



Republic of Rwanda
Ministry of Health

rbc Rwanda
Biomedical
Centre
Healthy People, Wealthy Nation

SECOND RWANDA NON-COMMUNICABLE DISEASES RISK FACTORS STUDY DISSEMINATION OF FINDINGS

Rwanda, 2021-2022



What is NCDs risk factors STEPS Survey

Step1: Behavioral information: Tobacco Smoking, Alcohol consumption, Physical inactivity and Diet..

Step2: Physical measurements: Height, Weight, waist circumference and blood pressure.

Step 3: Biochemical measurements: Blood sugar, and Cholesterol.

Additional modules: Cervical cancer, Oral health, Injuries and Violence.

When & Where?

November 2021 to January 2022.

400 enumeration areas from 30 districts.

Methodology

The survey was a population-based survey of adults aged 18-69 years.

A multi-stage cluster sample design was used to produce representative data for that age range in Rwanda. A total of 5,676 adults participated in the survey.

The overall response rate was 96.3%.



SOCIAL DEMOGRAPHIC INFORMATION

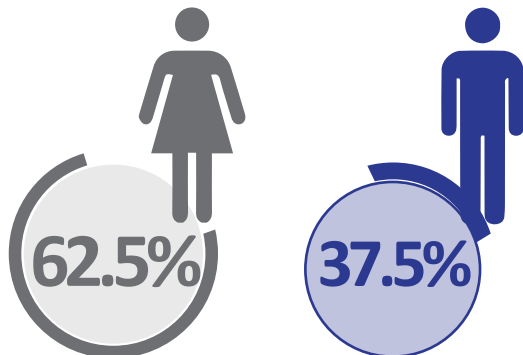


5,676

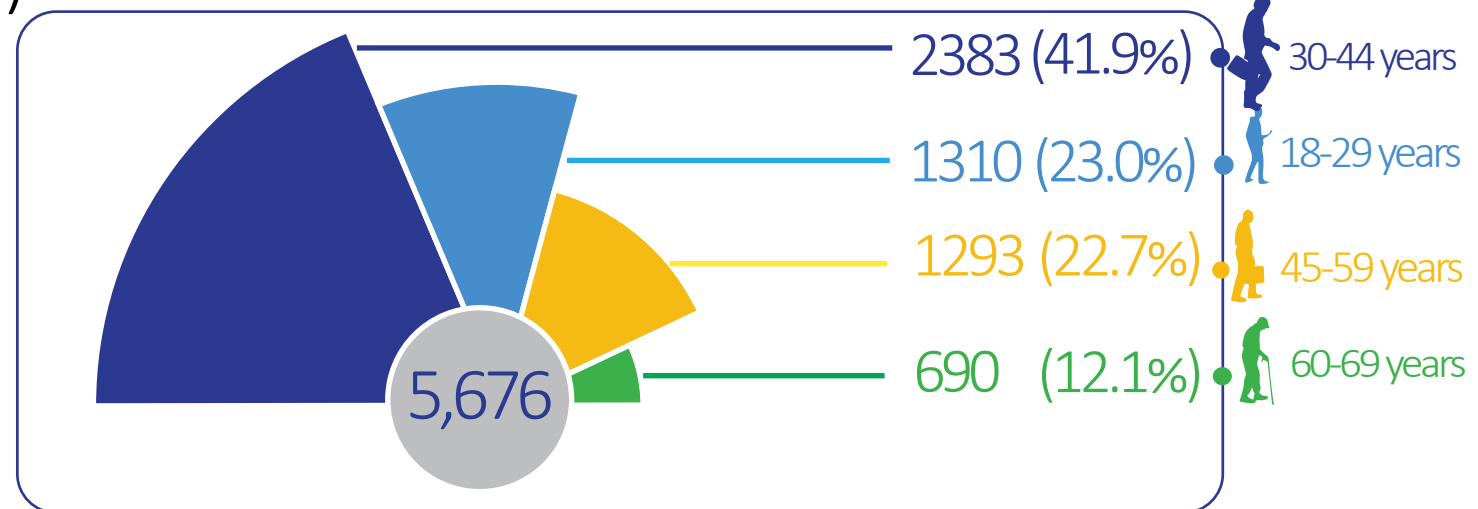
Study Population (18-69 years)

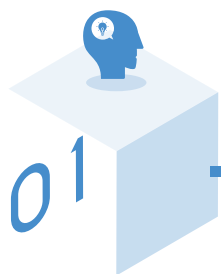
Sex

Distribution



Age-Range Distribution

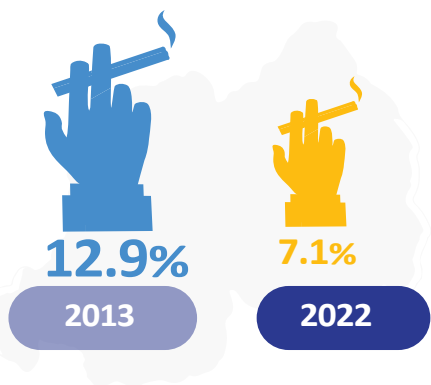




Behavioral Risk Factors

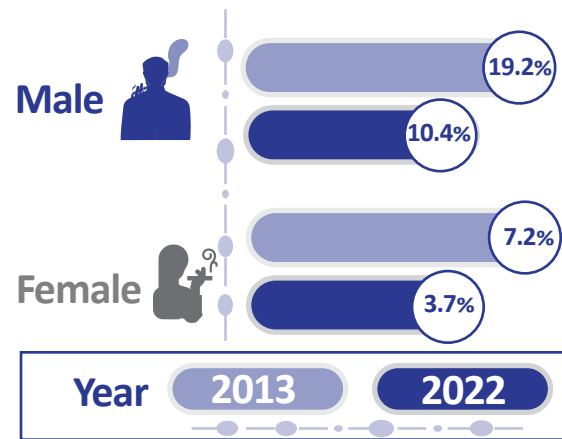
TOBACCO SMOKING

Overall



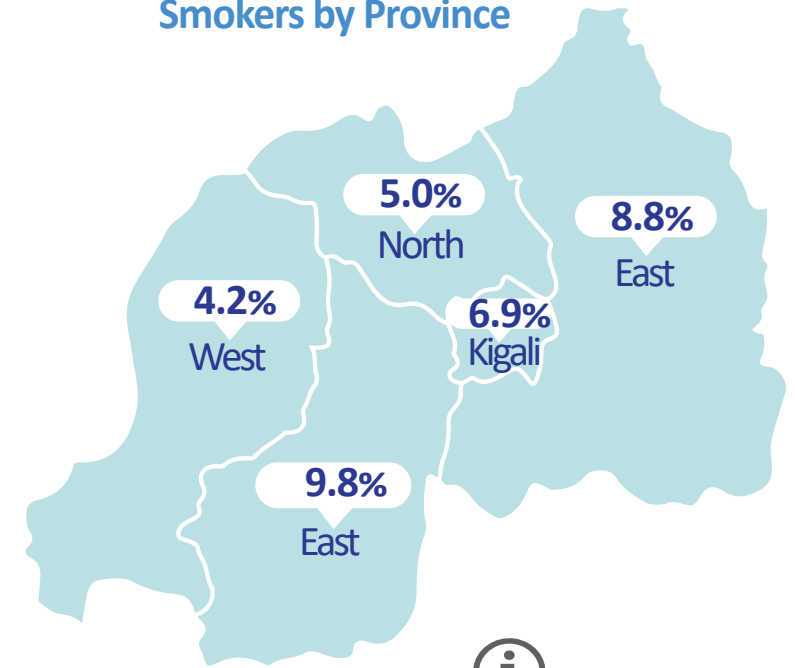
i
5.8% decrease in prevalence of tobacco smoking (from 12.9% in 2013 to 7.1% in 2022).

Smokers by Sex



i
Only 3.7% of women reported being current smokers against 10.4% in men

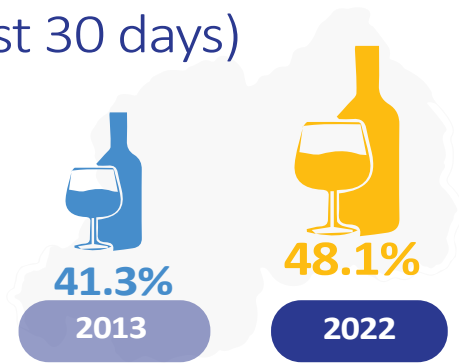
Smokers by Province



i
Tobacco smoking in the Southern and Eastern province is 9.8% and 8.8% respectively, Which is beyond the national prevalence.

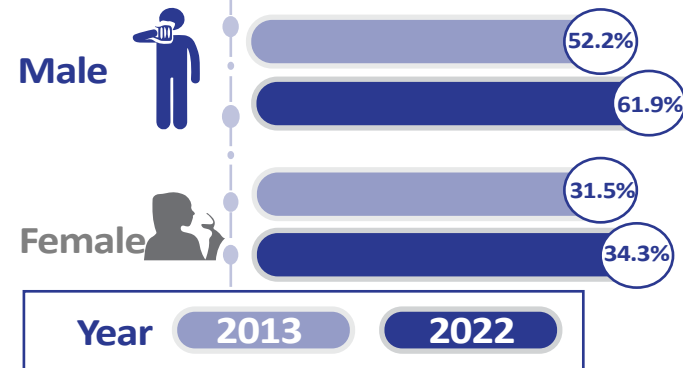
ALCOHOL CONSUMPTION

Current Drinkers (Past 30 days)



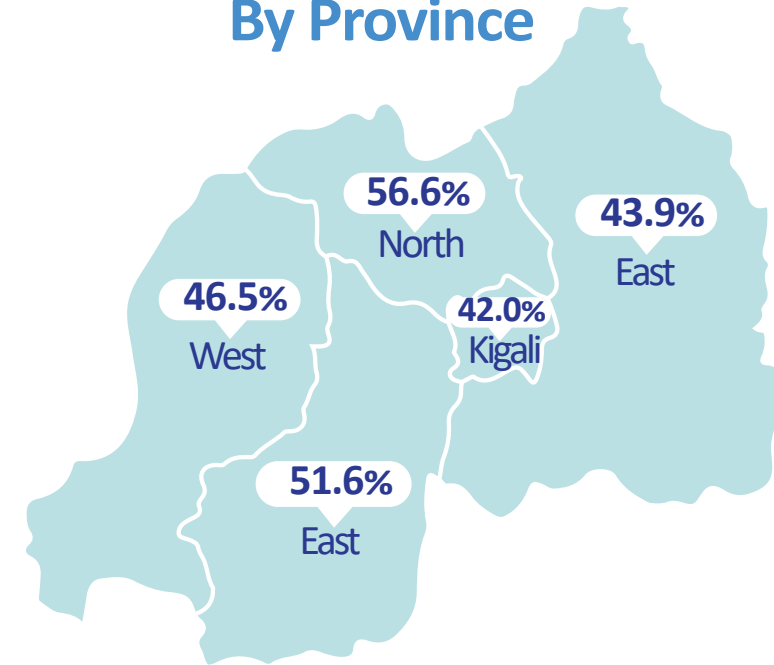
- Nearly half of respondents (48.1%) reported having consumed alcohol during the past 30 days of the survey.
- Compared to 2013 results there has been a moderate increase in alcohol drinking

By Sex



- The proportion of male (61.9%) who drink is significantly higher than women (34.3%).

By Province

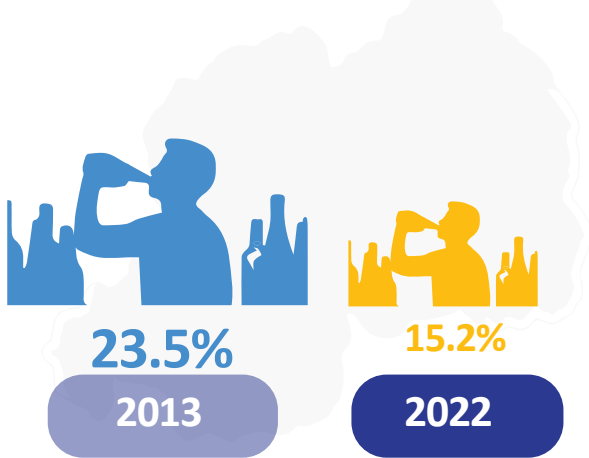


"The northern and southern province have a highest prevalence of alcohol consumption. While the City of Kigali has the lowest consumption at 42%."

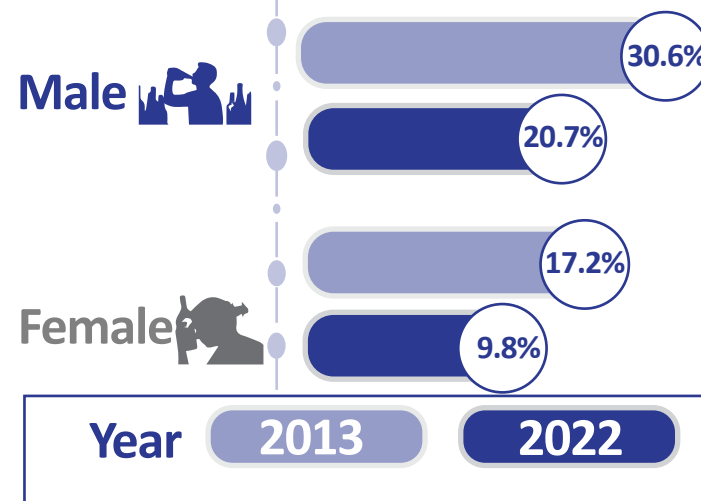
HEAVY ALCOHOL DRINKING

National Level

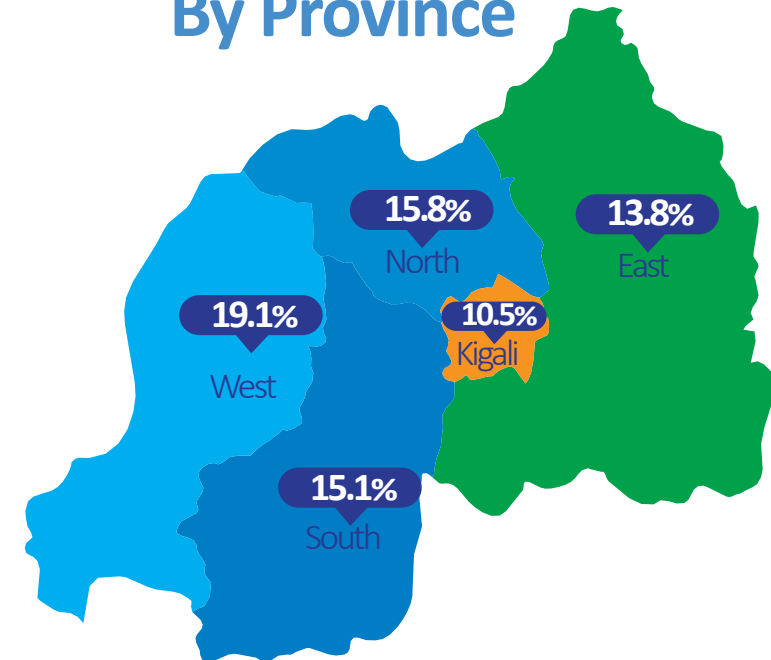
Heavy episodic drinking (Past 30 days)



By Sex



By Province



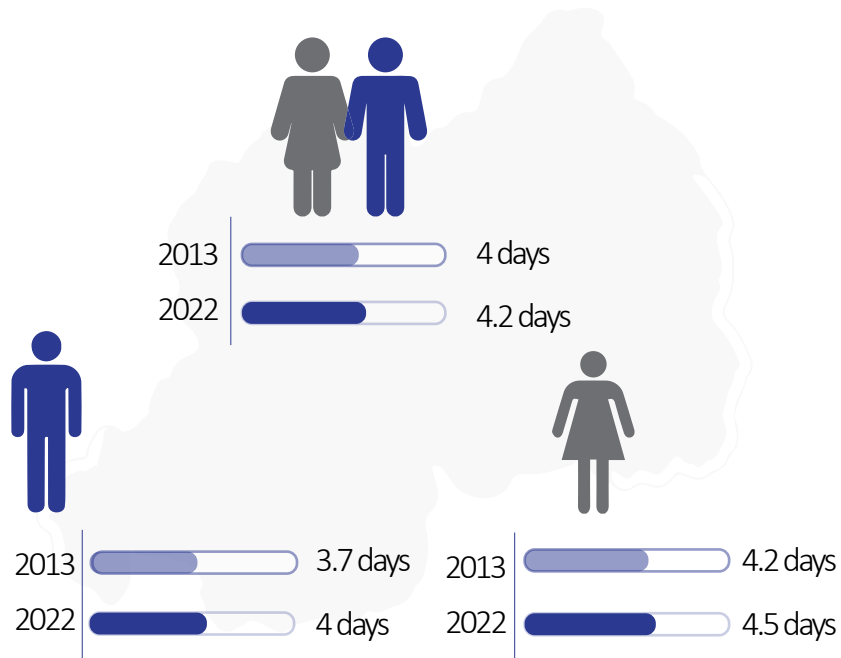
“ A Significant 8% decrease in heavy drinking compared to 2013 STEPS findings.”

DIET_FRUITS AND VEGETABLES CONSUMPTION/ # DAYS



Vegetables

Mean # of days vegetables consumed in a typical week



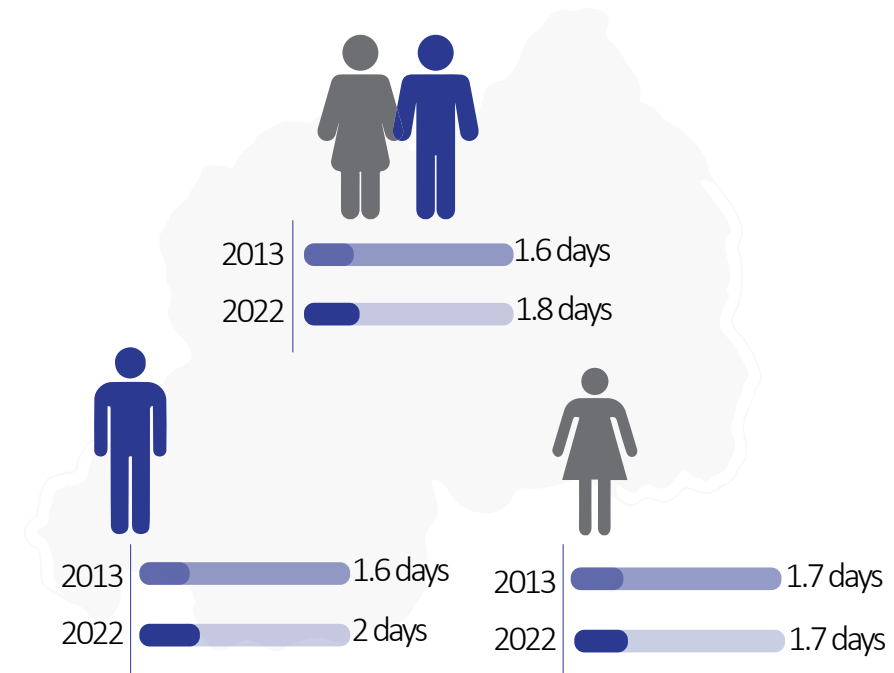
• On average Rwandans consume vegetables **4 days/week**, while fruits are consumed nearly **2 days/week**

• No significant variation was noted among sexes and no significant improvement over time



Fruits

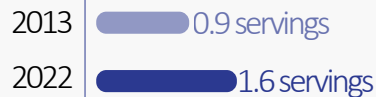
Mean # of days fruits consumed in a typical week





Vegetables

Mean # of servings of vegetables consumed on average/day



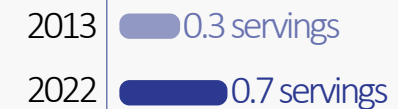
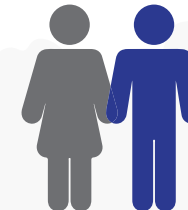
• Daily, Rwandans are consuming **1.6 servings** of vegetables and **0.7 servings** of fruits, while WHO recommends **5 servings per day**

• A moderate improvement since 2013

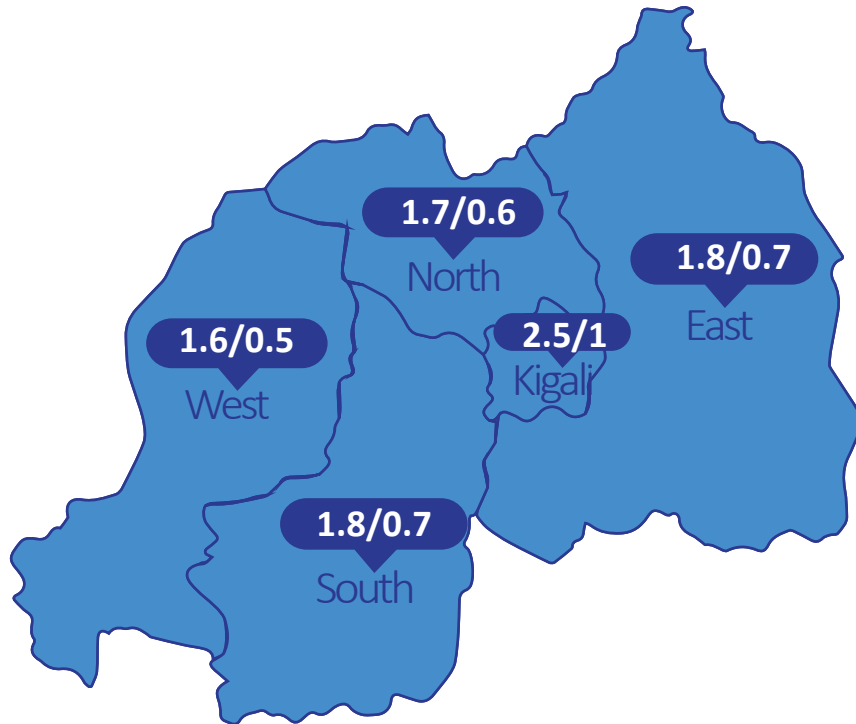


Fruits

Mean # of servings of vegetables consumed on average/day



Fruits Consumption

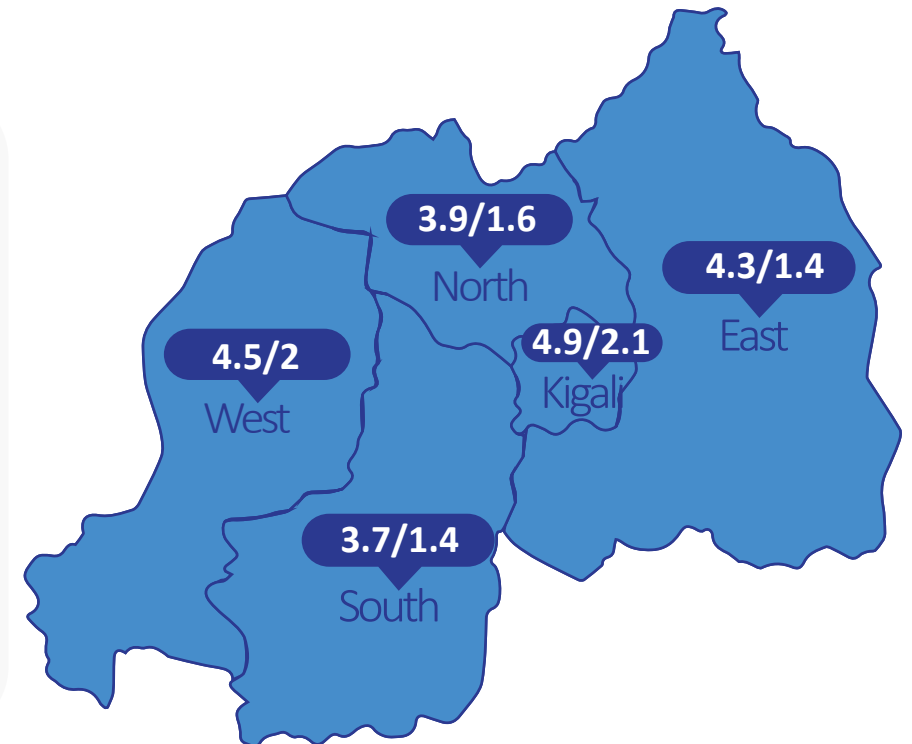


Mean # of days Fruits consumed per week/Mean # of Servings per day



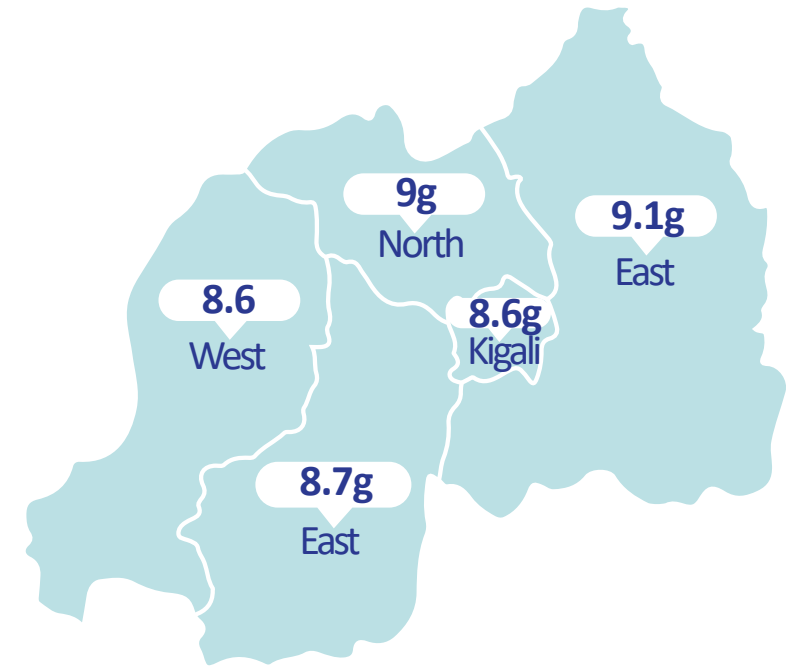
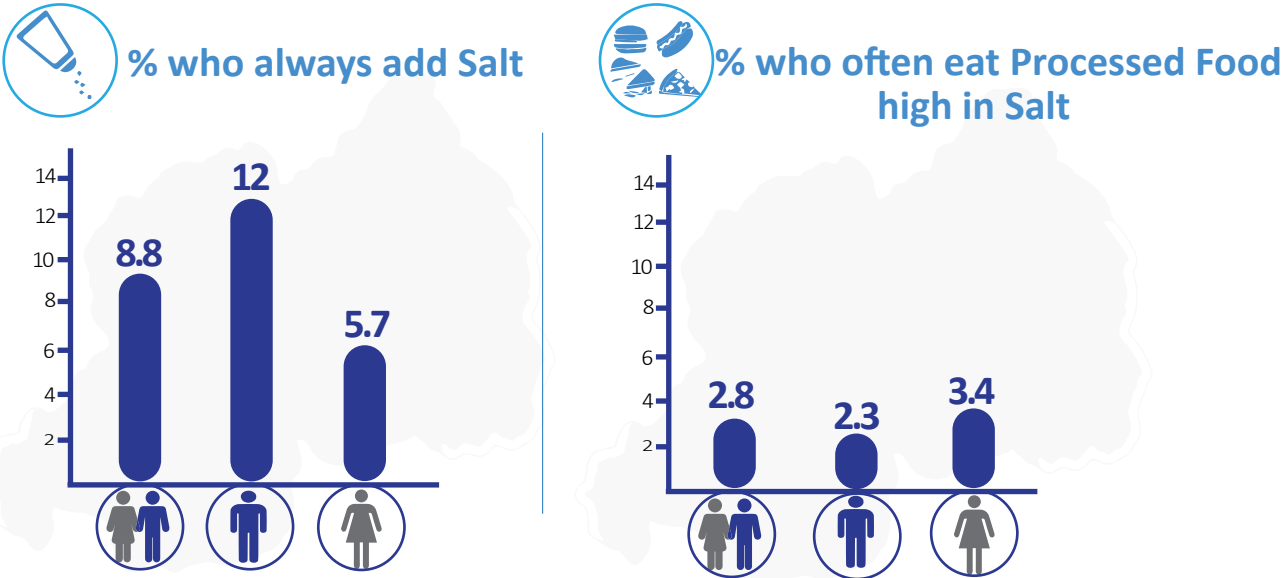
- The City of Kigali consume more fruits and vegetables that other provinces but none of the provinces consume the required quantity of **5 servings per day**

Vegetables Consumption



Mean # of days vegetables are consumed per week/Mean # of servings per day

DIET_SALT CONSUMPTION

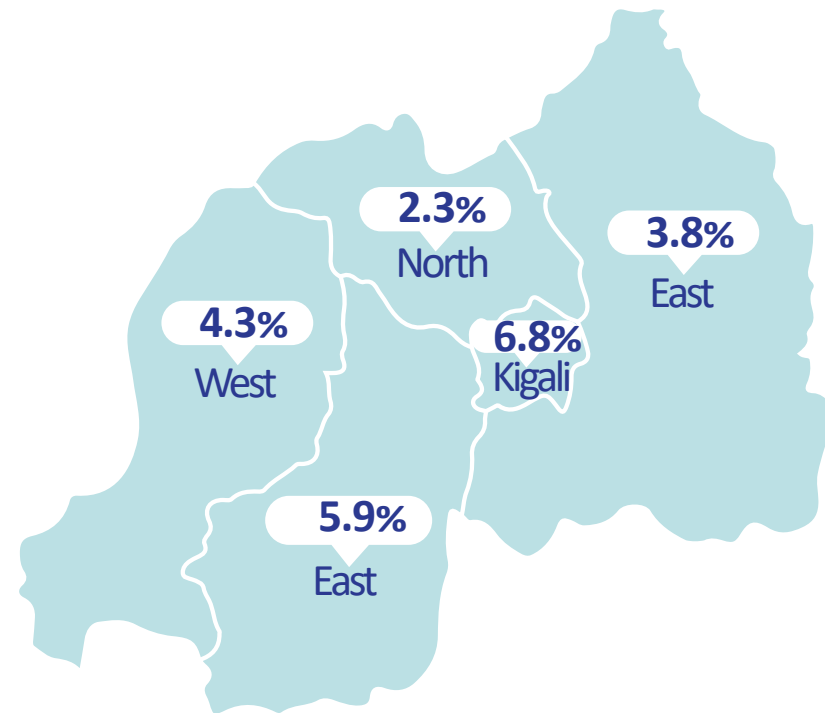
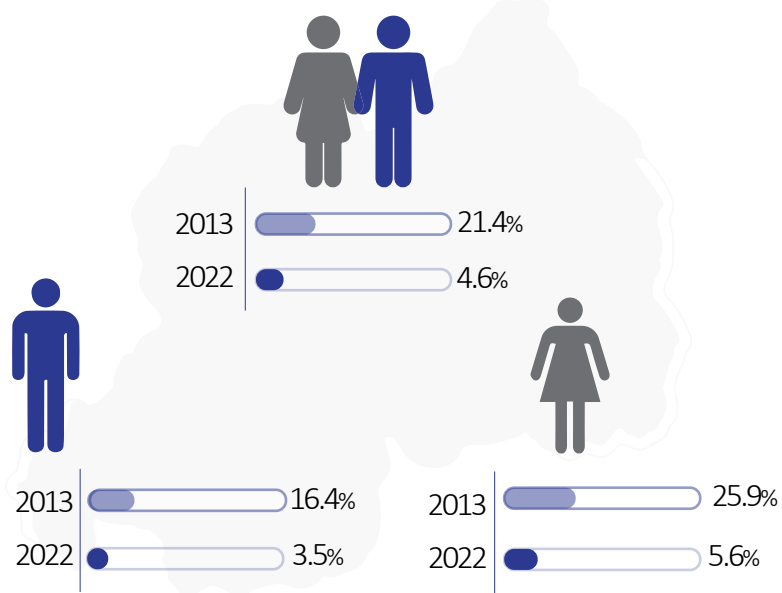


Mean Salt intake per day (In Grams)

The average quantity of salt consumed per day is **8.8 grams**, this is higher than the **<5 grams** recommended by WHO

"All provinces consume a higher quantity of salt and there is no significant difference among provinces!"

% with insufficient physical activity (defined as < 150 minutes of moderate-intensity activity per week, or equivalent)

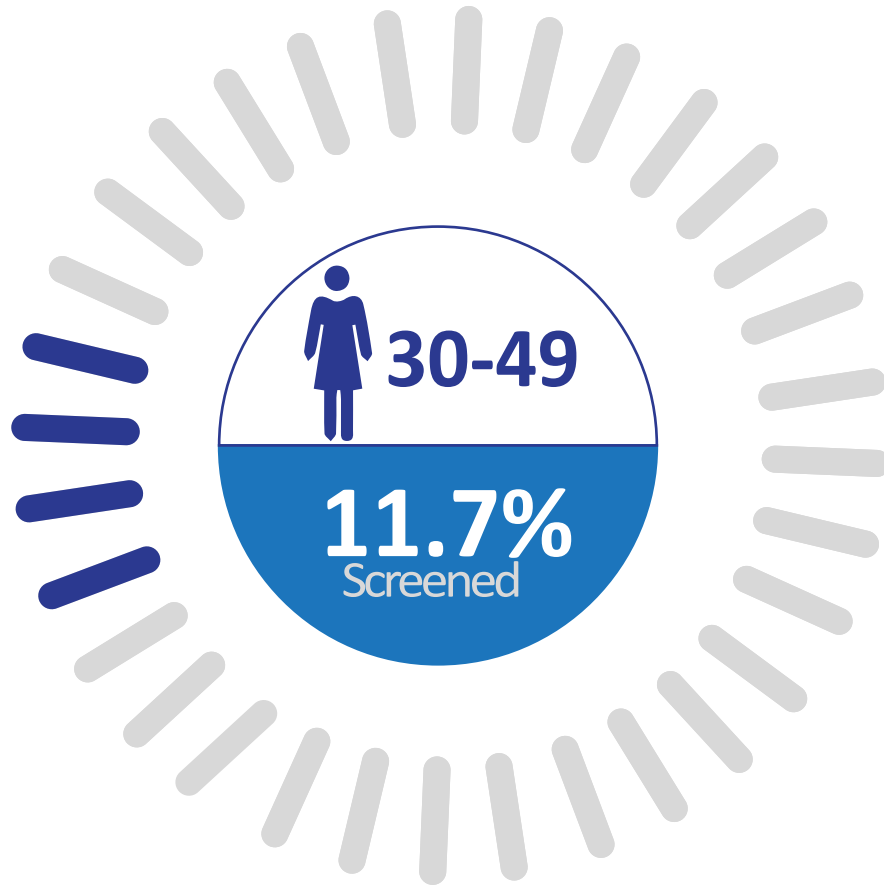


• There is a significant improvement over time, the prevalence of insufficient physical activity has reduced almost **5 times**

"The City of Kigali has a higher prevalence of physical inactivity!"

Other risk factors

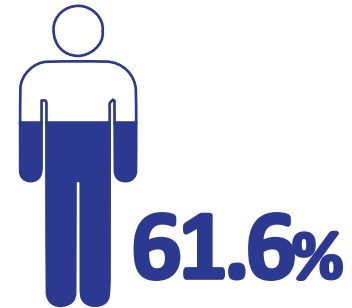
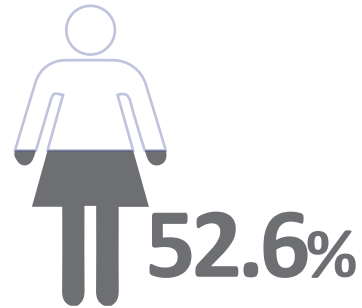
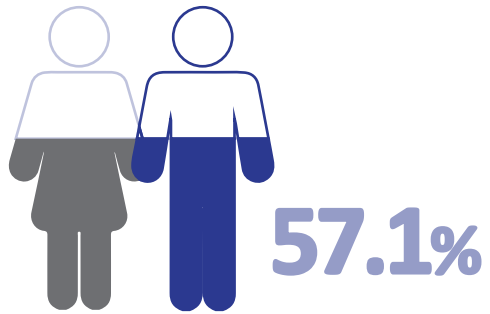
CERVICAL CANCER SCREENING



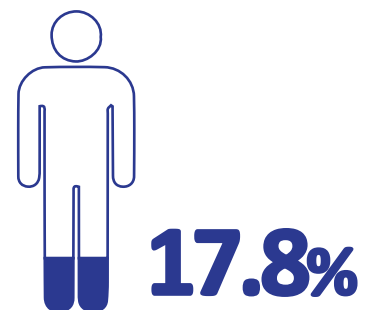
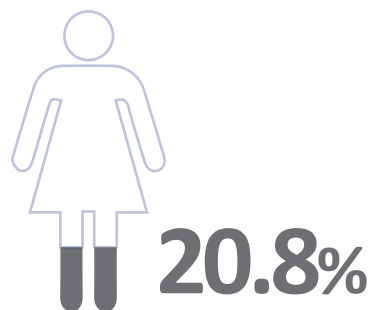
i Only 11.7% of 1.6 million women between 30-49 years old (Eligible for Cervical Cancer screening) have ever had a screening test for cervical cancer.



Percentage of respondents who have never received dental care



Percentage of respondents cleaning their teeth at least twice a day



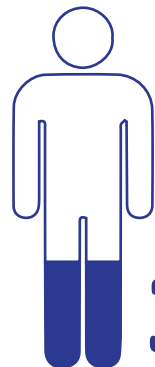
Only 43% responded to have ever received dental care, while only 19% of Rwandans clean their teeth two times a day as recommended.



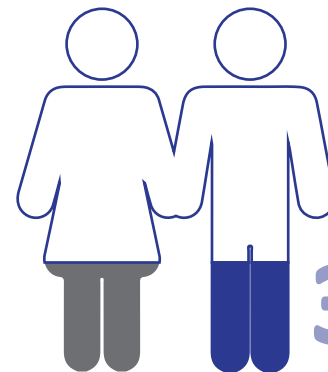
Percentage of drivers or passengers of a motorcycle or motor-scooter not always using a helmet



30.5%

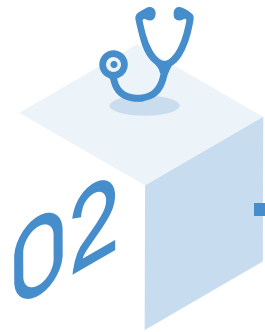


30%



30.3%

“ Compared with results from 2013, there have been significant improvements as the non-use of the helmet has reduced by 44% (from 74.0% in 2013) ”



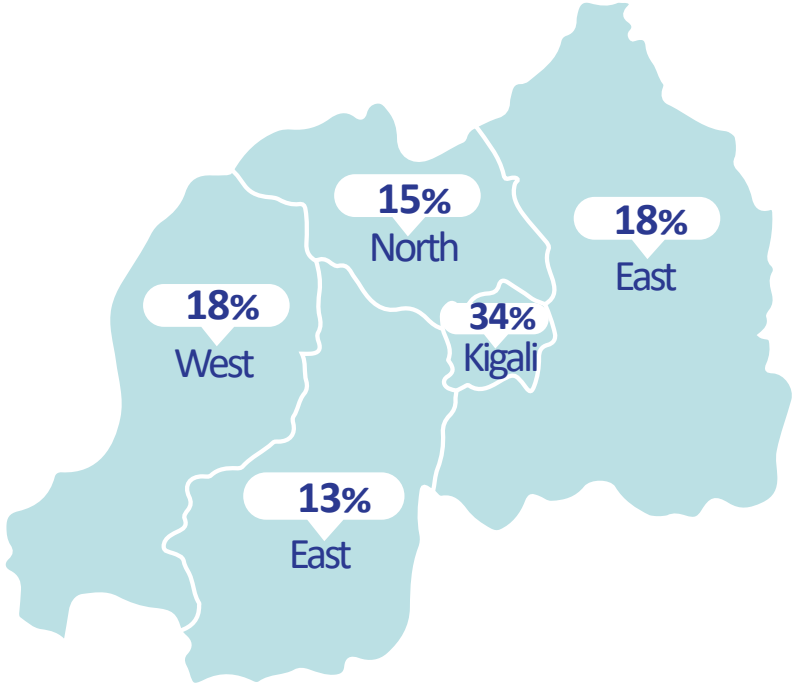
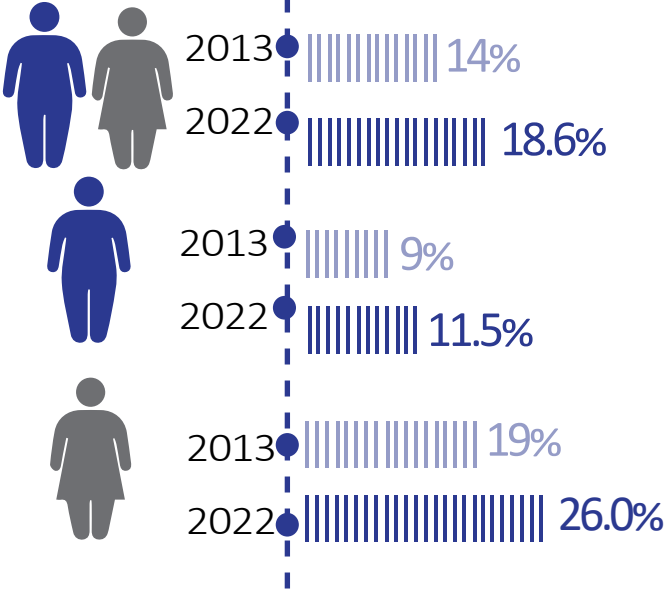
Physical Measurements

BODY MASS INDEX

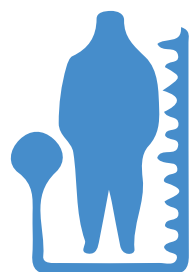
“
Since 2013, there has been an increase in the prevalence of overweight from 14.3% to 18.6% and the increase was more observed in females
”



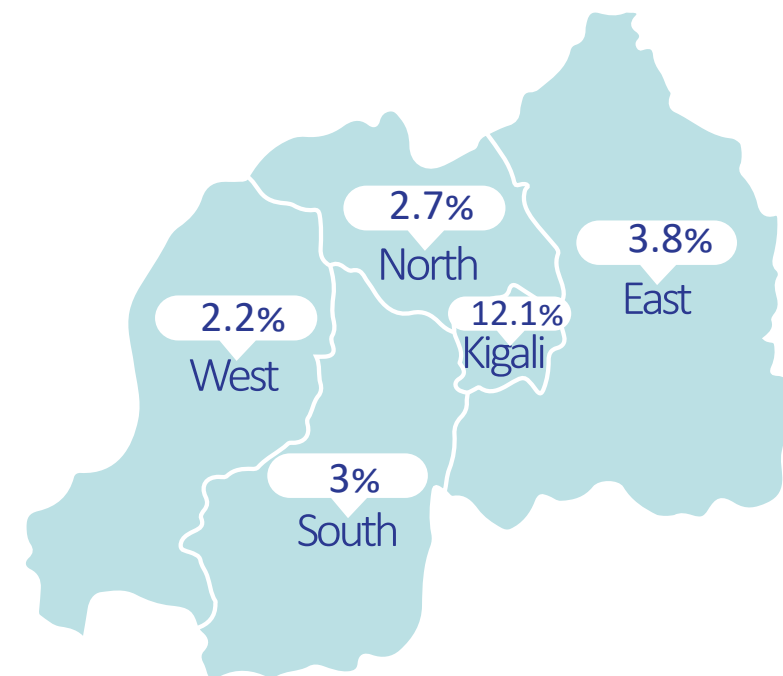
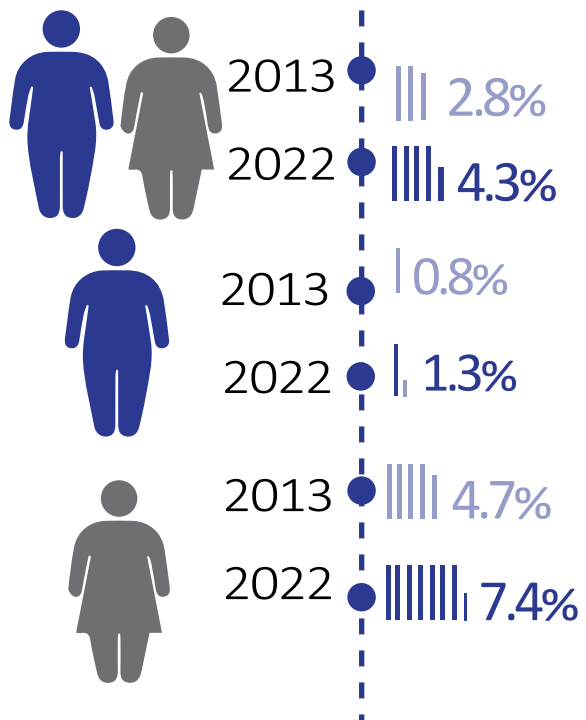
Percentage of overweight (BMI ≥25 kg/m²)



“The City of Kigali has the highest prevalence of overweight, just double of other provinces.”



Percentage of obesity (BMI ≥ 30 kg/m²)



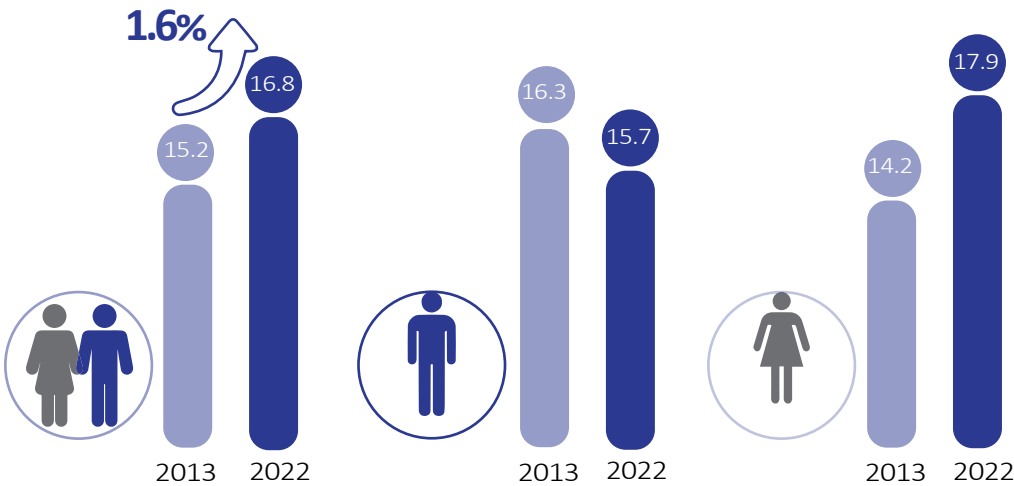
“The City of Kigali has the highest prevalence of obesity, four times higher than other provinces.”

“Since 2013, there has been an increase in the prevalence of obesity from 2.8% to 4.3% and the increase was more observed in females”

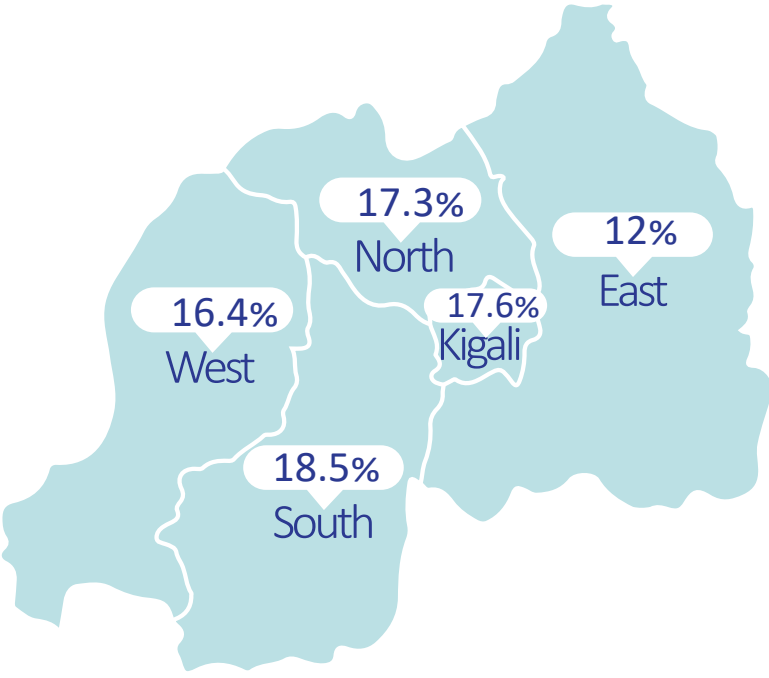
HIGH BLOOD PRESSURE



Percentage with raised BP (SBP \geq 140 and/or DBP \geq 90 mmHg or currently on medication for raised BP)



“The prevalence of high blood pressure significantly increases with age, to reach 43.2% in 60-69 age group, where half of females in that age group are hypertensive”



“The Eastern province has the lowest prevalence of hypertension while the southern province has the highest prevalence.”

BLOOD PRESSURE MEASUREMENT COVERAGE



52.1%

65.0%



38.3%



Half of participants have never their blood pressure measured, Although this figure is still high, it shows a significant improvement since the last 2012-13 STEPS survey, which indicated that nearly 80% of participants had never had their blood pressure measured.




38% of females have never have their blood pressure measured and the percentage increases to 65% in males.

COMBINED NCDs RISK FACTORS

 Current daily smoking

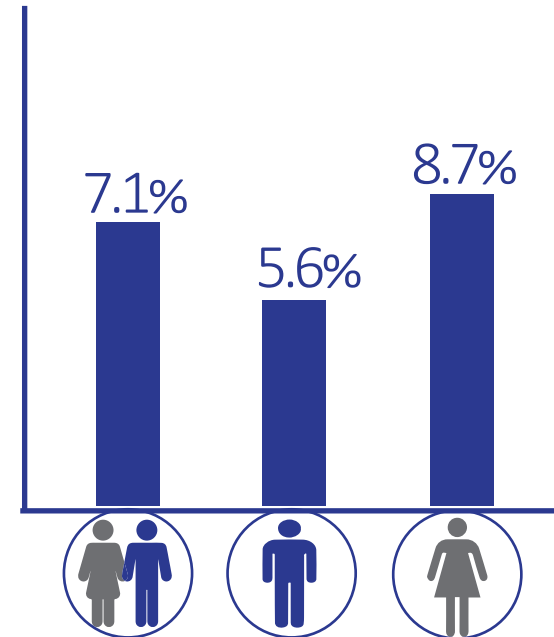
 Overweight or obese (BMI \geq 25 kg/m²)

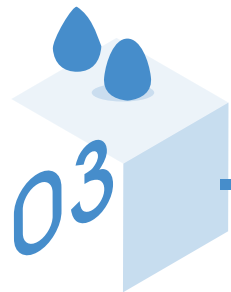
 Physical inactivity

 Raised BP (SBP \geq 140 and/or DBP \geq 90 mmHg or currently on medication for raised BP).

 Less than five servings of fruit and/or vegetables per day

% with 3-5 risk factors

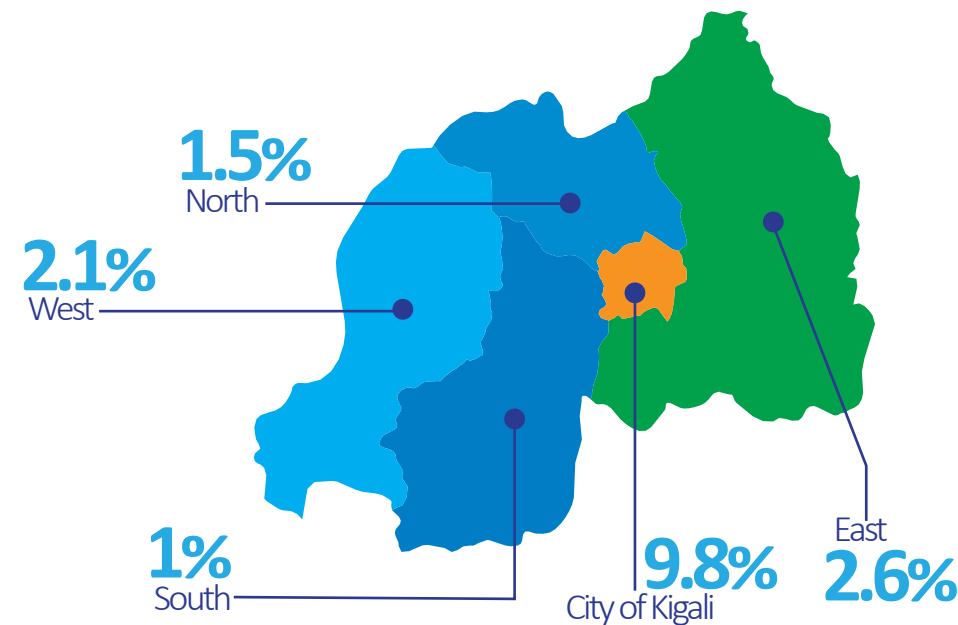
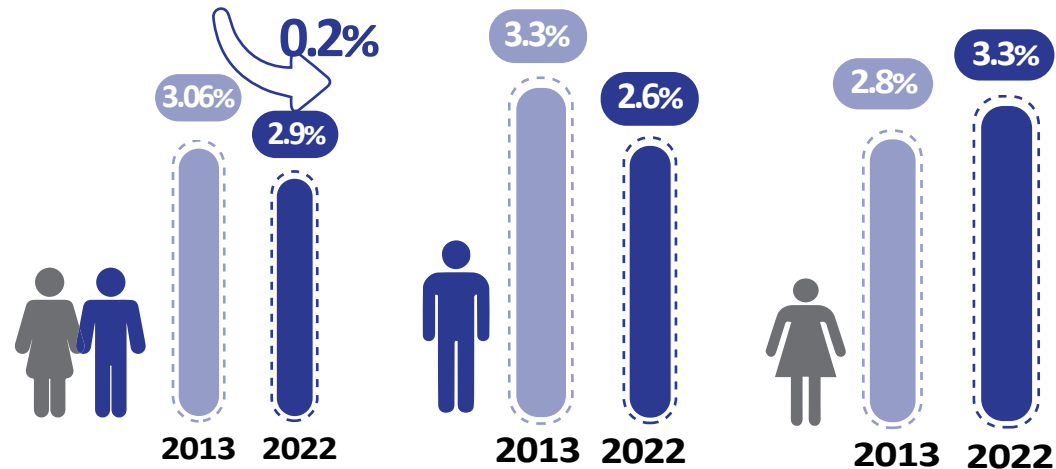




Biochemical Measurements

PREVALENCE OF DIABETES

 Percentage with raised fasting blood glucose or currently on medication for raised blood glucose (plasma venous value ≥ 126 mg/dl)



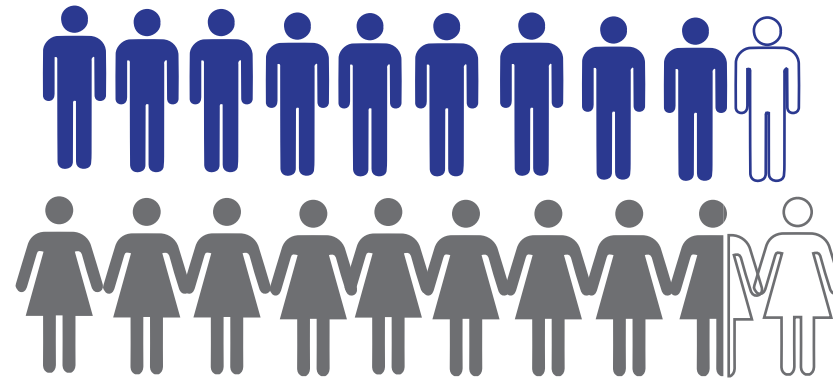
The prevalence of diabetes has been stable over the past 9 years, just around 3%. Generally, the prevalence of diabetes in Rwanda is still low compared to the global prevalence where it is affecting 10% of the global population

“The City of Kigali has the highest prevalence of Diabetes, more than 4 times higher than the national prevalence.”

BLOOD SUGAR MEASUREMENT COVERAGE



88.2%



90.4%

87.0%



88.5% of respondents had never undergone blood sugar measurement with significant differences between both sexes (90.4% of men vs 87.0% of women).

RECOMMENDATIONS

1

Strengthen NCDs Community awareness using different communications channels and strategies.

3

Strengthen the health care system for NCDs early detection and management.

5

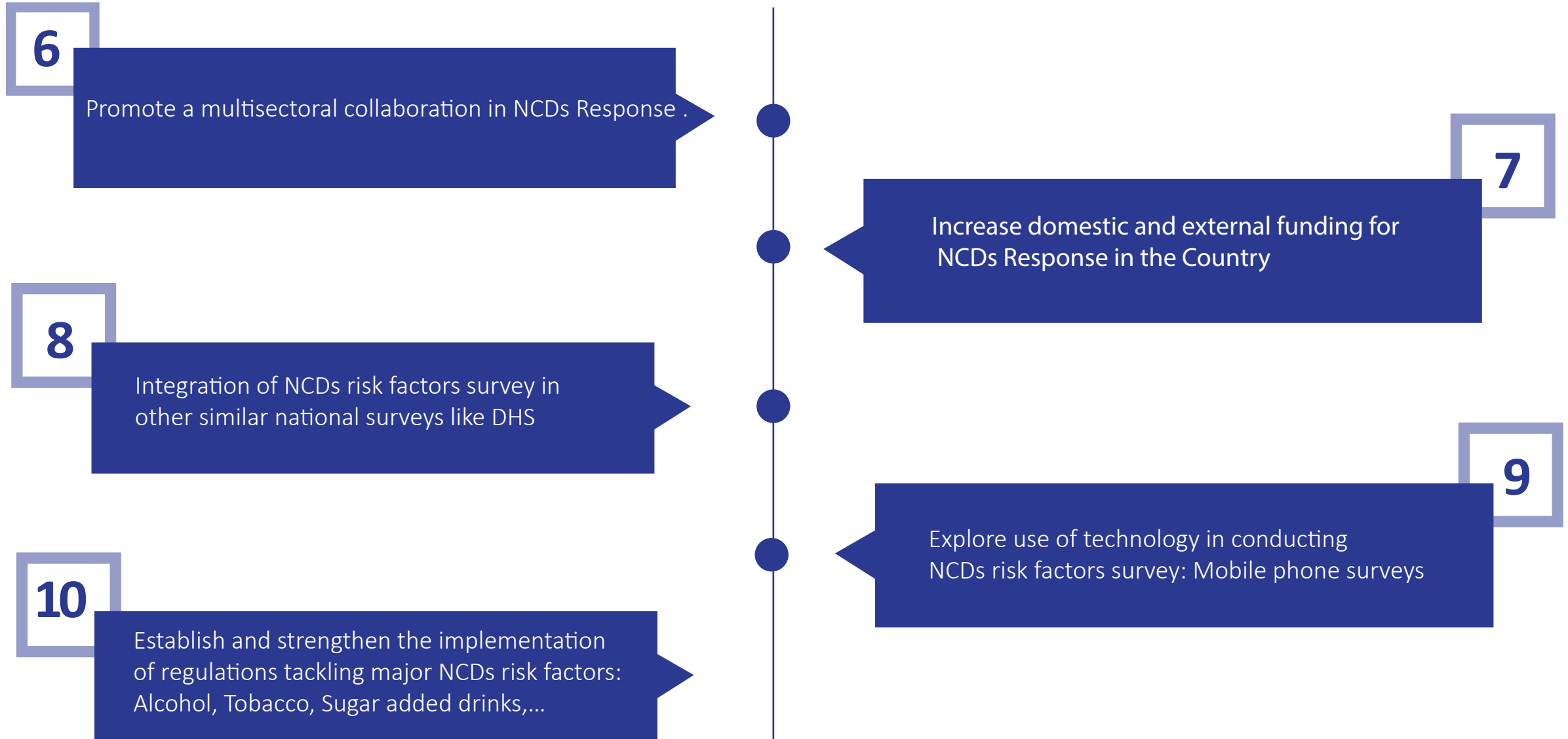
Strengthen NCDs data systems and research.

2

Establish community NCDs early detection programs using community health workers.

4

Establish and strengthen specialized NCDs management centers: Infrastructure, Equipment and Human Resource



ACKNOWLEDGEMENT



THANK YOU!



francois.uwinkindi@rbc.gov.rw