



March 5<sup>th</sup> 2021

WEEKLY DEATHS – preliminary data

Weeks 6 and 7 of 2021

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

### DEATHS BY COVID-19 IN WEEKS 6 AND 7 OF 2021 ACCOUNTED FOR, RESPECTIVELY, 31.6% AND 21.7% OF THE TOTAL

In weeks 6 and 7 of 2021, there were 3,349 and 2,824 deaths in Portugal, respectively, 696 and 175 more deaths than the 2015-2019 average in those weeks. The number of deaths due to COVID-19 in those two weeks was 1,057 and 612, representing, respectively, 31.6% and 21.7% of the total deaths.

Of the 6,173 deaths in this period, 74.3% corresponded to people aged 75 years and over. The greatest increase in the number of deaths was seen in those aged 90 years and over, 248 more deaths (+21.6%) compared to the 2015-2019 average. However, it was in the age group 70 to 74 years that the largest relative increase was registered, 28.9% more than the 2015-2019 average, corresponding to 117 more deaths.

The Norte, Centro and Área Metropolitana de Lisboa concentrated 82.4% of deaths in weeks 6 and 7. However, in terms of the number of deaths per 100 thousand inhabitants, only Alentejo (85.5), Centro (70.5) and Área Metropolitana de Lisboa (63.5) had values higher than the national (59.9).

In weeks 6 and 7, 65.3% of deaths occurred in hospitals.

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In this press release Statistics Portugal provides preliminary data regarding the number of deaths that occurred in the national territory, per week, until the 7<sup>th</sup> week of 2021 (February 15<sup>th</sup> to 21<sup>st</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 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 March 2<sup>nd</sup> 2021. The information is preliminary and will be subject to updates.



**In the weeks 6 and 7 of 2021 there were 6,173 deaths, 871 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 until week 3 (January 18<sup>th</sup> to 24<sup>th</sup>), reaching in that week the highest number of weekly deaths observed since the beginning of the pandemic. That week, 5,026 people died, 2,160 more than the 2015-2019 average. The number of deaths by COVID-19 was 1,693 this week, representing 33.7% of the total deaths. The total number of deaths began to decline in week 4 (January 25<sup>th</sup> to 31<sup>st</sup>), in spite of in that week the highest number of weekly deaths by COVID-19 (2,036) since the beginning of the pandemic was recorded.

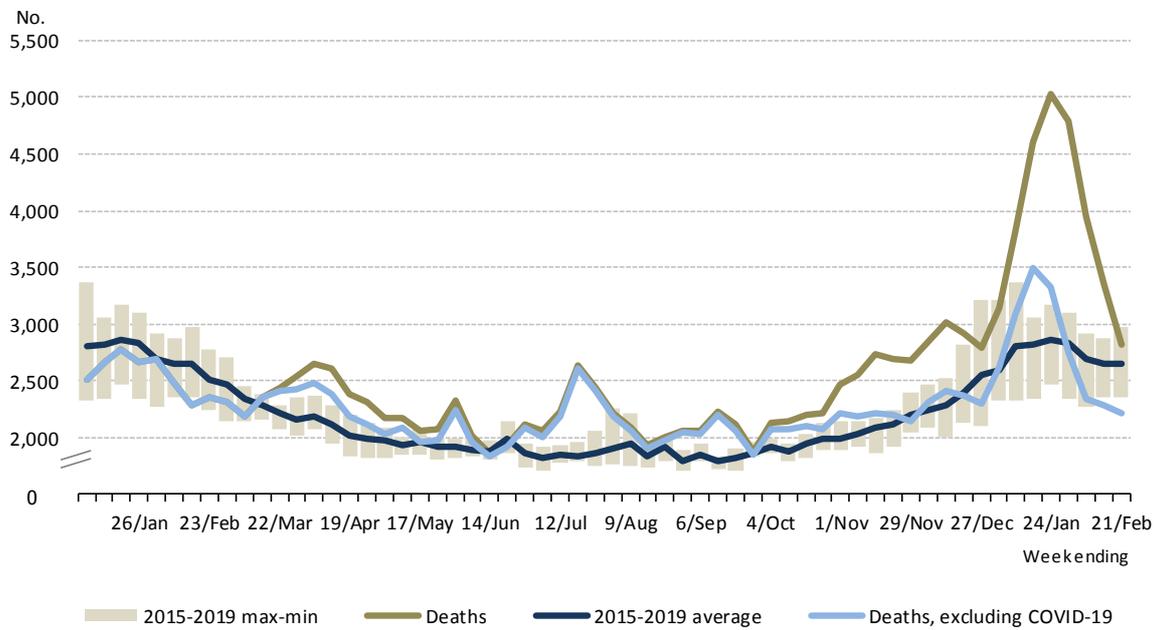
In weeks 6 and 7 of 2021, the number of deaths continued to decline. In those two weeks, there were 3,349 and 2,824 deaths in Portugal, respectively (a total of 6,173 deaths). The excess of mortality was, respectively, 696 and 175 deaths, 26.2% and 6.6% more than the 2015-2019 average in the same weeks.

The number of deaths due to COVID-19 in those weeks was 1,057 and 612, representing, respectively, 31.6% and 21.7% of the total deaths, values above the excess of mortality. It means that, excluding deaths by COVID-19, the mortality recorded in these two weeks would be below the average of the period 2015 -2019, a situation that already occurred in weeks 4 and 5 of 2021.

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.

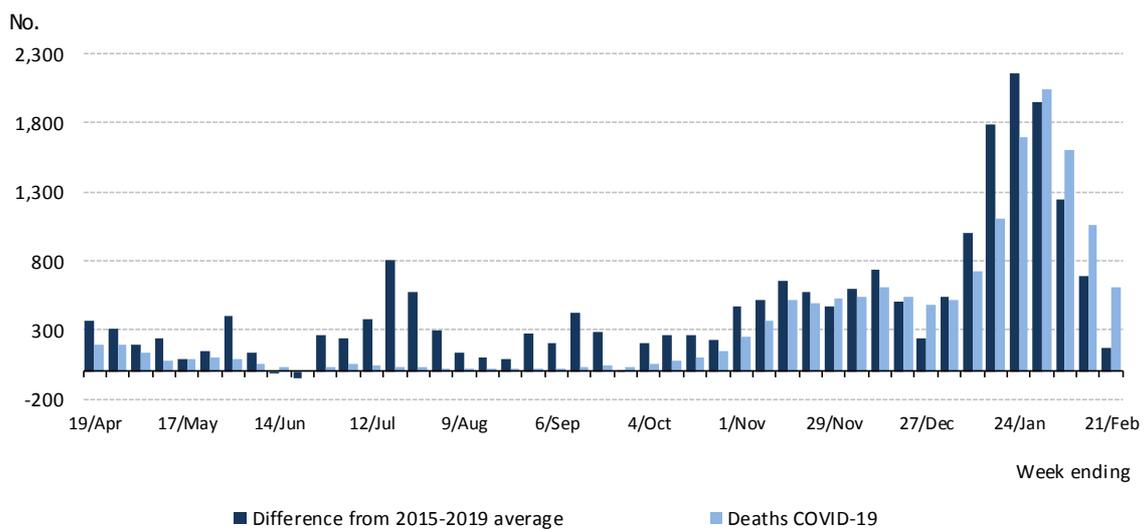
In Figure 2, the bars represent the total weekly death differential relative to the 2015-2019 average for the same period and the number of COVID-19 deaths.

Figure 1: Deaths 2020, 2021 and average 2015-2019, by week, Portugal, weeks 1 of 2020 to 7 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 16 of 2020 to 7 of 2021



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



### **Female mortality higher than male mortality**

Between February 8<sup>th</sup> and 21<sup>st</sup> (weeks 6 and 7), there were 3,038 deaths of men and 3,135 of women, an increase of 422 and 449 deaths, respectively, compared with the 2015-2019 average of deaths in the same weeks. The number of deaths of men, which at week 6 was 1,635, decreased to 1,403 in week 7, representing, respectively, 33.6 deaths per 100 thousand men at week 6 and 28.9 deaths at week 7. The number of deaths of women was in week 6 of 1,714, representing 31.5 deaths per 100 thousand women. In the following week it decreased to 1,421 deaths, corresponding to 26.1 deaths per 100 thousand women.

### **Age group 70 to 74 years old registered the highest relative increase in mortality**

Between February 8<sup>th</sup> and 21<sup>st</sup>, 74.3% of deaths (4,586 deaths) were of people aged 75 years and over and, of these, 59.9% (2,749) were of people aged 85 and over. The greatest increase in the number of deaths compared to the 2015-2019 average was found in people aged 90 years and over, with 248 more deaths (+ 21.6%), followed by the age group 85 to 89 years, with 230 more deaths than the average (+ 20.5%). However, it was in the age group 70 to 74 years that the greatest relative increase in mortality was registered, 28.9% more than the average, corresponding to 117 more deaths. The number of deaths recorded in week 6 was higher than the 2015-2019 average observed in the same weeks in all age groups. In week 7, the number of deaths of people under 65 years of age and in the age group 80 to 84 years was below the 2015-2019 average.

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

Between February 8<sup>th</sup> and 21<sup>st</sup> (weeks 6 and 7) there were 1,703 deaths in the region Norte (27.6% of the total), 1,563 (25.3%) in Centro, 1,818 (29.5%) in Área Metropolitana de Lisboa, 603 (9.8%) in Alentejo, 250 (4.0%) in Algarve, 102 (1.7%) in Região Autónoma dos Açores and 125 (2.0% of the total) in Região Autónoma da Madeira. However, in relative terms, the highest number of deaths per 100 thousand inhabitants was registered in Alentejo (85.5 deaths), followed by Centro (70.5), by Área Metropolitana de Lisboa (63.5), Algarve (57.0), Região Autónoma da Madeira (49.1), Norte (47.7) and Região Autónoma dos Açores (42.0 deaths).

The number of deaths recorded in week 6 was higher than the 2015-2019 average observed in the same weeks in all regions. However, in week 7, only in the regions Centro, Área Metropolitana de Lisboa and Alentejo there was a number of deaths above the 2015-2019 average.

### **More than 65% of deaths occurred in hospitals**

Of the total of 6,173 deaths recorded between February 8<sup>th</sup> and 21<sup>st</sup> (weeks 6 and 7), 4,034 (65.3%) took place in a hospital and 2,139 (34.7%) occurred outside the hospital context (at private homes and other places), corresponding, respectively, to increases of 732 and 138 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 5 to 7 of 2021

	Week 5 of 2021 (February 1 <sup>st</sup> to 7 <sup>th</sup> )					Week 6 of 2021 (February 8 <sup>th</sup> to 14 <sup>th</sup> )					Week 7 of 2021 (February 15 <sup>th</sup> to 21 <sup>st</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>3,942</b>	<b>38.3</b>	<b>2,694</b>	<b>1,248</b>	<b>46.3</b>	<b>3,349</b>	<b>32.5</b>	<b>2,653</b>	<b>696</b>	<b>26.2</b>	<b>2,824</b>	<b>27.4</b>	<b>2,649</b>	<b>175</b>	<b>6.6</b>
<b>Sex</b>															
Males	1,949	40.1	1,317	632	48.0	1,635	33.6	1,304	331	25.4	1,403	28.9	1,312	91	6.9
Females	1,993	36.7	1,377	616	44.7	1,714	31.5	1,349	365	27.1	1,421	26.1	1,337	84	6.3
<b>NUTS 2</b>															
Norte	1,002	28.0	832	170	20.4	886	24.8	835	51	6.1	817	22.9	825	-8	-1.0
Centro	1,027	46.3	703	324	46.1	845	38.1	677	168	24.8	718	32.4	671	47	7.0
AM Lisboa	1,220	42.6	671	549	81.8	1,019	35.6	651	368	56.5	799	27.9	654	145	22.2
Alentejo	413	58.6	260	153	58.8	330	46.8	252	78	31.0	273	38.7	249	24	9.6
Algarve	147	33.5	121	26	21.5	138	31.5	124	14	11.3	112	25.5	122	-10	-8.2
RA Açores	58	23.9	47	11	23.4	54	22.2	50	4	8.0	48	19.8	56	-8	-14.3
RA Madeira	68	26.7	53	15	28.3	71	27.9	58	13	22.4	54	21.2	66	-12	-18.2
<b>Age group</b>															
Under 65 years	419	5.2	351	68	19.4	355	4.4	352	3	0.9	354	4.4	356	-2	-0.6
65 to 69 years	224	2.8	160	64	40.0	197	2.5	156	41	26.3	158	2.0	148	10	6.8
70 to 74 years	343	4.3	201	142	70.6	290	3.6	203	87	42.9	232	2.9	202	30	14.9
75 to 79 years	477	6.0	308	169	54.9	383	4.8	306	77	25.2	340	4.2	322	18	5.6
80 to 84 years	683	8.5	513	170	33.1	629	7.8	496	133	26.8	485	6.1	488	-3	-0.6
85 to 89 years	845	10.5	590	255	43.2	742	9.3	561	181	32.3	612	7.6	563	49	8.7
90 years and over	950	11.9	570	380	66.7	752	9.4	577	175	30.3	643	8.0	570	73	12.8
<b>Place of occurrence</b>															
Hospital	2,583	-	1,666	917	55.0	2,204	-	1,642	562	34.2	1,830	-	1,660	170	10.2
Another location	1,359	-	1,027	332	32.3	1,145	-	1,011	134	13.3	994	-	990	4	0.4

Notes:

- (1) Data for 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.



## Portugal in the European context

Among the set of European countries that submitted data to Eurostat (see table 2) on the number of weekly deaths for 2021, and for all weeks of year 2016 to 2019 as a basis for comparison, Portugal, with the exception of week 1 (January 4<sup>th</sup> to 10<sup>th</sup>), registered the most accentuated increase in the number of deaths in relation to the average of the homologous week of 2016-2019.

In the first week of 2021, Portugal recorded 36% more deaths than the 2016-2019 average in the same week, ranking 4<sup>th</sup> among the countries with the highest excess of mortality, behind Czechia, Latvia and Lithuania.

In week 2 (January 11<sup>th</sup> to 17<sup>th</sup>), Portugal became the country with the highest excess of mortality and remained so in the following weeks, reaching the highest excess of mortality in week 3 (January 18<sup>th</sup> to 24<sup>th</sup>), with 80% more deaths than the 2016-2019 average.

Table 2: Monthly and weekly deaths in 29 European countries, 2020 and 2021, compared to 2016-2019 average (2016-2019 average = 100)

Countries	2020			2021 (Weeks 1 to 6)					
	October	November	December	January 4 <sup>th</sup> to 10 <sup>th</sup>	January 11 <sup>th</sup> to 17 <sup>th</sup>	January 18 <sup>th</sup> to 24 <sup>th</sup>	January 25 <sup>th</sup> to 31 <sup>th</sup>	February 1 <sup>st</sup> to 7 <sup>th</sup>	February 8 <sup>th</sup> to 14 <sup>th</sup>
Austria	112	148	138	107	104	113	112	x	x
Belgium	123	159	119	104	99	101	101	91	90
Bulgaria	113	196	176	98	94	97	94	93	99
Croatia	112	146	157	109	106	100	93	x	x
Cyprus	109	111	118	87	56	71	53	30	x
Czechia	153	177	146	160	158	146	x	x	x
Denmark	102	106	111	110	109	115	110	103	96
Estonia	102	107	113	110	112	118	100	x	x
Finland	102	106	107	91	93	99	97	86	66
France	116	131	115	107	107	113	110	109	103
Germany	105	112	129	127	124	123	114	106	102
Greece	107	135	x	x	x	x	x	x	x
Hungary	116	157	143	105	104	96	86	x	x
Italy	115	150	x	x	x	x	x	x	x
Latvia	102	110	129	137	131	124	127	126	118
Lithuania	106	139	178	136	133	117	117	105	108
Luxembourg	106	147	139	114	99	100	125	x	x
Malta	121	138	131	x	x	x	x	x	x
Netherlands	118	120	123	126	115	117	111	109	x
Poland	145	197	149	132	125	125	114	102	100
<b>Portugal</b>	<b>114</b>	<b>126</b>	<b>120</b>	<b>136</b>	<b>167</b>	<b>180</b>	<b>172</b>	<b>147</b>	<b>126</b>
Romania	125	164	x	x	x	x	x	x	x
Slovakia	121	144	154	x	x	x	x	x	x
Slovenia	129	191	180	130	128	x	x	x	x
Spain	125	128	111	107	118	127	129	119	105
Sweden	97	146	x	116	116	114	107	98	95
Liechtenstein	117	169	221	119	107	100	50	80	x
Norway	102	100	97	89	94	93	94	83	81
Switzerland	112	163	155	122	116	113	103	88	x

Source: Weeks 1 to 6 2021: Statistics Portugal calculations based on online Eurostat [database](#) (extracted on 03/03/2021);

Months October to December 2020: adapted from Eurostat indicator on [Excess mortality – monthly data](#).



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## TECHNICAL NOTE

Statistics Portugal releases the preliminary weekly deaths, based on the information registered in the Civil Register Offices until March 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.

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.

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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.