

Deaths according to Cause of Death. Year 2011

The gross mortality rate increases 1.4% in 2011, as compared with the previous year

Diseases of the circulatory tract is the leading cause of death, although they continue the downward trend

Deaths due to tumours increase 2.0%, representing the second most common cause of death

387,911 deaths were recorded in Spain in 2011, that is, 5,864 fewer than those registered in 2010. 188,057 women (2.2% more than the previous year) and 199,854 men (0.9% more) died.

The gross mortality rate stood at 841.0 deaths per 100,000 inhabitants, indicating a 1.4% increase as compared with the previous year.

By sex, the female rate stood at 802.2 deaths per 100,000 women, whereas the male rate was 881.1 deaths per 100,000 men.

Causes of death, by groups of illnesses

The three main causes of death were *diseases of the circulatory tract* (responsible for 30.5% out of the total deaths), *tumours* (28.2%) and *diseases of the respiratory tract* (10.9%).

The first two maintained the trend of recent years: an increase in *tumours* (2.0% more deaths) and decrease in *circulatory diseases* (–0.7%). In contrast, deaths due to *respiratory diseases* increased 4.9% after decreasing in the last two years.

In relative terms, the group that experienced the highest increase of deaths in 2011 was the *diseases of the nervous system* group (5.0%) representing the fourth most common cause of death. This main disease in this group was the Alzheimer's disease, which was the cause of 11,907 deaths, where the rate was double as compared to 2000.

Differences by sex and age

Tumours and *diseases of the circulatory tract* were the main causes of death in men and women, but not in the same order.

Tumours were the main cause of death in males (with a rate of 295.3 deaths per 100,000) and the second in females (180.7). In both cases the rate increased as compared with the previous year.

Conversely, *diseases of the circulatory tract* were the leading cause of death among females (275.1 deaths per 100,000) and the second most common among males (237.3), both rates decreased as compared with 2010.

Distribution by chapters of the International Standards of Diseases. Year 2011

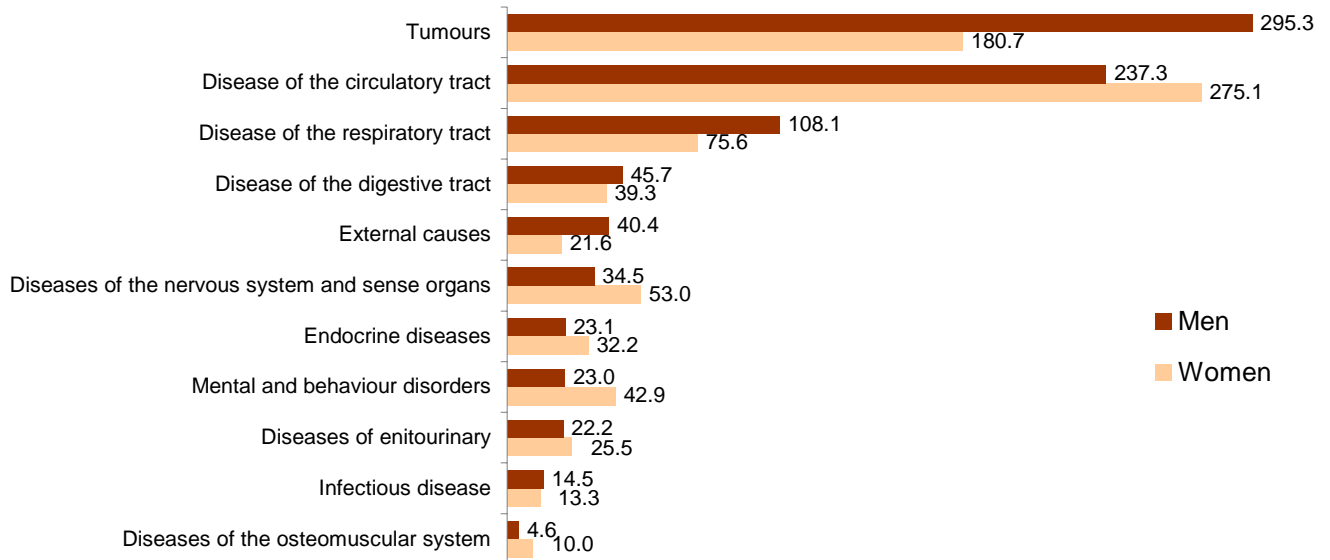
Chapters of the ICD	No. of deaths	%
Total deaths	387,911	100.0
Diseases of the circulatory tract	118,327	30.5
Tumours	109,341	28.2
Diseases of the respiratory tract	42,243	10.9
Diseases of the nervous system and sensory organs	20,254	5.2
Diseases of the digestive tract	19,576	5.0
Mental and behavioural disorders	15,276	3.9
External causes of mortality	14,233	3.7
Endocrine, nutritional and metabolic diseases	12,789	3.3
Diseases of the genitourinary system	11,011	2.8
Symptoms, signs and abnormal clinical and laboratory findings	10,612	2.7
Infectious and parasitic diseases	6,398	1.6
Diseases of the osteomuscular system and of the conjunctive tissue	3,387	0.9
Diseases of blood and haematopoietic organs, and certain disorders involving the immune mechanism system	1,528	0.4
Diseases of the skin and subcutaneous tissue	1,169	0.3
Congenital malformations, deformities and chromosomal abnormalities	920	0.2
Affections originating in the perinatal period	833	0.2
Pregnancy, childbirth and the puerperium	14	0.0

The greatest difference were in *osteomuscular and skin diseases*, were the incidence of mortality in women was double that of men.

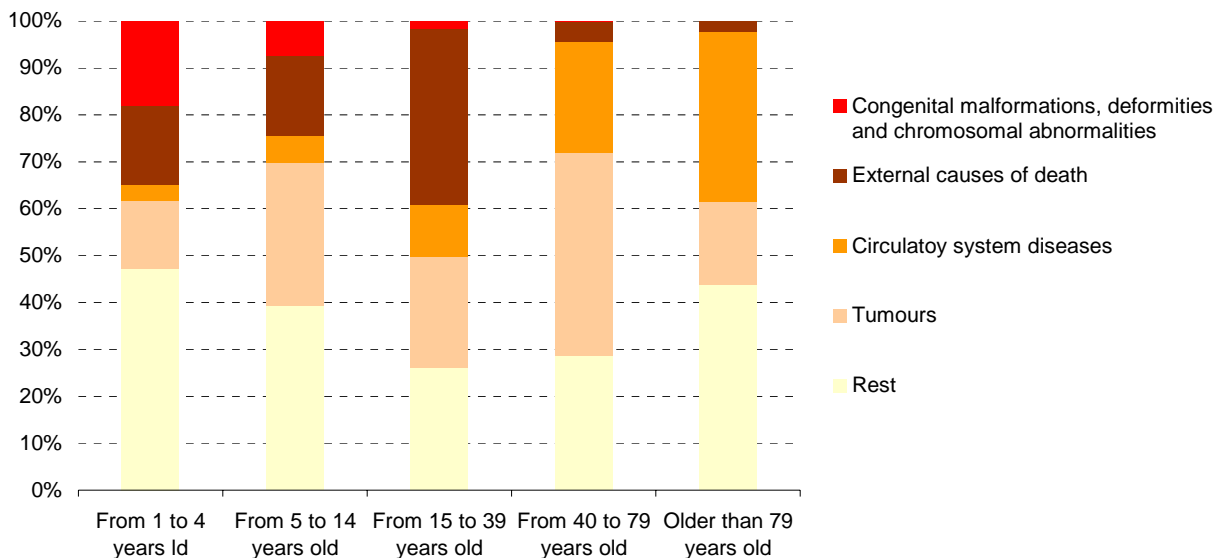
Moreover, of note was the clear predominance in female mortality of *diseases of the nervous system* (with a rate of 53.0 for females and 34.5 in males) and in *mental disorders* (42.9 as compared with 23.0). Within the first group, deaths due to Alzheimer's disease predominated, and in the second, those due to other forms of dementia (vascular, senile, etc.).

Conversely, the causes with the greatest increase in the relative rate of mortality in male versus that in female (predominance in male mortality) were *external causes* (with a rate of 40.4 deaths per 100,000 in males as compared with 21.6 per 100,000 in females), in *tumours* (295,3 as compared with 180.7) and in *respiratory diseases* (108.1 as compared with 75.6).

Gross rates per 100,000 inhabitants by cause of death by chapters of the ICD. Year 2011



Distribution of the leading causes of death by age group. Year 2011



By age, the main cause of death in persons aged over 79 years old were *diseases of the circulatory tract* (3,405.4 deaths per 100,000 persons in this group of age).

In the age groups between five and 14 years old, and between 40 and 79 years old, the main causes of death were *tumours* (with rates of 3.0 and 322.3 per 100,000, respectively).

Among the persons aged between 15 and 39 years old, the main cause of death was the *external causes* group (16.2 per 100,000 persons).

Finally, among the children aged between one and four years old, the main cause of death were congenital malformations, deformities and chromosomal abnormalities (3.9 per 100,000 children in this age group) followed closely by the *external causes* (2.8).

Most common causes of death

On a more detailed level of diseases, *ischaemic heart diseases* (heart attack, angina pectoris etc.) and *cerebrovascular diseases* continued to occupy the first and second places in the number of deaths. In both cases, however, there was a decrease in deaths, as compared with the previous year (–1.2% and –4.3%, respectively). *Ischaemic diseases* were the leading cause of death in men, and *cerebrovascular diseases* were the leading cause in women.

Among *tumours*, those causing the greatest mortality were *bronchial and lung cancer* (1.6% more deaths in 2010) and *colon cancer* (4.0% more deaths). By sex, the cancer that caused most deaths among males was *bronchial and lung cancer*. In women it was *breast cancer* (which increased 0.4%).

Number of deaths by most frequent cause of death¹

Year 2011	Total	Male	Female
Total deaths	387,911	199,854	188,057
Ischaemic heart diseases	34,837	19,925	14,912
Cerebrovascular diseases	28,855	12,152	16,703
Bronchial and lung cancer	21,058	17,479	3,579
Cardiac failure	17,089	5,954	11,135
Chronic diseases of the lower respiratory tracts	15,904	11,819	4,085
Dementia	14,583	4,780	9,803
Alzheimer's disease	11,907	3,528	8,379
Colon cancer	11,687	6,687	5,000
Diabetes mellitus	9,995	4,153	5,842
Hypertensive diseases	9,669	3,193	6,476
Pneumonia	8,167	4,166	4,001
Renal failure	6,659	3,253	3,406
Breast cancer	6,399	85	6,314
Prostate cancer	6,034	6,034	-
Stomach cancer	5,812	3,009	2,803

(1) Causes whose relative weight is greater than 1.5%

Deaths due *traffic accidents* continued their downward trend. Specifically, they were 2,116 persons, decreasing 9.4% less as compared with 2010. Since the beginning of the last decade, the number of deaths due to this cause has decreased approximately a third.

The number of deaths due to AIDS/HIV decreased 6.6% (756 men and 197 women).

Since 1995, when the highest number of deaths due to this cause was reached in Spain, this deaths have decreased 83.7%.

The number of suicides was at levels similar to those of 2010, with 3,180 deaths. Suicide continues to be the first external cause of death.

Gross mortality rates by Autonomous Community

The highest death rates per 100,000 inhabitants in 2011 correspond to Principado de Asturias (1,202.2), Galicia (1,093.7) and Castilla y León (1,090.1).

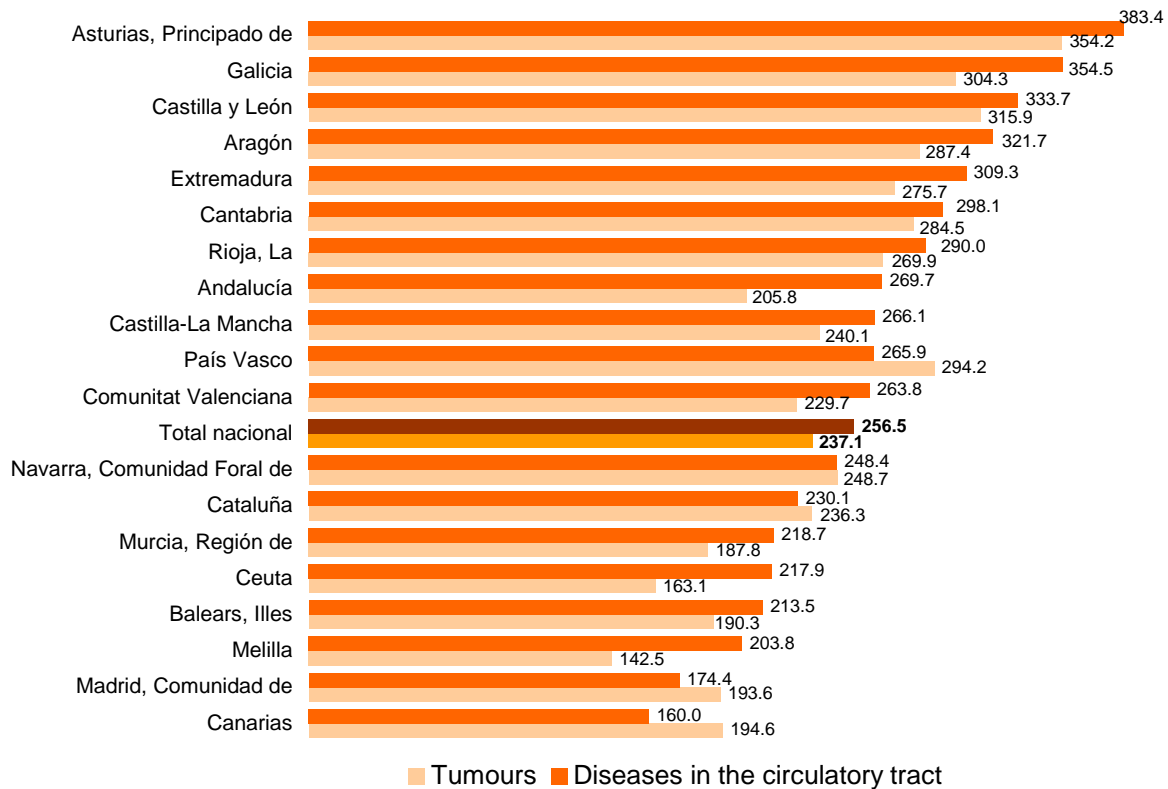
In turn, the lowest mortality rates were recorded in the Autonomous City of Melilla (635.5), Canarias (643.8) and Comunidad de Madrid (653.1).

Mortality rate per 100,000 inhabitants (all causes) Year 2011

Total	841,0
Asturias, Principado de	1.202,2
Galicia	1.093,7
Castilla y León	1.090,1
Aragón	1.030,2
Extremadura	977,2
Cantabria	969,4
País Vasco	932,0
Rioja, La	922,5
Castilla-La Mancha	882,6
Navarra, Comunidad Foral de	828,2
Cataluña	824,1
Comunitat Valenciana	815,6
Andalucía	794,4
Balears, Illes	701,9
Murcia, Región de	693,0
Ceuta	672,0
Madrid, Comunidad de	653,1
Canarias	643,8
Melilla	635,5

The main cause of death in most Autonomous Communities were *diseases of the circulatory tract*. In País Vasco, Comunidad Foral de Navarra, Cataluña, Canarias and Comunidad de Madrid the main cause of death was *tumours*.

Gross mortality rates per 100,000 inhabitants of the two leading causes of death(*). Year 2011



International data: standardized rates by the reduced list of causes of death for the dissemination of data in Eurostat

Eurostat publishes the data of Death due to Cause of Death by a reduced list that gathers the codes of the ICD-10 list in 65 groups of causes. Among the data that it provides there are the standardized rates that allow the comparison of the death data between countries with different population structure¹. Here are presented the standardized rates for countries and the most significant causes of death.

Standardized rates per 100,000 inhabitants in the EU by cause of death². Year 2010³

Countries	All causes	Circulatory tract	Tumours	Respiratory tract	Nervous system	Transport aciden	Suicides
Italy	478,0	159,8	163,1	27,6	17,4	6,9	5,4
Spain	487,6	137,8	157,3	45,2	22,0	5,1	5,8
France	501,9	114,5	167,2	25,5	25,7	6,3	14,6
Cyprus	512,0	189,8	121,8	35,0	12,9	9,2	3,8
Sweden	514,2	182,2	145,4	27,3	20,5	3,0	11,1
Malta	516,9	189,4	153,7	47,2	13,3	3,6	7,4
Luxembourg	524,5	167,3	159,7	36,5	19,8	4,8	9,7
Netherlands	543,1	146,7	187,3	48,1	18,3	3,9	8,8
Ireland	544,3	178,4	172,6	60,5	19,9	4,1	10,9
Austria	548,1	206,8	159,6	27,7	16,6	6,2	12,7
United Kingdom	553,3	164,2	173,8	67,6	20,3	3,4	6,4
Greece	558,1	228,9	149,1	49,1	8,4	11,8	2,9
Germany	565,3	208,7	162,4	37,0	14,6	4,4	9,9
Finland	573,8	213,6	141,6	21,3	52,4	5,9	16,8
Portugal	585,4	167,2	156,5	57,1	16,4	8,4	8,2
UE-27	587,2	209,4	171,4	41,1	18,2	6,5	10,2
Slovenia	600,6	218,7	197,4	32,4	10,7	7,1	17,2
Check Rep.	724,6	344,4	198,1	41,1	7,6	8,1	12,8
Poland	773,7	336,4	202,9	38,2	10,6	10,9	15,3
Estonia	799,7	408,3	187,9	21,8	13,7	6,8	14,8
Slovakia	853,3	442,5	198,6	52,2	12,0	8,9	10,8
Hungary	898,0	418,7	243,0	42,5	12,3	8,9	21,7
Lithuania	947,7	486,4	190,9	28,1	14,3	10,7	29,4
Romania	948,4	540,0	180,9	49,1	9,7	12,3	11,9
Letonia	956,3	485,4	199,8	22,7	9,9	11,2	18,2
Bulgary	965,0	617,4	156,4	38,1	9,6	9,1	9,3

¹ The gross mortality rates are affected by the population structure of the country. In order to compare the data between countries or in time intervals in which there are significant changes in the population structures by age, it is required to calculate the standardized rates from a population group. The integration of the data obtained this way is the death rate that would be obtained if all countries had the same population. These rates are calculated with the standard population recommended by the World Health Organisation.

² The complete list of standardized rates for the reduced list and countries is available in the Eurostat data base in Population and social conditions/ Health
(http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database)

³ Belgium and Denmark: no data available for 2010

Methodological note

The Death Statistics according to Cause of Death provides annual information on deaths which have occurred in the country dealing, by basic cause of death, in accordance with the International Classification of Diseases (ICD) of the World Health Organisation (WHO). The 10th revision of this classification has been used since 1999.

In accordance with the recommendations of the WHO, the classification of causes of death is investigated and tabulated depending of the **basic cause of death**. This is defined as the *illness or injury which started the chain of pathological events which directly led to death. When the cause is a traumatic injury, the basic cause is considered to be the circumstances of the accident or violence which produced the fatal injury*. To be exact, this set or chain of illnesses is what the doctor certifying the death must provide in the statistical bulletin. Starting with these causes, named by the WHO as *immediate, intermediate, initial or fundamental and other processes*, and in accordance with the international regulations established in the ICD for selecting the basic cause, the latter is reached.

Data on causes of death is collected in three statistical questionnaire models: Medical Death Certificate/Statistical Death Register (CMD/BED), Judicial Statistical Death Register (BEDJ) and the Statistical Bulletin of Infants who died within 24 hours (BEP). The first one collects data on deaths due to natural causes, without requiring the intervention of a judge, whereas the second is directed at obtaining information on deaths due to causes requiring judicial intervention, since there are signs of a possible accidental or violent cause; both contain data on deaths among those who have lived more than 24 hours. Deaths occurring within 24 hours of life are collected in the BEP.

The sections in the bulletins containing the causes of death are different in both models. In the CMD/BED, 4 causes are described, which form the chain of illnesses which led to death, in the BEP only two are shown, one relating to the mother and another to the foetus, and in the BEDJ the external circumstances that caused the death are shown.

These statistics provide information on mortality by dealing with the basic cause of death, its distribution by sex, age, residence and month of death. It also offers indicators that enable the drawing of comparisons on an Autonomous Community level and large groups of causes of death.