



Snapshot of 2023 STEPs Survey findings

Hypertension

Rationale

High blood pressure is one of the world's leading risk factors for death and disability. The number of people living with hypertension (blood pressure of ≥ 140 mmHg systolic or ≥ 90 mmHg diastolic or on medication) doubled between 1990 and 2019, from 650 million to 1.3 billion.

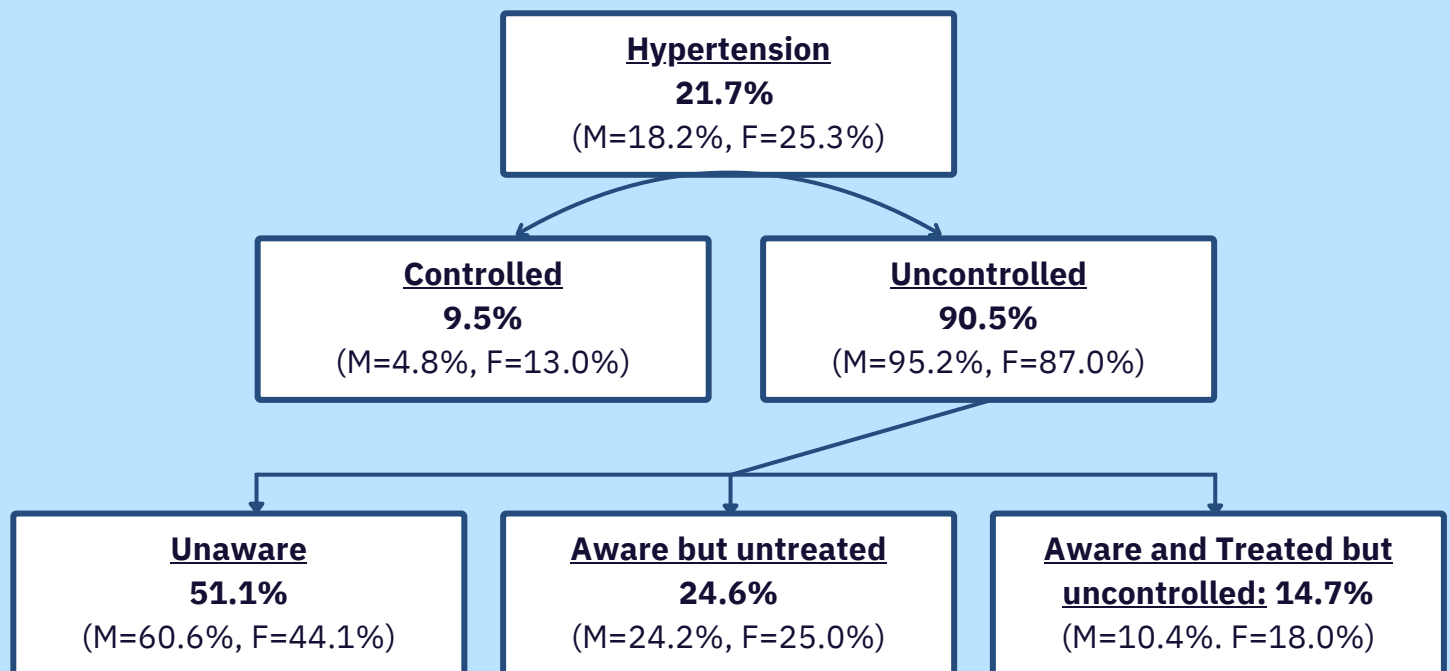
This common, deadly condition is an important public health problem that leads to stroke, heart attack, heart failure, kidney damage and many other health problems. High blood pressure causes more deaths than other leading risk factors, including tobacco use and high blood sugar.

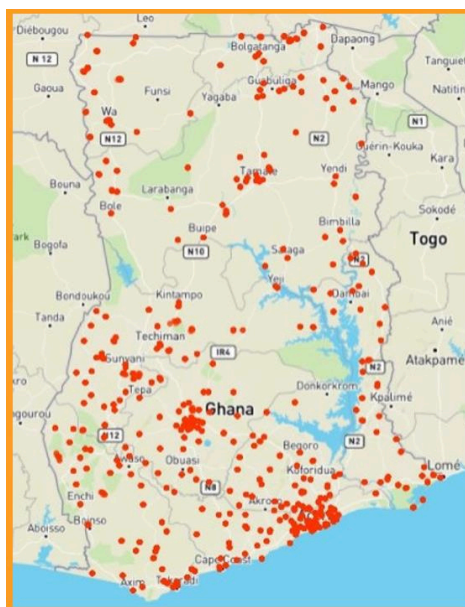
The good news is that hypertension and its associated complications can be addressed. Risk-factor strategies include ensuring that people eat a healthy diet low in sodium, maintain a healthy weight, avoid alcohol and tobacco, and take regular physical activity (all of which also contribute to good health more generally). Policies and practices to support these strategies are most effective when implemented across entire populations or within specific settings, such as in schools and at workplaces.

Key messages

National leadership accountable for steady progress in preventing heart attack and stroke, especially through improved control of hypertension should be provided by:

- Establishing national mechanisms such as a national steering committee, coordinated by strategic leadership from the ministry of health, to monitor and improve resource allocation and implementation of an integrated response to noncommunicable diseases, with specific attention to hypertension control rates
- Ensuring representation on such a steering committee comes from inside and outside government and includes clinicians committed to improving the management and control of hypertension through primary health care services setting and monitoring, at least annually and ideally quarterly, national targets and indicators to foster accountability.
- Ensuring that national policies and plans addressing hypertension are fully costed, funded, and implemented.
- Develop comprehensive programmes that address risk factors for hypertension and other noncommunicable diseases; for instance, encouraging healthy diets low in sodium, reducing tobacco and alcohol use, and making regular physical activity a normal part of daily life.





- 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. Blood Pressure Measurement



The findings of the survey show that 24.3 % of adults aged 18-69 years have never measured their blood pressure.

Disaggregated by sex, 33.8% of men and 14.7% of women have never had their blood pressure measured.



5 in 20 have never measured their blood pressure



2. Measured Blood Pressure

Blood Pressure among adults	Both	Urban	Rural
Mean systolic blood pressure - SBP (mmHg), including those currently on medication for raised BP	120.3 (119.5-121.1)	120.5 (119.3-121.7)	120.0 (119.0-121.0)
Mean diastolic blood pressure - DBP (mmHg), including those currently on medication for raised BP	79.6 (79.0-80.2)	80.3 (79.4-81.2)	78.5 (77.8-79.3)
Percentage with raised BP (SBP ≥ 140 and/or DBP ≥ 90 mmHg or currently on medication for raised BP)	21.7% (20.2-23.2)	23.4% (21.1-25.9)	19.1% (17.0-21.1)
Percentage with raised BP (SBP ≥ 140 and/or DBP ≥ 90 mmHg or currently on medication for raised BP) who are not currently on medication for raised BP	75.8% (72.9-78.6)	73.4% (69.4-77.4)	80.1% (76.9-83.3)

2.1 Prevalence of measured Blood Pressure ≥140mmHg/90mmHg

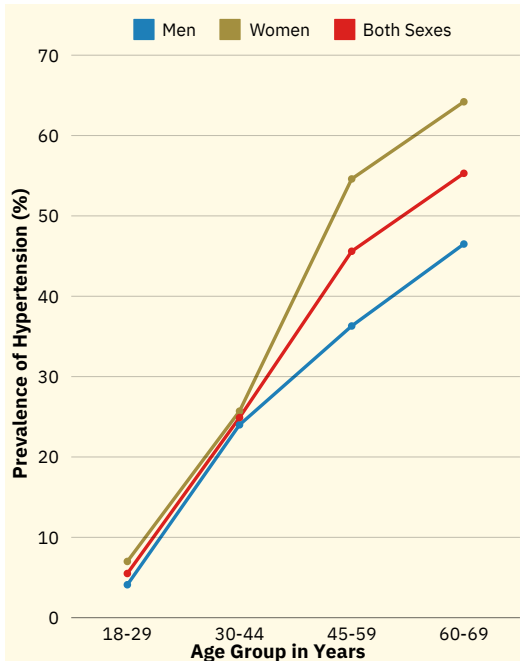
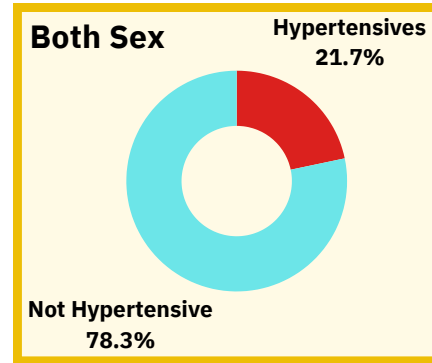
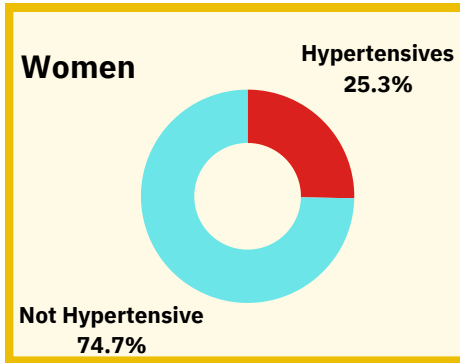
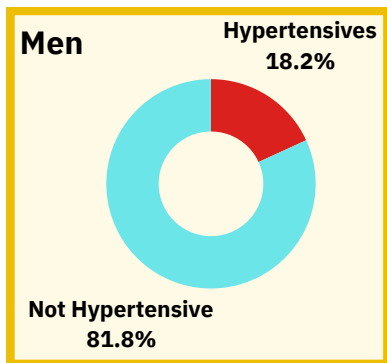
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-29	548	4.1	2.3-6.0	863	6.2	4.3-8.0	1411	5.1	3.8-6.4
30-44	715	22.8	19.1-26.5	1378	24.3	21.4-27.2	2093	23.6	21.2-26.0
45-59	509	34.5	29.1-39.8	792	47.4	43.2-51.7	1301	41.1	37.6-44.5
60-69	226	43.3	34.7-51.8	330	45.6	37.9-53.3	556	44.4	39.0-49.9
18-69	1998	17.3	15.3-19.4	3363	22.0	20.3-23.7	5361	19.6	18.1-21.1

The prevalence among the adult population (18-69 years) is 19.6%, 17.3% in men and 22.0% in women.

The prevalence increases with increasing age. Severe raised blood pressure or severe hypertension is present in 8.4% of the adult population (18-69 years).

2.2 Prevalence of Hypertension

The proportion of adult population (18-69 years) who have raised blood pressure or are currently on medications for raised blood pressure is 21.7%. A quarter of all women are hypertensives while one in five men are hypertensives. For the 18-29-year group, 5.5% have hypertension and the proportion increases significantly to 24.9% in the 30-44-year group, then 45.6% among 45-59-year group and as high as 55.3% for the 60-69-year group.



There is an age and sex difference in the prevalence of hypertension. The prevalence of Hypertension increases with age.

EVERYONE CAN TAKE NINE CONCRETE STEPS TO PREVENT HIGH BLOOD PRESSURE:

3. Severe raised blood pressure

Sadly, a significant proportion of Ghanaians have severe raised blood pressure. Severe Blood pressure is defined as Systolic Blood Pressure ≥ 160 and/or Diastolic Blood Pressure ≥ 100 mmHg. Almost one in ten Ghanaians have severely raised blood pressure.

Age Group (years)	Both Sexes		
	n	%	95% CI
18-29	1411	1.1	0.5-1.8
30-44	2093	9.7	8.0-11.3
45-59	1301	19.2	16.3-22.1
60-69	556	23.6	18.8-28.4
18-69	5361	8.4	7.4-9.3



1 in 10 Ghanaians have severe raised blood pressure

Uncontrolled Hypertension causes Premature Deaths.

It increases the risk of the following:

- Stroke
- Blindness
- Kidney failure
- Heart Attack
- Heart Failure
- Other complications

Globally, High blood pressure – the silent killer – is responsible for more than 10 million deaths every year.

4. Raised blood pressure on medication

The proportion of adult population aged 18-69 years currently taking medication for raised blood pressure that was prescribed by a doctor, or a health worker is 29.1%. This increases with age among both sexes however, none of the men in the 18–29-year group diagnosed with raised blood pressure were on medication. 16.8 % of those previously diagnosed with raised blood pressure have seen a traditional healer, 13.4 % are currently taking herbal or traditional remedies.

4.1 Raised blood pressure diagnosis, treatment, and control of raised blood pressure

Overall, 51.1% of adult population 18-69 years with raised blood pressure are not previously diagnosed, 24.6% who were previously diagnosed are not on medication, 14.7% of those previously diagnosed are on medication but not controlled with only 9.5% of those previously diagnosed and on medication having controlled blood pressure. Among men with raised blood pressure, the percentage who were not previously diagnosed was 60.6% and for women was 44.1%. Only 10.4% of men and 18.0 % of women with hypertension are controlled.



Most people with Hypertension are not diagnosed

**51.1% OF GHANAIANS
AGED 18-69 YEARS WITH
RAISED BLOOD PRESSURE
ARE NOT AWARE**

**Check your blood
pressure today!**

5. Summary of combined risk factors of Cardiovascular Disease

Cardiovascular disease (CVD) risk	Both	Urban	Rural
Percentage aged 40-69 years with a 10-year CVD risk \geq 20%, or with existing CVD	11.2% (9.8-12.7)	9.3% (7.6 – 11.4)	13.8% (11.7- 16.2)
<ul style="list-style-type: none"> Summary of combined risk factors: current daily smokers, less than 5 servings of fruits & vegetables per day, insufficient physical activity: not meeting WHO recommendations on physical activity for health (<150 minutes of moderate activity per week, or equivalent), overweight (BMI \geq 25 kg/m²), raised BP (SBP \geq 140 and/or DBP \geq 90 mmHg or currently on medication for raised BP) 			
Percentage with none of the above risk factors	11.1% (9.7-12.6)	8.7% (7.1-10.4)	15.6% (12.4-18.9)
Percentage with three or more of the above risk factors, aged 18 to 44 years	8.0% (6.8-9.2)	9.1% (7.5-10.7)	6.4% (4.6-8.2)
Percentage with three or more of the above risk factors, aged 45 to 69 years	24.8% (21.7-28.0)	31.8% (27.0-36.6)	15.7% (12.5-18.8)
Percentage with three or more of the above risk factors, aged 18 to 69 years	12.1% (10.9-13.4)	14.4% (12.6-16.1)	8.8% (7.2-10.4)

Generally, 13.3% of men and 8.8% of women have none of the combined risk factors. The percentage of men aged 18 to 69 years with 3 or more of these risk factors is 7.3%. The percentage in the 45–69-year group is significantly higher at 16.0% than those in the 18- 44-year group 4.6 %. The population with none of the combined risk factors in the urban population is 8.7% which is significantly lower than the rural population (15.6%). The percentage of three or more combined risk factors for the 45–69-year group and the 18–69-year groups are significantly higher among the urban population than rural.

For women 18 - 69 years, 17.4% have 3 or more of the combined risk factors. 11.9% among those aged 18-44 and 33.8% for the ages of 45-69 years. There is a statistically significant higher risk for women within the 45-69 age group (33.8%) compared with men in the same age group (16.0%).

How many people in Ghana have high blood pressure?

3.7 Million

GHANAIS AGED 18 - 69 HAVE HYPERTENSION



1.9 Million

GHANAIS WITH HIGH BLOOD PRESSURE ARE UNAWARE



SEVEN OUT OF TEN MEN WITH HIGH BLOOD PRESSURE ARE UNAWARE



FOUR OUT OF TEN WOMEN WITH HIGH BLOOD PRESSURE ARE UNAWARE

6. Call to Action

- A functioning national steering committee, coordinated by the Ministry of Health, Ghana Health Service to monitor and improve response to noncommunicable diseases (NCDs), with a focus on hypertension control would provide NCDs specific leadership to reduce the burden and associated morbidity and mortality due Hypertension.
- Establish and regularly monitor (at least annually, ideally quarterly) national targets and indicators for hypertension control to ensure accountability and progress.
- Ensure that national policies and plans addressing hypertension are fully costed, funded, and effectively implemented.
- Develop Comprehensive Risk Reduction Programs: Create and promote comprehensive programs that address risk factors for hypertension and other NCDs, such as advocating for healthy diets low in sodium, reducing tobacco and alcohol consumption, and encouraging regular physical activity.
- Fully Implement the WHO HEARTS package in Ghana

References

- Epstein, M., & Sowers, J. R. (1992). Diabetes mellitus and hypertension. In Hypertension. <https://doi.org/10.1161/01.HYP.19.5.403>
- GSS. (2015). Ghana Demographic Health Survey. Ghana Statistical Service, 530.
- GSS. (2017). Ghana Living Standards Survey (Round 7).
- Harding, J. L., Shaw, J. E., Peeters, A., Guiver, T., Davidson, S., & Magliano, D. J. (2014). Mortality Trends Among People With Type 1 and Type 2 Diabetes in Australia: 1997 – 2010. *Diabetes Care*, 37, 2579–2586. <https://doi.org/10.2337/dc14-0096>
- Hartley, L., Igbinedion, E., Holmes, J., Flowers, N., Thorogood, M., Clarke, A., Stranges, S., Hooper, L., & Rees, K. (2013). Increased consumption of fruit and vegetables for the primary prevention of cardiovascular diseases. *Cochrane Database of Systematic Reviews*. <https://doi.org/10.1002/14651858.CD009874.pub2>
- Sturgeon, J. D., Folsom, A. R., Longstreth, W. T., Shahar, E., Rosamond, W. D., & Cushman, M. (2007). Risk factors for intracerebral hemorrhage in a pooled prospective study. *Stroke*. <https://doi.org/10.1161/STROKEAHA.107.487090>
- WHO. (2013). Implementation tools: Package of Essential Noncommunicable (PEN) Disease Interventions for Primary Health Care in Low-Resource Settings.
- WHO. (2015). WHO Model list of Essential Medicines.
- WHO. (2017). The WHO STEPwise approach to noncommunicable disease risk factor surveillance. World Health Organisation.
- WHO. (2018a). 2018 NCDs Country Profile.
- WHO. (2018b). Global Report on Noncommunicable Diseases.
- WHO. (2022). Global Report on Hypertension

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.

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