



February 5<sup>th</sup> 2021

WEEKLY DEATHS – preliminary data

Weeks 2 and 3 of 2021

*Version rectified at 6:00 pm*

*On page 4, last paragraph, second line, where it reads “...(47.4%) occurred outside the hospital context...” it should read “...(36.9%) occurred outside the hospital context...”*

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

### THE NUMBER OF DEATHS BY COVID-19 IN WEEKS 2 AND 3 OF 2021 REPRESENTED, RESPECTIVELY, 24.3% AND 34.6% OF THE TOTAL DEATHS

In weeks 2 and 3 of 2021, there were 4,530 and 4,898 deaths in Portugal, respectively, 1,714 and 2,032 more deaths than the 2015-2019 average. The number of deaths due to COVID-19 in those weeks was 1,103 and 1,693, representing, respectively, 24.3% and 34.6% of the total deaths.

Of the 9,428 deaths recorded in this period, 4,738 were of men and 4,690 were of women, respectively, 1,945 and 1,801 more deaths, respectively, than the average number of deaths in the same weeks of 2015-2019.

In the same period, more than 75% of deaths corresponded to people aged 75 years and over. However, the largest excess of mortality was seen in those aged 90 years and over (+87.9% compared to the 2015-2019 average).

The Norte, Centro and Área Metropolitana de Lisboa concentrated 82.6% of deaths in weeks 2 and 3. However, in terms of the number of deaths per 100 thousand inhabitants, only Alentejo (140.5) and Centro (115.7) had values higher than the national (91.6).

In weeks 2 and 3, 63.1% of deaths occurred in hospital.

---

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 3<sup>rd</sup> week of 2021 (January 18<sup>th</sup> to 24<sup>th</sup>), making a comparison with the average number of deaths for the same period of 2015-2019. The average for 2015 to 2019 provides a basis for comparison with the number of deaths expected per week in a normal (non-pandemic) year.

Information on deaths is obtained through the Civil Register collected under the Integrated Civil Registration and Identification System (SIRIC) until February 2<sup>nd</sup> 2021. The information is preliminary and will be subject to updates.

The number of COVID-19 deaths 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

WEEKLY DEATHS– Preliminary Data – weeks 2 and 3 of 2021



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.

**In the weeks 2 and 3 of 2021 there were 9,428 deaths, 3,746 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 30<sup>th</sup> and April 5<sup>th</sup>, 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 28<sup>th</sup> 2020 to January 3<sup>rd</sup> 2021), the number of deaths has steadily increased, moving further and further away from the 2015-2019 average.

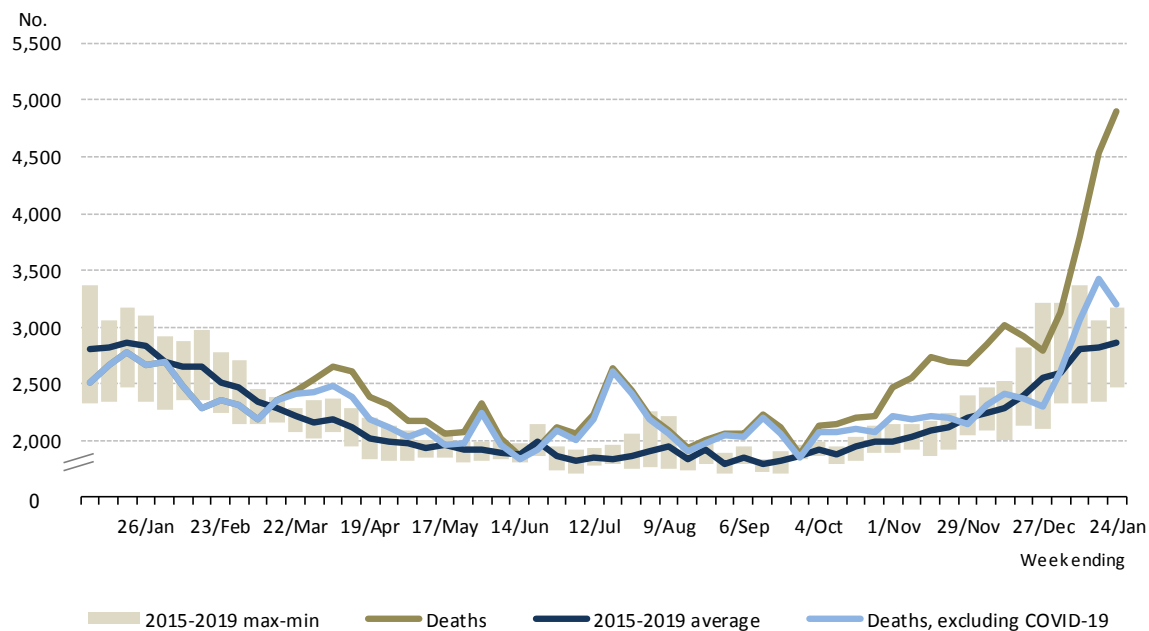
In Figure 1, the shaded bars, defined by the minimum and maximum values of deaths per week in any of the five years between 2015 and 2019, provide an indication of the range of variation in the number of deaths in the considered period. It shows that, as of the beginning of March 2020, the number of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

In weeks 2 and 3 of 2021 the number of deaths registered in Portugal were, respectively, 4,530 and 4,898 (a total of 9,428 deaths). In week 3 it was recorded the highest number of weekly deaths observed since the beginning of the pandemic. The number of deaths due to COVID-19 in those weeks was 1,103 and 1,693, representing, respectively, 24.3% and 34.6% of the total deaths.

In weeks 2 and 3 of 2021, excess mortality was 1,714 and 2,032 deaths, respectively, 60.9% and 70.9% above the 2015-2015 average in the same weeks. The number of deaths by COVID-19 represented, respectively, 64.4% and 83.3% of the total increase in deaths.

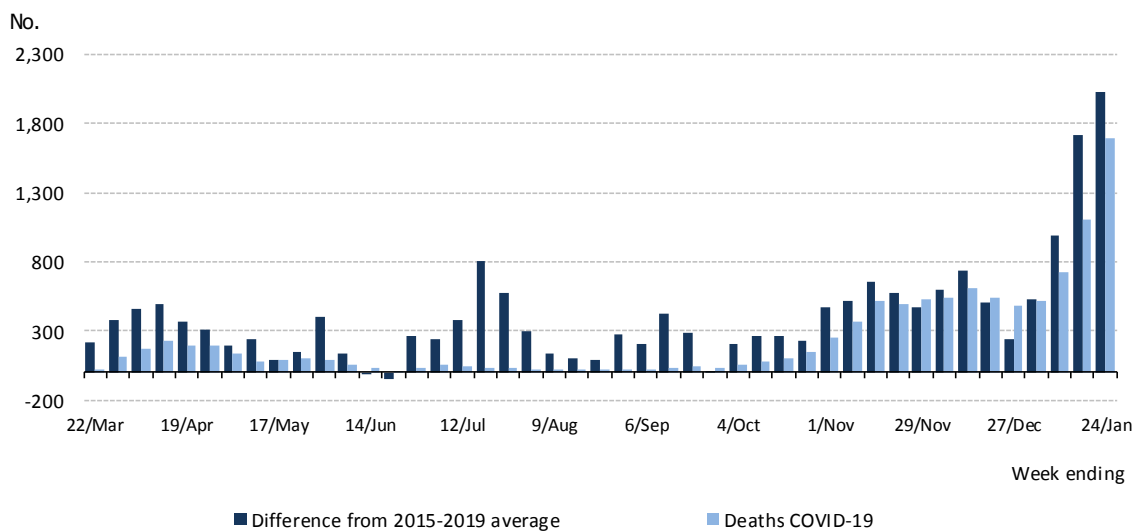
In Figure 2, the bars represent the total weekly death differential relative to the 2015-2019 average for the same period and the number of COVID-19 deaths.

Figure 1: Deaths 2020, 2021 and average 2015-2019, by week, Portugal, weeks 1 of 2020 to 3 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 12 of 2020 to 3 of 2021



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



### **Excess male mortality higher than female mortality**

Between January 11<sup>th</sup> and 24<sup>th</sup> (weeks 2 and 3), there were 4,738 deaths of men and 4,690 of women, an increase of 1,945 and 1,801 deaths, respectively, compared with the 2015-2019 average of deaths in the same weeks.

The number of deaths of men, which at week 2 was 2,282, increased to 2,456 at week 3, representing, respectively, 47.0 deaths per 100 thousand men at week 2 and 50.5 deaths at week 3.

The number of deaths of women was in week 2 of 2,248, representing 41.4 deaths per 100 thousand women. In the following week it increased to 2,442 deaths, corresponding to 44.9 deaths per 100 thousand women.

### **Largest increase in mortality of people aged 90 and over**

Between January 11<sup>th</sup> and 24<sup>th</sup>, 76.8% of deaths (7,241 deaths) were of people aged 75 years and over and, of these, 61.7% (4,468) 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 1 094 more deaths than the 2015-2019 average, which represented an increase of 87.9%. The second highest increase in mortality was registered in the age group 85 to 89 years, with 935 more deaths than the average (+ 72.8%).

### **Alentejo and Centro with the highest number of deaths per 100 thousand inhabitants**

Between January 11 and 24 (weeks 2 and 3) there were 2,623 deaths in the Norte (27.8% of the total), 2,565 (27.2%) in the Centro region, 2,603 (27.6%) in the Área Metropolitana de Lisboa, 990 (10.5%) in the Alentejo, 396 (4.2%) in the Algarve, 94 (1.0%) in the Região Autónoma Region dos Açores and 147 (1.6%) in the Região Autónoma da Madeira.

However, in relative terms, the highest number of deaths per 100 thousand inhabitants was registered in Alentejo (140.5 deaths), followed by Centro (115.7), by the Área Metropolitana de Lisboa (90.9), Algarve (90.3), Norte (73.4) and the autonomous regions of the Açores and Madeira (57.8 and 38.7 deaths, respectively).

The number of deaths recorded in weeks 2 and 3 was higher than the 2015-2019 average observed in the same weeks in all regions, except for the Região Autónoma da Madeira in week 2, with an equal number of deaths, and the Região Autónoma dos Açores in week 3, when it registered a lower number of deaths.

### **More than 60% of deaths occurred in hospital**

Of the total of 9,428 deaths recorded between January 11<sup>th</sup> and 24<sup>th</sup> (weeks 2 and 3), 5,952 (63.1%) took place in a hospital and 3,476 (36.9%) occurred outside the hospital context (at private homes and other places), corresponding, respectively, to increases of 2,507 and 1,239 deaths compared with the average number of deaths observed in the same weeks of 2015-2019.



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

	Week 1 of 2021 (January 4 <sup>th</sup> to 10 <sup>th</sup> )					Week 2 of 2021 (January 11 <sup>th</sup> to 17 <sup>th</sup> )					Week 3 of 2021 (January 18 <sup>th</sup> to 24 <sup>th</sup> )				
	Deaths (No.)	Deaths per 100 000 inhab.	2015-2019 deaths average (homologous week)	Change relative to the 2015-2019 average		Deaths (No.)	Deaths per 100 000 inhab.	2015-2019 deaths average (homologous week)	Change relative to the 2015-2019 average		Deaths (No.)	Deaths per 100 000 inhab.	2015-2019 deaths average (homologous week)	Change relative to the 2015-2019 average	
				Absolute values	%				Absolute values	%				Absolute values	%
<b>Total</b>	<b>3,792</b>	<b>36.8</b>	<b>2,804</b>	<b>988</b>	<b>35.2</b>	<b>4,530</b>	<b>44.0</b>	<b>2,816</b>	<b>1,714</b>	<b>60.9</b>	<b>4,898</b>	<b>47.6</b>	<b>2,866</b>	<b>2,032</b>	<b>70.9</b>
<b>Sex</b>															
Males	1,952	40.2	1,379	573	41.6	2,282	47.0	1,379	903	65.5	2,456	50.5	1,414	1,042	73.7
Females	1,840	33.8	1,425	415	29.1	2,248	41.4	1,437	811	56.4	2,442	44.9	1,452	990	68.2
<b>NUTS 2</b>															
Norte	1,177	32.9	910	267	29.3	1,304	36.5	884	420	47.5	1,319	36.9	899	420	46.7
Centro	953	43.0	712	241	33.8	1,186	53.5	725	461	63.6	1,379	62.2	713	666	93.4
AM Lisboa	1,010	35.3	691	319	46.2	1,247	43.6	710	537	75.6	1,356	47.4	732	624	85.2
Alentejo	381	54.1	249	132	53.0	469	66.6	257	212	82.5	521	73.9	272	249	91.5
Algarve	161	36.7	126	35	27.8	204	46.5	117	87	74.4	192	43.8	129	63	48.8
RA Açores	42	17.3	48	-6	-12.5	49	20.2	47	2	4.3	45	18.5	49	-4	-8.2
RA Madeira	61	24.0	58	3	5.2	67	26.4	67	0	0.0	80	31.5	65	15	23.1
<b>Age group</b>															
Under 65 years	443	5.5	376	67	17.8	513	6.4	365	148	40.5	483	6.0	372	111	29.8
65 to 69 years	213	2.7	157	56	35.7	236	2.9	156	80	51.3	259	3.2	162	97	59.9
70 to 74 years	325	4.1	214	111	51.9	327	4.1	214	113	52.8	369	4.6	220	149	67.7
75 to 79 years	457	5.7	343	114	33.2	524	6.5	342	182	53.2	578	7.2	348	230	66.1
80 to 84 years	609	7.6	497	112	22.5	802	10.0	531	271	51.0	869	10.8	533	336	63.0
85 to 89 years	824	10.3	610	214	35.1	988	12.3	592	396	66.9	1,142	14.2	603	539	89.4
90 years and over	920	11.5	605	315	52.1	1,140	14.2	616	524	85.1	1,198	14.9	628	570	90.8
<b>Place of occurrence</b>															
Hospital	2,401	-	1,718	683	39.8	2,849	-	1,697	1,152	67.9	3,103	-	1,748	1,355	77.5
Another location	1,391	-	1,086	305	28.1	1,681	-	1,119	562	50.2	1,795	-	1,118	677	60.6

Notes:

- (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.

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



---

## TECHNICAL NOTE

Statistics Portugal releases the preliminary weekly deaths for 2020, based on the information registered in the Civil Register Offices until February 2<sup>nd</sup> 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 31<sup>st</sup> 2019, released on June 15<sup>th</sup> 2020 (latest figures available), are used in computing the indicators per 100 thousand inhabitants.

## DEFINITIONS:

**Death:** The permanent disappearance of vital functions.

---

Detailed methodological information available at: [www.ine.pt](http://www.ine.pt), option Products, Metadata system.

Detailed statistical information available at: [www.ine.pt](http://www.ine.pt), option Products, Statistical data, database, theme Population, subtheme Mortality and life expectancy.