



EuroWDC: the European data collection on weekly death counts

Eurostat

Giampaolo Lanzieri

A single entry point on Covid-19

Wide range of related statistics

Focus on population and health

The screenshot shows the Eurostat website interface. At the top, there is a navigation bar with the Eurostat logo, a search bar, and links for 'Sign In | Register', 'Legal notice | Cookies | Links | My alerts | Contact', and a language dropdown set to 'english'. Below the navigation bar is a main menu with 'News', 'Data', 'Publications', 'About Eurostat', and 'Help'. The breadcrumb trail reads 'European Commission > Eurostat > COVID-19 > Overview'. The main heading is 'COVID-19: Statistics serving Europe'. Underneath, there is an 'INTRODUCTION' section with the sub-heading 'What information can I find here?'. The text explains that users can find a wide range of statistics and data published by Eurostat related to COVID-19, which can be used as a baseline to measure the impact of the crisis. It also mentions that the information covers various topics like economy, society, and health, and provides links to 'latest releases', 'interactive data visualisation', and 'relevant datasets'. A 'Read more' link is visible at the bottom of the introduction section. To the right of the text is a graphic with the text 'COVID-19' and several blue virus-like icons.

<https://ec.europa.eu/eurostat/web/covid-19/overview>

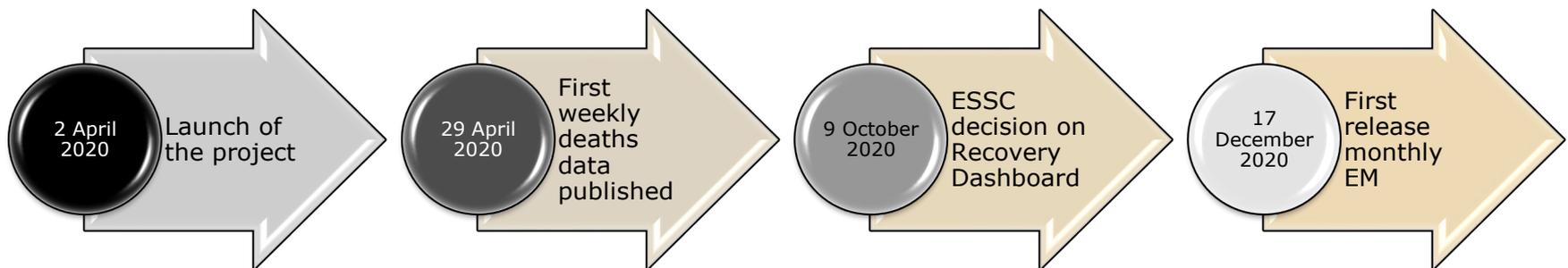
The screenshot shows the Eurostat website interface for the 'POPULATION AND HEALTH' section. At the top, there is a navigation bar with the Eurostat logo, a search bar, and links for 'Sign In | Register', 'Legal notice | Cookies | Links | My alerts | Contact', and a language dropdown set to 'english'. Below the navigation bar is a main menu with 'News', 'Data', 'Publications', 'About Eurostat', and 'Help'. The breadcrumb trail reads 'European Commission > Eurostat > COVID-19 > Information by topic > Population and health'. The main heading is 'POPULATION AND HEALTH'. Underneath, there is an 'Overview' section with the sub-heading 'Information by topic'. The text explains that this page gathers statistics on population and health related to COVID-19 in one place, which can be used as a baseline to measure the impact of the crisis. It also mentions that users can find the latest releases in this area, a detailed map to located health care services close to them, and links to in-depth articles or extract relevant datasets. To the right of the text is a photograph of a healthcare worker in a blue uniform attending to a patient. Below the text is a 'LATEST RELEASES' section with a 'See complete list' link. The latest releases are listed in a grid format:

Date	Release Title	Date	Release Title
21/01/2021	European Statistical Recovery Dashboard: January edition	20/01/2021	Excess mortality in 2020: especially high in spring and autumn
17/12/2020	European Statistical Recovery Dashboard	02/12/2020	Healthcare expenditure across the EU: 10% of GDP

<https://ec.europa.eu/eurostat/web/covid-19/population-health>

A voluntary data collection on all-causes weekly deaths in Europe

EuroWDC milestones



ESSC: European Statistical
System Committee

High granularity

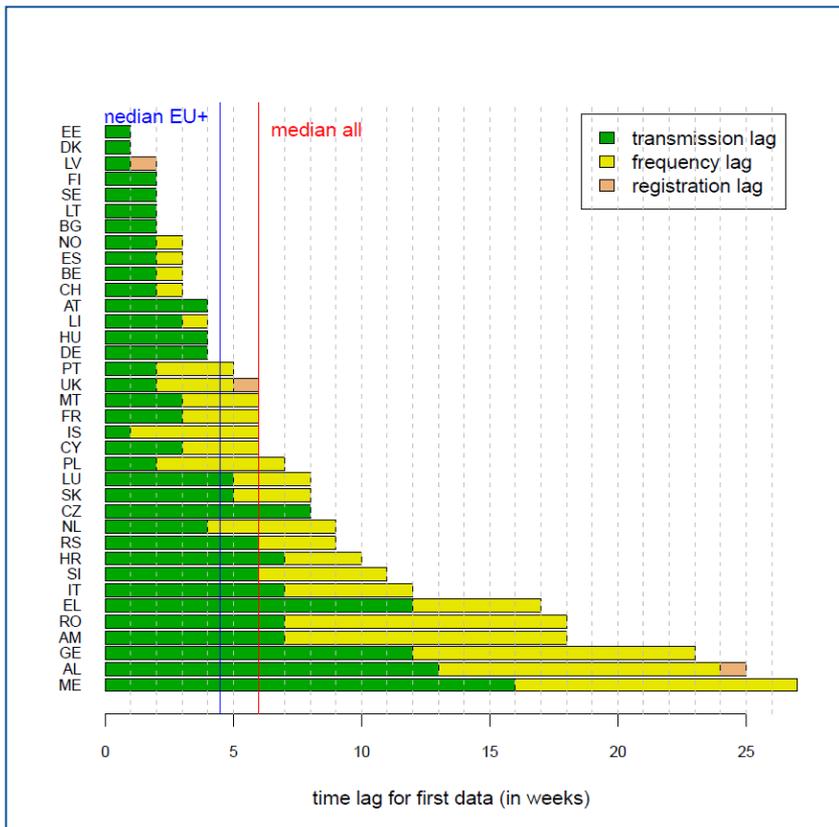
https://ec.europa.eu/eurostat/web/population-demography-migration-projections/data/database?node_code=demomwk

The screenshot displays a list of data series in the Eurostat database. The series are organized into a folder structure. The folder 'Weekly deaths - special data collection (demomwk)' is highlighted. Within this folder, the series 'Deaths by week, sex, 5-year age group and NUTS 3 region (demo_r_mweek3)' is circled in red. Other series include 'Excess mortality - monthly data (demo_mexrt)', 'Deaths by week and sex (demo_r_mwk_ts)', and various age-specific and region-specific death counts.

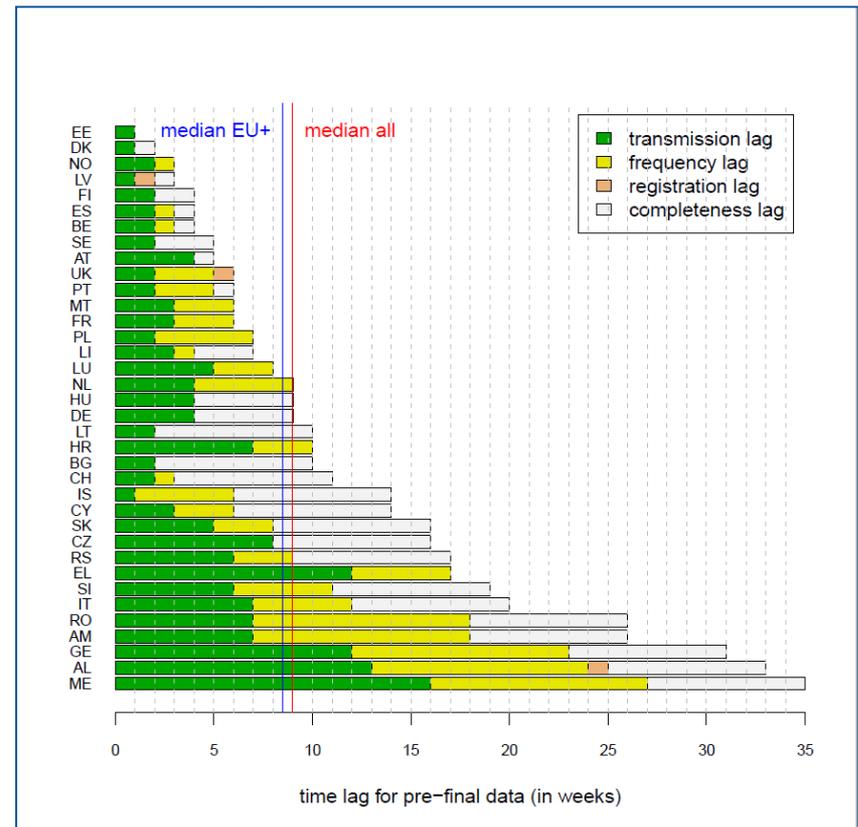
Series Name	Code	Status
Excess mortality - monthly data	demo_mexrt	Updated
Weekly deaths - special data collection	demomwk	Updated
Deaths by week and sex	demo_r_mwk_ts	Updated
Deaths by week, sex and 20-year age group	demo_r_mwk_20	Updated
Deaths by week, sex and 10-year age group	demo_r_mwk_10	Updated
Deaths by week, sex and 5-year age group	demo_r_mwk_05	Updated
Deaths by week, sex and NUTS 2 region	demo_r_mwk2_ts	Updated
Deaths by week, sex, 20-year age group and NUTS 2 region	demo_r_mwk2_20	Updated
Deaths by week, sex, 10-year age group and NUTS 2 region	demo_r_mwk2_10	Updated
Deaths by week, sex, 5-year age group and NUTS 2 region	demo_r_mwk2_05	Updated
Deaths by week and NUTS 3 region	demo_r_mwk3_t	Updated
Deaths by week, sex and NUTS 3 region	demo_r_mwk3_ts	Updated
Deaths by week, sex, 20-year age group and NUTS 3 region	demo_r_mwk3_20	Updated
Deaths by week, sex, 10-year age group and NUTS 3 region	demo_r_mwk3_10	Updated
Deaths by week, sex, 5-year age group and NUTS 3 region	demo_r_mweek3	Updated

Timeliness (at Eurostat public database as of 16 October 2020)

TP1 – first data



TP2 – pre-final data



Selected indicators on recovery



<https://ec.europa.eu/eurostat/cache/recovery-dashboard/>

Monthly excess mortality

- *ESSC requirement:*

$$EM = \left(\frac{\widehat{D}_{2020}^M - \bar{D}^M}{\bar{D}^M} \right) \cdot 100$$

where:

$$D = \text{deaths}, M = \text{month}, \bar{D}^M = \frac{1}{4} \sum_{i=2016}^{2019} D_i^M$$

- *Correction for (estimated) data completeness \hat{C} in country c and week w :*

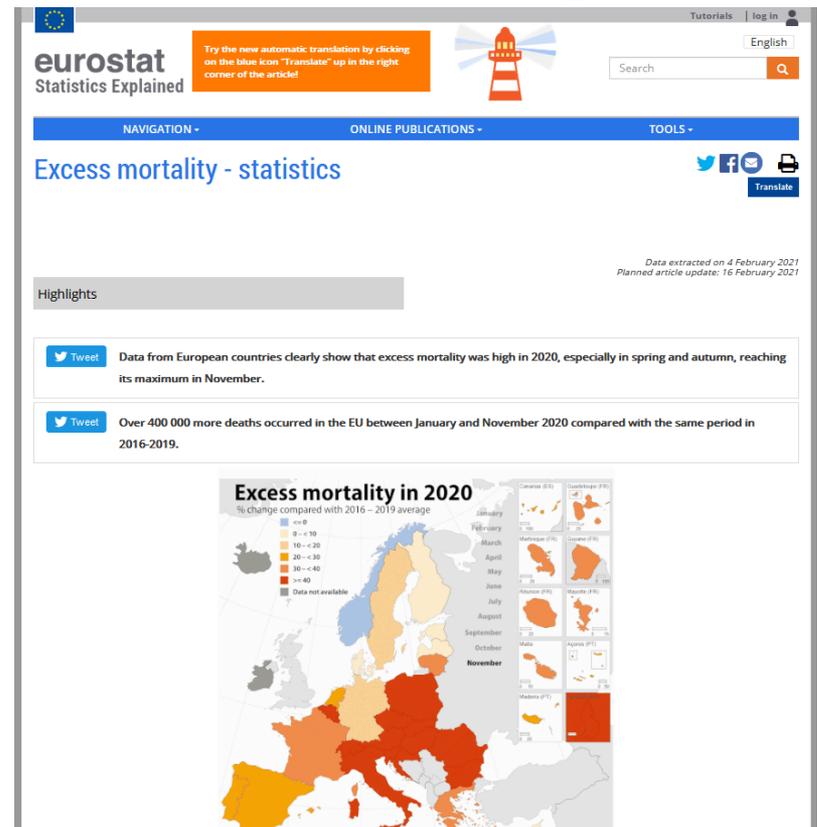
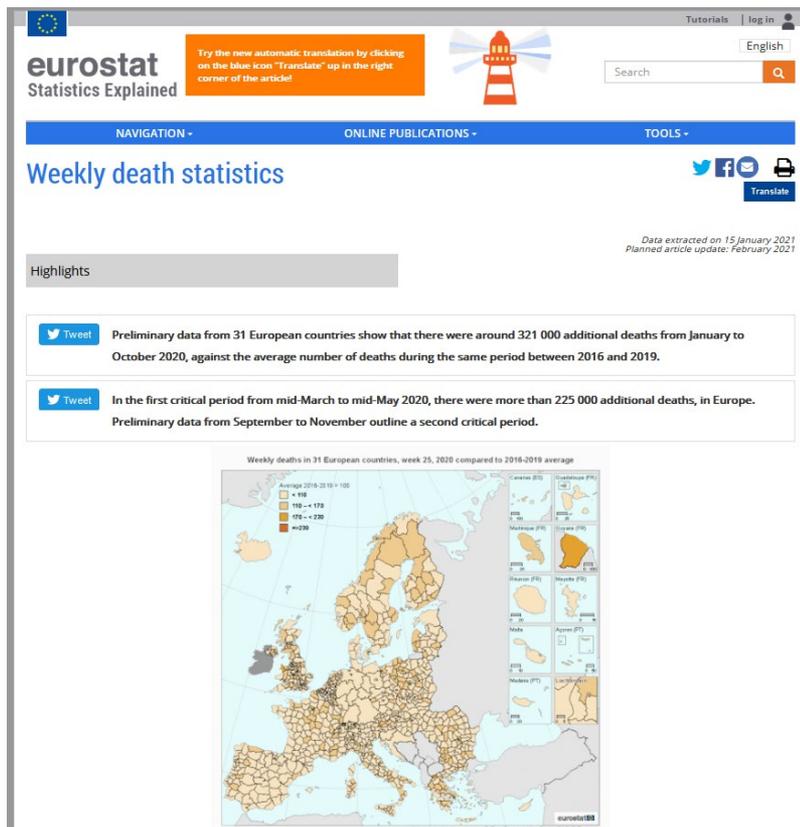
$$k_{c,w} = \frac{1}{\hat{C}_{c,w}}, \hat{C}_{c,w} \in [0, 1] \rightarrow \widehat{D}_{c,w} = k_{c,w} \cdot D_{c,w}$$

Illustrating the developments

“Statistics Explained” articles

Weekly deaths

Excess mortality



Main features of the two datasets

Weekly deaths

- *Voluntary data collection*
- *Time dimension: week (ISO)*
- *Updated on daily basis as data come in*
- *Breakdown by NUTS 3 region (NUTS-2021 classification), sex, 5-year age group (up to age 90+)*
- *Data from 2000 (depending on country), highest coverage 2015 onwards*
- *Associated "Statistics Explained" article updated monthly*

Excess mortality

- *Eurostat computation from weekly deaths based on ESSC requirements*
- *Time dimension: month*
- *Updated once a month around the middle*
- *Only national level, no disaggregation*
- *Data from 2020 only*
- *Associated "Statistics Explained" article updated monthly*

Ongoing work

- *Continuous effort to improve quality (particularly timeliness, completeness and granularity)*
- *Review of the national statistical processes for the production of deaths statistics (publication planned)*
- *Cooperation with EUROMOMO*

- *UK: until agreement on statistical cooperation is established, Eurostat will no longer disseminate new data for the UK, neither through its database nor in other dissemination products*

THANK YOU FOR THE ATTENTION

*For further information:
giampaolo.lanzieri@ec.europa.eu*