World Health Organization

European Region

FACTSHEET ON UKRAINE BASED ON STEPS

(the WHO STEPwise Approach to Surveillance)

# Diabetes mellitus
in adults aged 18–69 years

> BMI

- Overweight and obesity are major risk factors for a number of chronic diseases, including diabetes and cardiovascular diseases. Body mass index (BMI) is a simple index of weight-for-height that is commonly used to classify overweight and obesity in adults. It is defined as a **person's weight in kilograms divided by the square of his height in meters (kg/m²)** *(1)*.
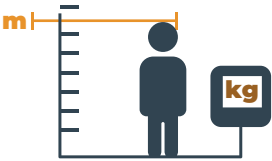
Proportion of the population with a BMI of ≥ 25 kg/m²

Age group (years)	Men n	% (95% CI)	Women n	% (95% CI)	Both sexes n	% (95% CI)
18–29	256	40.9 (32.1–49.7)	298	31.8 (21.3–42.3)	554	36.5 (29.9–43.1)
30–44	447	51.6 (36.1–67.0)	651	52.8 (47.2–58.4)	1 098	52.1 (42.8–61.4)
45–59	470	75.1 (68.4–81.9)	835	76.4 (71.6–81.3)	1 305	75.8 (71.7–79.9)
60–69	394	66.6 (59.5–73.6)	813	77.5 (72.5–82.4)	1 207	73.0 (68.9–77.0)
18–69	1 567	58.0 (50.4–65.5)	2 597	60.2 (57.0–63.4)	4 164	59.0 (54.8–63.3)

CI: confidence interval.
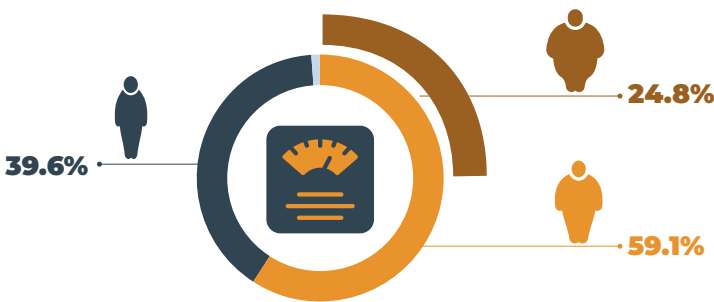
- Only two fifths (**39.6%**) of the population in Ukraine had a normal weight (BMI 18.5–24.9 kg/m²).

- Almost three fifths of the population (**59.1%**) had overweight (BMI ≥ 25 kg/m²), and a quarter (**24.8%**) had obesity (BMI ≥ 30 kg/m²).

- Both overweight and obesity increased sharply with age, and obesity was more prevalent among women (men: 20.1%; women: 29.8%).

> BLOOD GLUCOSE LEVEL (BIOCHEMICAL MEASUREMENTS)

Proportion with raised fasting blood glucose levels or currently on medication for diabetes mellitus[a]

Age group (years)	Men n	% (95% CI)	Women n	% (95% CI)	Both sexes n	% (95% CI)
18–29	170	3.7 (0.6–6.8)	217	2.7 (0.0–5.4)	387	3.2 (1.0–5.3)
30–44	300	3.7 (1.3–6.2)	496	4.6 (1.9–7.4)	796	4.1 (2.3–5.9)
45–59	319	9.2 (4.8–13.6)	649	6.1 (3.8–8.4)	968	7.7 (5.2–10.1)
60–69	274	14.6 (8.5–20.8)	595	20.2 (15.1–25.4)	869	18.0 (14.1–22.0)
18–69	1 063	6.7 (4.7–8.7)	1 957	7.4 (5.8–9.0)	3 020	7.1 (5.8–8.4)

CI: confidence interval.

[a] Defined as either plasma venous glucose concentration of ≥ 7.0 mmol/L (126 mg/dL) or capillary whole blood glucose concentration of ≥ 6.1 mmol/L (110 mg/dL).

- **7.1%** of the population had raised fasting plasma glucose (≥ 7.0 mmol/L) or were currently taking oral hypoglycaemic drugs or insulin.
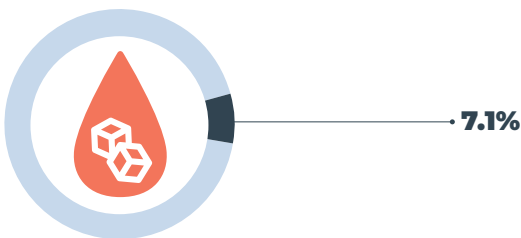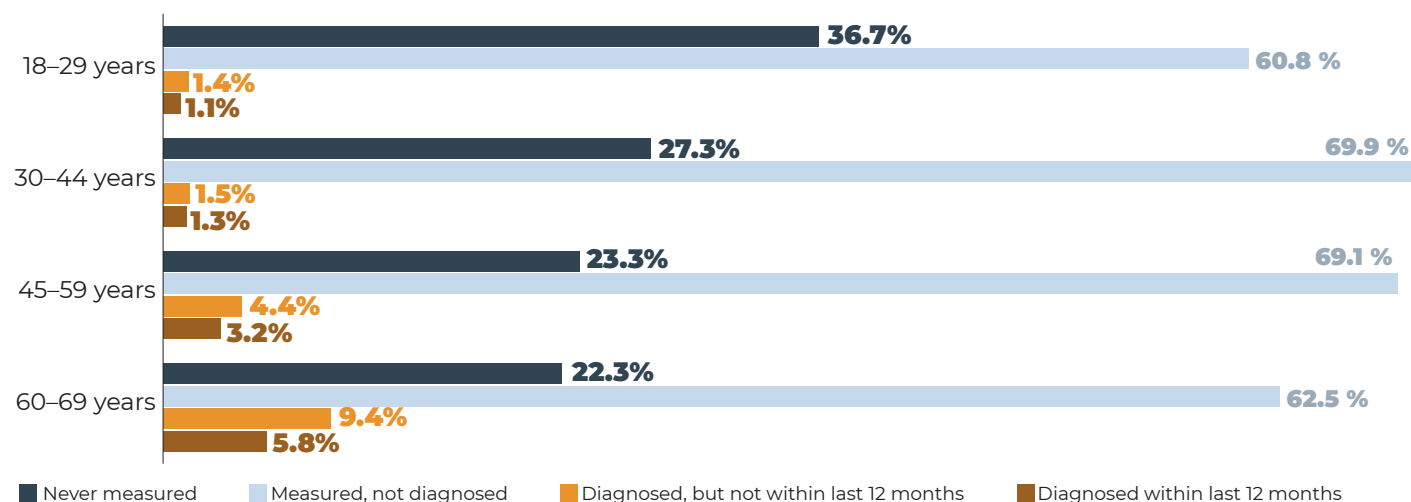
- Of these, nearly half (3.8% of the overall population) had not previously been diagnosed with diabetes; in addition, **40.7%** of the population had total blood cholesterol levels of ≥ 5.0 mmol/L or were currently on medication for raised cholesterol.
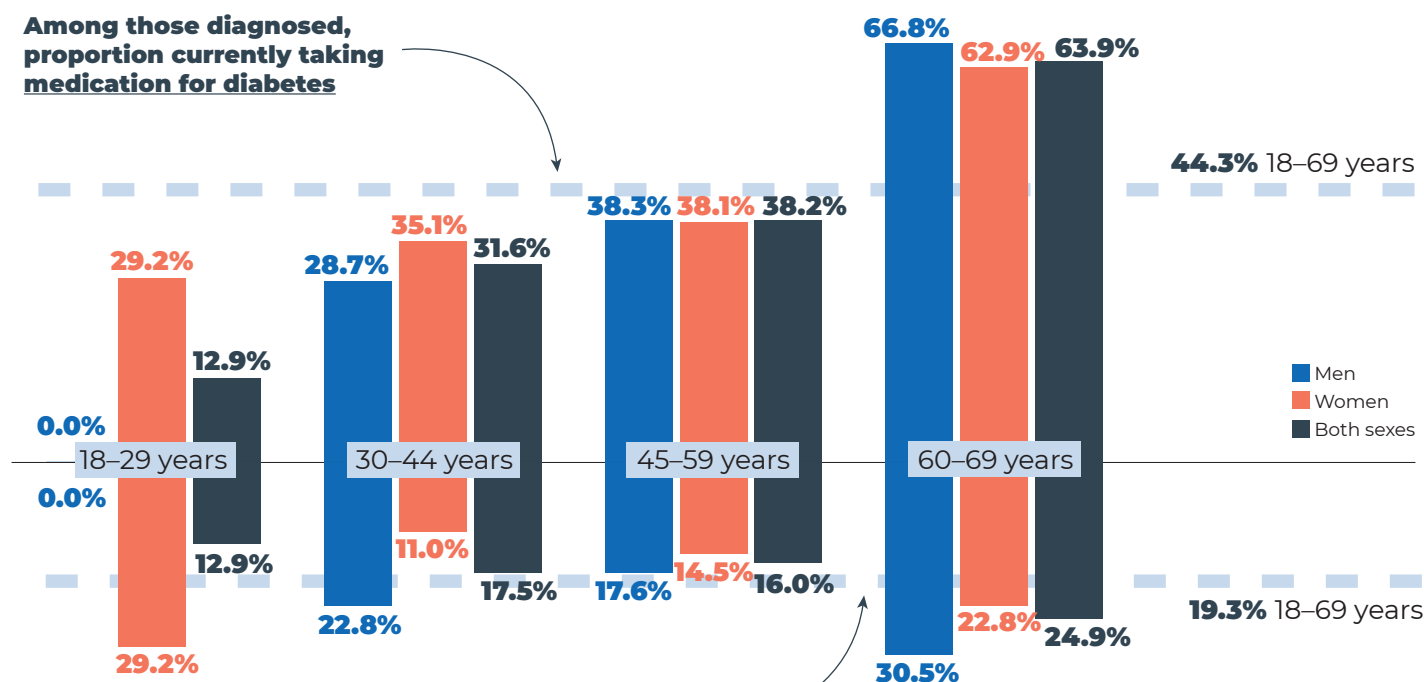
DIAGNOSED WITH DIABETES MELLITUS

Blood sugar measurement and diagnosis, both sexes

18–29 years
- Never measured: 36.7%
- Measured, not diagnosed: 60.8 %
- Diagnosed, but not within last 12 months: 1.4%
- Diagnosed within last 12 months: 1.1%

30–44 years
- Never measured: 27.3%
- Measured, not diagnosed: 69.9 %
- Diagnosed, but not within last 12 months: 1.5%
- Diagnosed within last 12 months: 1.3%

45–59 years
- Never measured: 23.3%
- Measured, not diagnosed: 69.1 %
- Diagnosed, but not within last 12 months: 4.4%
- Diagnosed within last 12 months: 3.2%

60–69 years
- Never measured: 22.3%
- Measured, not diagnosed: 62.5 %
- Diagnosed, but not within last 12 months: 9.4%
- Diagnosed within last 12 months: 5.8%

■ Never measured ■ Measured, not diagnosed ■ Diagnosed, but not within last 12 months ■ Diagnosed within last 12 months

Among those diagnosed, proportion currently taking medication for diabetes

44.3% 18–69 years

	Men	Women	Both sexes
18–29 years	0.0%	29.2%	12.9%
30–44 years	28.7%	35.1%	31.6%
45–59 years	38.3%	38.1%	38.2%
60–69 years	66.8%	62.9%	63.9%

■ Men ■ Women ■ Both sexes

	Men	Women	Both sexes
18–29 years	0.0%	29.2%	12.9%
30–44 years	22.8%	11.0%	17.5%
45–59 years	17.6%	14.5%	16.0%
60–69 years	30.5%	22.8%	24.9%

19.3% 18–69 years

Proportion currently taking insulin prescribed for diabetes among those previously diagnosed

- At the time of the survey, an estimated 2.9% of the population were taking oral hypoglycaemic drugs or insulin.
- Just over a quarter (**27.4%**) of the population stated that they had never had their blood glucose measured by a health-care worker.

27.4%

- 5.9% of the population had been informed by a health-care worker that they had raised blood glucose or diabetes.

44.3%

- Less than half (**44.3%**) of the population who were aware that they had raised blood glucose or diabetes were taking oral medication for diabetes.

19.3%
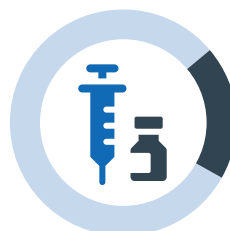
- Just under one fifth of participants (**19.3%**) who were aware that they had raised blood glucose or diabetes were taking insulin.

> RECOMMENDED ENABLING ACTIONS *(2)*

- Provide preventive foot care for people with diabetes mellitus (including educational programmes, access to appropriate footwear and multidisciplinary clinics).
- Ensure effective glycaemic control for people with diabetes, along with standard home glucose monitoring for people treated with insulin, to reduce the incidence of diabetes complications.
- Implement global coverage targets for diabetes *(3)*:
  - 80% of people living with diabetes are diagnosed;
  - 80% have good control of glycaemia;
  - 80% of people with diagnosed diabetes have good control of blood pressure;
  - 60% of people with diabetes of 40 years or older receive statins; and
  - 100% of people with type 1 diabetes have access to affordable insulin and blood glucose self-monitoring.
- Screen people with diabetes for proteinuria and treat with angiotensin-converting-enzyme inhibitor to prevent or delay kidney disease.
- Screen all diabetes patients for diabetic retinopathy and prevent blindness with laser photocoagulation.
- Provide preventive foot care for people with diabetes mellitus (including educational programmes, access to appropriate footwear and multidisciplinary clinics).
- Integrate very cost-effective noncommunicable disease 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 noncommunicable disease 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: history of noncommunicable disease 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 (BMI) ≥ 25 kg/m²); and hypertension (systolic BP > 140 mmHg and/or diastolic BP > 90 mmHg, or currently taking medication for hypertension).[1]

Note

[1] More details can be found in the report entitled STEPS prevalence of noncommunicable disease risk factors in Ukraine 2019 *(4)*.

References

(1) Obesity and overweight [website]. Geneva: World Health Organization; 2022 (https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight, accessed 3 October 2022).

(2) 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).

(3) First-ever global coverage targets for diabetes adopted at the 75th World Health Assembly [website]. Geneva: World Health Organization; 28 May 2022 (https://www.who.int/news-room/feature-stories/detail/first-ever-global-coverage-targets-for-diabetes-adopted-at-the-75-th-world-health-assembly, accessed 3 October 2022).

(4) 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).