



PRESS RELEASE

Causes of Death: 2019

The Hellenic Statistical Authority (ELSTAT) announces statistical data on the causes of death for the year 2019. The data sources are the death certificates submitted by medical practitioners and, for violent or sudden deaths, by the Forensic Medicine Authorities.

Data on the causes of death are presented in accordance with the 10th Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10, version 2008) which was adopted in 2014. In particular, the data are as follows:

- In 2019, deaths recorded an increase of 3.9%, amounting to 124,954¹ (63,079 men and 61,875 women) in comparison with 120,291 (61,382 men and 58,909 women), in 2018.
- The main causes of death in 2019 were diseases of the circulatory system with 44,234 deaths, followed by neoplasms with 30,637 deaths and by diseases of the respiratory system with 13,591 deaths (Tables 1-2, Graph 1).
- In comparison with the previous years, the share of deaths caused by diseases of the circulatory system rose from 10.0% in 1938 (first year when analytical data were made available) to 25.0% in 1956 (first year after the Second World War for which data were available) and up to 35.4% in 2019. The corresponding share of deaths caused by neoplasms rose from 4.1% in 1938 to 11.7% in 1956 and up to 24.5% in 2019. On the contrary, deaths caused by infectious and parasitic diseases, which in 1938 accounted for 18.4% of the total deaths, dropped significantly to 3.4% in 2019 (Table 3, Graph 2). It's worth noticing that classification changes should be taken into account when assessing the comparability of data over time.
- The number of deaths due to suicides, as recorded by the Forensic Medicine and Criminal Investigation Authorities, amounted to 530 in 2019, compared with 567 in 2018 (decrease of 6.5%). It should be noted that any discrepancies between these data and the corresponding data of other agencies may be on account of the different methodology used or other underlying factors, such as the need for time-consuming research by the Forensic Medicine Authorities in order to investigate the conditions resulting to the death, deaths caused by late effects after a suicide attempt, etc.
- The data presented in this Press Release do not include data on the number of refugees/migrants who died while border-crossing before being registered in the Country or have drowned in Greek territorial waters. The corresponding figures per year are 302 in 2015, 164 in 2016, 27 in 2017, 72 in 2018 and 62 in 2019.

The data on the causes of death for the year 2019 are presented broken down by sex, age group, place of permanent residence of the deceased and month of occurrence (Tables 4-7, Graphs 3-4).

¹ It is noted that the data on deaths are finalized after the processing of the data on the causes of death, and therefore, the total number of deaths announced in this Press Release does not fully coincide with the data published in the Press Release on "Vital Statistics: 2019" of the 1st October 2020.

Information on methodological issues:

Population, Employment & Cost of Living Statistics Division
Population and Migration Statistics Section
Sophia Bakalidou, tel: +30 213 135 2175
e-mail: s.bakalidou@statistics.gr
Aikaterini Fentouri, tel.: +30 213 135 2895
e-mail: a.fentouri@statistics.gr

Information on data provision:

Tel: + 30 213 135 2022, -2308, -2310
e-mail: data.dissem@statistics.gr

Table 1. Deaths by categories of causes of death, broken down by the most important subcategories, 2014-2019

Causes of death (ICD-10, version 2008)	2014	2015	2016	2017	2018	2019
Total deaths	113,740	121,183	118,788	124,495	120,291	124,954
Certain infectious and parasitic diseases	3,515	3,936	4,013	4,165	4,054	4,234
Neoplasms	29,508	30,252	30,673	30,567	30,331	30,637
<i>among which:</i>						
<i>Malignant neoplasms of colon, rectosigmoid junction, rectum, anus and anal canal</i>	2,750	2,805	2,891	2,686	2,681	2,851
<i>Malignant neoplasm of liver and intrahepatic bile ducts</i>	1,451	1,558	1,572	1,422	1,422	1,480
<i>Malignant neoplasm of pancreas</i>	1,763	1,859	1,833	1,882	1,914	1,898
<i>Malignant neoplasms of trachea, bronchus and lung</i>	7,080	7,158	7,127	7,178	7,046	7,117
<i>Malignant neoplasm of breast</i>	2,018	2,138	2,191	2,187	2,201	2,261
<i>Malignant neoplasm of prostate</i>	1,698	1,763	1,646	1,688	1,711	1,706
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	284	239	271	332	263	340
Endocrine, nutritional and metabolic diseases	1,952	2,036	2,006	2,464	2,509	2,740
<i>among which, Diabetes mellitus</i>	1,667	1,780	1,753	2,122	2,220	2,384
Mental and behavioural disorders	665	1,159	1,401	1,827	1,940	2,256
<i>among which, Dementia</i>	589	1,009	1,244	1,624	1,720	1,949
Diseases of the nervous system	2,523	2,963	3,235	3,767	3,652	3,546
<i>among which:</i>						
<i>Parkinson disease</i>	882	1,158	1,385	1,651	1,609	1,560
<i>Alzheimer's disease</i>	479	591	600	645	545	504
Diseases of the eye and adnexa	0	0	0	0	0	0
Diseases of the ear and mastoid process	0	1	1	0	1	2
Diseases of the circulatory system	45,148	46,411	44,164	46,942	44,590	44,234
<i>among which:</i>						
<i>Heart diseases</i>	29,664	30,592	28,917	31,618	30,526	29,804
<i>Cerebrovascular diseases</i>	14,279	14,445	13,779	13,797	12,574	12,973
Diseases of the respiratory system	12,751	14,835	13,809	13,847	12,668	13,591
<i>among which:</i>						
<i>Influenza</i>	84	43	135	93	36	139
<i>Pneumonia & other acute lower respiratory infections</i>	5,523	6,732	6,535	6,766	6,145	6,608
<i>Chronic lower respiratory diseases</i>	2,829	3,486	2,976	3,260	3,029	3,244
Diseases of the digestive system	3,294	3,311	3,500	3,617	3,544	3,585
Diseases of the skin and subcutaneous tissue	66	50	43	62	54	79
Diseases of the musculoskeletal system and connective tissue	231	233	310	318	352	408
Diseases of the genitourinary system	2,791	3,663	3,276	3,578	3,544	3,866
Pregnancy, childbirth and the puerperium	4	5	6	10	4	6
Certain conditions originating in the perinatal period	190	195	219	159	173	195
Congenital malformations, deformations and chromosomal abnormalities	155	182	238	213	184	196
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	7,109	7,766	7,561	8,236	7,910	10,435
External causes of mortality-Violent deaths	3,554	3,946	4,062	4,391	4,518	4,604
<i>Transport accidents</i>	1,025	956	1,013	917	865	840
<i>Falls</i>	421	584	658	902	918	1,063
<i>Accidental drowning and submersion</i>	349	350	405	347	367	363
<i>Accidental poisoning by and exposure to noxious substances</i>	184	284	238	268	268	276
<i>Other accidents</i>	421	677	704	888	923	848
<i>Suicide</i>	565	529	484	523	567	530
<i>Homicide, assault</i>	121	99	87	89	109	93
<i>Other external causes</i>	468	467	473	457	501	591

Graph 1. Percentage distribution of deaths by main categories of causes of death, 2019

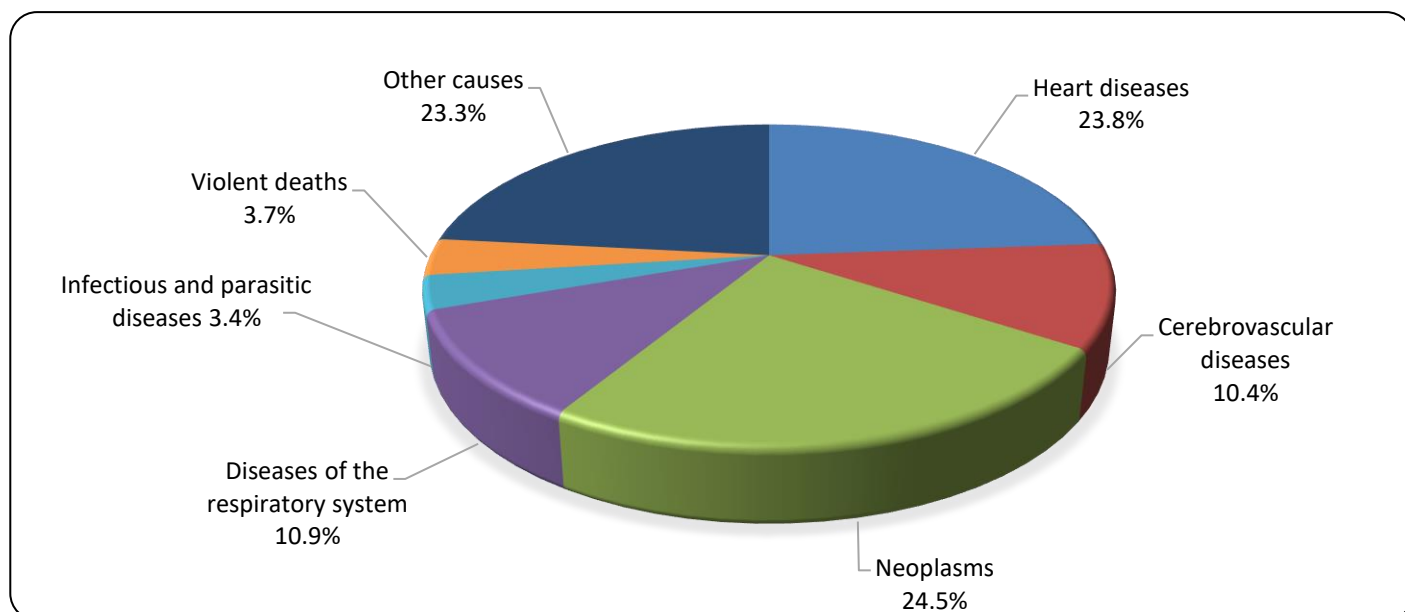


Table 2. Deaths by main categories of causes of death, years 2014-2019 and average number of deaths for the years 2014-2018

Year	2014	2015	2016	2017	2018	2019	Average 2014-2018
Total deaths	113,740	121,183	118,788	124,495	120,291	124,954	119,699
Heart diseases	29,664	30,592	28,917	31,618	30,526	29,804	30,263
Cerebrovascular diseases	14,279	14,445	13,779	13,797	12,574	12,973	13,775
Neoplasms	29,508	30,252	30,673	30,567	30,331	30,637	30,266
Diseases of the respiratory system	12,751	14,835	13,809	13,847	12,668	13,591	13,582
Infectious and parasitic diseases	3,515	3,936	4,013	4,165	4,054	4,234	3,937
Violent deaths	3,554	3,946	4,062	4,391	4,518	4,604	4,094
Other causes	20,469	23,177	23,535	26,110	25,620	29,111	23,782

Table 3. Main categories of causes of death, years 1938, 1956, 1979, 1989, 1999, 2009 and 2019

Main causes of death	1938	1956	1979	1989	1999	2009	2019
Total deaths	93,766	59,460	82,338	92,720	103,304	108,316	124,954
Diseases of the circulatory system	9,347	14,893	35,875	47,906	52,028	48,453	44,234
Neoplasms	3,831	6,928	16,371	19,254	23,430	27,345	30,637
Diseases of the respiratory system	17,849	3,290	5,648	4,826	7,231	10,770	13,591
Infectious and parasitic diseases	17,283	3,185	832	615	553	1,183	4,234
Violent deaths	2,687	2,821	4,518	4,942	4,471	3,868	4,604
Other causes	42,769	28,343	19,094	15,177	15,591	16,697	27,654

Graph 2. Percentage distribution of main categories of causes of death, years 1938, 1956, 1979, 1989, 1999, 2009 and 2019

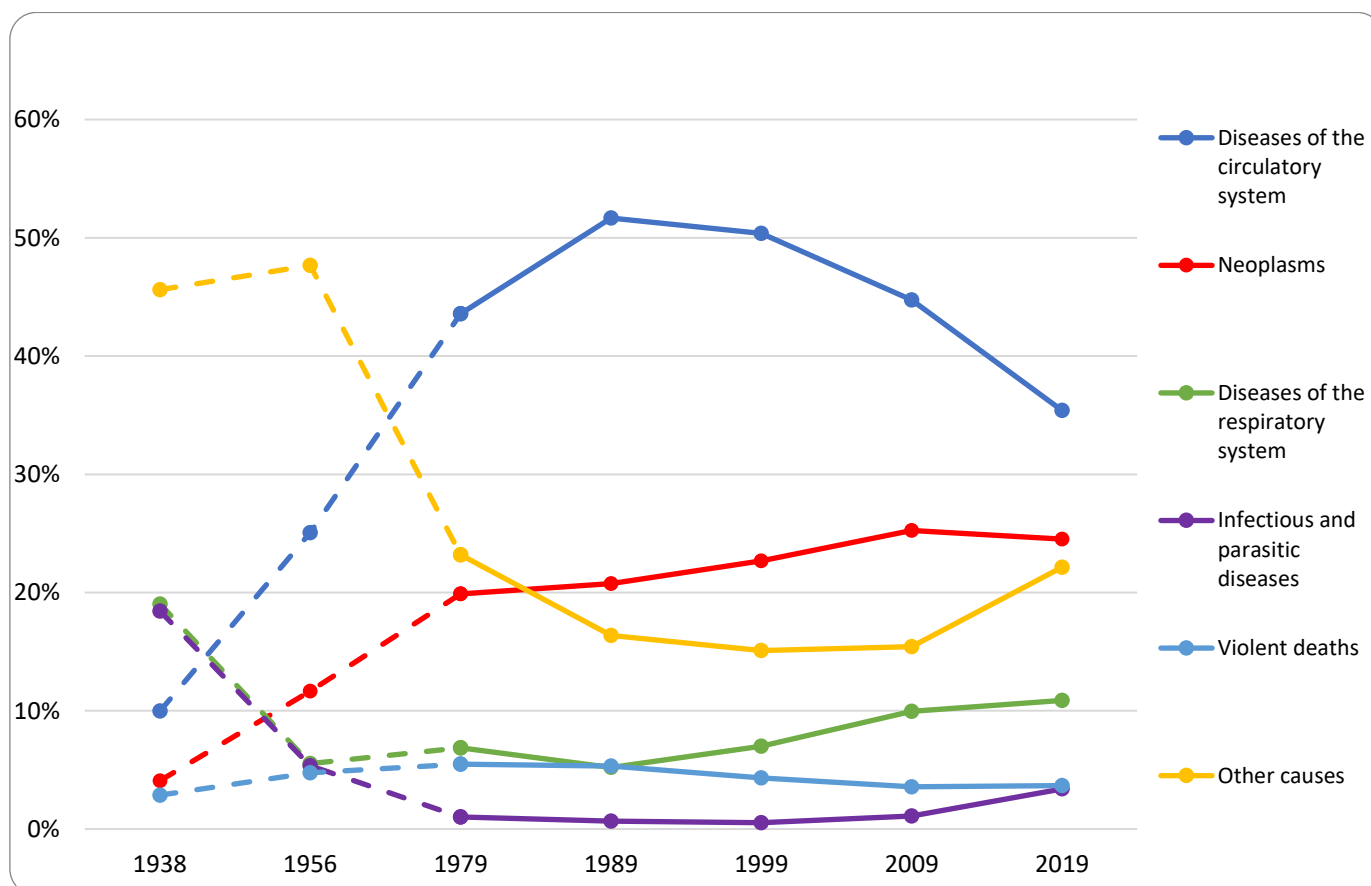


Table 4. Deaths by main categories of causes of death, by sex and age group, 2019

Cause of death	Total deaths by cause	Deaths by age and sex											
		Under 15 years		15-29		30-44		45-59		60-74		75 and over	
		Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
Total deaths	124,954	240	219	435	146	1,292	534	5,303	2,588	15,025	7,879	40,784	50,509
Certain infectious and parasitic diseases	4,234	4	4	5	2	33	8	89	29	251	182	1,361	2,266
Neoplasms among which:	30,637	18	17	35	46	245	265	1,800	1,465	6,617	3,541	9,698	6,890
<i>Malignant neoplasm of colon</i>	2,478	0	0	0	2	18	12	120	94	394	275	831	732
<i>Malignant neoplasm of bronchus and lung</i>	7,113	0	0	2	2	40	19	547	223	2,627	675	2,314	664
<i>Malignant neoplasm of breast</i>	2,261	0	0	0	1	1	88	3	326	8	573	10	1,251
<i>Malignant neoplasm of prostate</i>	1,706	0	0	0	0	0	0	27	0	268	0	1,411	0
<i>Malignant neoplasm of brain</i>	1,033	8	5	4	5	33	16	121	81	210	157	211	182
<i>Leukaemia</i>	1,229	3	6	5	9	16	12	30	50	205	114	429	350
Diseases of the circulatory system among which:	44,234	1	7	45	13	331	80	1,934	483	4,587	1,975	14,459	20,319
<i>Heart diseases</i>	29,804	1	6	36	10	288	57	1,566	334	3,377	1,287	9,644	13,198
<i>Cerebrovascular diseases</i>	12,973	0	1	6	3	30	19	255	120	910	625	4,301	6,703
Diseases of the respiratory system	13,591	13	16	8	2	35	21	170	68	881	500	5,458	6,419
Congenital malformations, deformations and chromosomal abnormalities	196	47	47	17	4	5	7	24	20	14	11	0	0
Other pathological causes	27,458	125	115	36	25	176	87	720	397	2,057	1,418	8,752	13,550
Violent deaths	4,604	32	13	289	54	467	66	566	126	618	252	1,056	1,065
<i>Transport accidents</i>	840	10	5	169	21	151	15	153	26	120	38	98	34
<i>Falls</i>	1,063	3	0	6	1	20	2	42	6	64	32	393	494
<i>Accidental drowning and submersion</i>	363	5	2	11	4	24	5	38	11	76	29	105	53
<i>Accidental poisoning by and exposure to noxious substances</i>	276	0	1	29	5	125	11	65	13	12	5	2	8
<i>Other accidents</i>	848	8	2	16	5	28	4	80	24	121	64	235	261
<i>Suicide</i>	530	1	2	45	11	83	20	125	27	105	11	79	21
<i>Homicide, assault</i>	93	5	1	8	4	23	3	16	6	12	4	7	4
<i>Other external causes</i>	591	0	0	5	3	13	6	47	13	108	69	137	190

Graph 3. Percentage distribution of deaths by main categories of causes of death, in total deaths by age group and sex, 2019

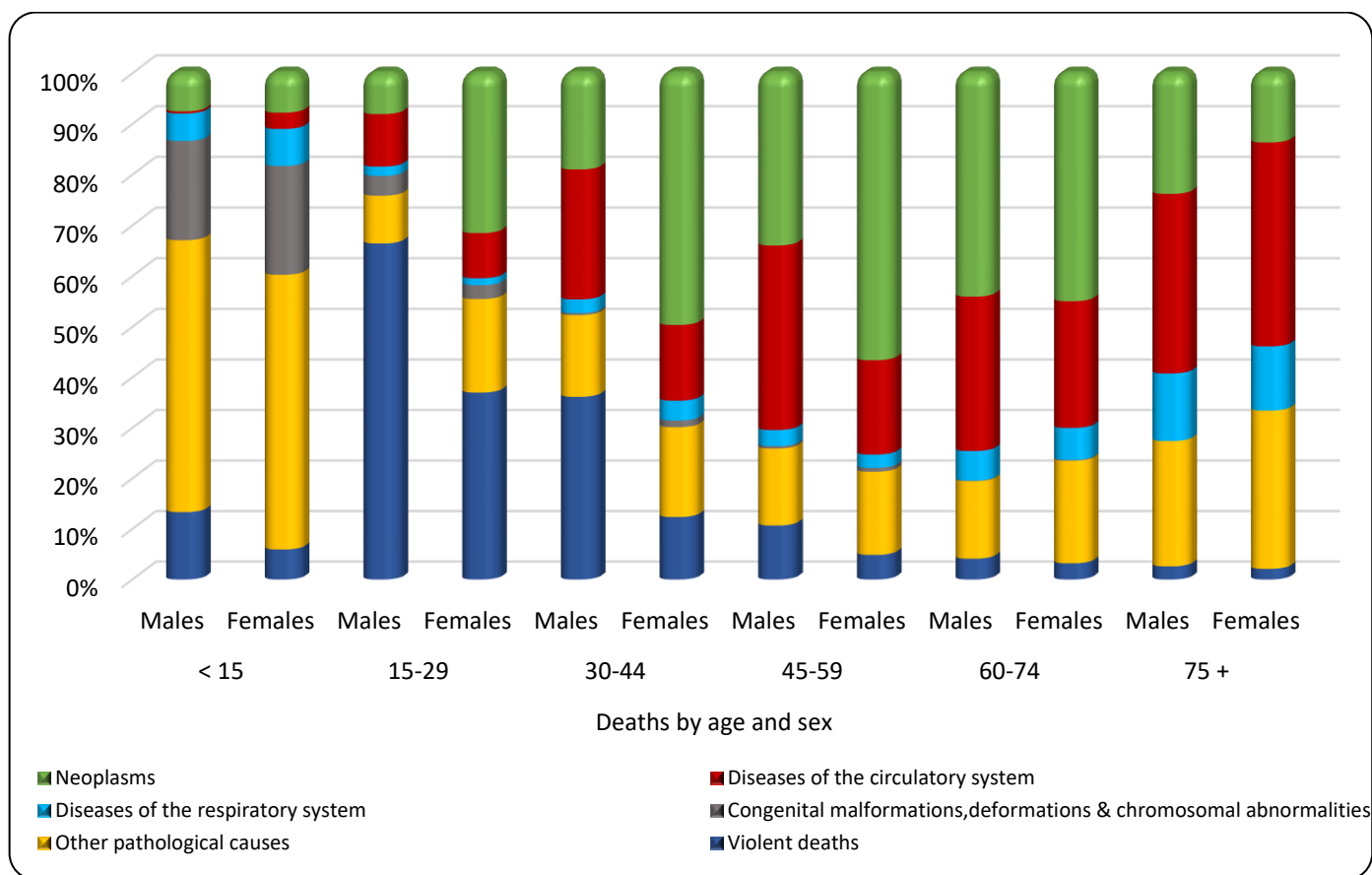


Table 5. Deaths by month of occurrence and cause of death, 2019

Month	Total deaths per month	Deaths by cause							
		Certain infectious and parasitic diseases	Neoplasms	Heart diseases	Cerebrovascular diseases	Influenza, pneumonia & other acute lower respiratory infections	Transport accidents	Suicides	Other causes
Total deaths	124,954	4,234	30,637	29,804	12,973	6,747	840	530	39,189
January	13,054	328	2,827	3,466	1,366	933	55	35	4,044
February	10,726	375	2,371	2,573	1,134	734	50	35	3,454
March	10,952	312	2,535	2,551	1,158	680	59	42	3,615
April	10,077	413	2,376	2,527	1,006	448	57	48	3,202
May	10,097	289	2,571	2,249	1,077	578	78	61	3,194
June	10,241	460	2,518	2,461	998	420	82	45	3,257
July	10,110	283	2,629	2,162	1,052	545	79	42	3,318
August	10,380	316	2,668	2,331	1,083	568	109	55	3,250
September	9,083	373	2,364	2,175	912	397	83	55	2,724
October	9,471	293	2,557	2,074	1,045	516	76	42	2,868
November	9,774	438	2,517	2,594	988	332	45	30	2,830
December	10,989	354	2,704	2,641	1,154	596	67	40	3,433

Table 6. Cause-specific mortality by sex, for important categories of causes of death, 2019

Causes of Death	Total	Males	Females
Septicaemia	35.1	28.6	41.3
Malignant neoplasm of colon	23.1	26.2	20.2
Malignant neoplasm of pancreas	17.7	19.2	16.3
Malignant neoplasm of bronchus and lung	66.3	106.1	28.7
Malignant neoplasm of breast	21.1	0.4	40.6
Malignant neoplasm of prostate	15.9	32.7	0.0
Malignant neoplasm of bladder	12.1	20.5	4.2
Diabetes mellitus	22.2	22.8	21.7
Dementia and Alzheimer's disease	22.9	15.6	29.8
Heart diseases	278.0	286.1	270.3
Cerebrovascular diseases	121.0	105.6	135.6
Influenza, pneumonia & other acute lower respiratory infections	62.9	57.7	67.9
Chronic obstructive pulmonary disease	29.9	36.5	23.7
Senility	25.9	16.2	35.2
Transport accidents	7.8	13.5	2.5
Suicide	4.9	8.4	1.7

Graph 4. Cause-specific mortality by sex, for important categories of causes of death, 2019

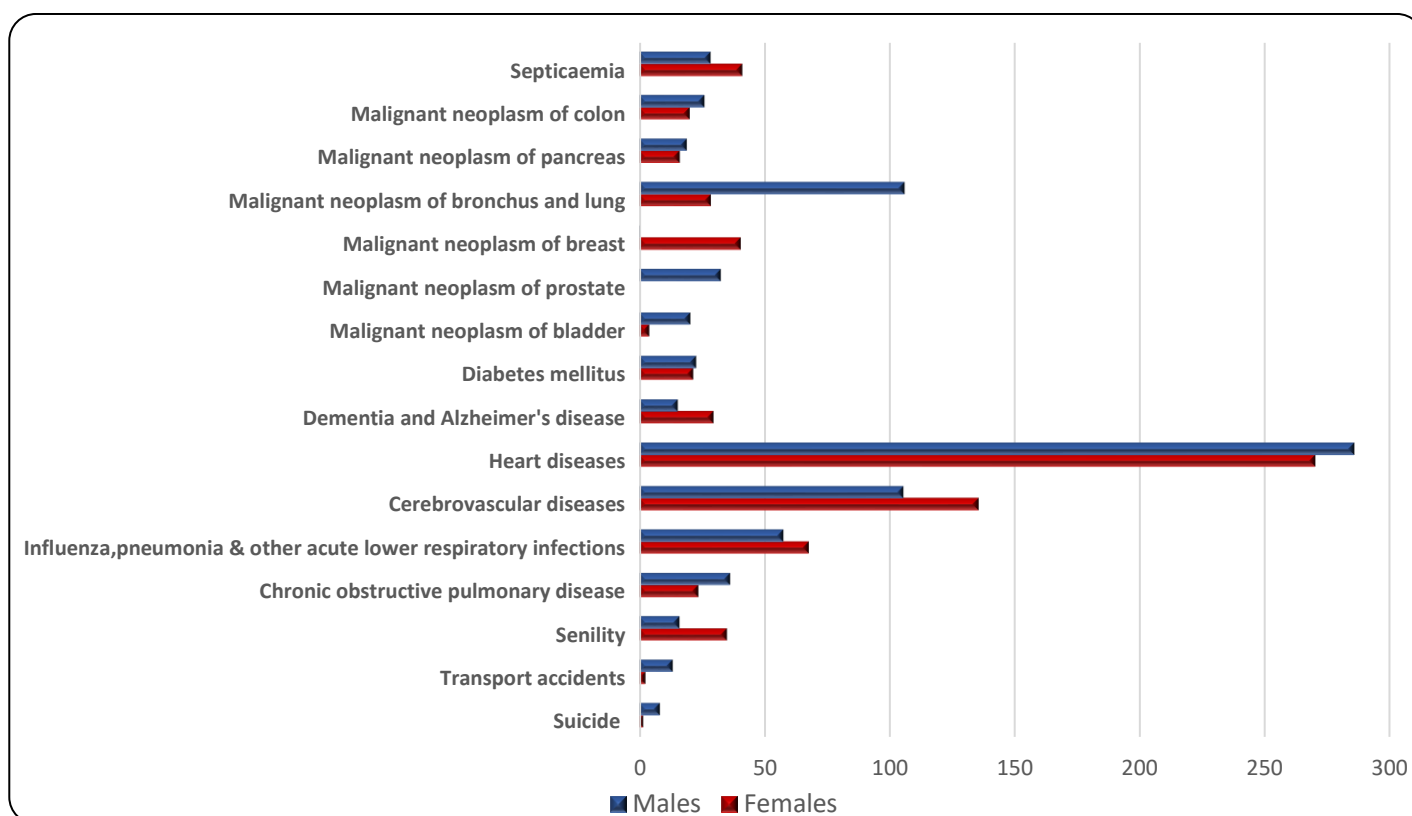


Table 7. Cause-specific mortality by main cause of death and NUTS2 Region of the permanent residence, 2019*

Cause of death	Anatoliki Makedonia, Thraki	Kentriki Makedonia	Dytiki Makedonia	Thessalia	Ipeiros	Ionia Nisia	Dytiki Ellada	Stereia Ellada	Peloponnisos	Attiki	Voreio Aigaio	Notio Aigaio	Kriti
Total deaths	1,270.6	1,169.0	1,305.3	1,253.8	1,245.9	1,306.1	1,225.7	1,248.8	1,315.9	1,097.8	1,059.9	853.5	1,009.6
Certain infectious and parasitic diseases	31.5	35.3	30.5	47.7	48.6	59.9	44.7	45.0	47.1	35.9	47.5	26.6	49.1
Neoplasms	299.4	298.8	326.1	303.5	287.3	295.8	291.1	274.5	305.6	284.2	226.4	210.8	237.1
Diseases of the circulatory system among which:	519.2	422.3	490.2	425.7	476.2	445.2	413.1	461.5	450.2	380.0	360.0	297.6	324.8
<i>Heart diseases</i>	351.0	277.3	314.5	268.5	298.1	282.0	254.2	303.6	306.8	268.0	250.8	210.5	224.2
<i>Cerebrovascular diseases</i>	154.5	133.4	163.6	144.9	166.1	141.5	145.6	144.4	128.9	97.4	100.3	74.3	88.2
Diseases of the respiratory system	112.5	103.5	121.9	136.7	127.7	168.0	168.1	133.5	182.5	124.8	108.7	90.5	118.6
Other pathological causes	266.4	266.7	300.6	299.2	268.1	291.4	268.7	292.6	279.3	232.7	278.3	194.3	242.4
Violent deaths	41.6	42.4	36.1	40.9	38.1	45.7	40.0	41.7	51.3	40.2	39.1	33.5	37.6
<i>Transport accidents</i>	6.3	6.1	5.6	6.1	7.5	9.3	9.3	8.3	10.3	7.1	8.9	9.8	8.7
<i>Falls</i>	10.3	11.8	8.7	11.6	9.6	11.8	8.0	7.4	12.6	9.4	7.1	6.7	8.0
<i>Accidental drowning and submersion</i>	1.2	1.8	0.8	2.0	2.1	4.9	4.0	2.9	2.6	2.6	2.7	3.2	1.3
<i>Accidental poisoning by and exposure to noxious substances</i>	1.5	3.5	1.1	1.4	1.2	1.0	0.8	4.1	3.3	2.7	3.1	3.2	1.4
<i>Other accidents</i>	9.8	9.4	9.0	8.4	6.9	5.9	8.0	7.4	10.5	6.5	8.4	2.9	7.7
<i>Suicide</i>	5.7	3.2	6.4	5.4	5.4	5.9	5.5	4.9	5.2	4.9	5.3	2.6	5.8
<i>Homicide, assault</i>	0.7	0.5	0.0	0.7	0.3	1.5	0.2	0.5	0.7	1.0	0.9	1.4	1.7
<i>Other external causes</i>	6.0	6.0	4.5	5.3	5.1	5.4	4.3	6.3	6.1	5.9	2.7	3.8	3.0

*Deaths of foreign residents, as well as those whose permanent residence was unknown, are not included.

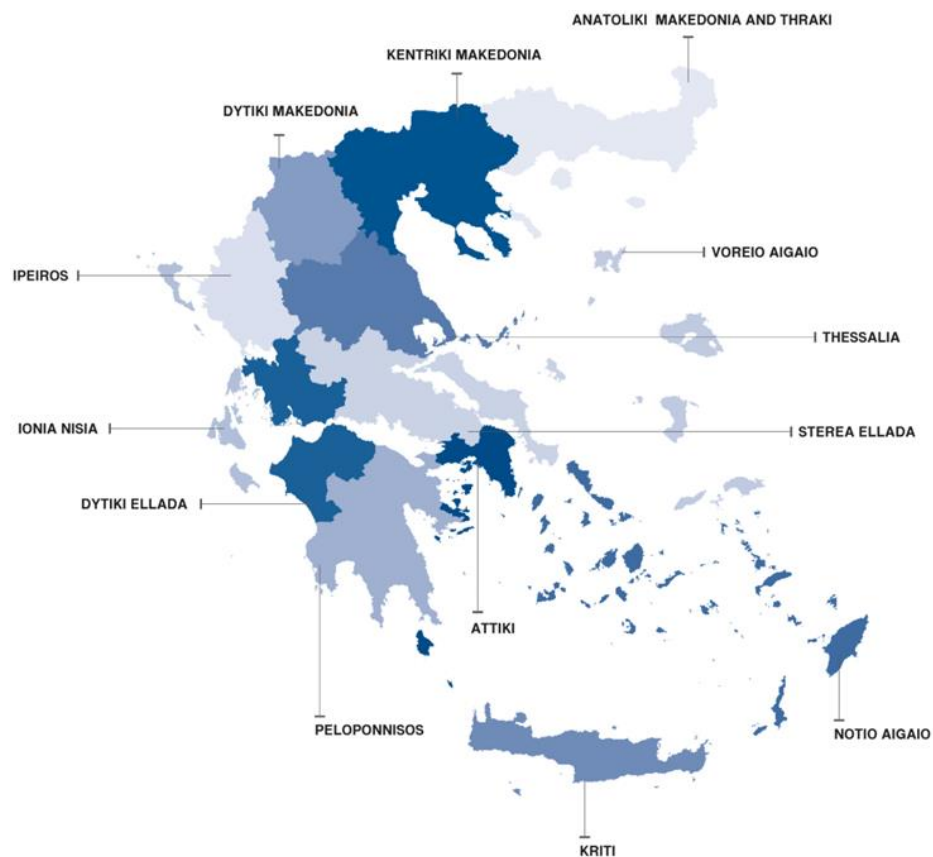
EXPLANATORY NOTES

- Vital Statistics** Data on the causes of death are part of the Vital Statistics Survey, which is conducted in its current form since 1956. In cooperation with the Regional Statistical Offices of ELSTAT, individual statistical data on vital events (Marriages, Births, Deaths and Registered Partnerships) are collected on a monthly basis from the Civil Register Offices all over Greece. From 1938 onwards, data on the causes of death are compiled based on death certificates filled in by medical practitioners or forensic pathologists. As regards violent or sudden deaths, where the cause of death is not specified and more research is needed, data on the causes of death are collected through the Forensic Medicine Authorities. The survey produces statistical results on a yearly basis. Annual data are announced no later than two years after the reference year according to Commission Regulation (EU) No 328/2011.
- Legal Framework** The survey is fully harmonized with the European statistical practice: Regulation (EC) No 1338/2008 of the European Parliament and of the Council on “Community statistics on public health and health and safety at work” and Implementing Commission Regulation (EU) No 328/2011, as regards “statistics on causes of death”. The survey is governed by Law 344/76 concerning the “Registration of vital events” which lays down the obligations of the Civil Register Offices to collect and then to transmit the data, as well as by Law 3832/2010 on the “Hellenic Statistical System”.
- Coverage** The survey is a census survey and it covers all the deaths, which occur all over Greece. Cases of refugees/migrants who died while border-crossing before being registered in the Country or have drowned in Greek territorial waters, are not included in the national data on the Causes of Death.
- Reference Period** 1/1/2019-31/12/2019.
- Definitions** **Death:** means the permanent disappearance of all evidence of life at any time after live birth has taken place.
- Main or underlying cause of death:** pursuant to the 10th Revision of the International Classification of Diseases (ICD-10) of the World Health Organisation (WHO), is the disease or injury which initiated the train of morbid events leading directly to death, or the circumstances of the accident or violence which caused the fatal injury.
- Cause-Specific mortality:** the rate refers to the number of deaths assigned to a specific cause during a given time interval divided by the estimated population in the middle of the year, per 100,000 inhabitants.
- Methodology** Vital statistics data, after having been collected from the Civil Register Offices, undergo the necessary quality checks and then they are processed and tabulated. All causes of death are coded at a central level by a single team of coders to ensure internal coherence. From 2014 onwards, ELSTAT applies the 4-digit ICD-10 Classification of Diseases, 2008 version. The time series up to 2014 are available in the 4-digit ICD-9 Classification of Diseases. Data for the years 2014-2016 are available in both ICD-9 and ICD-10. From 2017 onwards, data will be available only in ICD-10.

Comments It should be noticed that in Tables 1, 4 and 7, the subcategory “other external causes” of “violent deaths” includes the following: deaths due to misadventures to patients during surgical and medical care, deaths in cases where an investigation by a medical or legal authority has not determined whether the injuries are accidental, suicidal or homicidal, deaths caused by injuries inflicted by law-enforcing agents (including military) on duty while attempting to enforce the law and deaths caused by injuries during war operations.

Geographical Classification Geographical classification is based on the Nomenclature of Territorial Units for Statistics (NUTS).

Map of the Regions (NUTS2) of Greece



References More information (tables, methodology) concerning Vital Statistics is available on the website of ELSTAT: <https://www.statistics.gr/>, at the link Statistics, Population and Social Conditions, Demography, Deaths-Causes of death (ICD-9) and Deaths-Causes of death (ICD-10).