



March 19<sup>th</sup> 2021

WEEKLY DEATHS – preliminary data

Weeks 8 and 9 of 2021

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

### **DEATHS IN WEEKS 8 AND 9 BELOW THE 2015-2019 AVERAGE**

In weeks 8 and 9 (February 22<sup>nd</sup> to March 7<sup>th</sup>), there were 2,506 and 2,299 deaths in Portugal, respectively, 8 and 174 fewer deaths than the 2015-2019 average. The number of deaths due to COVID-19 was 328 and 214, representing, respectively, 13.1% and 9.3% of the total deaths.

Of the 4,805 deaths recorded between February 22<sup>nd</sup> and March 7<sup>th</sup>, 71.3% corresponded to people aged 75 years and over. Compared to the 2015-2019 average, the number of deaths decreased in all age groups, with the exception of the age groups 65 to 69 years and 70 to 74 years. The greatest reduction occurred in the age group 80 to 84 years old, with 108 deaths less than the 2015-2019 average (-11.7%).

The Norte, Centro and Área Metropolitana de Lisboa concentrated 81.7% of deaths in weeks 8 and 9. However, in terms of the number of deaths per 100 thousand inhabitants, only Alentejo (63.9), Centro (53.0) and Área Metropolitana de Lisboa (47.4) had values higher than the national (46.6).

In weeks 8 and 9, 63.4% 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 9<sup>th</sup> week of 2021 (March 1<sup>st</sup> to 7<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 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 16<sup>th</sup> 2021. The information is preliminary and will be subject to updates.



## **In the weeks 8 and 9 of 2021 the number of deaths was below the average of 2015-2019 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. The total number of deaths has been decreasing since 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 8 and 9 of 2021, the number of deaths continued to decline. In those two weeks, there were 2,506 and 2,299 deaths in Portugal, respectively (a total of 4,805 deaths), below the average for the 2015-2019 period, respectively, 8 and 174 fewer deaths than the 2015-2019 average. Since the beginning of the pandemic, this situation had only occurred in the weeks 24 and 25 of 2020 (June 8<sup>th</sup> to 21<sup>st</sup> 2020).

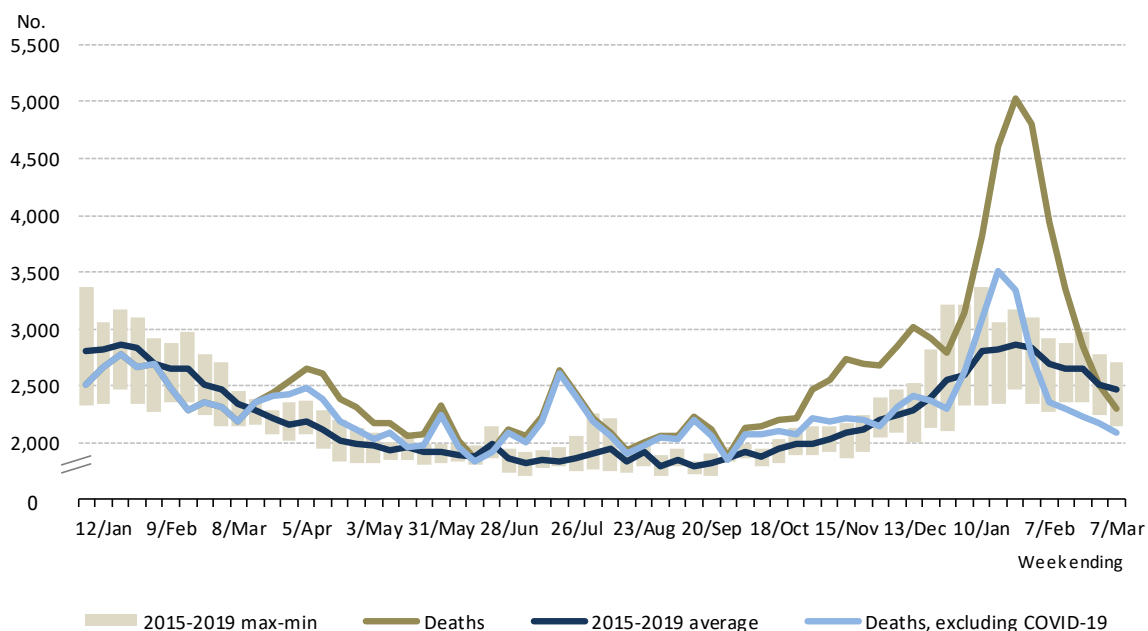
The number of deaths due to COVID-19 in those weeks was 328 and 214, representing, respectively, 13.1% and 9.3% of the total deaths.

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 the last two weeks, as already mentioned, the number of deaths decreased below the 2015-2019 average, and in week 9 approached the minimum value observed in that period.

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.

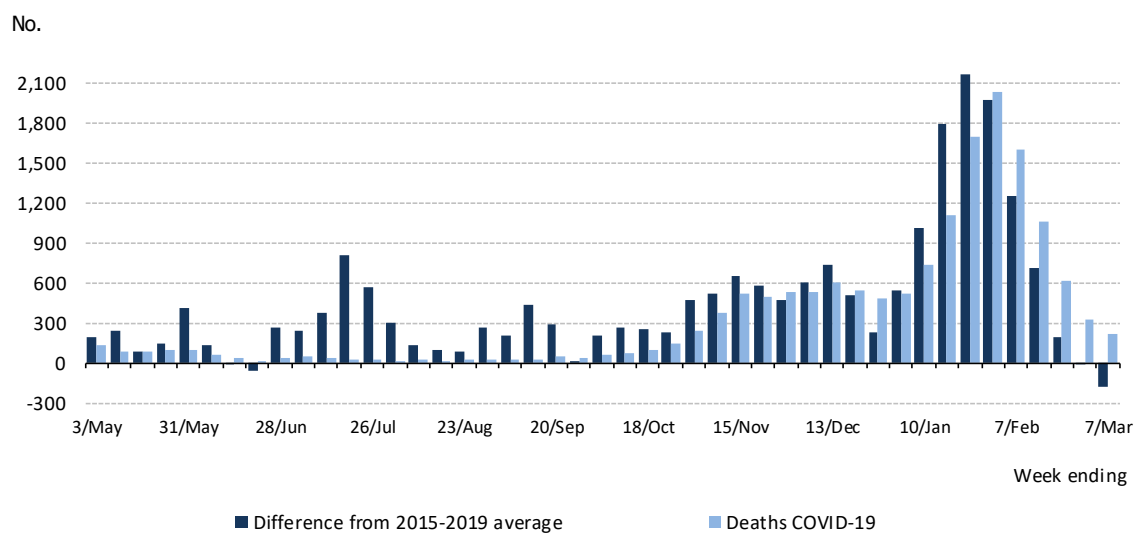


Figure 1: Deaths 2020, 2021 and average 2015-2019, by week, Portugal, weeks 1 of 2020 to 9 of 2021



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 18 of 2020 to 9 of 2021



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



### **Male mortality slightly higher than female mortality**

Between February 22<sup>nd</sup> and March 7<sup>th</sup> (weeks 8 and 9), there were 2,425 deaths of men and 2,380 of women, a decrease of 49 and 133 deaths, respectively, compared with the 2015-2019 average of deaths in the same weeks. The number of deaths of men, which at week 8 was 1,254, decreased to 1,171 in week 9, representing, respectively, 25.8 deaths per 100 thousand men at week 8 and 24.1 deaths at week 9. The number of deaths of women was in week 8 of 1,252, representing 23.0 deaths per 100 thousand women. In the following week it decreased to 1,128 deaths, corresponding to 20.8 deaths per 100 thousand women.

### **Excess mortality continued to occur in age groups 65 to 69 and 70 to 74 years old**

Between February 22<sup>nd</sup> and March 7<sup>th</sup>, 71.3% of deaths (3,424 deaths) were of people aged 75 years and over and, of these, 42.1% (2,024) were of people aged 85 and over. Compared to the 2015-2019 average, the number of deaths decreased in all age groups, with the exception of age groups 65-69 years and 70-74 years. The greatest reduction occurred in the age group 80 to 84 years old, with 108 deaths less than the average (-11.7%).

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

Between February 22<sup>nd</sup> to March 7<sup>th</sup> (weeks 8 and 9) there were 1,396 deaths in the region Norte (29.1% of the total), 1,174 (24.4%) in Centro, 1,356 (28.2%) in Área Metropolitana de Lisboa, 450 (9.4%) in Alentejo, 201 (4.2%) in Algarve, 106 (2.2%) in Região Autónoma dos Açores and 112 (2.3% 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 (63.9 deaths), followed by Centro (53.0), by Área Metropolitana de Lisboa (47.4), Algarve (45.9), Região Autónoma da Madeira (44.1), and Região Autónoma dos Açores (43.7 deaths) and Norte (39.9).

In week 8, the number of deaths recorded in the regions Norte, Alentejo and Algarve was lower than the 2015-2019 average. In week 9, only the Área Metropolitana de Lisboa recorded a number of deaths above the 2015-2019 average.

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

Of the total of 4,805 deaths recorded between February 22<sup>nd</sup> and March 7<sup>th</sup> (weeks 8 and 9), 3,044 (63.4%) took place in a hospital and 1,761 (36.6%) occurred outside the hospital context (at private homes and other places), corresponding, respectively, to decreases of 86 and 96 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 7 to 9 of 2021

	Week 7 of 2021 (February 15 <sup>th</sup> to 21 <sup>st</sup> )					Week 8 of 2021 (February 22 <sup>nd</sup> to 28 <sup>th</sup> )					Week 9 of 2021 (March 1 <sup>st</sup> to 7 <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>2,847</b>	<b>27.7</b>	<b>2,649</b>	<b>198</b>	<b>7.5</b>	<b>2,506</b>	<b>24.3</b>	<b>2,514</b>	<b>-8</b>	<b>-0.3</b>	<b>2,299</b>	<b>22.3</b>	<b>2,473</b>	<b>-174</b>	<b>-7.0</b>
<b>Sex</b>															
Males	1,418	29.2	1,312	106	8.1	1,254	25.8	1,244	10	0.8	1,171	24.1	1,230	-59	-4.8
Females	1,429	26.3	1,337	92	6.9	1,252	23.0	1,270	-18	-1.4	1,128	20.8	1,243	-115	-9.3
<b>NUTS 2</b>															
Norte	817	22.9	825	-8	-1.0	690	19.3	793	-103	-13.0	706	19.7	765	-59	-7.7
Centro	721	32.5	671	50	7.5	638	28.8	627	11	1.8	536	24.2	624	-88	-14.1
AM Lisboa	819	28.6	654	165	25.2	709	24.8	616	93	15.1	647	22.6	618	29	4.7
Alentejo	273	38.7	249	24	9.6	235	33.4	245	-10	-4.1	215	30.5	230	-15	-6.5
Algarve	112	25.5	122	-10	-8.2	113	25.8	120	-7	-5.8	88	20.1	114	-26	-22.8
RA Açores	48	19.8	56	-8	-14.3	57	23.5	50	7	14.0	49	20.2	49	0	0.0
RA Madeira	55	21.6	66	-11	-16.7	60	23.6	56	4	7.1	52	20.5	63	-11	-17.5
<b>Age group</b>															
Under 65 years	361	4.5	356	5	1.4	311	3.9	333	-22	-6.6	311	3.9	323	-12	-3.7
65 to 69 years	159	2.0	148	11	7.4	164	2.0	141	23	16.3	170	2.1	139	31	22.3
70 to 74 years	235	2.9	202	33	16.3	226	2.8	204	22	10.8	199	2.5	195	4	2.1
75 to 79 years	338	4.2	322	16	5.0	310	3.9	294	16	5.4	273	3.4	306	-33	-10.8
80 to 84 years	487	6.1	488	-1	-0.2	416	5.2	461	-45	-9.8	401	5.0	464	-63	-13.6
85 to 89 years	621	7.7	563	58	10.3	515	6.4	542	-27	-5.0	470	5.9	530	-60	-11.3
90 years and over	646	8.1	570	76	13.3	564	7.0	539	25	4.6	475	5.9	516	-41	-7.9
<b>Place of occurrence</b>															
Hospital	1,848	-	1,660	188	11.3	1,619	-	1,565	54	3.5	1,425	-	1,565	-140	-8.9
Another location	999	-	990	9	0.9	887	-	949	-62	-6.5	874	-	908	-34	-3.7

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.

WEEKLY DEATHS– Preliminary Data – weeks 8 and 9 of 2021



## 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 was, in weeks 3 to 6 (January 18<sup>th</sup> to February 14<sup>th</sup>) the country with the greatest increase in the number of deaths in relation to the average of the same week of 2016-2019.

In the first week of 2021, Portugal registered 37% more deaths than the average of 2016-2019, ranking 3<sup>rd</sup>, together with Latvia, among the countries with the highest excess of mortality, behind Slovakia and Czechia. In week 2 (January 11<sup>th</sup> to 17<sup>th</sup>), Portugal registered an excess mortality rate of 68%, only behind Slovakia with 78%.

In week 3 (January 18<sup>th</sup> to 24<sup>th</sup>), Portugal became the country with the highest excess of mortality, with 81% more deaths than the 2016-2019 average, and remained so until week 6 (February 8<sup>th</sup> to 14<sup>th</sup>).

**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 7 of 2021						
	November	December	January	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>st</sup>	February 1 <sup>st</sup> to 7 <sup>th</sup>	February 8 <sup>th</sup> to 14 <sup>th</sup>	February 15 <sup>th</sup> to 21 <sup>st</sup>
Austria	148	138	109	107	104	113	112	103	96	x
Belgium	159	119	101	104	99	102	101	91	91	94
Bulgaria	194	174	99	98	94	97	95	93	99	106
Croatia	145	161	108	109	106	100	93	x	x	x
Cyprus	113	124	112	127	85	102	114	97	69	78
Czechia	176	145	153	160	160	148	143	134	x	x
Denmark	106	111	111	110	109	115	110	103	97	89
Estonia	107	114	112	110	113	119	103	101	109	107
Finland	106	96	95	92	94	101	100	93	91	101
France	131	116	110	108	107	113	111	110	108	110
Germany	113	130	122	127	124	123	113	106	103	99
Greece	132	130	x	x	x	x	x	x	x	x
Hungary	159	144	103	107	107	99	91	88	87	x
Italy	152	127	104	x	x	x	x	x	x	x
Latvia	110	129	129	137	131	124	127	126	118	113
Lithuania	139	178	126	136	133	117	117	105	108	106
Luxembourg	147	139	109	114	99	100	125	x	x	x
Malta	138	139	101	90	102	114	99	101	94	103
Netherlands	120	123	118	126	115	118	111	110	107	105
Poland	197	150	126	132	125	125	114	102	100	x
<b>Portugal</b>	<b>126</b>	<b>121</b>	<b>159</b>	<b>137</b>	<b>168</b>	<b>181</b>	<b>173</b>	<b>150</b>	<b>130</b>	<b>111</b>
Romania	163	152	x	110	106	113	76	x	x	x
Slovakia	139	164	177	174	178	160	153	x	x	x
Slovenia	189	179	127	133	132	125	109	104	91	x
Spain	128	109	118	107	118	127	129	121	111	104
Sweden	111	125	115	116	117	115	107	98	97	95
Liechtenstein	169	210	114	119	107	100	50	80	x	x
Norway	100	97	93	89	95	94	95	86	89	79
Switzerland	163	156	121	125	119	116	107	96	91	80

Source: Weeks 1 to 7 2021: Statistics Portugal calculations based on online Eurostat [database](#) (extracted on 16/03/2021);

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 16<sup>th</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.