



16 May 2025  
CAUSES OF DEATH 2023  
2013-2023

## FEWER DEATHS FROM DISEASES OF THE CIRCULATORY SYSTEM

In 2023, 118,947 people died in the country, 4.8% less than in 2022 (124,942): 118,344 were residents (99.5% of the total) and 603 lived abroad (0.5% of the total).

Cerebrovascular diseases, also known as strokes, were responsible for the highest number of deaths of residents (9,177 deaths, or 7.8% of total deaths of residents), despite a decrease of 4.6% compared to the previous year. The mortality rate from cerebrovascular diseases was 86.7 deaths of residents per 100,000 inhabitants, lower than in 2022 (92.1).

There were 6.0% fewer deaths of residents due to ischemic heart disease (6,414 deaths, representing 5.4% of total deaths of residents in 2023) and 6.2% fewer deaths of residents due to acute myocardial infarction (3,664, representing 3.1% of deaths of residents).

Of all deaths due to malignant neoplasms, 4,490 deaths caused by malignant neoplasms of the trachea, bronchi and lung stood out, which represented 3.8% of the total resident deaths and increased by 1.8% over the previous year. Malignant neoplasms of the colon, rectum and anus accounted for 3.1% of resident mortality in 2023, with 3,639 deaths (1.2% more than in the previous year).

Diseases of the respiratory system caused 13,110 resident deaths, 8.2% more than in the previous year and leading to an increase in the mortality rate from 116.0 per 100,000 inhabitants in 2022 to 123.9 per 100,000 inhabitants in 2023. Almost 56% of the increase in deaths caused by diseases of the respiratory system was associated with the increase in deaths from pneumonia, with 5,042 deaths in 2023.

In 2023, there were 2,535 deaths caused by the COVID-19 disease, representing 2.1% of the total deaths that occurred in the country, and 32.5% of the total of 7,797 deaths from this disease that occurred in the previous year.

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Statistics Portugal releases today the statistical results on mortality by causes of death in Portugal in 2023, according to 55 groups of causes of death based on the «OECD Health Data» list of the Organization for Cooperation and Economic Development (OECD). This information considers the codification of death certificates by the Directorate-General of Health until May 9, 2025.

The indicators include the main groups of causes of death by disease, especially diseases of the circulatory system, malignant neoplasms, diseases of the respiratory system, and endocrine, nutritional, and metabolic diseases, as well as deaths from external causes of injury or poisoning.



For each cause of death is indicated the number of deaths by sex, age group, and place of residence of the deceased, as well as some derived indicators: sex ratio; average age at the time of death; crude death rate; standardized death rate; and average number of potential years of life lost, among others.

This information is available using the Tree-navigation available at Statistics Portugal website, [https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine\\_bdc\\_tree&contexto=bd&selTab=tab2](https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_bdc_tree&contexto=bd&selTab=tab2), and choosing the Health/Causes of death. The indicators for the main causes of death are presented in this press release.

## Diseases of the circulatory system and malignant neoplasms accounted for almost half of total mortality

In 2023, 118,947 people died in the country, 4.8% less than in 2022 (124,942), but higher than before the COVID-19 pandemic (112,334 in 2019). Of the total deaths in the country in 2023, 118,344 were residents of Portugal (99.5% of the total) and 603 of residents abroad (0.5% of the total).

Considering only the deaths of residents, deaths from diseases of the circulatory system and from malignant neoplasms accounted for 49.2% in 2023, close to the values of 2021 (48.0%) and 2022 (48.9%).

Figure 1. Number and proportion of deaths from some causes of death, Portugal, 2023

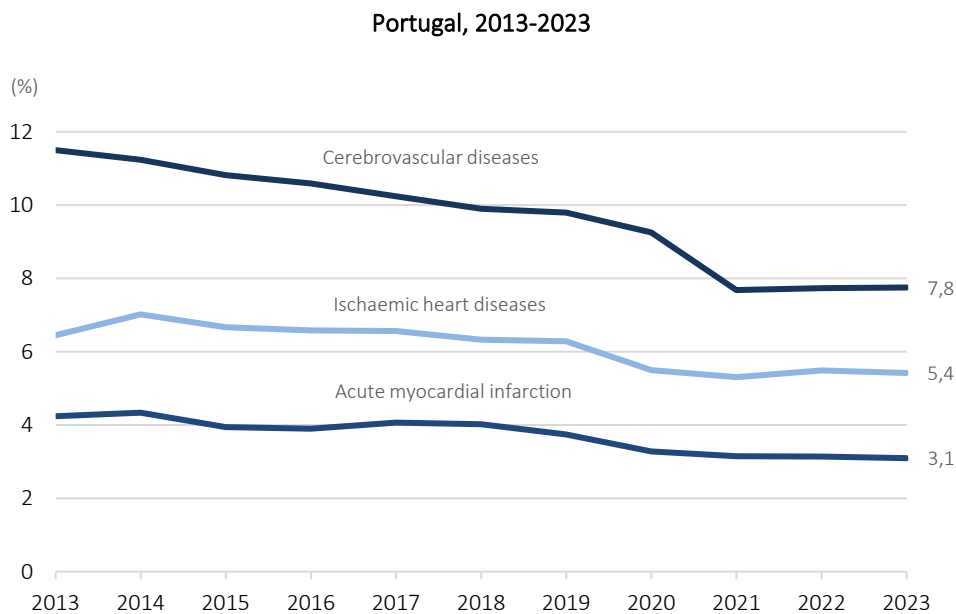
	Number of deaths			Proportion of deaths		
	2022	2023	Variation	2022	2023	Difference
	No.		%	%		pp
<b>Diseases of the circulatory system</b>	<b>32 996</b>	<b>30 059</b>	<b>-8,9</b>	<b>26,5</b>	<b>25,4</b>	<b>-1,1</b>
Cerebrovascular diseases	9 616	9 177	-4,6	7,7	7,8	0,0
Ischaemic heart diseases	6 826	6 414	-6,0	5,5	5,4	-0,1
Acute myocardial infarction	3 908	3 664	-6,2	3,1	3,1	0,0
<b>Malignant neoplasms</b>	<b>27 836</b>	<b>28 166</b>	<b>1,2</b>	<b>22,4</b>	<b>23,8</b>	<b>1,4</b>
Malignant neoplasms of trachea, bronchus and lung	4 410	4 490	1,8	3,5	3,8	0,2
Malignant neoplasms of colon, rectum and anus	3 597	3 639	1,2	2,9	3,1	0,2
<b>Diseases of the respiratory system</b>	<b>12 114</b>	<b>13 110</b>	<b>8,2</b>	<b>9,7</b>	<b>11,1</b>	<b>1,3</b>
Pneumonia	4 488	5 042	12,3	3,6	4,3	0,7
<b>COVID-19 disease</b>	<b>7 769</b>	<b>2 526</b>	<b>-67,5</b>	<b>6,2</b>	<b>2,1</b>	<b>-4,1</b>

Source: Statistics Portugal, Mortality by causes of death.

Cerebrovascular diseases continued to be the disease that caused the highest number of deaths, despite the decrease compared to the previous year

Diseases of the circulatory system caused 30,059 deaths of residents in Portugal, 8.9% less than in the previous year, resulting in a mortality rate of 284.1 per 100,000 inhabitants, lower than in the previous year (315.9).

Figure 2. Proportion of deaths from cerebrovascular diseases, ischemic heart disease and acute myocardial infarction



Source: Statistics Portugal, Mortality by causes of death.

Of all diseases of the circulatory system, cerebrovascular diseases, also known as strokes, continued to stand out in 2023, having caused the highest number of deaths in the country (9,177 deaths, that is, 7.8% of the total deaths of residents), despite the decrease of 4.6% compared to the previous year. The mortality rate from cerebrovascular diseases was 86.7 deaths of residents per 100,000 inhabitants, lower than in 2022 (92.1).

In 2023, stroke deaths continued to affect mainly women, with a ratio of 79.7 male deaths per 100 female deaths, which, despite the relative improvement in the female condition compared to the previous year (75.8).

Of the total number of deaths due to cerebrovascular diseases, 93.5% were residents aged 65 and over and 81.8% aged 75 and over; 1,016, or 11.1%, died under 70 years of age. 9,420 potential years of life were lost due to cerebrovascular diseases, slightly higher than in the previous one (9,359), which results from the decrease in the number of deaths under 70 years of age due to this cause. The average number of potential years of life lost was 9.3 years (9.1 in the previous year).

#### Fewer deaths due to ischemic heart disease

Still in the set of diseases of the circulatory system, there were fewer deaths of residents due to ischemic heart disease: 6,414 deaths, 6.0% less than in the previous year, and representing 5.4% of the total deaths of residents in 2023 (5.5% in 2022).



The crude mortality rate of residents from ischemic heart disease was 60.6 deaths per 100,000 inhabitants in 2023, lower than in 2022 (65.3). In 2023, these deaths mainly affected men, with a ratio of 146.9 male deaths per 100 female deaths, higher than in 2022 (144.7).

In 2023, of the total deaths of residents due to ischemic heart disease, 80.8% were of people aged 65 and over and 63.0% of people aged 75 and over; 1,757, or 27.4%, died under the age of 70. A total of 18,937 potential years of life were lost due to ischemic heart disease, less than in the previous year (19,568), resulting from the decrease in the number of deaths under 70 years of age due to this cause. The average number of potential years of life lost was 10.8 years (11.3 in 2022).

### Fewer deaths from acute myocardial infarction

In 2023, there were 3,664 deaths of residents due to acute myocardial infarction, representing 3.1% of total mortality and decreasing by 6.2% compared to the previous year (3,908 deaths).

The crude mortality rate due to acute myocardial infarction, for residents, was 34.6 deaths per 100,000 inhabitants, with significantly increasing values for 45 years and over (cf. page 6, Figure 3.D).

Deaths of residents due to acute myocardial infarction mainly affected men, with a ratio of 156.4 deaths of men per 100 of women, higher than that observed in the previous year (155.8).

Of the total number of deaths of residents due to acute myocardial infarction in 2023, 77.9% were of persons aged 65 years and over and 59.1% of persons aged 75 and over; 1,141, or 31.1%, died under 70 years of age. A total of 12,593 potential years of life were lost due to acute myocardial infarction, less than in the previous year (13,083), resulting from the decrease in the number of deaths under 70 years of age due to this cause. The average number of potential years of life lost was 11.0 years (11.5 in 2022).

### More deaths caused by malignant neoplasms

Considering only resident deaths, malignant neoplasms caused 28,166 deaths in 2023, 1.2% more than in the previous year (27,836 deaths in 2022). This set of diseases accounted for 23.8% of resident deaths in 2023.

In 2023, the mortality rate of residents due to malignant neoplasms was 266.2 per 100,000 inhabitants, much higher in the case of men (327.9) than in women (209.9). There were 102,901 potential years of life lost, which is higher than the result of 102,277 years of life lost in 2022.

Of malignant neoplasms, there were 4,490 deaths caused by malignant neoplasms of the trachea, bronchi and lung, which accounted for 3.8% of the total deaths of residents and increased by 1.8% over the previous year. These neoplasms continued to affect men and women very differently, with crude mortality rates of 65.9 deaths per 100,000 men and 21.0 deaths per 100,000 women, resulting in a ratio of 287.1 deaths of men per 100 of women. The crude mortality rate due to malignant neoplasms of the trachea, bronchi and lung was 42.4 deaths per 100,000 residents, with significantly increasing values for 45 years and older (cf. page 6, Figure 3.E).



Malignant neoplasms of the colon, rectum, and anus accounted for 3.1% of resident mortality in 2023, with 3,639 deaths (1.2% more than in the previous year). These neoplasms continued to affect mainly men, with a ratio of 131.2 deaths of men per 100 of women. The crude mortality rate due to malignant neoplasms of the colon, rectum, and anus was 34.4 deaths per 100,000 residents, with significantly increasing values for 55 years and older (cf. page 6, Figure 3.F).

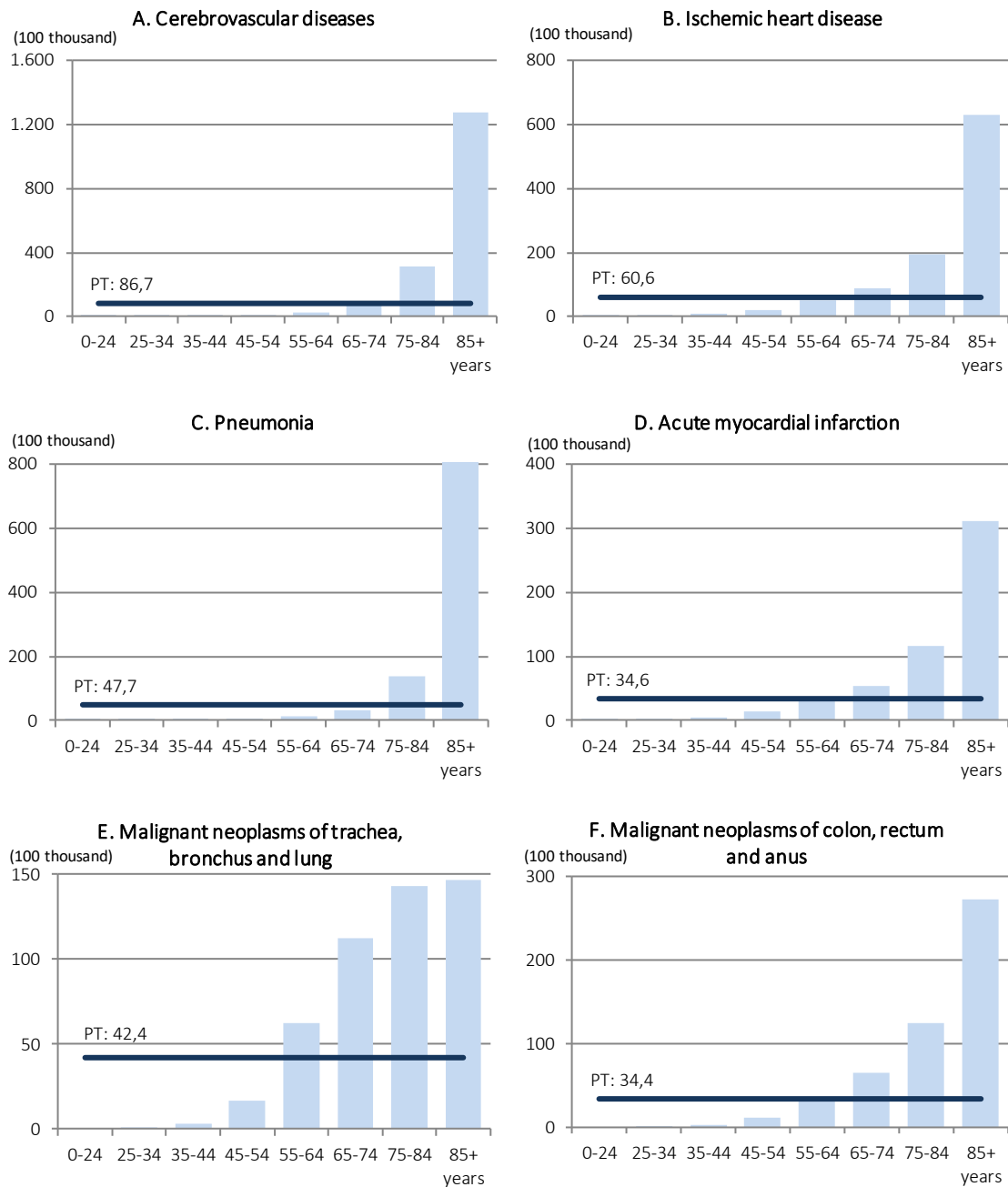
### More deaths from diseases of the respiratory system

In 2023, diseases of the respiratory system caused 13,110 resident deaths, 8.2% more than in the previous year and an increase in the mortality rate from 116.0 per 100,000 inhabitants in 2022 to 123.9 per 100,000 inhabitants in 2023. It should be noted that, following World Health Organization (WHO) standards, deaths from COVID-19 were not classified or included in the set of respiratory diseases, constituting a separate set of diseases (see methodological note). The average number of potential years of life lost due to diseases of the respiratory system increased from 10.5 in 2022 to 10.9 in 2023.

Almost 56% of the increase in deaths caused by diseases of the respiratory system was associated with the increase in deaths from pneumonia, with 5,042 deaths in 2023, which represented 4.3% of the mortality that occurred in 2023 (3.6% in 2022), and an increase of 12.3% deaths compared to the previous year. The crude pneumonia mortality rate was 47.7 deaths per 100,000 residents, with significantly increasing values for those aged 65 and over (cf. page 6, Figure 3.C).

In 2023, deaths from pneumonia hit men the hardest, with a ratio of 106.8 men per 100 women.

Figure 3. Crude mortality rates from some diseases per 100,000 inhabitants, by age group, Portugal, 2023



Source: Statistics Portugal, Mortality by causes of death.



## Deaths caused by the COVID-19 disease

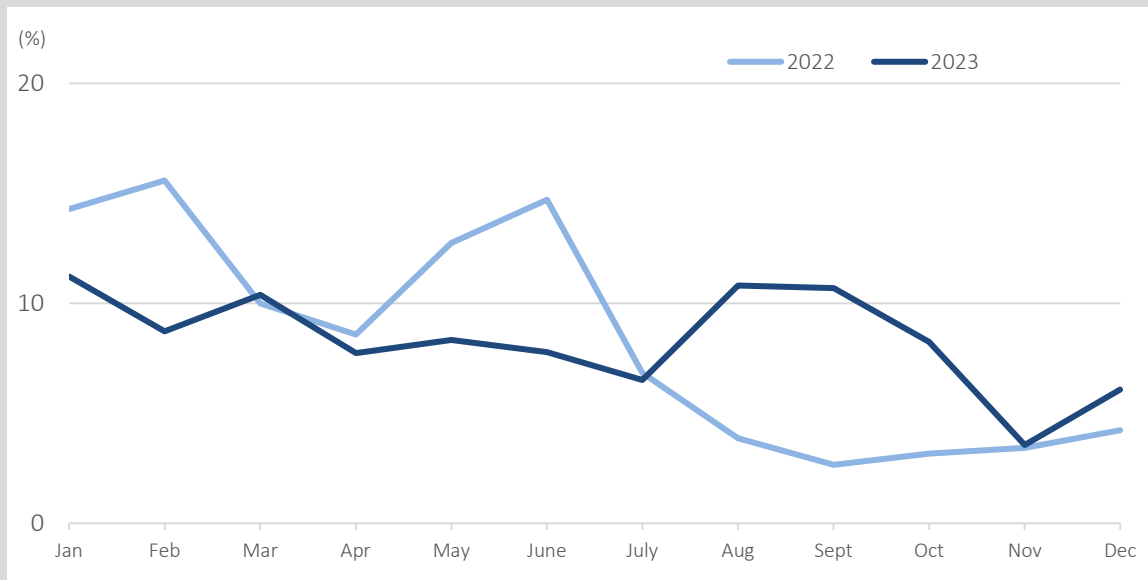
In 2023, there were 2,535 deaths caused by the COVID-19 disease in Portugal, representing 2.1% of the total deaths in the country (5,262 fewer deaths and 4.1 pp less than in 2022). Of these, 2,526 were from residents in Portugal and 9 from residents abroad. These results consider deaths where COVID-19 was the underlying cause of death, i.e. the disease that initiated the chain of pathological events that led to death.

The decrease in the number of deaths compared to the previous year was reflected in a substantial reduction in the mortality rate, from 74.4 deaths per 100,000 residents in Portugal in 2022 to 23.9 in 2023, remaining higher for men (26.9) than for women (21.1).

For COVID-19 deaths, the sex ratio among residents in Portugal was 116.5 male deaths for every 100 female deaths (6.6 fewer than in the previous year), and the average age at death was 82.2 years (81.5 years in 2022).

The monthly distribution of deaths from COVID-19 in 2023 showed a downward trend over the first seven months of the year, interrupted in August and September. In 2022, 75.9% of deaths caused by COVID-19 occurred in the first half of the year.

Figure 4. Monthly distribution of the number of deaths from COVID-19, 2022-2023



Source: Statistics Portugal, Mortality by causes of death.



## METHODOLOGICAL NOTE

Data on deaths from causes of death result from the use of administrative data for statistical purposes. This is information subject to civil registration and collected from the Civil Registry Office through the Integrated System of Civil Registration and Identification (SIRIC) and the Death Certificate Information System (SICO). The General Directorate of Health collaborates with the INE by identifying the underlying cause of death and the cause of external death, when there is, and subsequently to the codification of causes of death according to the International Classification of Diseases (ICD-10), of the World Health Organization (WHO). The results of the statistics for 2023 presented in this press release were obtained based on the information of the Information System of Death Certificates available until May 9, 2025. Following WHO standards, deaths due to COVID-19 were not included in the diseases of the respiratory system, constituting a specific category of diseases. In ICD-10, deaths due to COVID-19 were classified according to codes for special uses, corresponding to the following set of codes: U00 to U99.

The 2019 version of ICD-10 was adopted for the 2023 data. Consequently, some conditions can no longer be considered a underlying cause of death and are now coded under 'Ill-defined causes or causes classified elsewhere', while disorders of the foetus and newborn are no longer coded as an underlying cause of death under category P00-P04 (Foetus and newborn affected by maternal factors and complications of pregnancy, labour and childbirth), and it is expected that from 2019 to 2020 there will be a decrease to zero of the P00-P04 codes with an increase in the P07-P08, P20-P21, P28.5, P95 and P96.9.

## CONCEPTS

**Potential years of life lost (PVPA):** Number of years that theoretically a given population stops living if they die prematurely (before the age of 70). It is the result of the sum of the products of the number of deaths occurred in each age group ( $O_i$ ) by the difference ( $A_i$ ) between the upper limit considered (70 years) and the midpoint of the class interval corresponding to each age group.

$$APVP = \sum_i O_i \times A_i$$

**Underlying cause of death:** Illness or injury that initiates the chain of pathological events leading to death, or circumstances of the accident or act of violence that produce the fatal injury.

**External cause:** Circumstance in which a particular injury, intoxication or adverse effect occurs.

**Average age at death:** Quotient between the sum of the product of each midpoint of the age group by the number of observations in each age group and the total number of observations.

**Average number of potential years of life lost:** Quotient between the number of potential years of life lost and the number of deaths under 70 years of age.

**Sex ratio:** Quotient between male and female deaths per 100 women.

**Crude mortality rate:** Number of deaths observed during a certain period of time, usually a calendar year, due to a certain cause of death, referred to the average population of that period (estimated in number of deaths per 100,000 inhabitants).