Excess mortality statistics

Statistics Explained

Data extracted on 14 February 2025
Planned article update: 17 June 2025

Highlights

" In December 2024, the excess mortality indicator decreased in the EU to 3.0% above the baseline compared with November 2024 (5.1%). "

" The excess mortality rate was positive in 18 EU countries and negative in 8 of the EU countries for which the data were available. "

" In December 2024, the highest excess mortality rates were in Finland (13.6%), Luxembourg (13.4%) and the Malta (12.0%). "

This article provides an overview of the development of excess mortality in the EU in December 2024. The data covered in this analysis include all deaths that have occurred since December 2023. In this article, excess mortality refers to the number of deaths from all causes measured during a defined period, above that which was observed in the baseline period. The baseline consists of the average number of deaths that occurred in each month during the period 2016-2019. The higher the value, the higher the number of additional deaths compared with the baseline. A negative indicator shows that fewer deaths occurred in a particular month compared with the baseline period. This indicator, which is part of the European Statistical Monitor , provides a comprehensive comparison of additional deaths among the European countries. It provides a general measure of mortality because it includes all deaths regardless of their cause. For more information on the method to calculate the indicator, see below under Data sources.

Recent data on excess mortality in the EU

In December 2024, excess mortality in the EU decreased to 3.0% above the baseline. By contrast, the indicator was 5.1% in November 2024 (Figure 1).

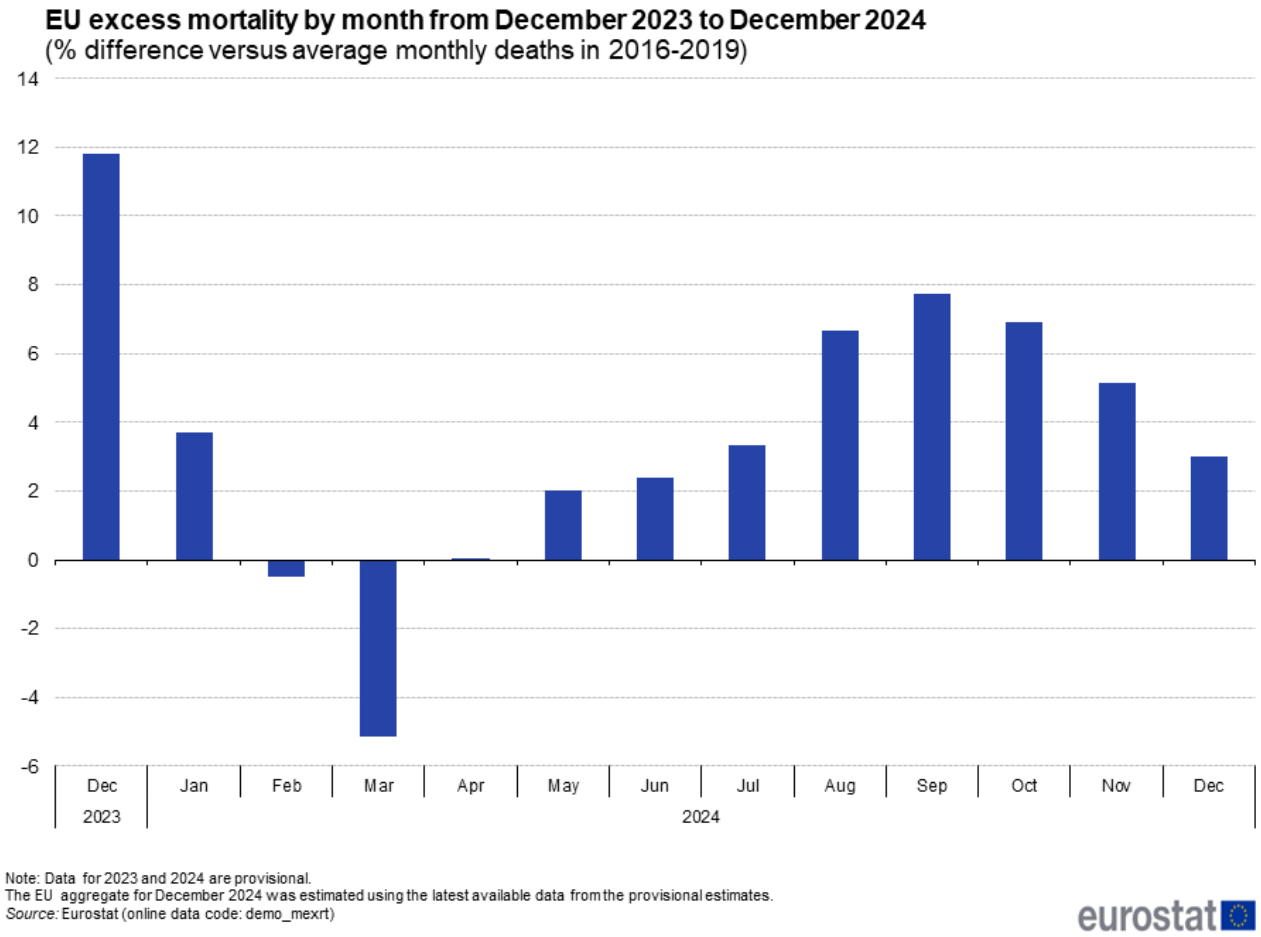

Figure 1: EU excess mortality by month from December 2023 to December 2024 (% difference versus average monthly deaths in 2016-2019) Source: Eurostat (demo_mexrt)

In December 2024, excess mortality continued to vary across the EU (Figure 2). The excess mortality rate was negative in 8 EU countries: the lowest rates were recorded in Croatia (-13.1%), Bulgaria (-10.3%), Latvia (-9.1%), Romania (-8.8%) and Slovakia (-4.0%). On the other hand, 18 EU countries registered excess deaths: the highest rates were observed in Finland (13.6%), Luxembourg (13.4%), Malta (12.0%), Ireland (11.5%) and Germany (9.6%). For comparison, in November 2024, 23 EU countries recorded excess deaths, with the highest rates observed in the Finland (14.6%), Germany (13.0%), Austria (12.7%), Slovenia (12.3%) and Denmark (10.3%) (Table 1).

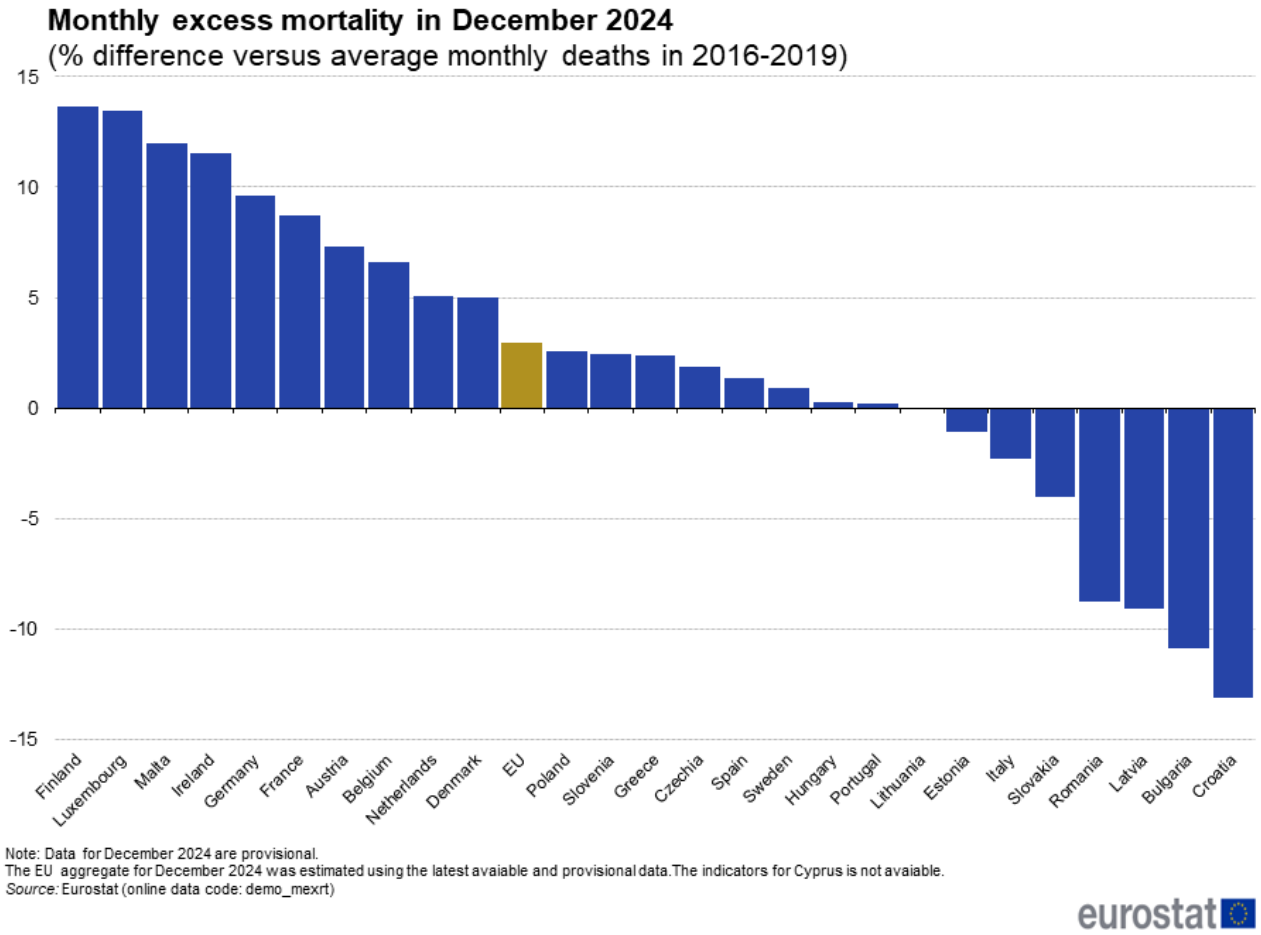

Figure 2: Monthly excess mortality in December 2024 (% difference versus average monthly deaths in 2016-2019) Source: Eurostat (demo_mexrt)

Excess mortality indicator

Percentage of monthly additional deaths between November 2023 and November 2024 compared to average monthly deaths in 2016-2019

	Dec-2023	Jan-2024	Feb-2024	Mar-2024	Apr-2024	May-2024	Jun-2024	Jul-2024	Aug-2024	Sep-2024	Oct-2024	Nov-2024	Dec-2024
EU	12.2	3.7	-0.5	-5.1	0.0	2.0	2.4	3.3	6.7	7.8	6.9	5.1	3.0
Belgium	7.9	5.8	-0.9	-7.9	2.6	-1.4	8.5	2.3	4.0	5.4	6.4	3.0	6.6
Bulgaria	-6.2	-11.2	-6.6	-13.8	-11.7	-8.5	-4.4	1.8	-0.3	1.6	-5.8	-3.4	-10.9
Czechia	10.0	1.2	0.5	-10.5	-4.0	-2.1	1.7	1.4	2.4	6.2	5.9	2.4	1.8
Denmark	19.0	11.0	1.9	-5.6	4.2	3.0	5.1	7.2	8.0	8.9	9.1	10.3	5.0
Germany	21.6	10.9	4.7	-5.7	4.3	7.3	10.0	5.3	6.8	12.4	14.2	13.0	9.6
Estonia	19.3	11.9	0.2	-3.5	1.4	-1.7	6.0	-2.6	3.8	3.6	10.8	9.6	-1.1
Ireland	8.6	5.8	9.4	11.1	12.0	10.7	15.4	17.2	19.3	13.0	11.4	8.2	11.5
Greece	7.7	-0.1	-2.2	-4.6	-5.6	2.1	5.3	21.4	8.6	9.0	2.0	6.5	2.4
Spain	8.8	8.5	-4.3	1.4	4.1	6.8	6.8	9.0	9.6	6.1	7.7	3.1	1.3
France	11.8	6.5	4.3	-0.3	3.3	4.9	9.8	4.9	6.7	7.8	10.7	4.7	8.7
Croatia	8.4	-6.4	1.5	-11.2	-8.5	-6.5	-4.2	4.7	6.7	7.4	-1.6	-1.9	-13.1
Italy	11.7	-3.4	-5.5	-7.6	-2.9	-0.1	-1.3	6.7	9.4	9.7	4.0	3.3	-2.3
Cyprus	:	:	:	:	:	:	:	:	:	:	:	:	:
Latvia	7.0	-1.9	-3.5	-14.2	-15.0	-9.9	-5.2	-10.9	-5.0	-9.7	-0.8	-4.4	-9.1
Lithuania	7.5	-6.8	-9.7	-10.1	-7.1	-7.2	-1.3	-4.8	-0.6	-1.8	0.1	-4.0	-0.1
Luxembourg	10.5	-1.7	4.7	2.9	9.7	4.9	14.1	12.9	4.8	15.2	9.3	2.6	13.4
Hungary	8.0	-7.2	-7.5	-9.9	-6.4	-2.6	-3.3	8.3	3.2	1.3	2.4	2.0	0.3
Malta	8.8	8.4	3.1	7.9	17.9	15.8	11.1	27.5	38.0	39.0	16.8	-0.3	12.0
Netherlands	17.8	10.5	8.8	4.4	13.3	8.9	11.4	9.1	10.5	13.0	12.8	9.9	5.1
Austria	20.2	8.6	9.1	-0.9	3.9	7.4	9.0	12.3	12.0	16.6	17.0	12.7	7.3
Poland	10.5	0.2	-3.0	-7.7	-2.5	1.3	0.8	1.5	5.0	4.5	4.9	2.4	2.5
Portugal	13.4	9.6	-10.0	4.7	5.3	10.7	12.1	15.4	8.8	8.1	5.4	3.2	0.2
Romania	-8.1	-5.0	-6.7	-14.7	-13.9	-21.4	-47.3	-45.3	-2.2	-3.4	-11.6	-7.3	-8.8
Slovenia	20.2	2.9	7.8	-3.1	2.1	1.3	8.2	14.9	9.6	13.3	10.5	12.3	2.4
Slovakia	17.3	4.0	-1.2	-8.2	-6.3	2.8	3.2	6.6	10.9	7.3	9.3	2.9	-4.0
Finland	26.6	8.7	5.2	-0.6	4.1	5.1	5.9	7.5	11.7	13.7	9.1	14.6	13.6
Sweden	16.8	4.8	-4.2	-9.2	-5.1	-0.6	2.6	0.6	3.6	3.6	4.1	4.1	0.9
Iceland	24.7	30.7	5.9	23.7	3.4	17.6	9.6	8.4	27.6	13.6	18.9	14.7	5.8
Liechtenstein	-6.7	-12.4	59.1	-5.3	37.9	29.7	47.3	-15.2	-8.1	63.0	9.7	-25.4	-36.9
Norway	11.0	6.8	3.7	1.1	2.9	9.1	10.4	6.6	13.0	14.7	14.8	10.2	2.0
Switzerland	16.9	4.6	5.4	1.4	8.7	6.1	10.5	10.4	14.1	9.8	7.3	0.6	-4.2

Note: Data for 2023 and 2024 are provisional.

: data not available

The EU aggregate for December 2024 was estimated using the latest available data.

The indicators for Malta and Romania were estimated based on the latest provisional available data.

Source: Eurostat (online data code: demo_mexrt)

eurostat

Table 1: Excess mortality indicator (Percentage of monthly additional deaths in 2023-2024 compared with average monthly deaths in 2016-2019) Source: Eurostat (demo_mexrt)

Recent data on weekly deaths in the EU

According to the weekly death statistics, during December 2024, approximately 12 900 additional deaths were recorded compared with the average number of deaths for the same period in 2016-2019 (baseline). Compared with the previous year, there were 35 700 fewer deaths than in December 2023, when 48 600 additional deaths were recorded in the EU.

Looking at the different weeks of the month, the highest number of additional deaths was recorded in the first week of December 2024 (4 600).

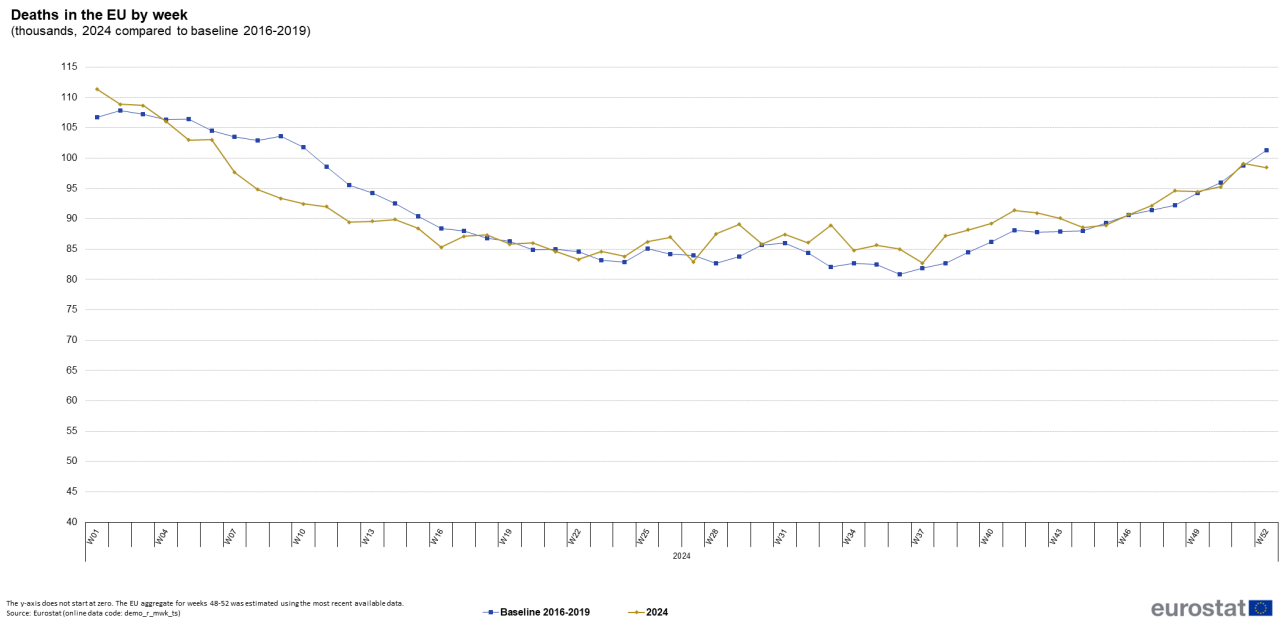

Figure 3: Deaths in the EU by week (thousands, 2023-2024 compared with baseline 2016-2019) Source: Eurostat (demo_r_mwk_ts)

Recent developments in the EU countries

Table 1 above shows the respective excess mortality indicator while Table 2 below shows the number of deaths in EU countries for the month of December 2024, as well as, where data are available, the most affected regions of the countries.

- During the first week of December 2024 (week 48), Ireland recorded the highest excess mortality rate (17.0%). Luxembourg and Finland followed with rates of 15.4% and 15.3%, respectively.
- In the second week of December 2024 (week 49), Malta had the highest excess mortality rates among the EU countries with 26.5%, followed by the Netherlands with 12.8% and Austria with 11.4%.
- During the third week of December 2024 (week 50), Luxembourg (23.5%), Ireland (12.2%) and Finland (11.2%) recorded the highest excess mortality rates.
- In the fourth week of December 2024 (week 51), Luxembourg registered the highest excess mortality rate 31.0%, followed by Malta with 15.3% and Ireland with 12.4%.
- During the fifth week of December 2024 (week 52), Malta (11.2%), Luxembourg (11.0%) and Ireland (10.0%) recorded the highest excess mortality rates.

Deaths by country and the most affected region in December 2024
(Number of deaths)

Country	Total deaths	Most affected NUTS-3 region	Deaths in the most affected region
Belgium	10 622	Arr. Antwerpen	886
Bulgaria	8 860	Sofia	1 263
Czechia	10 001	Středočeský kraj	1 258
Denmark	4 981	Sydjylland	694
Germany*	90 576	:	:
Estonia**	1 352	:	:
Ireland**	3 325	:	:
Greece	11 318	Kentrikos Tomeas Athinon	1 040
Spain	39 058	Madrid	4 604
France	60 447	Nord	2 271
Croatia**	4 094	:	:
Italy	57 538	:	:
Cyprus**	:	:	:
Latvia	2 290	Rīga	375
Lithuania	3 416	Vilniaus apskritis	676
Luxembourg**	425	:	:
Hungary	11 746	Budapest	1 814
Malta	371	:	:
Netherlands	14 317	Groot-Rijnmond	660
Austria	7 916	Wien	1 399
Poland	36 731	Miasto Warszawa	862
Portugal	10 734	Área Metropolitana do Porto	1 621
Romania	21 687	Bucureşti	1 740
Slovenia*	1 861	:	:
Slovakia	4 485	Nitriansky kraj	647
Finland	5 477	Helsinki-Uusimaa	1 280
Sweden	8 252	Stockholms län	1 277
Iceland*	432 474	:	:
Liechtenstein**	203	:	:
Norway	15	:	:
Switzerland	3 805	Zürich	947

Notes: Data for 2024 are provisional.

* Only data for NUTS-1 region available

** Only national data available

; Missing data or not applicable

Source: Eurostat (online data code: demo_r_mwk_ts)

eurostat

Table 2: Deaths by country and the most affected region in December 2024 (Number of deaths) Source: Eurostat (demo_r_mwk_ts)

In the tool below, you may select the country you would like to analyse.

Further releases

Data for the most recent months are provisional and subject to revision. Starting from the data reference period of January 2025, this article and the related indicator will be updated quarterly, with Q1 2025 scheduled for publication by mid-June 2025.

For additional information on the COVID-19 pandemic see Deaths during the COVID-19 pandemic .

Source data for tables and figures

Excess mortality data

Data sources

The excess mortality indicator takes the number of deaths from any cause in a given period and compares it with a historical baseline from previous years in a period that was not affected by the COVID-19 pandemic. In this case, the baseline consists of the average number of deaths that occurred in each month during the period 2016-2019. The European Union (EU) average baseline for 2016-2019 was not adjusted for age-specific mortality rates or increasing life expectancy. The indicator is expressed as the percentage of additional deaths compared with the baseline period (2016-2019). A negative percentage indicates that no additional deaths occurred in a particular month compared with the baseline period. The excess mortality indicator, covering EU and EFTA countries, is based on weekly death data transmitted to Eurostat by EU countries on a voluntary basis. Data are classified by sex, 5-year age groups and NUTS regions, and are continuously updated with more recent weeks of mortality statistics. These weekly data are then attributed pro-rata to months to compute the excess mortality indicator. For the purpose of the excess mortality indicator, the death figures for the latest weeks available in a Member State are corrected for incompleteness. Data remain provisional and subject to revision with the next releases.

The excess mortality indicator is based on a data collection for which National Statistical Institutes from the EU and the European Free Trade Association (EFTA) have transmitted weekly deaths data to Eurostat on a voluntary basis since April 2020. The weekly deaths dataset that Eurostat publishes regularly is used to compute the monthly excess mortality indicator by mapping the deaths of each week to a full month.

Thirty-one countries provide weekly mortality data: Belgium, Bulgaria, Czechia, Denmark, Germany, Estonia, Ireland, Greece, Spain, France, Croatia, Italy, Cyprus, Latvia, Lithuania, Luxembourg, Hungary, Malta, the Netherlands, Austria, Poland, Portugal, Romania, Slovenia, Slovakia, Finland, Sweden, Iceland, Liechtenstein, Norway and Switzerland. Data received from candidate and neighbouring countries are not present in this article.

The EU aggregate for December 2024 was estimated using the most recent available data. The indicator for Cyprus is not available.

Data for CY 2020–2024 is currently unavailable due to technical issues.

Data for several countries were recalculated from 2021 onwards by applying the new coefficients of data completeness transmitted by the National Statistical Institutes in May 2023. For more information about Methodology, please consult Excess Mortality Metadata [1] .

The excess mortality indicator does not distinguish between the causes of death and did not differentiate between sex and age class. For more information on causes of death statistics, please see Causes of death - monthly statistics and Causes of death statistics . During the COVID-19 pandemic, excess death statistics revealed the mortality burden potentially linked to the pandemic, encompassing not only direct virus-related deaths, but also indirect deaths. This measure included undiagnosed and unreported COVID-19 deaths as well as deaths from other causes influenced by the overall crisis. It also accounted for the reduction in deaths from other causes, such as accidents that did not occur due to restrictions on commuting or travel during lockdown periods. In the post-pandemic period, the indicator captures the effects of heat waves during summer and influenza during winter.

Context

The COVID-19 pandemic has triggered tremendous interest in statistics. Hence, in April 2020, in cooperation with the National Statistical Institutes of the European Statistical System, Eurostat set up a special data collection on weekly deaths, to support the policy and research efforts related to the pandemic. The National Statistical Institutes regularly and voluntarily transmit data to Eurostat on weekly deaths up to the latest available week. 'Excess mortality' has been identified as the most useful indicator for assessing additional deaths, complementing the other indicators contained in the European Statistical Monitor. To capture the dynamics of mortality changes in a stable way, the excess mortality indicator is calculated for each month, no later than 45 days after the end of the reference period (depending on data available to Eurostat from the National Statistical Institutes). Eurostat started to publish the excess mortality indicator in relation to the COVID-19 public health emergency announced by the World Health Organisation. While the global COVID-19 crisis is over, the indicator remains relevant and is available to capture possible future factors affecting mortality in the EU.

Explore further

Other articles

- Deaths during the COVID-19 pandemic
- Weekly death statistics
- Causes of death statistics
- Causes of death statistics by age group
- Mortality and life expectancy statistics

Database

- Mortality (DEMO_MEXRT) , see:

Excess mortality - monthly data (demo_mexrt)

- Mortality (demomwk) , see:

Weekly deaths - special data collection (demomwk)

Thematic section

- Population and health
- Population and Demography overview

Methodology

- Excess mortality (ESMS metadata file — demo_mexrt)

Visualisation

- Data Browser (Excess mortality line chart) - select geopolitical entity and time
- Data Browser (Excess mortality bar chart) - select time