Noncommunicable Disease Risk Factors
STEPS Survey Uganda 2023

World Health Organization

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About this report

This report outlines the main findings of the Uganda National Non-Communicable Diseases risk factors STEPS survey, 2023. This survey was conducted between February and March 2023, but commenced planning in May 2021. Household listing, which involved updating the sampling frame at cluster/enumeration area (EA) level was conducted through December 2022 and January 2023. Training of data collectors was done in January 2023. Field work commenced on the 30th January 2023 and the last data entry was on the 08th March 2023. Data quality monitoring was digitally done through this period and face to face visits were conducted at various intervals by the investigators listed below. Overall, the quality of the survey was deemed good, with improvements added to this current survey versus the one conducted in 2014. The improvements included entering data real time, being able to trace the data collector using Global Positioning System (GPS) embedded in the android tablet (see Appendix III). Time taken for the data collection was digitally monitored and allowed the investigators to address issues on non-compliance with the protocol in time. These important processes in the survey imply that this report should be read in conjunction with the study protocol and the data book. The report format has been adopted to keep in line with the World Health Organisation (WHO) STEPwise approach to surveillance (STEPS) survey reports. The analysis presented in this report does not go into rigorous statistical analysis, and leaves comparisons at the level of confidence intervals. It should be further noted that the tables were produced in Epi Info™ templates and for some coding reasons may sometimes not add up to 100%.

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Contents

Table of figures

EXECUTIVE SUMMARY

Noncommunicable diseases (NCDs) kill 41 million people each year, equivalent to 71% of all deaths globally. Each year, more than 15 million people die from an NCD between the ages of 30 and 69 years; 85% of these "premature" deaths occur in low- and middle-income (LMIC) countries. Global figures estimate 77% of all NCDs deaths to occur in LMIC countries. Cardiovascular diseases (CVD) account for the majority of NCD deaths, or 17.9 million people annually, followed by cancers (9.3 million), respiratory diseases (4.1 million), and diabetes (1.5 million). Tobacco use, physical inactivity, harmful use of alcohol and unhealthy diets underlie the above four groups of diseases that account for over 80% of all premature deaths. Thus, surveillance of these diseases and the associated risk factors is a key component to the response in the management of NCDs. This is the background to the 2023 STEPs survey, which is a follow up on the 2014 STEPS Uganda national baseline survey.

Part I of this report deals with burden of NCDs in Uganda while Part II explains the significance and rationale of carrying out the 2023 survey. The objectives are explained in Part III. It is noted the burden of NCDs in Uganda is considerably relatively low, but projected to increase and surveillance is required to monitor success of measures implemented to address the NCDs. The objectives are aligned to this agenda in addition to addressing the Global NCD Compact 2020-2030. The Global NCD Compact aims at reducing, by one third, premature mortality from non-communicable diseases through prevention and treatment of NCDs, and the promotion of mental health and well-being. The survey design and methodology is presented in Part IV of the report. The design followed the STEPwise methodology of the WHO, and employed a multistage sampling design. Results are presented sequentially as demographics, self-reported questionnaire, physical measurements, biochemical measurements and calculated cardiovascular risk. The study was confined to the age bracket of 18 – 69 years. The response rate was 86%, with the female respondents comprising of 52.8%. Details of results are presented in Part V to Part IX of the report. Overall, the findings point to significant risk factors in the population and with little change from the previous STEPS survey of 2014; and in some instances, an increase as in hyperglycaemia. Gender differences are still apparent, but we noted narrowed differences between urban and rural in prevalence of risk factors. The latter is quite apparent in blood glucose levels. Salt intake was estimated for the first time and despite the many limitations encountered, the analysed data shows increased salt intake in comparison to WHO recommended levels, sending a message of the need to intensify measures to reduce salt intake in the population. Finally, the calculated risk of cardiovascular disease is still high for the population and therefore a need to address the risk factors.

ABBREVIATIONS AND ACRONYMS

BMI	Body Mass Index
CI	Confidence Interval
COPD	Chronic Obstructive Pulmonary Disease
COVID-19	Corona virus disease of the year 2019
CPHL	Central Public Health Laboratory
CVD	Cardiovascular Disease
DBP	Diastolic Blood Pressure
DHS	Demographic and Health Survey
DM	Diabetes Mellitus (all forms)
EA	Enumeration area
HBP	High Blood Pressure
HDL-C	High Density Lipoprotein Cholesterol
ICMJE	International Committee of Medical Journal Editors
IFG	Impaired Fasting Glucose
IGT	Impaired Glucose Tolerance
IT	Information Technology
LC I	Local Council I
LMIC	Low-and Middle-Income Countries
MDG	Millennium Development Goals
M&E	Monitoring and Evaluation
MOE	Margin of Error
MOH	Ministry of Health
NCDs	Non-Communicable Diseases
NPHC	National Population and Health Census
PSU	Primary Sampling Unit
SBP	Systolic Blood Pressure
REC/IRB	Review and Ethics Committee / Institutional Review Board
SARS-CoV2	Severe Acute Respiratory Syndrome Coronavirus 2
SRH	Sexual Reproductive Health
SSA	Sub-Saharan Africa
TB	Tuberculosis
T1D	Type 1 Diabetes
T2D	Type 2 Diabetes
TC	Total Cholesterol
VHTs	Village Health Teams
UNCST	Uganda National Council of Science and Technology
VIP	Violence and Injury Prevention
WC-IC	Waist Circumference: horizontal plane - superior border of the iliac crest
WC-mid	Waist Circumference: horizontal plane - midway lowest ribs & iliac crest
WHO	World Health Organization

DEFINITIONS

Non-Communicable Diseases (NCD)

The term 'noncommunicable diseases' is used to make the distinction between the diseases that are not infectious (e.g.; cardiovascular diseases; cancer, chronic respiratory disease and diabetes) and infectious or 'communicable diseases') [1].

Risk factors

In this report, a 'risk factor' is any attribute, characteristic, or exposure of an individual which increases the likelihood of developing a disease; and with regards to this report, an NCD [1].

Major behavioural risk factors

The major modifiable behavioural risk factors are tobacco use, harmful alcohol consumption, unhealthy diet (low fruit and vegetable consumption, diet high in salt) and insufficient physical activity [1].

Major biological risk factors

The major biological risk factors are overweight and obesity, raised blood pressure, raised blood glucose, abnormal blood lipids, including raised cholesterol [1].

NCD Global Monitoring Framework

Following the Political Declaration on Noncommunicable Diseases (NCDs) adopted by the UN General Assembly in 2011, WHO developed a global monitoring framework to enable global tracking of progress in preventing and controlling major noncommunicable diseases – cardiovascular diseases, cancer, chronic lung diseases and diabetes – and their key risk factors. The framework is comprised of nine global targets and 25 indicators and was adopted by Member States during the World Health Assembly (WHA) in May 2013. Member States are encouraged to consider the development of national NCD targets and indicators building on the global framework. The nine voluntary global targets are aimed at combatting global mortality from the four main NCDs, accelerating action against the leading risk factors for NCDs and strengthening national health system responses. The mortality target – a 25% reduction in premature mortality from noncommunicable diseases by 2025 – was adopted by the World Health Assembly in May 2012. The framework is expected to drive progress in prevention and control of NCDs and provide the foundation for advocacy, raising awareness, reinforcing political commitment and promoting global action to tackle these deadly diseases. The framework will also help shape a new development agenda that advances the three dimensions of sustainable development: economic development, environmental sustainability, and social inclusion. In summary, the Global Monitoring Framework refers to unconditional probability of dying between the ages of 30 and 70 years from cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases. The lower age limit for the indicator of 30 years represents the point in the life cycle where the mortality risk for

the four selected chronic diseases starts to rise in most populations from very low levels at younger ages. The upper limit of 70 years was chosen for two reasons: (a) to identify an age range in which these chronic diseases deaths can be truly considered premature deaths in almost all regions of the world. (In all regions except the African Region, the average expected age at death for 30-year-olds already exceeds 70 years); (b) estimation of cause-specific death rates become increasingly uncertain at older ages because of increasing proportions of deaths coded to ill-defined causes, increasing levels of co-morbidity, and increasing rates of age misstatement in mortality and population data sources. This indicator should be interpreted as the chance that a 30-year-old individual living in a specific country (or place) in a specific year (or defined period of time) has of dying from any of the four major NCD (cardiovascular disease, cancer, diabetes, or chronic respiratory disease) before reaching the age of 70 years (or his/her 70th birthday).

Enumeration Area (EA)

In Uganda, an enumeration area (EA) is a geographic area that covers an average of 130 households. A sampling frame contains information about EA location, type of residence (urban or rural), and the estimated number of residential households [2].

Census Frame

A census frame is a complete list of all census enumeration areas (EAs); and in this study utilised the census EAs created in 2014 National Population and Health Census (NPHC) [2].

Urban and Rural Area

The definition of urban areas in Uganda, for statistical purposes, has changed from the past earlier definitions. While earlier censuses treated any settlements with a population of more than 1,000 persons as urban areas, for the 2002 census, urban centres were those population centres that were legally gazetted with town, municipal, or city councils. Thus, currently in Uganda, gazetted cities, municipalities and town councils are defined as urban areas as per the Local Government Act 2000. Regardless of the population size, all district headquarters are urban areas by law because they are located in Town Councils and all Town Councils are urban areas. Urban population (% of total population) in Uganda was reported at 24.36 % in 2019, according to the World Bank collection of development indicators, compiled from officially recognized sources [2].

Household

A household is defined as individuals who comprise a family unit and who live together under the same roof; individuals who dwell in the same place and comprise a family, sometimes encompassing domestic help; and / or all those who are under the control of one domestic head. In Uganda, a household is defined as a group of persons who normally LIVE and EAT together [3].

PART I: Introduction

Noncommunicable disease burden

The global burden of chronic, non-communicable diseases (NCDs) - largely cardiovascular disease, cancer, chronic respiratory disease, and diabetes - is increasing rapidly and will have significant social, economic and health consequences unless urgently addressed. The latest United Nations high-level meeting on NCDs reaffirmed this observation and also highlighted the slow progress in meeting the 2011 Political Declaration on the Prevention and Control of Noncommunicable Diseases and the third Sustainable Development Goal [4-7]. Like other sub-Saharan (SSA) countries, Uganda is experiencing an emerging increase in NCDs, despite the already overburdened health system with acute infectious diseases [8]. Indeed, the dual disease burden is seemingly continuing to grow faster than the health budget allocation [9]. While the lack of situational analyses, priority setting, and budgeting have been identified as the major obstacles in the lead to this current scenario, lack of updated information on the local epidemiology of the major NCDs; and taking stock of any achievements made in the control and prevention of the major NCDs since the last seven years when the first benchmarking NCD Survey was done [10], may be contributing factors. This population-based Uganda National NCD risk factor survey 2023, using the WHO STEPwise approach to noncommunicable disease risk factor surveillance (STEPS) will provide crucial data for on the measures previously taken to mitigate against the NCDs, especially those embedded in the Global Monitoring Framework. The STEPS survey is an integral part of nationwide NCD surveillance to track trends in key NCD risk factors and health system response including service coverage and utilization. STEPS is a standardized but flexible framework for countries to monitor the main NCD risk factors through the questionnaire assessments, physical and biochemical measurements and may be used to inform NCD policies and track risk-factor trends [11]. Public health monitoring or surveillance activities comprise of the regular collection of health information in terms of health indicators, the routine analysis of indicators over time, place and between population groups, sharing of available scientific knowledge as well as the regular dissemination of results. Good quality health information is essential for planning and implementing health policy in all countries, including Uganda. Monitoring and surveillance will provide health information in a timely manner so that policy makers and planners have the information they need to fight epidemics now or plan for the future. Common preventable risk factors underlie most NCDs. The leading risk factor globally is blood pressure, followed by tobacco use. Other major risk factors, accounting for a large fraction of the global mortality and morbidity from NCDs include alcohol use, unhealthy diet (such as low fruit and vegetable intake, or high salt intake) insufficient physical activity, overweight/obesity, raised blood glucose, and raised cholesterol. The rationale for including these eight core risk

factors in STEPS surveillance activities is that they have the greatest impact on NCD mortality and morbidity, modification is possible through effective prevention, measurement of risk factors has been proven valid and measurements can be obtained using appropriate ethical standards [12]. It is against this background that the proposed Uganda National NCD risk factor survey 2023 was undertaken looking at the eight major risk factors above. Repeat surveys are essential to identify trends in the prevalence of risk factors, and funds allowing, we expect another survey in 2028.

Uganda: Country Background

The Republic of Uganda is a landlocked country in East Africa, and has seen an increase in life expectancy from 39 years in 1950 to 64 years in 2021[13], and is thus beginning to experience an increase in the diseases of an aging population. Statistically, Uganda is divided into four regions: Central, Northern, Eastern and Western and administratively into 146 districts, with 70,626 villages. The Uganda population is estimated at 47 million, with a population density of 593 people per mi^2, and 25.7% of the population being urban[14]. Figure 1a shows the statistical, not administrative, regions of Uganda; Figure 1b shows the current administrative districts of Uganda. In general, Lugbara (Lugbarati) and Luo are spoken in the Northern Region; Ateso in the Eastern Region; Runyankole-Rukiga and Runyoro - Rutoro in the Western Region and Luganda in the Central Region and part of the Eastern Region.

FIGURE 1a Map of Uganda showing the Central, Eastern, Northern and Western regions.

Two other major languages, namely Ngakarimojong and Lusoga, were not included in translation as the population here comprehend Ateso and Luganda respectively [3].

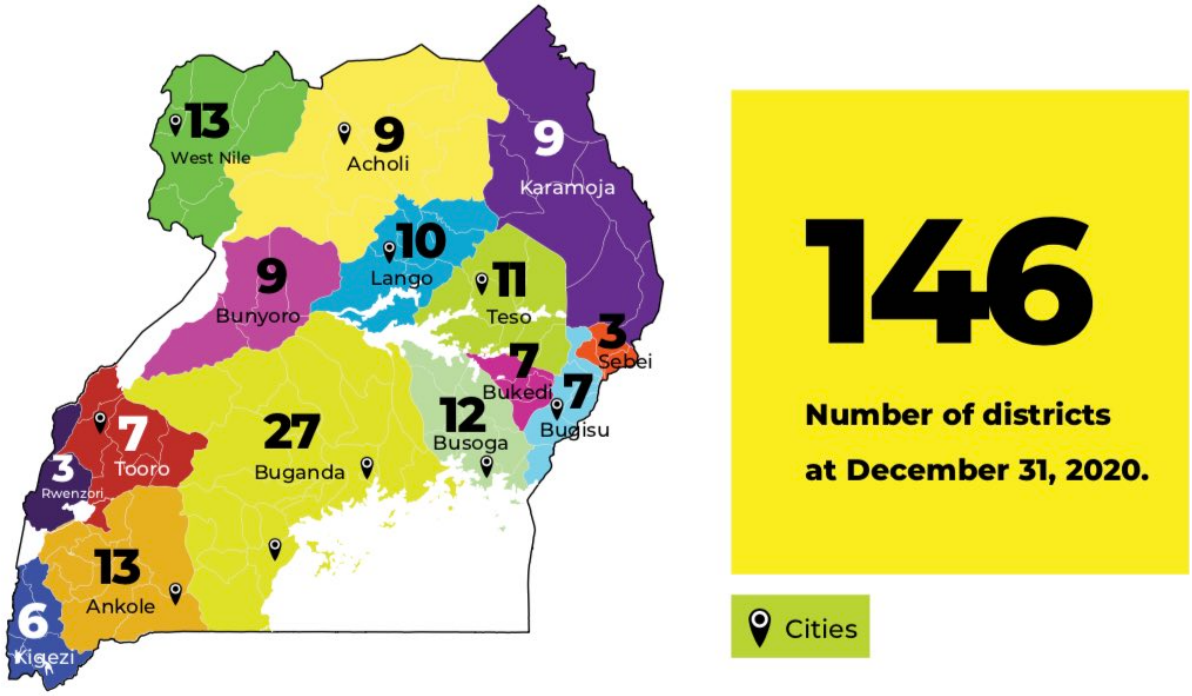

FIGURE 1b Map of Uganda showing location of 146 districts (total 70,626 villages)

PART II: Significance of the Uganda NCD Risk Factors Survey

In Uganda, NCDs are increasingly being prioritised, and therefore well collected, systematic nation-wide population data is required to determine the burden of the diseases and their risk factors, as well as monitor changes in the appropriate indicators over time. This is crucial for the identification and implementation of appropriate interventions as well as justification of allocated resources. The magnitude of NCDs and associated risk factors in Uganda will guide the planning and implementation of interventions on all levels. This report of the Uganda NCD Risk Factors Survey 2023 is a follow up surveillance on that of 2014. Because of time and financial constraints, the details on meat consumption, oral health and the qualitative component performed in 2014 survey were dropped; energy use, mental health and impact of COVID19 pandemic on behaviour risk factors behaviour were introduced (important in informing current and future health policy).

PART III: Aims and Objectives of the Survey

Aims

To determine the magnitude and the associated risk factors of non-communicable diseases (NCDs) among the Ugandan population.

Objectives

The specific objectives of the survey are to: -

1. To assess the magnitude of the following behavioural risk factors for NCDs:- physical inactivity, tobacco use and harmful use of alcohol and unhealthy diet.
2. To assess the magnitude of biochemical risk factors important in the management of NCDs: raised blood glucose and total cholesterol.
3. To collect data on socio-demographic characteristics important in the control and management of NCDs: age, gender, level of education, employment, income, marital status
4. To collect data on clinical parameters important in the control and management of NCDs: weight, waist circumference, height, blood pressure, heart rate.
5. To assess preventive measures for selected non-communicable conditions namely cervical cancer screening.
6. To examine the trends of NCD and associated risk factors in the Ugandan population in relation to the 2014 NCD Risk Factors Survey and in relation to interventions against NCD that were informed by results of the 2014 NCD Risk Factors Survey.

PART IV: Survey Design and Methodology

The study was a population-level, household based, cross-sectional survey employing the WHO Stepwise Approach [15].

The STEPwise (STEPS) Approach

The survey employed the WHO STEPwise approach, which is a sequential process of data collection using a three-step process. The WHO STEPS instrument for the Uganda NCD survey is attached in the appendix.

Step 1: This step involved the collection of demographic and behavioural information. This step included information on the level of education, employment, income, lifestyle factors that contribute to NCDs such as tobacco use, alcohol consumption, fruit and vegetable consumption, physical inactivity, history of raised blood pressure, raised blood glucose, raised blood cholesterol, cardiovascular diseases, life style advice and cervical cancer screening for women respondents, household energy use, mental health (depression) and impact of COVID-19 pandemic on behavioural risk factors.

Step 2: This step involved taking of the physical measurements. The measurements included taking of; height, weight, girth (waist, hip), blood pressure and pulse rate.

Step 3: This step involved performing biochemical measurements. This was done using point of care devices to measure blood glucose, blood lipids (total cholesterol [TC] and High-Density Lipoprotein cholesterol [HDL-C]) and spot urine sodium, creatinine and cotinine).

Within each of the three steps, there were three levels of data collection described by WHO as core, expanded and optional levels. The core, expanded and optional levels of detail that were gathered for each step are detailed in the Table 1 and Table 2 below.

The Sampling Procedure

Sampling Frame

The sampling frame used for the Uganda National NCD 2023 survey is the frame for the Uganda Population and Housing Census (UPHC 2014). The sampling frame consisted of a complete list of the census enumeration areas (EA) created for covering the whole country and consists of 78,692 EAs (excluding Refugees, Forests and Forest reserves and Institutional population). Two EAs were removed from the present survey, as one was gazetted as institutionalized and the other as a national park. Currently, in Uganda, there are 70,626 villages in 312 counties with 15 Cities and 146 Districts. It is important to note that each district/city is sub-divided into sub-counties/divisions, and each sub-country/division into parishes/wards, and each parish/ward into villages/cells and then the enumeration areas (EAs). The sampling frame file contains

the administrative belongings for each EA and its number of households at the time of the census operation. Each EA has also a designated residence type, which is either urban or rural. Sampling performed is displayed in Table 3.

Selection of EAs with PPS and Systematic Sampling Procedure

The sample for the NCD survey utilised a three-stage stratified sample selected from the sampling frame. In total 8 sampling strata were created; two for each region. Samples were selected randomly from each stratum according to the sample allocation given in Table 3 by probability proportional to size selection (PPS). Before the sample selection, the sampling frame was sorted within sampling stratum, district, then by sub-county, parish, village and EA code. With this sorting, stratification by rural/urban was achieved. Weighting during analysis followed this procedure.

Selection of households (HHs) with Systematic Sampling Procedure

After the first stage selection of the EAs and before the main survey, a household listing exercise was carried out in all of the selected EAs during the month of December 2022 and completed in January 2023 (except for the areas of Mubende and Kassanda districts which had been affected by Ebola, where listing was completed later in February 2023 after the lockdown in these two districts had been lifted). The household listing exercise consisted of visiting each of the 309 selected EAs; drawing a location and a detailed sketch map; and recording on the household listing forms all residential households found in the EA with the address and the name of the head of the households. The resulting list of households served as the sampling frame for the selection of households in the second stage prior to data collection stage (main STEPS survey).

At the second stage, a fixed number of 14 households were selected from the newly established household listing for each selected EA. The choice of 14 households per EA is based on previous experience of undertaking the national NCD survey. Household selection was performed in the central office prior the main survey data collection. No replacements and no changes of the pre-selected households was allowed during the data collection in order to prevent potential bias.

The selection of 14 households was done with equal probability from the listing for each sampled EA.

Selection of respondents at the household level

At the third stage, the research assistants interviewed only one randomly selected household member who would meet the predetermined NCD survey inclusion criteria from a pre-selected household. The selection was done using the android tablet that was pre-set for randomly selecting an individual from a household. The household member needed to be an adult aged 18-69 years of age. No replacements and no changes of the pre-selected household member was allowed during the data collection to prevent potential bias and maintain high data quality.

Sample Size Calculation

The sample size for the survey was calculated assuming a 50% prevalence of the risk factors ($\boldsymbol{P}$= 0.5, which is the recommended value that gives the most conservative sample size), a 5% level of significance ($\boldsymbol{\alpha}$=0.05), a margin of error of 0.05 ($\boldsymbol{\delta}$=0.05); an expected response rate of 80%, 6 age-sex categories (3 groups per gender: 18-29, 30-45, 45-69), and a 1.5 design effect. Using these parameters, the sample size calculation was made using the WHO STEPS sample size calculator [World Health Organization (WHO) 2017 Accessed at: https://www.who.int/ncds/surveillance/steps/resources/sample_size_calculator.xls?ua=1]. The sample size is:

$$n_1 = \frac{Z^2_{\alpha/2} P(1-P)}{\delta^2}$$

Where: $Z_{\alpha/2}$ = 1.96 (the two tailed standard normal deviate with $\boldsymbol{\alpha}$ area in the tails)

P = 0.5 (prevalence of the risk factors)

$\boldsymbol{\delta}$ = 0.05 (maximum error between the estimated and actual prevalence the investigator is willing to allow)

Thus: $$n_1 = \frac{1.96^2 * 0.5 * 0.5}{0.05^2}$$

$$= 384.16$$

Multiplying by the design effect (DE=1.5 recommended by WHO for most STEPS surveys), and number of age -sex estimates

$$n_2 = 384.16 * 1.5 * 6 = 3457.44$$

Adjusting for expected response rate of 80%

Required sample size $$= \frac{3457.44}{0.8} = 4321.8$$

A total of **4,322** respondents would need to be interviewed; distributed into 309 Enumeration areas (EAs), with each EA having approximately 14 households. In each household, only one eligible consenting person was randomly selected from the household leading to a total of 4,322 households. Therefore, the proposed survey utilized a stratified countrywide randomly selected sample of 4,322 individuals (men and women) within the age range 18– 69 years divided into 3 two-sets (men and women) age groups (18 – 29; 30 – 44; 45 – 69). A total of 309 primary sampling units consisting of EAs were randomly selected using the 2014 Population Census enumeration area list. The survey had an 86% response rate; details are displayed in Table 4.

Table 1 Items included in the 2023 Uganda NCD STEPS risk factor survey

Step	Core Items	Expanded Items	Optional Items
Step 1 Behavioural	Basic demographic information including: age sex years at school	Expanded demographic information including: highest level of education ethnicity marital status employment status household income	Cervical cancer Mental / depression Response to COVID-19 Pandemic
	Tobacco use, duration and quantity of smoking, quit attempts, past smoking, smokeless tobacco use	Cessation, exposure to environmental tobacco smoke	
	Alcohol consumption, cessation, binge drinking, past 7 days drinking, consumption of untaxed alcohol	Alcohol use disorders	
	Fruit and vegetable consumption, consumption of salt and processed food high in salt	Awareness of too much salt as a health problem, control of salt intake	
	Physical activity at work / in the household, for transport and during leisure time	Sedentary behaviour	
	History of raised blood pressure, diabetes, raised total cholesterol and cardiovascular diseases		
	Life style advice Cervical cancer screening House hold energy use		
Step 2 Physical Measurements	Blood pressure Height weight Waist circumference	Heart rate Hip circumference	
Step 3 Biochemical Measurements	Fasting blood glucose Total cholesterol High Density Lipoprotein Cholesterol Urinary cotinine Urinary sodium Creatinine		

Table 2 Final program NCD Survey 2023

Questions STEP 1	CORE	EXPANDED	Country added questions	Country instrument
Survey Information	9	1	1	11
Demographic information	4	7	2	13
Tobacco use	11	7		18
Alcohol consumption	12	4		16
Diet: Fruits and vegetables	4			4
Dietary salt consumption	4	3		7
Physical activity	15	1		16
History of raised blood pressure	6			6
History of diabetes	7			7
History of raised cholesterol	6			6
History of cardiovascular diseases	3			3
Lifestyle advice	2			2
Cervical cancer screening	1			1
SUB TOTAL	84	23	3	110
Optional modules				
Household energy use	9			9
Cervical cancer screening	4	6		10
Anxiety and depression	4			4
Coronavirus 2019 pandemic	3			3
SUB TOTAL	20	6	0	26
TOTAL				136

Table 3 Sample allocation by sampling strata

Region & urbanity		Number of EAs per 2014 Census	Estimated # of HH	# of EAs to be selected using PPS	# of HH to be selected using SRS
Central	Urban	8,582	1,136,270	49	682
	Rural	11,300	1,130,221	48	678
Eastern	Urban	3,310	323,683	14	194
	Rural	18,798	1,414,012	61	848
Northern	Urban	2,406	233,871	10	140
	Rural	14,907	1,102,272	47	661
Western	Urban	3,978	424,226	18	254
	Rural	15,410	1,440,690	62	864
Total		**78,691**	**7,205,245**	**309**	**4,322**

Table 4 Sample allocation by sampling strata realized

Region & urbanity		Number of EAs per 2014 Census	Estimated # of HH	# of EAs to be selected using PPS	# of HH to be selected using SRS (Observations)
Central	Urban	8,582	1,136,270	34	357
	Rural	11,300	1,130,221	43	547
Eastern	Urban	3,310	323,683	13	194
	Rural	18,798	1,414,012	74	897
Northern	Urban	2,406	233,871	9	104
	Rural	14,907	1,102,272	58	706
Western	Urban	3,978	424,226	16	186
	Rural	15,410	1,440,690	60	742
Total		**78,691**	**7,205,245**	**307**	**3,694**

PART V: Results on demographics

Demographics

The number of participants enrolled into the Non-communicable Disease Risk Factors STEPS survey Uganda 2023 was 3,694 (1,426 men; 2,268 women), giving a response rate of 86%. The median age was 36 years age range 18 – 69 years. Detail of the demographics are displayed in Table 5.

Age

Table 5 Summary information by age and sex of the respondents

Age group and sex of respondents						
Age Group (years)	Men		Women		Both Sexes	
	n	%	n	%	n	%
18-29	469	38.5%	750	61.5%	1219	100%
30-44	451	35.6%	816	64.4%	1267	100%
45-69	506	41.9%	702	58.1%	1208	100%
18-69	**1426**	38.6%	**2268**	61.4%	**3694**	100%

Education

Majority of participants had no formal education. This category comprised of 53.6% (95%CI: 51.0 – 56.1) while the category of completed primary education comprised of 26.8% (95% CI: 24.8 – 28.9) and the category of attained O'Level education and beyond comprised of 19.6% (95 % CI: 17.7 – 21.7). Details of education attained are displayed in Table 6a, Table 6b and Table 6c.

Table 6a Highest level of education by age and sex of the respondents (men)

Highest level of education								
Age Group (years)	Men							
	n	% No formal schooling	% Primary School completed	% O-Level completed	% Junior Secondary completed	% A-level completed	% University /Higher institutions completed	% Post graduate degree
18-29	469	44.6	33.7	16.2	0.4	2.3	2.8	0.0
30-44	451	44.8	31.3	11.3	0.9	5.8	6.0	0.0
45-69	506	59.5	24.5	7.3	0.8	2.0	5.7	0.2
18-69	1426	49.9	29.7	11.5	0.7	3.3	4.8	0.1

Table 6b Highest level of education by age and sex of the respondents (women)

Highest level of education								
Age Group (years)	**Women**							
	n	% No formal schooling	% Primary School completed	% O-Level completed	% Junior Secondary completed	% A-level completed	% University /Higher institutions completed	% Post graduate degree
18-29	749	51.4	29.4	13.4	0.4	2.3	3.2	0.0
30-44	816	59.9	25.2	8.3	0.1	2.5	3.9	0.0
45-69	702	76.4	17.0	4.1	0.3	0.3	1.9	0.1
18-69	2267	62.2	24.0	8.7	0.3	1.7	3.0	0.1

Table 6c Highest level of education by age and sex of the respondents (combined men and women)

Highest level of education								
Age Group (years)	**Both Sexes**							
	n	% No formal schooling	% Primary School completed	% O-Level completed	% Junior Secondary completed	% A-level completed	% University /Higher institutions completed	% Post graduate degree
18-29	1218	31.0	14.4	0.4	48.8	2.3	3.0	0.0
30-44	1267	27.4	9.4	0.4	54.5	3.6	4.7	0.0
45-69	1208	20.1	5.5	0.5	69.3	1.0	3.5	0.2
18-69	3693	26.2	9.8	0.4	57.5	2.3	3.7	0.1

Marriage

Among the participants, 17.5%, (95% CI: 15.6 – 19.6) were never married, 634.0% (95% CI: 61.5 – 66.4) were married/cohabiting, while the remaining 18.5% (95% CI: 16.6 – 20.6) were either separated or divorced or widowed. Detail of the marital status by gender and age group are displayed in Table 7a, 7b and 7c.

Table 7a Marital status of participants (men)

Marital status							
Age Group (years)	Men						
	n	% Never married	% Currently married	% Separated	% Divorced	% Widowed	% Cohabiting
18-29	469	47.1	32.0	6.4	0.2	0.0	14.3
30-44	451	7.3	64.7	10.9	0.2	0.4	16.4
45-69	506	1.4	72.1	13.4	0.8	3.4	8.9
18-69	**1426**	**18.3**	**56.6**	**10.3**	**0.4**	**1.3**	**13.0**

Table 7b Marital status of participants (women)

Marital status							
Age Group (years)	Women						
	n	% Never married	% Currently married	% Separated	% Divorced	% Widowed	% Cohabiting
18-29	750	18.5	50.7	8.1	0.1	0.8	21.7
30-44	816	4.9	63.2	12.9	0.7	4.3	14.0
45-69	701	2.1	47.1	14.4	3.6	29.7	3.1
18-69	**2267**	**8.6**	**54.1**	**11.8**	**1.4**	**11.0**	**13.2**

Table 7c Marital status of participants (men and women)

Marital status							
Age Group (years)	Both Sexes						
	n	% Never married	% Currently married	% Separated	% Divorced	% Widowed	% Cohabiting
18-29	1219	29.5	43.5	7.5	0.2	0.5	18.9
30-44	1267	5.8	63.8	12.2	0.6	2.9	14.8
45-69	1207	1.8	57.6	14.0	2.4	18.6	5.6
18-69	**3693**	**12.3**	**55.1**	**11.2**	**1.0**	**7.3**	**13.1**

Employment

Overall, 9.7% (95% CI: 7.5 – 12.4) participants were employed, 68.7% (95% CI: 65.7 – 71.6) were self-employed, while 21.6%, 95% CI: 19.5 – 23.8) were unemployed. Among the participants more women, 27.1%, (95% CI: 24.6 – 30.0) were unemployed compared to men, 15.3% (95% CI: 12.7 – 18.5). Response to the traditional employment category, women comprised 7.7% (95% CI: 6.1– 9.2) and men 12.2% (95% CI:8.3 – 17.5), while those in the self-employment category; women comprised of 65%, (95% CI: 62.3 – 68.4). Details of employment are displayed in Tables 8a, 8b and 8c.

Table 8a Employment status of participants (men)

Employment status					
Age Group (years)	Men				
	n	% Government employee	% Non-government employee	% Self-employed	% Unpaid
18-29	469	0.2	11.3	69.3	19.2
30-44	451	2.7	8.0	81.8	7.5
45-69	505	4.2	5.5	77.2	13.1
18-69	**1425**	**2.4**	**8.2**	**76.1**	**13.3**

Table 8b Employment status of participants (women)

Employment status					
Age Group (years)	Women				
	n	% Government employee	% Non-government employee	% Self-employed	% Unpaid
18-29	750	0.3	7.7	61.1	30.9
30-44	816	2.3	5.4	72.7	19.6
45-69	702	1.1	2.4	72.2	24.2
18-69	**2268**	**1.3**	**5.2**	**68.7**	**24.8**

Table 8c Employment status of participants (men and women)

Employment status					
Age Group (years)	Both Sexes				
	n	% Government employee	% Non-government employee	% Self-employed	% Unpaid
18-29	1219	0.2	9.1	64.2	26.4
30-44	1267	2.4	6.3	75.9	15.3
45-69	1207	2.4	3.7	74.3	19.6
18-69	**3693**	**1.7**	**6.4**	**71.5**	**20.4**

Respondents of participants to unpaid work and being unemployed are displayed in Tables 8d, 8e and 8f

Table 8d Respondents of unemployed participants to unpaid work (men)

Unpaid work and unemployed							
Age Group (years)	Men						
	n	% Non-paid	% Student	% Home-maker	% Retired	Unemployed	
						% Able to work	% Not able to work
18-29	90	15.6	41.1	4.4	0.0	34.4	4.4
30-44	34	44.1	0.0	2.9	0.0	52.9	0.0
45-69	66	33.3	0.0	1.5	16.7	37.9	10.6
18-69	**190**	**26.8**	**19.5**	**3.2**	**5.8**	**38.9**	**5.8**

Table 8e Respondents of unemployed participants to unpaid work (women)

Unpaid work and unemployed							
Age Group (years)	Women						
	n	% Non-paid	% Student	% Home-maker	% Retired	Unemployed	
						% Able to work	% Not able to work
18-29	232	15.9	11.6	23.3	0.0	48.3	0.9
30-44	160	25.6	0.0	17.5	0.0	53.8	3.1
45-69	170	28.2	0.0	11.2	3.5	42.4	14.7
18-69	**562**	**22.4**	**4.8**	**18.0**	**1.1**	**48.0**	**5.7**

Table 8f Respondents of unemployed participants to unpaid work (men and women)

Unpaid work and unemployed							
Age Group (years)	Both Sexes						
	n	% Non-paid	% Student	% Home-maker	% Retired	Unemployed	
						% Able to work	% Not able to work
18-29	322	15.8	19.9	18.0	0.0	44.4	1.9
30-44	194	28.9	0.0	14.9	0.0	53.6	2.6
45-69	236	29.7	0.0	8.5	7.2	41.1	13.6
18-69	**752**	**23.5**	**8.5**	**14.2**	**2.3**	**45.7**	**5.7**

Household income

The mean annual per capita was 1,387,729 Uganda Shillings. The estimated house hold earnings are displayed in Table 9.

Table 9 Estimated household earnings per year

Estimated household earnings (Shillings)					
n	% Quintile 1: Under 1,000,000	% Quintile 2: 1,000,000 – 9,999,999	% Quintile 3: 10,000,000 - 29,999,999	% Quintile 4: 30,000,000 - 59,999,999	% Quintile 5: 60,000,000 and more
141	70.9	25.5	2.1	1.4	**-**

We used the description of the roof and floor of the household to define the socio-economic positioning (roof of straw thatched, floor of earth and or cow dung as lower; roof of iron sheets and or floor cement as middle and the rest as upper socio-

economic positioning). Based on this proxy socio-economic positioning (SEP), the proportion lower SEP was 21.7% (95% CI: 19.0 – 24.6), middle SEP was 73.2% (95% CI: 79.2 – 76.0), and upper SEP 5.1% (95% CI: 4.0 – 6.5). By gender, the proportion of males in the lower SEP was 23.8% (95% CI: 20.1 – 28.0) while in females was 20.0% (95% CI: 17.0 – 22.6). In the middle SEP the proportion of males was 71.6% (95% CI: 67.4 – 75.4) and females was 74.7% (95%CI: 71.4 – 77.8). In the upper SEP the proportion of males was 4.6% (95% CI:3.1 – 6.7) and in females was 5.6% (95% CI: 4.2 – 7.4).

PART VI: Results on lifestyle choices

Tobacco use

The prevalence of tobacco use was 8.3% (95% CI: 6.9 – 9.8). Details of tobacco use are displayed in tables below, including smoke tobacco use, smokeless tobacco users, and exposure to second-hand tobacco smoke.

Tables on tobacco smoking behaviour

Percentage of current tobacco smokers									
Age Group (years)	Men			Women			Both Sexes		
	n	% Current smoker	95% CI	n	% Current smoker	95% CI	n	% Current smoker	95% CI
18-29	469	7.8	4.9-10.7	750	0.8	0.3-1.3	1219	4.1	2.7-5.5
30-44	451	15.1	10.5-19.7	816	2.3	0.9-3.6	1267	7.9	5.5-10.2
45-69	506	22.5	17.7-27.3	702	4.5	2.8-6.3	1208	13.5	10.8-16.2
18-69	**1426**	**15.0**	**12.3-17.6**	**2268**	**2.4**	**1.7-3.2**	**3694**	**8.3**	**6.9-9.8**

Smoking status									
Age Group (years)	Men								
	n	Current smoker				Non-smokers			
		% Daily	95% CI	% Non-daily	95% CI	% Former smoker	95% CI	% Never smoker	95% CI
18-29	469	5.7	3.2-8.2	2.1	0.4-3.9	6.9	4.3-9.6	85.3	81.6-88.9
30-44	451	10.9	7.1-14.8	4.2	0.9-7.4	7.8	4.8-10.8	77.1	72.2-82.0
45-69	506	20.4	15.7-25.1	2.1	0.7-3.4	19.4	15.7-23.2	58.1	52.2-64.0
18-69	**1426**	**12.2**	**9.8-14.7**	**2.7**	**1.4-4.0**	**11.5**	**9.5-13.4**	**73.6**	**70.4-76.7**

Smoking status									
Age Group (years)	Women								
	n	Current smoker				Non-smokers			
		% Daily	95% CI	% Non-daily	95% CI	% Former smoker	95% CI	% Never smoker	95% CI
18-29	750	0.5	0.1-0.9	0.3	0.0-0.6	1.4	0.3-2.5	97.8	96.6-99.0
30-44	816	1.7	0.5-2.8	0.6	0.1-1.1	2.3	1.1-3.6	95.4	93.6-97.2
45-69	702	3.1	1.8-4.5	1.4	0.3-2.5	6.3	4.0-8.7	89.1	86.2-92.1
18-69	**2268**	**1.7**	**1.1-2.3**	**0.7**	**0.3-1.1**	**3.2**	**2.3-4.1**	**94.3**	**93.1-95.6**

Smoking status									
Age Group (years)	Both Sexes								
	n	Current smoker				Non-smokers			
		% Daily	95% CI	% Non-daily	95% CI	% Former smoker	95% CI	% Never smoker	95% CI
18-29	1219	3.0	1.8-4.2	1.2	0.3-2.0	4.1	2.6-5.5	91.8	89.9-93.8
30-44	1267	5.7	3.8-7.6	2.2	0.7-3.6	4.7	3.3-6.2	87.4	84.9-90.0
45-69	1208	11.7	9.1-14.4	1.7	0.8-2.7	12.9	10.5-15.2	73.6	70.1-77.2
18-69	**3694**	**6.7**	**5.4-7.9**	**1.7**	**1.0-2.3**	**7.1**	**6.0-8.2**	**84.5**	**82.7-86.4**

Current daily smokers among smokers									
Age Group (years)	Men			Women			Both Sexes		
	n	% Daily smokers	95% CI	n	% Daily smokers	95% CI	n	% Daily smokers	95% CI
18-29	41	72.7	53.6-91.7	10	62.9	30.3-95.5	51	71.7	54.1-89.3
30-44	66	72.4	54.0-90.8	24	73.5	52.7-94.4	90	72.6	56.9-88.4
45-69	112	90.7	84.7-96.8	35	68.8	48.5-89.1	147	87.0	80.4-93.7
18-69	**219**	**81.8**	**74.1-89.6**	**69**	**69.6**	**56.2-83.0**	**288**	**80.0**	**73.0-86.9**

Mean age started smoking									
Age Group (years)	Men			Women			Both Sexes		
	n	Mean age	95% CI	n	Mean age	95% CI	n	Mean age	95% CI
18-29	33	17.5	16.0-19.0	6	20.8	-	39	17.8	16.3-19.2
30-44	54	21.2	19.2-23.2	17	21.1	-	71	21.2	19.4-22.9
45-69	98	25.0	21.6-28.4	27	23.5	-	125	24.8	21.8-27.8
18-69	**185**	**22.7**	**20.4-25.0**	**50**	**22.4**	**-**	**235**	**22.7**	**20.6-24.7**

Mean duration of smoking									
Age Group (years)	Men			Women			Both Sexes		
	n	Mean duration	95% CI	n	Mean duration	95% CI	n	Mean duration	95% CI
18-29	33	6.4	5.2-7.5	6	4.6	-	39	6.2	5.1-7.3
30-44	54	15.1	12.8-17.4	17	18.2	-	71	15.6	13.5-17.6
45-69	98	30.6	27.7-33.5	27	30.4	-	125	30.6	28.0-33.2
18-69	**185**	**22.3**	**19.7-24.9**	**50**	**23.8**	**-**	**235**	**22.5**	**20.2-24.8**

Manufactured cigarette smokers among daily smokers									
Age Group (years)	Men			Women			Both Sexes		
	n	% Manu-factured cigarette smoker	95% CI	n	% Manu-factured cigarette smoker	95% CI	n	% Manu-factured cigarette smoker	95% CI
18-29	33	77.9	57.4-98.3	4	39.3	0.0-95.9	37	75.5	56.1-94.8
30-44	51	80.2	67.1-93.3	17	47.4	21.8-73.0	68	74.7	62.4-87.1
45-69	100	71.6	61.3-82.0	25	21.6	1.9-41.4	125	65.4	55.1-75.8
18-69	**184**	**74.9**	**66.6-83.1**	**46**	**32.2**	**14.0-50.3**	**230**	**69.5**	**61.4-77.7**

Manufactured cigarette smokers among current smokers									
Age Group (years)	Men			Women			Both Sexes		
	n	% Manu-factured cigarette smoker	95% CI	n	% Manu-factured cigarette smoker	95% CI	n	% Manu-factured cigarette smoker	95% CI
18-29	41	82.8	67.1-98.5	7	23.7	0.0-63.0	48	78.5	63.5-93.4
30-44	62	80.9	68.3-93.4	23	37.6	12.8-62.3	85	73.1	61.1-85.1
45-69	112	70.4	60.1-80.6	33	16.4	2.3-30.6	145	61.7	51.3-72.1
18-69	**215**	**75.6**	**68.2-83.1**	**63**	**24.1**	**10.1-38.1**	**278**	**67.9**	**60.3-75.5**

Mean amount of tobacco used by daily smokers by type									
Age Group (years)	Men								
	n	Mean # of manufactured cig.	95% CI	n	Mean # of hand-rolled cig.	95% CI	n	Mean # of pipes of tobacco	95% CI
18-29	33	3.0	1.4-4.6	33	1.5	0.8-2.1	33	1.3	0.0-3.1
30-44	51	4.5	2.7-6.3	52	2.3	1.1-3.5	51	0.6	0.0-1.2
45-69	100	3.1	2.4-3.8	97	2.4	1.6-3.2	99	0.9	0.1-1.7
18-69	**184**	**3.4**	**2.7-4.2**	**182**	**2.2**	**1.6-2.8**	**183**	**0.9**	**0.3-1.5**

Mean amount of tobacco used by daily smokers by type									
Age Group (years)	Women								
	n	Mean # of cigars, cheerots, cigarillos	95% CI	n	Mean # of shisha sessions	95% CI	n	Mean # of other type of tobacco	95% CI
18-29	33	0.2	0.0-0.4	32	0.1	0.0-0.2	33	0.5	0.0-1.2
30-44	50	1.3	0.0-2.8	52	0.0	0.0-0.1	50	0.0	0.0-0.1
45-69	99	0.6	0.2-0.9	94	0.0	-	96	0.2	0.0-0.4
18-69	**182**	**0.7**	**0.2-1.1**	**178**	**0.0**	**0.0-0.0**	**179**	**0.2**	**0.0-0.4**

Mean amount of tobacco used by daily smokers by type									
Age Group (years)	Both Sexes								
	n	Mean # of manufactured cig.	95% CI	n	Mean # of hand-rolled cig.	95% CI	n	Mean # of pipes of tobacco	95% CI
18-29	37	2.9	1.4-4.4	38	1.6	0.9-2.3	37	1.3	0.0-3.0
30-44	68	4.0	2.4-5.6	68	2.1	1.1-3.2	69	0.7	0.2-1.2
45-69	125	2.7	2.1-3.4	122	2.3	1.6-3.0	125	0.9	0.2-1.6
18-69	**230**	**3.1**	**2.4-3.8**	**228**	**2.1**	**1.6-2.6**	**231**	**0.9**	**0.4-1.4**

Mean amount of tobacco used by daily smokers by type									
Age Group (years)	Both Sexes								
	n	Mean # of cigars, cheerots, cigarillos	95% CI	n	Mean # of shisha sessions	95% CI	n	Mean # of other type of tobacco	95% CI
18-29	38	0.2	0.0-0.4	37	0.1	0.0-0.2	37	0.5	0.0-1.1
30-44	67	1.3	0.0-2.5	69	0.0	0.0-0.0	68	0.0	0.0-0.1
45-69	124	0.5	0.2-0.8	121	0.0	-	122	0.2	0.0-0.4
18-69	**229**	**0.7**	**0.3-1.0**	**227**	**0.0**	**0.0-0.0**	**227**	**0.2**	**0.0-0.4**

Percentage of current smokers smoking each of the following products									
Age Group (years)	Men								
	n	% Manuf. cigs.	95% CI	n	% Hand-rolled cigs.	95% CI	n	% Pipes of tobacco	95% CI
18-29	41	82.8	67.1-98.5	41	45.7	26.0-65.5	41	24.2	5.8-42.6
30-44	62	80.9	68.3-93.4	63	45.1	29.6-60.6	63	25.1	6.6-43.7
45-69	112	70.4	60.1-80.6	109	49.3	36.6-61.9	111	14.8	7.8-21.8
18-69	**215**	**75.6**	**68.2-83.1**	**213**	**47.4**	**38.1-56.7**	**215**	**19.6**	**12.2-27.0**

Percentage of current smokers smoking each of the following products									
Age Group (years)	Men								
	n	% Cigars, cheroots, cigarillos	95% CI	n	% Shisha	95% CI	n	% Other	95% CI
18-29	41	14.4	0.0-32.1	39	4.8	0.0-11.6	41	13.1	0.0-30.5
30-44	62	10.5	0.0-23.7	64	4.2	0.0-10.5	62	10.2	0.0-26.8
45-69	111	14.0	5.3-22.6	106	0.0	0.0-0.0	108	8.0	1.5-14.6
18-69	**214**	**13.1**	**6.6-19.6**	**209**	**2.2**	**0.0-4.5**	**211**	**9.7**	**2.7-16.7**

Percentage of current smokers smoking each of the following products									
Age Group (years)	Women								
	n	% Manuf. cigs.	95% CI	n	% Hand-rolled cigs.	95% CI	n	% Pipes of tobacco	95% CI
18-29	7	23.7	0.0-63.0	8	29.6	0.0-66.7	8	56.7	22.7-90.7
30-44	23	37.6	12.8-62.3	22	47.5	24.6-70.4	23	35.9	15.7-56.2
45-69	33	16.4	2.3-30.6	32	66.0	46.2-85.7	32	25.0	9.0-41.1
18-69	**63**	**24.1**	**10.1-38.1**	**62**	**56.3**	**43.9-68.8**	**63**	**32.0**	**21.2-42.7**

Percentage of current smokers smoking each of the following products									
Age Group (years)	Women								
	n	% Cigars, cheroots, cigarillos	95% CI	n	% Shisha	95% CI	n	% Other	95% CI
18-29	9	0.0	0.0-0.0	9	0.0	0.0-0.0	8	12.9	0.0-37.4
30-44	23	28.5	2.6-54.4	23	3.3	0.0-10.3	24	12.6	0.0-27.4
45-69	33	14.0	0.3-27.7	35	0.0	0.0-0.0	33	11.2	0.0-23.7
18-69	**65**	**17.3**	**5.0-29.5**	**67**	**1.1**	**0.0-3.2**	**65**	**11.8**	**3.4-20.3**

Percentage of current smokers smoking each of the following products									
Age Group (years)	Both Sexes								
	n	% Manuf. cigs.	95% CI	n	% Hand-rolled cigs.	95% CI	n	% Pipes of tobacco	95% CI
18-29	48	78.5	63.5-93.4	49	44.4	25.5-63.3	49	26.8	10.0-43.7
30-44	85	73.1	61.1-85.1	85	45.5	31.9-59.1	86	26.9	11.3-42.5
45-69	145	61.7	51.3-72.1	141	52.0	40.6-63.4	143	16.4	9.7-23.0
18-69	**278**	**67.9**	**60.3-75.5**	**275**	**48.7**	**40.3-57.2**	**278**	**21.4**	**15.0-27.8**

Percentage of current smokers smoking each of the following products									
Age Group (years)	Both Sexes								
	n	% Cigars, cheroots, cigarillos	95% CI	n	% Shisha	95% CI	n	% Other	95% CI
18-29	50	13.2	0.0-29.4	48	4.3	0.0-10.4	49	13.1	0.0-29.2
30-44	85	13.5	1.4-25.6	87	4.1	0.0-9.5	86	10.6	0.0-24.6
45-69	144	14.0	6.3-21.6	141	0.0	0.0-0.0	141	8.6	2.8-14.3
18-69	**279**	**13.7**	**7.8-19.6**	**276**	**2.0**	**0.0-4.0**	**276**	**10.0**	**3.9-16.1**

Percentage of daily smokers smoking given quantities of manufactured or hand-rolled cigarettes per day											
Age Group (years)	Men										
	n	% <5 Cigs.	95% CI	% 5-9 Cigs.	95% CI	% 10-14 Cigs.	95% CI	% 15-24 Cigs.	95% CI	% ≥ 25 Cigs.	95% CI
18-29	31	73.7	57.5-90.0	12.6	1.6-23.7	8.0	0.0-16.5	5.6	0.0-13.6	0.0	0.0-0.0
30-44	50	39.3	17.5-61.2	31.3	12.4-50.2	17.9	6.8-29.0	10.9	0.0-23.6	0.5	0.0-1.6
45-69	86	53.4	38.7-68.0	29.0	16.0-42.0	11.1	4.6-17.6	6.0	1.0-11.1	0.5	0.0-1.6
18-69	**167**	**53.1**	**43.3-62.9**	**26.8**	**18.3-35.2**	**12.4**	**7.1-17.8**	**7.3**	**2.3-12.2**	**0.4**	**0.0-1.1**

Percentage of daily smokers smoking given quantities of manufactured or hand-rolled cigarettes per day											
Age Group (years)	Women										
	n	% <5 Cigs.	95% CI	% 5-9 Cigs.	95% CI	% 10-14 Cigs.	95% CI	% 15-24 Cigs.	95% CI	% ≥ 25 Cigs.	95% CI
18-29	1	0.0	0.0-0.0	0.0	0.0-0.0	100.0	100.0-100.0	0.0	0.0-0.0	-	-
30-44	10	81.0	52.3-100.0	14.0	0.0-41.7	5.0	0.0-15.7	0.0	0.0-0.0	-	-
45-69	20	96.0	87.8-100.0	0.0	0.0-0.0	0.0	0.0-0.0	4.0	0.0-12.2	-	-
18-69	**31**	**87.0**	**72.4-100.0**	**4.6**	**0.0-14.2**	**5.9**	**0.0-15.4**	**2.5**	**0.0-7.9**	**-**	**-**

Percentage of daily smokers smoking given quantities of manufactured or hand-rolled cigarettes per day											
Age Group (years)	Both Sexes										
	n	% <5 Cigs.	95% CI	% 5-9 Cigs.	95% CI	% 10-14 Cigs.	95% CI	% 15-24 Cigs.	95% CI	% ≥ 25 Cigs.	95% CI
18-29	32	71.7	55.1-88.4	12.3	1.6-23.0	10.5	0.8-20.3	5.4	0.0-13.2	0.0	0.0-0.0
30-44	60	44.3	24.5-64.2	29.2	12.3-46.1	16.4	6.5-26.3	9.6	0.0-20.9	0.5	0.0-1.4
45-69	106	58.2	45.3-71.0	25.7	14.4-37.1	9.8	4.1-15.6	5.8	1.2-10.4	0.5	0.0-1.4
18-69	**198**	**56.5**	**47.5-65.5**	**24.5**	**17.0-32.1**	**11.8**	**7.0-16.6**	**6.8**	**2.3-11.3**	**0.4**	**0.0-1.0**

Former daily smokers (who don't smoke currently) among all respondents									
Age Group (years)	Men			Women			Both Sexes		
	n	% Former daily smokers	95% CI	n	% Former daily smokers	95% CI	n	% Former daily smokers	95% CI
18-29	469	3.1	1.4-4.9	750	0.4	0.0-0.8	1219	1.7	0.8-2.6
30-44	451	5.7	2.4-9.1	816	1.1	0.2-1.9	1267	3.1	1.5-4.7
45-69	506	16.6	13.1-20.0	702	4.9	2.9-6.9	1208	10.7	8.7-12.8
18-69	**1426**	**8.5**	**6.9-10.1**	**2268**	**2.0**	**1.3-2.7**	**3694**	**5.1**	**4.2-5.9**

Former daily smokers (who don't smoke currently) among ever daily smokers									
Age Group (years)	Men			Women			Both Sexes		
	n	% Former daily smokers	95% CI	n	% Former daily smokers	95% CI	n	% Former daily smokers	95% CI
18-29	48	35.6	18.6-52.7	11	46.3	13.5-79.0	59	36.7	20.8-52.6
30-44	77.0	34.4	17.8-51.1	25	38.9	13.9-63.8	102	35.2	20.9-49.5
45-69	185.0	44.8	36.8-52.8	61	61.2	48.5-73.9	246	47.7	40.5-55.0
18-69	**310.0**	**40.9**	**34.5-47.3**	**97**	**54.3**	**43.1-65.5**	**407**	**43.1**	**37.4-48.9**

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
18-29	36	3.6	-	10	9.2	1.4-17.1	46	4.6	-
30-44	37	12.9	-	18	12.2	7.9-16.4	55	12.7	-
45-69	100	21.1	-	47	20.0	14.4-25.6	147	20.8	-
18-69	**173**	**15.6**	**-**	**75**	**16.4**	**12.7-20.2**	**248**	**15.8**	**-**

Current smokers who have tried to stop smoking									
Age Group (years)	Men			Women			Both Sexes		
	n	% Tried to stop smoking	95% CI	n	% Tried to stop smoking	95% CI	n	% Tried to stop smoking	95% CI
18-29	41	58.0	38.7-77.2	10	48.8	14.3-83.2	51	57.1	39.6-74.6
30-44	66	58.3	42.4-74.2	24	47.4	16.3-78.5	90	56.5	42.0-71.0
45-69	112	29.0	19.1-38.9	35	45.9	23.9-67.9	147	31.8	22.8-40.8
18-69	**219**	**43.2**	**33.6-52.9**	**69**	**46.7**	**29.8-63.5**	**288**	**43.8**	**35.3-52.2**

Current smokers who have been advised by doctor to stop smoking									
Age Group (years)	Men			Women			Both Sexes		
	n	% Advised to stop smoking	95% CI	n	% Advised to stop smoking	95% CI	n	% Advised to stop smoking	95% CI
18-29	32	14.4	2.4-26.4	9	24.9	8.2-41.6	41	15.6	3.8-27.5
30-44	52	24.1	4.3-43.9	21	19.6	2.1-37.2	73	23.4	6.5-40.3
45-69	89	33.5	19.3-47.7	32	30.1	9.8-50.4	121	32.9	20.8-45.0
18-69	**173**	**27.2**	**16.9-37.4**	**62**	**26.6**	**13.7-39.5**	**235**	**27.1**	**18.3-35.9**

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
18-29	469	3.6	1.9-5.4	750	1.0	0.1-2.0	1219	2.3	1.3-3.3
30-44	451	4.1	2.1-6.0	816	1.6	0.6-2.6	1267	2.7	1.6-3.7
45-69	506	4.4	2.4-6.4	702	2.7	1.2-4.2	1208	3.6	2.3-4.8
18-69	**1426**	**4.0**	**2.8-5.3**	**2268**	**1.7**	**0.8-2.7**	**3694**	**2.8**	**2.0-3.7**

Smokeless tobacco use									
	Men								
Age Group (years)	n	Current user				Non user			
		% Daily	95% CI	% Non-daily	95% CI	% Past user	95% CI	% Never used	95% CI
18-29	469	2.2	0.7-3.7	1.4	0.4-2.4	4.4	2.1-6.8	91.9	89.0-94.8
30-44	451	2.4	0.9-3.9	1.7	0.5-2.9	5.4	1.5-9.3	90.5	86.4-94.6
45-69	506	2.6	1.1-4.2	1.8	0.4-3.1	3.5	1.1-5.9	92.1	88.9-95.2
18-69	**1426**	**2.4**	**1.4-3.4**	**1.6**	**0.8-2.4**	**4.4**	**2.6-6.2**	**91.6**	**89.4-93.7**

Smokeless tobacco use									
	Women								
Age Group (years)	n	Current user				Non user			
		% Daily	95% CI	% Non-daily	95% CI	% Past user	95% CI	% Never used	95% CI
18-29	750	0.7	0.0-1.5	0.3	0.0-0.6	1.1	0.0-2.5	97.8	96.2-99.5
30-44	816	1.2	0.4-2.1	0.3	0.0-0.8	0.7	0.0-1.4	97.8	96.6-99.0
45-69	702	2.3	0.9-3.6	0.5	0.0-1.0	2.3	0.8-3.8	94.9	92.8-97.0
18-69	**2268**	**1.4**	**0.5-2.2**	**0.4**	**0.1-0.6**	**1.3**	**0.6-2.0**	**96.9**	**95.8-98.1**

Smokeless tobacco use									
Age Group (years)	Both Sexes								
	n	Current user				Non user			
		% Daily	95% CI	% Non-daily	95% CI	% Past user	95% CI	% Never used	95% CI
18-29	1219	1.4	0.6-2.3	0.8	0.3-1.4	2.7	1.4-4.0	95.0	93.3-96.7
30-44	1267	1.7	0.9-2.6	0.9	0.4-1.5	2.7	0.9-4.5	94.6	92.6-96.6
45-69	1208	2.5	1.4-3.5	1.1	0.4-1.8	2.9	1.5-4.3	93.5	91.6-95.4
18-69	**3694**	**1.9**	**1.2-2.6**	**1.0**	**0.6-1.4**	**2.8**	**1.8-3.7**	**94.4**	**93.2-95.6**

Former daily smokeless tobacco users (who don't use tobacco currently) among all respondents									
Age Group (years)	Men			Women			Both Sexes		
	n	% Former daily users	95% CI	n	% Former daily users	95% CI	n	% Former daily users	95% CI
18-29	469	3.5	1.2-5.8	750	0.3	0.0-0.6	1219	1.8	0.7-3.0
30-44	451	3.4	0.3-6.4	816	0.6	0.0-1.3	1267	1.8	0.4-3.2
45-69	506	3.5	1.0-6.0	702	1.4	0.1-2.7	1208	2.5	1.1-3.9
18-69	**1426**	**3.5**	**1.8-5.2**	**2268**	**0.8**	**0.3-1.2**	**3694**	**2.0**	**1.2-2.9**

Former daily smokeless tobacco users (who don’t use tobacco currently) among ever daily users									
Age Group (years)	Men			Women			Both Sexes		
	n	% Former daily users	95% CI	n	% Former daily users	95% CI	n	% Former daily users	95% CI
18-29	28	61.2	37.6-84.8	12	29.1	2.2-56.0	40	56.1	34.2-78.0
30-44	25	58.4	30.2-86.6	22	34.2	6.2-62.2	47	51.3	27.7-74.9
45-69	32	57.0	36.9-77.0	28	38.5	12.8-64.2	60	50.0	34.2-65.8
18-69	**85**	**58.9**	**42.8-74.9**	**62**	**35.7**	**17.6-53.7**	**147**	**52.2**	**38.4-66.1**

Mean times per day smokeless tobacco used by daily smokeless tobacco users by type									
Age Group (years)	Men								
	n	Snuff by mouth	95% CI	n	Snuff by nose	95% CI	n	Chewing tobacco	95% CI
18-29	14	1.3	0.1-2.5	14	3.3	1.7-4.8	14	0.2	0.0-0.4
30-44	12	1.8	0.0-3.9	13	4.1	0.6-7.7	14	0.3	0.0-0.8
45-69	16	5.0	0.0-11.2	16	3.4	0.7-6.1	15	0.0	-
18-69	**42**	**2.9**	**0.1-5.7**	**43**	**3.5**	**1.6-5.5**	**43**	**0.1**	**0.0-0.3**

Mean times per day smokeless tobacco used by daily smokeless tobacco users by type									
Age Group (years)	Women								
	n	Snuff by mouth	95% CI	n	Snuff by nose	95% CI	n	Chewing tobacco	95% CI
18-29	6	1.1	0.5-1.8	7	0.7	0.1-1.3	8	0.8	0.0-1.5
30-44	12	2.6	1.3-4.0	17	0.7	0.2-1.2	15	0.9	0.0-2.5
45-69	19	0.8	0.0-1.6	19	2.2	0.7-3.7	19	1.4	0.4-2.4
18-69	**37**	**1.4**	**0.8-2.0**	**43**	**1.5**	**0.8-2.2**	**42**	**1.1**	**0.3-2.0**

Mean times per day smokeless tobacco used by daily smokeless tobacco users by type									
Age Group (years)	Both Sexes								
	n	Snuff by mouth	95% CI	n	Snuff by nose	95% CI	n	Chewing tobacco	95% CI
18-29	20	1.2	0.3-2.2	21	2.6	1.5-3.7	22	0.3	0.0-0.6
30-44	24	2.1	0.7-3.5	30	2.7	0.6-4.7	29	0.5	0.0-1.2
45-69	35	3.1	0.0-6.9	35	2.8	1.3-4.4	34	0.7	0.1-1.2
18-69	**79**	**2.3**	**0.5-4.1**	**86**	**2.7**	**1.5-4.0**	**85**	**0.5**	**0.2-0.9**

Percentage of current users of smokeless tobacco using each of the following products									
Age Group (years)	Men								
	n	% Snuff by mouth	95% CI	% Snuff by nose	95% CI	% Chewing tobacco	95% CI	% other	95% CI
18-29	22	42.3	17.0-67.6	65.8	42.4-89.2	21.2	1.0-41.5	10.9	0.0-24.7
30-44	21	52.1	27.8-76.3	66.1	44.8-87.4	12.2	0.0-28.1	0.0	0.0-0.0
45-69	23	48.2	24.6-71.7	43.1	19.8-66.5	5.8	0.0-17.0	0.0	0.0-0.0
18-69	**66**	**47.3**	**32.5-62.0**	**57.3**	**44.0-70.5**	**12.9**	**4.0-21.8**	**3.7**	**0.0-8.6**

Percentage of current users of smokeless tobacco using each of the following products									
Age Group (years)	Women								
	n	% Snuff by mouth	95% CI	% Snuff by nose	95% CI	% Chewing tobacco	95% CI	% other	95% CI
18-29	10	63.6	42.4-84.8	40.0	12.2-67.7	26.2	5.2-47.3	8.7	0.0-27.4
30-44	15	69.7	45.4-94.0	24.5	6.8-42.1	16.6	0.0-35.7	13.3	0.0-29.4
45-69	24	31.1	10.5-51.7	44.8	18.8-70.8	49.1	24.0-74.3	18.1	0.4-35.8
18-69	**49**	**49.0**	**35.0-63.1**	**37.0**	**21.0-53.1**	**33.6**	**17.1-50.0**	**14.5**	**2.1-26.8**

Percentage of current users of smokeless tobacco using each of the following products									
Age Group (years)	Both Sexes								
	n	% Snuff by mouth	95% CI	% Snuff by nose	95% CI	% Chewing tobacco	95% CI	% other	95% CI
18-29	32	46.5	26.3-66.7	60.1	42.1-78.1	22.4	6.0-38.7	10.4	0.0-21.5
30-44	36	57.8	37.5-78.2	51.6	35.7-67.5	13.6	1.4-25.8	4.6	0.0-11.2
45-69	47	41.9	23.9-59.9	43.7	26.1-61.4	21.2	6.5-35.8	6.4	0.0-12.9
18-69	**115**	**47.8**	**35.5-60.2**	**50.9**	**40.7-61.1**	**19.2**	**11.0-27.3**	**7.1**	**2.2-12.0**

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
18-29	469	10.1	6.9-13.3	750	1.5	0.4-2.5	1219	5.6	4.0-7.3
30-44	451	17.7	13.1-22.3	816	3.3	1.7-4.9	1267	9.6	7.2-12.0
45-69	506	24.4	19.4-29.4	702	6.7	4.4-9.0	1208	15.5	12.7-18.4
18-69	**1426**	**17.2**	**14.5-20.0**	**2268**	**3.7**	**2.5-4.9**	**3694**	**10.1**	**8.6-11.6**

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
18-29	469	7.2	4.4-10.0	750	1.2	0.2-2.1	1219	4.1	2.6-5.5
30-44	451	12.6	8.7-16.6	816	2.7	1.2-4.1	1267	7.0	5.0-9.1
45-69	506	21.3	16.6-26.1	702	5.2	3.2-7.3	1208	13.3	10.5-16.0
18-69	**1426**	**13.6**	**11.1-16.1**	**2268**	**2.9**	**1.8-4.0**	**3694**	**8.0**	**6.6-9.3**

Exposed to second-hand tobacco smoke in home during the past 30 days									
Age Group (years)	Men			Women			Both Sexes		
	n	% Exposed	95% CI	n	% Exposed	95% CI	n	% Exposed	95% CI
18-29	469	30.5	25.0-36.1	750	28.0	23.9-32.1	1219	29.2	25.8-32.6
30-44	451	33.3	27.4-39.1	816	27.7	23.7-31.7	1267	30.1	26.9-33.4
45-69	506	32.3	27.4-37.2	702	27.3	23.0-31.7	1208	29.8	26.6-33.1
18-69	**1426**	**31.9**	**28.5-35.4**	**2268**	**27.7**	**25.3-30.1**	**3694**	**29.7**	**27.5-31.9**

Exposed to second-hand tobacco smoke in the workplace during the past 30 days									
Age Group (years)	Men			Women			Both Sexes		
	n	% Exposed	95% CI	n	% Exposed	95% CI	n	% Exposed	95% CI
18-29	390	58.4	51.4-65.4	609	38.3	32.9-43.6	999	47.9	43.2-52.7
30-44	372	60.1	53.8-66.4	653	45.8	40.9-50.6	1025	52.1	48.0-56.3
45-69	412	53.6	47.0-60.2	557	41.8	36.4-47.2	969	47.8	43.3-52.4
18-69	**1174**	**57.3**	**52.9-61.7**	**1819**	**41.9**	**38.6-45.2**	**2993**	**49.3**	**46.0-52.5**

Alcohol consumption

The response to consumption of alcohol consumption is displayed in the tables below. Overall, 58.4% (95% CI: 55.9 – 60.8) reported ever consuming alcohol; with an overall 10.9% (95% CI: 8.9 – 12.9); distributed as 13.4% (10.6 – 16.3) in men and 6.8% (4.5 – 9.1). Both urban and rural responses were similar: 57.6% (95% CI: 52.8 – 62.3) participants living in the urban area responded yes to ever consuming alcohol; 58.7% (95% CI: 55.9 – 61.6) participants living in the rural area responded yes to consumption of alcohol in their lifetime. Details of alcohol consumption are detailed below.

Alcohol consumption status									
	Men								
Age Group (years)	n	% Current drinker (past 30 days)	95% CI	% Drank in past 12 months, not current	95% CI	% Past 12 months abstainer	95% CI	% Lifetime abstainer	95% CI
18-29	469	36.6	31.5-41.8	12.8	9.0-16.7	8.8	6.0-11.6	41.7	35.7-47.8
30-44	451	47.5	41.1-53.9	6.1	3.3-8.9	17.2	13.4-21.0	29.2	23.3-35.0
45-69	506	50.4	44.5-56.4	6.8	4.2-9.4	18.6	13.6-23.6	24.1	19.3-29.0
18-69	1426	44.6	41.0-48.2	8.8	6.9-10.6	14.6	12.4-16.9	32.0	28.6-35.4

Alcohol consumption status									
	Women								
Age Group (years)	n	% Current drinker (past 30 days)	95% CI	% Drank in past 12 months, not current	95% CI	% Past 12 months abstainer	95% CI	% Lifetime abstainer	95% CI
18-29	750	13.4	9.7-17.0	12.8	9.7-15.9	14.5	11.8-17.3	59.3	54.5-64.1
30-44	816	21.7	17.8-25.7	9.5	7.3-11.8	21.2	16.9-25.4	47.6	43.1-52.0
45-69	702	22.7	18.9-26.4	9.1	6.3-11.9	25.6	21.5-29.6	42.7	37.9-47.5
18-69	**2268**	**19.1**	**16.7-21.5**	**10.5**	**8.8-12.2**	**20.2**	**17.7-22.6**	**50.2**	**47.4-53.0**

Alcohol consumption status									
	Both Sexes								
Age Group (years)	n	% Current drinker (past 30 days)	95% CI	% Drank in past 12 months, not current	95% CI	% Past 12 months abstainer	95% CI	% Lifetime abstainer	95% CI
18-29	1219	24.5	21.1-27.9	12.8	10.2-15.4	11.8	9.8-13.7	50.9	46.9-54.9
30-44	1267	33.0	29.0-37.1	8.0	6.3-9.8	19.4	16.4-22.5	39.5	35.8-43.2
45-69	1208	36.5	32.5-40.5	7.9	6.1-9.8	22.1	18.7-25.5	33.5	29.7-37.2
18-69	**3694**	**31.1**	**28.6-33.6**	**9.7**	**8.4-11.0**	**17.6**	**15.7-19.4**	**41.6**	**39.1-44.1**

Stopping drinking due to health reasons									
	Men			Women			Both Sexes		
Age Group (years)	n	% stopping due to health reasons	95% CI	n	% stopping due to health reasons	95% CI	n	% stopping due to health reasons	95% CI
18-29	49	28.8	12.7-44.9	111	5.7	1.6-9.9	160	14.0	7.0-20.9
30-44	71	15.6	5.2-26.0	153	22.9	12.9-32.9	224	20.1	11.3-28.9
45-69	89	36.3	18.2-54.4	172	25.0	17.3-32.8	261	29.7	20.6-38.9
18-69	**209**	**27.4**	**17.3-37.6**	**436**	**19.4**	**15.1-23.6**	**645**	**22.5**	**17.9-27.2**

Frequency of alcohol consumption in the past 12 months													
	Men												
Age Group (years)	n	% Daily	95% CI	% 5-6 days/ week	95% CI	% 3-4 days/ week	95% CI	% 1-2 days/ week	95% CI	% 1-3 days/ month	95% CI	% < once a month	95% CI
18-29	44	6.0	1.8-10.1	3.4	0.2-6.6	13.9	8.9-18.8	28.2	21.5-34.9	20.3	13.6-26.9	25.7	18.1-33.2
30-44	38	17.1	11.1-23.1	4.8	2.2-7.4	14.4	9.7-19.1	32.0	24.7-39.3	15.4	9.8-21.0	15.1	9.3-21.0
45-69	39	17.3	12.3-22.2	7.7	3.1-12.3	20.5	15.2-25.7	24.4	18.8-30.0	11.6	7.9-15.3	14.6	9.7-19.5
18-69	**121**	**13.4**	**10.6-16.3**	**5.4**	**3.3-7.5**	**16.4**	**13.4-19.4**	**27.9**	**24.1-31.7**	**15.6**	**13.0-18.3**	**18.5**	**15.0-21.9**

Frequency of alcohol consumption in the past 12 months													
	Women												
Age Group (years)	n	% Daily	95% CI	% 5-6 days/ week	95% CI	% 3-4 days/ week	95% CI	% 1-2 days/ week	95% CI	% 1-3 days/ month	95% CI	% < once a month	95% CI
18-29	41	1.6	0.2-3.1	3.6	0.2-7.0	2.3	0.5-4.0	17.1	41	23.5	15.4-31.6	46.7	37.2-56.3
30-44	53	7.3	3.4-11.2	0.5	0.0-1.1	6.1	3.0-9.2	25.1	53	18.3	12.9-23.8	39.9	32.4-47.4
45-69	51	11.3	5.9-16.7	2.8	0.2-5.3	10.9	5.7-16.1	16.2	51	23.4	16.7-30.2	31.5	23.7-39.3
18-69	**145**	**6.8**	**4.5-9.1**	**2.2**	**0.7-3.7**	**6.5**	**4.3-8.6**	**19.7**	**145**	**21.6**	**17.9-25.3**	**39.3**	**34.3-44.3**

Frequency of alcohol consumption in the past 12 months													
	Both Sexes												
Age Group (years)	n	% Daily	95% CI	% 5-6 days/ week	95% CI	% 3-4 days / week	95% CI	% 1-2 days/ week	95% CI	% 1-3 days/ month	95% CI	% < once a month	95% CI
18-29	85	4.4	1.7-7.0	3.5	1.2-5.8	9.6	6.4-12.9	24.1	19.3-29.0	21.5	16.0-26.9	33.4	27.0-39.7
30-44	91	12.9	9.0-16.8	3.0	1.5-4.5	10.8	7.8-13.9	29.0	24.0-34.1	16.7	12.8-20.5	25.7	21.0-30.5
45-69	90	15.1	11.4-18.9	5.9	2.8-9.1	17.0	13.2-20.9	21.5	17.4-25.5	15.8	12.5-19.2	20.6	16.1-25.1
18-69	**266**	**10.9**	**8.9-12.9**	**4.2**	**2.8-5.6**	**12.6**	**10.6-14.6**	**24.8**	**22.0-27.5**	**17.9**	**15.6-20.3**	**26.4**	**23.4-29.5**

Mean number of drinking occasions in the past 30 days among current (past 30 days) drinkers									
Age Group (years)	Men			Women			Both Sexes		
	n	Mean	95% CI	n	Mean	95% CI	n	Mean	95% CI
18-29	159	6.7	5.5-7.8	97	4.5	2.9-6.0	256	6.0	5.1-6.9
30-44	205	9.6	8.2-11.1	168	5.7	4.5-6.8	373	8.2	7.1-9.2
45-69	238	10.9	9.4-12.4	154	7.6	5.7-9.4	392	9.9	8.7-11.1
18-69	**602**	**9.3**	**8.4-10.2**	**419**	**6.1**	**5.1-7.1**	**1021**	**8.2**	**7.5-9.0**

Mean number of standard drinks per drinking occasion among current (past 30 days) drinkers									
Age Group (years)	Men			Women			Both Sexes		
	n	Mean	95% CI	n	Mean	95% CI	n	Mean	95% CI
18-29	162	3.0	2.3-3.8	94	2.2	1.5-2.8	256	2.8	2.2-3.3
30-44	204	4.4	3.4-5.4	168	2.5	2.1-3.0	372	3.7	3.0-4.3
45-69	241	3.7	3.0-4.5	151	3.0	2.3-3.7	392	3.5	2.9-4.1
18-69	**607**	**3.7**	**3.3-4.2**	**413**	**2.6**	**2.2-3.0**	**1020**	**3.4**	**3.0-3.7**

Drinking at high-end level among all respondents (≥60g of pure alcohol on average per occasion among men and ≥40g of pure alcohol on average per occasion among women)									
Age Group (years)	Men			Women			Both Sexes		
	n	% ≥60g	95% CI	n	% ≥40g	95% CI	n	% high-end level	95% CI
18-29	292	4.0	1.3-6.6	643	1.4	0.5-2.4	935	2.6	1.3-4.0
30-44	228	9.2	5.1-13.3	638	3.2	1.8-4.6	866	5.8	3.7-8.0
45-69	247	5.7	3.4-8.0	535	4.5	2.5-6.5	782	5.1	3.6-6.6
18-69	**767**	**6.1**	**4.2-8.0**	**1816**	**3.0**	**2.0-3.9**	**2583**	**4.4**	**3.3-5.6**

Drinking at intermediate level among all respondents (40-59.9g of pure alcohol on average per occasion among men and 20-39.9g of pure alcohol on average per occasion among women)									
Age Group (years)	Men			Women			Both Sexes		
	n	% 40-59.9g	95% CI	n	% 20-39.9g	95% CI	n	% intermediate level	95% CI
18-29	292	3.1	0.9-5.3	643	3.7	2.0-5.5	935	3.4	2.0-4.8
30-44	228	5.0	2.6-7.3	638	7.8	5.3-10.3	866	6.6	4.8-8.4
45-69	247	5.7	3.6-7.9	535	7.3	5.0-9.5	782	6.5	4.8-8.2
18-69	**767**	**4.5**	**3.3-5.8**	**1816**	**6.2**	**4.9-7.4**	**2583**	**5.4**	**4.5-6.4**

Drinking at lower-end level among all respondents (<40g of pure alcohol on average per occasion among men and <20g of pure alcohol on average per occasion among women)									
Age Group (years)	Men			Women			Both Sexes		
	n	% <40g	95% CI	n	% <20g	95% CI	n	% lower-end level	95% CI
18-29	292	27.1	22.4-31.8	643	6.7	4.1-9.3	935	16.4	13.7-19.0
30-44	228	31.6	26.3-36.9	638	9.9	7.4-12.5	866	19.3	16.2-22.4
45-69	247	37.0	31.4-42.6	535	9.3	6.7-11.8	782	23.0	19.6-26.3
18-69	**767**	**31.8**	**28.8-34.9**	**1816**	**8.6**	**7.0-10.2**	**2583**	**19.4**	**17.5-21.4**

High-end, intermediate, and lower-end level drinking among current (past 30 days) drinkers							
	Men						
Age Group (years)	n	% high-end (≥60g)	95% CI	% intermediate (40-59.9g)	95% CI	% lower-end (<40g)	95% CI
18-29	162	11.6	4.3-18.9	9.0	3.0-15.1	79.4	70.5-88.2
30-44	204	20.1	12.3-28.0	10.9	5.9-15.9	69.0	60.8-77.2
45-69	241	11.7	7.2-16.3	11.8	7.6-16.0	76.5	70.6-82.4
18-69	**607**	**14.4**	**10.3-18.5**	**10.7**	**8.0-13.5**	**74.9**	**70.5-79.4**

High-end, intermediate, and lower-end level drinking among current (past 30 days) drinkers							
	Women						
Age Group (years)	n	% high-end (≥40g)	95% CI	% intermediate (20-39.9g)	95% CI	% lower-end (<20g)	95% CI
18-29	94	12.1	4.8-19.4	31.3	19.8-42.7	56.7	43.1-70.2
30-44	168	15.4	9.2-21.5	37.2	27.9-46.4	47.5	38.1-56.8
45-69	151	21.5	12.9-30.0	34.5	25.3-43.7	44.0	34.7-53.4
18-69	**413**	**16.8**	**12.2-21.4**	**34.8**	**29.3-40.4**	**48.4**	**42.0-54.8**

High-end, intermediate, and lower-end level drinking among current (past 30 days) drinkers							
	Both sexes						
Age Group (years)	n	% high-end	95% CI	% intermediate	95% CI	% lower-end	95% CI
18-29	256	11.7	6.2-17.3	15.3	9.7-20.8	73.0	65.7-80.3
30-44	372	18.3	12.5-24.1	20.7	15.3-26.1	60.9	54.4-67.5
45-69	392	14.7	10.6-18.9	18.8	14.3-23.3	66.5	61.0-72.0
18-69	**1020**	**15.2**	**11.8-18.5**	**18.5**	**15.6-21.4**	**66.3**	**62.4-70.3**

Mean maximum number of standard 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
18-29	157	3.7	3.0-4.4	96	2.1	1.7-2.4	253	3.2	2.7-3.7
30-44	201	5.1	4.1-6.1	169	3.2	2.5-3.9	370	4.4	3.7-5.1
45-69	236	4.8	4.0-5.6	152	3.1	2.5-3.7	388	4.3	3.7-4.9
18-69	**594**	**4.6**	**4.0-5.1**	**417**	**2.9**	**2.5-3.3**	**1011**	**4.0**	**3.6-4.4**

Six or more drinks on a single occasion at least once during the past 30 days among total population									
Age Group (years)	Men			Women			Both Sexes		
	n	% ≥ 6 drinks	95% CI	n	% ≥ 6 drinks	95% CI	n	% ≥ 6 drinks	95% CI
18-29	451	10.3	6.8-13.9	738	1.3	0.6-2.1	1189	5.6	3.8-7.3
30-44	425	14.5	9.5-19.4	805	3.5	2.1-4.8	1230	8.2	5.8-10.6
45-69	483	13.9	10.2-17.7	684	5.1	3.3-6.9	1167	9.4	7.4-11.5
18-69	**1359**	**12.8**	**10.3-15.3**	**2227**	**3.2**	**2.4-4.0**	**3586**	**7.7**	**6.4-8.9**

Mean number of times with six or more drinks during a single occasion in the past 30 days among current drinkers									
Age Group (years)	Men			Women			Both Sexes		
	n	Mean number of times	95% CI	n	Mean number of times	95% CI	n	Mean number of times	95% CI
18-29	159	0.9	0.5-1.2	95	0.4	0.0-0.7	254	0.7	0.5-1.0
30-44	197	2.2	1.1-3.2	167	0.5	0.3-0.8	364	1.6	0.9-2.2
45-69	236	2.0	1.2-2.8	149	1.1	0.5-1.7	385	1.7	1.2-2.3
18-69	**592**	**1.7**	**1.3-2.2**	**411**	**0.7**	**0.4-1.0**	**1003**	**1.4**	**1.1-1.7**

Frequency of alcohol consumption in the past 7 days											
Age Group (years)	Men										
	n	% Daily	95% CI	% 5-6 days	95% CI	% 3-4 days	95% CI	% 1-2 days	95% CI	% 0 days	95% CI
18-29	170	5.7	0.4-11.0	7.9	4.2-11.7	14.9	9.3-20.5	59.8	51.3-68.4	11.6	6.1-17.1
30-44	215	16.5	10.6-22.4	8.0	3.9-12.1	21.1	14.7-27.5	43.0	34.8-51.2	11.5	4.5-18.4
45-69	250	19.7	14.2-25.2	13.4	8.5-18.4	24.3	17.8-30.8	37.0	30.4-43.7	5.6	2.6-8.5
18-69	**635**	**14.5**	**11.2-17.9**	**10.1**	**7.5-12.6**	**20.5**	**16.9-24.1**	**45.7**	**41.0-50.3**	**9.2**	**6.1-12.4**

Frequency of alcohol consumption in the past 7 days											
Age Group (years)	Women										
	n	% Daily	95% CI	% 5-6 days	95% CI	% 3-4 days	95% CI	% 1-2 days	95% CI	% 0 days	95% CI
18-29	99	7.1	0.4-13.8	3.0	0.0-6.2	11.8	5.3-18.3	44.7	31.0-58.5	33.4	22.0-44.8
30-44	173	8.1	2.7-13.5	6.8	2.9-10.7	11.2	5.3-17.2	54.4	45.0-63.8	19.4	12.1-26.8
45-69	160	13.9	7.3-20.5	8.1	2.5-13.7	20.0	13.5-26.6	40.6	31.1-50.1	17.4	11.1-23.8
18-69	**432**	**10.0**	**6.5-13.5**	**6.4**	**3.7-9.1**	**14.6**	**10.9-18.4**	**47.0**	**40.6-53.4**	**22.0**	**17.2-26.7**

Frequency of alcohol consumption in the past 7 days											
Age Group (years)	Both Sexes										
	n	% Daily	95% CI	% 5-6 days	95% CI	% 3-4 days	95% CI	% 1-2 days	95% CI	% 0 days	95% CI
18-29	269	6.1	1.7-10.5	6.6	3.8-9.4	14.0	9.5-18.6	55.7	48.1-63.3	17.6	12.3-22.9
30-44	388	13.4	9.2-17.6	7.5	4.5-10.6	17.5	12.8-22.2	47.2	40.9-53.5	14.4	8.7-20.1
45-69	410	17.8	13.4-22.3	11.7	7.9-15.5	23.0	18.4-27.6	38.2	32.8-43.5	9.3	6.4-12.1
18-69	**1067**	**13.1**	**10.5-15.6**	**8.9**	**6.9-10.8**	**18.6**	**16.0-21.3**	**46.1**	**42.5-49.7**	**13.3**	**10.6-16.1**

Mean number of standard drinks consumed on average per day in the past 7 days among current drinkers									
Age Group (years)	Men			Women			Both Sexes		
	n	Mean number	95% CI	n	Mean number	95% CI	n	Mean number	95% CI
18-29	170	0.7	0.5-0.9	99	0.3	0.2-0.4	269	0.6	0.5-0.8
30-44	215	1.2	0.9-1.5	173	0.5	0.4-0.6	388	1.0	0.7-1.2
45-69	250	1.5	1.1-1.9	160	1.1	0.5-1.7	410	1.4	1.0-1.7
18-69	**635**	**1.2**	**1.0-1.4**	**432**	**0.7**	**0.4-0.9**	**1067**	**1.0**	**0.8-1.2**

Consumption of unrecorded alcohol									
Age Group (years)	Men			Women			Both Sexes		
	n	% consuming unrecorded alcohol	95% CI	n	% consuming unrecorded alcohol	95% CI	n	% consuming unrecorded alcohol	95% CI
18-29	167	52.8	43.0-62.6	94	48.9	34.7-63.1	261	51.8	43.8-59.8
30-44	208	57.0	49.1-64.8	170	47.6	36.6-58.6	378	53.4	46.9-60.0
45-69	250	66.6	59.9-73.4	155	57.9	48.4-67.4	405	64.0	58.4-69.5
18-69	**625**	**59.6**	**55.2-63.9**	**419**	**51.7**	**44.7-58.8**	**1044**	**57.1**	**53.1-61.1**

Mean number of standard drinks of unrecorded alcohol consumed on average per day in the past 7 days among current drinkers									
Age Group (years)	Men			Women			Both Sexes		
	n	Mean number	95% CI	n	Mean number	95% CI	n	Mean number	95% CI
18-29	62	0.5	0.3-0.7	45	0.3	0.2-0.4	107	0.4	0.3-0.6
30-44	92	0.9	0.5-1.2	75	0.5	0.3-0.6	167	0.7	0.5-1.0
45-69	129	0.8	0.6-1.0	71	0.6	0.3-0.9	200	0.8	0.6-0.9
18-69	**283**	**0.7**	**0.6-0.9**	**191**	**0.5**	**0.4-0.6**	**474**	**0.7**	**0.6-0.8**

Frequency of family/partner problems due to someone else's drinking during the past 12 months among all respondents							
	Men						
Age Group (years)	n	% monthly or more frequently	95% CI	% less than monthly	95% CI	% never	95% CI
18-29	469	4.4	1.7-7.1	10.5	7.0-13.9	85.1	80.1-90.1
30-44	451	4.4	2.5-6.3	13.7	9.7-17.6	81.9	77.6-86.3
45-69	506	5.8	3.2-8.5	12.3	8.8-15.8	81.8	77.3-86.3
18-69	**1426**	**4.9**	**3.3-6.5**	**12.1**	**9.9-14.2**	**83.0**	**80.2-85.9**

Frequency of family/partner problems due to someone else's drinking during the past 12 months among all respondents							
	Women						
Age Group (years)	n	% monthly or more frequently	95% CI	% less than monthly	95% CI	% never	95% CI
18-29	750	5.1	3.2-7.0	8.5	6.1-10.9	86.4	83.6-89.3
30-44	816	5.0	3.3-6.7	9.7	7.3-12.0	85.3	82.4-88.2
45-69	702	5.2	3.2-7.2	9.5	7.1-12.0	85.3	82.0-88.6
18-69	**2268**	**5.1**	**4.0-6.2**	**9.2**	**7.8-10.6**	**85.7**	**83.8-87.6**

Frequency of family/partner problems due to someone else's drinking during the past 12 months among all respondents							
	Both Sexes						
Age Group (years)	n	% monthly or more frequently	95% CI	% less than monthly	95% CI	% never	95% CI
18-29	1219	4.8	3.1-6.5	9.4	7.4-11.5	85.8	83.0-88.6
30-44	1267	4.7	3.4-6.1	11.4	9.2-13.6	83.8	81.2-86.5
45-69	1208	5.5	3.8-7.2	10.9	8.9-12.9	83.6	80.9-86.2
18-69	**3694**	**5.0**	**4.0-6.0**	**10.5**	**9.2-11.9**	**84.4**	**82.6-86.3**

Frequency of family/partner problems due to someone else's drinking during the past 12 months among all respondents							
	Men						
Age Group (years)	n	% monthly or more frequently	95% CI	% less than monthly	95% CI	% never	95% CI
18-29	469	4.4	1.7-7.1	10.5	7.0-13.9	85.1	80.1-90.1
30-44	451	4.4	2.5-6.3	13.7	9.7-17.6	81.9	77.6-86.3
45-69	506	5.8	3.2-8.5	12.3	8.8-15.8	81.8	77.3-86.3
18-69	**1426**	**4.9**	**3.3-6.5**	**12.1**	**9.9-14.2**	**83.0**	**80.2-85.9**

Frequency of family/partner problems due to someone else's drinking during the past 12 months among all respondents							
	Women						
Age Group (years)	n	% monthly or more frequently	95% CI	% less than monthly	95% CI	% never	95% CI
18-29	750	5.1	3.2-7.0	8.5	6.1-10.9	86.4	83.6-89.3
30-44	816	5.0	3.3-6.7	9.7	7.3-12.0	85.3	82.4-88.2
45-69	702	5.2	3.2-7.2	9.5	7.1-12.0	85.3	82.0-88.6
18-69	**2268**	**5.1**	**4.0-6.2**	**9.2**	**7.8-10.6**	**85.7**	**83.8-87.6**

Frequency of family/partner problems due to someone else's drinking during the past 12 months among all respondents							
	Both Sexes						
Age Group (years)	n	% monthly or more frequently	95% CI	% less than monthly	95% CI	% never	95% CI
18-29	1219	4.8	3.1-6.5	9.4	7.4-11.5	85.8	83.0-88.6
30-44	1267	4.7	3.4-6.1	11.4	9.2-13.6	83.8	81.2-86.5
45-69	1208	5.5	3.8-7.2	10.9	8.9-12.9	83.6	80.9-86.2
18-69	**3694**	**5.0**	**4.0-6.0**	**10.5**	**9.2-11.9**	**84.4**	**82.6-86.3**

Diet

The tables below display the consumption of fruit and vegetables in the population.

Mean number of days fruit consumed in a typical week									
	Men			Women			Both Sexes		
Age Group (years)	n	Mean number of days	95% CI	n	Mean number of days	95% CI	n	Mean number of days	95% CI
18-29	452	3.5	3.3-3.7	724	3.1	2.9-3.4	1176	3.3	3.1-3.5
30-44	443	3.3	3.0-3.6	783	3.3	3.0-3.5	1226	3.3	3.1-3.5
45-69	486	3.3	3.0-3.6	681	3.3	3.1-3.6	1167	3.3	3.1-3.5
18-69	**1381**	**3.4**	**3.2-3.6**	**2188**	**3.2**	**3.1-3.4**	**3569**	**3.3**	**3.2-3.4**

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
18-29	460	3.2	2.9-3.4	738	3.6	3.3-3.8	1198	3.4	3.2-3.6
30-44	444	3.2	2.9-3.6	805	3.8	3.6-4.0	1249	3.5	3.3-3.7
45-69	498	3.7	3.4-4.0	693	3.9	3.7-4.2	1191	3.8	3.6-4.0
18-69	**1402**	**3.4**	**3.2-3.6**	**2236**	**3.7**	**3.6-3.9**	**3638**	**3.6**	**3.4-3.7**

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
18-29	444	1.5	1.3-1.8	715	1.1	1.0-1.3	1159	1.3	1.2-1.5
30-44	432	1.5	1.2-1.7	773	1.4	1.2-1.6	1205	1.4	1.2-1.6
45-69	477	1.3	1.1-1.5	671	1.4	1.2-1.7	1148	1.4	1.2-1.5
18-69	**1353**	**1.4**	**1.3-1.6**	**2159**	**1.3**	**1.2-1.4**	**3512**	**1.4**	**1.3-1.5**

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
18-29	451	1.1	0.9-1.3	725	1.1	1.0-1.2	1176	1.1	0.9-1.2
30-44	428	1.0	0.8-1.3	795	1.3	1.1-1.4	1223	1.2	1.0-1.3
45-69	481	1.2	1.0-1.3	677	1.4	1.2-1.6	1158	1.3	1.2-1.4
18-69	**1360**	**1.1**	**1.0-1.2**	**2197**	**1.3**	**1.2-1.3**	**3557**	**1.2**	**1.1-1.3**

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
18-29	462	2.5	2.2-2.9	738	2.2	2.0-2.4	1200	2.4	2.1-2.6
30-44	441	2.4	2.1-2.8	804	2.6	2.3-2.9	1245	2.5	2.3-2.8
45-69	495	2.4	2.1-2.6	692	2.8	2.5-3.2	1187	2.6	2.4-2.8
18-69	**1398**	**2.5**	**2.2-2.7**	**2234**	**2.5**	**2.3-2.7**	**3632**	**2.5**	**2.3-2.6**

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
18-29	462	28.7	23.7-33.7	46.7	40.9-52.5	13.4	9.0-17.9	11.2	6.9-15.4
30-44	441	34.4	27.8-41.0	41.5	36.2-46.9	12.5	8.1-16.9	11.6	7.9-15.3
45-69	495	27.0	22.8-31.3	43.9	38.3-49.6	19.8	14.2-25.4	9.2	6.3-12.2
18-69	**1398**	**29.8**	**26.7-32.9**	**44.2**	**41.2-47.2**	**15.3**	**12.3-18.3**	**10.6**	**8.5-12.8**

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
18-29	738	28.7	24.5-32.8	49.1	44.9-53.2	12.5	9.4-15.5	9.8	7.2-12.4
30-44	804	28.4	24.7-32.1	45.9	41.8-50.0	13.4	10.8-16.0	12.3	9.2-15.5
45-69	692	27.9	23.5-32.4	43.9	39.2-48.7	15.9	12.5-19.3	12.3	9.3-15.3
18-69	**2234**	**28.4**	**25.8-30.9**	**46.4**	**43.8-49.0**	**13.8**	**12.2-15.5**	**11.4**	**9.7-13.2**

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
18-29	1200	28.7	25.2-32.2	47.9	44.2-51.6	12.9	10.3-15.6	10.5	8.1-12.8
30-44	1245	31.0	27.3-34.8	44.0	40.5-47.4	13.0	10.5-15.5	12.0	9.5-14.5
45-69	1187	27.5	24.6-30.4	43.9	40.4-47.5	17.8	14.7-20.9	10.8	8.7-12.8
18-69	**3632**	**29.0**	**26.9-31.2**	**45.4**	**43.3-47.5**	**14.5**	**12.8-16.2**	**11.1**	**9.6-12.5**

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
18-29	462	28.7	23.7-33.7	46.7	40.9-52.5	13.4	9.0-17.9	11.2	6.9-15.4
30-44	441	34.4	27.8-41.0	41.5	36.2-46.9	12.5	8.1-16.9	11.6	7.9-15.3
45-69	495	27.0	22.8-31.3	43.9	38.3-49.6	19.8	14.2-25.4	9.2	6.3-12.2
18-69	**1398**	**29.8**	**26.7-32.9**	**44.2**	**41.2-47.2**	**15.3**	**12.3-18.3**	**10.6**	**8.5-12.8**

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
18-29	1200	28.7	25.2-32.2	47.9	44.2-51.6	12.9	10.3-15.6	10.5	8.1-12.8
30-44	1245	31.0	27.3-34.8	44.0	40.5-47.4	13.0	10.5-15.5	12.0	9.5-14.5
45-69	1187	27.5	24.6-30.4	43.9	40.4-47.5	17.8	14.7-20.9	10.8	8.7-12.8
18-69	**3632**	**29.0**	**26.9-31.2**	**45.4**	**43.3-47.5**	**14.5**	**12.8-16.2**	**11.1**	**9.6-12.5**

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
18-29	738	28.7	24.5-32.8	49.1	44.9-53.2	12.5	9.4-15.5	9.8	7.2-12.4
30-44	804	28.4	24.7-32.1	45.9	41.8-50.0	13.4	10.8-16.0	12.3	9.2-15.5
45-69	692	27.9	23.5-32.4	43.9	39.2-48.7	15.9	12.5-19.3	12.3	9.3-15.3
18-69	**2234**	**28.4**	**25.8-30.9**	**46.4**	**43.8-49.0**	**13.8**	**12.2-15.5**	**11.4**	**9.7-13.2**

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
18-29	462	88.8	84.6-93.1	738	90.2	87.6-92.8	1200	89.6	87.2-91.9
30-44	441	88.4	84.7-92.1	804	87.7	84.5-90.8	1245	88.0	85.5-90.5
45-69	495	90.8	87.8-93.7	692	87.7	84.7-90.7	1187	89.2	87.2-91.3
18-69	**1398**	**89.4**	**87.2-91.5**	**2234**	**88.6**	**86.8-90.3**	**3632**	**88.9**	**87.5-90.4**

Add salt always or often before eating or when eating									
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-29	469	18.1	13.7-22.5	750	15.3	12.3-18.4	1219	16.7	14.0-19.3
30-44	451	23.3	18.3-28.3	815	17.6	14.1-21.0	1266	20.1	17.2-23.0
45-69	505	17.6	13.8-21.3	701	13.5	10.3-16.7	1206	15.5	13.0-18.0
18-69	**1425**	**19.5**	**17.0-22.0**	**2266**	**15.5**	**13.5-17.6**	**3691**	**17.4**	**15.7-19.1**

Add salt always or often when cooking or preparing food at home									
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-29	446	32.9	27.0-38.8	748	38.9	34.4-43.4	1194	36.1	32.4-39.8
30-44	438	33.0	28.2-37.9	814	33.9	30.0-37.8	1252	33.5	30.3-36.7
45-69	500	35.9	29.9-42.0	699	32.3	27.1-37.5	1199	34.1	29.8-38.4
18-69	**1384**	**34.0**	**30.5-37.4**	**2261**	**35.2**	**32.4-38.0**	**3645**	**34.6**	**32.2-37.1**

Always or often consume processed food high in salt									
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-29	468	16.9	12.1-21.6	748	7.7	5.7-9.8	1216	12.1	9.4-14.8
30-44	449	13.8	9.5-18.1	812	10.9	6.6-15.2	1261	12.2	8.8-15.5
45-69	502	10.9	7.4-14.4	697	8.1	2.8-13.4	1199	9.5	6.1-12.8
18-69	**1419**	**13.9**	**11.3-16.5**	**2257**	**8.9**	**5.9-12.0**	**3676**	**11.3**	**8.8-13.8**

Think they consume far too much or too much salt									
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-29	466	21.3	16.1-26.6	748	10.0	7.4-12.6	1214	15.4	12.4-18.5
30-44	444	15.9	12.2-19.7	812	13.9	11.1-16.7	1256	14.8	12.6-17.0
45-69	505	13.1	9.5-16.7	697	8.2	6.0-10.4	1202	10.6	8.4-12.9
18-69	**1415**	**16.9**	**14.2-19.6**	**2257**	**10.8**	**9.2-12.4**	**3672**	**13.7**	**12.0-15.3**

Self-reported quantity of salt consumed											
Age Group (years)	Men										
	n	% Far too much	95% CI	% Too much	95% CI	% Just the right amount	95% CI	% Too little	95% CI	% Far too little	95% CI
18-29	466	3.4	1.0-5.8	17.9	12.9-22.8	62.6	56.5-68.6	14.4	10.1-18.7	1.7	0.2-3.3
30-44	444	1.0	0.2-1.7	15.0	11.3-18.7	70.7	66.1-75.3	12.5	9.1-15.9	0.9	0.1-1.7
45-69	505	1.5	0.2-2.8	11.6	8.2-14.9	66.6	60.7-72.5	17.9	12.7-23.0	2.4	1.1-3.7
18-69	**1415**	**2.0**	**1.0-3.1**	**14.9**	**12.3-17.4**	**66.3**	**62.5-70.2**	**15.0**	**12.0-18.1**	**1.7**	**1.0-2.5**

Self-reported quantity of salt consumed											
	Women										
Age Group (years)	n	% Far too much	95% CI	% Too much	95% CI	% Just the right amount	95% CI	% Too little	95% CI	% Far too little	95% CI
18-29	748	0.9	0.2-1.5	9.1	6.6-11.7	69.3	65.0-73.6	19.3	15.6-22.9	1.4	0.3-2.6
30-44	812	1.0	0.0-2.1	12.9	10.3-15.5	63.1	59.2-67.0	20.4	16.7-24.2	2.5	1.3-3.8
45-69	697	0.8	0.2-1.4	7.4	5.3-9.5	53.5	48.6-58.3	32.2	27.5-36.9	6.2	3.9-8.5
18-69	**2257**	**0.9**	**0.4-1.4**	**9.9**	**8.4-11.4**	**62.3**	**59.7-65.0**	**23.6**	**21.3-25.9**	**3.3**	**2.3-4.2**

Self-reported quantity of salt consumed											
	Both Sexes										
Age Group (years)	n	% Far too much	95% CI	% Too much	95% CI	% Just the right amount	95% CI	% Too little	95% CI	% Far too little	95% CI
18-29	1214	2.1	0.9-3.3	13.3	10.4-16.3	66.1	62.1-70.0	16.9	13.8-20.1	1.6	0.6-2.5
30-44	1256	1.0	0.3-1.7	13.8	11.7-16.0	66.4	63.4-69.4	17.0	14.3-19.7	1.8	1.0-2.6
45-69	1202	1.2	0.4-1.9	9.5	7.3-11.7	60.0	56.3-63.8	25.0	21.6-28.5	4.3	3.0-5.6
18-69	**3672**	**1.4**	**0.9-2.0**	**12.2**	**10.7-13.8**	**64.2**	**61.8-66.6**	**19.6**	**17.5-21.6**	**2.5**	**1.9-3.2**

Importance of lowering salt in diet							
	Men						
Age Group (years)	n	% Very important	95% CI	% Somewhat important	95% CI	% Not at all important	95% CI
18-29	396	70.7	65.0-76.5	23.8	18.4-29.3	5.4	3.0-7.8
30-44	393	68.1	62.0-74.3	22.8	18.2-27.3	9.1	5.7-12.5
45-69	421	66.6	60.1-73.0	27.8	21.6-34.0	5.6	2.9-8.3
18-69	**1210**	**68.5**	**65.1-72.0**	**24.8**	**21.7-28.0**	**6.6**	**4.9-8.3**

Importance of lowering salt in diet							
Age Group (years)	Women						
	n	% Very important	95% CI	% Somewhat important	95% CI	% Not at all important	95% CI
18-29	666	69.9	65.4-74.4	22.3	18.5-26.2	7.8	5.3-10.4
30-44	694	66.4	61.5-71.2	27.3	22.6-32.0	6.3	4.1-8.5
45-69	589	73.9	69.5-78.3	21.5	17.2-25.8	4.6	2.8-6.4
18-69	**1949**	**69.9**	**66.9-72.9**	**23.7**	**20.9-26.5**	**6.4**	**5.0-7.7**

Importance of lowering salt in diet							
Age Group (years)	Both Sexes						
	n	% Very important	95% CI	% Somewhat important	95% CI	% Not at all important	95% CI
18-29	1062	70.3	66.4-74.1	23.0	19.6-26.5	6.7	4.9-8.5
30-44	1087	67.2	63.1-71.2	25.3	22.0-28.6	7.6	5.6-9.5
45-69	1010	70.3	66.3-74.2	24.6	20.9-28.4	5.1	3.5-6.7
18-69	**3159**	**69.3**	**66.9-71.6**	**24.3**	**22.1-26.4**	**6.5**	**5.4-7.6**

Think consuming too much salt could cause serious health problem									
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-29	469	80.3	76.0-84.7	750	85.2	81.9-88.5	1219	82.9	80.1-85.7
30-44	451	79.7	75.1-84.3	816	82.1	78.7-85.4	1267	81.0	78.2-83.8
45-69	506	74.1	69.0-79.3	702	80.2	76.7-83.7	1208	77.2	74.0-80.3
18-69	**1426**	**78.0**	**75.2-80.8**	**2268**	**82.6**	**80.6-84.6**	**3694**	**80.4**	**78.6-82.3**

Limit consumption of processed foods									
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-29	469	36.3	30.3-42.4	750	43.5	38.6-48.5	1219	40.1	35.9-44.2
30-44	451	42.4	36.2-48.6	816	42.2	37.5-46.8	1267	42.3	38.2-46.4
45-69	506	38.5	33.2-43.8	702	46.2	41.7-50.8	1208	42.4	38.6-46.2
18-69	**1426**	**38.9**	**35.6-42.1**	**2268**	**43.9**	**40.9-46.9**	**3694**	**41.5**	**38.9-44.1**

Look at the salt or sodium content on food labels									
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-29	469	16.4	12.3-20.4	750	13.2	10.0-16.4	1219	14.7	12.1-17.4
30-44	451	9.8	6.8-12.7	816	11.1	8.1-14.1	1267	10.5	8.4-12.7
45-69	506	12.4	8.7-16.2	702	9.5	6.7-12.3	1208	11.0	8.3-13.6
18-69	**1426**	**13.1**	**10.8-15.4**	**2268**	**11.4**	**9.5-13.2**	**3694**	**12.2**	**10.6-13.8**

Buy low salt/sodium alternatives									
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-29	469	23.2	18.2-28.3	750	25.4	20.9-29.8	1219	24.4	20.8-27.9
30-44	451	20.6	16.6-24.7	816	24.4	20.7-28.2	1267	22.8	19.6-26.0
45-69	506	26.7	21.4-32.0	702	26.9	22.5-31.3	1208	26.8	22.9-30.7
18-69	**1426**	**23.6**	**20.4-26.9**	**2268**	**25.5**	**22.8-28.2**	**3694**	**24.6**	**22.1-27.2**

Use spices other than salt when cooking									
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-29	469	19.2	13.6-24.8	750	22.7	17.9-27.5	1219	21.0	17.2-24.8
30-44	451	18.4	14.0-22.7	816	17.7	14.1-21.3	1267	18.0	14.8-21.2
45-69	506	14.0	10.0-17.9	702	18.5	14.3-22.6	1208	16.2	13.1-19.3
18-69	**1426**	**17.2**	**14.1-20.3**	**2268**	**19.7**	**16.8-22.6**	**3694**	**18.5**	**16.0-21.0**

Avoid eating foods prepared outside of a home									
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-29	469	30.0	24.3-35.7	750	37.9	33.3-42.4	1219	34.1	30.3-37.9
30-44	451	29.3	24.4-34.3	816	37.8	33.5-42.0	1267	34.1	30.7-37.5
45-69	506	31.9	26.6-37.2	702	40.2	35.5-44.9	1208	36.1	32.5-39.7
18-69	**1426**	**30.5**	**27.2-33.7**	**2268**	**38.5**	**35.9-41.2**	**3694**	**34.7**	**32.5-37.0**

Do other things specifically to control your salt intake									
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-29	469	14.6	10.4-18.7	750	17.6	12.4-22.8	1219	16.2	12.6-19.7
30-44	451	9.9	6.4-13.4	816	11.8	8.7-14.8	1267	11.0	8.7-13.2
45-69	506	10.7	7.3-14.0	702	11.3	8.1-14.5	1208	11.0	8.6-13.4
18-69	**1426**	**11.8**	**9.7-14.0**	**2268**	**13.7**	**11.2-16.2**	**3694**	**12.8**	**11.0-14.7**

Physical Activity

The STEPS survey utilised the Global Physical Activity Questionnaire (GPAQ) to measure how many Metabolic Equivalents in minutes (MET-min). The MET-min per week obtained from the GPAQ is a scale-type variable. Applying MET values to activity levels allowed 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. That is, moderate – intensity physical activity corresponds to 4 MET/min, and vigorous -intensity physical activity corresponds to 8 MET/min.

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

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

For the calculation of the categorical indicator on the recommended amount of physical activity for health, the total time spent in physical activity during a typical week and the intensity of the physical activity are taken into account. Throughout a week, including activity for work, during transport and leisure time, adults should do at least:

- 150 minutes of moderate-intensity physical activity OR
- 75 minutes of vigorous-intensity physical activity OR

An equivalent combination of moderate- and vigorous-intensity physical activity achieving at least 600 MET-minutes.

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

The three levels of physical activity suggested for classifying populations 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.

Using the above criteria, 3.7% (95% CI: 2.0 – 5.3) of the male Ugandan population and 3.2% (95% CI: 2.2 – 4.2) of the female Ugandan population were not meeting the required level of recommended physical activity by the World Health Organisation (WHO). Taken together, 83.8% (95% CI: 82.5 – 85.5) of the population reported high level of physical activity. Details of responses to the questionnaire on physical activity are displayed in the tables below.

Not meeting WHO recommendations on physical activity for health

Age Group (years)	Men			Women			Both Sexes		
	n	% not meeting recs	95% CI	n	% not meeting recs	95% CI	n	% not meeting recs	95% CI
18-29	442	3.3	0.2-6.4	706	3.4	1.6-5.2	1148	3.3	1.6-5.1
30-44	422	3.0	0.8-5.2	755	3.0	1.5-4.4	1177	3.0	1.6-4.3
45-69	476	4.6	2.2-7.1	663	3.2	1.6-4.8	1139	3.9	2.4-5.4
18-69	**1340**	**3.7**	**2.0-5.3**	**2124**	**3.2**	**2.2-4.2**	**3464**	**3.4**	**2.5-4.3**

Level of total physical activity according to former recommendations							
Age Group (years)	Men						
	n	% Low	95% CI	% Moderate	95% CI	% High	95% CI
18-29	442	4.2	1.0-7.4	5.7	2.7-8.7	90.1	86.1-94.2
30-44	422	5.2	2.4-8.0	5.5	3.2-7.8	89.3	85.6-93.0
45-69	476	8.8	5.7-12.0	10.1	5.8-14.3	81.1	76.3-85.9
18-69	**1340**	**6.1**	**4.2-7.9**	**7.1**	**5.3-8.9**	**86.8**	**84.3-89.3**

Level of total physical activity according to former recommendations							
Age Group (years)	Women						
	n	% Low	95% CI	% Moderate	95% CI	% High	95% CI
18-29	706	8.6	6.0-11.1	9.1	6.7-11.4	82.4	78.8-85.9
30-44	755	6.1	3.9-8.3	12.1	9.0-15.2	81.9	77.8-85.9
45-69	663	8.4	5.7-11.1	13.1	9.5-16.6	78.5	74.2-82.7
18-69	**2124**	**7.7**	**6.3-9.1**	**11.3**	**9.5-13.1**	**81.0**	**78.8-83.2**

Level of total physical activity according to former recommendations							
Age Group (years)	Both Sexes						
	n	% Low	95% CI	% Moderate	95% CI	% High	95% CI
18-29	1148	6.5	4.5-8.4	7.4	5.4-9.5	86.1	83.4-88.8
30-44	1177	5.7	4.0-7.4	9.1	7.1-11.2	85.2	82.4-87.9
45-69	1139	8.6	6.5-10.8	11.6	8.8-14.3	79.8	76.5-83.0
18-69	**3464**	**6.9**	**5.8-8.1**	**9.3**	**7.9-10.7**	**83.8**	**82.0-85.5**

Mean minutes of total physical activity on average per day									
Age Group (years)	Men			Women			Both Sexes		
	n	Mean minutes	95% CI	n	Mean minutes	95% CI	n	Mean minutes	95% CI
18-29	442	450.7	415.8-485.5	706	342.4	318.0-366.9	1148	394.4	373.3-415.5
30-44	422	429.8	383.9-475.7	755	347.3	324.7-369.9	1177	383.9	357.7-410.0
45-69	476	349.5	319.3-379.7	663	325.9	300.5-351.2	1139	337.5	318.0-357.1
18-69	**1340**	**410.2**	**387.0-433.4**	**2124**	**338.9**	**322.8-355.0**	**3464**	**372.6**	**357.6-387.7**

Median minutes of total physical activity on average per day									
Age Group (years)	Men			Women			Both Sexes		
	n	Median minutes	Inter-quartile range (P25-P75)	n	Median minutes	Inter-quartile range (P25-P75)	n	Median minutes	Inter-quartile range (P25-P75)
18-29	442	420.0	248.6-617.1	706	291.4	180.0-471.4	1148	351.4	210.0-565.7
30-44	422	360.0	231.4-570.0	755	291.4	192.9-445.7	1177	325.7	205.7-501.4
45-69	476	305.7	175.7-480.0	663	282.9	180.0-411.4	1139	291.4	177.1-437.1
18-69	**1340**	**360**	**222.9-570.0**	**2124**	**287.9**	**180.0-445.7**	**3464**	**317.1**	**195.7-505.7**

Mean minutes of work-related physical activity on average per day									
Age Group (years)	Men			Women			Both Sexes		
	n	Mean minutes	95% CI	n	Mean minutes	95% CI	n	Mean minutes	95% CI
18-29	442	290.3	264.5-316.2	706	243.1	226.4-259.9	1148	265.8	250.8-280.8
30-44	422	303.2	276.0-330.3	755	247.7	233.4-262.0	1177	272.3	257.1-287.5
45-69	476	253.6	228.5-278.8	663	234.5	218.7-250.2	1139	244.0	229.4-258.5
18-69	**1340**	**281.7**	**265.3-298.1**	**2124**	**242.0**	**232.5-251.5**	**3464**	**260.8**	**251.2-270.3**

Mean minutes of transport-related physical activity on average per day									
Age Group (years)	Men			Women			Both Sexes		
	n	Mean minutes	95% CI	n	Mean minutes	95% CI	n	Mean minutes	95% CI
18-29	442	124.7	102.7-146.7	706	87.6	75.6-99.6	1148	105.4	92.8-118.0
30-44	422	109.2	82.8-135.6	755	91.0	79.1-102.9	1177	99.1	84.5-113.6
45-69	476	82.4	72.0-92.8	663	85.9	73.2-98.6	1139	84.2	75.6-92.7
18-69	**1340**	**105.8**	**93.6-117.9**	**2124**	**88.2**	**80.0-96.4**	**3464**	**96.5**	**88.7-104.4**

Mean minutes of recreation-related physical activity on average per day									
Age Group (years)	Men			Women			Both Sexes		
	n	Mean minutes	95% CI	n	Mean minutes	95% CI	n	Mean minutes	95% CI
18-29	442	35.6	29.2-42.1	706	11.7	8.0-15.4	1148	23.2	19.1-27.2
30-44	422	17.5	12.7-22.3	755	8.6	6.3-10.8	1177	12.5	10.1-15.0
45-69	476	13.4	8.7-18.1	663	5.5	2.8-8.2	1139	9.4	6.5-12.4
18-69	**1340**	**22.7**	**19.1-26.4**	**2124**	**8.7**	**6.5-11.0**	**3464**	**15.4**	**13.0-17.7**

Median minutes of work-related physical activity on average per day									
Age Group (years)	Men			Women			Both Sexes		
	n	Median minutes	Inter-quartile range (P25-P75)	n	Median minutes	Inter-quartile range (P25-P75)	n	Median minutes	Inter-quartile range (P25-P75)
18-29	442	257.1	128.6-420.0	706	205.7	111.4-342.9	1148	231.4	120.0-377.1
30-44	422	265.7	154.3-411.4	755	214.3	128.6-325.7	1177	240.0	137.1-360.0
45-69	476	214.9	102.9-214.3	663	205.7	126.4-308.6	1139	205.7	120.0-342.9
18-69	**1340**	**257.1**	**128.6-411.4**	**2124**	**205.7**	**120.0-325.7**	**3464**	**231.4**	**128.6-360.0**

Median minutes of transport-related physical activity on average per day									
Age Group (years)	Men			Women			Both Sexes		
	n	Median minutes	Inter-quartile range (P25-P75)	n	Median minutes	Inter-quartile range (P25-P75)	n	Median minutes	Inter-quartile range (P25-P75)
18-29	442	60.0	21.4-180.0	706	51.4	17.1-120.0	1148	51.4	17.1-120.0
30-44	422	51.4	21.4-137.1	755	51.4	20.0-120.0	1177	51.4	21.4-120.0
45-69	476	42.9	19.3-102.9	663	42.9	17.1-105.0	1139	42.9	17.1-102.9
18-69	**1340**	**51.4**	**21.4-128.6**	**2124**	**51.4**	**17.1-111.4**	**3464**	**51.4**	**17.1-120.0**

Median minutes of recreation-related physical activity on average per day									
Age Group (years)	Men			Women			Both Sexes		
	n	Median minutes	Inter-quartile range (P25-P75)	n	Median minutes	Inter-quartile range (P25-P75)	n	Median minutes	Inter-quartile range (P25-P75)
18-29	442	8.6	0.0-51.4	706	0.0	0.0-0.0	1148	0.0	0.0-25.7
30-44	422	0.0	0.0-12.9	755	0.0	0.0-0.0	1177	0.0	0.0-4.3
45-69	476	0.0	0.0-0.0	663	0.0	0.0-0.0	1139	0.0	0.0-0.0
18-69	**1340**	**0.0**	**0.0-0.0**	**2124**	**0.0**	**0.0-0.0**	**3464**	**0.0**	**0.0-6.4**

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
18-29	442	7.5	4.1-10.8	706	6.5	4.3-8.8	1148	7.0	4.9-9.0
30-44	422	7.8	3.9-11.6	755	6.0	3.9-8.2	1177	6.8	4.5-9.0
45-69	476	7.5	4.5-10.5	663	6.0	3.9-8.0	1139	6.7	4.9-8.6
18-69	**1340**	**7.6**	**5.5-9.6**	**2124**	**6.2**	**4.8-7.5**	**3464**	**6.8**	**5.6-8.1**

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
18-29	442	9.4	5.3-13.4	706	7.5	4.9-10.2	1148	8.4	6.0-10.9
30-44	422	8.1	4.5-11.7	755	8.8	5.5-12.1	1177	8.5	6.0-10.9
45-69	476	9.0	5.7-12.3	663	8.4	5.7-11.1	1139	8.7	6.5-10.8
18-69	**1340**	**8.9**	**6.6-11.1**	**2124**	**8.2**	**6.4-10.0**	**3464**	**8.5**	**7.0-10.0**

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
18-29	442	46.7	40.5-53.0	706	75.3	70.2-80.4	1148	61.6	57.4-65.8
30-44	422	68.7	63.2-74.2	755	78.0	74.0-82.0	1177	73.9	70.8-77.0
45-69	476	78.1	73.3-82.9	663	87.2	83.8-90.7	1139	82.7	79.6-85.8
18-69	**1340**	**63.9**	**60.6-67.2**	**2124**	**79.9**	**77.3-82.5**	**3464**	**72.3**	**70.1-74.5**

Composition of total physical activity							
Age Group (years)	Men						
	n	% Activity from work	95% CI	% Activity for transport	95% CI	% Activity during leisure time	95% CI
18-29	436	63.2	59.9-66.5	27.0	23.7-30.3	9.8	8.2-11.5
30-44	416	69.6	66.4-72.9	25.3	22.5-28.2	5.0	3.3-6.7
45-69	465	70.3	67.2-73.3	26.2	23.2-29.2	3.5	2.3-4.7
18-69	**1317**	**67.5**	**65.7-69.3**	**26.2**	**24.6-27.9**	**6.3**	**5.4-7.1**

Composition of total physical activity							
	Women						
Age Group (years)	n	% Activity from work	95% CI	% Activity for transport	95% CI	% Activity during leisure time	95% CI
18-29	699	69.7	67.4-72.1	26.8	24.6-29.1	3.4	2.4-4.4
30-44	746	70.5	68.2-72.7	26.7	24.4-28.9	2.9	1.8-4.0
45-69	648	72.8	70.4-75.1	25.7	23.5-27.9	1.5	0.9-2.2
18-69	**2093**	**70.9**	**69.4-72.4**	**26.4**	**24.9-27.9**	**2.7**	**2.1-3.3**

Composition of total physical activity							
	Both Sexes						
Age Group (years)	n	% Activity from work	95% CI	% Activity for transport	95% CI	% Activity during leisure time	95% CI
18-29	1135	66.6	64.5-68.7	26.9	24.8-29.0	6.5	5.5-7.5
30-44	1162	70.1	68.1-72.1	26.1	24.3-27.9	3.8	2.9-4.8
45-69	1113	71.6	69.5-73.6	26.0	24.0-27.9	2.5	1.7-3.3
18-69	**3410**	**69.3**	**68.0-70.6**	**26.3**	**25.2-27.5**	**4.4**	**3.8-4.9**

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
18-29	442	29.7	23.7-35.7	706	63.5	58.2-68.9	1148	47.3	43.2-51.4
30-44	422	41.4	35.2-47.6	755	68.1	63.5-72.7	1177	56.2	52.3-60.1
45-69	476	63.3	57.0-69.7	663	74.1	69.8-78.4	1139	68.8	64.7-72.9
18-69	**1340**	**44.6**	**40.7-48.4**	**2124**	**68.3**	**65.2-71.5**	**3464**	**57.1**	**54.3-59.9**

Minutes spent in sedentary activities on average per day					
	Men				
Age Group (years)	n	Mean minutes	95% CI	Median minutes	Inter-quartile range (P25-P75)
18-29	469	173.9	157.3-190.5	140	75-240
30-44	451	175.1	158.7-191.4	150	90-240
45-69	506	194.6	178.4-210.9	180	120-240
18-69	**1426**	**181.3**	**170.9-191.7**	**180**	**90-240**

Minutes spent in sedentary activities on average per day					
	Women				
Age Group (years)	n	Mean minutes	95% CI	Median minutes	Inter-quartile range (P25-P75)
18-29	750	174.9	163.2-186.7	150	90-240
30-44	816	179.0	165.7-192.4	150	90-240
45-69	702	179.8	163.0-196.6	180	90-240
18-69	**2268**	**177.8**	**169.5-186.2**	**150**	**90-240**

Minutes spent in sedentary activities on average per day					
	Both Sexes				
Age Group (years)	n	Mean minutes	95% CI	Median minutes	Inter-quartile range (P25-P75)
18-29	1219	174.5	164.5-184.4	150	90-240
30-44	1267	177.3	166.3-188.4	150	90-240
45-69	1208	187.2	175.8-198.6	180	90-240
18-69	**3694**	**179.5**	**172.8-186.1**	**170**	**90-240**

History of measurement of blood pressure

Among men, 71.1% (95% CI: 67.6 – 74.6) and 41.3% (95% CI: 38.0 – 44.5) among women reported to have never had blood pressure measured and no diagnosis of hypertension. Details of responses to blood pressure are displayed in the tables below.

Blood pressure measurement and diagnosis									
	Men								
Age Group (years)	n	% Never measured	95% CI	% measured, not diagnosed	95% CI	% diagnosed, but not within past 12 months	95% CI	% diagnosed within past 12 months	95% CI
18-29	469	84.1	79.5-88.7	13.6	9.1-18.1	1.3	0.1-2.5	1.0	0.0-1.9
30-44	451	69.9	62.5-77.3	25.7	18.3-33.1	1.9	0.3-3.5	2.6	0.8-4.3
45-69	506	58.3	52.6-64.0	27.5	22.6-32.4	5.7	3.6-7.8	8.6	4.3-12.9
18-69	**1426**	**71.1**	**67.6-74.6**	**21.9**	**18.5-25.3**	**3.0**	**2.0-3.9**	**4.0**	**2.4-5.7**

Blood pressure measurement and diagnosis									
	Women								
Age Group (years)	n	% Never measured	95% CI	% measured, not diagnosed	95% CI	% diagnosed, but not within past 12 months	95% CI	% diagnosed within past 12 months	95% CI
18-29	750	53.2	48.1-58.3	41.3	36.3-46.4	2.4	1.2-3.6	3.1	1.5-4.6
30-44	816	35.4	30.7-40.0	51.5	46.8-56.3	6.7	4.7-8.7	6.4	4.4-8.4
45-69	702	34.0	29.5-38.6	36.3	31.2-41.4	13.2	9.5-16.8	16.5	12.5-20.5
18-69	**2268**	**41.3**	**38.0-44.5**	**43.3**	**40.5-46.1**	**7.2**	**5.7-8.6**	**8.3**	**6.7-9.9**

Blood pressure measurement and diagnosis									
	Both sexes								
Age Group (years)	n	% Never measured	95% CI	% measured, not diagnosed	95% CI	% diagnosed, but not within past 12 months	95% CI	% diagnosed within past 12 months	95% CI
18-29	1219	68.0	64.5-71.5	28.1	24.6-31.5	1.9	1.1-2.7	2.1	1.2-3.0
30-44	1267	50.5	46.0-54.9	40.2	36.0-44.4	4.6	3.1-6.1	4.7	3.3-6.1
45-69	1208	46.1	42.2-50.1	31.9	28.3-35.5	9.4	7.3-11.6	12.5	9.6-15.5
18-69	**3694**	**55.3**	**52.5-58.2**	**33.2**	**30.7-35.6**	**5.2**	**4.3-6.1**	**6.3**	**5.2-7.4**

Currently taking drugs (medication) for raised blood pressure prescribed by doctor or health worker among those diagnosed									
	Men			Women			Both Sexes		
Age Group (years)	n	% taking meds	95% CI	n	% taking meds	95% CI	*n*	*% taking meds*	*95% CI*
18-29	11	26.4	0.0-55.5	42	8.0	0.0-18.1	53	13.1	1.6-24.5
30-44	19	11.7	0.1-23.3	101	15.6	5.0-26.2	120	14.8	6.0-23.5
45-69	63	51.0	34.9-67.2	185	31.4	23.3-39.5	248	37.7	29.3-46.1
18-69	**93**	**40.7**	**27.0-54.5**	**328**	**23.9**	**18.1-29.7**	**421**	**28.7**	**22.4-35.1**

Seen a traditional healer among those previously diagnosed									
	Men			Women			Both Sexes		
Age Group (years)	n	% seen trad. healer	95% CI	n	% seen trad. healer	95% CI	*n*	*% seen trad. healer*	*95% CI*
18-29	11	20.6	0.0-49.2	42	7.5	0.0-15.7	53	11.1	1.0-21.2
30-44	19	0.0	0.0-0.0	101	11.1	4.1-18.1	120	8.8	3.1-14.5
45-69	63	25.6	1.6-49.6	185	20.4	12.2-28.7	248	22.1	12.6-31.6
18-69	**93**	**20.2**	**2.2-38.1**	**328**	**16.1**	**10.5-21.7**	**421**	**17.3**	**10.8-23.8**

Currently taking herbal or traditional remedy for raised blood pressure among those previously diagnosed									
Age Group (years)	Men			Women			Both Sexes		
	n	% taking trad. meds	95% CI	n	% taking trad. meds	95% CI	*n*	*% taking trad. meds*	*95% CI*
18-29	11	26.8	0.0-61.4	42	9.8	0.0-23.9	53	14.5	0.0-29.1
30-44	19	4.3	0.0-12.5	101	7.9	2.0-13.8	120	7.1	2.1-12.2
45-69	63	28.3	9.7-46.9	185	15.9	9.2-22.6	248	19.9	11.7-28.1
18-69	**93**	**23.6**	**9.1-38.1**	**328**	**12.8**	**7.9-17.8**	**421**	**15.9**	**10.1-21.8**

PART VII: Results on health seeking behaviour

History of diabetes

Among men, 88.9% (95% CI: 86.5 – 91.3) and 84.7% (95% CI: 82.6 – 86.9) among women reported to have never had blood glucose measured and no diagnosis of diabetes. Details of responses to blood glucose and diabetes are displayed in the tables below.

Blood sugar measurement and diagnosis									
	Men								
Age Group (years)	n	% Never measured	95% CI	% measured, not diagnosed	95% CI	% diagnosed, but not within past 12 months	95% CI	% diagnosed within past 12 months	95% CI
18-29	469	95.6	91.9-99.4	4.3	0.6-8.0	0.0	0.0-0.0	0.1	0.0-0.2
30-44	451	90.8	87.5-94.1	8.1	5.0-11.2	0.9	0.1-1.8	0.2	0.0-0.5
45-69	506	80.1	75.1-85.0	16.0	11.2-20.8	2.3	0.3-4.3	1.6	0.5-2.7
18-69	**1426**	**88.9**	**86.5-91.3**	**9.4**	**7.1-11.8**	**1.1**	**0.3-1.8**	**0.6**	**0.3-1.0**

Blood sugar measurement and diagnosis									
	Women								
Age Group (years)	n	% Never measured	95% CI	% measured, not diagnosed	95% CI	% diagnosed, but not within past 12 months	95% CI	% diagnosed within past 12 months	95% CI
18-29	750	91.8	88.9-94.6	7.3	4.5-10.0	0.7	0.0-1.5	0.3	0.0-0.6
30-44	816	88.1	84.9-91.3	11.0	7.9-14.2	0.5	0.0-0.9	0.4	0.0-0.8
45-69	702	72.9	68.8-76.9	21.8	18.0-25.7	1.9	0.9-2.9	3.4	1.7-5.2
18-69	**2268**	**84.7**	**82.6-86.9**	**13.0**	**10.9-15.1**	**1.0**	**0.5-1.4**	**1.3**	**0.7-1.9**

Blood sugar measurement and diagnosis									
	Both sexes								
Age Group (years)	n	% Never measured	95% CI	% measured, not diagnosed	95% CI	% diagnosed, but not within past 12 months	95% CI	% diagnosed within past 12 months	95% CI
18-29	1219	93.6	91.4-95.9	5.8	3.6-8.1	0.4	0.0-0.8	0.2	0.0-0.4
30-44	1267	89.3	86.9-91.7	9.8	7.5-12.0	0.7	0.2-1.1	0.3	0.0-0.6
45-69	1208	76.4	73.3-79.6	18.9	15.9-22.0	2.1	0.9-3.2	2.5	1.5-3.6
18-69	**3694**	**86.7**	**85.1-88.2**	**11.3**	**9.8-12.9**	**1.0**	**0.6-1.4**	**1.0**	**0.6-1.3**

Currently taking drugs (medication) prescribed for diabetes among those previously diagnosed									
Age Group (years)	Men			Women			Both Sexes		
	n	% taking insulin	95% CI	n	% taking insulin	95% CI	*n*	*% taking insulin*	*95% CI*
18-29	1	0.0	0.0-0.0	7	20.8	0.0-52.2	8	19.4	0.0-48.0
30-44	7	31.4	0.0-66.9	8	27.0	0.0-59.2	15	29.2	3.1-55.4
45-69	19	40.6	10.3-70.8	35	28.8	8.8-48.7	54	33.8	16.0-51.6
18-69	**27**	**38.1**	**12.4-63.8**	**50**	**27.3**	**11.1-43.6**	**77**	**31.7**	**16.8-46.5**

Currently taking insulin prescribed for diabetes among those previously diagnosed

Age Group (years)	Men			Women			Both Sexes		
	n	% taking meds	95% CI	n	% taking meds	95% CI	*n*	*% taking meds*	*95% CI*
18-29	1	100.0	100.0-100.0	7	63.0	21.4-100.0	8	65.6	27.3-100.0
30-44	7	48.3	1.1-95.5	8	74.2	42.9-100.0	15	61.0	38.4-83.6
45-69	19	59.1	32.9-85.4	35	44.9	25.9-63.9	54	50.9	34.3-67.6
18-69	**27**	**57.7**	**34.0-81.3**	**50**	**51.4**	**34.0-68.8**	**77**	**53.9**	**39.8-68.0**

Seen a traditional healer for diabetes among those previously diagnosed									
Age Group (years)	Men			Women			Both Sexes		
	n	% seen trad. healer	95% CI	n	% seen trad. healer	95% CI	*n*	*% seen trad. healer*	*95% CI*
18-29	1	0.0	0.0-0.0	7	64.8	24.5-100.0	8	60.3	20.6-100.0
30-44	7	37.3	0.0-86.0	8	24.1	0.0-57.4	15	30.9	1.5-60.2
45-69	19	39.0	10.3-67.6	35	21.6	7.3-35.8	54	29.0	15.2-42.7
18-69	**27**	**38.0**	**13.5-62.5**	**50**	**28.5**	**10.8-46.2**	**77**	**32.3**	**19.0-45.6**

Currently taking herbal or traditional treatment for diabetes among those previously diagnosed									
Age Group (years)	Men			Women			Both Sexes		
	n	% taking trad. meds	95% CI	n	% taking trad. meds	95% CI	*n*	*% taking trad. meds*	*95% CI*
18-29	1	0.0	0.0-0.0	7	57.0	14.5-99.5	8	53.1	11.7-94.5
30-44	7	37.3	0.0-86.0	8	12.6	0.0-34.7	15	25.2	0.0-52.5
45-69	19	25.9	5.2-46.6	35	14.3	2.0-26.6	54	19.2	7.7-30.8
18-69	**27**	**27.8**	**9.4-46.1**	**50**	**20.6**	**4.6-36.5**	**77**	**23.5**	**12.1-34.9**

History of raised Cholesterol

Among men, 98.1% (95% CI: 97.1 – 99.0) and 97.2% (95% CI: 95.9 – 98.4) among women reported to have never had blood cholesterol measured and no diagnosis of raised cholesterol. Details of responses to cholesterol and raised cholesterol are displayed in the tables below.

Total cholesterol measurement and diagnosis									
	Men								
Age Group (years)	n	% Never measured	95% CI	% measured, not diagnosed	95% CI	% diagnosed, but not within past 12 months	95% CI	% diagnosed within past 12 months	95% CI
18-29	469	99.1	98.1-100.0	0.3	0.0-0.7	0.5	0.0-1.4	0.1	0.0-0.3
30-44	451	98.6	97.5-99.6	0.6	0.0-1.2	0.6	0.0-1.3	0.2	0.0-0.7
45-69	506	96.5	94.2-98.8	2.3	0.4-4.3	0.9	0.0-2.3	0.3	0.0-0.6
18-69	**1426**	**98.1**	**97.1-99.0**	**1.1**	**0.4-1.8**	**0.7**	**0.1-1.3**	**0.2**	**0.0-0.4**

Total cholesterol measurement and diagnosis									
	Women								
Age Group (years)	n	% Never measured	95% CI	% measured, not diagnosed	95% CI	% diagnosed, but not within past 12 months	95% CI	% diagnosed within past 12 months	95% CI
18-29	750	98.1	96.5-99.8	1.7	0.1-3.4	0.1	0.0-0.4	0.0	0.0-0.0
30-44	816	98.0	96.0-99.9	1.3	0.4-2.2	0.6	0.0-1.8	0.1	0.0-0.3
45-69	702	95.1	92.7-97.6	2.5	0.9-4.2	0.9	0.2-1.5	1.5	0.2-2.7
18-69	**2268**	**97.2**	**95.9-98.4**	**1.8**	**1.0-2.7**	**0.5**	**0.1-1.0**	**0.5**	**0.1-0.9**

Total cholesterol measurement and diagnosis									
	Both sexes								
Age Group (years)	n	% Never measured	95% CI	% measured, not diagnosed	95% CI	% diagnosed, but not within past 12 months	95% CI	% diagnosed within past 12 months	95% CI
18-29	1219	98.6	97.6-99.6	1.0	0.1-1.9	0.3	0.0-0.8	0.1	0.0-0.2
30-44	1267	98.2	97.1-99.4	1.0	0.4-1.6	0.6	0.0-1.4	0.2	0.0-0.4
45-69	1208	95.8	94.1-97.4	2.4	1.2-3.7	0.9	0.2-1.6	0.9	0.2-1.5
18-69	**3694**	**97.6**	**96.8-98.4**	**1.5**	**0.9-2.0**	**0.6**	**0.2-1.0**	**0.4**	**0.1-0.6**

Currently taking oral treatment (medication) prescribed for raised total cholesterol among those previously diagnosed									
Age Group (years)	Men			Women			Both Sexes		
	n	% taking meds	95% CI	n	% taking meds	95% CI	*n*	*% taking meds*	*95% CI*
18-29	2	0.0	0.0-0.0	1	0.0	0.0-0.0	3	0.0	0.0-0.0
30-44	4	0.0	0.0-0.0	3	0.0	0.0-0.0	7	0.0	0.0-0.0
45-69	4	0.0	0.0-0.0	14	12.1	0.0-32.7	18	8.0	0.0-20.7
18-69	**10**	**0.0**	**0.0-0.0**	**18**	**8.5**	**0.0-23.6**	**28**	**4.8**	**0.0-12.4**

Seen a traditional healer for raised cholesterol among those previously diagnosed									
Age Group (years)	Men			Women			Both Sexes		
	n	% seen trad. healer	95% CI	n	% seen trad. healer	95% CI	*n*	*% seen trad. healer*	*95% CI*
18-29	2	18.8	0.0-67.3	1	0.0	0.0-0.0	3	15.2	0.0-49.9
30-44	4	0.0	0.0-0.0	3	0.0	0.0-0.0	7	0.0	0.0-0.0
45-69	4	0.0	0.0-0.0	14	0.0	0.0-0.0	18	0.0	0.0-0.0
18-69	**10**	**4.6**	**0.0-21.5**	**18**	**0.0**	**0.0-0.0**	**28**	**2.0**	**0.0-6.3**

Currently taking herbal or traditional treatment for raised cholesterol among those previously diagnosed									
Age Group (years)	Men			Women			Both Sexes		
	n	% taking trad. meds	95% CI	n	% taking trad. meds	95% CI	*n*	*% taking trad. meds*	*95% CI*
18-29	2	0.0	0.0-0.0	1	0.0	0.0-0.0	3	0.0	0.0-0.0
30-44	4	28.2	0.0-96.7	3	0.0	0.0-0.0	7	13.2	0.0-42.6
45-69	4	0.0	0.0-0.0	14	20.4	0.0-42.8	18	13.5	0.0-30.4
18-69	**10**	**8.1**	**0.0-33.5**	**18**	**14.3**	**0.0-30.8**	**28**	**11.6**	**0.0-25.3**

History of cardiovascular diseases

Among men, 13.7% (95% CI: 11.2 – 16.3) and 16.1% (95% CI14.0 – 18.2) among women reported to ever having had a heart attack or chest pain from heart disease or a stroke. Details of responses to cardiovascular disease are displayed in the tables below.

Having ever had a heart attack or chest pain from heart disease or a stroke									
Age Group (years)	Men			Women			Both Sexes		
	n	% CVD history	95% CI	n	% CVD history	95% CI	*n*	*% CVD history*	*95% CI*
18-29	469	12.9	8.9-16.9	750	13.0	10.0-15.9	1219	12.9	10.4-15.4
30-44	451	11.7	7.9-15.4	816	15.6	12.3-18.9	1267	13.9	11.3-16.4
45-69	506	16.4	12.2-20.6	702	20.3	16.5-24.1	1208	18.4	15.4-21.3
18-69	**1426**	**13.7**	**11.2-16.3**	**2268**	**16.1**	**14.0-18.2**	**3694**	**15.0**	**13.2-16.8**

Currently taking aspirin regularly to prevent or treat heart disease									
Age Group (years)	Men			Women			Both Sexes		
	n	% taking aspirin	95% CI	n	% taking aspirin	95% CI	*n*	*% taking aspirin*	*95% CI*
18-29	469	0.9	0.1-1.6	750	1.4	0.2-2.5	1219	1.1	0.4-1.8
30-44	451	0.7	0.0-1.5	816	1.4	0.4-2.5	1267	1.1	0.4-1.8
45-69	506	2.5	0.7-4.2	702	2.5	1.3-3.7	1208	2.5	1.4-3.6
18-69	**1426**	**1.4**	**0.7-2.0**	**2268**	**1.7**	**1.1-2.4**	**3694**	**1.6**	**1.1-2.1**

Currently taking statins regularly to prevent or treat heart disease									
Age Group (years)	Men			Women			Both Sexes		
	n	% taking statins	95% CI	n	% taking statins	95% CI	*n*	*% taking statins*	*95% CI*
18-29	469	1.3	0.2-2.4	750	0.8	0.1-1.5	1219	1.1	0.4-1.7
30-44	451	0.7	0.0-1.4	816	1.9	0.8-3.1	1267	1.4	0.7-2.1
45-69	506	1.5	0.3-2.6	702	3.6	2.1-5.1	1208	2.6	1.6-3.5
18-69	**1426**	**1.2**	**0.6-1.8**	**2268**	**2.1**	**1.4-2.7**	**3694**	**1.6**	**1.2-2.1**

Lifestyle advice

The responses to lifestyle advice questionnaire are displayed in the tables below.

Advised by doctor or health worker to quit using tobacco or don't start									
Age Group (years)	Men			Women			Both Sexes		
	n	% advised	95% CI	n	% advised	95% CI	*n*	*% advised*	*95% CI*
18-29	203	15.3	9.0-21.5	451	18.6	14.1-23.2	654	17.3	13.6-21.1
30-44	194	14.1	9.1-19.1	479	16.5	11.9-21.1	673	15.7	12.3-19.1
45-69	262	26.2	17.6-34.8	405	15.2	10.8-19.5	667	20.2	15.4-25.0
18-69	**659**	**19.2**	**14.9-23.5**	**1335**	**16.9**	**14.2-19.5**	**1994**	**17.8**	**15.4-20.1**

Advised by doctor or health worker to reduce salt in the diet									
Age Group (years)	Men			Women			Both Sexes		
	n	% advised	95% CI	n	% advised	95% CI	*n*	*% advised*	*95% CI*
18-29	203	18.4	11.4-25.4	451	24.1	18.8-29.3	654	21.9	17.5-26.3
30-44	194	16.4	10.5-22.2	479	26.0	20.7-31.2	673	22.6	18.6-26.7
45-69	262	24.3	16.9-31.6	405	37.9	31.7-44.0	667	31.7	26.8-36.5
18-69	**659**	**20.1**	**15.9-24.3**	**1335**	**28.9**	**25.9-32.0**	**1994**	**25.4**	**22.8-28.0**

Advised by doctor or health worker to eat at least five servings of fruit and/or vegetables each day									
Age Group (years)	Men			Women			Both Sexes		
	n	% advised	95% CI	n	% advised	95% CI	*n*	*% advised*	*95% CI*
18-29	203	41.5	32.7-50.4	451	51.4	45.9-57.0	654	47.6	42.8-52.4
30-44	194	41.4	32.7-50.1	479	52.8	47.2-58.4	673	48.9	43.8-54.0
45-69	262	43.0	34.8-51.2	405	56.3	50.4-62.1	667	50.2	45.0-55.5
18-69	**659**	**42.1**	**36.8-47.4**	**1335**	**53.4**	**50.0-56.8**	**1994**	**48.9**	**45.7-52.0**

Advised by doctor or health worker to reduce fat in the diet									
Age Group (years)	Men			Women			Both Sexes		
	n	% advised	95% CI	n	% advised	95% CI	*n*	*% advised*	*95% CI*
18-29	203	24.4	14.9-33.9	451	27.8	22.3-33.3	654	26.5	21.5-31.6
30-44	194	22.5	15.6-29.3	479	29.4	24.4-34.5	673	27.0	23.1-31.0
45-69	262	25.2	18.0-32.4	405	36.2	30.0-42.4	667	31.2	26.4-36.0
18-69	**659**	**24.2**	**19.3-29.1**	**1335**	**30.9**	**27.6-34.2**	**1994**	**28.2**	**25.3-31.2**

Advised by doctor or health worker to start or do more physical activity									
Age Group (years)	Men			Women			Both Sexes		
	n	% advised	95% CI	n	% advised	95% CI	*n*	*% advised*	*95% CI*
18-29	203	28.0	18.6-37.4	451	36.2	30.3-42.2	654	33.0	27.6-38.5
30-44	194	25.6	18.7-32.5	479	31.8	26.1-37.5	673	29.6	25.0-34.3
45-69	262	34.0	25.5-42.5	405	33.2	27.1-39.2	667	33.5	28.5-38.5
18-69	**659**	**29.6**	**24.8-34.5**	**1335**	**33.8**	**30.2-37.4**	**1994**	**32.1**	**29.2-35.1**

Advised by doctor or health worker to maintain a healthy body weight or to lose weight									
Age Group (years)	Men			Women			Both Sexes		
	n	% advised	95% CI	n	% advised	95% CI	*n*	*% advised*	*95% CI*
18-29	203	19.1	9.8-28.4	451	20.4	15.3-25.5	654	19.9	15.0-24.8
30-44	194	14.6	9.5-19.7	479	21.0	16.3-25.6	673	18.8	15.1-22.4
45-69	262	24.4	16.0-32.7	405	18.8	13.5-24.1	667	21.3	16.5-26.2
18-69	**659**	**19.9**	**15.3-24.5**	**1335**	**20.1**	**17.1-23.1**	**1994**	**20.0**	**17.2-22.9**

Advised by doctor or health worker to reduce sugary beverages in diet									
Age Group (years)	Men			Women			Both Sexes		
	n	% advised	95% CI	n	% advised	95% CI	*n*	*% advised*	*95% CI*
18-29	203	18.2	11.7-24.8	451	27.6	21.7-33.5	654	24.0	19.3-28.7
30-44	194	25.4	18.0-32.8	479	27.3	22.3-32.4	673	26.6	22.3-31.0
45-69	262	25.1	18.2-32.1	405	31.7	25.6-37.9	667	28.7	24.2-33.2
18-69	**659**	**22.8**	**18.5-27.2**	**1335**	**28.8**	**25.3-32.2**	**1994**	**26.4**	**23.6-29.3**

PART VIII: Results on cervical cancer screening

Cancer screening

Among women respondents, 17.6% (95% CI: 15.3 – 19.8) responded to have ever been screened for cancer of the cervix. Among the female respondents aged 30 – 49 years, 23.0% (95% CI: 19.6 – 26.4) had ever been screened for cervical cancer. Details of the responses to cancer of the cervix are displayed in the tables below.

Age Group (years)	Women		
	n	% ever tested	95% CI
18-29	744	9.4	6.7-12.1
30-44	813	20.4	17.1-23.6
45-69	695	24.0	19.0-29.0
18-69	**2252**	**17.6**	**15.3-19.8**

Age Group (years)	Women		
	n	% ever tested	95% CI
30-49	**1012**	**23.0**	**19.6-26.4**

PART IX: Results on biofuels

Cooking and lighting of households

Majority of the households used a movable firepan/3-stone stone stove / open fire stove. 76.1% (95%CI: 73.0 – 79.0) used this method for cooking, 11.0% (95%CI: 9.2 – 13.2) used a traditional solid fuel stove, 8.6% (95%CI: 6.8 – 10.8) used manufactured solid fuel stove while the remaining smaller groups used various forms of cooking including gas and electricity. With regards to lighting, 20.0% (95% CI: 16.7 – 23.7) used electricity, 51.8% (95% CI: 48.6 – 55.1) used solar-powered lantern or flash light, 6.9% (95% CI:5.7 – 8.3) used rechargeable flash light, 12.8% (95% CI:11.0 – 14.7) used battery powered flashlight, 0.07% (95% CI: 0.01 – 0.03) used biogas lamp, 0.04% (95% CI:0.01 – 0.03) used liquified petroleum gas, 0.01% (95% CI: 0.0 – 0.1) used gasoline lamp, 5.0% (95% CI: 3.9 – 6.3) used kerosine or paraffin lamp, 0.3% (95% CI: 0.2 – 0.6) used an oil lamp and the remaining used an open fire or a candle.

Anxiety and depressive symptoms

A combined score of the four questions used in the survey was used to derive the possibility of anxiety / depressive symptoms in the respondents. A score of 1 in the questions was regarded as normal, no symptoms of anxiety/depression, 2 as minimal anxiety/depression symptoms 3 as moderate anxiety/depression symptoms and 4 as severe anxiety/depression symptoms. Using this score, the prevalence of anxiety/depression symptoms was: 26.2% (95% CI: 24.0 – 28.6) no symptoms of anxiety/depression, 35.6% (95% CI:33.2 – 38.0) minor symptoms of anxiety, 22.9% (95% CI: 20.8 – 25.2) had moderate anxiety/depression and 15.3% (95% CI: 13.7 – 17.0) had severe symptoms of anxiety/depression.

Effect of COVID-19 on smoking behaviour

Among the population, 94.7% (95% CI: 93.4 – 95.7) COVID-19 had no effect on smoking behaviour, in 1.9% (95% CI: 1.4 - 2.6) COVID-19 was associated with reduction in smoking and in 3.4% (95% CI: 2.6 – 4.5) COVID-19 was associated with an increase in smoking.

Effect of COVID-19 on consumption of alcohol

Among the population, 73.0% (95% CI: 70.9 -75.1), COVID-19 had no effect on the consumption of alcohol, while 16.6% (95%CI:15.1 – 18.2) COVID-19 was associated with starting the consumption of alcohol or increasing the consumption of alcohol. In 10.3% (95% CI:8.9 -11.9), COVID-19 was associated with a reduction in alcohol consumption.

Effect of COVID-19 on consumption of fruits and vegetables

Among the population, there was a significant increase in the consumption of fruits and vegetables during the COVID-19 Pandemic: 41.4% (95% CI: 38.9 – 43.9) versus 35.3% (95% CI: 33.1 – 37.7) COVID-19 response to no effect on the consumption of fruit and vegetables and 23.2% (95% CI: 21.2 – 25.4) response to a reduction in fruit consumption.

PART X: Results on Physical Measurements

Blood Pressure

Arterial systemic hypertension was defined as blood pressure (BP) systolic greater or equal 140 and or diastolic BP greater or equal to 90. According to this definition, the prevalence of arterial systemic hypertension was 22.8% (95%CI: 20.0 – 25.6) in men and 21.7% (95% CI:19.3 – 24.1) in women. Grouped together, the prevalence of hypertension is 22.2% (95% CI: 20.4 – 24.0). Grading the prevalence of hypertension according to the International Society of Hypertension [16], the proportion of Normal Blood Pressure was 64.0% (95% CI: 61.7 – 66.1), High Normal Blood Pressure 14.7% (95% CI: 13.3 – 16.2), Grade 1 Hypertension 14.8% (95% CI: 13.3 16.4), and Grade 2 Hypertension 6.6% (95% CI: 5.5 – 7.8). Details of blood pressure, including heart rate, are displayed in the following tables.

Mean systolic blood pressure (mmHg)

Age Group (years)	Men			Women			Both Sexes		
	n	Mean	95% CI	n	Mean	95% CI	n	Mean	95% CI
18-29	469	121.6	120.2-123.0	749	113.0	112.0-114.1	1218	117.1	116.2-118.1
30-44	450	123.6	122.0-125.1	815	118.3	116.9-119.7	1265	120.6	119.5-121.8
45-69	506	127.9	125.6-130.3	700	131.0	128.8-133.1	1206	129.4	127.8-131.1
18-69	**1425**	**124.3**	**123.2-125.4**	**2264**	**120.3**	**119.3-121.3**	**3689**	**122.2**	**121.5-123.0**

Mean diastolic blood pressure (mmHg)

Age Group (years)	Men			Women			Both Sexes		
	n	Mean	95% CI	n	Mean	95% CI	n	Mean	95% CI
18-29	469	76.3	75.3-77.2	749	76.3	75.3-77.2	1218	76.3	75.6-77.0
30-44	450	82.3	80.9-83.6	815	81.5	80.5-82.5	1265	81.8	81.0-82.7
45-69	506	84.8	83.3-86.3	700	85.8	84.5-87.1	1206	85.3	84.3-86.3
18-69	**1425**	**81.0**	**80.2-81.7**	**2264**	**81.0**	**80.3-81.7**	**3689**	**81.0**	**80.4-81.5**

SBP ≥140 and/or DBP ≥ 90 mmHg									
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-29	467	9.6	6.2-13.0	738	8.5	5.7-11.4	1205	9.0	6.6-11.4
30-44	441	23.5	17.1-29.8	809	19.9	15.7-24.1	1250	21.4	17.8-25.1
45-69	500	36.3	30.6-42.1	688	38.9	34.1-43.7	1188	37.6	33.8-41.4
18-69	**1408**	**22.8**	**20.0-25.6**	**2235**	**21.7**	**19.3-24.1**	**3643**	**22.2**	**20.4-24.0**

SBP ≥160 and/or DBP ≥ 100 mmHg									
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-29	467	0.2	0.0-0.6	738	1.1	0.4-1.8	1205	0.6	0.2-1.1
30-44	441	6.2	3.2-9.2	809	5.2	3.3-7.2	1250	5.6	3.9-7.4
45-69	500	13.3	8.6-17.9	688	15.8	11.2-20.3	1188	14.5	11.2-17.8
18-69	**1408**	**6.4**	**4.6-8.3**	**2235**	**7.0**	**5.3-8.6**	**3643**	**6.7**	**5.6-7.9**

SBP ≥140 and/or DBP ≥ 90 mmHg or currently on medication for raised blood pressure									
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-29	467	10.1	6.6-13.5	738	9.2	6.2-12.2	1205	9.6	7.2-12.1
30-44	441	23.5	17.1-29.8	809	20.6	16.5-24.7	1250	21.8	18.2-25.5
45-69	500	37.8	32.0-43.5	688	43.1	37.7-48.6	1188	40.5	36.5-44.4
18-69	**1408**	**23.4**	**20.6-26.3**	**2235**	**23.5**	**20.9-26.0**	**3643**	**23.5**	**21.7-25.2**

SBP ≥160 and/or DBP ≥ 100 mmHg or currently on medication for raised blood pressure									
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-29	467	0.8	0.0-1.7	738	1.8	0.8-2.7	1205	1.3	0.7-1.9
30-44	441	6.3	3.3-9.3	809	6.7	4.4-8.9	1250	6.5	4.6-8.4
45-69	500	17.2	12.1-22.3	688	24.1	18.4-29.8	1188	20.6	16.8-24.5
18-69	**1408**	**8.0**	**6.0-10.1**	**2235**	**10.3**	**8.2-12.3**	**3643**	**9.2**	**7.8-10.6**

Raised blood pressure diagnosis, treatment and control among those with raised blood pressure (SBP ≥ 140 and/or DBP ≥ 90 mmHg) or on medication for raised blood pressure									
	Men								
Age Group (years)	n	% with raised blood pressure, not previously diagnosed	95% CI	% with previously diagnosed raised blood pressure, not on medication	95% CI	% with previously diagnosed raised blood pressure, on medication but not controlled	95% CI	% with previously diagnosed raised blood pressure, on medication and blood pressure controlled	95% CI
18-29	46	92.0	83.3-100.0	2.0	0.0-6.0	1.1	0.0-3.4	4.9	0.0-12.3
30-44	96	90.7	83.3-98.0	7.1	0.1-14.1	2.3	0.0-4.6	0.0	0.0-0.0
45-69	182	66.5	55.5-77.5	13.6	8.2-19.0	16.0	6.5-25.6	3.9	0.5-7.3
18-69	**324**	**77.6**	**70.3-84.9**	**9.9**	**6.1-13.6**	**9.6**	**3.9-15.4**	**2.9**	**0.7-5.1**

Raised blood pressure diagnosis, treatment and control among those with raised blood pressure (SBP ≥ 140 and/or DBP ≥ 90 mmHg) or on medication for raised blood pressure									
	Women								
Age Group (years)	n	% with raised blood pressure, not previously diagnosed	95% CI	% with previously diagnosed raised blood pressure, not on medication	95% CI	% with previously diagnosed raised blood pressure, on medication but not controlled	95% CI	% with previously diagnosed raised blood pressure, on medication and blood pressure controlled	95% CI
18-29	62	83.9	73.1-94.8	8.6	0.0-17.8	0.0	0.0-0.0	7.5	0.8-14.2
30-44	156	72.0	62.7-81.3	17.6	9.7-25.6	6.9	0.5-13.4	3.4	0.5-6.4
45-69	272	46.2	38.9-53.5	28.1	21.9-34.3	15.9	10.8-21.1	9.8	5.1-14.6
18-69	**490**	**59.2**	**53.2-65.1**	**22.2**	**17.7-26.8**	**11.0**	**7.6-14.5**	**7.6**	**4.5-10.7**

Raised blood pressure diagnosis, treatment and control among those with raised blood pressure (SBP ≥ 140 and/or DBP ≥ 90 mmHg) or on medication for raised blood pressure									
	Both Sexes								
Age Group (years)	n	% with raised blood pressure, not previously diagnosed	95% CI	% with previously diagnosed raised blood pressure, not on medication	95% CI	% with previously diagnosed raised blood pressure, on medication but not controlled	95% CI	% with previously diagnosed raised blood pressure, on medication and blood pressure controlled	95% CI
18-29	108	88.0	81.0-95.0	5.3	0.3-10.3	0.6	0.0-1.7	6.2	1.1-11.3
30-44	252	80.7	74.4-87.1	12.7	7.2-18.2	4.8	1.1-8.5	1.8	0.2-3.4
45-69	454	55.7	49.3-62.0	21.3	17.2-25.4	16.0	10.6-21.4	7.1	4.0-10.1
18-69	**814**	**67.9**	**63.1-72.6**	**16.4**	**13.5-19.3**	**10.4**	**7.1-13.6**	**5.4**	**3.4-7.3**

Mean heart rate (beats per minute)									
Age Group (years)	Men			Women			Both Sexes		
	n	mean	95% CI	n	mean	95% CI	n	mean	95% CI
18-29	469	72.2	70.8-73.7	749	82.8	81.6-83.9	1218	77.7	76.7-78.8
30-44	450	72.8	71.6-74.1	815	80.1	79.1-81.1	1265	76.9	76.0-77.8
45-69	506	73.9	72.5-75.3	700	77.5	76.3-78.6	1206	75.7	74.8-76.6
18-69	**1425**	**73.0**	**72.2-73.8**	**2264**	**80.2**	**79.5-81.0**	**3689**	**76.8**	**76.2-77.4**

Height, Waist Circumference and Weight Measurements

The world Health Organisation criteria was used to define risk attributable to waist circumference and obesity according to body mass index (BMI)[17, 18]. The three categories of risk in relation to diabetes and cardiovascular disease are: **Low Risk** (men, WC 93.9 cm or less; women, WC 79.9 cm or less); **Increased Risk** (men, WC 94.0 to 101.9 cm; women, WC 80.0 to 87.9 cm); and **High Risk** (men, WC 102.0 cm or more; women, WC 88.0 cm or more). Using this criterion, 71.4% (95% CI: 69.1 – 73.7) of the Ugandan population had Low risk, 14.0% (95%

CI: 12.6 – 15.5) had Increased Risk while 14.6% (95% CI: 12.6 – 16.7) had High Risk. By urban and rural, the prevalence of Low Risk was 74.8% (95% CI: 72.6 – 76.9); Increased Risk 14.0% (95% CI: 12.5 – 15.7) and 11.2% (95% CI: 9.6 – 13.0) in the rural area compared to to 63.8% (95% CI: 58.0 – 69 .3), 14.0% (95% CI: 11.1 – 17.4) Increased Risk and 22.2% (95% CI: 17.2 – 28.0) High Risk in the urban area.

Based on the BMI, the proportion of Underweight was 16.4% (95% CI: 14.8 – 18.2); Normal weight was 59.9% (95% CI: 57.6 -62.2), Class I Obesity (Overweight) was 14.7% (95% CI: 13.1 -16.3), Class II Obesity (Obesity) 7.3% (95% CI: 6.0 – 8.8) and Class III Obesity (Extreme Obesity) was 1.7% (95% CI: 1.2 – 2.4). Among the urban population, the prevalence of obesity was under weight 12.2% (95% CI: 9.4 – 15.9), Normal weight 54.2% (95% CI: 49.3 – 59.1), Class I Obesity (Overweight) 20.3% (95% CI: 16.9 – 24.2), Class II Obesity (Obesity) 10.0 (95%CI: 7.1 – 14.1) and Class III Obesity (Extreme Obesity) 3.1% (95% CI: 1.9 – 5.1), while in the rural population, the prevalence of underweight was significantly higher; 18.2% (95% CI: 16.3 – 20.3), Normal weight higher; 62.4% (95% CI: 60.0 – 64.8), Class I Obesity (Overweight) lower; 12.2% (95% CI: 10.6 – 13.9), Class II Obesity (Obesity) lower; 6.1%(95% CI: 4.9 – 7.5) and Class III Obesity (Extreme Obesity) lower; 1.1% (95% CI: 0.7 – 1.7). Details of the height, weight and body mass index are displayed in the tables below.

Detail of physical measurements are displayed in the Tables below.

Mean height (cm)						
Age Group (years)	Men			Women		
	n	Mean	95% CI	n	Mean	95% CI
18-29	469	167.2	165.8-168.6	624	159.5	158.5-160.6
30-44	450	167.6	166.3-169.0	743	159.3	158.2-160.5
45-69	506	169.1	167.8-170.4	695	159.2	158.0-160.4
18-69	**1425**	**168.0**	**167.2-168.7**	**2062**	**159.4**	**158.6-160.1**

Mean weight (kg)						
Age Group (years)	Men			Women		
	n	Mean	95% CI	n	Mean	95% CI
18-29	469	60.3	58.9-61.6	624	58.0	56.7-59.3
30-44	450	62.9	61.2-64.6	743	61.9	60.6-63.1
45-69	506	60.8	59.4-62.2	695	60.3	58.6-61.9
18-69	**1425**	**61.2**	**60.3-62.2**	**2062**	**60.1**	**59.2-61.0**

Mean BMI (kg/m^2)									
Age Group (years)	Men			Women			Both Sexes		
	n	Mean	95% CI	n	Mean	95% CI	n	Mean	95% CI
18-29	465	21.8	21.2-22.4	621	22.9	22.4-23.5	1086	22.4	21.9-22.8
30-44	450	22.6	21.9-23.3	736	24.5	24.0-25.1	1186	23.6	23.2-24.1
45-69	503	21.3	20.8-21.7	691	24.1	23.4-24.9	1194	22.7	22.2-23.2
18-69	**1418**	**21.9**	**21.5-22.2**	**2048**	**23.9**	**23.5-24.3**	**3466**	**22.9**	**22.6-23.2**

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
18-29	465	11.9	8.2-15.6	74.4	68.9-79.9	8.1	5.0-11.3	5.5	1.5-9.5
30-44	450	13.7	10.0-17.3	65.3	59.6-70.9	11.1	7.6-14.6	10.0	5.5-14.5
45-69	503	27.0	22.0-32.0	56.4	50.4-62.4	13.1	9.4-16.8	3.5	1.6-5.4
18-69	**1418**	**17.6**	**15.0-20.1**	**65.6**	**62.1-69.0**	**10.7**	**8.7-12.7**	**6.2**	**3.9-8.5**

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
18-29	621	11.9	8.6-15.1	65.3	60.6-69.9	15.7	11.9-19.5	7.2	4.8-9.6
30-44	736	10.8	8.2-13.5	52.6	47.8-57.4	21.5	18.0-24.9	15.1	11.6-18.7
45-69	691	16.5	12.9-20.1	51.1	46.8-55.4	17.8	14.1-21.5	14.5	11.2-17.9
18-69	**2048**	**13.1**	**11.2-15.0**	**56.3**	**53.5-59.0**	**18.4**	**16.2-20.5**	**12.3**	**10.4-14.2**

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
18-29	1086	11.9	9.4-14.5	70.0	66.3-73.7	11.8	9.0-14.5	6.3	3.9-8.7
30-44	1186	12.1	9.9-14.4	58.4	54.7-62.1	16.7	14.2-19.1	12.8	9.9-15.7
45-69	1194	21.8	18.6-25.0	53.8	50.0-57.5	15.4	12.7-18.2	9.0	6.9-11.1
18-69	**3466**	**15.3**	**13.6-17.0**	**60.8**	**58.5-63.2**	**14.6**	**13.0-16.1**	**9.3**	**7.6-11.0**

BMI≥25									
Age Group (years)	Men			Women			Both Sexes		
	n	% BMI≥25	95% CI	n	% BMI≥25	95% CI	n	% BMI≥25	95% CI
18-29	465	13.7	9.0-18.3	621	22.9	18.5-27.2	1086	18.1	14.7-21.5
30-44	450	21.1	15.6-26.6	736	36.6	32.0-41.2	1186	29.5	25.7-33.2
45-69	503	16.6	12.4-20.8	691	32.3	27.7-36.9	1194	24.5	21.0-27.9
18-69	**1418**	**16.9**	**13.8-20.0**	**2048**	**30.7**	**27.8-33.5**	**3466**	**23.9**	**21.4-26.4**

Waist circumference (cm)						
Age Group (years)	Men			Women		
	n	Mean	95% CI	n	Mean	95% CI
18-29	469	75.7	74.4-77.0	624	78.6	77.6-79.7
30-44	450	79.5	78.3-80.7	743	83.6	82.6-84.7
45-69	506	80.6	79.6-81.7	695	84.8	83.5-86.1
18-69	**1425**	**78.5**	**77.8-79.3**	**2062**	**82.4**	**81.7-83.1**

Hip circumference (cm)						
Age Group (years)	Men			Women		
	n	Mean	95% CI	n	Mean	95% CI
18-29	469	88.9	87.4-90.3	624	93.2	92.0-94.4
30-44	450	91.5	90.3-92.6	743	96.2	95.1-97.3
45-69	506	90.7	89.7-91.7	695	96.3	95.0-97.6
18-69	**1425**	**90.3**	**89.5-91.1**	**2062**	**95.2**	**94.5-96.0**

Mean waist / hip ratio						
Age Group (years)	Men			Women		
	n	Mean	95% CI	n	Mean	95% CI
18-29	469	0.9	0.8-0.9	624	0.8	0.8-0.9
30-44	450	0.9	0.9-0.9	743	0.9	0.9-0.9
45-69	506	0.9	0.9-0.9	695	0.9	0.9-0.9
18-69	**1425**	**0.9**	**0.9-0.9**	**2062**	**0.9**	**0.9-0.9**

PART XI: Results on Biochemical Measurements

Blood glucose

The prevalence of normal glycaemia was 93.1% (95% CI: 91.6 – 94.4), impaired fasting glycaemia 4.3% (95% CI:3.4 – 5.5) and diabetes 2.6% (95% CI: 2.0 – 3.3).

In the urban population, the prevalence was 93.1% (95% CI: 88.4 – 96.0) normal glycaemia, 4.3% (95% CI: 2.2 – 8.2) impaired fasting glycaemia and 2.6% (95% CI: 1.6 – 4.2) diabetes. In the rural population, the prevalence was 93.1% (95% CI: 91.8 – 94.2) normal glycaemia, 4.3% (95% CI:3.5 – 5.3) impaired fasting glycaemia and 2.6% (95% CI: 1.9 – 3.5) diabetes.

By gender, the prevalence normal glycaemia in males was 94% (95% CI: 92.3 -95.9), 3.7% (95% CI: 2.1 – 5.3) impaired fasting glycaemia and 2.6% (95% CI: 1.6 – 3.6) diabetes, while in females the prevalence of normal glycaemia was 92.0% (95% CI: 90.2 – 93.4), 5.9% (95% CI: 4.7 – 7.1) impaired fasting glycaemia and 3.9% (95% CI: 2.7 – 5.1) diabetes.

Details of blood glucose are displayed in the tables below.

Impaired Fasting Glycaemia*

Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-29	446	3.8	0.1-7.6	718	3.3	1.8-4.8	1164	3.5	1.6-5.5
30-44	433	2.3	0.7-3.9	788	7.9	5.4-10.4	1221	5.5	3.7-7.2
45-69	486	4.7	2.7-6.8	684	6.7	4.7-8.8	1170	5.7	4.3-7.2
18-69	**1365**	**3.7**	**2.1-5.3**	**2190**	**5.9**	**4.7-7.1**	**3555**	**4.9**	**3.9-5.9**

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
18-29	446	0.9	0.1-1.8	718	1.6	0.4-2.9	1164	1.3	0.5-2.1
30-44	433	1.5	0.5-2.5	788	4.1	1.8-6.4	1221	2.9	1.6-4.3
45-69	486	5.3	2.8-7.9	684	6.2	4.1-8.4	1170	5.8	4.0-7.5
18-69	**1365**	**2.6**	**1.6-3.6**	**2190**	**3.9**	**2.7-5.1**	**3555**	**3.3**	**2.5-4.0**

Currently on medication for diabetes									
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-29	456	0.3	0.0-0.7	724	0.9	0.0-1.9	1180	0.6	0.1-1.2
30-44	443	0.7	0.0-1.4	794	1.3	0.0-2.7	1237	1.0	0.2-1.9
45-69	497	2.8	0.8-4.9	692	3.1	1.6-4.7	1189	3.0	1.7-4.2
18-69	**1396**	**1.3**	**0.5-2.0**	**2210**	**1.7**	**0.9-2.5**	**3606**	**1.5**	**1.0-2.1**

Raised blood glucose diagnosis and treatment among all respondents							
	Men						
Age Group (years)	n	% with raised blood glucose, not previously diagnosed	95% CI	% with previously diagnosed raised blood glucose, not on medication	95% CI	% with previously diagnosed raised blood glucose, on medication	95% CI
18-29	446	0.6	0.0-1.4	0.0	0.0-0.0	0.1	0.0-0.3
30-44	433	0.7	0.1-1.4	0.3	0.0-0.7	0.6	0.0-1.2
45-69	486	2.9	1.3-4.5	1.7	0.4-3.0	2.5	0.4-4.5
18-69	**1365**	**1.4**	**0.8-2.1**	**0.7**	**0.2-1.1**	**1.0**	**0.3-1.8**

Raised blood glucose diagnosis and treatment among all respondents							
	Women						
Age Group (years)	n	% with raised blood glucose, not previously diagnosed	95% CI	% with previously diagnosed raised blood glucose, not on medication	95% CI	% with previously diagnosed raised blood glucose, on medication	95% CI
18-29	718	0.5	0.0-1.2	0.4	0.0-0.8	0.6	0.0-1.4
30-44	788	2.9	0.9-4.8	0.2	0.0-0.5	0.7	0.0-1.3
45-69	684	3.1	1.6-4.5	2.6	1.1-4.0	2.4	1.1-3.8
18-69	**2190**	**2.1**	**1.1-3.1**	**1.0**	**0.5-1.5**	**1.2**	**0.6-1.8**

Raised blood glucose diagnosis and treatment among all respondents							
	Both Sexes						
Age Group (years)	n	% with raised blood glucose, not previously diagnosed	95% CI	% with previously diagnosed raised blood glucose, not on medication	95% CI	% with previously diagnosed raised blood glucose, on medication	95% CI
18-29	1164	0.6	0.1-1.1	0.2	0.0-0.4	0.4	0.0-0.8
30-44	1221	1.9	0.8-3.1	0.3	0.0-0.5	0.6	0.2-1.1
45-69	1170	3.0	1.9-4.1	2.1	1.2-3.1	2.5	1.3-3.6
18-69	**3555**	**1.8**	**1.2-2.4**	**0.8**	**0.5-1.2**	**1.1**	**0.7-1.6**

Total Cholesterol

The mean of total cholesterol was 3.2 mmol/l (95% CI: 3.1 - 3.2). Detail of cholesterol studies are displayed in the tables below.

Total cholesterol measurement and diagnosis									
	Men								
Age Group (years)	n	% Never measured	95% CI	% measured, not diagnosed	95% CI	% diagnosed, but not within past 12 months	95% CI	% diagnosed within past 12 months	95% CI
18-29	469	99.1	98.1-100.0	0.3	0.0-0.7	0.5	0.0-1.4	0.1	0.0-0.3
30-44	451	98.6	97.5-99.6	0.6	0.0-1.2	0.6	0.0-1.3	0.2	0.0-0.7
45-69	506	96.5	94.2-98.8	2.3	0.4-4.3	0.9	0.0-2.3	0.3	0.0-0.6
18-69	**1426**	**98.1**	**97.1-99.0**	**1.1**	**0.4-1.8**	**0.7**	**0.1-1.3**	**0.2**	**0.0-0.4**

Total cholesterol measurement and diagnosis									
	Women								
Age Group (years)	n	% Never measured	95% CI	% measured, not diagnosed	95% CI	% diagnosed, but not within past 12 months	95% CI	% diagnosed within past 12 months	95% CI
18-29	750	98.1	96.5-99.8	1.7	0.1-3.4	0.1	0.0-0.4	0.0	0.0-0.0
30-44	816	98.0	96.0-99.9	1.3	0.4-2.2	0.6	0.0-1.8	0.1	0.0-0.3
45-69	702	95.1	92.7-97.6	2.5	0.9-4.2	0.9	0.2-1.5	1.5	0.2-2.7
18-69	**2268**	**97.2**	**95.9-98.4**	**1.8**	**1.0-2.7**	**0.5**	**0.1-1.0**	**0.5**	**0.1-0.9**

Total cholesterol measurement and diagnosis									
	Both sexes								
Age Group (years)	n	% Never measured	95% CI	% measured, not diagnosed	95% CI	% diagnosed, but not within past 12 months	95% CI	% diagnosed within past 12 months	95% CI
18-29	1219	98.6	97.6-99.6	1.0	0.1-1.9	0.3	0.0-0.8	0.1	0.0-0.2
30-44	1267	98.2	97.1-99.4	1.0	0.4-1.6	0.6	0.0-1.4	0.2	0.0-0.4
45-69	1208	95.8	94.1-97.4	2.4	1.2-3.7	0.9	0.2-1.6	0.9	0.2-1.5
18-69	**3694**	**97.6**	**96.8-98.4**	**1.5**	**0.9-2.0**	**0.6**	**0.2-1.0**	**0.4**	**0.1-0.6**

Currently taking oral treatment (medication) prescribed for raised total cholesterol among those previously diagnosed									
Age Group (years)	Men			Women			Both Sexes		
	n	% taking meds	95% CI	n	% taking meds	95% CI	n	% taking meds	95% CI
18-29	2	0.0	0.0-0.0	1	0.0	0.0-0.0	3	0.0	0.0-0.0
30-44	4	0.0	0.0-0.0	3	0.0	0.0-0.0	7	0.0	0.0-0.0
45-69	4	0.0	0.0-0.0	14	12.1	0.0-32.7	18	8.0	0.0-20.7
18-69	**10**	**0.0**	**0.0-0.0**	**18**	**8.5**	**0.0-23.6**	**28**	**4.8**	**0.0-12.4**

Cotinine as surrogate for tobacco use

Interpretation of urine tests for tobacco use was based on urine levels of Cotinine. Cotinine is measured in nanograms per millilitre (ng/mL): Cotinine levels in a non-smoker are generally less than 10 ng/mL (assessed using COT10 urine result). Cotinine levels in a light smoker or someone exposed to second-hand smoke are 11 ng/mL to 30 ng/mL. Cotinine levels in a heavy smoker may be more than 500 ng/mL (assessed using COT200 urine result). Based on this criterion, the prevalence of the population exposed to tobacco use 20.8% (95% CI: 18.6 – 23.2); 34.8% (95% CI: 30.9 – 39.0) (7.2% of the population) were probable persons exposed to second-hand smoke.

Salt intake

The mean salt intake was 5.4 g/day (95% CI: 5.3 – 5.6). The table below displays the detail of salt consumption. This is a preliminary report on the salt intake; more

detailed analysis will follow, which currently shows a higher level (mean 6.8 g/day (95% CI: 6.7-6.8).

Mean salt intake (g/day)									
Age Group (years)	Men			Women			Both Sexes		
	n	Mean	95% CI	n	Mean	95% CI	n	Mean	95% CI
18-29	173	4.7	4.5-4.9	245	5.2	5.0-5.3	418	4.9	4.8-5.1
30-44	198	5.2	4.9-5.6	324	6.0	5.8-6.2	522	5.6	5.5-5.8
45-69	230	5.6	5.4-5.8	283	5.7	5.5-6.0	513	5.7	5.5-5.9
18-69	**601**	**5.2**	**5.1-5.4**	**852**	**5.7**	**5.5-5.8**	**1453**	**5.4**	**5.3-5.6**

PART XII: Cardiovascular disease risk

The cardiovascular disease risk was calculated according to World Health Organisation risk criteria. The risks are tabulated in the tables that follow.

Percentage of respondents by level of 10-year CVD risk							
Age Group (years)	Men						
	n	<10%	95% CI	10-20%	95% CI	≥20%	95% CI
40-54	386	100.0	-	0	-	0	-
55-69	228	83.5	76.4-88.8	16.3	11.3-23.4	0.2	-
40-69	**614**	**93.9**	**91.1-95.9**	**6.0**	**4.0-8.9**	**0.1**	-

Percentage of respondents by level of 10-year CVD risk							
Age Group (years)	Women						
	n	<10%	95% CI	10-20%	95% CI	≥20%	95% CI
40-54	568	100.0	-	0	-	0	-
55-69	327	93.0	87.3-96.3	6.9	3.6-12.7	0.1	-
40-69	**895**	**97.5**	**95.298.7**	**2.5**	**1.3-4.7**	**0**	**-**

Percentage of respondents by level of 10-year CVD risk							
Age Group (years)	Both Sexes						
	n	<10%	95% CI	10-20%	95% CI	≥20%	95% CI
40-54	954	1	-	0	-	0	-
55-69	555	88.3	84.0-91.6	11.5	8.3-15.8	0.1	-
40-69	**1509**	**95.7**	**94.1-96.9**	**4.2**	**3.0-5.9**	**0.1**	**-**

Percentage of respondents with a 10-year CVD risk ≥20% or with existing CVD									
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
40-54	387	15.6	11.5-20.7	569	21.3	17.3-25.9	956	18.5	15.4-22.0
55-69	228	16.0	10.8-23.1	327	20.4	15.7-26.1	555	18.2	14.6-22.6
40-69	**615**	**15.7**	**12.4-19.7**	**896**	**21.0**	**17.7-24.6**	**1511**	**18.4**	**15.8-21.3**

Percentage of eligible persons receiving drug therapy and counseling to prevent heart attacks and strokes									
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
40-54	61	13.1	-	115	11.0	6.2-18.7	176	11.8	7.0-19.4
55-69	32	18.4	-	68	20.4	10.1-36.8	100	19.5	10.2-34.1
40-69	**93**	**15.1**	**-**	**183**	**14.3**	**9.2-21.6**	**276**	**14.6**	**9.6-21.6**

Summary of Combined Risk Factors							
Age Group (years)	Men						
	n	% with 0 risk factors	95% CI	% with 1-2 risk factors	95% CI	% with 3-5 risk factors	95% CI
18-44	834	6.7	4.4-8.9	87.0	83.9-90.2	6.3	3.9-8.7
45-69	461	2.4	0.7-4.0	83.2	79.0-87.3	14.5	10.5-18.5
18-69	**1295**	**5.2**	**3.6-6.8**	**85.7**	**83.1-88.3**	**9.1**	**7.0-11.2**

Summary of Combined Risk Factors							
Age Group (years)	Women						
	n	% with 0 risk factors	95% CI	% with 1-2 risk factors	95% CI	% with 3-5 risk factors	95% CI
18-44	1233	6.2	4.5-7.9	85.2	82.6-87.8	8.6	6.4-10.8
45-69	635	4.0	2.2-5.8	78.8	74.4-83.2	17.2	12.9-21.5
18-69	**1868**	**5.5**	**4.2-6.7**	**83.1**	**80.7-85.4**	**11.5**	**9.4-13.5**

Summary of Combined Risk Factors							
Age Group (years)	Both Sexes						
	n	% with 0 risk factors	95% CI	% with 1-2 risk factors	95% CI	% with 3-5 risk factors	95% CI
18-44	2067	6.4	5.0-7.8	86.1	84.1-88.1	7.5	5.8-9.1
45-69	1096	3.2	2.0-4.4	81.0	77.8-84.1	15.8	12.8-18.9
18-69	**3163**	**5.3**	**4.3-6.4**	**84.4**	**82.7-86.1**	**10.3**	**8.8-11.8**

PART XIII: Discussion

We have presented the findings of a nationally representative NCDs risk factors' survey 2023 that follows nine years after the baseline conducted in the year 2014. While more rigorous specific analysis is yet to be done, the trend is that most of the risk factors increased in comparison to the 2014 survey or in some cases did not significantly change. Tobacco use was the exception; showing a trend downwards, but figures do not overtly show significant differences from the confidence intervals. Differences in the Urban – Rural gradients are difficult to interpret at this stage as further analysis is required to investigate the correlates of urbanisation. There were quite a number of limitations in the study. The time period between listing and data collection was extended because of logistical limitations; there was an outbreak of Ebola in the districts of Mubende and Kasanda which resulted in listing of EAs being delayed and lastly COVID-19 was still present in the community sending fears to the population on getting contact with individuals they were not familiar with. Funding was grossly limited and necessitated reducing the time of field research assistants who would wait for more than two days in an enumeration area. Logistical failures resulted in a lot of missing samples for the STEP 3 estimation of urine. Despite the above limitations we feel that the quality of data remains robust, especially with the additional improvement in employing real-time data entry and this being supervised. The team held meetings regularly looking at the data being collected and addressed any arising issues promptly.

PART XIV: Conclusion and recommendations

The Uganda National NCD risk factors survey results indicate a need for vigilance and continued surveillance as the findings point towards a general increase in prevalence of most NCDs risk factors. We recommend addressing these important areas of health, and subsequently follow up to assess the impact in the next five years, 2028.

PART XV: References

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PART XVI: Appendices

Appendix I

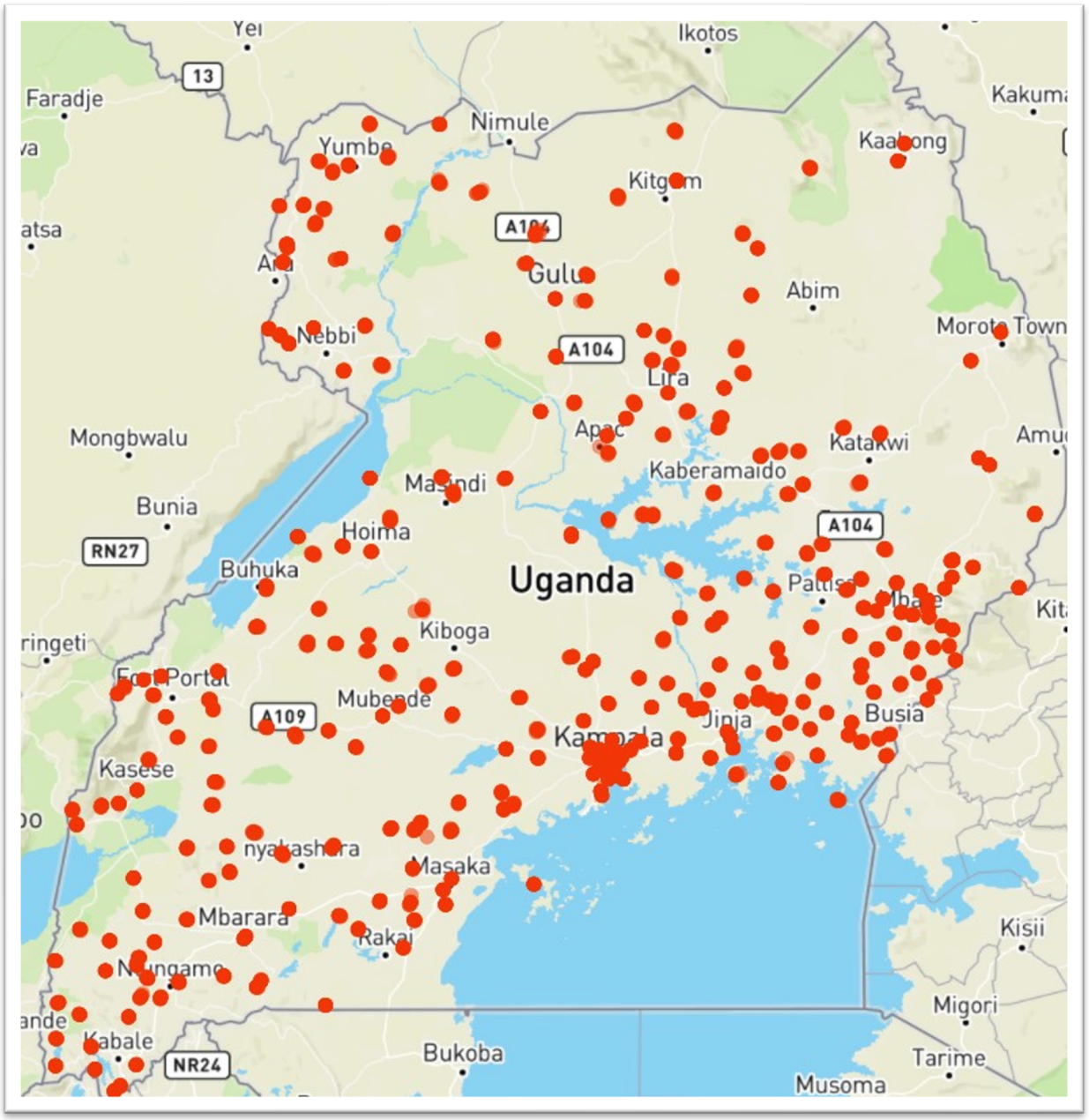

Figure 2 Map of Uganda showing the Enumeration Areas (EAs) where data was collected

Appendix II

STEPS Instrument, including question by question specifications attached

Appendix III

STEPS implementation plan attached