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Organization**



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



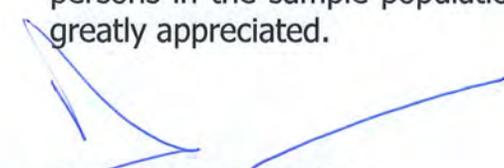
Over the last 20-30 years there have been socio-economic, lifestyles and dietary changes in our society caused by a shift in the disease pattern of communicable to non-communicable diseases (NCDs) such as diabetes, obesity, cardiovascular diseases, cancer and high blood pressure. These new diseases are 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 ≥ 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/m². Among the female population 44% had BMI greater than 30 KG/m².

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/m²), 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

Risk Factor	Condition			
	Cardio Vascular Disease	Diabetes	Cancer	Respiratory Conditions
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 (Random sampling)	- 1.0
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* 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

Age Group (years)	Male	Female	Total	%
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
25-64	455	650	1105	100

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

Educational Level	Male %	Female %
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.

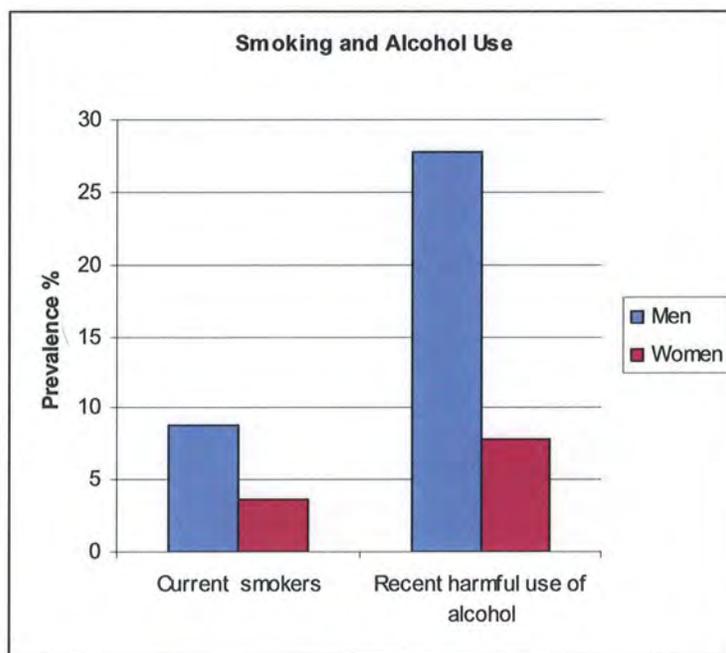
Alcohol Consumption

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 health¹. 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

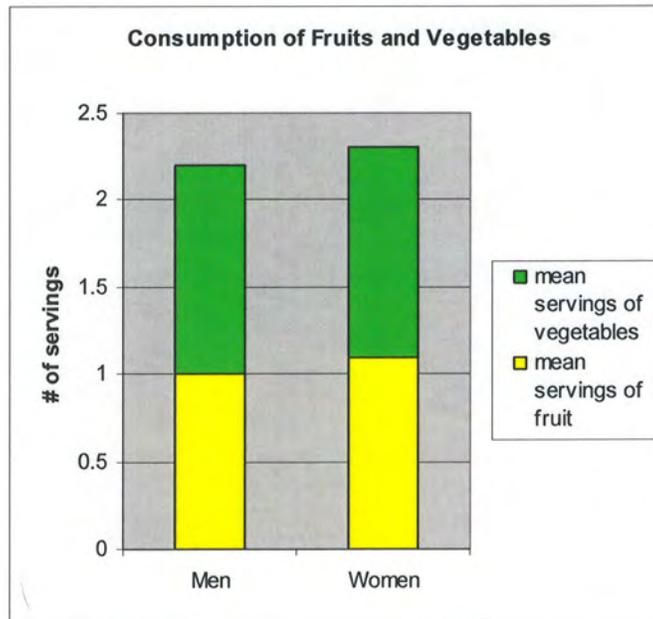


Fruit and Vegetable Consumption

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.

¹ 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.

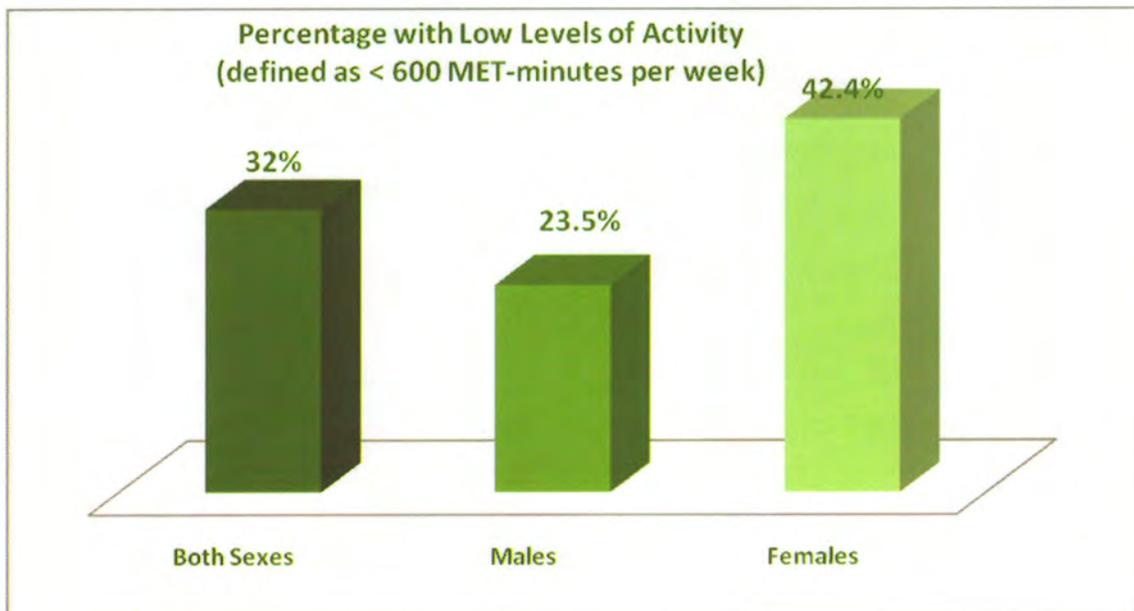
FIGURE 2: Consumption of Fruits and Vegetables in the Population



Physical Activity

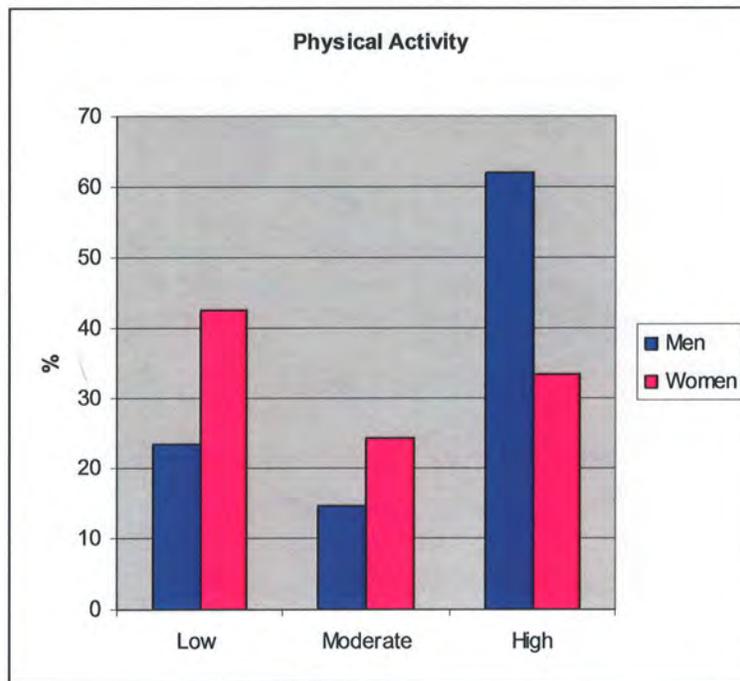
In the BVI population women had lower levels of physical activity when compared to men. Almost a quarter of males (23.5%; 95%CI 13.7-33.2) and almost half of females (42.5%; 95%CI 35.2-49.7) were classified as having low levels of physical activity.

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 activity² (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.

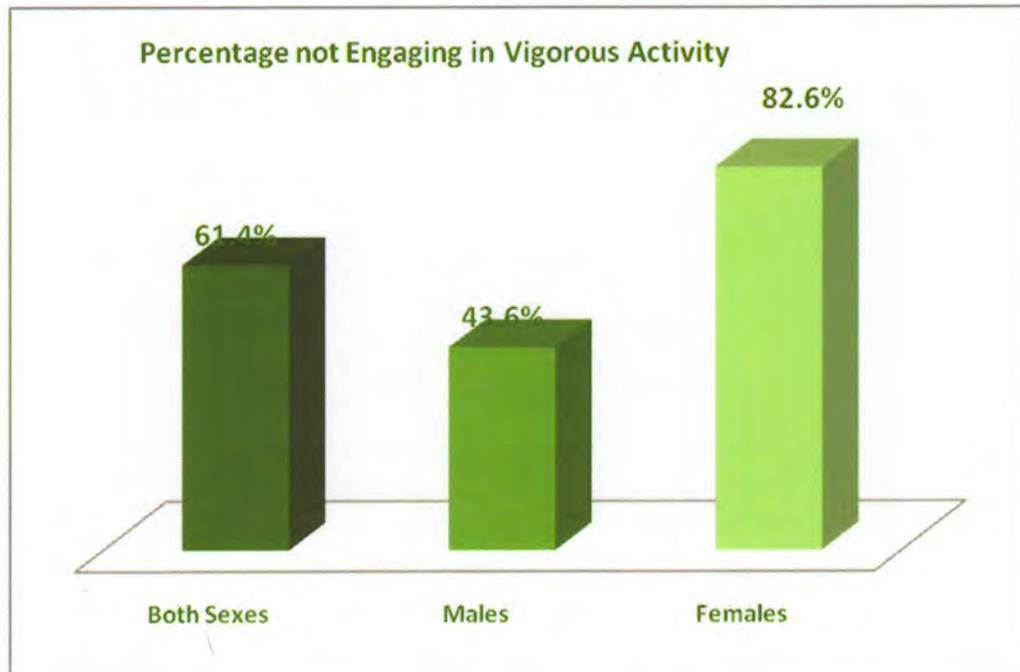
FIGURE 4: Levels of Physical Activity in the Population



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

² 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.

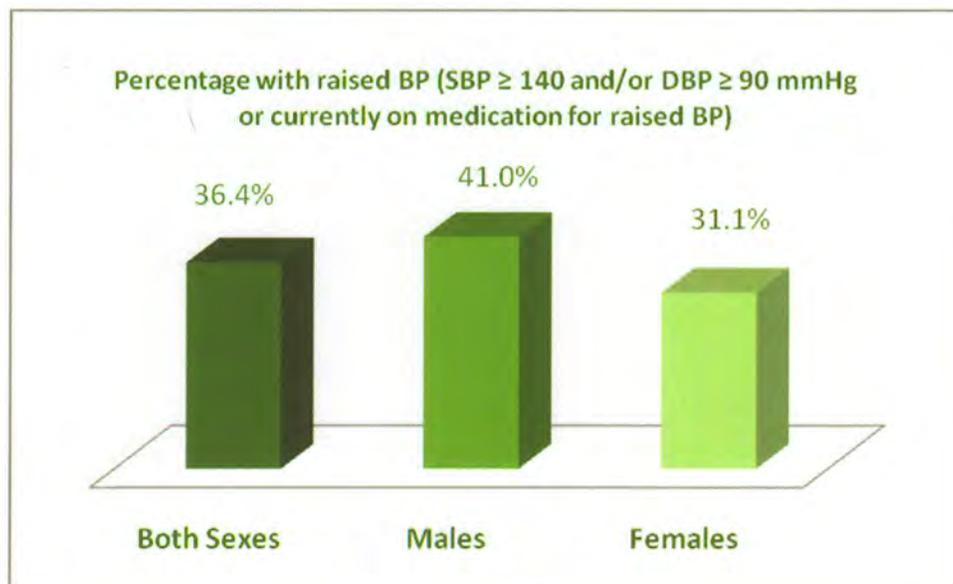
Of those diagnosed with hypertension or raised blood pressure, more than half (58.6%; 95% CI 54.5-62.8) had been taking medication. The percentage of males and females taking medication for hypertension or raised blood pressure was similar. **(See Appendix 6).**

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

Disease Conditions	Females % (95% CI)	Males % (95% CI)	Total % (95% CI)
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)

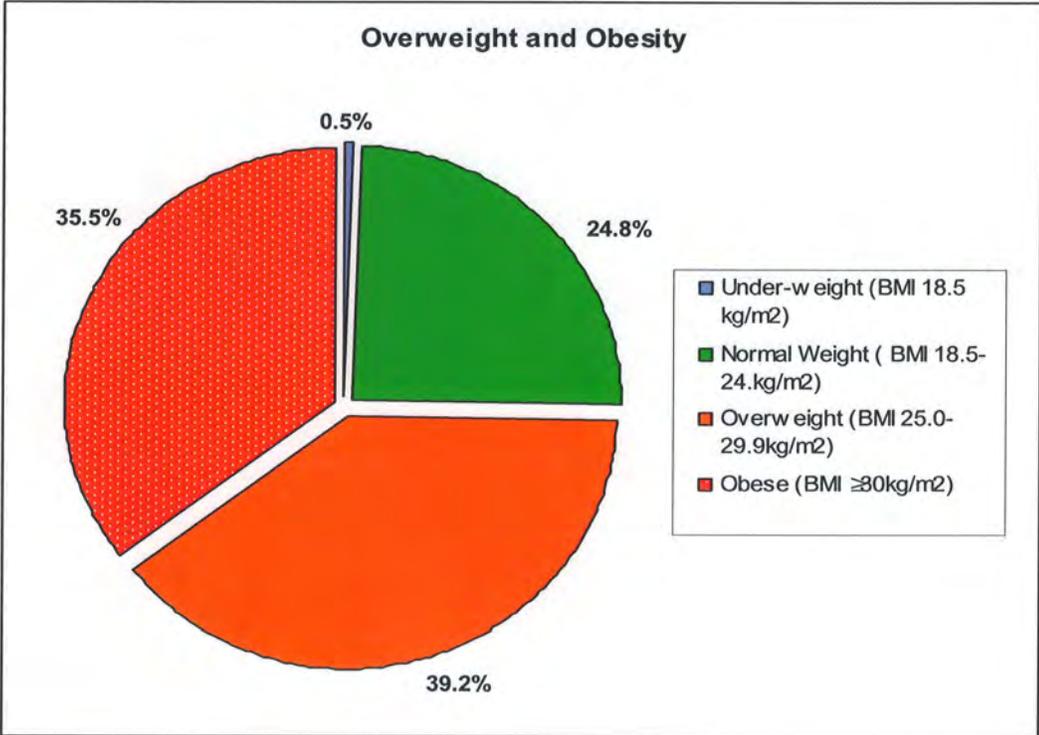
Overweight and Obesity

Three-quarters (74.7%) of the BVI population were classified as overweight (defined as BMI \geq 25 kg/m²)³ with more than a third (35.5%; 95% CI 34.5-36.5) of the population being classified as obese (BMI \geq 30kg/ m²) as shown in Figure 5. Among males, almost

³ 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 mmHg	SBP \geq 140 and/or DBP \geq 90 %		SBP \geq 160 and/or DBP \geq 100 %	
		Without Medication	On Medication	Without Medication	With 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 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 923.8) 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 % 95% CI	≤1 year % 95% CI	1-2 years % 95% CI	> 2 years % 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)

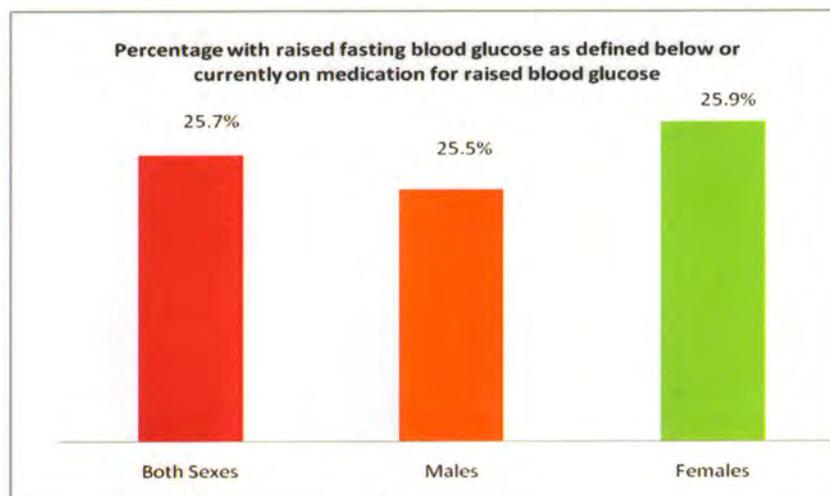
Biochemical Measurements

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

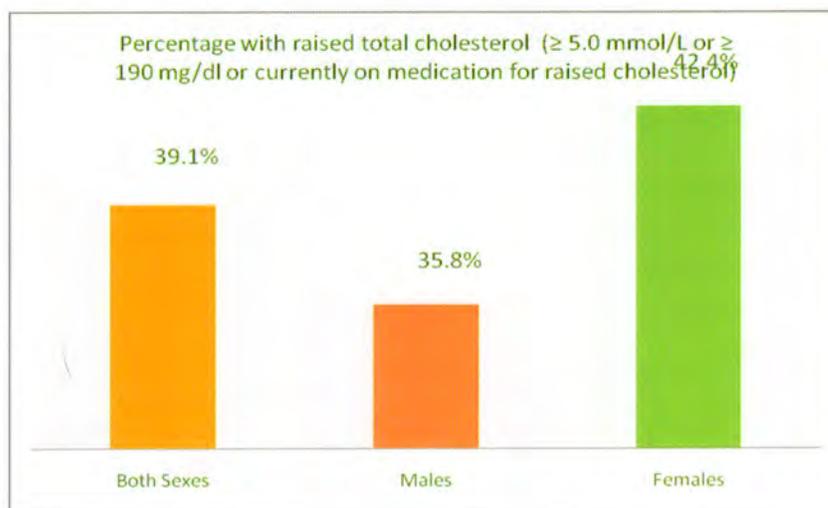
All participants would have fasted for twelve hours before the fasting blood glucose test was done. The mean fasting blood glucose for all respondents including those currently on medication for raised blood glucose was 101 mmol/L. **(See Appendix 6)**. Nine percent (9%) of persons measured had borderline 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 ≥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 ≥ 5.1 mmol/L or ≥ 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 ($BMI \geq 25$ kg/m²), raised blood pressure ($SBP \geq 140$ and /or $DBP \geq 90$ 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	% 0 Risk Factors	% 1-2 Risk factors	% 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 activity⁴ 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 overweight⁴ which is a major risk

⁴ BMI_{or} = 25 kg/m²

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 obese⁵, 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 levels⁷; the waist size of females exceeded the acceptable level of ≤ 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 conditions 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

⁵ BMI ≥ 30 kg/m²

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 activity⁶, overweight or obese⁷ raised BP⁸.

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

⁶ <600 MET –minutes per week

⁷ BMI \geq 25kg/m²

⁸ BP \geq 140 and /or DBP \geq 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.

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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 No 2 If No, END	15
6	Consent has been obtained (verbal or written)	Yes 1 No 2 If NO, END	16
7	Time of interview (24 hour clock)	_____ : _____ Hours minutes	17
8	Family Surname		18
9	First name		19
Additional Information that may be helpful			
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 Male 2	C1
12	What is your date of birth? Do you know 77 777 7777	----- if known, Go to C4 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 highest level of education you have completed? [INSERT COUNTRY-SPECIFIC CATEGORIES]	No formal schooling 1 Less than primary school 2 Primary school completed 3 Secondary school completed 4 High school completed 5 College/University completed 6 Post graduate degree 7 Refused 88	C5
16	What is your [insert relevant ethnic	Negro/African descent 1	C6

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

	household have been? (RECORD ONLY ONE, NOT ALL 3)	OR per year _____ Go to T1 Refused 88	C10c C10d														
21	If you don't know the amount, can you give an estimate of the annual household income if I read some options to you? It is [INSERT QUINTILE VALUES IN LOCAL CURRENCY] (READ OPTIONS)	<table border="0"> <tr> <td>≤ Quintile (Q) 1</td> <td>1</td> </tr> <tr> <td>More than Q1, ≤ Q 2</td> <td>2</td> </tr> <tr> <td>More than Q2, ≤ Q 3</td> <td>3</td> </tr> <tr> <td>More than Q3, ≤ Q 4</td> <td>4</td> </tr> <tr> <td>More than Q 4</td> <td>5</td> </tr> <tr> <td>Don't Know</td> <td>77</td> </tr> <tr> <td>Refused</td> <td>88</td> </tr> </table>	≤ Quintile (Q) 1	1	More than Q1, ≤ Q 2	2	More than Q2, ≤ Q 3	3	More than Q3, ≤ Q 4	4	More than Q 4	5	Don't Know	77	Refused	88	
≤ Quintile (Q) 1	1																
More than Q1, ≤ Q 2	2																
More than Q2, ≤ Q 3	3																
More than Q3, ≤ Q 4	4																
More than Q 4	5																
Don't Know	77																
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 tobacco products , such as cigarettes, cigars or pipes? (USE SHOWCARD)	Yes 1 No 2 If No, go to T6	T1
23 Do you currently smoke tobacco products daily ?	Yes 1 No 2 If No, go to T6	T2
24 How old were you when you first started smoking daily?	Age (years) Don't know 77 ---- if known, go to T5a	T3
25 Do you remember how long ago it was? (RECORD ONLY 1, NOT ALL 3) Don't know 77	In years--- if known, go to T5a Or in Months – if known, go to T5a Or in weeks	T4a T4b T4c
26 On average, how many of the following	Manufactured cigarettes Hand-rolled cigarettes	T5a 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: _____

EXPANDED: Tobacco Use			
Question	Response	Code	
27	In the past, did you ever smoke daily ?	Yes 1 No 2 If No, go to T9	T6
28	How old were you when you stopped smoking daily ?	Age (years) Don't know 77—If known, go to T9	T7
29	How long ago did you stop smoking daily? Don't know 77	Years ago ----If known, go to T9 Or months ago – If known, go to T9 Or weeks ago	T8a T8b T8c
30	Do you currently use any smokeless tobacco such as [snuff, chewing tobacco, betel] (USE SHOWCARD)	Yes 1 No 2 If No, go to T12	T9
31	Do you currently use smokeless tobacco products daily ?	Yes 1 No 2 If No, go to T12	T10
32	On average, how many times a day do you use ... (RECORD FOR EACH TYPE, USE SHOWCARD) Don't know 77	Snuff, by mouth Snuff, by nose Chewing tobacco Betel, quid Other ----If other, go to T11 other, else go to T13 Other (specify)	T11a T11b T11c T11d T11e T11other
33	In the past , did you ever use smokeless tobacco such as [snuff, chewing tobacco, or betel] daily ?	Yes 1 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 in your home smoke when you were present?	Number of days Don't know 77 -----	T13
35	During the past 7 days, on 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?	Number of days 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 ever consumed an alcoholic drink such as beer, wine, spirits, fermented cider or mauby, guava berry, sorrel, stout (USE SHOWCARD OR SHOW EXAMPLES)	Yes 1 No 2 If No, go to D1	A1a
37	Have you consumed an alcoholic drink within the past 12 months?	Yes 1 No 2 If No, go to D1	A1b
38	During the past 12 months, how frequently have you had at least one alcoholic drink?	Daily 1 5-6 days per week 2 1-4 days per week 3 1-3 days per month 4 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 past 30 days ?	Yes 1 No 2 If No, go to D1	A3
40	During the past 30 days on how many occasions did you have at least one alcoholic drink?	Number Don't know 77 -----	A4
41	During the past 30 days, when you drank alcohol, on average , how many standard alcoholic drinks did you have during one drinking occasion?	Number Don't know 77 -----	A5
42	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?	Largest number Don't know 77 -----	A6
43	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?	Number of times 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	A8
		Sometimes with meals	2	
		Rarely with meals	3	
		Never with meals	4	
45	During each of the past 7 days , how many standard alcoholic drinks did you have each day? (USE SHOWCARD) Don't know 77	Monday		A9a
		Tuesday		A9b
		Wednesday		A9c
		Thursday		A9d
		Friday		A9e

		Saturday	A9f
		Sunday	A9g
CORE: Diet			
The next questions ask about the fruits and vegetables that you usually eat. I have a nutrition card here that shows you some examples of local fruits and vegetables. Each picture represents the size of a serving. As you answer these questions please think of a typical week in the last year.			
Question		Response	Code
46	In a typical week, on how many days do you eat fruit ? (USE SHOWCARD)	Number of days Don't know 77 -----If zero, go to D3	D1
47	How many servings of fruit do you eat on one of those days? (USE SHOWCARD)	Number of servings Don't know -- -----	D2
48	In a typical week, on how many days do you eat vegetables ? (USE SHOWCARD)	Number of days Don't know 77 ---- if zero days, go to D4	D3
49	How many servings of vegetables do you eat on one of those days? (USE SHOWCARD)	Number of servings Don't know 77 -----	D4
EXPANDED: Diet			
50	What type of oil or fat is most often used for meal preparation in your household? (USE SHOWCARD) (SELECT ONLY ONE)	Vegetable oil 1 Lard of suet 2 Butter or ghee 3 Margarine 4 Other 5 If other, go to D5 other None in particular 6 None used 7 Don't know	D5 D5other

		77 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 Don't know 77 -----	D6

CORE: Physical Activity

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

Think first about the time you spend doing work. Think of work as the things that you have to do such as paid or unpaid work, study/training, household chores, harvesting food/crops, fishing or hunting for food, seeking employment. [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.

Question	Response	Code	
Work			
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 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 -----:----- hrs : mins	P3 (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 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 (a-b)
Travel to and from places			
The next questions exclude the physical activities at work that you have already mentioned. Now I would like to ask you about the usual way you travel to and from places. For example to work, for shopping, to market, to place of worship. [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 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 (a-b)

Participant Identification Number: _____

CORE: Physical Activity, Continued		
Question	Response	Code
Recreational activities		
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 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? [INSERT EXAMPLES] (USE SHOWCARD)	Yes 1 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 (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 (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 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 No 2 If No, go to H6	H2a
70	Have you been told in the past 12 months?	Yes 1 No 2	H2b

Participant Identification Number: _____

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

CORE: History of Diabetes			
	Question	Response	Code
74	Have you ever had your blood sugar measured by a doctor or other health worker?	Yes 1 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 No 2 If No, go to M1	H7a
76	Have you been told in the past 12 months?	Yes 1 No 2	H7b

Participant Identification Number: _____

EXPANDED: History of Diabetes			
Are you currently receiving any of the following treatments/advice for diabetes prescribed by a doctor or other health worker?			
77	Insulin	Yes 1 No 2	H8a
	Drugs (medication) that you have taken in the past two weeks	Yes 1 No 2	H8b
	Special prescribed diet	Yes 1 No 2	H8c
	Advice or treatment to lose weight	Yes 1 No 2	H8d
	Advice or treatment to stop smoking	Yes 1 No 2	H8e
	Advice to start or do more exercise	Yes 1 No 2	H8f
78	Have you ever seen a bush doctor for diabetes or raised blood sugar?	Yes 1 No 2	H9
79	Are you currently taking any herbal or traditional remedy for your diabetes?	Yes 1 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 More than 2 years ago 2 Never 3 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 More than 1 year ago 2 Never 3 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 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 No 2 If No, go to F1a	L2a
84	Were you told in the past 12 months?	Yes 1 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 No 2	L3a
	Special prescribed diet	Yes 1 No 2	L3b
	Advice or treatment to lose weight	Yes 1 No 2	L3c
	Advice or treatment to stop smoking	Yes 1 No 2	L3d
	Advice to start to do more exercise	Yes 1 No 2	L3e
	During the past 12 months have you seen a bush doctor/healer for raised cholesterol?	Yes 1 No 2	L4
87	Are you currently taking any herbal or traditional remedy for your raised cholesterol?	Yes 1 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 No 2	F1a
	Raised blood pressure	Yes 1 No 2	F1b
	Stroke	Yes 1 No 2	F1c
	Cancer or malignant tumor	Yes 1 No 2	F1d
	Raised Cholesterol	Yes 1 No 2	F1e
	Early heart attack (below age 55 for men and below age 65 for women)	Yes 1 No 2	F1f

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 _____ Weight _____	M2
91	Height	In centimeters (cm) _____	M3
92	Weight If too large for scale 666.6	In kilograms (kg) _____	M4
93	For women: Are you pregnant?	Yes 1 If Yes, go to M8 No 2	M5
CORE: Waist			
94	Device ID for waist	_____	M6
95	Waist circumference	In centimeters (cm) _____	M7
CORE: Blood Pressure			
96	Interviewer ID	_____	M8
97	Device ID for blood pressure	_____	M9
98	Cuff size used	Small 1 Medium 2 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 No 2	M14

	with drugs (medication) prescribed by a 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 No 2	B1
106	Technician ID	_____	B2
107	Device ID	_____	B3
108	Time of day blood specimen taken (24 hour clock)	Hours: minutes _____:____	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 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 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 No 2	S1
118	Have you ever had a colonoscopy?	Yes 1 No 2	S2
119	<u>This following questions are for men only:</u> Have you ever had a examination of your prostate?	Yes 1 No 2	S3
120	<u>The following questions are for women only:</u> Have you been shown how to examine your breasts?	Yes 1 No 2	S4
120	When was the last time you had an examination of your breasts?	1 year or less 1 Between 1 and 2 years 2 More than 2 years 3 Never 4 Don't know 77	S5
121	When was the last time you had a mammogram?	1 year or less 1 Between 1 and 2 years 2 More than 2 years 3 Never 4 Don't know 77	S6
122	When was the last time you had a Pap test?	1 year or less 1 Between 1 and 2 years 2 More than 2 years 3 Never 4 Don't know 77	S7

Appendix 2

STEPS Survey Coordination and Management Committee:

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Maurice Turnbull, Statistician, Department of Planning
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END OF REPORT



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

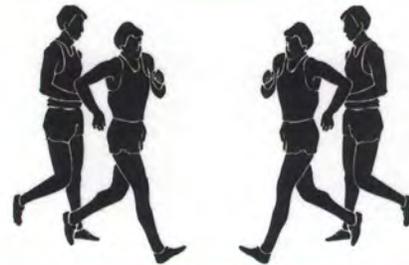
VIGOROUS INTENSITY SPORTS FOR AT LEAST 10 MINUTES CONTINUOUSLY

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 are considered to be:	I SERVING	EXAMPLES
Raw green leafy vegetables	1 cup	
Other vegetables cooked, chopped or raw	½ cup	
Vegetable juice	½ cup	
FRUITS are considered to be:	I SERVING	EXAMPLES
Banana, Apple, Orange	1 medium size piece	
Chopped, cooked and 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 are considered to be:	1 SERVING	EXAMPLES
Raw green leafy vegetables	1 cup	
Other vegetables cooked, chopped or raw	1/2 cup	
Vegetable juice	1/2 cup	
FRUITS are considered to be:	1 SERVING	EXAMPLES
Banana, Apple, Orange	1 medium size piece	
Chopped, cooked and canned fruits	1/2 cup	
Fruit juice	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 (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	
25-64		455			650		1629	1105	67.8

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
25-64	455	41.2	650	58.8	1105	100.0

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
25-64	434	12.0	618	11.9	1052	12.0

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
25-64	452	0.2	0.2	26.5	21.9	23.9	24.6	2.7

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
25-64	639	0.0	0.6	17.7	20.3	25.7	30.0	5.6

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
25-64	1091	0.1	0.5	21.4	21.0	24.9	27.8	4.4

Analysis Information:

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

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

Instrument Question:

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

Ethnic group of respondents				
Age Group (years)	Both Sexes			
	n	% Negro/African 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
25-64	1101	88.0	4.5	7.5

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
25-64	453	38.9	46.6	4.0	7.3	2.4	0.9

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
25-64	645	42.5	42.3	4.3	7.9	2.6	0.3

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
25-64	1098	41.0	44.1	4.2	7.7	2.6	0.5

Analysis Information:

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

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

Instrument question:

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

Employment status					
Men					
Age Group (years)	n	% Government employee	% Non-government employee	% Self-employed	% Unpaid
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
25-64	454	24.0	57.5	15.9	2.6

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
25-64	648	26.9	59.0	6.2	8.0

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
25-64	1102	25.7	58.3	10.2	5.8

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
25-64	3	0.0	33.3	0.0	0.0	66.7	0.0

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
25-64	52	0.0	1.9	28.8	25.0	40.4	3.8

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
25-64	64	0.0	3.1	23.4	29.7	40.6	3.1

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	% ≤\$10,000	% >10,000 and ≤20,000	% >\$20,000 and ≤30,000	% >\$30,000 and ≤40,000	% >\$40,000 and ≤ \$50,000	% ≥\$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?

Age Group (years)	Percentage of current smokers								
	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
25-64	454	8.8	3.9-13.7	648	3.6	0.3-6.9	1102	6.4	5.7-7.0

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			
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
25-64	454	3.8	0.2-7.3	5.0	3.6-6.4	91.2	86.3-96.1

Smoking status							
Women							
Age Group (years)	n	Current smoker			% Does not smoke	95% CI	
		% Daily	95% CI	% Non-daily			
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
25-64	648	2.3	0.0-6.3	1.2	0.6-1.9	96.4	93.1-99.7

Smoking status							
Both Sexes							
Age Group (years)	n	Current smoker			% Does not smoke	95% CI	
		% Daily	95% CI	% Non-daily			
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
25-64	1102	3.1	2.9-3.3	3.3	2.6-3.9	93.6	93.0-94.3

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
25-64	33	42.8	18.4-67.2	20	65.3	29.6-100.0	53	48.6	40.3-57.0

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
25-64	14	18.6	-	10	21.7	14.5-29.0	24	19.7	16.1-23.3

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	95% CI
25-34	4	88.9	88.9-88.9	1	100.0	100.0-100.0	5	90.4	90.4-90.4
35-44	4	85.7	85.7-85.7	3	100.0	100.0-100.0	7	89.4	86.9-91.9
45-54	3	100.0	100.0-100.0	5	100.0	100.0-100.0	8	100.0	100.0-100.0
55-64	3	66.7	66.7-66.7	2	100.0	100.0-100.0	5	79.0	69.5-88.5
25-64	14	86.9	86.9-86.9	11	100.0	100.0-100.0	25	91.5	86.8-96.1

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												
Men												
Age Group (years)	n	Mean # of manufactured cig.	95% CI	N	Mean # of hand-rolled cig.	95% CI	n	Mean # of pipes of tobacco	95% CI	n	Mean # of other type of tobacco	95% 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	-
25-64	14	7.7	-	14	0.1	-	14	0.0	-	14	0.2	-

Mean amount of tobacco used by daily smokers by type												
Women												
Age Group (years)	n	Mean # of manufactured cig.	95% CI	n	Mean # of hand-rolled cig.	95% CI	n	Mean # of pipes of tobacco	95% CI	n	Mean # of other type of tobacco	95% 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	-
25-64	11	11.3	10.7-11.8	8	0.0	-	8	0.0	-	8	0.0	-

Mean amount of tobacco used by daily smokers by type												
Both Sexes												
Age Group (years)	n	Mean # of manufactured cig.	95% CI	n	Mean # of hand-rolled cig.	95% CI	n	Mean # of pipes of tobacco	95% CI	n	Mean # of other type of 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	-
25-64	25	8.9	7.8-10.0	22	0.1	0.0-0.1	22	0.0	-	22	0.1	0.0-0.2

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
25-64	440	13.3	5.3-21.3	637	1.5	1.3-1.8	1077	7.8	2.2-13.4

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
25-64	46	14.4	13.3-15.4	9	17.4	16.0-18.8	55	14.6	13.6-15.7

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	-
25-64	454	0.0	-	648	0.0	-	25-64	0.0	-

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
25-64	454	0.0	0.0	0.0	0.0	100.0	100.0-100.0

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
25-64	648	0.0	0.0	0.0	0.0	100.0	100.0-100.0

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
25-64	1102	0.0	0.0	0.0	0.0	100.0	100.0-100.0

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
25-64	454	0.3	0.0-0.6	648	0.1	0.1-0.2	1102	0.2	0.1-0.4

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
25-64	454	3.8	0.2-7.3	648	2.3	0.0-6.3	1102	3.1	2.9-3.3

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
25-64	454	8.8	3.9-13.7	648	3.6	0.3-6.9	1102	6.4	5.7-7.0

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
25-64	406	2.6	0.3-4.9	532	2.5	1.2-3.8	938	2.5	0.7-4.4

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
25-64	410	16.3	8.6-24.0	532	7.0	5.6-8.5	942	12.2	7.4-17.1

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
25-64	454	49.6	39.1-60.0	16.9	12.0-21.8	15.8	10.8-20.9	17.7	7.6-27.8

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
25-64	648	16.0	15.5-16.4	18.1	17.4-18.7	25.6	17.3-33.9	40.3	32.0-48.6

Alcohol consumption status									
Both Sexes									
Age Group (years)	n	% Current drinker (past 30 days)	95% CI	% Drank in past 12 months, not current	95% CI	% Past 12 months abstainer	95% CI	% Lifetime abstainer	95% CI
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
25-64	1102	34.0	24.8-43.3	17.4	15.1-19.8	20.4	19.7-21.0	28.1	16.6-39.7

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											
Men											
Age Group (years)	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
25-64	287	8.5	0.1-17.0	5.3	0.0-11.0	23.1	16.6-29.7	33.7	33.3-34.1	29.3	20.0-38.7

Frequency of alcohol consumption in the past 12 months											
Women											
Age Group (years)	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
25-64	215	1.6	0.0-6.2	2.6	0.7-4.6	5.6	1.8-9.4	22.7	19.8-25.6	67.5	59.2-75.7

Frequency of alcohol consumption in the past 12 months											
Both Sexes											
Age Group (years)	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
25-64	502	6.4	0.0-14.2	4.5	0.5-8.5	17.8	10.2-25.5	30.4	28.2-32.5	40.9	27.3-54.4

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
25-64	200	6.2	4.7-7.7	99	3.8	0.8-6.9	299	5.7	3.9-7.5

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
25-64	210	3.4	2.6-4.2	104	1.8	1.7-1.8	314	3.0	2.4-3.7

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 ≥ 60 g of pure alcohol on average per day for men and ≥ 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
25-64	439	1.1	0.2-1.9	638	0	0	1077	0.6	0.2-1.0

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
25-64	439	0.5	0.0-1.5	638	0.6	0.0-1.7	1077	0.5	0.0-1.5

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 ≥ 60 g of pure alcohol on average per day for men and ≥ 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
25-64	199	2.2	0.2-4.2	1.0	0.0-3.0	96.8	94.2-99.4

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
25-64	98	0.0	-	4.4	0.0-13.8	95.6	86.2-100.0

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
25-64	204	3.8	2.7-4.8	99	1.9	1.8-1.9	303	3.4	2.5-4.3

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
25-64	454	27.7	21.6-33.8	648	7.8	4.3-11.3

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
25-64	212	1.8	0.9-2.6	107	1.0	0.5-1.5

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
25-64	214	25.6	13.3-37.9	26.9	12.6-41.3	16.0	1.2-30.9	31.4	0.0-72.3

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
25-64	108	34.7	32.1-37.2	19.4	2.8-35.9	20.7	4.2-37.2	25.3	21.0-29.6

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
25-64	322	27.6	17.2-37.9	25.3	17.3-33.3	17.0	2.5-31.6	30.1	0.0-62.5

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
25-64	209	24.9	21.9-28.0	14.1	7.3-21.0	8.3	5.9-10.6

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	-
25-64	103	10.2	6.1-14.3	7.0	6.4-7.6	0.0	-

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
25-64	312	21.8	20.0-23.6

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
25-64	449	4.1	4.0-4.2	639	4.7	4.5-4.9	1088	4.4	4.3-4.5

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
25-64	451	4.9	4.8-5.1	645	5.2	5.1-5.3	1096	5.1	5.0-5.1

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
25-64	448	1.0	0.6-1.5	639	1.1	1.0-1.3	1087	1.1	0.8-1.4

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
25-64	450	1.2	1.1-1.3	644	1.2	1.2-1.2	1094	1.2	1.1-1.2

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
25-64	453	2.2	1.7-2.7	648	2.3	2.2-2.5	1101	2.3	1.9-2.6

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
25-64	453	19.1	14.0-24.2	55.6	53.5-57.7	17.6	16.0-19.3	7.7	0.0-16.1

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
25-64	648	13.8	12.1-15.6	56.3	52.7-59.9	22.3	18.1-26.4	7.6	1.6-13.6

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
25-64	1101	16.7	15.1-18.2	55.9	53.2-58.6	19.8	16.5-23.0	7.6	0.3-15.0

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
25-64	453	92.3	83.9-100.0	648	92.4	86.4-98.4	1101	92.4	85.1-99.7

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 (house-holds)	% 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 (house-holds)	% 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.

Age Group (years)	Mean number of meals eaten outside a home								
	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">• Moderate MET value = 4.0• Vigorous MET value = 8.0
Transport	Cycling and walking MET value = 4.0
Recreation	<ul style="list-style-type: none">• Moderate MET value = 4.0• Vigorous MET value = 8.0

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.

- 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)	n	% Low	95% CI	Men			
				% 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
25-64	446	23.5	13.7-33.2	14.6	12.3-17.0	61.9	49.8-73.9

Level of total physical activity							
Age Group (years)	n	% Low	95% CI	Women			
				% 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
25-64	619	42.5	35.2-49.7	24.2	21.8-26.5	33.4	28.3-38.4

Level of total physical activity							
Age Group (years)	n	% Low	95% CI	Both Sexes			
				% 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
25-64	1065	32.1	21.6-42.7	19.0	17.7-20.3	48.9	37.1-60.6

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
25-64	446	259.4	219.9-298.9	619	157.2	140.8-173.5	1065	212.7	176.9-248.6

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
25-64	446	240.0	38.5-385.7	619	60.0	4.2-300	1065	128.5	17.1-349.2

Analysis Information:

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

Domain-specific physical activity-mean

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

Instrument questions:

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

Mean minutes of work-related physical activity on average per day									
Age Group (years)	Men			Women			Both Sexes		
	N	Mean minutes	95% CI	n	Mean minutes	95% CI	n	Mean minutes	95% CI
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
25-64	446	208.4	192.5-224.3	619	126.6	118.7-134.6	1065	171.1	151.7-190.5

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
25-64	446	26.5	4.2-48.7	619	13.8	1.8-25.9	1065	20.7	4.4-37.0

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
25-64	446	24.5	19.5-29.5	619	16.7	13.6-19.7	1065	20.9	18.5-23.4

Analysis Information:

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

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

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

Median minutes of work-related physical activity on average per day									
Age Group (years)	Men			Women			Both Sexes		
	N	Median minutes	Inter-quartile range (P25-P75)	n	Median minutes	Inter-quartile range (P25-P75)	n	Median minutes	Inter-quartile range (P25-P75)
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
25-64	446	205.7	0-342.8	619	6.4	0-274.2	1065	85.7	0-308.5

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
25-64	446	0.0	0-14.2	619	0.0	0-15	1065	0.0	0-15

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
25-64	446	0.0	0-34.2	619	0.0	0-21.4	1065	0.0	0-25.7

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 (years)	Men			Women			Both Sexes		
	N	% no activity at work	95% CI	n	% no activity at work	95% CI	n	% no activity 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
25-64	446	31.3	18.8-43.8	619	48.5	38.4-58.5	1065	39.1	26.0-52.3

No transport-related physical activity									
Age Group (years)	Men			Women			Both Sexes		
	N	% no activity for transport	95% CI	n	% no activity for transport	95% CI	n	% no activity for 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
25-64	446	64.7	51.9-77.6	619	62.3	60.9-63.8	1065	63.6	56.9-70.4

No recreation-related physical activity									
Age Group (years)	Men			Women			Both Sexes		
	N	% no activity at recreation	95% CI	n	% no activity at recreation	95% CI	n	% no activity at 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
25-64	446	56.1	45.9-66.4	619	63.3	58.9-67.8	1065	59.4	51.1-67.7

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
25-64	389	67.0	65.8-68.3	11.7	4.6-18.8	21.3	13.6-29.0

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
25-64	464	57.1	52.7-61.4	21.0	17.7-24.2	21.9	20.4-23.5

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
25-64	853	62.8	59.5-66.2	15.6	13.4-17.8	21.6	16.4-26.7

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 (years)	Men			Women			Both Sexes		
	N	% no vigorous activity	95% CI	n	% no vigorous activity	95% CI	n	% no vigorous 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
25-64	454	243.1	230.7-255.5	210.0	120-300

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
25-64	648	248.3	229.5-267.1	180.0	120-300

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
25-64	1102	245.5	230.1-260.9	210.0	120-300

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
25-64	450	2.6	2.4-2.8	80.9	76.7-85.2	5.5	1.4-9.7	10.9	9.4-12.4

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
25-64	647	1.5	1.2-1.8	71.1	65.2-77.0	11.3	6.4-16.2	16.1	14.5-17.7

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
25-64	1097	2.1	2.0-2.2	76.4	75.4-77.3	8.2	7.5-8.9	13.3	12.1-14.5

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
25-64	43	59.4	47.8-70.9	95	58.1	55.8-60.4	138	58.6	54.5-62.8

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
25-64	59	84.0	70.9-97.1	97	57.8	53.4-62.2	156	68.5	66.5-70.5

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
25-64	44	57.9	41.2-74.6	92	56.4	53.4-59.5	136	57.0	51.1-63.0

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
25-64	13	16.6	3.5-29.7	6	2.7	0.6-4.8	19	8.4	3.2-13.6

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
25-64	50	63.4	52.9-73.8	104	64.4	61.5-67.3	154	64.0	60.5-67.4

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
25-64	72	8.5	0.0-21.7	158	7.2	4.1-10.3	230	7.8	5.7-9.8

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
25-64	72	6.0	0.0-14.5	158	11.8	8.3-15.3	230	9.4	5.5-13.3

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
25-64	450	19.4	16.3-22.5	68.8	67.7-69.8	5.4	2.8-8.0	6.4	5.5-7.3

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
25-64	646	10.7	9.3-12.0	77.1	76.1-78.0	5.7	4.5-7.0	6.5	4.9-8.2

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
25-64	1096	15.3	12.2-18.5	72.6	71.4-73.8	5.6	4.7-6.5	6.5	5.3-7.6

- 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
25-64	44	13.3	7.4-19.2	77	19.8	11.8-27.9	121	16.4	15.4-17.4

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
25-64	44	68.2	61.4-74.9	77	63.1	44.3-81.8	121	65.7	61.5-70.0

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 (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
25-64	44	59.8	53.1-66.5	77	46.4	37.1-55.7	121	53.4	44.9-62.0

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	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
25-64	44	57.8	49.9-65.8	77	53.0	47.8-58.3	121	55.6	47.6-63.5

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	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
25-64	44	9.8	5.6-14.0	77	6.2	3.0-9.3	121	8.1	6.2-10.0

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	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
25-64	44	72.9	57.7-88.1	77	69.6	58.3-81.0	121	71.4	65.2-77.5

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
25-64	44	21.8	5.3-38.3	77	21.4	10.1-32.8	121	21.6	4.0-39.3

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
25-64	44	2.7	1.4-4.0	77	8.3	4.1-12.5	121	5.3	2.2-8.5

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
25-64	44	48.0	44.1-51.9	19.0	18.8-19.3	33.0	29.4-36.6

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
25-64	75	72.2	59.1-85.2	11.9	6.3-17.5	15.9	8.4-23.3

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
25-64	119	59.2	51.5-67.0	15.7	13.3-18.2	25.0	19.7-30.3

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
25-64	41	33.7	33.4-34.0	26.6	13.2-40.0	39.8	26.1-53.4

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
25-64	72	25.2	15.2-35.3	21.4	13.2-29.6	53.4	36.0-70.7

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
25-64	113	29.8	25.4-34.2	24.2	10.8-37.5	46.1	28.5-63.7

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 (years)	Men			Women			Both Sexes		
	n	% diagnosed	95% CI	n	% diagnosed	95% CI	n	% 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
25-64	441	14.1	11.6-16.6	640	18.4	14.4-22.4	1081	16.1	13.5-18.7

Raised cholesterol diagnosed in last 12 months									
Age Group (years)	Men			Women			Both Sexes		
	n	% diagnosed	95% CI	n	% diagnosed	95% CI	n	% 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
25-64	60	70.2	51.3-89.1	106	61.8	57.7-65.9	166	65.7	59.4-72.1

Currently taking cholesterol medication prescribed by doctor or health worker									
Age Group (years)	Men			Women			Both Sexes		
	n	% taking insulin	95% CI	n	% taking insulin	95% CI	n	% taking 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
25-64	60	21.8	0.0-61.6	106	23.2	21.4-25.0	166	22.5	8.9-36.2

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 (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
25-64	60	34.2	4.6-63.8	106	45.3	35.7-55.0	166	40.1	34.8-45.5

Advised by doctor or health worker to lose weight									
Age Group (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
25-64	60	39.0	5.1-72.8	106	50.4	47.0-53.9	166	45.1	32.1-58.1

Advised by doctor or health worker to stop smoking									
Age Group (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
25-64	60	5.9	0.0-13.4	106	5.3	1.3-9.3	166	5.6	1.5-9.7

Advised doctor or health worker to start or do more exercise									
Age Group (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
25-64	60	48.9	19.5-78.3	106	60.8	58.7-62.9	166	55.3	45.1-65.4

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
25-64	60	2.3	0.0-5.9	106	3.6	0.9-6.3	166	3.0	0.3-5.7

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
25-64	60	1.0	0.0-7.2	106	10.7	0.0-25.1	166	6.2	0.0-15.1

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
25-64	454	57.7	56.3-59.1	58.1	48.1-68.0	25.6	23.5-27.6

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
25-64	454	30.5	27.8-33.3	21.5	20.4-22.6	8.9	1.7-16.2

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
25-64	648	61.4	60.1-62.7	71.6	66.1-77.0	23.9	22.7-25.1

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
25-64	648	36.1	34.6-37.7	27.9	27.4-28.4	11.5	8.7-14.3

Family member who has been diagnosed with							
Both Sexes							
Age Group (years)	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
25-64	1102	59.4	58.5-60.3	64.3	59.9-68.7	24.8	24.2-25.4

Family member who has been diagnosed with							
Both Sexes							
Age Group (years)	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
25-64	1102	33.1	30.7-35.6	24.5	24.4-24.6	10.1	4.7-15.6

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

Age Group (years)	Mean height (cm)					
	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
25-64	449	176.0	174.3-177.8	641	163.8	162.9-164.7

Age Group (years)	Mean weight (kg)					
	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
25-64	449	86.7	85.8-87.5	633	79.4	78.2-80.6

Age Group (years)	Mean BMI (kg/m ²)								
	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
25-64	449	28.0	27.5-28.5	629	29.7	29.5-29.9	1078	28.8	28.3-29.3

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
25-64	449	0.2	0.0-0.3	26.4	18.9-33.9	45.0	39.0-51.1	28.4	26.9-29.9

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
25-64	629	0.9	0.8-0.9	23.0	21.9-24.1	32.2	28.3-36.2	43.9	40.9-46.9

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
25-64	1078	0.5	0.4-0.6	24.8	20.0-29.7	39.2	35.3-43.1	35.5	34.5-36.5

Analysis Information:

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

BMI ≥ 25 Description: Percentage of respondents being classified as overweight (BMI ≥ 25)

Instrument questions:

- Height
- Weight

Age Group (years)	BMI ≥ 25								
	Men			Women			Both Sexes		
	n	% BMI ≥ 25	95% CI	n	% BMI ≥ 25	95% CI	n	% BMI ≥ 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
25-64	449	73.5	66.1-80.8	629	76.2	75.0-77.3	1078	74.7	70.0-79.4

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	36.5-36.6
35-44	136	37.7	37.5-37.9	201	37.1	36.6-37.6
45-54	127	37.4	36.9-37.9	160	37.1	36.9-37.4
55-64	62	38.0	37.5-38.6	90	37.5	37.3-37.7
25-64	431	37.4	37.2-37.6	567	37.1	36.8-37.3

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

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
25-64	443	80.9	79.9-82.0	639	79.6	79.2-80.0	1082	80.3	79.8-80.8

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
25-64	404	34.7	19.4-49.9	564	21.1	20.4-21.8	968	28.5	18.5-38.5

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
25-64	443	41.0	28.6-53.3	639	31.1	27.1-35.1	1082	36.4	27.0-45.8

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
25-64	404	8.2	6.7-9.8	564	4.9	4.2-5.5	968	6.7	5.9-7.4

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
25-64	443	17.1	13.5-20.7	639	16.9	12.8-21.0	1082	17.0	16.0-18.1

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 ≥ 140 and/or DBP ≥ 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 ≥ 140 and/or DBP ≥ 90	95% CI	% Not on medication and SBP ≥ 140 and/or DBP ≥ 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
25-64	177	9.4	0.0-18.9	14.3	10.7-17.9	76.4	63.8-88.9

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 ≥ 140 and/or DBP ≥ 90	95% CI	% Not on medication and SBP ≥ 140 and/or DBP ≥ 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
25-64	197	18.8	13.5-24.2	22.1	16.4-27.8	59.1	48.6-69.6

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 ≥ 140 and/or DBP ≥ 90	95% CI	% Not on medication and SBP ≥ 140 and/or DBP ≥ 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
25-64	374	13.1	8.2-18.0	17.4	16.0-18.7	69.5	63.2-75.8

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
25-64	108	5.65	4.9-6.4	171	5.6	5.4-5.8	279	5.6	5.3-5.9

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
25-64	108	101.74	88.0-115.5	171	100.8	96.7-104.8	279	101.3	95.5-107.0

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
25-64	109	25.5	18.7-32.3	171	25.9	22.8-29.0	280	25.7	23.4-27.9

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
25-64	33	8.7	6.7-10.7	57	8.9	7.3-10.5	90	8.8	8.3-9.3

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
25-64	33	8.7	6.7-10.7	57	8.9	7.3-10.5	90	8.8	8.3-9.3

* Impaired fasting glycaemia is defined as either

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

** Raised blood glucose is defined as either

- plasma venous value: ≥ 7.0 mmol/L (126 mg/dl)
- capillary whole blood value: ≥ 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
25-64	95	9.8	8.5-11.1	143	9.9	9.8-10.0	238	9.8	9.4-10.3

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
25-64	95	378.9	328.7-429.2	143	382.0	378.4-385.6	238	380.5	361.9-399.1

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 ≥ 5.0 mmol/L or ≥ 190 mg/dl or currently on medication for raised cholesterol									
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
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
25-64	110	35.8	0.0-72.5	170	42.4	23.8-60.8	280	39.1	20.2-58.0

Total cholesterol ≥ 6.2 mmol/L or ≥ 240 mg/dl or currently on medication for raised cholesterol									
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
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
25-64	59	9.7	5.4-14	17	12.3	-1.8-27	26	11	7.7-14.4

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 ≥ 25 kg/m²)
- raised BP (SBP ≥ 140 and/or DBP ≥ 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
25-64	434	1.1	0.4-1.7	53.4	50.2-56.7	45.5	41.7-49.3

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
25-64	599	0.7	0.0-2.2	52.8	50.2-55.5	46.4	42.3-50.5

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
25-64	1033	0.9	0.0-2.0	53.2	50.2-56.2	45.9	41.9-49.9

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
25-64	454	48.3	44.9-51.7

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
25-64	454	40.4	27.2-53.6	648	47.0	34.7-59.2	1102	43.4	30.0-56.8

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
25-64	454	17.9	6.8-29.0	648	14.6	10.8-18.4	1102	16.4	9.0-23.8

**Breast
Cancer
Knowledge
and Breast
Exam**

Description: Percentage of women who were shown how to examine breasts and date of last breast exam.

Instrument questions:

- Have you been shown how to examine your breasts?
- When was the last time you had an examination of your breasts?

Shown how to examine breasts			
Age Group (years)	Women		
	n	%	95% CI
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
25-64	648	82.1	78.9-85.3

Last Breast Exam									
Age Group (years)	Women								
	n	% 1 year ago or less	95% CI	% Between 1 and 2 years ago	95% CI	% More than 2 years ago	95% CI	% Never had a breast exam	95% CI
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
25-64	630	51.3	47.3-55.4	16.4	14.9-17.9	18.8	13.8-23.8	13.4	12.6-14.3

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
25-64	635	26.4	24.4-28.3	13.7	12.5-14.9	17.1	15.3-18.9	42.8	39.2-46.4

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
25-64	636	49.5	41.4-57.6	18.4	12.7-24.0	26.1	22.4-29.8	6.0	4.6-7.4