



CAUSES OF DEATH STATISTICS DISSEMINATION OF COVID-19 AS CAUSE OF DEATH

1. ISSUE DESCRIPTION

Eurostat produces annual statistics on the Causes of death¹. Data for 2020, the first year of the COVID-19 pandemic, have now been disseminated.

The European Centre for Disease Prevention and Control (ECDC)² has been monitoring the COVID-19 pandemic and disseminating data on the number of new reported COVID-19 cases and deaths by EU/EEA country since 2020.

Eurostat compared the Causes of death data received from reporting countries with ECDC data of COVID-19 deaths and, when available, with data on national websites, and found differences. Eurostat raised the issue in the Public Health Working Group³ in November 2021 and asked countries to investigate why statistics in the Causes of death data collection differ from rapid data published nationally or by the ECDC during the COVID-19 pandemic⁴. The present note summarises the main reasons communicated to Eurostat by reporting countries.

1.1. Different data sources and speed of data collection.

Differences in coding and reporting practices make comparisons challenging. There are different data sources used in the two processes and differences are inevitable according to countries.

The ECDC's Epidemic Intelligence team collects the number of COVID-19 deaths, based on reports from health authorities through an automated process including

¹ Under Regulation (EC) No 1338/2008 of the European Parliament and of the Council on Community statistics on public health and health and safety at work (<http://data.europa.eu/eli/reg/2008/1338/2021-01-01>) and Commission Regulation (EU) No 328/2011 as regards statistics on causes of death (<http://data.europa.eu/eli/reg/2011/328/oj>)

² <https://www.ecdc.europa.eu/en>

³ Minutes of the meeting are available on CIRCABC: https://circabc.europa.eu/ui/group/7b3a8e80-bdaa-483c-96ef-c4d152b50172/library/25506361-c388-4f1b-a3c8-e00cedc98f4d?p=1&n=10&sort=modified_DESC

⁴ The Netherlands kindly provided a link of a news release from Statistics Netherlands (<https://www.cbs.nl/en-gb/news/2021/44/fewer-covid-19-deaths-in-q2-than-in-q1-2021>) to explain the reasons of the differences for the Netherlands.

webscraping⁵. The processing of these data follows ECDC's standard epidemic intelligence process and the data are validated by a team of epidemiologists.

In the Causes of death data collection, Member States use confirmed death certificates as the underlying data source⁶.

During the pandemic, the public has consistently demanded rapid data on COVID-19 cases and deaths. Countries have had to make use of parallel data collection channels of different robustness to fulfil the demands. Mortality statistics reported as part of official statistics, on the other hand, are based on established collection systems with strict quality criteria.

1.2. Dying *with* COVID or dying *from* COVID-19.

Many countries do a rapid day-to-day monitoring of COVID-19 deaths (deaths *with* COVID-19, reported in case a deceased person had a positive COVID-19 test or was suspected of having COVID-19). It is separate from the existing system of causes of death data collection via death certificates (deaths *from* COVID-19). Differences are found comparing these two sources:

- The first is the rapid report done in cases where the deceased had tested positive for COVID-19 and/or clinical signs pointed towards COVID-19. Whether or not the cause of death was COVID-19 might only be established at a later stage. This rapid reporting forms the basis for the numbers reported to and disseminated by ECDC.
- The Eurostat Causes of death data collection is based on confirmed death certificates established by medical experts assessing the underlying cause of death. Here, death certificates may establish another cause of death despite the deceased dying *with* COVID-19. The opposite is also possible; deaths that were confirmed cases of dying *from* COVID-19 may not have been picked up in the rapid reporting.

1.3. Revisions and final data

The rapid data sent by countries to ECDC may later be revised and republished at national level. The rapid data may also be revised by countries before transmitting final data to Eurostat in the Causes of death data collection (deadline n+2 years). This means that data may remain on the ECDC website and differ from what is later disseminated by the national statistical institutes or finally by Eurostat.

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⁵ <https://www.ecdc.europa.eu/en/covid-19/data-collection>

⁶ https://ec.europa.eu/eurostat/cache/metadata/en/hlth_cdeath_sims.htm