European Health Statistics - An overview of key data sources and indicators

EAPS Health, Morbidity and Mortality Working Group (HMMWG) annual meeting

10-12 September 2025, Belval-Esch (Luxembourg)

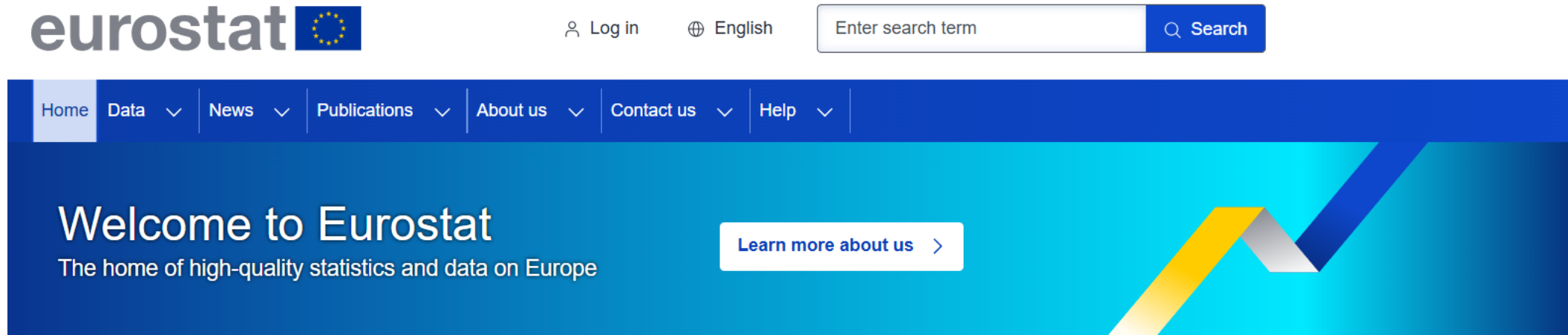*Ebba BARANY, PhD*

European Commission

Overview of the presentation

- ❖ Eurostat
  - ❖ Who we are
  - ❖ How to find our information
- ❖ Social statistics in Eurostat with a focus on health
  - ❖ Indicator sets and policy uses (examples)
  - ❖ Recent indicators/coming indicators
- ❖ European Health Data Space

Underlined text in my presentation are weblinks

<u>Eurostat</u> Who we are

Finding information

Database

Microdata requests

Eurostat <u>user support</u> in all EU languages

Statistics Explained

News articles

eurostat

NEWS ARTICLES | 5 August 2025

Deaths by drowning in the EU down by 4% in 2022

With summer in full swing, beaches and pools are bustling with activity; however, they also carry a heightened risk of drowning incidents.

In 2022, there were 4 810 deaths by drowning and submersion in the EU, 194 fewer than in 2021 (5 004), indicating a 3.9% decrease. The share of drownings and submersion fatalities out of all accidental deaths also decreased slightly from 3.1% in 2021 to 2.8% in 2022, making this the lowest share since the data collection started in 2011, when drownings and submersion fatalities represented 4.2% of all accidental deaths.

Among EU countries, in 2022, the highest number of drowning and submersion deaths was reported in France (784), which accounts for 16.3% of all drowning fatalities in the EU, followed by Germany (542), Poland (535), Romania (472) and Spain (449). The lowest numbers in the EU were recorded in Luxembourg (1), Malta (3), Cyprus (13) and Slovenia (25).

Accidental drowning and submersion fatalities, 2022
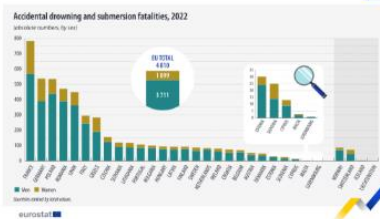
Source dataset: hlth_cd_aro

As in previous years, drowning deaths were more common among men than women. In 2022, this was the case in all EU countries. However, in Slovenia (14 men, 11 women), the difference was less substantial than in other EU countries. In Luxembourg, the only victim was male.

For more information

R T L TODAY   Home   Play   Radio

News   Luxembourg   World   Fact Check   Business + Tech   Think Lab   Science + Environment

| Eurostat

Luxembourg records EU's lowest number of drowning deaths

RTL Today | Update: 06.08.2025 07:07

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Luxembourg recorded the fewest drowning deaths in the European Union in 2022, with just one fatality, according to the latest available data.

The figures, published as Europe moves through the height of summer, show an overall decline in drowning and submersion deaths across the EU.

According to data released on Wednesday, 5 August, on Eurostat's website, a total of 4,810 people died by drowning in 2022, down from 5,004 in the previous year — a 3.9% drop. This also marks the lowest proportion of accidental deaths by drowning since records began in 2011.

France reported the highest number of drowning fatalities, with 784 deaths (16.3% of the EU total), followed by Germany (542), Poland (535), Romania (472) and Spain (449). Luxembourg recorded just one death by drowning, making it the country with the fewest fatalities, and was followed by Malta (3), Cyprus (13) and Slovenia (25).

Accidental drowning and submersion fatalities, 2022
(absolute numbers, by sex)

EU TOTAL
4 810
1 099
3 711

Men   Women
Countries ranked by total values.

eurostat
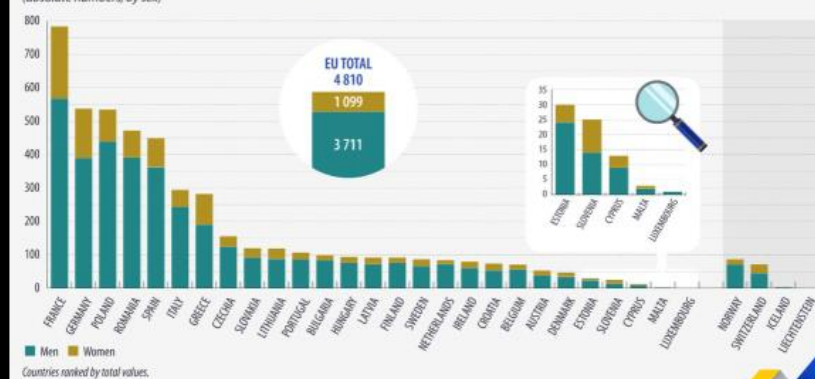
Manuals and guidelines
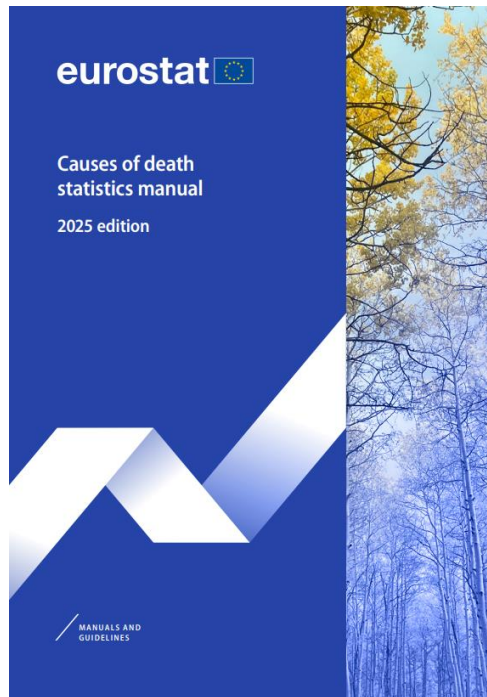
Importance of metadata

Annual national reference metadata

- Describing the statistical concepts and the methodologies

- Providing information on data quality

- Help to interpret the data

Quality reports (quality indicators) each 5 years

Database

Information on the database

- Data navigation tree
  - Detailed datasets
    - General and regional statistics
    - Economy and finance
    - Population and social conditions
      - Population and housing censuses (cens)
      - Demography, population stock and balance (demo)
      - Population projections (proj)
      - Migration (migr)
      - Health (hlth)
        - Health status (hlth_state)
        - Health determinants (hlth_det) M
        - Health care (hlth_care)
        - Causes of death (hlth_cdeath) M
        - Health and safety at work (hsw)

Accidents at work (ESAW, 2008 on (hsw_acc_work)

Reference Metadata in Euro SDMX Metadata Structure (ESMS)

Compiling agency: Eurostat, the statistical office of the European Union

Need help? Contact the Eurostat user support

Short metadata 🔘 Full metadata

Contents
Data description
Metadata last update
Statistical concepts and definitions
Statistical unit
Statistical population
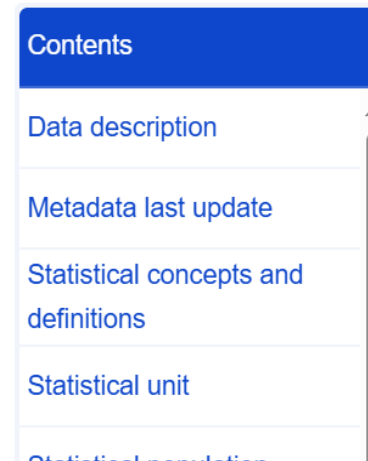
Data description

Harmonised data on accidents at wo 'European Statistics on Accidents a 1990. European Statistics on Accider version available.

An accident at work is defined as 'a di harm'. If the accident does not lead to data include only fatal and non-fatal ac

Social statistics in Eurostat

Demography and Migration;

Labour market;

Living conditions and Quality of Life;

Crime;

Education;

Health;

Social protection.

Available data cover a number of topics…

- Public health
  - Health status: self-reported health and morbidity, functional and activity limitations, injuries;
  - Health determinants: overweight and obesity, physical activity, risky behaviours such as tobacco and alcohol consumption;
  - Health care: health care expenditure, resources (staff and facilities) and activities (hospital and ambulatory services);
  - Causes of death: national and regional mortality by causes of death.
- Health and safety at work
  - Accidents at work: number of accidents, causes and circumstances of accidents.
  - Occupational diseases

Main aspects of health-related data collections

- **Administrative** data collections

  - Register based

  - Usually annual

  - Cover whole population (usually based on residence status)

  - Quite rigid to changes

- **Survey** based data collections

  - Self-reported

  - Frequency depending on a survey

  - Defined sample population

  - Changes possible, however with an effect on time series

Statistical collection by source

Surveys	Administrative data

Surveys

European Health Interview Survey

European Union Statistics on Income and Living Conditions

European Union Labour Force Survey

Administrative data

Causes of death

Healthcare non-expenditure

Healthcare expenditure

Accidents at work

Occupational diseases

Morbidity

Administrative data collections

- These are annual data collections

- Administrative (register) data and surveys complementary in these data domains

- Registers not set up for creating statistics - comparability of data across 27 EU Member States is limited by the fact that national data is subject to the way in which information is available

- User must refer to national reference metadata and quality reports

- Clear advantages of administrative data but not error free

- Annual improvements are made

Health – data sources

Healthcare expenditure – data from national health accounts registries, comprising data from different statistical sources

Examples of administrative sources:
- annual accounts of central, provincial or local governments or of social insurance funds, financial reports of government funds, public corporations or insurance associations.

Healthcare non-expenditure − data sources are very much country-specific

Examples of administrative sources:
- registries of licenses of healthcare personnel or their associations, health insurance funds, hospital reports, business registers, research or surveillance data;

Accidents at work – declarations of accidents at work (fatal or absence from work of more than 3 days) and **Occupational diseases** – recognised occupational diseases

Examples of administrative sources:
- accident insurance of the national social security system, private work-related insurances, labour inspection, health and safety authority.

Health – improvement potential

- Comparability (geographical or over time, when data sources change)

- Accessing data from the private sector to complement public sector data

- The available data may not have the desired granularity or follow common definitions

- Timeliness

- Reference periods

Important classification change: ICD-11

Adopted 2019

In effect 2022

Maps ICD-10 ⇔ ICD-11

Special tabulation lists Mortality List and Morbidity List

Will affect statistics on Causes of Death and Hospital Discharges Data, later on also Occupational diseases statistics.

Eurostat Task Force ICD – working on European Shortlist of Causes of death

Indicator sets and policy uses

Not exhaustive!

EU Sustainable Development Goals indicators

Indicator	Period	Annual growth rate	Assessment	More info
Healthy lives				
Healthy life years at birth	Long-term assessment not possible due to several breaks in time series		✕	page 66
	2016–2021 (¹)	– 0.1 %	→	
People with good or very good self-perceived health	2010–2023	0.1 %	→	page 67
	2018–2023	– 0.2 %	↘	
Health determinants				
Smoking prevalence	2009–2023	– 1.3 %	↑	page 68
	2017–2023	– 1.9 %	↑	
Obesity rate (*)	Time series too short for long-term assessment		✕	SDG 2, page 47
	2017–2022	– 0.1 %	→	
Population living in households suffering from noise (*)	2010–2023	– 0.9 %	↗	SDG 11, page 205
	2018–2023	0.0 %	→	
Causes of death				
Standardised avoidable mortality	2011–2022	– 0.8 %	↗	page 69
	2017–2022	0.5 %	↘	
Fatal accidents at work (*)	2010–2022	– 2.7 %	↑	SDG 8, page 154
	2017–2022	– 1.5 %	↑	
Road traffic deaths (*) ◎	2008–2023	Observed: – 3.9 % / Required: – 5.2 %	↗	SDG 11, page 207
	2018–2023	Observed: – 2.7 % / Required: – 5.8 %	↘	
Premature deaths due to exposure to fine particulate matter (PM$_{2.5}$) (*) ◎	2007–2022	Observed: – 2.5 % / Required: – 2.5 %	↑	SDG 11, page 206
	2017–2022	Observed: – 4.7 % / Required: – 3.4 %	↑	

Peace, justice and strong institutions

Indicators measuring progress towards SDG 16, EU

Indicator	Period	Annual growth rate	Assessm
Peace and personal security			
Standardised death rate due to homicide	2007–2022	– 3.3 %	↑
	2017–2022	– 0.6 %	↗
Population reporting crime, violence or vandalism in their area	2010–2023	– 2.1 %	↑
	2018–2023	– 2.8 %	↑
Victims of trafficking in human beings	2008–2023	2.6 %	↓
	2018–2023	8.6 %	↓
Access to justice			
General government total expenditure on law courts	2008–2023	2.9 %	↑

European Core Health Indicators

Heading	Examples
Demographic and socio-economic situation	Population, birth rate, total unemployment
Health status	Infant mortality, HIV/AIDS, road traffic injuries
Health determinants	Regular smokers, consumption/availability of fruit
Health interventions: health services	Vaccination of children, hospital beds, health expenditure
Health interventions: health promotion	Policies on healthy nutrition

European Semester, country reports (spring package)

Table A14.1: **Key health indicators**

	2019	2020	2021	2022	2023	EU average* (latest year)
Cancer mortality per 100 000 population	229.6	230.5	224.7	226.1	n.a.	234.7 (2022)
Mortality due to circulatory diseases per 100 000 population	362.9	361.0	343.3	346.6	n.a.	336.4 (2022)
Current expenditure on health, purchasing power standards, per capita	3 966	4 066	4 737	4 751	n.a.	3 684.6 (2022)
Public share of health expenditure, % of current health expenditure	75.1	76.9	78.2	77.6	77.2	81.3 (2022)
Spending on prevention, % of current health expenditure	2.1	3.2	10.4	7.4	n.a.	5.5 (2022)
Available hospital beds per 100 000 population**	650	636	620	600	n.a.	444 (2022)
Doctors per 1 000 population*	5.3	5.3	5.4	5.4	n.a.	4.2 (2022)*
Nurses per 1 000 population*	10.3	10.3	10.7	10.7	n.a.	7.6 (2022)*
Mortality at working age (20-64 years), % of total mortality	14.1	13.4	14.1	13.6	13.7	14.3 (2023)
Number of patents (pharma / biotech / medical technology)	137	126	95	80	96	29 (2023)***
Total consumption of antibacterials for systemic use, daily defined dose per 1 000 inhabitants****	11.6	8.8	8.8	10.5	11.3	20.0 (2023)

*The EU average is weighted for all indicators except for doctors and nurses per 1 000 population, for which the EU

State of health in the EU
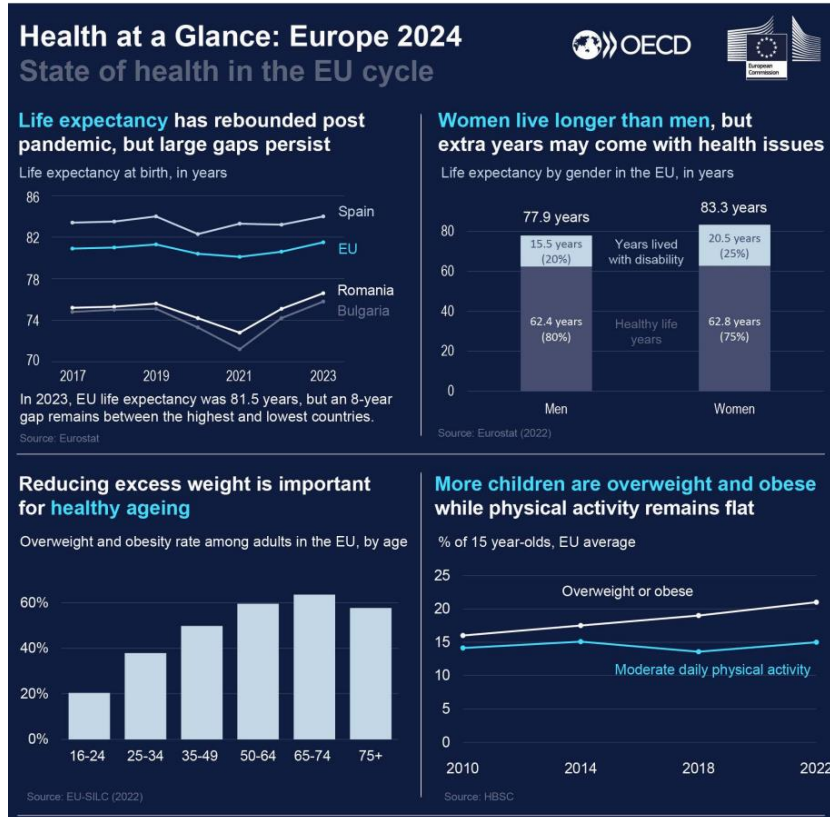
- Health at a Glance
- Country health profiles

Indicators recently added

Examples of indicators disseminated 1st time in 2025:

Recognised occupational diseases by occupation (ISCO) or by economic sector (NACE)

Available beds in intensive care unit (ICU)

Consultation of a medical doctor by type of consultation (teleconsultations)

Coming in the next years:

Potential years of life lost by treatable and preventable diseases

Hospital discharges by diagnosis, by residency

Indicators related to mental health and wellbeing (EHIS 2025, tentative EU-SILC 2027)

Coming: European Health Data Space

- Secondary use of health data = use of health data for a different purpose than what they were initially collected for. Makes data available for research, innovation, policy-making etc.

- EHDS regulation adopted in March 2025, 'secondary use' applies from 2029.

- Research institutions, public health institutes, statistical offices etc can be both 'Data holders' and 'Data users'.

- Preparation ongoing in Second Joint Action Towards the European Health Data Space – TEHDAS2 - Tehdas

User journey of a researcher

Data discovery — What health data exists to support my research?

Data access application — Can I use this data for my research project?

Data preparation — Issue permit and make data ready for use, ensuring data quality and privacy.

Data provision — Give access to Secure Processing Environment

Data use — Analyse and process data

Results output — Publish results, ensuring privacy and verifiability

Data user

Health Data Holders

Health Data Access Body

Data User

Central Services → Central EU metadata catalogue → Metadata records from 27 Member States

Multi-country data access application

Central Services — SPE

Gather datasets from 27 Member States in the EC SPE for analysis.

Involvement and advantages

Data holder

- Health-related data collected: e.g. health status and outcomes, health systems and services, health determinants, mental health statistics, etc.

- Electronic health data include data that have been initially collected for research or statistical purposes. Including aggregated, open and fully anonymised data.

- Provide a metadata record describing the datasets held by ESTAT to the UDAS metadata catalogue (Health DCAT-AP compliant)

- Provide data mentioned in the permit administered to the user by the Union Data Access Service (Union HDAB).

Data user

- Find available health related datasets from across-Europe.

- Request access to these datasets either through the EU Central platform or through a specific national HDAB.

- Access and analysis of the health data in Secure Processing Environments if they are in a pseudonymised format.

Thank you

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