



Snapshot of 2023 STEPs Survey findings

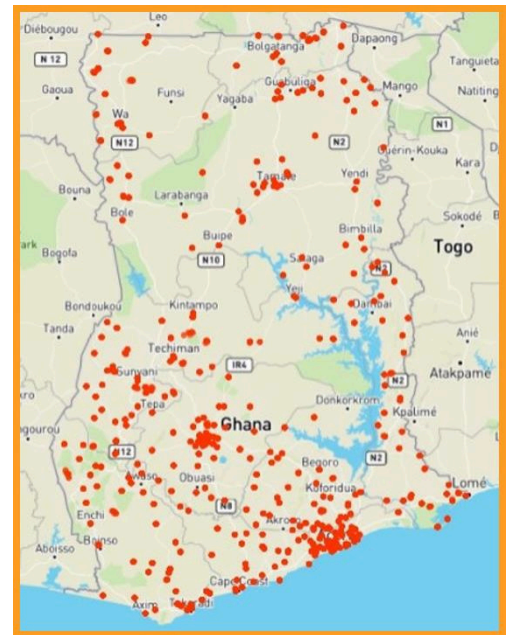
Modifiable Risk Factors: Tobacco use, Alcohol consumption, Fruits and Vegetable consumption, Salt intake and Physical activity

Rationale

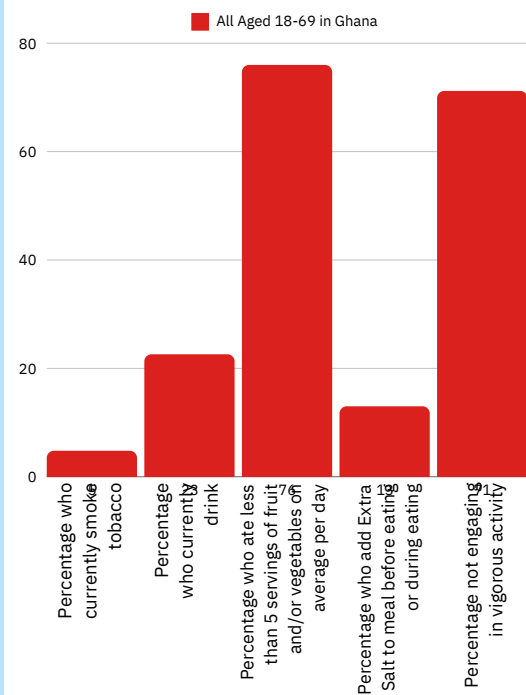
Rapid changes in demography and social and economic development play an important role in the emergence of non-communicable diseases (NCDs) as a public health problem. The growing burden of NCDs represents a major challenge, not only for developed countries but also for developing countries. The risk factors underlying major NCDs (heart disease, stroke, diabetes, cancer, and respiratory disease) have been well documented and are well known. However, no nationwide representative survey has ever been conducted in Ghana to document the risk factors. This maiden survey was therefore designed with the overall objective to establish a baseline on the prevalence of NCD risk factors in Ghana, which will help better guide monitoring and evaluation efforts.

Key messages

- Ghana has made significant efforts at implementing the Framework Convention on Tobacco Control (FCTC), however there are challenges with implementing some of the provisions on smoke free policies which needs to be prioritized. Compliance and regulatory processes should be strengthened at national and subnational level for all the other provisions within the framework such as Tobacco Advertisement, Promotion and Sponsorship (TAPS), public education, illicit trade, and labelling requirements using a multisectoral approach.
- Expedited actions are required for the passage of alcohol control legislative instrument to strengthen enforcement. Advocacy and awareness creation Initiatives targeted at schools and workplaces such as the adoption of the Employee Assistance Program (EAP) is critical. It is important for service delivery agencies to prioritize the provision of cessation services as part of promoting health and wellbeing at various levels of care. Community-based interventions such as existing self-help groups (alcoholic anonymous) should be strengthened to provide the required targeted support for users.
- Generally, Ghanaians do not eat fruits as frequently as needed; the little that is eaten is not sufficient to meet the needs of health and wellbeing. Increased eating of fruits in season is recommended for all Ghanaians. Again, consumption of vegetables falls below the expected recommendation for health and wellbeing and efforts should be made by all to consume the recommended servings per day
- High and frequent use of salt is linked to increased diet related diseases. Salt is made from sodium and high amounts in the diet contributes to high blood pressure and increased risk of heart and kidney diseases. The recommendation is to limit the use of salt in every day diets as well as regular consumption of processed foods high in salt.
- Ghana has adapted the global guidelines for physical activity which clearly defines and clarify physical activity within local context. These guidelines need to be widely disseminated and increased efforts at creating awareness on the benefits of physical activity. Advocacy to increase time allocated and the creation of an enabling environment within the school to promote physical activity within the school system should be prioritized. Workplace environment should also be conducive to promote physical activity and best practices should be considered for adoption.



Map of Ghana showing Nationwide household selection. A multi-stage sampling technique was used to obtain a nationally representative sample. Data was collected in all 16 regions, 385 enumeration areas and 5438 respondents aged 18 to 69.



1. Tobacco Use



Tobacco Use among adults aged 18-69 years	Both	Urban	Rural
Percentage who currently smoke tobacco	4.8% (3.8-5.9)	5.2% (3.6-6.9)	4.3% (3.1-5.3)
Percentage who currently smoke tobacco daily	3.1% (2.2-4.1)	3.3% (1.8-4.8)	2.9% (2.0-3.9)
For those who smoke tobacco daily			
Average age started smoking (years)	22.3% (20.7-23.8)	22.3% (20.7-23.8)	25.0% (22.3-27.6)
Percentage of daily smokers smoking manufactured cigarettes	73.6% (61.5-85.8)	74.9% (56.9-92.8)	71.6% (59.5-83.8)
Mean number of manufactured cigarettes smoked per day (by smokers of manufactured cigarettes)	3.0 (2.2-3.9)	3.0 (1.7-4.2)	3.0 (2.3-4.0)

1.1 Current Smokers

Adult population 18-69 years who currently smoke tobacco is 4.8% with a statistically significant difference in prevalence between men 9.3% and women 0.3%. Even though the prevalence is low, more than half (64.8%) of the current smokers of tobacco do it daily. There was no significant difference in the proportion of current smokers among urban (5.2%) and rural (4.3%) population



1.2 Initiation of smoking

For those who smoke tobacco daily, the younger generations (18-29 years) start smoking at a mean of 18.7 years compared to the older generation (60-69 years) with a mean of 28 years. The difference is statistically significant. The average age of starting smoking is statistically significantly different between the urban respondents, 21.0 years, and the rural respondents, 25.0 years

1.3 Smoking of manufactured cigarettes

About 73.6% of daily smokers smoke manufactured cigarettes. The daily smoking of manufactured cigarette is mainly found among the male respondents. The proportion of manufactured cigarette smokers among current smokers is 66.7%. There are no significant age group differences in both current and daily smokers of manufactured cigarettes. The mean number of manufactured cigarettes smoked per day by smokers of manufactured cigarettes is 3.

The proportion of daily smokers smoking manufactured cigarettes, and the mean number of manufactured cigarettes smoked per day by smokers of manufactured cigarettes did not vary among the urban and rural respondents.



1.4 Shisha smoking

The proportion of current smokers who smoke Shisha is 7.8%, which is more prevalent among age group 18-29 years (12.7%) and also highest among women. Whereas only 6.6% of men who currently smoke, smoke shisha, 44.0% of women who currently smoke, smoke shisha. A high proportion of 78.6% of the women who smoke shisha are in the age group of 18-29 years.

Shisha smoking among the youth especially among females is of growing concern and there is a need to put in interventions to address it.



1.5 Current smokers who have tried to stop smoking

Majority of current smokers have tried to stop smoking. Overall, 62.3% of current smokers have tried to stop smoking. Among the female current smokers, 68.8%, and male current smokers, 62.1% have tried to stop smoking. Only 25% of current smokers have been advised by a doctor to stop smoking.

It's good to see that over 60% of current smokers among both males and females have tried to stop smoking. This means the desire to stop is there and if efforts are put in place, they can be helped to quit smoking. Unfortunately, only 25% of them have been advised by doctor or other health personnel to stop smoking. Advantage should be taken at any opportunity by health personnel to advice smokers on quitting. There should be implementation of cessation services for those who try to stop smoking.

1.6 Exposure to second-hand smoke

Both males and females are equally exposed to second-hand smoke in the home environment. Whilst 15.2 % of male adult population (18-69 years) are exposed to smoke at home, 13.3% of female are. There are no significant differences in the exposure to second-hand smoke at home between the various age groups. Significantly at the workplace, more males 23.6% are exposed to second-hand smoke than females 16.2%.

2. Alcohol Consumption

Alcohol Consumption for adults	Both	Urban	Rural
Percentage who are lifetime abstainers	43.9% (40.9-46.9)	46.0% (41.4-50.6)	40.7% (36.6-44.8)
Percentage who are past-12-month abstainers	19.8% (18.2-21.5)	21.5% (19.0-24.0)	17.3% (14.9-19.7)
Percentage who currently drink (drank alcohol in the past 30 days)	22.6% (20.5-24.7)	18.6% (16.1-21.1)	28.4% (24.9-31.9)
Percentage who engage in heavy episodic drinking (6 or more drinks on any occasion in the past 30 days)	2.5% (2.0-3.0)	2.2% (1.6-2.9)	2.9% (2.1-3.7)

2.1 Abstainers

Adult population 18-69 years, who have never taken in alcohol in their life (lifetime abstainers) is 43.9%. The percentage who are past-12-month abstainers is 19.8%.

2.2 Consumers of Alcohol

Those who currently drank alcohol in the past 30 days made up 22.6% of the adult population, with a statistically significant difference between men (30.6 %) and women (4.5%).

There is a significant difference between the proportion of those who currently drink alcohol among the urban (18.6%) and the rural (28.4%) populations. In all 20.5% of the adult population have had to stop drinking alcohol due to health reasons.

Majority (83.9%) of current alcohol drinkers are lower-end drinkers (drinking less than 40g for men and less than 20g for women of pure alcohol on average per occasion) followed by intermediate drinkers, 12.3% , (drinking 40-59.9g for men and 20-39.9g for women of pure alcohol on the average per occasion) and with the high end drinkers (drinking ≥ 60g for men and ≥40g for female) of pure alcohol on average per occasion) being 3.8%.

The proportion of the population engaged in heavy episodic drinking on a single occasion is 2.5%. They were engaged in drinking of six or more drinks at a single occasion in the past thirty days. Significantly more men (3.6%) drink heavily on a single occasion compared to women (1.4%). Though a slightly higher proportion of the population in the rural settings engage in heavy episodic drinking compared to those in the urban setting, the difference is not statistically significant. 17.7% of the population are not able to stop drinking once they started during the past 12 months and among past 12-months drinkers.



9 out of 20 adults have never taken alcohol

Recent Studies and guidelines indicate that there is

NO SAFE LIMIT TO ALCOHOL CONSUMPTION

The World health Organization emphasizes No level of alcohol consumption is safe for our health

3. Fruits and Vegetables Consumption

Fruits and Vegetables Consumption	Both	Urban	Rural
Mean number of days fruit consumed in a typical week	2.2 (2.1-2.3)	2.2 (2.1-2.3)	2.2 (2.0-2.3)
Mean number of servings of fruit consumed on average per day	0.8 (0.7-0.8)	0.8 (0.7-0.8)	0.8 (0.8-0.9)
Mean number of days vegetables consumed in a typical week	6.0 (5.9-6.1)	6.0 (5.8-6.1)	6.0 (5.9-6.1)
Mean number of servings of vegetables consumed on average per day	2.7 (2.6-2.9)	2.7 (2.5-2.9)	2.8 (2.7-3.1)
Percentage who ate less than 5 servings of fruit and/or vegetables on average per day	76.0% (73.8-78.1)	77.0% (74.0-80.1)	74.4% (71.1-77.7)
Percentage who always or often add salt or salty sauce to their food before eating or as they are eating	13.0% (11.2-14.7)	13.7% (10.9-16.4)	11.9% (10.2-13.7)
Percentage who always or often eat processed foods high in salt	22.8% (20.9-24.8)	23.1% (20.1-26.0)	22.5% (19.6-25.4)

The mean number of days the adult population (18-69 years) consume fruits in a typical week was 2.2 days. However, for vegetables, it is 6.0 in a typical week. The mean number of days of consumption of both fruits and vegetables is not different among the different age groups and sex.

Mean number of days for the consumption of fruits and vegetables does not vary in the urban or rural population and no significant difference among the different age groups.

The consumption of adequate servings of fruits is low among the adult population (18-69 years), with an average, of less than a serving (0.8) of fruits per day. There was no significant difference among the various age groups, sex as well as rural and urban populations.

Even though the mean number of days vegetables consumed per week is 6 days, the servings on the average per day is only 2.7 for the general population 18-69 years. Men have an average of 2.6 servings per day compared with 2.9 servings per day for women. There is no difference between the age grouping on average servings for vegetables per day, and no difference between urban and rural populations.

Majority of the adult population, (76.0%) have less than 5 servings of fruits and/or vegetables on the average per day. Only 24.0% have adequate servings of more than 5 on average per day. There is no difference among the various age grouping, and no difference between urban and rural populations.



WHO recommends an adult consumes at least 400 g (i.e. five servings) of fruit and vegetables per day



Majority of the adult population, (76.0%) have less than 5 servings of fruits and/or vegetables on the average per day

4. Salt Intake

13.0% of the adult population (18-69 years) always or often adds salt or salty sauce such as soy sauce to their meal before eating or during eating; 90.5% always or often add salt to their food when cooking or preparing foods at home; 22.8% always or often eat processed food high in salt; 9.1%; think they consume far too much or too much salt; and 18.3% think they take in too little or far too little salt.

Majority of the adult population (68.8%) think it is very important to lower salt in the diet. However, 10.4% think it is not at all important. The level of knowledge on too much salty diets causing serious health problems was high among the population and did not differ much among various age groups and sex.

Both sexes (86.1%) think salt causes serious health problems. Despite this high knowledge among respondents on the dangers of taking in too much salt, many are not taking appropriate actions to control their salt intake. For example, less than half (45.2%) limits consumption of processed foods on regular basis to control salt intake; only 9.8% look at the sodium contents on food labels; about a quarter (23.4%) say they buy low salt/sodium contents alternatives; the likelihood of using other spices other than salt when cooking was 25.6% among the population; 41.3% avoid eating food prepared outside the home environment; and 3.9% of respondents do other things to specifically control their salt intake

5. Physical Activities

Physical Activity	Both	Urban	Rural
Percentage with insufficient physical activity (defined as < 150 minutes of moderate-intensity activity per week, or equivalent)	9.9% (8.7-11.2)	12.5% (10.7-14.4)	6.1% (4.7-7.6)
Median time (in minutes) spent in physical activity on average per day (presented with inter-quartile range)	240.0 (65.7-420.0)	180.0 (48.6-394.3)	314.3 (128.6-454.3)
Percentage not engaging in vigorous activity	71.2% (68.9-73.4)	73.5% (70.4-76.6)	67.8% (64.6-70.9)

5.1 Adult Population (18-69 years) not meeting WHO recommendation on physical activity for health

Adult population (18-69 years) who are not meeting the WHO recommended physical activity level for health (Percentage with insufficient physical activity (defined as < 150 minutes of moderate-intensity activity per week, or equivalent) is 9.9%. More women (14.6%), than men (5.0 %) are not meeting recommendations for physical activity for health. This difference is statistically significant. More urban dwellers were less physically active (12.5%) than rural dwellers (6.1%). This difference is statistically significant.

5.2 Mean minutes of physical activity

The mean minutes of total physical activity on average per day for respondents was significantly different for men 323.8 and women 223.1. The younger (18-29 years) and older (60-69 years) age groups did less mean number of minutes of total physical activity on average per day than the middle age group (30-59 years). Those in the younger (18-29 years) and older (60-69 years) age groups should be encouraged to do more physical activity. The elderly should be encouraged to go for walks.

The mean minutes of recreation activity for the population (18-69 years) is 12.6 minutes on average per day. This is even worse for women who averaged 4.5 minutes compared to men who averaged 20.4 minutes on average per day. This difference is statistically significant.

Men had significantly higher mean minutes of 214.2 on average per day for work-related physical activity than women who had a mean of 129.4 minutes. The middle age group of 30-59 years have significantly higher mean minutes of work-related physical activity than the younger (18-29 years) and older (60-69 years) groups. This is not surprising as more of the 30-59 year old are in employment and some of the jobs would require active physical activity.

Mean minutes of transport-related physical activity (89.2 minutes) for the population is not different for men (89.2 minutes) and women (89.2 minutes). This may be because they all have to commute to work using similar means of transport.

5.3 Composition of total physical activity

The distribution of the various domains to the total physical activity among the population (18-69 years) is 45.4% for activity from work, 46.0% for activity for transport and 8.6% for activity during leisure time. Leisure time physical activity contributes less to the total physical activity generally irrespective of the age groupings or sex.

The younger age group (18–29-year-old) significantly had more physical activity during leisure time than the older age groups. Physical activity during leisure time made the least contribution for both men (11.9%) and women (5.1%). People should be encouraged to engage in recreations that involve physical activity like sports, swimming, jogging. They can also join gyms and keep fit clubs. The elderly can take walks.

5.4 Respondents not engaging in vigorous physical activity

As high as 91.2% of women engage in no vigorous activity compared to 51.9% of men. This difference is statistically significant. Most women, regardless of the age groups engage in no vigorous activity. Among population, 71.2% do not engage in vigorous activity. The percentage not engaging in vigorous activity is higher among urban dwellers (73.5%) than in the rural population (67.8%) respondents though not statistically significant.

6. Call to Action

By focusing on these priorities, Ghana can further its efforts towards attaining the NCDs related targets of the Sustainable Development goals and reduce the burden and associated mortality of NCDs

- **Strengthen Smoke-Free Policies:** Prioritize enforcement of smoke-free environments at both national and subnational levels. Implement multisectoral approaches to enhance compliance with all FCTC provisions.
- **Pass and Enforce Alcohol Control Legislation:** Expedite the passage of alcohol control legislation. Focus on advocacy and awareness in schools and workplaces. Enhance support for cessation services and community-based interventions.
- **Promote Healthy Eating:** Launch campaigns to increase the consumption of fruits and vegetables. Encourage Ghanaians to consume fruits in season and meet daily vegetable intake recommendations. Educate on the risks of high salt consumption and promote reduced salt intake.
- **Enhance Physical Activity:** Disseminate physical activity guidelines widely across the country. Advocate for increased physical activity in schools and supportive environments in workplaces. Promote the benefits of physical activity to the general public.

References

- Al-Hazzaa, H. M., Abahussain, N. A., Al-Sobayel, H. I., Qahwaji, D. M., & Musaiger, A. O. (2011). Physical activity, sedentary behaviors and dietary habits among Saudi adolescents relative to age, gender and region. *International Journal of Behavioral Nutrition and Physical Activity*. <https://doi.org/10.1186/1479-5868-8-140>
- Alissa, E. M., & Ferns, G. A. (2017). Dietary fruits and vegetables and cardiovascular diseases risk. In *Critical Reviews in Food Science and Nutrition*. <https://doi.org/10.1080/10408398.2015.1040487>
- Ariesen, M. J., Claus, S. P., Rinkel, G. J. E., & Algra, A. (2003). Risk factors for intracerebral hemorrhage in the general population: A systematic review. In *Stroke*. <https://doi.org/10.1161/01.STR.0000080678.09344.8D>
- Bagnardi, V., Blangiardo, M., Vecchia, C. La, & Corrao, G. (2001). A meta-analysis of alcohol drinking and cancer risk. *British Journal of Cancer*. <https://doi.org/10.1054/bjoc.2001.2140>
- Bosu, W. K. (2012). A comprehensive review of the policy and programmatic response to chronic non-communicable disease in Ghana. *Ghana Medical Journal*, 46(2 Suppl), 69–78.
- Bowling, A. (2014). *Research Methods in Health: Investigating Health and Health Service* (4th Ed). Open University Press. Camilli, G. (1995). The relationship between Fisher's exact test and Pearson's chi-square test: A bayesian perspective. *Psychometrika*, 60(2), 305–312.
- Carter, B. D., Abnet, C. C., Feskanich, D., Freedman, N. D., Hartge, P., Lewis, C. E., Ockene, J. K., Prentice, R. L., Speizer, F. E., Thun, M. J., & Jacobs, E. J. (2015). Smoking and Mortality — Beyond Established Causes. *New England Journal of Medicine*. <https://doi.org/10.1056/NEJMsa1407211>
- Chan, J. C. N., Malik, V., Jia, W., Kadowaki, T., Yajnik, C. S., Yoon, K. H., & Hu, F. B. (2009). Diabetes in Asia: epidemiology, risk factors, and pathophysiology. In *JAMA - Journal of the American Medical Association*. <https://doi.org/10.1001/jama.2009.726>
- Ghana: National Food Based Dietary Guidelines- 2022

Acknowledgement

The National STEPS Survey was conducted by Ministry of Health, Ghana Health Service, Ghana Statistical Service, The World Health Organization and the members of the National STEP team task team. WHO provided technical and financial resources.

This Factsheet was produced by the WHO Country Office, Ghana under the leadership of Dr. Joana Ansong.

The WHO technical support team include Dr. Benjamin Nuertey, Mr. Dominic Atweam, Dr Leveana Gyimah, Dr. Pascal Mwin.

The STEPS Survey task team include; Dr. Dennis Odoi Laryea, Dr. Philip Teg-Nefaa Tabong, Dr. Peter Takyi Peparah, Dr. Emmanuel Parbie Abbeyquaye, Dr. Yaw Ampem Amoako, Dr. Lambert Appiah, Dr. Mary Efua Commeh, Mr. Isaac Obeng Tandoh, Ms Sybill Sory, Dr. Joana Ansong, Dr. Sally-Ann Ohene, Dr. Leveana Gyimah, Mrs Priscilla Eshun, Dr. Elsie Kodjoe, Dr. Abraham Hodgson.

Contact us at: Connect with iaHO@who.int

us on LinkedIn: <https://www.linkedin.com/company/iaho/>