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ITEM 3

DATA COLLECTION ON WEEKLY DEATHS

MEETING OF THE EUROPEAN DIRECTORS OF SOCIAL STATISTICS

VIDEO CONFERENCE, 14 MAY 2020

1. Introduction

Besides its major impact on people lives and populations' economy and health care system, the Covid-19 pandemic has triggered a tremendous interest on related statistics. Whilst the international comparability of data associated to the Covid-19 may still be arguable due to possible different rules of disease / causes of death classification and coverage issues, high-frequency data on overall mortality offer a viable alternative for internationally comparable monitoring and analyses of direct and indirect effects of the Covid-19 pandemic.

Eurostat, in cooperation with the NSIs of the European Statistical System (ESS), has therefore launched in April 2020 an exceptional and voluntary data collection on weekly deaths (EuroWDC). The present document reports on the state of play of this initiative.

2. PROGRESS AND STATE OF PLAY OF THE EUROWDC

Taking in due consideration the urgent need of statistical information for mortality monitoring, EuroWDC has been designed having timeliness as primary quality criterion. National data are expected to be transmitted by the national statistical office as soon as ready and the validation processing in Eurostat is kept to a minimum to allow a prompt dissemination. At the current stage, timeliness of weekly data on deaths is a must for their usefulness.

The EuroWDC has been set up in very short time. These are the milestones of the project:

- Start on 2 April 2020.
- EU survey on data availability from 6 to 8 April 2020.
- Data request launched on 15 April 2020.
- Information at the Partnership group on 17 April
- Data collection opened on 20 April 2020.
- Information at the meeting of the Directors General of the NSIs on 23 April
- Data first published on 29 April 2020.

The list above proves the exceptional reaction of the ESS and of the system of national statistical offices at large, even though – reasonably – the EuroWDC is still in development. Updates and improvements are being implemented and data providers are gaining a better understanding of the technical requirements.

As of today, the participating countries are: Belgium, Bulgaria, Czechia, Denmark, Estonia, Spain, Latvia, Lithuania, Luxembourg, Austria, Portugal, Slovakia, Finland, Sweden, Iceland, Liechtenstein, Switzerland, Serbia, Armenia, and Georgia. Data from Norway and Andorra are under processing and France has announced the data

transmission. This would take to 15 the number of participating EU Member States, plus the 4 EFTA countries and further 4 non-EU countries, for a total of 23 participating countries with varying extent of data availability. The following Table 1 summarises the data available online as of 06/05/2020 in the Eurostat database (Eurobase). For sake of simplicity, the report is here limited to the total number of cases without further disaggregation by sex, age or NUTS level.

Table 1: availability of weekly deaths totals in Eurobase as of 6 May 2020

Country	Start year	Start week	Latest year	Latest week
BE	2000	1	2020	16
BG	2015	1	2020	17
CZ	2005	1	2020	10
DK	2007	1	2020	17
EE	2000	1	2020	18
ES	2000	1	2019	39
LV	2020	14	2020	18
LT	2000	1	2020	18
LU	2000	1	2020	8
AT	2000	1	2020	13
PT	2000	1	2020	15
SK	2000	1	2020	14
FI	2000	1	2020	14
SE	2000	1	2020	18
IS	2000	1	2020	18
LI	2000	1	2020	15
СН	2000	1	2020	16
RS	2000	1	2018	52
AM	2020	1	2020	13
GE	2014	1	2020	1

2.1. Technical specifications

The EuroWDC aims to collect data on weekly deaths broken down by NUTS3 region, sex and 5-year age group. Even though the dimensions used for the breakdown are rather basic, a few clarifications are still needed. Table 2 focuses on the modality of data transmission, while Table 3 reports the preferences regarding the content. The compliance with these latter would increase data comparability to the highest degree. When different options are adopted by the data provider, they should be described in the national metadata.

When having a broader view of the available data, their transmission and specifications, Eurostat envisages to include a methodological note on the European data collection on Weekly Deaths Counts (EuroWDC) in the so-called methodological corner "COVID-19: support for statisticians" in Eurostat web-site.

Table 2: modalities of data transmission for EuroWDC

Feature	Options	Eurostat preference
Weekly data transmission	 On the same weekday As soon as data are available 	2. As soon as data are available
Completeness	Full (including aggregations) Only highest disaggregated data	1. Full (including aggregations)
Data revisions transmission	 At regular time intervals As soon as available 	2. As soon as available

Table 3: technical specifications for EuroWDC

Dimension	Options	Eurostat preference	
Time breakdown	1. Weeks	1. Weeks	
Time breakdown	2. Days		
	1. Single age		
Age breakdown	2. 5-year age group	2. 5-year age group	
Age oreakdown	3. 10-year age group		
	4. Other		
Sub-national breakdown	1. NUTS level 3	1. NUTS level 3	
Suo-national dieakdown	2. Lower NUTS levels		
	1. Age completed	2. Age completed	
Definition of age	2. Age reached		
	3. Both ("Lexis triangles")		
Definition of date of the	1. Date of occurrence	1. Date of occurrence	
event	2. Date of registration		
Definition of	1. (Geographic) Place of occurrence of the death	2. (Geographic) Place of residence	
(geographic) place of the event	2. (Geographic) Place of residence of the deceased person		
	1. Hospital	D	
Location of the event	2. Institution	Data not collected, but information on their	
Location of the event	3. Home	coverage possibly provided in the metadata	
	4. Elsewhere		
Beginning of the weeks	1. On Mondays (ISO 8601)	1. On Mondays (ISO 8601)	
Degining of the weeks	2. Any other weekday		

 The week with the year's first Thursday in it¹ (ISO 8601). Any other (e.g., the week with the first Monday in the calendar year) 	1. The week with the year's first Thursday in it (ISO 8601).
 At least 5 years Up to 20 years Other 	2. Up to 20 years
	first Thursday in it I (ISO 8601). 2. Any other (e.g., the week with the first Monday in the calendar year) 1. At least 5 years 2. Up to 20 years

3. ALTERNATIVE DATA COLLECTIONS OR ANALYSES

Several national authorities disseminate data or analyses on Covid-19. However, in order to improve the general knowledge on this disease, to better support scientific efforts and to learn from best practices, an international comparison is needed. Most of international repositories report data on cases and deaths due to Covid-19. Among others, this is the case for:

- The world-renowned Coronavirus Resource Center² of the John Hopkins University, which offers a wealth of data and analyses on Covid-19 for all countries of the world, but no possibility to download datasets.
- The World Health Organisation (WHO) that, likewise, has a dedicated section on Covid-19 pandemic³ with data for all countries of the world, but only available in dashboards and reports. No data download offered.
- The European Centre for Disease Prevention and Control (ECDC), an agency of the European Union, in whose website⁴ it is possible to download data on the geographic distribution of Covid-19 cases worldwide (no further breakdowns).
- The European Crisis Management Laboratory (ECML) Covid-19 website⁵ by the Joint Research Centre of the European Commission, reporting also national containment measures.

³ https://www.who.int/emergencies/diseases/novel-coronavirus-2019

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¹ For instance, in the calendar year 2020 the first Thursday was on 2 January. Consequently, the week starting on Monday 30 December 2019 is considered the first week of the year 2020.

² https://coronavirus.jhu.edu/

⁴ https://www.ecdc.europa.eu/en/Covid-19-pandemic

⁵ https://jrc-Covid.azurewebsites.net/

• The French National Institute of Demographic Studies (INED)⁶ website for "International Data on the Demography of Deaths Related to the COVID-19 Pandemic", where data for Denmark, Germany, Spain, France, Italy, The Netherlands, Portugal, Norway, and the Republic of Korea are disseminated broken down by sex and age.

There are some initiatives that, similarly to EuroWDC, focus instead on overall mortality:

- EuroMOMO⁷, a European mortality monitoring activity, aiming to detect and measure excess deaths related to seasonal influenza, pandemics and other public health threats. The EuroMOMO partners are mainly public health institutes. Weekly data are from 24 participating countries and regions: Austria, Belgium, Denmark, Estonia, Finland, France, Germany (Berlin), Germany (Hesse), Greece, Hungary, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, UK (England), UK (Northern Ireland), UK (Scotland), UK (Wales). However, the EuroMOMO network hub is not mandated by the participating countries to release any national data, which must therefore be asked to the countries individually. Further, displayed data are not broken down by sex or NUTS region, and the age breakdown is limited to the groups 0-4, 5-14, 15-64, and 65+.
- The Human Mortality Database⁸ (HMD) has recently launched a project on "Estimating mortality and human losses during health crisis" based on weekly deaths counts, aiming to cover at least the EU27 Member States plus Norway, Switzerland, the United Kingdom, Russia, USA, Japan, South Korea, Canada and Australia. As of now, data by sex and age have been collected and processed for 9 countries/regions (Germany, Spain, Italy, the Netherlands, Austria, Sweden England and Wales, USA, and Russia). Contacts between Eurostat and the HMD are ongoing for exploring possible synergies.

4. CONCLUSIVE REMARKS

At the best of our knowledge, the EuroWDC exercise is quite unique among international data collections on mortality and Covid-19 pandemic, in that:

- It offers a single source of almost comparable information on weekly mortality in Europe.
- The data are highly disaggregated, namely by sex, 5-year age group and NUTS level 3 region.

⁶ https://dc-Covid.site.ined.fr/en/

⁷ https://www.euromomo.eu/

⁸ https://www.mortality.org/

- The data are expected to be very timely, as they should be provided on weekly basis by the participating countries and rapidly disseminated by Eurostat.
- It provides as well a long term basis for analyses, as the time series cover about 20 years of observations.

Its ultimate success will depend on the continuing efforts of the data providers. Now that the EuroWDC is getting over the starting phase, it becomes possible to exploit the data (e.g., with analyses on excess deaths) and link them to illustrative dashboards and graphs.

The DSS are invited:

- To take note of the new data collection on weekly deaths EuroWDC, its purpose and specifications and the current state of play of its implementation, as one of the exceptional and timely answer to the need of statistics for measuring the impact of the Covid-19 pandemic.
- For the Member States already participating to the EuroWDC data collection, to continue updating the dataset by proving data for the most recent weeks as soon as available, possible revisions of data already sent and longer back series whenever possible.
- For Member States not yet proving data, to join this effort on a voluntary basis, as far as possible following Eurostat preferences for modalities of data transmission and technical specifications, having timeliness as primary quality criterion.