February 19th 2021 WEEKLY DEATHS – preliminary data Weeks 4 and 5 of 2021

MORTALITY IN PORTUGAL IN THE CONTEXT OF THE COVID-19 PANDEMIC

DEATHS BY COVID-19 IN WEEKS 4 AND 5 OF 2021 ACCOUNTED FOR, RESPECTIVELY, 43.2% AND 41.8% OF THE TOTAL

In weeks 4 and 5 of 2021, there were 4,711 and 3,825 deaths in Portugal, respectively, 1,878 and 1,131 more deaths than the 2015-2019 average. The number of deaths due to COVID-19 in those weeks was 2,036 and 1,597, representing, respectively, 43.2% and 41.8% of the total deaths.

Of the 8,536 deaths in this period, more than 75% corresponded to people aged 75 years and over. However, the largest excess of mortality was seen in those aged 90 years and over (+74.1% compared to the 2015-2019 average).

The Norte, Centro and Área Metropolitana de Lisboa concentrated 82.6% of deaths in weeks 4 and 5. However, in terms of the number of deaths per 100 thousand inhabitants, only Alentejo (130.0), Centro (103.2) and Área Metropolitana de Lisboa (90.5) had values higher than the national (83.0).

In weeks 4 and 5, 65.2% of deaths occurred in hospitals.

In this press release Statistics Portugal provides preliminary data regarding the evolution of the number of deaths that occurred in the national territory, per week, until the 5th week of 2021 (February 1st to 7th), making a comparison with the average number of deaths for the same period of 2015-2019. The average for 2015 to 2019 provides a reference for the number of deaths expected per week in a normal (non-pandemic) year, considering that there is an excess of mortality when the number of deaths exceeds the average number of that period.

Information on deaths is obtained through the Civil Register collected under the Integrated Civil Registration and Identification System (SIRIC) until February 16th 2021. The information is preliminary and will be subject to updates.

In the weeks 4 and 5 of 2021 there were 8,536 deaths, 3,009 more than the 2015-2019 average in the same period.

In the first weeks of 2020, the number of deaths was, in general, lower than the average values for the period 2015-2019. In March, contrary to past trends, mortality started to increase, reaching a first peak between March 30th and April 5th, to which COVID-19 deaths contributed in part. A new maximum of deaths was reached in mid-July, despite the reduced contribution of the number of deaths due to COVID-19 to the increase in mortality. As the end of the year and the beginning of 2021 approached, this increase was increasingly explained by the increase in deaths due to COVID-19. Since the last week of 2020 (December 28th 2020 to January 3rd 2021), the number of deaths has steadily increased until week 3 (January 18th to 24th), reaching in that week the highest number of weekly deaths observed since the beginning of the pandemic. That week, 5,011 people died, 2,145 more than the 2015-2019 average. The number of deaths by COVID-19 was 1,693 this week, representing 33.8% of the total deaths.

In Figure 1, the shaded bars, defined by the minimum and maximum values of deaths per week in any of the five years between 2015 and 2019, provide an indication of the range of variation in the number of deaths in the considered period. It shows that, as of the beginning of March 2020, the number of deaths was, in general, above the upper limit of this range of values.

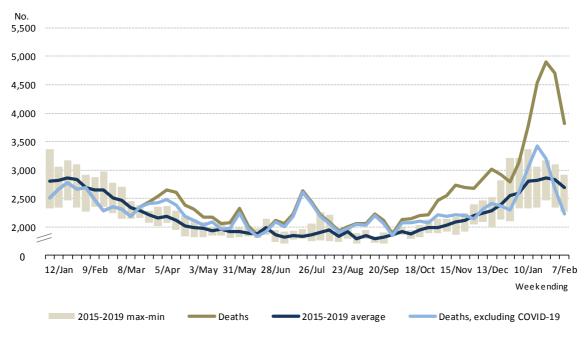
In weeks 4 and 5 of 2021, the number of deaths decreased, despite continuing well above that observed since the beginning of the pandemic. In those two weeks, there were 4,711 and 3,825 deaths in Portugal, respectively (a total of 8,536 deaths). The number of deaths due to COVID-19 in those weeks was 2,036 and 1,597, representing, respectively, 43.2% and 41.8% of the total deaths. In week 4 (January 25th to 31st), it was recorded the highest number of deaths by COVID-19 per week (2,036) observed since the beginning of the pandemic.

In weeks 4 and 5 of 2021, excess mortality was 1,878 and 1,131 deaths, respectively, 66.3% and 42.0% above the 2015-2019 average in the same weeks.

The number of deaths by COVID-19 was, in weeks 4 and 5, above the excess of mortality, which means that excluding deaths by COVID-19, the mortality registered in these two weeks would be below the average of the period 2015 -2019.

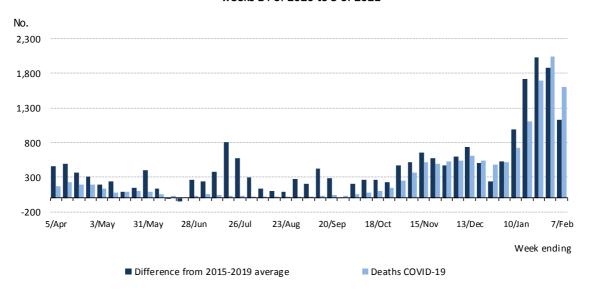
In Figure 2, the bars represent the total weekly death differential relative to the 2015-2019 average for the same period and the number of COVID-19 deaths.

Figure 1: Deaths 2020, 2021 and average 2015-2019, by week, Portugal, weeks 1 of 2020 to 5 of 2021



Source: Statistics Portugal, Deaths. Directorate-General of Health, Daily COVID-19 Status Report.

Figure 2: Difference between deaths 2020, 2021 and 2015-2019 average and COVID-19 deaths, by week, Portugal, weeks 14 of 2020 to 5 of 2021



Source: Statistics Portugal, Deaths. Directorate-General of Health, Daily COVID-19 Status Report.

Excess male mortality higher than female mortality

Between January 25th and February 7th (weeks 4 and 5), there were 4,278 deaths of men and 4,258 of women, an increase of 1,560 and 1,450 deaths, respectively, compared with the 2015-2019 average of deaths in the same weeks.

The number of deaths of men, which at week 4 was 2,382, decreased to 1,896 in week 5, representing, respectively, 49.0 deaths per 100 thousand men at week 4 and 39.0 deaths at week 5.

The number of deaths of women was in week 4 of 2,329, representing 42.8 deaths per 100 thousand women. In the following week it decreased to 1,929 deaths, corresponding to 35.5 deaths per 100 thousand women.

Largest increase in mortality of people aged 90 and over

Between January 25th and February 7th, 75.9% of deaths (6,478 deaths) were of people aged 75 years and over and, of these, 60.9% (3,946) were of people aged 85 and over. However, it was among people aged 90 and over that the greatest excess of mortality was found. In this age group, there were 889 more deaths than the 2015-2019 average, which represented an increase of 74.1%. The second highest increase in mortality was registered in the age group 85 to 89 years, with 677 more deaths than the average (+57.3%).

Alentejo, Centro and Área Metropolitana de Lisboa with the highest number of deaths per 100 thousand inhabitants

Between January 25th and February 7th (weeks 4 and 5) there were 2,177 deaths in the region Norte (25.5% of the total), 2,288 (26.8%) in Centro, 2,590 (30.3%) in Área Metropolitana de Lisboa, 916 (10.7%) in Alentejo, 307 (3.6%) in Algarve, 96 (1.1%) in Região Autónoma dos Açores and 148 (1.7%) in Região Autónoma da Madeira.

However, in relative terms, the highest number of deaths per 100 thousand inhabitants was registered in Alentejo (130.0 deaths), followed by Centro (103.2), by Área Metropolitana de Lisboa (90.5), Algarve (70.0), Norte (60.9) and the autonomous regions of Madeira and Açores (58.2 and 39.6 deaths, respectively).

The number of deaths recorded in weeks 4 and 5 was higher than the 2015-2019 average observed in the same weeks in all regions, except for the Região Autónoma dos Açores in week 4.

More than 65% of deaths occurred in hospitals

Of the total of 8,536 deaths recorded between January 25th and February 7th (weeks 4 and 5), 5,568 (65.2%) took place in a hospital and 2,968 (34.8%) occurred outside the hospital context (at private homes and other places), corresponding, respectively, to increases of 2,153 and 858 deaths compared with the average number of deaths observed in the same weeks of 2015-2019.

WEEKLY DEATHS- Preliminary Data - weeks 4 and 5 of 2021



Table 1: Deaths 2021 and 2015-2019 average by week, Portugal, weeks 3 to 5 of 2021

| | Week 3 of 2021 (January 18 th to 24 th) | | | | | Week 4 of 2021 (January 25 th to 31 st) | | | | | Week 5 of 2021 (February 1 st to 7 th) | | | | |
|---------------------|---|---------------------------------|--|--|------|---|-------------------|---------------------------------|--|-------|--|------------|---------------------------------|--|------|
| | Deaths (No.) | Deaths per 100 000 inhab. | 2015-2019 deaths average (homologous week) | Change relative to the 2015-2019 average | | Deaths (No.) | Deaths per | 2015-2019 deaths | Change relative to the 2015-2019 average | | Dacha (Na.) | Deaths per | 2015-2019 deaths | Change relative to the 2015-2019 average | |
| | | | | Absolute values | % | Deaths (No.) | 100 000 inhab. | average (homologous week) | Absolute values | % | Deaths (No.) | | average (homologous week) | Absolute values | % |
| Total | 5,011 | 48.7 | 2,866 | 2,145 | 74.8 | 4,711 | 45.8 | 2,833 | 1,878 | 66.3 | 3,825 | 37.2 | 2,694 | 1,131 | 42.0 |
| Sex | | | | | | | | | | | | | | | |
| Males | 2,520 | 51.9 | 1,414 | 1,106 | 78.2 | 2,382 | 49.0 | 1,401 | 981 | 70.0 | 1,896 | 39.0 | 1,317 | 579 | 44.0 |
| Females | 2,491 | 45.8 | 1,452 | 1,039 | 71.6 | 2,329 | 42.8 | 1,431 | 898 | 62.8 | 1,929 | 35.5 | 1,377 | 552 | 40.1 |
| NUTS 2 | | | | | | | | | | | | | | | ı |
| Norte | 1,329 | 37.2 | 899 | 430 | 47.8 | 1,187 | 33.2 | 899 | 288 | 32.0 | 990 | 27.7 | 832 | 158 | 19.0 |
| Centro | 1,388 | 62.6 | 713 | 675 | 94.7 | 1,271 | 57.3 | 728 | 543 | 74.6 | 1,017 | 45.9 | 703 | 314 | 44.7 |
| AM Lisboa | 1,445 | 50.5 | 732 | 713 | 97.4 | 1,451 | 50.7 | 705 | 746 | 105.8 | 1,139 | 39.8 | 671 | 468 | 69.7 |
| Alentejo | 523 | 74.2 | 272 | 251 | 92.3 | 511 | 72.5 | 259 | 252 | 97.3 | 405 | 57.5 | 260 | 145 | 55.8 |
| Algarve | 194 | 44.3 | 129 | 65 | 50.4 | 163 | 37.2 | 126 | 37 | 29.4 | 144 | 32.8 | 121 | 23 | 19.0 |
| RA Açores | 47 | 19.4 | 49 | -2 | -4.1 | 38 | 15.7 | 48 | -10 | -20.8 | 58 | 23.9 | 47 | 11 | 23.4 |
| RA Madeira | 80 | 31.5 | 65 | 15 | 23.1 | 83 | 32.6 | 60 | 23 | 38.3 | 65 | 25.6 | 53 | 12 | 22.6 |
| Age group | | | | | | | | | | | | | | | ı |
| Under 65 years | 512 | 6.4 | 372 | 140 | 37.6 | 443 | 5.5 | 380 | 63 | 16.6 | 404 | 5.0 | 351 | 53 | 15.1 |
| 65 to 69 years | 266 | 3.3 | 162 | 104 | 64.2 | 269 | 3.4 | 159 | 110 | 69.2 | 217 | 2.7 | 160 | 57 | 35.6 |
| 70 to 74 years | 377 | 4.7 | 220 | 157 | 71.4 | 394 | 4.9 | 213 | 181 | 85.0 | 330 | 4.1 | 201 | 129 | 64.2 |
| 75 to 79 years | 589 | 7.3 | 348 | 241 | 69.3 | 558 | 7.0 | 339 | 219 | 64.6 | 465 | 5.8 | 308 | 157 | 51.0 |
| 80 to 84 years | 892 | 11.1 | 533 | 359 | 67.4 | 844 | 10.5 | 521 | 323 | 62.0 | 665 | 8.3 | 513 | 152 | 29.6 |
| 85 to 89 years | 1156 | 14.4 | 603 | 553 | 91.7 | 1044 | 13.0 | 591 | 453 | 76.6 | 814 | 10.2 | 590 | 224 | 38.0 |
| 90 years and over | 1219 | 15.2 | 628 | 591 | 94.1 | 1,159 | 14.5 | 629 | 530 | 84.3 | 929 | 11.6 | 570 | 359 | 63.0 |
| Place of occurrence | | | | | | | | | | | | | | | ı |
| Hospital | 3,170 | - | 1,748 | 1,422 | 81.4 | 3,063 | - | 1,749 | 1,314 | 75.1 | 2 <i>,</i> 505 | - | 1,666 | 839 | 50.4 |
| Another location | 1,841 | - | 1,118 | 723 | 64.7 | 1,648 | - | 1,083 | 565 | 52.2 | 1,320 | - | 1,027 | 293 | 28.5 |

Notes:

Source: Statistics Portugal, Deaths and Annual Provisional Estimates of Resident Population December 31st 2019.

WEEKLY DEATHS— Preliminary Data – weeks 4 and 5 of 2021

⁽¹⁾ Data for 2020 and 2021 are preliminary.

⁽²⁾ The total number of deaths may not correspond to the sum of the partial figures by sex and residence, due to the existence of records with unknown sex and residence and because it includes deaths in Portugal from residents abroad.

⁽³⁾ The week is defined according to ISO 8601. Every week has 7 days, starts on a Monday and ends on a Sunday. The first week of the year is the one that contains the first Thursday of the year.

TECHNICAL NOTE

Statistics Portugal releases the preliminary weekly deaths for 2020, based on the information registered in the Civil Register Offices until February 16th 2021.

Data on deaths is obtained from statistical operations of direct and exhaustive collection on live births and deaths in Portuguese territory using facts that are subject to compulsory civil registration (birth and death) in the Sistema Integrado do Registo e Identificação Civil (SIRIC).

In addition to administrative information obtained from Civil Register Offices, Statistics Portugal collects an additional set of variables identified as statistically pertinent to the National Statistic System (NSS) and the European Statistical System (EES).

Data is recorded and sent electronically, in compliance with the requirements set out by Statistics Portugal and laid down in liaison with the Instituto de Registos e Notariado (IRN) and the Instituto de Gestão Financeira e Equipamentos da Justiça (IGFEJ).

In this release data on provisional annual estimates of resident population referenced to December 31st 2019, released on June 15th 2020 (latest figures available), are used in computing the indicators per 100 thousand inhabitants.

Data on the number of deaths by COVID-19 are also used, whose source is the daily situation report COVID-19 of the Directorate-General for Health that provides only a partial measure of the pandemic on mortality. A more comprehensive measure of the impact on mortality may be provided by the difference between the total number of deaths, by all causes of death, and the average number of deaths for 2015-2019, even though there are other known effects on mortality, such as seasonal flu and spikes or hot or cold waves. Thus, it is considered that there is an excess of mortality when the number of deaths, during a certain period of time, exceeds the number of deaths expected for that period, in this case, the average of the period 2015-2019

DEFINITIONS:

Death: The permanent disappearance of vital functions.

Detailed methodological information available at: www.ine.pt, option Products, Metadata system.

Detailed statistical information available at: **www.ine.pt**, option Products, Statistical data, database, theme Population, subtheme Mortality and life expectancy.