     | <b>0-274.2</b>                 | <b>1065</b> | <b>85.7</b>    | <b>0-308.5</b>                 |

| 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) |
| 25-34                                                                    | 112        | 0.0            | 0-8.5                          | 148        | 0.0            | 0-10.7                         | 260         | 0.0            | 0-8.5                          |
| 35-44                                                                    | 139        | 0.0            | 0-20                           | 215        | 0.0            | 0-10                           | 354         | 0.0            | 0-14.2                         |
| 45-54                                                                    | 133        | 0.0            | 0-12.8                         | 166        | 0.0            | 0-17.1                         | 299         | 0.0            | 0-15                           |
| 55-64                                                                    | 62         | 0.0            | 0-21.4                         | 90         | 0.0            | 0-17.1                         | 152         | 0.0            | 0-20                           |
| <b>25-64</b>                                                             | <b>446</b> | <b>0.0</b>     | <b>0-14.2</b>                  | <b>619</b> | <b>0.0</b>     | <b>0-15</b>                    | <b>1065</b> | <b>0.0</b>     | <b>0-15</b>                    |

| 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) |
| 25-34                                                                     | 112        | 0.0            | 0-42.8                         | 148        | 0.0            | 0-25.7                         | 260         | 0.0            | 0-34.2                         |
| 35-44                                                                     | 139        | 0.0            | 0-51.4                         | 215        | 0.0            | 0-17.1                         | 354         | 0.0            | 0-34.2                         |
| 45-54                                                                     | 133        | 0.0            | 0-25.7                         | 166        | 0.0            | 0-21.4                         | 299         | 0.0            | 0-25.7                         |
| 55-64                                                                     | 62         | 0.0            | 0-17.1                         | 90         | 0.0            | 0-8.5                          | 152         | 0.0            | 0-8.5                          |
| <b>25-64</b>                                                              | <b>446</b> | <b>0.0</b>     | <b>0-34.2</b>                  | <b>619</b> | <b>0.0</b>     | <b>0-21.4</b>                  | <b>1065</b> | <b>0.0</b>     | <b>0-25.7</b>                  |

#### 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 |            |                             |                  |            |                             |                  |             |                             |                  |
|-----------------------------------|------------|-----------------------------|------------------|------------|-----------------------------|------------------|-------------|-----------------------------|------------------|
| Age Group<br>(years)              | Men        |                             |                  | Women      |                             |                  | Both Sexes  |                             |                  |
|                                   | N          | % no<br>activity<br>at work | 95% CI           | n          | % no<br>activity<br>at work | 95% CI           | n           | % no<br>activity<br>at work | 95% CI           |
| 25-34                             | 112        | 38.2                        | 27.1-49.3        | 148        | 56.9                        | 49.9-64.0        | 260         | 46.5                        | 33.3-59.7        |
| 35-44                             | 139        | 30.8                        | 12.5-49.0        | 215        | 48.3                        | 38.7-58.0        | 354         | 38.7                        | 24.2-53.2        |
| 45-54                             | 133        | 27.4                        | 12.4-42.4        | 166        | 38.0                        | 31.8-44.3        | 299         | 32.5                        | 20.7-44.2        |
| 55-64                             | 62         | 28.1                        | 22.3-33.8        | 90         | 54.7                        | 40.1-69.3        | 152         | 39.9                        | 28.8-51.1        |
| <b>25-64</b>                      | <b>446</b> | <b>31.3</b>                 | <b>18.8-43.8</b> | <b>619</b> | <b>48.5</b>                 | <b>38.4-58.5</b> | <b>1065</b> | <b>39.1</b>                 | <b>26.0-52.3</b> |

| No transport-related physical activity |            |                                      |                  |            |                                      |                  |             |                                      |                  |
|----------------------------------------|------------|--------------------------------------|------------------|------------|--------------------------------------|------------------|-------------|--------------------------------------|------------------|
| Age Group<br>(years)                   | Men        |                                      |                  | Women      |                                      |                  | Both Sexes  |                                      |                  |
|                                        | N          | % no<br>activity<br>for<br>transport | 95% CI           | n          | % no<br>activity<br>for<br>transport | 95% CI           | n           | % no<br>activity<br>for<br>transport | 95% CI           |
| 25-34                                  | 112        | 67.3                                 | 51.8-82.7        | 148        | 61.2                                 | 58.7-63.6        | 260         | 64.5                                 | 56.2-72.9        |
| 35-44                                  | 139        | 62.6                                 | 61.2-64.0        | 215        | 65.9                                 | 61.4-70.4        | 354         | 64.1                                 | 62.0-66.2        |
| 45-54                                  | 133        | 69.2                                 | 53.6-84.7        | 166        | 64.6                                 | 61.7-67.5        | 299         | 67.0                                 | 58.4-75.6        |
| 55-64                                  | 62         | 57.3                                 | 28.7-86.0        | 90         | 54.1                                 | 42.4-65.8        | 152         | 55.9                                 | 45.5-66.3        |
| <b>25-64</b>                           | <b>446</b> | <b>64.7</b>                          | <b>51.9-77.6</b> | <b>619</b> | <b>62.3</b>                          | <b>60.9-63.8</b> | <b>1065</b> | <b>63.6</b>                          | <b>56.9-70.4</b> |

| No recreation-related physical activity |            |                                   |                  |            |                                   |                  |             |                                   |                  |
|-----------------------------------------|------------|-----------------------------------|------------------|------------|-----------------------------------|------------------|-------------|-----------------------------------|------------------|
| Age Group<br>(years)                    | Men        |                                   |                  | Women      |                                   |                  | Both Sexes  |                                   |                  |
|                                         | N          | % no<br>activity at<br>recreation | 95% CI           | n          | % no<br>activity at<br>recreation | 95% CI           | n           | % no<br>activity at<br>recreation | 95% CI           |
| 25-34                                   | 112        | 51.5                              | 27.8-75.3        | 148        | 60.6                              | 58.3-63.0        | 260         | 55.6                              | 39.5-71.7        |
| 35-44                                   | 139        | 51.8                              | 47.1-56.5        | 215        | 61.4                              | 56.9-66.0        | 354         | 56.1                              | 51.4-60.8        |
| 45-54                                   | 133        | 57.7                              | 45.4-70.0        | 166        | 62.8                              | 56.2-69.4        | 299         | 60.1                              | 50.2-70.1        |
| 55-64                                   | 62         | 67.4                              | 61.7-73.0        | 90         | 71.4                              | 66.4-76.4        | 152         | 69.2                              | 65.2-73.2        |
| <b>25-64</b>                            | <b>446</b> | <b>56.1</b>                       | <b>45.9-66.4</b> | <b>619</b> | <b>63.3</b>                       | <b>58.9-67.8</b> | <b>1065</b> | <b>59.4</b>                       | <b>51.1-67.7</b> |

#### 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           |
| 25-34                                  | 97         | 61.7                 | 58.4-64.9        | 9.8                      | 9.3-10.3        | 28.5                           | 25.1-32.0        |
| 35-44                                  | 121        | 65.3                 | 59.2-71.3        | 10.6                     | 9.2-12.0        | 24.1                           | 17.8-30.4        |
| 45-54                                  | 118        | 72.8                 | 70.5-75.0        | 9.5                      | 1.5-17.4        | 17.8                           | 9.6-26.0         |
| 55-64                                  | 53         | 68.8                 | 55.5-82.1        | 19.6                     | 0.0-45.7        | 11.6                           | 0.0-24.5         |
| <b>25-64</b>                           | <b>389</b> | <b>67.0</b>          | <b>65.8-68.3</b> | <b>11.7</b>              | <b>4.6-18.8</b> | <b>21.3</b>                    | <b>13.6-29.0</b> |

| 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           |
| 25-34                                  | 106        | 48.4                 | 44.5-52.4        | 23.8                     | 22.9-24.6        | 27.8                           | 24.7-30.9        |
| 35-44                                  | 152        | 58.1                 | 56.4-59.8        | 17.6                     | 16.7-18.5        | 24.3                           | 22.2-26.4        |
| 45-54                                  | 135        | 65.0                 | 61.8-68.2        | 15.7                     | 11.6-19.8        | 19.3                           | 17.7-20.9        |
| 55-64                                  | 71         | 53.0                 | 39.2-66.8        | 32.2                     | 22.2-42.2        | 14.8                           | 11.0-18.6        |
| <b>25-64</b>                           | <b>464</b> | <b>57.1</b>          | <b>52.7-61.4</b> | <b>21.0</b>              | <b>17.7-24.2</b> | <b>21.9</b>                    | <b>20.4-23.5</b> |

| 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           |
| 25-34                                  | 203        | 56.3                 | 50.5-62.0        | 15.5                     | 12.6-18.4        | 28.2                           | 25.2-31.3        |
| 35-44                                  | 273        | 62.4                 | 59.4-65.3        | 13.5                     | 12.6-14.3        | 24.2                           | 21.2-27.2        |
| 45-54                                  | 253        | 69.2                 | 66.2-72.2        | 12.3                     | 7.7-17.0         | 18.5                           | 13.8-23.2        |
| 55-64                                  | 124        | 62.3                 | 61.9-62.7        | 24.8                     | 15.3-34.2        | 12.9                           | 3.4-22.5         |
| <b>25-64</b>                           | <b>853</b> | <b>62.8</b>          | <b>59.5-66.2</b> | <b>15.6</b>              | <b>13.4-17.8</b> | <b>21.6</b>                    | <b>16.4-26.7</b> |

#### 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

| No vigorous physical activity |     |                              |           |  |       |                              |           |  |            |                              |           |
|-------------------------------|-----|------------------------------|-----------|--|-------|------------------------------|-----------|--|------------|------------------------------|-----------|
| Age Group<br>(years)          | Men |                              |           |  | Women |                              |           |  | Both Sexes |                              |           |
|                               | N   | % no<br>vigorous<br>activity | 95% CI    |  | n     | % no<br>vigorous<br>activity | 95% CI    |  | n          | % no<br>vigorous<br>activity | 95% CI    |
| 25-34                         | 112 | 40.0                         | 22.3-57.7 |  | 148   | 81.4                         | 80.0-82.8 |  | 260        | 58.5                         | 39.3-77.6 |
| 35-44                         | 139 | 38.4                         | 26.9-50.0 |  | 215   | 81.3                         | 71.9-90.7 |  | 354        | 57.8                         | 46.8-68.8 |
| 45-54                         | 133 | 48.0                         | 34.1-61.9 |  | 166   | 83.6                         | 79.2-88.0 |  | 299        | 65.0                         | 52.6-77.3 |
| 55-64                         | 62  | 50.5                         | 41.3-59.6 |  | 90    | 85.2                         | 80.9-89.5 |  | 152        | 65.9                         | 56.6-75.2 |
| 25-64                         | 446 | 43.6                         | 31.7-55.5 |  | 619   | 82.7                         | 77.8-87.5 |  | 1065       | 61.4                         | 48.8-74.1 |

**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

| Minutes spent in sedentary activities on average per day |            |              |                    |                |                                |
|----------------------------------------------------------|------------|--------------|--------------------|----------------|--------------------------------|
| Age Group (years)                                        | Men        |              |                    |                |                                |
|                                                          | n          | Mean minutes | 95% CI             | Median minutes | Inter-quartile range (P25-P75) |
| 25-34                                                    | 115        | 274.4        | 187.6-361.2        | 240.0          | 120-420                        |
| 35-44                                                    | 143        | 235.0        | 225.6-244.4        | 240.0          | 120-300                        |
| 45-54                                                    | 133        | 241.8        | 223.3-260.4        | 180.0          | 120-300                        |
| 55-64                                                    | 63         | 211.3        | 154.7-267.9        | 180.0          | 120-240                        |
| <b>25-64</b>                                             | <b>454</b> | <b>243.1</b> | <b>230.7-255.5</b> | <b>210.0</b>   | <b>120-300</b>                 |

| Minutes spent in sedentary activities on average per day |            |              |                    |                |                                |
|----------------------------------------------------------|------------|--------------|--------------------|----------------|--------------------------------|
| Age Group (years)                                        | Women      |              |                    |                |                                |
|                                                          | n          | Mean minutes | 95% CI             | Median minutes | Inter-quartile range (P25-P75) |
| 25-34                                                    | 152        | 296.2        | 267.3-325.2        | 240.0          | 150-360                        |
| 35-44                                                    | 225        | 233.4        | 201.1-265.6        | 180.0          | 120-300                        |
| 45-54                                                    | 175        | 242.8        | 199.4-286.2        | 180.0          | 120-300                        |
| 55-64                                                    | 96         | 213.8        | 162.1-265.4        | 180.0          | 90-240                         |
| <b>25-64</b>                                             | <b>648</b> | <b>248.3</b> | <b>229.5-267.1</b> | <b>180.0</b>   | <b>120-300</b>                 |

| Minutes spent in sedentary activities on average per day |             |              |                    |                |                                |
|----------------------------------------------------------|-------------|--------------|--------------------|----------------|--------------------------------|
| Age Group (years)                                        | Both Sexes  |              |                    |                |                                |
|                                                          | n           | Mean minutes | 95% CI             | Median minutes | Inter-quartile range (P25-P75) |
| 25-34                                                    | 267         | 284.1        | 218.6-349.6        | 240.0          | 120-420                        |
| 35-44                                                    | 368         | 234.3        | 223.2-245.3        | 180.0          | 120-300                        |
| 45-54                                                    | 308         | 242.3        | 213.1-271.5        | 180.0          | 120-300                        |
| 55-64                                                    | 159         | 212.4        | 202.6-222.2        | 180.0          | 120-240                        |
| <b>25-64</b>                                             | <b>1102</b> | <b>245.5</b> | <b>230.1-260.9</b> | <b>210.0</b>   | <b>120-300</b>                 |

**Analysis Information:**

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



## Blood Pressure and Diabetes History

### 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          |
| 25-34                                    | 113        | 7.8              | 6.4-9.2        | 86.2                      | 82.3-90.2        | 3.0                                        | 0.0-6.1        | 3.0                               | 0.0-5.9         |
| 35-44                                    | 142        | 2.0              | 0.8-3.2        | 86.1                      | 80.2-91.9        | 5.0                                        | 2.0-8.0        | 7.0                               | 5.3-8.6         |
| 45-54                                    | 133        | 0.0              | 0.0-0.0        | 80.0                      | 74.6-85.4        | 6.3                                        | 0.0-13.1       | 13.7                              | 11.9-15.5       |
| 55-64                                    | 62         | 0.0              | 0.0-0.0        | 65.9                      | 59.9-71.9        | 9.1                                        | 4.6-13.7       | 25.0                              | 23.0-27.0       |
| <b>25-64</b>                             | <b>450</b> | <b>2.6</b>       | <b>2.4-2.8</b> | <b>80.9</b>               | <b>76.7-85.2</b> | <b>5.5</b>                                 | <b>1.4-9.7</b> | <b>10.9</b>                       | <b>9.4-12.4</b> |

| 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           |
| 25-34                                    | 152        | 3.1              | 2.4-3.8        | 85.9                      | 83.6-88.3        | 6.8                                        | 5.5-8.0         | 4.2                               | 2.4-6.0          |
| 35-44                                    | 225        | 1.8              | 1.0-2.6        | 78.4                      | 73.4-83.5        | 6.8                                        | 2.6-11.1        | 12.9                              | 11.0-14.9        |
| 45-54                                    | 174        | 0.4              | 0.1-0.7        | 68.0                      | 56.7-79.2        | 8.8                                        | 0.0-18.3        | 22.8                              | 20.1-25.5        |
| 55-64                                    | 96         | 0.8              | 0.4-1.2        | 43.8                      | 32.1-55.6        | 29.2                                       | 12.8-45.5       | 26.2                              | 21.3-31.1        |
| <b>25-64</b>                             | <b>647</b> | <b>1.5</b>       | <b>1.2-1.8</b> | <b>71.1</b>               | <b>65.2-77.0</b> | <b>11.3</b>                                | <b>6.4-16.2</b> | <b>16.1</b>                       | <b>14.5-17.7</b> |

| 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           |
| 25-34                                    | 265         | 5.7              | 4.3-7.1        | 86.1                      | 84.7-87.5        | 4.7                                        | 2.8-6.6        | 3.5                               | 2.1-4.9          |
| 35-44                                    | 367         | 1.9              | 1.6-2.2        | 82.6                      | 77.1-88.0        | 5.8                                        | 2.3-9.4        | 9.7                               | 8.0-11.3         |
| 45-54                                    | 307         | 0.2              | 0.0-0.4        | 74.1                      | 72.4-75.8        | 7.5                                        | 6.0-9.1        | 18.2                              | 16.8-19.5        |
| 55-64                                    | 158         | 0.4              | 0.1-0.7        | 55.7                      | 54.2-57.1        | 18.4                                       | 15.3-21.5      | 25.6                              | 22.2-29.0        |
| <b>25-64</b>                             | <b>1097</b> | <b>2.1</b>       | <b>2.0-2.2</b> | <b>76.4</b>               | <b>75.4-77.3</b> | <b>8.2</b>                                 | <b>7.5-8.9</b> | <b>13.3</b>                       | <b>12.1-14.5</b> |

**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 been told by a doctor or other health worker that you have raised blood pressure or hypertension?
- Are you currently receiving any of the following treatments/advice for high blood pressure prescribed by a doctor or other health worker?
- Drugs (medication) that you have taken in the last 2 weeks?

| Currently taking blood pressure drugs 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           |
| 25-34                                                                                             | 1         | 10.0          | 2.7-17.3         | 5         | 28.6          | 18.0-39.2        | 6          | 21.1          | 13.7-28.5        |
| 35-44                                                                                             | 8         | 37.5          | 18.1-56.9        | 18        | 38.2          | 22.1-54.3        | 26         | 37.9          | 23.0-52.9        |
| 45-54                                                                                             | 18        | 68.5          | 52.1-85.0        | 38        | 66.6          | 61.7-71.5        | 56         | 67.4          | 61.1-73.7        |
| 55-64                                                                                             | 16        | 76.6          | 58.1-95.2        | 34        | 69.3          | 49.1-89.6        | 50         | 72.4          | 55.6-89.2        |
| <b>25-64</b>                                                                                      | <b>43</b> | <b>59.4</b>   | <b>47.8-70.9</b> | <b>95</b> | <b>58.1</b>   | <b>55.8-60.4</b> | <b>138</b> | <b>58.6</b>   | <b>54.5-62.8</b> |



**Blood pressure lifestyle advice**

Description: Percentage of respondents who received lifestyle advice from a doctor or health worker to treat raised blood pressure among those previously diagnosed with raised blood pressure.

Instrument questions:

- When was your blood pressure last measured by a health professional?
- Have you ever been told by a doctor or other health worker that you have raised blood pressure or hypertension?
- Are you currently receiving any of the following treatments/advice for high blood pressure prescribed by a doctor or other health worker?

| Advised by doctor or health worker to reduce salt intake among those previously diagnosed |           |             |                  |           |             |                  |            |             |                  |
|-------------------------------------------------------------------------------------------|-----------|-------------|------------------|-----------|-------------|------------------|------------|-------------|------------------|
| Age Group (years)                                                                         | Men       |             |                  | Women     |             |                  | Both Sexes |             |                  |
|                                                                                           | n         | %           | 95% CI           | n         | %           | 95% CI           | n          | %           | 95% CI           |
| 25-34                                                                                     | 3         | 80.2        | 22.0-100.0       | 7         | 38.1        | 7.5-68.7         | 10         | 55.1        | 42.7-67.4        |
| 35-44                                                                                     | 15        | 87.5        | 83.6-91.4        | 27        | 60.0        | 50.2-69.8        | 42         | 71.6        | 65.3-77.9        |
| 45-54                                                                                     | 22        | 80.0        | 75.8-84.1        | 33        | 59.9        | 46.1-73.8        | 55         | 67.9        | 58.7-77.1        |
| 55-64                                                                                     | 19        | 86.7        | 55.0-100.0       | 30        | 59.9        | 50.9-69.0        | 49         | 71.1        | 67.1-75.0        |
| <b>25-64</b>                                                                              | <b>59</b> | <b>84.0</b> | <b>70.9-97.1</b> | <b>97</b> | <b>57.8</b> | <b>53.4-62.2</b> | <b>156</b> | <b>68.5</b> | <b>66.5-70.5</b> |

| Advised by doctor or health worker to lose weight among those previously diagnosed |           |             |                  |           |             |                  |            |             |                  |
|------------------------------------------------------------------------------------|-----------|-------------|------------------|-----------|-------------|------------------|------------|-------------|------------------|
| Age Group (years)                                                                  | Men       |             |                  | Women     |             |                  | Both Sexes |             |                  |
|                                                                                    | n         | %           | 95% CI           | n         | %           | 95% CI           | n          | %           | 95% CI           |
| 25-34                                                                              | 2         | 50.1        | 13.7-86.6        | 8         | 52.4        | 26.5-78.3        | 10         | 51.5        | 29.1-73.9        |
| 35-44                                                                              | 11        | 62.5        | 43.1-81.9        | 28        | 63.7        | 58.2-69.1        | 39         | 63.2        | 55.7-70.6        |
| 45-54                                                                              | 18        | 65.7        | 45.9-85.5        | 34        | 65.3        | 59.7-70.8        | 52         | 65.4        | 57.5-73.4        |
| 55-64                                                                              | 13        | 50.1        | 5.4-94.7         | 22        | 44.6        | 40.9-48.2        | 35         | 46.9        | 33.7-60.0        |
| <b>25-64</b>                                                                       | <b>44</b> | <b>57.9</b> | <b>41.2-74.6</b> | <b>92</b> | <b>56.4</b> | <b>53.4-59.5</b> | <b>136</b> | <b>57.0</b> | <b>51.1-63.0</b> |

| Advised by doctor or health worker to stop smoking among those previously diagnosed |           |             |                 |          |            |                |            |            |                 |
|-------------------------------------------------------------------------------------|-----------|-------------|-----------------|----------|------------|----------------|------------|------------|-----------------|
| Age Group (years)                                                                   | Men       |             |                 | Women    |            |                | Both Sexes |            |                 |
|                                                                                     | n         | %           | 95% CI          | n        | %          | 95% CI         | n          | %          | 95% CI          |
| 25-34                                                                               | 1         | 9.7         | 0.0-75.3        | 2        | 9.5        | 4.8-14.2       | 3          | 9.6        | 0.0-26.8        |
| 35-44                                                                               | 1         | 8.3         | 5.7-10.9        | 1        | 1.8        | 1.2-2.4        | 2          | 4.6        | 3.3-5.9         |
| 45-54                                                                               | 5         | 20.0        | 0.0-43.7        | 3        | 4.0        | 0.0-8.3        | 8          | 10.4       | 0.2-20.5        |
| 55-64                                                                               | 6         | 20.0        | 0.0-47.6        | 0        | 0.0        | 0.0-0.0        | 6          | 8.3        | 1.3-15.4        |
| <b>25-64</b>                                                                        | <b>13</b> | <b>16.6</b> | <b>3.5-29.7</b> | <b>6</b> | <b>2.7</b> | <b>0.6-4.8</b> | <b>19</b>  | <b>8.4</b> | <b>3.2-13.6</b> |

| Advised by doctor or health worker to start or do more exercise among those previously diagnosed |           |             |                  |            |             |                  |            |             |                  |
|--------------------------------------------------------------------------------------------------|-----------|-------------|------------------|------------|-------------|------------------|------------|-------------|------------------|
| Age Group (years)                                                                                | Men       |             |                  | Women      |             |                  | Both Sexes |             |                  |
|                                                                                                  | n         | %           | 95% CI           | n          | %           | 95% CI           | n          | %           | 95% CI           |
| 25-34                                                                                            | 3         | 60.2        | 16.5-100.0       | 11         | 71.4        | 60.8-82.0        | 14         | 66.9        | 50.2-83.6        |
| 35-44                                                                                            | 14        | 75.0        | 67.2-82.8        | 29         | 65.4        | 62.1-68.8        | 43         | 69.5        | 66.0-72.9        |
| 45-54                                                                                            | 20        | 71.4        | 58.2-84.6        | 39         | 74.6        | 70.9-78.3        | 59         | 73.3        | 68.7-78.0        |
| 55-64                                                                                            | 13        | 50.0        | 17.1-82.8        | 25         | 51.6        | 48.5-54.6        | 38         | 50.9        | 40.9-60.9        |
| <b>25-64</b>                                                                                     | <b>50</b> | <b>63.4</b> | <b>52.9-73.8</b> | <b>104</b> | <b>64.4</b> | <b>61.5-67.3</b> | <b>154</b> | <b>64.0</b> | <b>60.5-67.4</b> |

**Blood pressure advice by a traditional healer**

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

Instrument questions:

- When was your blood pressure last measured by a health professional?
- 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 |           |            |                 |            |            |                 |            |            |                |
|------------------------------------------------------------|-----------|------------|-----------------|------------|------------|-----------------|------------|------------|----------------|
| Age Group (years)                                          | Men       |            |                 | Women      |            |                 | Both Sexes |            |                |
|                                                            | n         | %          | 95% CI          | n          | %          | 95% CI          | n          | %          | 95% CI         |
| 25-34                                                      | 5         | 40.1       | 11.0-69.2       | 15         | 4.8        | 2.4-7.1         | 20         | 19.0       | 10.7-27.3      |
| 35-44                                                      | 18        | 4.2        | 2.9-5.5         | 41         | 14.6       | 9.6-19.5        | 59         | 10.2       | 7.3-13.1       |
| 45-54                                                      | 27        | 11.4       | 0.0-62.0        | 54         | 4.0        | 1.3-6.7         | 81         | 7.0        | 0.0-22.2       |
| 55-64                                                      | 22        | 0.0        | 0.0-0.0         | 48         | 7.0        | 1.7-12.3        | 70         | 4.1        | 0.6-7.5        |
| <b>25-64</b>                                               | <b>72</b> | <b>8.5</b> | <b>0.0-21.7</b> | <b>158</b> | <b>7.2</b> | <b>4.1-10.3</b> | <b>230</b> | <b>7.8</b> | <b>5.7-9.8</b> |

| Currently taking herbal or traditional remedy for high blood pressure among those previously diagnosed |           |            |                 |            |             |                 |            |            |                 |
|--------------------------------------------------------------------------------------------------------|-----------|------------|-----------------|------------|-------------|-----------------|------------|------------|-----------------|
| Age Group (years)                                                                                      | Men       |            |                 | Women      |             |                 | Both Sexes |            |                 |
|                                                                                                        | n         | %          | 95% CI          | n          | %           | 95% CI          | n          | %          | 95% CI          |
| 25-34                                                                                                  | 5         | 0.0        | 0.0-0.0         | 15         | 4.8         | 2.4-7.1         | 20         | 2.8        | 1.6-4.1         |
| 35-44                                                                                                  | 18        | 0.0        | 0.0-0.0         | 41         | 3.6         | 2.4-4.9         | 59         | 2.1        | 1.5-2.7         |
| 45-54                                                                                                  | 27        | 14.3       | 9.0-19.6        | 54         | 9.4         | 0.0-27.2        | 81         | 11.3       | 0.0-23.1        |
| 55-64                                                                                                  | 22        | 3.2        | 0.0-24.9        | 48         | 20.9        | 12.2-29.7       | 70         | 13.6       | 7.6-19.6        |
| <b>25-64</b>                                                                                           | <b>72</b> | <b>6.0</b> | <b>0.0-14.5</b> | <b>158</b> | <b>11.8</b> | <b>8.3-15.3</b> | <b>230</b> | <b>9.4</b> | <b>5.5-13.3</b> |



**Diabetes measurement and diagnosis**

Description: Diabetes 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         |
| 25-34                                 | 114        | 37.3             | 26.9-47.7        | 59.7                      | 52.4-67.1        | 2.4                                        | 0.0-4.8        | 0.6                               | 0.0-1.2        |
| 35-44                                 | 141        | 18.7             | 16.7-20.7        | 75.8                      | 75.1-76.4        | 2.0                                        | 0.7-3.4        | 3.5                               | 0.7-6.4        |
| 45-54                                 | 133        | 8.0              | 5.9-10.1         | 74.3                      | 62.7-85.8        | 7.4                                        | 5.2-9.7        | 10.3                              | 2.0-18.5       |
| 55-64                                 | 62         | 11.4             | 2.8-19.9         | 62.5                      | 59.4-65.6        | 12.5                                       | 4.1-20.9       | 13.7                              | 10.3-17.0      |
| <b>25-64</b>                          | <b>450</b> | <b>19.4</b>      | <b>16.3-22.5</b> | <b>68.8</b>               | <b>67.7-69.8</b> | <b>5.4</b>                                 | <b>2.8-8.0</b> | <b>6.4</b>                        | <b>5.5-7.3</b> |

| 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         |
| 25-34                                 | 151        | 14.1             | 14.1-14.2       | 83.2                      | 82.8-83.7        | 0.0                                        | 0.0-0.0        | 2.6                               | 2.1-3.1        |
| 35-44                                 | 225        | 12.2             | 4.8-19.7        | 75.9                      | 72.8-79.0        | 6.1                                        | 4.2-8.0        | 5.7                               | 2.7-8.7        |
| 45-54                                 | 174        | 6.8              | 5.9-7.6         | 77.2                      | 72.3-82.1        | 7.2                                        | 0.1-14.2       | 8.9                               | 6.7-11.0       |
| 55-64                                 | 96         | 10.0             | 8.6-11.5        | 69.9                      | 59.3-80.5        | 10.8                                       | 5.0-16.7       | 9.2                               | 4.9-13.6       |
| <b>25-64</b>                          | <b>646</b> | <b>10.7</b>      | <b>9.3-12.0</b> | <b>77.1</b>               | <b>76.1-78.0</b> | <b>5.7</b>                                 | <b>4.5-7.0</b> | <b>6.5</b>                        | <b>4.9-8.2</b> |

| 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         |
| 25-34                                 | 265         | 27.0             | 16.4-37.6        | 70.2                      | 61.4-78.9        | 1.3                                        | 0.4-2.2        | 1.5                               | 0.5-2.5        |
| 35-44                                 | 366         | 15.7             | 13.3-18.2        | 75.8                      | 74.7-76.9        | 3.9                                        | 2.2-5.6        | 4.5                               | 3.9-5.2        |
| 45-54                                 | 307         | 7.4              | 6.4-8.3          | 75.7                      | 72.2-79.2        | 7.3                                        | 4.9-9.7        | 9.6                               | 4.5-14.7       |
| 55-64                                 | 158         | 10.7             | 6.7-14.8         | 65.9                      | 63.2-68.6        | 11.7                                       | 4.8-18.7       | 11.6                              | 10.9-12.3      |
| <b>25-64</b>                          | <b>1096</b> | <b>15.3</b>      | <b>12.2-18.5</b> | <b>72.6</b>               | <b>71.4-73.8</b> | <b>5.6</b>                                 | <b>4.7-6.5</b> | <b>6.5</b>                        | <b>5.3-7.6</b> |

- 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?
  - Are you currently receiving any of the following treatments/advice 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           |
| 25-34                                                                             | 2         | 20.0             | 20.0-20.0       | 3         | 80.0             | 80.0-80.0        | 5          | 44.8             | 44.8-44.8        |
| 35-44                                                                             | 6         | 9.1              | 3.0-15.2        | 26        | 15.0             | 3.4-26.6         | 32         | 12.9             | 5.5-20.2         |
| 45-54                                                                             | 18        | 9.7              | 6.2-13.1        | 28        | 21.1             | 0.0-42.8         | 46         | 15.0             | 3.8-26.1         |
| 55-64                                                                             | 18        | 17.4             | 0.0-38.2        | 20        | 11.6             | 9.3-13.8         | 38         | 15.1             | 0.0-33.5         |
| <b>25-64</b>                                                                      | <b>44</b> | <b>13.3</b>      | <b>7.4-19.2</b> | <b>77</b> | <b>19.8</b>      | <b>11.8-27.9</b> | <b>121</b> | <b>16.4</b>      | <b>15.4-17.4</b> |

| Currently taking oral drugs 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           |
| 25-34                                                                                | 2         | 100.0         | 100.0-100.0      | 3         | 40.0          | 40.0-40.0        | 5          | 75.2          | 75.2-75.2        |
| 35-44                                                                                | 6         | 54.5          | 24.2-84.9        | 26        | 45.4          | 30.9-59.8        | 32         | 48.6          | 23.3-74.0        |
| 45-54                                                                                | 18        | 74.2          | 59.7-88.7        | 28        | 73.6          | 46.5-100.0       | 46         | 73.9          | 72.0-75.9        |
| 55-64                                                                                | 18        | 60.9          | 53.9-67.8        | 20        | 69.2          | 63.2-75.2        | 38         | 64.2          | 57.4-71.0        |
| <b>25-64</b>                                                                         | <b>44</b> | <b>68.2</b>   | <b>61.4-74.9</b> | <b>77</b> | <b>63.1</b>   | <b>44.3-81.8</b> | <b>121</b> | <b>65.7</b>   | <b>61.5-70.0</b> |



**Diabetes  
lifestyle  
advice**

Description: Percentage of respondents who received diabetes lifestyle advice from a doctor or health worker among those previously diagnosed with 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?
- Are you currently receiving any of the following treatments/advice for diabetes prescribed by a doctor or other health worker?

| Advised by doctor or health worker to have special prescribed diet among those previously diagnosed |           |             |                  |           |             |                  |            |             |                  |
|-----------------------------------------------------------------------------------------------------|-----------|-------------|------------------|-----------|-------------|------------------|------------|-------------|------------------|
| Age Group<br>(years)                                                                                | Men       |             |                  | Women     |             |                  | Both Sexes |             |                  |
|                                                                                                     | n         | %           | 95% CI           | n         | %           | 95% CI           | n          | %           | 95% CI           |
| 25-34                                                                                               | 2         | 100.0       | 100.0-100.0      | 3         | 40.0        | 40.0-40.0        | 5          | 75.2        | 75.2-75.2        |
| 35-44                                                                                               | 6         | 54.6        | 18.1-91.0        | 26        | 42.5        | 34.5-50.5        | 32         | 46.8        | 33.6-60.0        |
| 45-54                                                                                               | 18        | 58.1        | 55.0-61.1        | 28        | 52.7        | 25.5-79.9        | 46         | 55.6        | 44.5-66.6        |
| 55-64                                                                                               | 18        | 56.5        | 52.4-60.7        | 20        | 42.4        | 34.1-50.6        | 38         | 50.9        | 46.7-55.1        |
| <b>25-64</b>                                                                                        | <b>44</b> | <b>59.8</b> | <b>53.1-66.5</b> | <b>77</b> | <b>46.4</b> | <b>37.1-55.7</b> | <b>121</b> | <b>53.4</b> | <b>44.9-62.0</b> |

| Advised by doctor or health worker to lose weight among those previously diagnosed |           |             |                  |           |             |                  |            |             |                  |
|------------------------------------------------------------------------------------|-----------|-------------|------------------|-----------|-------------|------------------|------------|-------------|------------------|
| Age Group<br>(years)                                                               | Men       |             |                  | Women     |             |                  | Both Sexes |             |                  |
|                                                                                    | n         | %           | 95% CI           | n         | %           | 95% CI           | n          | %           | 95% CI           |
| 25-34                                                                              | 2         | 80.0        | 80.0-80.0        | 3         | 40.0        | 40.0-40.0        | 5          | 63.5        | 63.5-63.5        |
| 35-44                                                                              | 6         | 100.0       | 100.0-100.0      | 26        | 51.6        | 37.9-65.3        | 32         | 68.9        | 63.2-74.6        |
| 45-54                                                                              | 18        | 41.9        | 38.9-45.0        | 28        | 55.2        | 45.0-65.4        | 46         | 48.1        | 42.6-53.5        |
| 55-64                                                                              | 18        | 56.5        | 36.4-76.7        | 20        | 53.8        | 44.8-62.8        | 38         | 55.4        | 40.3-70.6        |
| <b>25-64</b>                                                                       | <b>44</b> | <b>57.8</b> | <b>49.9-65.8</b> | <b>77</b> | <b>53.0</b> | <b>47.8-58.3</b> | <b>121</b> | <b>55.6</b> | <b>47.6-63.5</b> |

| Advised by doctor or health worker to stop smoking among those previously diagnosed |           |            |                 |           |            |                |            |            |                 |
|-------------------------------------------------------------------------------------|-----------|------------|-----------------|-----------|------------|----------------|------------|------------|-----------------|
| Age Group<br>(years)                                                                | Men       |            |                 | Women     |            |                | Both Sexes |            |                 |
|                                                                                     | n         | %          | 95% CI          | n         | %          | 95% CI         | n          | %          | 95% CI          |
| 25-34                                                                               | 2         | 0.0        | 0.0-0.0         | 3         | 0.0        | 0.0-0.0        | 5          | 0.0        | 0.0-0.0         |
| 35-44                                                                               | 6         | 18.2       | 0.0-72.8        | 26        | 3.0        | 2.2-3.8        | 32         | 8.4        | 0.0-38.0        |
| 45-54                                                                               | 18        | 9.7        | 6.2-13.1        | 28        | 5.3        | 0.0-10.7       | 46         | 7.6        | 1.9-13.3        |
| 55-64                                                                               | 18        | 8.7        | 3.1-14.3        | 20        | 11.6       | 9.3-13.8       | 38         | 9.8        | 4.1-15.6        |
| <b>25-64</b>                                                                        | <b>44</b> | <b>9.8</b> | <b>5.6-14.0</b> | <b>77</b> | <b>6.2</b> | <b>3.0-9.3</b> | <b>121</b> | <b>8.1</b> | <b>6.2-10.0</b> |

| Advised by doctor or health worker to start or do more exercise among those previously diagnosed |           |             |                  |           |             |                  |            |             |                  |
|--------------------------------------------------------------------------------------------------|-----------|-------------|------------------|-----------|-------------|------------------|------------|-------------|------------------|
| Age Group<br>(years)                                                                             | Men       |             |                  | Women     |             |                  | Both Sexes |             |                  |
|                                                                                                  | n         | %           | 95% CI           | n         | %           | 95% CI           | n          | %           | 95% CI           |
| 25-34                                                                                            | 2         | 100.0       | 100.0-100.0      | 3         | 80.0        | 80.0-80.0        | 5          | 91.7        | 91.7-91.7        |
| 35-44                                                                                            | 6         | 100.0       | 100.0-100.0      | 26        | 54.5        | 46.6-62.3        | 32         | 70.7        | 66.0-75.5        |
| 45-54                                                                                            | 18        | 71.0        | 57.6-84.3        | 28        | 81.5        | 62.6-100.0       | 46         | 75.9        | 74.6-77.1        |
| 55-64                                                                                            | 18        | 60.9        | 38.0-83.8        | 20        | 65.3        | 58.6-72.1        | 38         | 62.7        | 43.5-81.8        |
| <b>25-64</b>                                                                                     | <b>44</b> | <b>72.9</b> | <b>57.7-88.1</b> | <b>77</b> | <b>69.6</b> | <b>58.3-81.0</b> | <b>121</b> | <b>71.4</b> | <b>65.2-77.5</b> |

**Diabetes advice by traditional healer**

Description: Percentage of respondents who have sought advice or treatment from traditional healers 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         | %           | 95% CI          | n         | %           | 95% CI           | n          | %           | 95% CI          |
| 25-34             | 2         | 80.0        | 80.0-80.0       | 3         | 0.0         | 0.0-0.0          | 5          | 46.9        | 46.9-46.9       |
| 35-44             | 6         | 18.2        | 6.0-30.3        | 26        | 9.1         | 6.7-11.5         | 32         | 12.3        | 6.3-18.4        |
| 45-54             | 18        | 25.8        | 0.0-52.2        | 28        | 39.5        | 24.5-54.5        | 46         | 32.2        | 3.7-60.6        |
| 55-64             | 18        | 8.7         | 0.0-35.1        | 20        | 11.6        | 9.3-13.8         | 38         | 9.8         | 0.0-31.3        |
| <b>25-64</b>      | <b>44</b> | <b>21.8</b> | <b>5.3-38.3</b> | <b>77</b> | <b>21.4</b> | <b>10.1-32.8</b> | <b>121</b> | <b>21.6</b> | <b>4.0-39.3</b> |

**Currently taking herbal or traditional treatment for diabetes among those previously diagnosed**

| Age Group (years) | Men       |            |                | Women     |            |                 | Both Sexes |            |                |
|-------------------|-----------|------------|----------------|-----------|------------|-----------------|------------|------------|----------------|
|                   | n         | %          | 95% CI         | n         | %          | 95% CI          | n          | %          | 95% CI         |
| 25-34             | 2         | 0.0        | 0.0-0.0        | 3         | 0.0        | 0.0-0.0         | 5          | 0.0        | 0.0-0.0        |
| 35-44             | 6         | 0.0        | 0.0-0.0        | 26        | 3.0        | 2.2-3.8         | 32         | 2.0        | 1.0-2.9        |
| 45-54             | 18        | 6.5        | 4.2-8.7        | 28        | 7.9        | 0.0-16.0        | 46         | 7.1        | 1.8-12.4       |
| 55-64             | 18        | 0.0        | 0.0-0.0        | 20        | 15.4       | 12.4-18.4       | 38         | 6.1        | 2.5-9.7        |
| <b>25-64</b>      | <b>44</b> | <b>2.7</b> | <b>1.4-4.0</b> | <b>77</b> | <b>8.3</b> | <b>4.1-12.5</b> | <b>121</b> | <b>5.3</b> | <b>2.2-8.5</b> |



**Diabetes control: eye exam**

Description: Percentage of participants previously diagnosed with diabetes who, as part of their diabetes control, have had their eyes examined within the past 2 years, more than 2 years ago or never.

Instrument questions:

- When was the last time your eyes were examined as part of your diabetes control?

| Time of last eye exam, as part of diabetes control, among those diagnosed with diabetes |           |                           |                  |                         |                  |             |                  |
|-----------------------------------------------------------------------------------------|-----------|---------------------------|------------------|-------------------------|------------------|-------------|------------------|
| Age Group (years)                                                                       | Men       |                           |                  |                         |                  |             |                  |
|                                                                                         | n         | % within the past 2 years | 95% IC           | % more than 2 years ago | 95% IC           | % never     | 95% IC           |
| 25-34                                                                                   | 2         | 20.0                      | 20.0-20.0        | 80.0                    | 80.0-80.0        | 0.0         | 0.0-0.0          |
| 35-44                                                                                   | 6         | 63.6                      | 21.1-100.0       | 27.3                    | 0.0-75.8         | 9.1         | 3.0-15.2         |
| 45-54                                                                                   | 18        | 67.7                      | 56.3-79.2        | 0.0                     | 0.0-0.0          | 32.3        | 20.8-43.7        |
| 55-64                                                                                   | 18        | 26.1                      | 10.8-41.4        | 26.1                    | 9.4-42.8         | 47.8        | 46.4-49.2        |
| <b>25-64</b>                                                                            | <b>44</b> | <b>48.0</b>               | <b>44.1-51.9</b> | <b>19.0</b>             | <b>18.8-19.3</b> | <b>33.0</b> | <b>29.4-36.6</b> |

| Time of last eye exam, as part of diabetes control, among those diagnosed with diabetes |           |                           |                  |                         |                 |             |                 |
|-----------------------------------------------------------------------------------------|-----------|---------------------------|------------------|-------------------------|-----------------|-------------|-----------------|
| Age Group (years)                                                                       | Women     |                           |                  |                         |                 |             |                 |
|                                                                                         | n         | % within the past 2 years | 95% IC           | % more than 2 years ago | 95% IC          | % never     | 95% IC          |
| 25-34                                                                                   | 3         | 80.0                      | 80.0-80.0        | 0.0                     | 0.0-0.0         | 20.0        | 20.0-20.0       |
| 35-44                                                                                   | 26        | 51.4                      | 38.6-64.3        | 15.2                    | 11.2-19.2       | 33.4        | 24.5-42.2       |
| 45-54                                                                                   | 27        | 89.2                      | 79.2-99.1        | 8.1                     | 0.7-15.6        | 2.7         | 0.2-5.2         |
| 55-64                                                                                   | 19        | 66.6                      | 59.6-73.7        | 16.7                    | 13.2-20.2       | 16.7        | 13.2-20.2       |
| <b>25-64</b>                                                                            | <b>75</b> | <b>72.2</b>               | <b>59.1-85.2</b> | <b>11.9</b>             | <b>6.3-17.5</b> | <b>15.9</b> | <b>8.4-23.3</b> |

| Time of last eye exam, as part of diabetes control, among those diagnosed with diabetes |            |                           |                  |                         |                  |             |                  |
|-----------------------------------------------------------------------------------------|------------|---------------------------|------------------|-------------------------|------------------|-------------|------------------|
| Age Group (years)                                                                       | Both sexes |                           |                  |                         |                  |             |                  |
|                                                                                         | n          | % within the past 2 years | 95% IC           | % more than 2 years ago | 95% IC           | % never     | 95% IC           |
| 25-34                                                                                   | 5          | 44.8                      | 44.8-44.8        | 46.9                    | 46.9-46.9        | 8.3         | 8.3-8.3          |
| 35-44                                                                                   | 32         | 55.8                      | 43.1-68.5        | 19.5                    | 0.0-43.8         | 24.7        | 12.5-36.9        |
| 45-54                                                                                   | 45         | 77.5                      | 62.0-93.0        | 3.7                     | 1.1-6.3          | 18.8        | 5.8-31.7         |
| 55-64                                                                                   | 37         | 41.5                      | 33.2-49.7        | 22.5                    | 8.9-36.2         | 36.0        | 29.2-42.9        |
| <b>25-64</b>                                                                            | <b>119</b> | <b>59.2</b>               | <b>51.5-67.0</b> | <b>15.7</b>             | <b>13.3-18.2</b> | <b>25.0</b> | <b>19.7-30.3</b> |

**Diabetes control: foot exam** Description: Percentage of participants previously diagnosed with diabetes who, as part of their diabetes control, have had their feet examined within the past 2 years, more than 2 years ago or never.

Instrument questions:

- When was the last time your feet were examined as part of your diabetes control?

| Time of last foot exam, as part of diabetes control, among those diagnosed with diabetes |           |                        |                  |                        |                  |             |                  |
|------------------------------------------------------------------------------------------|-----------|------------------------|------------------|------------------------|------------------|-------------|------------------|
| Age Group (years)                                                                        | Men       |                        |                  |                        |                  |             |                  |
|                                                                                          | n         | % within the past year | 95% IC           | % more than 1 year ago | 95% IC           | % never     | 95% IC           |
| 25-34                                                                                    | 2         | 0.0                    | 0.0-0.0          | 80.0                   | 80.0-80.0        | 20.0        | 20.0-20.0        |
| 35-44                                                                                    | 6         | 18.2                   | 6.0-30.3         | 0.0                    | 0.0-0.0          | 81.8        | 69.7-94.0        |
| 45-54                                                                                    | 16        | 37.9                   | 27.0-48.8        | 34.5                   | 21.4-47.6        | 27.6        | 25.4-29.8        |
| 55-64                                                                                    | 17        | 40.9                   | 30.3-51.5        | 18.2                   | 6.0-30.3         | 40.9        | 18.1-63.7        |
| <b>25-64</b>                                                                             | <b>41</b> | <b>33.7</b>            | <b>33.4-34.0</b> | <b>26.6</b>            | <b>13.2-40.0</b> | <b>39.8</b> | <b>26.1-53.4</b> |

| Time of last foot exam, as part of diabetes control, among those diagnosed with diabetes |           |                        |                  |                        |                  |             |                  |
|------------------------------------------------------------------------------------------|-----------|------------------------|------------------|------------------------|------------------|-------------|------------------|
| Age Group (years)                                                                        | Women     |                        |                  |                        |                  |             |                  |
|                                                                                          | n         | % within the past year | 95% IC           | % more than 1 year ago | 95% IC           | % never     | 95% IC           |
| 25-34                                                                                    | 3         | 40.0                   | 40.0-40.0        | 40.0                   | 40.0-40.0        | 20.0        | 20.0-20.0        |
| 35-44                                                                                    | 24        | 13.6                   | 0.1-27.1         | 20.7                   | 14.5-27.0        | 65.7        | 56.0-75.3        |
| 45-54                                                                                    | 26        | 30.6                   | 1.8-59.5         | 13.9                   | 0.8-27.0         | 55.5        | 13.5-97.4        |
| 55-64                                                                                    | 19        | 25.0                   | 19.8-30.3        | 29.1                   | 14.1-44.0        | 45.9        | 36.2-55.6        |
| <b>25-64</b>                                                                             | <b>72</b> | <b>25.2</b>            | <b>15.2-35.3</b> | <b>21.4</b>            | <b>13.2-29.6</b> | <b>53.4</b> | <b>36.0-70.7</b> |

| Time of last foot exam, as part of diabetes control, among those diagnosed with diabetes |            |                        |                  |                        |                  |             |                  |
|------------------------------------------------------------------------------------------|------------|------------------------|------------------|------------------------|------------------|-------------|------------------|
| Age Group (years)                                                                        | Both sexes |                        |                  |                        |                  |             |                  |
|                                                                                          | n          | % within the past year | 95% IC           | % more than 1 year ago | 95% IC           | % never     | 95% IC           |
| 25-34                                                                                    | 5          | 16.5                   | 16.5-16.5        | 63.5                   | 63.5-63.5        | 20.0        | 20.0-20.0        |
| 35-44                                                                                    | 30         | 15.4                   | 7.3-23.5         | 12.7                   | 5.9-19.5         | 71.9        | 60.3-83.5        |
| 45-54                                                                                    | 42         | 34.5                   | 28.4-40.7        | 24.9                   | 6.8-42.9         | 40.6        | 16.5-64.7        |
| 55-64                                                                                    | 36         | 34.7                   | 27.3-42.2        | 22.4                   | 11.2-33.6        | 42.8        | 25.8-59.9        |
| <b>25-64</b>                                                                             | <b>113</b> | <b>29.8</b>            | <b>25.4-34.2</b> | <b>24.2</b>            | <b>10.8-37.5</b> | <b>46.1</b> | <b>28.5-63.7</b> |



**Cholesterol  
diagnosis  
and  
treatment**

Description: raised total cholesterol diagnosis and treatment results.

Instrument questions:

- Have you ever been told by a doctor or other health worker that you have raised cholesterol?
- Were you told in the last 12 months?
- Are you currently receiving any of the following treatments/advice for raised cholesterol prescribed by a doctor or other health worker?
- Oral treatment (medication) taken in the last 2 weeks?

| Raised cholesterol ever diagnosed |            |                |                  |            |                |                  |             |                |                  |
|-----------------------------------|------------|----------------|------------------|------------|----------------|------------------|-------------|----------------|------------------|
| Age Group<br>(years)              | Men        |                |                  | Women      |                |                  | Both Sexes  |                |                  |
|                                   | n          | %<br>diagnosed | 95% CI           | n          | %<br>diagnosed | 95% CI           | n           | %<br>diagnosed | 95% CI           |
| 25-34                             | 109        | 4.4            | 0.5-8.2          | 149        | 8.0            | 4.0-12.0         | 258         | 6.0            | 4.5-7.5          |
| 35-44                             | 140        | 11.6           | 8.9-14.4         | 223        | 13.5           | 10.7-16.2        | 363         | 12.5           | 12.1-12.8        |
| 45-54                             | 130        | 24.7           | 21.9-27.5        | 173        | 25.8           | 17.9-33.8        | 303         | 25.3           | 21.2-29.3        |
| 55-64                             | 62         | 15.9           | 5.3-26.5         | 95         | 27.8           | 26.4-29.2        | 157         | 21.4           | 16.9-25.9        |
| <b>25-64</b>                      | <b>441</b> | <b>14.1</b>    | <b>11.6-16.6</b> | <b>640</b> | <b>18.4</b>    | <b>14.4-22.4</b> | <b>1081</b> | <b>16.1</b>    | <b>13.5-18.7</b> |

| Raised cholesterol diagnosed in last 12 months |           |                |                  |            |                |                  |            |                |                  |
|------------------------------------------------|-----------|----------------|------------------|------------|----------------|------------------|------------|----------------|------------------|
| Age Group<br>(years)                           | Men       |                |                  | Women      |                |                  | Both Sexes |                |                  |
|                                                | n         | %<br>diagnosed | 95% CI           | n          | %<br>diagnosed | 95% CI           | n          | %<br>diagnosed | 95% CI           |
| 25-34                                          | 4         | 57.4           | 0.0-100.0        | 10         | 40.0           | 12.3-67.7        | 14         | 46.9           | 18.1-75.7        |
| 35-44                                          | 17        | 69.6           | 62.5-76.6        | 28         | 27.0           | 15.6-38.4        | 45         | 48.6           | 46.6-50.7        |
| 45-54                                          | 26        | 69.0           | 55.1-83.0        | 42         | 70.5           | 61.0-80.0        | 68         | 69.8           | 67.3-72.3        |
| 55-64                                          | 13        | 78.9           | 7.6-100.0        | 26         | 83.2           | 73.5-93.0        | 39         | 81.5           | 60.8-100.0       |
| <b>25-64</b>                                   | <b>60</b> | <b>70.2</b>    | <b>51.3-89.1</b> | <b>106</b> | <b>61.8</b>    | <b>57.7-65.9</b> | <b>166</b> | <b>65.7</b>    | <b>59.4-72.1</b> |

| Currently taking cholesterol medication prescribed by doctor or health worker |           |                     |                 |            |                     |                  |            |                     |                 |
|-------------------------------------------------------------------------------|-----------|---------------------|-----------------|------------|---------------------|------------------|------------|---------------------|-----------------|
| Age Group<br>(years)                                                          | Men       |                     |                 | Women      |                     |                  | Both Sexes |                     |                 |
|                                                                               | n         | % taking<br>insulin | 95% CI          | n          | % taking<br>insulin | 95% CI           | n          | % taking<br>insulin | 95% CI          |
| 25-34                                                                         | 4         | 0.0                 | 0.0-0.0         | 10         | 6.7                 | 2.1-11.3         | 14         | 4.0                 | 1.6-6.5         |
| 35-44                                                                         | 17        | 21.7                | 0.0-58.4        | 28         | 10.8                | 6.3-15.4         | 45         | 16.4                | 4.3-28.4        |
| 45-54                                                                         | 26        | 16.7                | 0.0-43.3        | 42         | 14.8                | 12.2-17.4        | 68         | 15.7                | 5.4-26.0        |
| 55-64                                                                         | 13        | 43.0                | 0.0-100.0       | 26         | 53.2                | 40.5-65.9        | 39         | 49.1                | 21.5-76.7       |
| <b>25-64</b>                                                                  | <b>60</b> | <b>21.8</b>         | <b>0.0-61.6</b> | <b>106</b> | <b>23.2</b>         | <b>21.4-25.0</b> | <b>166</b> | <b>22.5</b>         | <b>8.9-36.2</b> |

**Cholesterol  
lifestyle  
advice**

Description: percentage of population with raised cholesterol who received lifestyle advice.

Instrument question:

- Are you currently receiving any of the following treatments/advice for raised cholesterol prescribed by a doctor or other health worker?

| Advised by doctor or health worker to have special prescribed diet |           |             |                 |            |             |                  |            |             |                  |
|--------------------------------------------------------------------|-----------|-------------|-----------------|------------|-------------|------------------|------------|-------------|------------------|
| Age Group<br>(years)                                               | Men       |             |                 | Women      |             |                  | Both Sexes |             |                  |
|                                                                    | n         | %           | 95% CI          | n          | %           | 95% CI           | n          | %           | 95% CI           |
| 25-34                                                              | 4         | 0.0         | 0.0-0.0         | 10         | 26.7        | 8.2-45.1         | 14         | 16.1        | 6.2-25.9         |
| 35-44                                                              | 17        | 30.4        | 0.0-69.9        | 28         | 40.5        | 29.5-51.5        | 45         | 35.4        | 25.6-45.2        |
| 45-54                                                              | 26        | 38.1        | 0.0-100.0       | 42         | 42.7        | 7.3-78.0         | 68         | 40.4        | 35.8-45.1        |
| 55-64                                                              | 13        | 43.0        | 1.3-84.7        | 26         | 60.8        | 38.1-83.6        | 39         | 53.7        | 34.2-73.3        |
| <b>25-64</b>                                                       | <b>60</b> | <b>34.2</b> | <b>4.6-63.8</b> | <b>106</b> | <b>45.3</b> | <b>35.7-55.0</b> | <b>166</b> | <b>40.1</b> | <b>34.8-45.5</b> |

| Advised by doctor or health worker to lose weight |           |             |                 |            |             |                  |            |             |                  |
|---------------------------------------------------|-----------|-------------|-----------------|------------|-------------|------------------|------------|-------------|------------------|
| Age Group<br>(years)                              | Men       |             |                 | Women      |             |                  | Both Sexes |             |                  |
|                                                   | n         | %           | 95% CI          | n          | %           | 95% CI           | n          | %           | 95% CI           |
| 25-34                                             | 4         | 57.4        | 0.0-100.0       | 10         | 53.3        | 51.0-55.6        | 14         | 54.9        | 38.0-71.9        |
| 35-44                                             | 17        | 34.8        | 0.0-79.9        | 28         | 45.9        | 37.2-54.7        | 45         | 40.3        | 27.3-53.3        |
| 45-54                                             | 26        | 33.3        | 15.6-51.1       | 42         | 54.0        | 23.7-84.4        | 68         | 43.8        | 21.8-65.8        |
| 55-64                                             | 13        | 50.2        | 0.0-100.0       | 26         | 46.8        | 15.9-77.7        | 39         | 48.2        | 35.3-61.1        |
| <b>25-64</b>                                      | <b>60</b> | <b>39.0</b> | <b>5.1-72.8</b> | <b>106</b> | <b>50.4</b> | <b>47.0-53.9</b> | <b>166</b> | <b>45.1</b> | <b>32.1-58.1</b> |

| Advised by doctor or health worker to stop smoking |           |            |                 |            |            |                |            |            |                |
|----------------------------------------------------|-----------|------------|-----------------|------------|------------|----------------|------------|------------|----------------|
| Age Group<br>(years)                               | Men       |            |                 | Women      |            |                | Both Sexes |            |                |
|                                                    | n         | %          | 95% CI          | n          | %          | 95% CI         | n          | %          | 95% CI         |
| 25-34                                              | 4         | 13.9       | 0.0-100.0       | 10         | 0.0        | 0.0-0.0        | 14         | 5.5        | 0.0-31.7       |
| 35-44                                              | 17        | 4.3        | 0.0-10.0        | 28         | 5.4        | 3.1-7.7        | 45         | 4.9        | 1.6-8.1        |
| 45-54                                              | 26        | 4.8        | 0.0-12.4        | 42         | 9.9        | 0.0-20.0       | 68         | 7.3        | 0.0-15.2       |
| 55-64                                              | 13        | 7.2        | 0.0-23.7        | 26         | 0.0        | 0.0-0.0        | 39         | 2.9        | 0.1-5.7        |
| <b>25-64</b>                                       | <b>60</b> | <b>5.9</b> | <b>0.0-13.4</b> | <b>106</b> | <b>5.3</b> | <b>1.3-9.3</b> | <b>166</b> | <b>5.6</b> | <b>1.5-9.7</b> |

| Advised doctor or health worker to start or do more exercise |           |             |                  |            |             |                  |            |             |                  |
|--------------------------------------------------------------|-----------|-------------|------------------|------------|-------------|------------------|------------|-------------|------------------|
| Age Group<br>(years)                                         | Men       |             |                  | Women      |             |                  | Both Sexes |             |                  |
|                                                              | n         | %           | 95% CI           | n          | %           | 95% CI           | n          | %           | 95% CI           |
| 25-34                                                        | 4         | 43.0        | 0.0-87.7         | 10         | 66.7        | 55.1-78.2        | 14         | 57.3        | 39.1-75.5        |
| 35-44                                                        | 17        | 34.8        | 0.0-79.9         | 28         | 51.4        | 44.9-57.8        | 45         | 42.9        | 28.2-57.7        |
| 45-54                                                        | 26        | 47.6        | 24.8-70.4        | 42         | 67.2        | 49.1-85.3        | 68         | 57.5        | 40.1-75.0        |
| 55-64                                                        | 13        | 71.3        | 18.6-100.0       | 26         | 55.2        | 29.2-81.3        | 39         | 61.7        | 50.2-73.1        |
| <b>25-64</b>                                                 | <b>60</b> | <b>48.9</b> | <b>19.5-78.3</b> | <b>106</b> | <b>60.8</b> | <b>58.7-62.9</b> | <b>166</b> | <b>55.3</b> | <b>45.1-65.4</b> |



**Cholesterol advice by a traditional healer**

Description: percentage of population with raised cholesterol, who are seeking advice with traditional healers.

Instrument questions:

- During the past 12 months have you 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 cholesterol in the last 12 months |           |            |                |            |            |                |            |            |                |
|-----------------------------------------------------------------|-----------|------------|----------------|------------|------------|----------------|------------|------------|----------------|
| Age Group (years)                                               | Men       |            |                | Women      |            |                | Both Sexes |            |                |
|                                                                 | n         | %          | 95% CI         | n          | %          | 95% CI         | n          | %          | 95% CI         |
| 25-34                                                           | 4         | 0.0        | 0.0-0.0        | 10         | 0.0        | 0.0-0.0        | 14         | 0.0        | 0.0-0.0        |
| 35-44                                                           | 17        | 0.0        | 0.0-0.0        | 28         | 0.0        | 0.0-0.0        | 45         | 0.0        | 0.0-0.0        |
| 45-54                                                           | 26        | 4.8        | 0.0-12.4       | 42         | 3.3        | 0.0-6.7        | 68         | 4.0        | 0.0-8.3        |
| 55-64                                                           | 13        | 0.0        | 0.0-0.0        | 26         | 8.4        | 3.5-13.3       | 39         | 5.0        | 0.1-9.9        |
| <b>25-64</b>                                                    | <b>60</b> | <b>2.3</b> | <b>0.0-5.9</b> | <b>106</b> | <b>3.6</b> | <b>0.9-6.3</b> | <b>166</b> | <b>3.0</b> | <b>0.3-5.7</b> |

| Currently taking herbal or traditional treatment for raised cholesterol |           |            |                |            |             |                 |            |            |                 |
|-------------------------------------------------------------------------|-----------|------------|----------------|------------|-------------|-----------------|------------|------------|-----------------|
| Age Group (years)                                                       | Men       |            |                | Women      |             |                 | Both Sexes |            |                 |
|                                                                         | n         | %          | 95% CI         | n          | %           | 95% CI          | n          | %          | 95% CI          |
| 25-34                                                                   | 4         | 0.0        | 0.0-0.0        | 10         | 6.7         | 2.1-11.3        | 14         | 4.0        | 1.6-6.5         |
| 35-44                                                                   | 17        | 4.3        | 0.0-31.1       | 28         | 0.0         | 0.0-0.0         | 45         | 2.2        | 0.0-12.2        |
| 45-54                                                                   | 26        | 0.0        | 0.0-0.0        | 42         | 13.1        | 0.8-25.4        | 68         | 6.6        | 0.8-12.5        |
| 55-64                                                                   | 13        | 0.0        | 0.0-0.0        | 26         | 16.8        | 0.0-50.6        | 39         | 10.1       | 0.0-27.0        |
| <b>25-64</b>                                                            | <b>60</b> | <b>1.0</b> | <b>0.0-7.2</b> | <b>106</b> | <b>10.7</b> | <b>0.0-25.1</b> | <b>166</b> | <b>6.2</b> | <b>0.0-15.1</b> |

## Family history of Chronic Disease Conditions

### Family history of Chronic Disease Conditions

Description: Percentage with a family member who has been diagnosed with a chronic disease condition.

Instrument questions:

- Have some of your family members been diagnosed with the following diseases?
- Diabetes; Raised blood pressure; Stroke; Cancer or malignant tumor; Raised cholesterol; Early myocardial infarction?

| Family member who has been diagnosed with |            |                                |                  |                         |                  |             |                  |
|-------------------------------------------|------------|--------------------------------|------------------|-------------------------|------------------|-------------|------------------|
| Age Group (years)                         | Men        |                                |                  |                         |                  |             |                  |
|                                           | n          | % Diabetes or high blood sugar | 95% CI           | % Raised blood pressure | 95% CI           | % Stroke    | 95% CI           |
| 25-34                                     | 115        | 57.6                           | 55.5-59.7        | 62.9                    | 43.3-82.6        | 28.8        | 26.1-31.5        |
| 35-44                                     | 143        | 57.7                           | 55.5-59.8        | 60.6                    | 47.9-73.3        | 27.1        | 24.2-30.0        |
| 45-54                                     | 133        | 60.6                           | 55.9-65.3        | 53.7                    | 44.8-62.6        | 22.9        | 19.4-26.4        |
| 55-64                                     | 63         | 53.3                           | 39.3-67.3        | 53.4                    | 44.2-62.5        | 22.2        | 6.4-38.0         |
| <b>25-64</b>                              | <b>454</b> | <b>57.7</b>                    | <b>56.3-59.1</b> | <b>58.1</b>             | <b>48.1-68.0</b> | <b>25.6</b> | <b>23.5-27.6</b> |

| Family member who has been diagnosed with |            |                             |                  |                      |                  |                               |                 |
|-------------------------------------------|------------|-----------------------------|------------------|----------------------|------------------|-------------------------------|-----------------|
| Age Group (years)                         | Men        |                             |                  |                      |                  |                               |                 |
|                                           | n          | % Cancer or malignant tumor | 95% CI           | % Raised cholesterol | 95% CI           | % Early myocardial infarction | 95% CI          |
| 25-34                                     | 115        | 31.1                        | 28.1-34.2        | 24.1                 | 20.1-28.0        | 7.1                           | 0.0-14.4        |
| 35-44                                     | 143        | 27.6                        | 23.6-31.6        | 23.7                 | 8.2-39.1         | 7.9                           | 2.7-13.0        |
| 45-54                                     | 133        | 32.0                        | 27.7-36.3        | 20.6                 | 7.0-34.2         | 6.8                           | 3.4-10.3        |
| 55-64                                     | 63         | 32.1                        | 10.0-54.3        | 15.5                 | 6.3-24.8         | 16.7                          | 0.0-35.2        |
| <b>25-64</b>                              | <b>454</b> | <b>30.5</b>                 | <b>27.8-33.3</b> | <b>21.5</b>          | <b>20.4-22.6</b> | <b>8.9</b>                    | <b>1.7-16.2</b> |

| Family member who has been diagnosed with |            |                                |                  |                         |                  |             |                  |
|-------------------------------------------|------------|--------------------------------|------------------|-------------------------|------------------|-------------|------------------|
| Age Group (years)                         | Women      |                                |                  |                         |                  |             |                  |
|                                           | n          | % Diabetes or high blood sugar | 95% CI           | % Raised blood pressure | 95% CI           | % Stroke    | 95% CI           |
| 25-34                                     | 152        | 63.0                           | 62.9-63.1        | 66.7                    | 62.2-71.2        | 22.4        | 19.1-25.7        |
| 35-44                                     | 225        | 57.5                           | 53.6-61.4        | 69.8                    | 62.3-77.2        | 25.2        | 19.0-31.4        |
| 45-54                                     | 175        | 65.1                           | 57.0-73.2        | 74.3                    | 66.6-82.0        | 23.9        | 19.8-28.0        |
| 55-64                                     | 96         | 58.7                           | 54.5-62.9        | 76.4                    | 73.0-79.8        | 23.9        | 16.8-31.1        |
| <b>25-64</b>                              | <b>648</b> | <b>61.4</b>                    | <b>60.1-62.7</b> | <b>71.6</b>             | <b>66.1-77.0</b> | <b>23.9</b> | <b>22.7-25.1</b> |

| Family member who has been diagnosed with |            |                             |                  |                      |                  |                               |                 |
|-------------------------------------------|------------|-----------------------------|------------------|----------------------|------------------|-------------------------------|-----------------|
| Age Group (years)                         | Women      |                             |                  |                      |                  |                               |                 |
|                                           | n          | % Cancer or malignant tumor | 95% CI           | % Raised cholesterol | 95% CI           | % Early myocardial infarction | 95% CI          |
| 25-34                                     | 152        | 32.3                        | 31.2-33.4        | 25.5                 | 20.2-30.8        | 14.6                          | 11.4-17.7       |
| 35-44                                     | 225        | 36.3                        | 29.7-42.9        | 28.1                 | 26.5-29.6        | 10.4                          | 4.0-16.9        |
| 45-54                                     | 175        | 38.2                        | 34.7-41.7        | 31.5                 | 28.8-34.3        | 10.9                          | 8.7-13.1        |
| 55-64                                     | 96         | 37.7                        | 36.3-39.0        | 24.7                 | 19.3-30.1        | 10.0                          | 7.4-12.7        |
| <b>25-64</b>                              | <b>648</b> | <b>36.1</b>                 | <b>34.6-37.7</b> | <b>27.9</b>          | <b>27.4-28.4</b> | <b>11.5</b>                   | <b>8.7-14.3</b> |



| Family member who has been diagnosed with |             |                                |                  |                         |                  |             |                  |
|-------------------------------------------|-------------|--------------------------------|------------------|-------------------------|------------------|-------------|------------------|
| Age Group (years)                         | Both Sexes  |                                |                  |                         |                  |             |                  |
|                                           | n           | % Diabetes or high blood sugar | 95% CI           | % Raised blood pressure | 95% CI           | % Stroke    | 95% CI           |
| 25-34                                     | 267         | 60.0                           | 59.0-61.1        | 64.6                    | 54.9-74.3        | 26.0        | 24.5-27.5        |
| 35-44                                     | 368         | 57.6                           | 54.9-60.3        | 64.7                    | 61.0-68.5        | 26.2        | 24.9-27.6        |
| 45-54                                     | 308         | 62.8                           | 60.8-64.8        | 63.8                    | 59.8-67.8        | 23.4        | 20.8-25.9        |
| 55-64                                     | 159         | 55.8                           | 50.7-60.9        | 63.9                    | 61.1-66.8        | 23.0        | 17.5-28.6        |
| <b>25-64</b>                              | <b>1102</b> | <b>59.4</b>                    | <b>58.5-60.3</b> | <b>64.3</b>             | <b>59.9-68.7</b> | <b>24.8</b> | <b>24.2-25.4</b> |

| Family member who has been diagnosed with |             |                             |                  |                      |                  |                               |                 |
|-------------------------------------------|-------------|-----------------------------|------------------|----------------------|------------------|-------------------------------|-----------------|
| Age Group (years)                         | Both Sexes  |                             |                  |                      |                  |                               |                 |
|                                           | n           | % Cancer or malignant tumor | 95% CI           | % Raised cholesterol | 95% CI           | % Early myocardial infarction | 95% CI          |
| 25-34                                     | 267         | 31.7                        | 29.8-33.5        | 24.7                 | 20.9-28.5        | 10.4                          | 3.4-17.4        |
| 35-44                                     | 368         | 31.5                        | 30.2-32.8        | 25.6                 | 17.8-33.5        | 9.0                           | 3.3-14.8        |
| 45-54                                     | 308         | 35.0                        | 32.3-37.8        | 25.9                 | 21.3-30.6        | 8.8                           | 5.8-11.9        |
| 55-64                                     | 159         | 34.7                        | 22.0-47.3        | 19.7                 | 18.4-21.1        | 13.7                          | 5.7-21.6        |
| <b>25-64</b>                              | <b>1102</b> | <b>33.1</b>                 | <b>30.7-35.6</b> | <b>24.5</b>          | <b>24.4-24.6</b> | <b>10.1</b>                   | <b>4.7-15.6</b> |

## Physical Measurements

**Height, weight and BMI** Description: Mean height, weight, and body mass index among all respondents (excluding pregnant women for weight and BMI).

Instrument questions:

- Height
- Weight

| Mean height (cm)  |            |              |                    |            |              |                    |
|-------------------|------------|--------------|--------------------|------------|--------------|--------------------|
| Age Group (years) | Men        |              |                    | Women      |              |                    |
|                   | n          | Mean         | 95% CI             | n          | Mean         | 95% CI             |
| 25-34             | 115        | 176.1        | 175.3-176.8        | 150        | 164.7        | 164.3-165.0        |
| 35-44             | 141        | 176.8        | 176.3-177.3        | 224        | 163.7        | 162.7-164.7        |
| 45-54             | 131        | 176.1        | 173.7-178.4        | 173        | 163.3        | 162.3-164.2        |
| 55-64             | 62         | 174.7        | 169.7-179.8        | 94         | 163.8        | 163.0-164.6        |
| <b>25-64</b>      | <b>449</b> | <b>176.0</b> | <b>174.3-177.8</b> | <b>641</b> | <b>163.8</b> | <b>162.9-164.7</b> |

| Mean weight (kg)  |            |             |                  |            |             |                  |
|-------------------|------------|-------------|------------------|------------|-------------|------------------|
| Age Group (years) | Men        |             |                  | Women      |             |                  |
|                   | n          | Mean        | 95% CI           | n          | Mean        | 95% CI           |
| 25-34             | 115        | 86.5        | 83.8-89.1        | 147        | 76.0        | 75.3-76.6        |
| 35-44             | 141        | 88.8        | 88.4-89.2        | 223        | 81.5        | 79.7-83.3        |
| 45-54             | 131        | 85.4        | 83.5-87.3        | 170        | 80.0        | 77.7-82.2        |
| 55-64             | 62         | 85.4        | 82.4-88.5        | 93         | 79.9        | 78.9-81.0        |
| <b>25-64</b>      | <b>449</b> | <b>86.7</b> | <b>85.8-87.5</b> | <b>633</b> | <b>79.4</b> | <b>78.2-80.6</b> |

| Mean BMI (kg/m <sup>2</sup> ) |            |             |                  |            |             |                  |             |             |                  |
|-------------------------------|------------|-------------|------------------|------------|-------------|------------------|-------------|-------------|------------------|
| Age Group (years)             | Men        |             |                  | Women      |             |                  | Both Sexes  |             |                  |
|                               | n          | Mean        | 95% CI           | n          | Mean        | 95% CI           | n           | Mean        | 95% CI           |
| 25-34                         | 115        | 27.9        | 27.0-28.9        | 146        | 28.4        | 28.2-28.5        | 261         | 28.1        | 27.4-28.8        |
| 35-44                         | 141        | 28.4        | 28.3-28.5        | 222        | 30.3        | 30.0-30.6        | 363         | 29.3        | 29.1-29.5        |
| 45-54                         | 131        | 27.7        | 27.6-27.8        | 170        | 30.0        | 29.6-30.5        | 301         | 28.8        | 28.4-29.3        |
| 55-64                         | 62         | 27.9        | 26.9-28.9        | 91         | 30.1        | 29.8-30.5        | 153         | 28.9        | 28.0-29.8        |
| <b>25-64</b>                  | <b>449</b> | <b>28.0</b> | <b>27.5-28.5</b> | <b>629</b> | <b>29.7</b> | <b>29.5-29.9</b> | <b>1078</b> | <b>28.8</b> | <b>28.3-29.3</b> |

### Analysis Information:

- Questions used: M3, M4, M5
- Epi Info program name: Mbmi (unweighted); MbmiWT (weighted)



**BMI categories** Description: Percentage of respondents (excluding pregnant women) in each BMI category.

Instrument questions:

- Height
- Weight

| BMI classifications |            |                      |                |                           |                  |                 |                  |               |                  |
|---------------------|------------|----------------------|----------------|---------------------------|------------------|-----------------|------------------|---------------|------------------|
| Age Group (years)   | Men        |                      |                |                           |                  |                 |                  |               |                  |
|                     | 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           |
| 25-34               | 115        | 0.6                  | 0.0-1.2        | 29.4                      | 19.8-38.9        | 41.2            | 37.7-44.7        | 28.8          | 23.2-34.4        |
| 35-44               | 141        | 0.0                  | 0.0-0.0        | 26.0                      | 20.9-31.0        | 43.0            | 40.4-45.7        | 31.0          | 28.6-33.4        |
| 45-54               | 131        | 0.0                  | 0.0-0.0        | 24.3                      | 16.0-32.5        | 50.3            | 32.1-68.5        | 25.4          | 15.5-35.4        |
| 55-64               | 62         | 0.0                  | 0.0-0.0        | 25.8                      | 17.3-34.4        | 46.0            | 43.1-49.0        | 28.1          | 19.0-37.2        |
| <b>25-64</b>        | <b>449</b> | <b>0.2</b>           | <b>0.0-0.3</b> | <b>26.4</b>               | <b>18.9-33.9</b> | <b>45.0</b>     | <b>39.0-51.1</b> | <b>28.4</b>   | <b>26.9-29.9</b> |

| BMI classifications |            |                      |                |                           |                  |                 |                  |               |                  |
|---------------------|------------|----------------------|----------------|---------------------------|------------------|-----------------|------------------|---------------|------------------|
| Age Group (years)   | Women      |                      |                |                           |                  |                 |                  |               |                  |
|                     | 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           |
| 25-34               | 146        | 1.6                  | 1.3-2.0        | 32.4                      | 30.8-34.1        | 35.7            | 35.3-36.1        | 30.3          | 28.6-31.9        |
| 35-44               | 222        | 0.7                  | 0.0-2.2        | 17.9                      | 16.1-19.6        | 33.9            | 32.3-35.6        | 47.5          | 45.6-49.3        |
| 45-54               | 170        | 0.9                  | 0.2-1.5        | 22.4                      | 14.1-30.7        | 25.5            | 19.8-31.2        | 51.3          | 47.8-54.7        |
| 55-64               | 91         | 0.0                  | 0.0-0.0        | 18.8                      | 16.7-20.9        | 36.7            | 28.3-45.1        | 44.5          | 37.9-51.1        |
| <b>25-64</b>        | <b>629</b> | <b>0.9</b>           | <b>0.8-0.9</b> | <b>23.0</b>               | <b>21.9-24.1</b> | <b>32.2</b>     | <b>28.3-36.2</b> | <b>43.9</b>   | <b>40.9-46.9</b> |

| BMI classifications |             |                      |                |                           |                  |                 |                  |               |                  |
|---------------------|-------------|----------------------|----------------|---------------------------|------------------|-----------------|------------------|---------------|------------------|
| Age Group (years)   | Both Sexes  |                      |                |                           |                  |                 |                  |               |                  |
|                     | 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           |
| 25-34               | 261         | 1.0                  | 0.3-1.7        | 30.7                      | 26.6-34.9        | 38.8            | 37.8-39.8        | 29.5          | 26.7-32.2        |
| 35-44               | 363         | 0.3                  | 0.0-1.0        | 22.3                      | 20.3-24.4        | 38.9            | 37.0-40.8        | 38.4          | 37.4-39.4        |
| 45-54               | 301         | 0.4                  | 0.0-0.8        | 23.4                      | 15.0-31.7        | 38.2            | 28.1-48.4        | 38.0          | 35.3-40.7        |
| 55-64               | 153         | 0.0                  | 0.0-0.0        | 22.7                      | 16.5-28.8        | 41.9            | 39.5-44.3        | 35.4          | 31.1-39.8        |
| <b>25-64</b>        | <b>1078</b> | <b>0.5</b>           | <b>0.4-0.6</b> | <b>24.8</b>               | <b>20.0-29.7</b> | <b>39.2</b>     | <b>35.3-43.1</b> | <b>35.5</b>   | <b>34.5-36.5</b> |

#### Analysis Information:

- Questions used: M3, M4, M5
- Epi Info program name: Mbmiclass (unweighted); MbmiclassWT (weighted)

**BMI  $\geq 25$**  Description: Percentage of respondents being classified as overweight (BMI  $\geq 25$ )

Instrument questions:

- Height
- Weight

| Age Group<br>(years) | BMI $\geq 25$ |                    |                  |            |                    |                  |             |                    |                  |
|----------------------|---------------|--------------------|------------------|------------|--------------------|------------------|-------------|--------------------|------------------|
|                      | Men           |                    |                  | Women      |                    |                  | Both Sexes  |                    |                  |
|                      | n             | %<br>BMI $\geq 25$ | 95% CI           | n          | %<br>BMI $\geq 25$ | 95% CI           | n           | %<br>BMI $\geq 25$ | 95% CI           |
| 25-34                | 115           | 70.0               | 61.1-79.0        | 146        | 65.9               | 63.9-68.0        | 261         | 68.3               | 64.8-71.8        |
| 35-44                | 141           | 74.0               | 69.0-79.1        | 222        | 81.4               | 80.8-81.9        | 363         | 77.3               | 74.7-80.0        |
| 45-54                | 131           | 75.7               | 67.5-84.0        | 170        | 76.7               | 69.0-84.4        | 301         | 76.2               | 68.2-84.2        |
| 55-64                | 62            | 74.2               | 65.6-82.7        | 91         | 81.2               | 79.1-83.3        | 153         | 77.3               | 71.2-83.5        |
| <b>25-64</b>         | <b>449</b>    | <b>73.5</b>        | <b>66.1-80.8</b> | <b>629</b> | <b>76.2</b>        | <b>75.0-77.3</b> | <b>1078</b> | <b>74.7</b>        | <b>70.0-79.4</b> |

**Analysis Information:**

- Questions used: M3, M4, M5
- Epi Info program name: Mbmiclass (unweighted); MbmiclassWT (weighted)



**Waist circumference** Description: Mean waist circumference among all respondents (excluding pregnant women).

Instrument question:

- Waist circumference measurement

| Waist circumference (cm) |            |             |                  |            |             |                  |
|--------------------------|------------|-------------|------------------|------------|-------------|------------------|
| Age Group (years)        | Men        |             |                  | Women      |             |                  |
|                          | n          | Mean        | 95% CI           | n          | Mean        | 95% CI           |
| 25-34                    | 106        | 36.6        | 36.4-36.8        | 116        | 36.5        | <b>36.5-36.6</b> |
| 35-44                    | 136        | 37.7        | 37.5-37.9        | 201        | 37.1        | <b>36.6-37.6</b> |
| 45-54                    | 127        | 37.4        | 36.9-37.9        | 160        | 37.1        | <b>36.9-37.4</b> |
| 55-64                    | 62         | 38.0        | 37.5-38.6        | 90         | 37.5        | <b>37.3-37.7</b> |
| <b>25-64</b>             | <b>431</b> | <b>37.4</b> | <b>37.2-37.6</b> | <b>567</b> | <b>37.1</b> | <b>36.8-37.3</b> |

**Analysis Information:**

- Questions used: M5, M7
- Epi Info program name: Mwaist (unweighted); MwaistWT (weighted)

**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             |
| 25-34                               | 112        | 126.5        | <b>125.5-127.6</b> | 151        | 117.5        | <b>116.4-118.7</b> | 263         | 122.5        | <b>119.9-125.1</b> |
| 35-44                               | 140        | 131.7        | <b>129.9-133.4</b> | 222        | 121.7        | <b>119.4-124.0</b> | 362         | 127.2        | <b>125.0-129.3</b> |
| 45-54                               | 130        | 137.2        | <b>128.5-145.9</b> | 172        | 130.3        | <b>127.1-133.6</b> | 302         | 133.8        | <b>127.3-140.4</b> |
| 55-64                               | 61         | 145.4        | <b>136.1-154.7</b> | 94         | 138.9        | <b>136.7-141.1</b> | 155         | 142.4        | <b>136.2-148.6</b> |
| <b>25-64</b>                        | <b>443</b> | <b>134.2</b> | <b>129.0-139.5</b> | <b>639</b> | <b>126.2</b> | <b>123.5-129.0</b> | <b>1082</b> | <b>130.5</b> | <b>125.7-135.3</b> |

| Mean diastolic blood pressure (mmHg) |            |             |                  |            |             |                  |             |             |                  |
|--------------------------------------|------------|-------------|------------------|------------|-------------|------------------|-------------|-------------|------------------|
| Age Group (years)                    | Men        |             |                  | Women      |             |                  | Both Sexes  |             |                  |
|                                      | n          | Mean        | 95% CI           | n          | Mean        | 95% CI           | n           | Mean        | 95% CI           |
| 25-34                                | 112        | 75.3        | 72.3-78.3        | 151        | 76.3        | 75.7-76.9        | 263         | 75.7        | 73.6-77.8        |
| 35-44                                | 140        | 80.9        | 80.5-81.2        | 222        | 79.0        | 77.8-80.1        | 362         | 80.0        | 79.6-80.4        |
| 45-54                                | 130        | 84.4        | 81.6-87.1        | 172        | 81.2        | 80.3-82.1        | 302         | 82.8        | 80.9-84.7        |
| 55-64                                | 61         | 84.1        | 80.0-88.3        | 94         | 82.4        | 80.7-84.2        | 155         | 83.4        | 81.7-85.0        |
| <b>25-64</b>                         | <b>443</b> | <b>80.9</b> | <b>79.9-82.0</b> | <b>639</b> | <b>79.6</b> | <b>79.2-80.0</b> | <b>1082</b> | <b>80.3</b> | <b>79.8-80.8</b> |

**Analysis Information:**

- Questions used: M11a, M11b, M12a, M12b, M13a, M13b
- Epi Info program name: Mbloodpressure (unweighted); MbloodpressureWT (weighted)



**Raised blood pressure**

Description: Percentage of respondents with raised blood pressure.

Instrument question:

- 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

| SBP $\geq$ 140 and/or DBP $\geq$ 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           |
| 25-34                                                                                             | 111        | 17.6        | 8.9-26.2         | 150        | 14.2        | 11.5-16.9        | 261        | 16.1        | 11.9-20.2        |
| 35-44                                                                                             | 130        | 31.0        | 17.3-44.7        | 202        | 18.9        | 17.3-20.5        | 332        | 25.6        | 17.1-34.1        |
| 45-54                                                                                             | 115        | 47.3        | 36.3-58.4        | 149        | 21.2        | 19.6-22.8        | 264        | 34.5        | 26.1-42.9        |
| 55-64                                                                                             | 48         | 52.9        | 19.3-86.6        | 63         | 41.1        | 37.7-44.4        | 111        | 48.0        | 24.9-71.1        |
| <b>25-64</b>                                                                                      | <b>404</b> | <b>34.7</b> | <b>19.4-49.9</b> | <b>564</b> | <b>21.1</b> | <b>20.4-21.8</b> | <b>968</b> | <b>28.5</b> | <b>18.5-38.5</b> |

| SBP $\geq$ 140 and/or DBP $\geq$ 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           |
| 25-34                                                                                         | 112        | 18.1        | 10.0-26.2        | 151        | 14.7        | 14.2-15.1        | 263         | 16.5        | 11.7-21.4        |
| 35-44                                                                                         | 140        | 35.2        | 25.0-45.3        | 222        | 26.6        | 24.9-28.2        | 362         | 31.2        | 24.9-37.6        |
| 45-54                                                                                         | 130        | 54.7        | 47.0-62.3        | 172        | 31.6        | 27.1-36.1        | 302         | 43.4        | 35.9-50.9        |
| 55-64                                                                                         | 61         | 63.6        | 39.1-88.2        | 94         | 61.5        | 53.9-69.0        | 155         | 62.6        | 45.6-79.7        |
| <b>25-64</b>                                                                                  | <b>443</b> | <b>41.0</b> | <b>28.6-53.3</b> | <b>639</b> | <b>31.1</b> | <b>27.1-35.1</b> | <b>1082</b> | <b>36.4</b> | <b>27.0-45.8</b> |

| SBP $\geq$ 160 and/or DBP $\geq$ 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         |
| 25-34                                                                                              | 111        | 3.6        | 0.2-7.1        | 150        | 2.1        | 1.7-2.5        | 261        | 3.0        | 1.2-4.7        |
| 35-44                                                                                              | 130        | 3.2        | 1.0-5.4        | 202        | 1.6        | 0.7-2.5        | 332        | 2.5        | 0.9-4.1        |
| 45-54                                                                                              | 115        | 9.5        | 3.0-16.0       | 149        | 5.4        | 2.1-8.8        | 264        | 7.5        | 3.0-12.0       |
| 55-64                                                                                              | 48         | 25.0       | 17.6-32.4      | 63         | 16.9       | 10.7-23.1      | 111        | 21.6       | 13.5-29.8      |
| <b>25-64</b>                                                                                       | <b>404</b> | <b>8.2</b> | <b>6.7-9.8</b> | <b>564</b> | <b>4.9</b> | <b>4.2-5.5</b> | <b>968</b> | <b>6.7</b> | <b>5.9-7.4</b> |

| SBP $\geq$ 160 and/or DBP $\geq$ 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           |
| 25-34                                                                                          | 112        | 4.2         | 0.3-8.2          | 151        | 2.6         | 0.5-4.8          | 263         | 3.5         | 2.6-4.4          |
| 35-44                                                                                          | 140        | 9.0         | 3.3-14.8         | 222        | 10.9        | 10.1-11.7        | 362         | 9.9         | 6.4-13.4         |
| 45-54                                                                                          | 130        | 22.1        | 13.3-30.9        | 172        | 17.9        | 14.3-21.5        | 302         | 20.0        | 16.8-23.3        |
| 55-64                                                                                          | 61         | 42.1        | 37.7-46.4        | 94         | 45.6        | 34.0-57.2        | 155         | 43.7        | 37.0-50.4        |
| <b>25-64</b>                                                                                   | <b>443</b> | <b>17.1</b> | <b>13.5-20.7</b> | <b>639</b> | <b>16.9</b> | <b>12.8-21.0</b> | <b>1082</b> | <b>17.0</b> | <b>16.0-18.1</b> |

**Analysis Information:**

- Questions used: M11a, M11b, M12a, M12b, M13a, M13b, M14
- Epi Info program name: Mraisedbp (unweighted); MraisedbpWT (weighted)



**Treatment and control of raised blood pressure**

Description: Percentage of respondents with treated and/or controlled of raised blood pressure among those with raised blood pressure (SBP  $\geq 140$  and/or DBP  $\geq 90$  mmHg) or currently on medication for raised blood pressure.

Instrument questions:

- 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

| Respondents with treated and/or controlled raised blood pressure |            |                                            |                 |                                                         |                  |                                                             |                  |
|------------------------------------------------------------------|------------|--------------------------------------------|-----------------|---------------------------------------------------------|------------------|-------------------------------------------------------------|------------------|
| Men                                                              |            |                                            |                 |                                                         |                  |                                                             |                  |
| Age Group (years)                                                | N          | % On medication and SBP < 140 and DBP < 90 | 95% CI          | % On medication and SBP $\geq 140$ and/or DBP $\geq 90$ | 95% CI           | % Not on medication and SBP $\geq 140$ and/or DBP $\geq 90$ | 95% CI           |
| 25-34                                                            | 20         | 3.3                                        | 0.0-8.0         | 0.0                                                     | 0.0-0.0          | 96.7                                                        | 92.0-100.0       |
| 35-44                                                            | 47         | 8.6                                        | 0.6-16.5        | 8.6                                                     | 0.6-16.5         | 82.8                                                        | 66.9-98.8        |
| 45-54                                                            | 71         | 9.5                                        | 0.4-18.7        | 16.0                                                    | 14.3-17.6        | 74.5                                                        | 64.3-84.7        |
| 55-64                                                            | 39         | 12.5                                       | 0.0-26.7        | 23.3                                                    | 15.5-31.0        | 64.3                                                        | 45.4-83.2        |
| <b>25-64</b>                                                     | <b>177</b> | <b>9.4</b>                                 | <b>0.0-18.9</b> | <b>14.3</b>                                             | <b>10.7-17.9</b> | <b>76.4</b>                                                 | <b>63.8-88.9</b> |

| Respondents with treated and/or controlled raised blood pressure |            |                                            |                  |                                                         |                  |                                                             |                  |
|------------------------------------------------------------------|------------|--------------------------------------------|------------------|---------------------------------------------------------|------------------|-------------------------------------------------------------|------------------|
| Women                                                            |            |                                            |                  |                                                         |                  |                                                             |                  |
| Age Group (years)                                                | N          | % On medication and SBP < 140 and DBP < 90 | 95% CI           | % On medication and SBP $\geq 140$ and/or DBP $\geq 90$ | 95% CI           | % Not on medication and SBP $\geq 140$ and/or DBP $\geq 90$ | 95% CI           |
| 25-34                                                            | 25         | 3.6                                        | 0.0-21.5         | 0.0                                                     | 0.0-0.0          | 96.4                                                        | 78.5-100.0       |
| 35-44                                                            | 58         | 23.3                                       | 16.9-29.7        | 12.3                                                    | 4.4-20.2         | 64.4                                                        | 62.9-65.8        |
| 45-54                                                            | 55         | 16.4                                       | 11.7-21.1        | 26.0                                                    | 10.6-41.4        | 57.7                                                        | 43.5-71.8        |
| 55-64                                                            | 59         | 23.2                                       | 17.6-28.7        | 33.1                                                    | 28.7-37.5        | 43.7                                                        | 35.7-51.8        |
| <b>25-64</b>                                                     | <b>197</b> | <b>18.8</b>                                | <b>13.5-24.2</b> | <b>22.1</b>                                             | <b>16.4-27.8</b> | <b>59.1</b>                                                 | <b>48.6-69.6</b> |

| Respondents with treated and/or controlled raised blood pressure |            |                                            |                 |                                                         |                  |                                                             |                  |
|------------------------------------------------------------------|------------|--------------------------------------------|-----------------|---------------------------------------------------------|------------------|-------------------------------------------------------------|------------------|
| Both Sexes                                                       |            |                                            |                 |                                                         |                  |                                                             |                  |
| Age Group (years)                                                | N          | % On medication and SBP < 140 and DBP < 90 | 95% CI          | % On medication and SBP $\geq 140$ and/or DBP $\geq 90$ | 95% CI           | % Not on medication and SBP $\geq 140$ and/or DBP $\geq 90$ | 95% CI           |
| 25-34                                                            | 45         | 3.4                                        | 0.0-7.7         | 0.0                                                     | 0.0-0.0          | 96.6                                                        | 92.3-100.0       |
| 35-44                                                            | 105        | 14.3                                       | 10.8-17.7       | 10.0                                                    | 1.8-18.2         | 75.7                                                        | 64.1-87.3        |
| 45-54                                                            | 126        | 12.0                                       | 4.5-19.5        | 19.5                                                    | 15.6-23.4        | 68.5                                                        | 62.3-74.8        |
| 55-64                                                            | 98         | 17.3                                       | 10.0-24.6       | 27.7                                                    | 23.3-32.0        | 55.1                                                        | 44.0-66.1        |
| <b>25-64</b>                                                     | <b>374</b> | <b>13.1</b>                                | <b>8.2-18.0</b> | <b>17.4</b>                                             | <b>16.0-18.7</b> | <b>69.5</b>                                                 | <b>63.2-75.8</b> |

**Analysis Information:**

- Questions used: M11a, M11b, M12a, M12b, M13a, M13b, M14
- Epi Info program name: Mraisedbp (unweighted); MraisedbpWT (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         |
| 25-34                               | 23         | 5.32        | 5.2-5.4        | 40         | 5.2        | 5.2-5.2        | 63         | 5.3        | 5.2-5.3        |
| 35-44                               | 39         | 5.01        | 4.8-5.2        | 64         | 5.6        | 4.7-6.5        | 103        | 5.3        | 4.9-5.6        |
| 45-54                               | 30         | 6.6         | 4.6-8.6        | 40         | 5.5        | 5.1-6.0        | 70         | 6.0        | 5.1-6.9        |
| 55-64                               | 16         | 6.1         | 4.4-7.9        | 27         | 6.3        | 5.1-7.4        | 43         | 6.2        | 5.3-5.9        |
| <b>25-64</b>                        | <b>108</b> | <b>5.65</b> | <b>4.9-6.4</b> | <b>171</b> | <b>5.6</b> | <b>5.4-5.8</b> | <b>279</b> | <b>5.6</b> | <b>5.3-5.9</b> |

| Mean fasting blood glucose (mg/dl) |            |               |                   |            |              |                   |            |              |                   |
|------------------------------------|------------|---------------|-------------------|------------|--------------|-------------------|------------|--------------|-------------------|
| Age Group (years)                  | Men        |               |                   | Women      |              |                   | Both Sexes |              |                   |
|                                    | n          | Mean          | 95% CI            | n          | Mean         | 95% CI            | n          | Mean         | 95% CI            |
| 25-34                              | 23         | 95.8          | 93.66-98.0        | 40         | 93.7         | 93.4-94.1         | 63         | 94.7         | 93.4-96.0         |
| 35-44                              | 39         | 90.3          | 86.8-93.7         | 64         | 100.7        | 85.0-116.5        | 103        | 94.6         | 88.1-101.1        |
| 45-54                              | 30         | 119.3         | 83.6-154.9        | 40         | 99.2         | 91.3-107.1        | 70         | 108.6        | 91.8-125.4        |
| 55-64                              | 16         | 110.6         | 79.2-142.0        | 27         | 112.8        | 91.7-133.8        | 43         | 111.8        | 94.1-129.5        |
| <b>25-64</b>                       | <b>108</b> | <b>101.74</b> | <b>88.0-115.5</b> | <b>171</b> | <b>100.8</b> | <b>96.7-104.8</b> | <b>279</b> | <b>101.3</b> | <b>95.5-107.0</b> |

### 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:

- Are you currently receiving any of the following treatments for diabetes prescribed by a doctor or other health worker? Insulin? Oral drugs (medication) that you have taken in the last 2 weeks?
- 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           |
| 25-34                       | 23         | 8.6         | 0.0-20.5         | 40         | 23.6        | 20.4-26.8        | 63         | 16.5        | 8.1-24.9         |
| 35-44                       | 40         | 17.2        | 0.0-49.7         | 64         | 17.5        | 0.0-35.3         | 104        | 17.3        | 0.0-35.5         |
| 45-54                       | 30         | 41.7        | 22.9-60.6        | 40         | 27.5        | 16.9-38.1        | 70         | 34.2        | 29.9-38.3        |
| 55-64                       | 16         | 45.1        | 0.0-101.8        | 27         | 38.7        | 1.5-75.9         | 43         | 41.7        | 10.8-72.5        |
| <b>25-64</b>                | <b>109</b> | <b>25.5</b> | <b>18.7-32.3</b> | <b>171</b> | <b>25.9</b> | <b>22.8-29.0</b> | <b>280</b> | <b>25.7</b> | <b>23.4-27.9</b> |

| 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         |
| 25-34                                                           | 2         | 2.9        | -0.1-6.0        | 2         | 2.1        | 1.6-2.5         | 4          | 2.5        | 0.8-4.3        |
| 35-44                                                           | 4         | 3.0        | -0.2-6.1        | 14        | 5.4        | 3.9-6.9         | 18         | 4.1        | 2.5-5.6        |
| 45-54                                                           | 14        | 13.7       | 1.7-25.7        | 24        | 13.4       | 6.5-20.4        | 38         | 13.6       | 10.7-16.5      |
| 55-64                                                           | 13        | 18.9       | 22.9-14.9       | 17        | 16.2       | 8.8-23.6        | 30         | 17.7       | 16.1-19.2      |
| <b>25-64</b>                                                    | <b>33</b> | <b>8.7</b> | <b>6.7-10.7</b> | <b>57</b> | <b>8.9</b> | <b>7.3-10.5</b> | <b>90</b>  | <b>8.8</b> | <b>8.3-9.3</b> |

| Currently on medication for diabetes |           |            |                 |           |            |                 |            |            |                |
|--------------------------------------|-----------|------------|-----------------|-----------|------------|-----------------|------------|------------|----------------|
| Age Group (years)                    | Men       |            |                 | Women     |            |                 | Both Sexes |            |                |
|                                      | n         | %          | 95% CI          | n         | %          | 95% CI          | n          | %          | 95% CI         |
| 25-34                                | 2         | 2.9        | -0.1-6.0        | 2         | 2.1        | 1.6-2.5         | 4          | 2.6        | 0.8-4.3        |
| 35-44                                | 4         | 3.0        | -0.2-6.1        | 14        | 5.4        | 3.9-6.9         | 18         | 4.1        | 2.5-5.6        |
| 45-54                                | 14        | 13.7       | 1.7-25.7        | 24        | 13.4       | 6.5-20.2        | 38         | 13.6       | 10.7-16.5      |
| 55-64                                | 13        | 18.9       | 22.9-14.9       | 17        | 16.2       | 8.8-23.6        | 30         | 17.7       | 16.2-19.2      |
| <b>25-64</b>                         | <b>33</b> | <b>8.7</b> | <b>6.7-10.7</b> | <b>57</b> | <b>8.9</b> | <b>7.3-10.5</b> | <b>90</b>  | <b>8.8</b> | <b>8.3-9.3</b> |

\* Impaired fasting glycaemia is defined as either

- plasma venous value:  $\geq 6.1$  mmol/L (110 mg/dl) and  $< 7.0$  mmol/L (126 mg/dl)
- capillary whole blood value:  $\geq 5.6$  mmol/L (100 mg/dl) and  $< 6.1$  mmol/L (110 mg/dl)

\*\* Raised blood glucose is defined as either

- plasma venous value:  $\geq 7.0$  mmol/L (126 mg/dl)
- capillary whole blood value:  $\geq 6.1$  mmol/L (110 mg/dl)

## **Analysis Information:**

- Questions used: H8a, H8b, 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 questions:

- 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          |
| 25-34                           | 24        | 9.8        | 8.9-10.7        | 33         | 9.6        | 9.5-9.7         | 57         | 9.6        | 9.3-10.1        |
| 35-44                           | 33        | 9.7        | 8.7-10.8        | 55         | 9.8        | 9.5-10.2        | 88         | 9.7        | 9.3-10.3        |
| 45-54                           | 25        | 9.8        | 8.8-10.8        | 33         | 10.3       | 10.0-10.6       | 58         | 10.1       | 9.8-10.2        |
| 55-64                           | 13        | 9.9        | 7.3-13.0        | 22         | 9.7        | 9.1-10.3        | 35         | 9.8        | 9.2-10.4        |
| <b>25-64</b>                    | <b>95</b> | <b>9.8</b> | <b>8.5-11.1</b> | <b>143</b> | <b>9.9</b> | <b>9.8-10.0</b> | <b>238</b> | <b>9.8</b> | <b>9.4-10.3</b> |

| Mean total cholesterol (mg/dl) |           |              |                    |            |              |                    |            |              |                    |
|--------------------------------|-----------|--------------|--------------------|------------|--------------|--------------------|------------|--------------|--------------------|
| Age Group (years)              | Men       |              |                    | Women      |              |                    | Both Sexes |              |                    |
|                                | n         | Mean         | 95% CI             | n          | Mean         | 95% CI             | n          | Mean         | 95% CI             |
| 25-34                          | 24        | 378.5        | 343.4-413.6        | 33         | 371.2        | 365.9-376.5        | 57         | 374.9        | 360.0-389.7        |
| 35-44                          | 33        | 375.8        | 335.7-415.9        | 55         | 381.7        | 368.1-395.3        | 88         | 378.3        | 358.4-398.3        |
| 45-54                          | 25        | 380.4        | 342.0-410.6        | 33         | 397.6        | 386.7-408.9        | 58         | 389.7        | 377.4-401.9        |
| 55-64                          | 13        | 385.7        | 280.9-490.7        | 22         | 397.6        | 352.9-400.2        | 35         | 380.4        | 357.5-403.3        |
| <b>25-64</b>                   | <b>95</b> | <b>378.9</b> | <b>328.7-429.2</b> | <b>143</b> | <b>382.0</b> | <b>378.4-385.6</b> | <b>238</b> | <b>380.5</b> | <b>361.9-399.1</b> |

**Analysis Information:**

- Questions used: B8
- Epi Info program name:
  - measurement in mmol/L: Btotalipids (unweighted); BtotalipidsWT (weighted)
  - measurement in mg/dl: BtotalipidsMg (unweighted); BtotalipidsMgWT (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 $\geq 5.0$ mmol/L or $\geq 190$ 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           |
| 25-34                                                                                                     | 24         | 30.3        | 0.0-77.5        | 40         | 35.1        | 30.3-40.0        | 64         | 32.9        | 19.9-46.0        |
| 35-44                                                                                                     | 40         | 36.5        | 0.0-89.1        | 61         | 32.8        | 0.0-65.7         | 101        | 35.0        | 4.2-65.9         |
| 45-54                                                                                                     | 30         | 33.4        | 19.8-47.0       | 42         | 56.7        | 35.5-77.9        | 72         | 46.0        | 37.3-54.6        |
| 55-64                                                                                                     | 16         | 45.1        | 20.8-69.3       | 27         | 43.6        | 34.1-52.9        | 43         | 44.2        | 33.3-55.2        |
| <b>25-64</b>                                                                                              | <b>110</b> | <b>35.8</b> | <b>0.0-72.5</b> | <b>170</b> | <b>42.4</b> | <b>23.8-60.8</b> | <b>280</b> | <b>39.1</b> | <b>20.2-58.0</b> |

| Total cholesterol $\geq 6.2$ mmol/L or $\geq 240$ 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          |
| 25-34                                                                                                     | 24        | -          | -             | 3         | 5.6         | 4.8-6.3        | 3          | 3.0       | 2.2-3.8         |
| 35-44                                                                                                     | 4         | 9.5        | -6.2-25       | 1         | 1.4         | -0.2-0.1       | 5          | 6.3       | 0.5-12          |
| 45-54                                                                                                     | 2         | 8.3        | -10.9-28      | 8         | 23          | 1.6-45         | 10         | 16.4      | 14-19           |
| 55-64                                                                                                     | 3         | 25         | -26.7-76.9    | 5         | 20          | -6.5-46        | 8          | 22.1      | 16-28.3         |
| <b>25-64</b>                                                                                              | <b>59</b> | <b>9.7</b> | <b>5.4-14</b> | <b>17</b> | <b>12.3</b> | <b>-1.8-27</b> | <b>26</b>  | <b>11</b> | <b>7.7-14.4</b> |

**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)



## 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 smoker
- less than 5 servings of fruits & vegetables per day
- low level of activity (<600 MET -minutes)
- overweight or obese (BMI  $\geq 25$  kg/m<sup>2</sup>)
- 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

| Level of total physical activity |            |                       |                |                         |                  |                         |                  |
|----------------------------------|------------|-----------------------|----------------|-------------------------|------------------|-------------------------|------------------|
| 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           |
| 25-44                            | 245        | 1.1                   | 0.6-1.6        | 58.5                    | 53.3-63.6        | 40.4                    | 35.8-45.1        |
| 45-64                            | 189        | 1.1                   | 0.3-1.8        | 47.4                    | 33.6-61.3        | 51.5                    | 36.9-66.1        |
| <b>25-64</b>                     | <b>434</b> | <b>1.1</b>            | <b>0.4-1.7</b> | <b>53.4</b>             | <b>50.2-56.7</b> | <b>45.5</b>             | <b>41.7-49.3</b> |

| Level of total physical activity |            |                       |                |                         |                  |                         |                  |
|----------------------------------|------------|-----------------------|----------------|-------------------------|------------------|-------------------------|------------------|
| 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           |
| 25-44                            | 354        | 0.9                   | 0.0-2.6        | 56.5                    | 53.1-59.9        | 42.7                    | 37.6-47.7        |
| 45-64                            | 245        | 0.6                   | 0.0-1.7        | 48.7                    | 45.5-51.9        | 50.7                    | 46.5-54.9        |
| <b>25-64</b>                     | <b>599</b> | <b>0.7</b>            | <b>0.0-2.2</b> | <b>52.8</b>             | <b>50.2-55.5</b> | <b>46.4</b>             | <b>42.3-50.5</b> |

| Level of total physical activity |             |                       |                |                         |                  |                         |                  |
|----------------------------------|-------------|-----------------------|----------------|-------------------------|------------------|-------------------------|------------------|
| 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           |
| 25-44                            | 599         | 1.0                   | 0.0-2.1        | 57.6                    | 56.3-58.9        | 41.4                    | 40.8-42.1        |
| 45-64                            | 434         | 0.9                   | 0.0-1.8        | 48.0                    | 39.3-56.7        | 51.1                    | 41.5-60.8        |
| <b>25-64</b>                     | <b>1033</b> | <b>0.9</b>            | <b>0.0-2.0</b> | <b>53.2</b>             | <b>50.2-56.2</b> | <b>45.9</b>             | <b>41.9-49.9</b> |

### Analysis Information:

- Questions used: T1, T2, D1-D4, P1-P15b, M3, M4, M5, M11a-M13b, M14
- Epi Info program name: Raisedrisk (unweighted); RaisedriskWT (weighted)

## Step 1 Optional Module

### 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           |
| 25-34             | 115        | 2.4         | 1.7-3.0          |
| 35-44             | 143        | 43.4        | 30.6-56.1        |
| 45-54             | 133        | 78.3        | 69.2-87.4        |
| 55-64             | 63         | 78.9        | 55.0-100.0       |
| <b>25-64</b>      | <b>454</b> | <b>48.3</b> | <b>44.9-51.7</b> |

| Had feces checked for hidden blood |            |             |                  |            |             |                  |             |             |                  |
|------------------------------------|------------|-------------|------------------|------------|-------------|------------------|-------------|-------------|------------------|
| Age Group (years)                  | Men        |             |                  | Women      |             |                  | Both Sexes  |             |                  |
|                                    | n          | %           | 95% CI           | n          | %           | 95% CI           | n           | %           | 95% CI           |
| 25-34                              | 115        | 32.9        | 15.4-50.4        | 152        | 43.8        | 37.0-50.5        | 267         | 37.7        | 22.8-52.7        |
| 35-44                              | 143        | 39.9        | 27.8-52.0        | 225        | 42.1        | 19.9-64.3        | 368         | 40.9        | 24.3-57.5        |
| 45-54                              | 133        | 43.4        | 38.4-48.4        | 175        | 46.2        | 35.1-57.3        | 308         | 44.8        | 36.9-52.7        |
| 55-64                              | 63         | 47.8        | 24.0-71.5        | 96         | 60.6        | 53.7-67.5        | 159         | 53.6        | 35.9-71.3        |
| <b>25-64</b>                       | <b>454</b> | <b>40.4</b> | <b>27.2-53.6</b> | <b>648</b> | <b>47.0</b> | <b>34.7-59.2</b> | <b>1102</b> | <b>43.4</b> | <b>30.0-56.8</b> |

| Has had colonoscopy |            |             |                 |            |             |                  |             |             |                 |
|---------------------|------------|-------------|-----------------|------------|-------------|------------------|-------------|-------------|-----------------|
| Age Group (years)   | Men        |             |                 | Women      |             |                  | Both Sexes  |             |                 |
|                     | n          | %           | 95% CI          | n          | %           | 95% CI           | n           | %           | 95% CI          |
| 25-34               | 115        | 5.3         | 0.0-10.8        | 152        | 9.9         | 9.3-10.5         | 267         | 7.3         | 3.6-11.1        |
| 35-44               | 143        | 14.3        | 7.5-21.1        | 225        | 13.3        | 5.1-21.5         | 368         | 13.8        | 6.4-21.3        |
| 45-54               | 133        | 24.0        | 11.3-36.7       | 175        | 13.9        | 12.1-15.7        | 308         | 19.1        | 12.9-25.2       |
| 55-64               | 63         | 33.4        | 5.4-61.3        | 96         | 24.7        | 15.3-34.1        | 159         | 29.4        | 11.2-47.7       |
| <b>25-64</b>        | <b>454</b> | <b>17.9</b> | <b>6.8-29.0</b> | <b>648</b> | <b>14.6</b> | <b>10.8-18.4</b> | <b>1102</b> | <b>16.4</b> | <b>9.0-23.8</b> |



**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<br>(years)         | Women      |             |                  |
|                              | n          | %           | 95% CI           |
| 25-34                        | 152        | 77.6        | 75.5-79.7        |
| 35-44                        | 225        | 83.8        | 76.9-90.7        |
| 45-54                        | 175        | 84.0        | 76.7-91.3        |
| 55-64                        | 96         | 82.3        | 79.5-85.1        |
| <b>25-64</b>                 | <b>648</b> | <b>82.1</b> | <b>78.9-85.3</b> |

| Last Breast Exam     |            |                               |                  |                                   |                  |                                  |                  |                                    |                  |
|----------------------|------------|-------------------------------|------------------|-----------------------------------|------------------|----------------------------------|------------------|------------------------------------|------------------|
| Age Group<br>(years) | Women      |                               |                  |                                   |                  |                                  |                  |                                    |                  |
|                      | n          | % 1<br>year<br>ago or<br>less | 95% CI           | % Between<br>1 and 2<br>years ago | 95% CI           | % More<br>than 2<br>years<br>ago | 95% CI           | % Never<br>had a<br>breast<br>exam | 95% CI           |
| 25-34                | 145        | 51.1                          | 48.0-54.2        | 15.8                              | 10.9-20.7        | 15.2                             | 13.0-17.4        | 17.9                               | 13.9-22.0        |
| 35-44                | 220        | 53.9                          | 52.0-55.9        | 13.0                              | 8.4-17.6         | 17.8                             | 13.0-22.7        | 15.2                               | 14.6-15.9        |
| 45-54                | 173        | 47.9                          | 43.4-52.4        | 22.0                              | 18.5-25.6        | 17.8                             | 12.3-23.3        | 12.3                               | 10.8-13.8        |
| 55-64                | 92         | 53.8                          | 44.3-63.3        | 12.8                              | 9.7-15.8         | 27.1                             | 17.3-36.9        | 6.4                                | 2.2-10.5         |
| <b>25-64</b>         | <b>630</b> | <b>51.3</b>                   | <b>47.3-55.4</b> | <b>16.4</b>                       | <b>14.9-17.9</b> | <b>18.8</b>                      | <b>13.8-23.8</b> | <b>13.4</b>                        | <b>12.6-14.3</b> |

**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           |
| 25-34             | 147        | 9.7                  | 7.5-11.8         | 8.6                         | 2.1-15.1         | 9.1                     | 5.6-12.7         | 72.6                    | 64.7-80.4        |
| 35-44             | 223        | 23.6                 | 20.2-27.1        | 12.0                        | 7.1-16.8         | 11.3                    | 4.2-18.3         | 53.1                    | 38.0-68.2        |
| 45-54             | 172        | 35.3                 | 34.2-36.4        | 20.8                        | 16.2-25.5        | 17.9                    | 9.3-26.5         | 26.0                    | 13.5-38.4        |
| 55-64             | 93         | 38.3                 | 25.3-51.4        | 11.1                        | 9.0-13.2         | 36.4                    | 27.7-45.1        | 14.2                    | 10.4-18.0        |
| <b>25-64</b>      | <b>635</b> | <b>26.4</b>          | <b>24.4-28.3</b> | <b>13.7</b>                 | <b>12.5-14.9</b> | <b>17.1</b>             | <b>15.3-18.9</b> | <b>42.8</b>             | <b>39.2-46.4</b> |

**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         |
| 25-34                             | 151        | 50.3                 | 47.5-53.0        | 17.8                        | 13.5-22.1        | 19.4                    | 17.9-20.9        | 12.6                                       | 12.6-12.6      |
| 35-44                             | 223        | 56.2                 | 55.2-57.2        | 16.3                        | 14.9-17.7        | 24.3                    | 22.1-26.4        | 3.3                                        | 1.3-5.3        |
| 45-54                             | 172        | 49.6                 | 34.9-64.3        | 18.8                        | 11.1-26.5        | 28.2                    | 22.8-33.7        | 3.4                                        | 0.1-6.7        |
| 55-64                             | 90         | 37.1                 | 20.2-53.9        | 21.9                        | 9.0-34.7         | 35.4                    | 27.9-43.0        | 5.7                                        | 2.4-8.9        |
| <b>25-64</b>                      | <b>636</b> | <b>49.5</b>          | <b>41.4-57.6</b> | <b>18.4</b>                 | <b>12.7-24.0</b> | <b>26.1</b>             | <b>22.4-29.8</b> | <b>6.0</b>                                 | <b>4.6-7.4</b> |