World Health
Organization

European Region

Hypertension and cardiovascular diseases
in adults aged 18–69 years

❯ DIAGNOSED WITH HYPERTENSION

Having SBP of ≥ 140 mmHg and/or DBP of ≥ 90 mmHg or currently taking medication for hypertension

■ men ■ women ■ both sexes

18–29 years: 15.9% / 9.5% / 12.7%

30–44 years: 20.4% / 20.5% / 20.4%

45–59 years: 53.3% / 47.7% / 50.6%

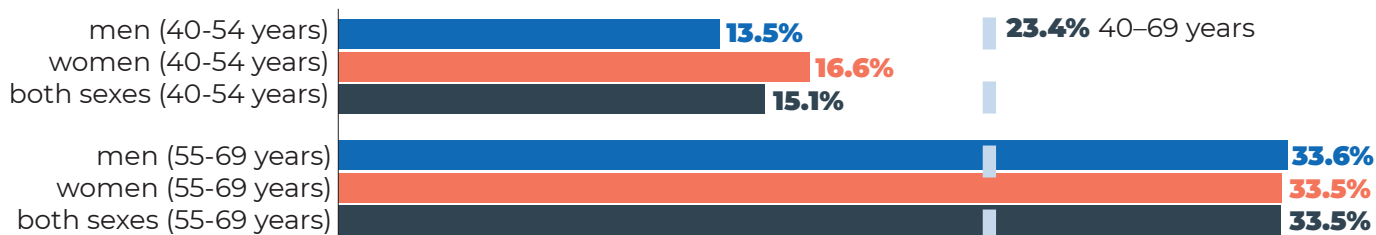**60–69 years:** 68.3% / 72.1% / 71.1%

34.8% 18–69 years

33.6%

34.8%
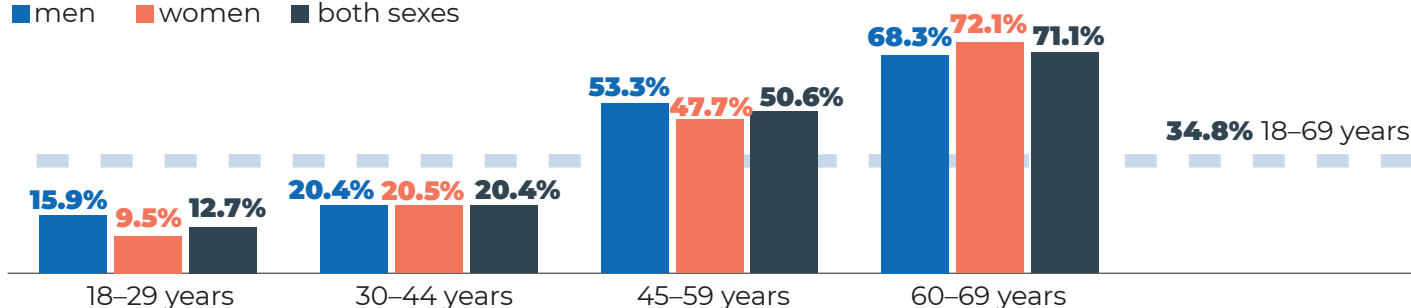
- One third of the population (**34.8%**) had hypertension, as defined in the section "STEPS description".
- Of these, a third (**33.6%**) had not been previously diagnosed with hypertension.
- Among participants with raised BP or currently taking medication for hypertension, 34.4% were on medication but their BP was not controlled (SBP ≥ 140 mmHg and/or DBP ≥ 90 mmHg); only 14.4% were on medication and had controlled BP levels (SBP < 140 mmHg and DBP < 90 mmHg).
- Of those who had previously been diagnosed and treated, a smaller proportion of men than women had controlled BP (men: 10.9%; women: 18%).

❯ CVD RISK

Proportion with a 10-year CVD risk of ≥ 30% of CVD or with existing CVD

men (40-54 years): 13.5%
women (40-54 years): 16.6%
both sexes (40-54 years): 15.1%

men (55-69 years): 33.6%
women (55-69 years): 33.5%
both sexes (55-69 years): 33.5%

23.4% 40–69 years

32.8%

60.1%

- One third (**32.8%**) of the population had three to five risk factors for developing CVD and **60.1%** had one or two risk factors.
- One quarter (23.4%) of the population aged 40–69 years had a 30% or higher 10-year cardiometabolic risk of developing a CVD event such as stroke or heart attack.
- Only one third (36.6%) of these high-risk individuals were receiving medication and counselling for CVD prevention.

❯ DIAGNOSED WITH CVDS

Proportion who ever had a heart attack or chest pain from heart disease or had a stroke

Age group (years)	Men n	% (95% CI)	Women n	% (95% CI)	Both sexes n	% (95% CI)
18–29	257	7.9 (1.6–14.1)	333	5.2 (2.6–7.9)	590	6.5 (3.1–9.9)
30–44	465	5.7 (2.6–8.9)	699	11.1 (7.4–14.8)	1 164	8.1 (5.4–10.7)
45–59	483	17.6 (12.7–22.5)	862	18.8 (14.7–22.9)	1 345	18.2 (14.9–21.5)
60–69	415	29.2 (23.0–35.4)	830	32.7 (27.6–37.9)	1 245	31.3 (27.1–35.5)
18–69	1 620	12.3 (9.6–14.90)	2 724	15.8 (13.6–18.0)	4 344	14.0 (12.2–15.8)

CI: confidence interval.

Proportion currently taking statins regularly to prevent or treat heart disease

Age group (years)	Men		Women		Both sexes	
	n	% (95% CI)	n	% (95% CI)	n	% (95% CI)
18–29	259	1.2 (0.0–2.9)	336	1.2 (0.0–2.4)	595	1.2 (0.2–2.2)
30–44	466	0.5 (0.0–1.3)	696	2.6 (1.2–4.1)	1 162	1.4 (0.7–2.2)
45–59	477	7.0 (4.0–10.0)	865	7.4 (5.3–9.6)	1 342	7.2 (5.3–9.1)
60–69	409	8.3 (5.3–11.3)	827	12.2 (9.4–15.0)	1 236	10.6 (8.5–12.7)
18–69	1 611	3.4 (2.3–4.40)	2 724	5.4 (4.3–6.4)	4 335	4.4 (3.6–5.1)

CI: confidence interval.

Proportion currently taking aspirin regularly to prevent or treat heart disease

Age group (years)	Men		Women		Both sexes	
	n	% (95% CI)	n	% (95% CI)	n	% (95% CI)
18–29	259	0.7 (0.0–1.5)	333	2.2 (0.1–4.2)	592	1.4 (0.3–2.5)
30–44	466	1.5 (0.3–2.7)	698	4.0 (1.6–6.4)	1 164	2.6 (1.3–3.9)
45–59	482	9.7 (5.9–13.5)	865	13.3 (9.6–17.0)	1 347	11.5 (8.8–14.2)
60–69	415	17.0 (12.1–21.9)	839	26.9 (22.1–31.7)	1 254	22.8 (19.3–26.4)
18–69	1 622	5.5 (4.0–6.9)	2 735	10.3 (8.6–12.0)	4 357	7.8 (6.6–9.0)

CI: confidence interval.

Percentage of eligible persons receiving drug therapy and counselling to prevent heart attacks and strokes

Age group (years)	Men		Women		Both sexes	
	n	% (95% CI)	n	% (95% CI)	n	% (95% CI)
40–54	44	23.8 (8.0–39.6)	99	28.3 (16.8–39.7)	143	26.3 (17.0–35.7)
55–69	141	39.3 (28.2–50.5)	302	44.3 (36.1–52.4)	443	42.1 (35.5–48.8)
40–69	185	33.9 (24.5–43.3)	401	38.6 (31.8–45.4)	586	36.6 (30.9–42.2)

CI: confidence interval.

▶ BLOOD CHOLESTEROL (BIOCHEMICAL MEASUREMENTS)

Proportion with total cholesterol of ≥ 5.0 mmol/L or ≥ 190 mg/dl or currently on medication for raised cholesterol

Age group (years)	Men		Women		Both sexes	
	n	% (95% CI)	n	% (95% CI)	n	% (95% CI)
18–29	178	21.3 (13.1–29.6)	222	22.4 (12.5–32.3)	400	21.9 (15.3–28.5)
30–44	309	35.2 (26.6–43.8)	503	31.0 (24.2–37.7)	812	33.2 (27.5–38.9)
45–59	327	56.8 (46.7–66.8)	654	54.2 (48.6–59.9)	981	55.5 (49.3–61.7)
60–69	281	47.7 (39.4–55.9)	604	58.9 (52.4–65.5)	885	54.5 (49.0–60.0)
18–69	1 095	40.6 (35.0–46.1)	1 983	40.9 (36.7–45.0)	3 078	40.7 (37.0–44.4)

CI: confidence interval.

- Almost two thirds (**63.9%**) of the population had never had their total cholesterol level measured.
- Overall, 4.3% of the population had been informed by a health-care worker that they had raised blood cholesterol.
- Of those previously diagnosed with raised total blood cholesterol, one quarter (25.7%) reported that they were taking medication prescribed by a doctor.
- 27.0% of men and 53.6% of women had low (i.e. at-risk) levels of high-density lipoprotein cholesterol (< 1.03 mmol/L).

63.9%

Among those diagnosed, proportion currently taking oral medication for raised total cholesterol

Age group (years)	Men n	% (95% CI)	Women n	% (95% CI)	Both sexes n	% (95% CI)
18–29	–	–	4	37.6 (0.0–91.7)	4	37.6 (0.0–91.5)
30–44	9	34.8 (0.0–75.5)	16	15.4 (0.0–38.3)	25	25.7 (2.6–48.7)
45–59	28	2.5 (2.1–42.8)	78	19.5 (9.7–29.2)	106	20.8 (10.3–31.3)
60–69	33	32.8 (10.2–55.3)	129	31.8 (21.4–42.2)	162	32.0 (22.5–41.6)
18–69	70	27.5 (11.7–43.4)	227	24.6 (17.1–32.1)	297	25.7 (18.2–33.3)

CI: confidence interval.

› RECOMMENDED ENABLING ACTIONS *(1)*

- Provide drug therapy (including glycaemic control for diabetes mellitus and control of hypertension using a total risk approach) and counselling for individuals who have had a heart attack or stroke and those with a moderate to high risk (≥ 20%) of a fatal or non-fatal cardiovascular event in the next 10 years.
- Treat new heart attack patients with primary percutaneous coronary interventions, aspirin and clopidogrel, initially in a hospital setting and followed up through primary-health-care facilities, with a target coverage rate of 95%.
- Treat acute ischaemic stroke patients with intravenous thrombolytic therapy.
- Provide care for acute stroke patients and rehabilitation in stroke units.
- Ensure cardiac rehabilitation after myocardial infarction.
- Integrate very cost-effective noncommunicable disease (NCD) interventions into the basic primary-health-care package, with referral systems to all levels of care to advance the universal health coverage agenda.

STEPS DESCRIPTION

The STEPS survey of NCD risk factors in Ukraine was organized by the Ministry of Health of Ukraine and WHO within the scope of Serving People, Improving Health, a joint project of the World Bank and the Ministry of Health of Ukraine. STEPS uses a global standardized methodology. Data collection for three steps took place from July to November 2019: NCD history was collected in Step 1, anthropometric measurements in Step 2 and biochemical health indicators in Step 3. The population-based survey used a multistage cluster sampling design to produce representative data for adults (aged 18–69 years). In total, 7704 randomly selected households were approached, with 4409 participants agreeing to take part in the survey and provide information (response rate of 57%). A 10-year risk for cardiovascular diseases (CVDs) of ≥ 30% was determined among those aged 40–69 years based on age, sex, blood pressure (BP), smoking status (current smoker or quit smoking for < 1 year before the assessment), total cholesterol and diabetes mellitus (diagnosed or a fasting plasma glucose concentration of > 6.1 mmol/L), or having an existing CVD. The CVD risk factors identified in the survey and from physical and biochemical measurements were current daily smoking; insufficient daily consumption of fruit and/or vegetables; insufficient physical activity to meet WHO recommendations; overweight (body mass index ≥ 25 kg/m²); and hypertension (systolic BP (SBP) of > 140 mmHg and/or diastolic BP (DBP) of > 90 mmHg, or currently taking medication for high BP).[1]

Note

[1] More details can be found in the report entitled STEPS prevalence of noncommunicable disease risk factors in Ukraine 2019 *(2)*.

References

(1) Tackling NCDs: "best buys" and other recommended interventions for the prevention and control of noncommunicable diseases. Geneva: World Health Organization; 2017 (https://apps.who.int/iris/handle/10665/259232, accessed 26 January 2022).

(2) STEPS prevalence of noncommunicable disease risk factors in Ukraine 2019. Copenhagen: WHO Regional Office for Europe; 2020 (https://apps.who.int/iris/handle/10665/336642, accessed 26 January 2022).