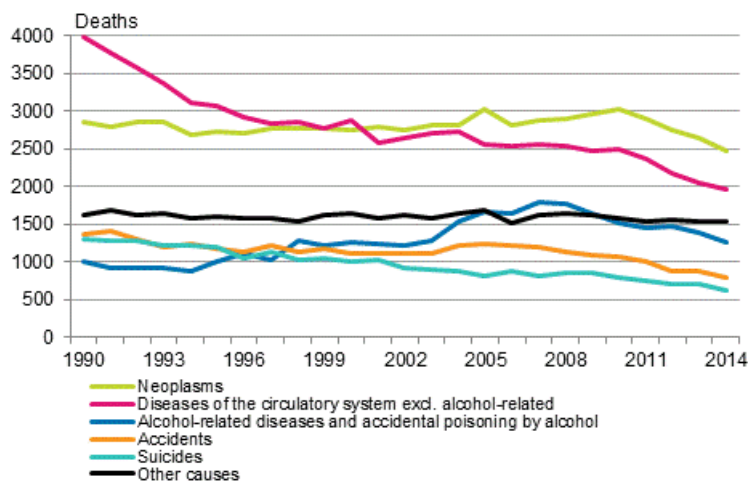


Causes of death in 2014

Fewer persons of working age than before die of diseases of the circulatory system

According to Statistics Finland's statistics on causes of death, nearly 8,700 Finns died at working age, that is, aged 15 to 64, around 5,900 men and 2,700 women. The mortality of people of working age has gone down in ten years by one quarter. The number of those dying of diseases of the circulatory system and accidents has diminished most. Over one-half of working-age people dying during 2014 died of neoplasms and diseases of the circulatory system.

Causes of death for deaths at working age, i.e. age 15 to 64 in 1990 to 2014



In Finland, fewer people than before die at working age, that is, at the age of 15 to 64. The age-standardised mortality of working-age people has diminished in ten years by 25 per cent. Among the main groups, mortality has declined most in diseases of the circulatory system and accidents, but the development has been positive in other most common cause of death groups as well.

Since 2001, most persons of working age have died of neoplasms instead of diseases of the circulatory system. In 2014, nearly 2,500 people of working age died of neoplasms, while around 2,000 died of diseases of the circulatory system. The number of persons dying of diseases of the circulatory system has gone down by one quarter during ten years. At the same time, the total number of persons of working age has not changed.

Accidents, suicides and alcohol-related causes claimed the life of 2,700 persons of working age

In 2014, nearly one-third of those dying at working age died of accidents, suicides and alcohol-related causes. The vast majority of them, 78 per cent, were men.

Almost 1,300 persons of working age died of alcohol-related causes in 2014, of whom the majority were men. The number of deaths was nearly ten per cent lower than in the year before. The number of those dying of alcohol-related diseases and alcohol poisonings has diminished starting from 2008.

The number of accidents among all people of working age has also contracted by over one-third since 2004. The decrease concerns nearly all most common accident groups: traffic accidents, stumbling and drowning. In 2014, around 800 persons of working age died of accidents, 600 of whom were men and 200 women.

Positive development has also taken place in suicide mortality. In 2014, the number of suicides among working-age people was over 600, which is more than one-quarter fewer than ten years earlier.

Most women died of neoplasms, most men of diseases of the circulatory system

Only every third person dying at working age was a woman. The mortality of working-age men has diminished in ten years more than that of women, so the difference in mortality between genders has narrowed down somewhat. However, the mortality of working-age men was still over double that of women. The difference in mortality between genders is at its largest in alcohol-related causes and diseases of the circulatory system. At its smallest it is in deaths from neoplasms (see Appendix figures 2 and 3).

In 2014, the most common cause of death group for working-age women was neoplasms, of which as many as 41 per cent of women died. The most common cancer for women was breast cancer, which caused the death of nearly every tenth working-age woman. Among working-age women, diseases of the circulatory system as the cause of death have decreased: their share in 2014 was 16 per cent, when twenty years ago the share was nearly one-quarter of all deaths. In contrast, 26 per cent of men died of diseases of the circulatory system, but just 23 per cent of neoplasms. The most common type of cancer that killed working-age men was lung cancer.

Men died at working age of alcohol-related causes considerably more than women. One in six men and one in ten women died of alcohol-related causes. The average age in alcohol-related causes of death was 59 years for men and 62 years for women.

Several different diseases and accidental alcohol poisonings have been collected into alcohol-related causes of death. The significance of the cause of death group in causes of death is smaller than that of the main groups of neoplasms and the circulatory system. However, more working-age persons die of alcohol-related causes than of individual neoplasm types or ischaemic heart diseases. Alcohol is also a contributing factor to death in many fatal accidents of working-age population.

In the statistics on causes of death, cause of death data are classified in accordance with the International Classification of Diseases (ICD10). The statistical application uses the national 54-category time series classification, with which classifications of different years have been made into a comparable format. The database tables contain more detailed data on causes of death on the 3-digit level of the International Classification of Diseases, for example.

Main causes of death among working-age population (aged 15 to 64) in 2014

54-group time series classification	Total	Males	Females	Total	Males	Females
	Number	Number	Number	%	%	%
04–22 Neoplasms	2 479	1 354	1 125	29	23	41
27–30 Diseases of the circulatory system	1 958	1 524	434	23	26	16
31–35 Disease of the respiratory system	198	134	64	2	2	2
41 Alcohol related diseases and accidental poisoning by alcohol	1 258	1 012	246	15	17	9
42–49 Accidents	798	612	186	9	10	7
50 Suicides	624	472	152	7	8	6
Other causes of death	1 346	841	505	16	14	19
01–54 Deaths total	8 661	5 949	2 712	100	100	100

Contents

1. Causes of death in 2014.....	6
Fewer deaths of alcohol-related causes and suicides than in the year before.....	6
Over one-half of working-age people died of neoplasms and diseases of the circulatory system.....	7
Every fourth woman aged over 65 died of dementia	7
2. Ischaemic heart disease still the cause of one in five deaths.....	9
3. Deaths from dementia and Alzheimer’s disease are increasing.....	11
4. Alcohol mortality diminished further.....	12
5. Stumbling the commonest reason for fatal accidents.....	14
Nearly half of those dying by drowning were intoxicated.....	15
Four out of five persons that died accidentally from drugs were men.....	15
6. Number of suicides fell clearly	17
7. Three maternal deaths in 2014.....	18

Tables

Table 1. Causes of death 2014	6
Table 2. Main causes of death among persons aged 65 or over in 2014.....	8
Table 3. Drug-related mortality 2000 to 2014.....	16
Table 4. Causes of death among children under the age of one 2002, 2009, 2012 and 2014.....	18

Appendix tables

Appendix table 1a. Deaths by underlying cause of death and by age in 2014, both sexes.....	19
Appendix table 1b. Deaths by underlying cause of death and by age in 2014, males.....	21
Appendix table 1c. Deaths by underlying cause of death and by age in 2014, females.....	23
Appendix table 2. Deaths from accidents by external cause and deaths from alcohol intoxication 2014.....	24
Appendix table 3. Mortality during infant and perinatal period 1987–2014.....	25
Appendix table 4. Mean population 2014 by age and sex.....	26
Appendix table 5. Standard population used in calculating age-standardised figures (Eurostat 2012).....	26

Figures

Figure 1. Proportions of causes of death by age groups in 2014.....	8
Figure 2. Age-standardised mortality from ischaemic heart disease in 1971 to 2014.....	9
Figure 3. Age-standardised carcinoma of larynx, trachea and lung 1971 to 2014.....	10
Figure 4. Age-standardised prostate cancer mortality for men and breast cancer mortality for women 1971 to 2014.....	10
Figure 5. Age-standardised dementia mortality (incl. Alzheimer's disease) 1971 to 2014.....	11
Figure 6. Age-standardised mortality from alcohol-related diseases and accidental poisonings by alcohol and total consumption of alcohol in 1971 to 2014.....	12
Figure 7. Age-standardised mortality from alcohol-related diseases and accidental poisonings by alcohol in 1971 to 2014.....	13
Figure 8. Accident mortality in 1970 to 2014.....	14
Figure 9. Mortality from drowning accidents 1998 to 2014.....	15
Figure 10. Suicide mortality 1970 to 2014.....	17

Figure 11. Mortality during infant and perinatal period in 1992–2014.....	18
Appendix figures	
Appendix figure 1. Age-standardised mortality of working-age people (aged 15 to 64) from different causes of death in 1990 to 2014	27
Appendix figure 2. Age-standardised mortality of working- age men (aged 15 to 64) from different causes of death in 1990 to 2014	27
Appendix 3. Age-standardised mortality of working-age women (aged 15 to 64) from different causes of death in 1990 to 2014	28
Appendix figure 4. Age-standardised mortality from diseases of the circulatory system in 1971 to 2014	28
Appendix figure 5. Age-standardised mortality from neoplasms in 1971 to 2014	28
Quality Description:Causes of death 2014.....	29

1. Causes of death in 2014

A total of 52,400 persons, 25,900 men and 26,500 women, died in 2014. The longer life expectancy is visible in the age distribution of deaths. People are dying at an ever older age: nearly two in three were aged over 75 and one in three were over 85. Nearly 400 of dead persons were aged 100 or over. The growing number of aged dead persons is visible in causes of death in the increased number of deaths from dementia, for example.

Due to the age structure of persons who died, the typical causes of death of older age groups dominate the causes of death distribution of the entire population. In 2014, thirty-seven per cent of deaths of Finns were caused by diseases of the circulatory system and 23 per cent by neoplasms. The most common disease of the circulatory system was ischaemic heart disease, which caused around one-fifth of all deaths. The most common types of cancer leading to death for men were lung cancer and prostate cancer, and correspondingly for women breast cancer and lung cancer.

Altogether 8,100 persons died from dementia, including Alzheimer's disease, which represented 15 per cent of all deaths. The number of deaths caused by dementia has grown rapidly in the past decade partly due to the ageing of the population. One in five deaths among women and one in ten deaths among men were caused by dementia. Dementia mortality among women was more than double than among men, which is mainly because women live longer than men. There are no differences in age-standardised mortality among genders (Figure 5).

Fewer deaths of alcohol-related causes and suicides than in the year before

In 2014, over 2,200 persons died of accidents, being four per cent of deaths, when alcohol poisonings are included in alcohol-related deaths in the time series classification. In terms of the total number of deaths from accidents, 2014 did not differ much from the year before. However, the number of deaths from accidents has slowly and almost continuously fallen since 2004, when 2,600 persons died from accidents.

Good 1,800 persons died of alcohol-related diseases and alcohol poisonings in 2014, which is nearly 100 lower than in the previous year. The share of alcohol-related causes in all deaths was four per cent. The majority of those dying of alcohol, three out of four, were men. Deaths from alcohol-related causes have become more common over the past ten years most among older age groups. Simultaneously, the medium age of those who died has risen. The median average age of men in alcohol-related causes of death was 59 years and of women 62 years.

In 2014, suicides were committed by 789 persons, which is around 100 lower than in the year before. The number of suicides was at its highest in 1990, when there were over 1,500 suicides in Finland. Since then, suicide mortality has decreased almost continuously (Figure 10). In 2014, suicide mortality was nearly 30 per cent lower than ten years ago. The median average age of suicides was 48 years. One in ten of all those having committed a suicide was a young person aged under 25 and one in five was aged 65 or over.

Table 1. Causes of death 2014

54-group time series classification	Total	Males	Females	Total	Males	Females
	Number	Number	Number	%	%	%
27–30 Diseases of the circulatory system	19 555	9 421	10 134	37	36	38
04–22 Neoplasms	12 270	6 476	5 794	23	25	22
25 Dementia, Alzheimer's disease	8 116	2 499	5 617	15	10	21
42–49 Accidents	2 226	1 379	847	4	5	3
41 Alcohol related diseases and accidental poisoning by alcohol	1 841	1 430	411	4	6	2
31–35 Disease of the respiratory system	1 837	1 149	688	4	4	3
50 Suicides	789	599	190	2	2	1
Other causes of death	5 775	2 911	2 864	11	11	11
01–54 Deaths total	52 409	25 864	26 545	100	100	100

Over one-half of working-age people died of neoplasms and diseases of the circulatory system

Ever fewer working-age persons, i.e. aged 15 to 64, die in Finland. In all, 8,700 of those dying in 2014, or 17 per cent of all deaths, were of working age. Every fourth man and every tenth woman that died during the year was of working age. The number of deaths among persons aged under 65 decreased by over 500 from the previous year.

The age-standardised mortality of working-age people has diminished in ten years by around one quarter. The mortality of working-age men has diminished more than that of women, so the difference in mortality between genders has narrowed down somewhat. However, the mortality of working-age men is still over double that of women.

Working-age people died most from neoplasms and from diseases of the circulatory system. More than one-half of deceased working-age people died of these two causes. In 2014, the most common cause of death group for working-age women is neoplasms, of which as many as 41 per cent of women died. Among working-age women, diseases of the circulatory system as the cause of death have decreased: their share in 2014 was 16 per cent of all deaths when twenty years ago the share was nearly one-quarter. More working-age men still died of diseases of the circulatory system than of neoplasms. The most common type of cancer resulting in death among women was breast cancer, which caused the death of nearly every tenth working-age woman. For working-age men, the most common cancer resulting in death was lung cancer.

Nearly 1,300 died of alcohol-related causes and diseases or accidental alcohol poisonings, that is, 15 per cent of those dying at working age. Four times more working-age men died of alcohol-related causes than working-age women. Causes of death related to alcohol caused the death of nearly every fifth man and every tenth woman. Alcohol mortality among working-age men and women has decreased clearly from the peak level of 2007 but is still almost on level with the beginning of the 2000s.

Every tenth working-age person died in accidents and over 600 died of suicides. Seven per cent of deaths were still caused by suicides despite the fact that suicides have decreased clearly from the 1990s.

Every fourth woman aged over 65 died of dementia

Finns die at an advanced age. The average age at death was 76 years for men and 85 years for women. The share of persons aged over 65 among deaths was 89 per cent for women and 77 per cent for men. The causes of death structure for older age groups clearly differs from that of the working-age population: the share of neoplasms, suicides, accidents and alcohol-related causes of death is smaller than among working-age people.

The most common cause of death category for persons aged over 65 was diseases of the circulatory system, which caused 40 per cent of the deaths. The share of diseases of the circulatory system in causes of death grows with age: For those aged 65 to 74 they killed one-third and for those aged over 90 as many as one-half (Figure 1). Correspondingly, the share of neoplasms in causes of death diminishes by age. Only eight per cent of those deceased at the age of over 90 died of neoplasms.

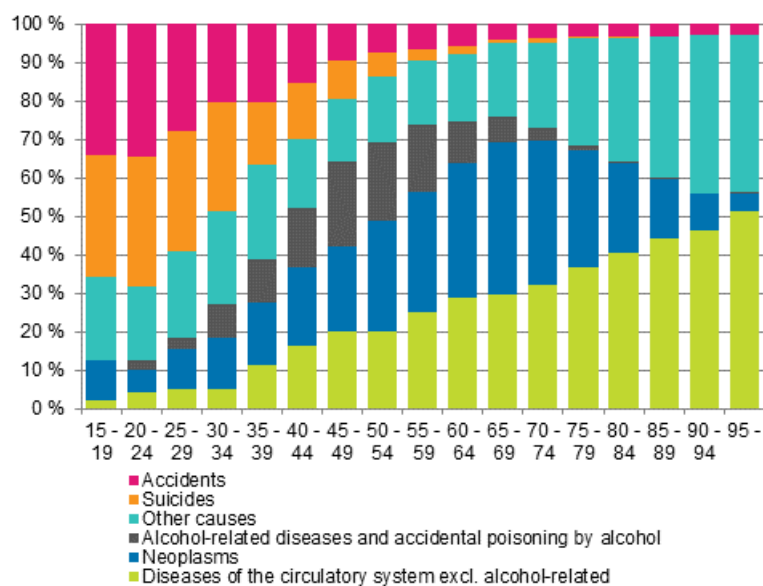
The importance of dementia, including Alzheimer's disease as a cause of death has grown strongly. In 2014, dementia was the third most common cause of death category for elderly people after diseases of the circulatory system and neoplasms. Nearly one-fifth of persons who had turned 65 and one-third of those aged over 95 died of dementia. Dementia mortality has developed over the past twenty years in a similar fashion for both men and women (Figure 5). According to Eurostat's statistics for 2012, the dementia mortality of men and women in Finland is biggest in EU countries relative to the population.

In 2014, one in five of the persons who committed a suicide were aged 65 or over. The share of suicides in causes of death for elderly people is, however, very low, under one per cent. In an international comparison, the suicide mortality of Finns aged over 65 did not differ from the average for EU countries in 2012. Additional information on the causes of death of persons aged 65 or over can be found in Appendix tables 1a-c and database tables.

Table 2. Main causes of death among persons aged 65 or over in 2014

54-group time series classification	Total	Males	Females	Total	Males	Females
	Number	Number	Number	%	%	%
04–22 Neoplasms	9 768	5 109	4 659	22	26	20
- Malignant neoplasm of larynx, trachea, bronchus and lung	1 715	1 098	617	4	6	3
- Malignant neoplasm of lymphoid, haematopoietic and related tissue	1 002	500	502	2	3	2
- Malignant neoplasm of pancreas	857	401	456	2	2	2
25 Dementia, Alzheimer's disease	8 071	2 476	5 595	19	13	24
27–30 Diseases of the circulatory system	17 593	7 894	9 699	40	40	41
- Ischaemic heart diseases	9 340	4 682	4 658	21	24	20
31–35 Disease of the respiratory system	1 635	1 012	623	4	5	3
41 Alcohol related diseases and accidental poisoning by alcohol	583	418	165	1	2	1
42–49 Accidents	1 410	756	654	3	4	3
Suicides	163	126	37	0	1	0
Other causes of death	4 313	2 008	2 305	10	10	10
01–54 Deaths total	43 536	19 799	23 737	100	100	100

Figure 1. Proportions of causes of death by age groups in 2014



2. Ischaemic heart disease still the cause of one in five deaths

Of the main cause of death categories, most Finns died of diseases of the circulatory system in 2014. Their importance as a cause of death has decreased, however, over the past twenty years from 46 to 37 per cent. Simultaneously, men's and women's age-standardised mortality from diseases of the circulatory system has declined by over 40 per cent (Appendix figure 4).

Among diseases of the circulatory system, ischaemic heart disease is still one of the most common causes of death for Finns, even though mortality from ischaemic heart disease has decreased considerably in Finland. Ischaemic heart disease still caused every fifth death and over 10,000 persons died of it in 2014. Slightly over one-half of them were men. Persons dying of this disease are older than before. In 1971, nearly four out of ten persons that died of ischaemic heart disease were of working-age, while in 2014 only one in ten was of working-age. The median average age for those dying of ischaemic heart disease in 1971 was for men 65 years and for women 73 years, while the corresponding figures in 2014 were 78 and 87 years.

Figure 2 shows ischaemic heart disease mortality age-standardised. In age standardisation, the effect of the age structure of the population and its changes are eliminated. Then it is seen in which level mortality from ischaemic heart disease would be if the age structure of the population remained unchanged during the whole reference period. The new standard population of Eurostat is used as the standard population in age-standardisation. When the ageing of the population is eliminated from the figures by age standardisation, it can be seen that ischaemic heart disease mortality has fallen evenly over the last 40 years. In 2014, ischaemic heart disease mortality decreased further for both men and women.

Of the main cause of death categories, second most Finns died of neoplasms. In 2014, they caused nearly one in four deaths. Over the past ten years, age-standardised neoplasm mortality has decreased by over ten per cent for men and slightly less for women, that is, six per cent (Appendix figure 5). The most common type of cancer resulting in death was still lung cancer for men and breast cancer for women. In 2014, a total of 1,400 men and 800 women died from carcinoma of the larynx, carcinoma of the tracheitis and lung cancer. Among men, lung cancer mortality has decreased since the beginning of the 1980s. Women's lung cancer mortality has, however, been growing slowly over the past ten years (Figure 3).

Figure 2. Age-standardised mortality from ischaemic heart disease in 1971 to 2014

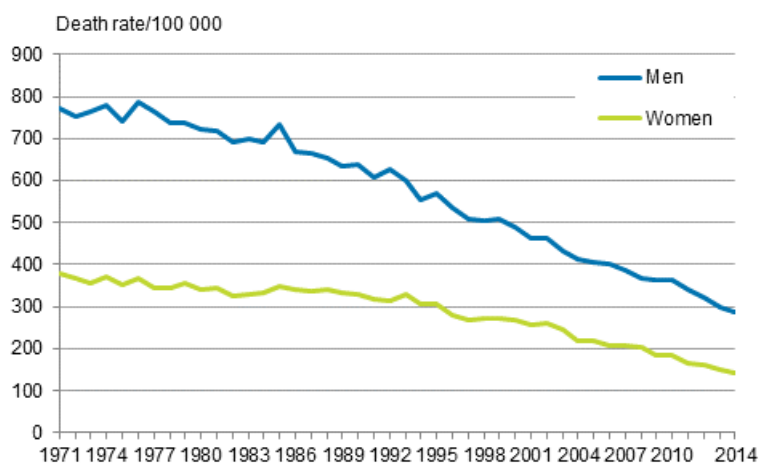
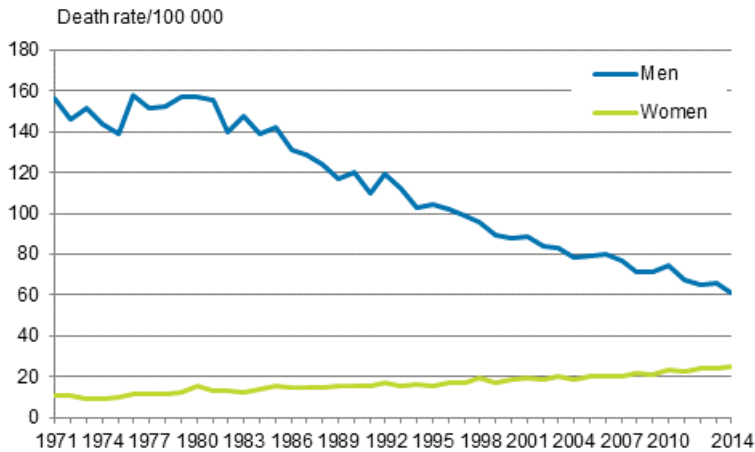


Figure 3. Age-standardised carcinoma of larynx, trachea and lung 1971 to 2014

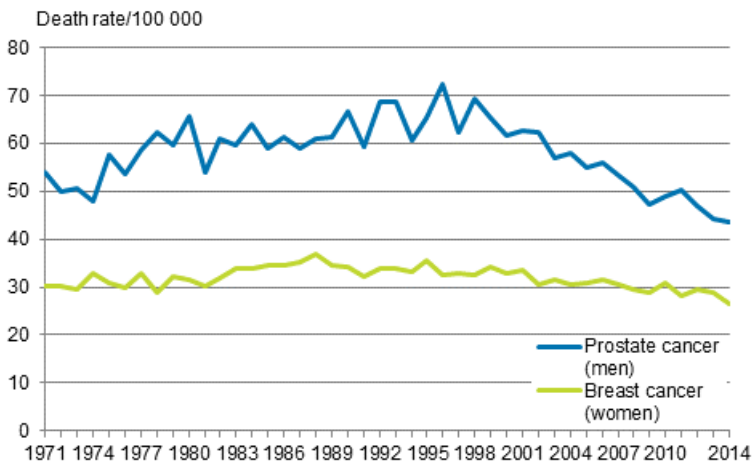


The most common type of cancer causing death among women is breast cancer. In 2014, the number of deaths from breast cancer among women totalled 813, that is, 29 deaths per 100,000 women. One in three of those dying of breast cancer was aged under 65. Nearly as many working-age women died from breast cancer as from alcohol-related causes. The total number of those dying from breast cancer has varied by year and in 2014, the number was on level with ten years earlier. Age-standardised breast cancer mortality has remained more or less unchanged since the 1970s, but the age-standardised figures of recent years indicate that breast cancer mortality is falling, however (Figure 4).

After lung cancer, prostate cancer is the second most common type of cancer resulting in death. In 2014, altogether 859 men died from prostate cancer, which was slightly more than women dying from breast cancer. Prostate cancer mortality is on level with women's breast cancer mortality, that is, 32 deaths per 100,000 men.

Above all, prostate cancer is a common cause of death for aged men; more than nine out of ten of the deceased were over 65. Men's age-standardised prostate cancer mortality has decreased clearly in the 21st century, even though the numbers of deaths from prostate cancer have been growing since the 1990s.

Figure 4. Age-standardised prostate cancer mortality for men and breast cancer mortality for women 1971 to 2014

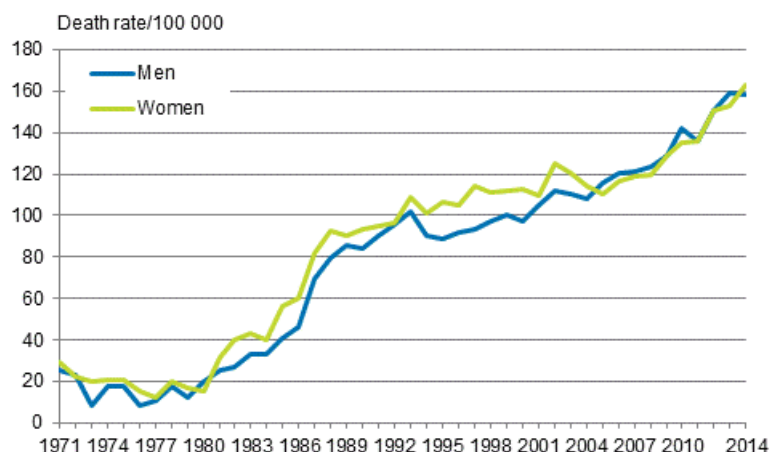


3. Deaths from dementia and Alzheimer's disease are increasing

In 2014, more than 8,100 Finns died from dementia including Alzheimer's disease. The number of deaths from dementia has more than doubled over the past ten years. The growth is also visible in the age-standardised figures (Figure 5), where the effects of the population structure are taken into consideration. The growth is in part the result of more specific diagnostics and changes in the definitions of causes of death (WHO guidelines). From 2005, cause of death statistics have adopted an international guideline that limits the use of pneumonia as a primary cause of death in connection with several chronic diseases. If a person is suffering from, for example, dementia in addition to pneumonia, dementia is selected as the primary cause of death in the statistics.

Dementia mortality has developed over the past twenty years in a similar fashion for both men and women. A majority of those who die from this disease group are, however, women. The higher share of deaths from dementia among women than men is caused by women living longer than men. The average age of persons dying from dementia was 88 in 2014. Dementia mortality of Finnish men and women was the highest in EU countries relative to the population and age structure in 2012.

Figure 5. Age-standardised dementia mortality (incl. Alzheimer's disease) 1971 to 2014



4. Alcohol mortality diminished further

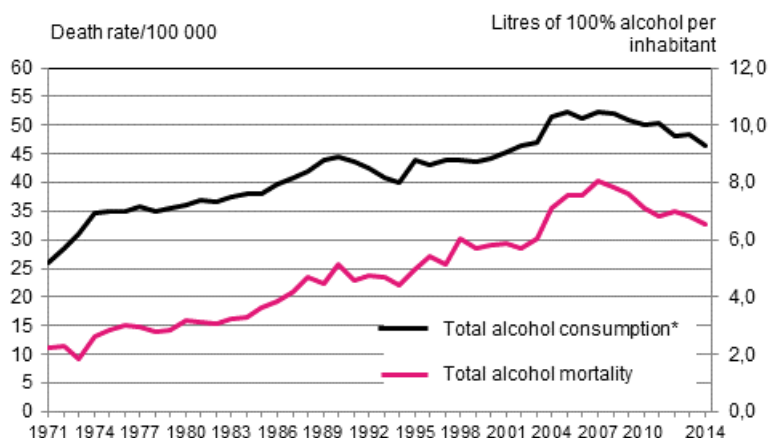
Deaths related to the use of alcohol grew relatively evenly in Finland from the 1980s until 2003, after which deaths from alcohol-related causes increased by around one-quarter within a few years. The slow decrease in the number of deaths from alcohol-related causes that started in 2008 continued in 2014. In 2014, mortality from alcohol is lower than ten years earlier. In 2014, good 1,800 persons died from alcohol-related diseases and alcohol poisonings. Of them, 1,400 were men and 400 women.

The most significant reason for high alcohol mortality is increased consumption of alcohol over the 2000s. Since 2007, total alcohol consumption has decreased, however. In 2014, converted to 100% alcohol, total consumption was 9.3 litres per capita (National Institute for Health and Welfare 2015). Changes in alcohol-related mortality has followed fairly regularly the graph for total consumption of alcoholic beverages even though alcohol-related deaths usually call for long-term detrimental use of alcohol that lasts for several years. The changes in the number of deaths from alcohol-related causes between 2009 and 2014 were mainly caused by changes in men's deaths from alcohol-related causes.

Alcohol-related deaths include both alcohol-related diseases and accidental poisonings by alcohol. Diseases related to long-term alcohol use, such as liver and heart diseases, cause a majority of deaths from alcohol-related causes. The share of alcohol poisonings in deaths from alcohol-related causes has decreased from 26 to 15 per cent over a ten-year period. In 2014, a total of 275 persons died from alcohol poisonings, of whom 79 per cent were men.

Several different diseases and alcohol poisonings have been collected into alcohol-related causes of death. The significance of the cause of death group is smaller than that of the main groups of neoplasms and the circulatory system. However, more working-age persons die of alcohol-related causes than of individual neoplasm types or ischaemic heart diseases. Alcohol is also a contributing factor to death in many fatal accidents.

Figure 6. Age-standardised mortality from alcohol-related diseases and accidental poisonings by alcohol and total consumption of alcohol in 1971 to 2014



*Source: National Institute for Health and Welfare 2015

Men die from alcohol-related causes considerably more often than women (Figure 7). Male mortality has also followed more closely changes in total consumption of alcohol. Women are lagging behind in alcohol statistics but women's mortality from alcohol-related causes has also risen evenly over several decades following men's mortality from alcohol-related causes.

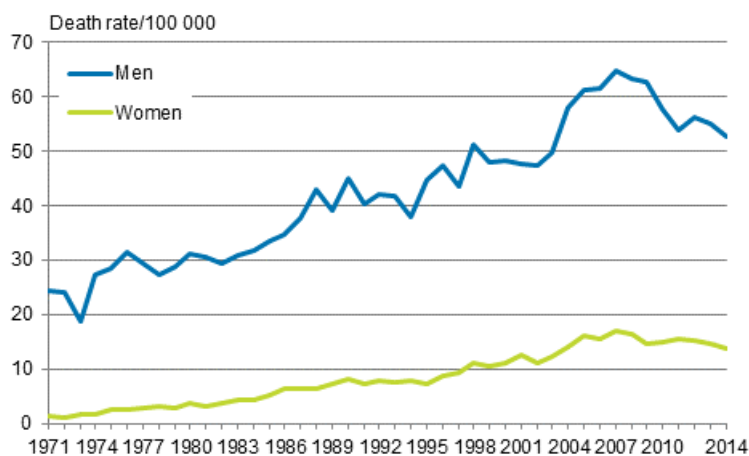
Persons who died from alcohol-related causes are older than before. During the past ten years, mortality from alcohol among both men and women aged 65 or over has grown considerably faster than in younger age groups and has increased nearly 1.5-fold. A majority, or nearly seven out of ten, of those who died from alcohol-related causes are still of working-age. The share of aged people among deaths from alcohol-related causes is increasing, however. In 2014, the average age of men dying of alcohol-related

causes was 59 years and that of women 62 years. The share of persons aged over 65 has grown by 15 percentage points over the past ten years from 17 to 32 per cent.

In 2014, the share of alcohol-related causes in all deaths was four per cent. Alcohol-related causes of death are more common for middle-aged people than for retirement-age people because the mortality in younger age groups as a whole is clearly lower than for older age groups. Among men who died between the ages of 45 and 54, alcohol-related causes were the cause of death for one-in-four, or 26 per cent and among those who died between the ages of 65 and 74 it was clearly lower at five per cent.

In addition to the underlying cause of death, alcohol is a contributing factor to death in many fatal accidents. The share of intoxication in accidents will be discussed in the following section.

Figure 7. Age-standardised mortality from alcohol-related diseases and accidental poisonings by alcohol in 1971 to 2014



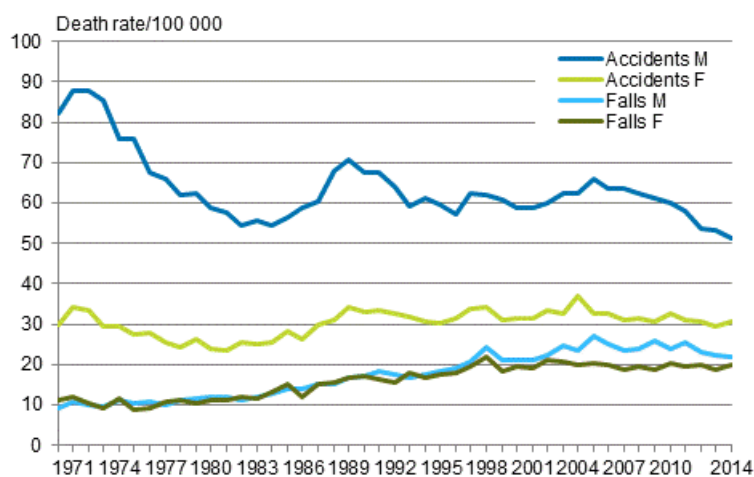
5. Stumbling the commonest reason for fatal accidents

The most common reasons for deaths from accidents are fatal traffic accidents, fatal falls and stumbles, drownings, poisonings, and fatal fires. In this publication, all other poisonings apart from alcohol poisonings that belong to alcohol-related causes are considered accidents.

In 2014, accidents caused good four per cent of all deaths. Accidents were the cause of the death of over 2,200 persons, of whom 1,400 were men and 800 women. The total number of deaths from accidents has diminished slowly but nearly continuously since 2004. The decreased mortality is mainly due to a fall in the number of fatal traffic accidents. Women's accident mortality is clearly lower than men's but the accident mortality of men in particular has developed favourably in recent years and the difference between men and women is narrowing down.

Examined by age group, six out of ten persons who died from accidents in 2014 were aged over 65. Aged people in particular died from fatal stumbling and falls more than other age groups.

Figure 8. Accident mortality in 1970 to 2014



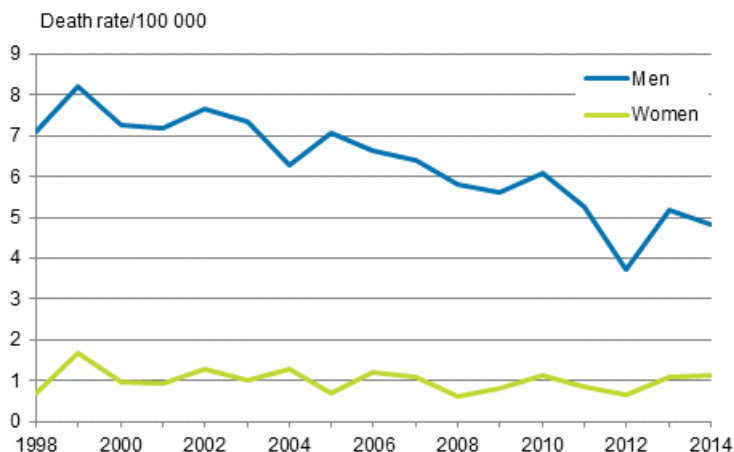
The commonest accident leading to death is stumbling or falling. In 2014, stumbling and falling caused the death of over 1,100 persons, which is around one-half of all fatal accidents. Approximately one-half of stumbling accidents took place inside one's home or in its immediate vicinity and one-quarter in care institutions. Nine out of ten stumbles resulting in death occurred to persons aged over 65. In absolute numbers, more deaths occurred among elderly women than elderly men but relative to the number of living people, elderly men had more stumbles resulting in death than women in relative terms.

The second most common fatal accidents were transport accidents. There were 255 deaths in transport accidents (excl. drowning accidents in water traffic) in 2014. The number of deaths has decreased by over one-third over the past ten years. Suicides are not included in deaths in transport accidents.

Drowning accidents usually include drowning from falling into water and drowning while swimming or boating. In 2014, a total of 161 persons died in drowning accidents of which 46 in water traffic. Most drowning victims, over 80 per cent, were men. Drowning deaths decreased clearly in a few previous years but the figures became gloomier again in 2013 (Figure 8).

There were clearly more deaths in fatal fires in 2014 than in the previous year. Fires claimed 70 lives, while in the year before, the number of victims was record low, 47. Seven out of ten victims were men. There were 44 deaths caused by the heat of sauna and 60 deaths caused by hypothermia.

Figure 9. Mortality from drowning accidents 1998 to 2014



Nearly half of those dying by drowning were intoxicated

In 2014, alcohol was a contributing factor in one in six fatal accidents, on average. Sixteen per cent of those who died in fatal accidents were intoxicated, i.e. 316 persons (Appendix table 2). Ten years ago, the corresponding share was 23 per cent of fatal accidents. In fatal accidents, intoxication means that the doctor signing the death certificate mentions that alcohol had contributed to the death. The figures exclude alcohol and drug poisonings where alcohol or drugs have not directly caused the death.

In 2014, intoxication was most common in deaths by drowning. Nearly half of those dying by drowning were under the influence of alcohol. Similarly, nearly half of the persons that died in fires or by hypothermia were also intoxicated. In traffic deaths, one in six were intoxicated at the time of death. By contrast, in stumbling accidents, of which a majority occurred among persons aged over 70, only one in ten were under the influence of alcohol.

Four out of five persons that died accidentally from drugs were men.

The total number of fatal poisonings (excl. alcohol poisonings) has fallen by 28 per cent from 2011. In 2014, their number was 243 cases, which was 51 fewer than in the year before. The average age of those dying of fatal poisonings was 39 years for men and 55 years for women.

In 2014, the number of deaths caused by drugs was 176, which is 25 fewer than in the previous year. When calculating drug-related deaths, Statistics Finland uses a classification (Selection B) compiled by the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) that publishes statistics and reports on its Internet site: www.emcdda.europa.eu.

According to the EMCDDA, cases where the underlying cause of death is drug psychoses, accidental poisoning, self-inflicted poisoning, and poisoning with undetermined intent are calculated as drug-related deaths. Deaths caused by drug psychoses are usually a result of drug addiction and long-term drug use. Accidental drug poisonings are cases where the death occurs shortly after the consumption of the substance. They can often also be referred to as overdoses. Self-inflicted poisonings with drugs are suicides. In 2014, twenty-nine suicides were committed with drugs. In poisonings with undetermined intent, the intent remains unclear.

Table 3. Drug-related mortality 2000 to 2014

	Total	Males	Females	Total	Males	Females
	Number	Number	Number	Per 100 000 mean population	Per 100 000 mean population	Per 100 000 mean population
2000	134	109	25	2,6	4,3	0,9
2001	110	78	32	2,1	3,1	1,2
2002	97	69	28	1,9	2,7	1,1
2003	101	76	25	1,9	3,0	0,9
2004	135	96	39	2,6	3,8	1,5
2005	126	95	31	2,4	3,7	1,2
2006	138	107	31	2,6	4,2	1,2
2007	143	116	27	2,7	4,5	1,0
2008	169	120	49	3,2	4,6	1,8
2009	175	130	45	3,3	5,0	1,7
2010	156	117	39	2,9	4,4	1,4
2011	197	156	41	3,7	5,9	1,5
2012	213	161	52	3,9	6,1	1,9
2013	201	148	53	3,7	5,5	1,9
2014	176	141	35	3,2	5,2	1,3

The drugs referred to in the EMCDDA's classification are mainly opioids. In addition to opioids, drugs also refer to cannabis and cannabinoids, other hallucinogens, and stimulants suitable for abuse, such as amphetamine and its derivatives. In 2014, four out of five drug-related deaths were associated with accidental overdoses of opioids.

The numbers of deaths have been calculated in accordance with the WHO's recommendation based on the substance judged as most influential. In many cases, the death is the result of multiple substance poisoning where the person has also digested other substances like alcohol and/or psychopharmacoons.

Considerably fewer women than men die from drugs. In 2014, the share of women among all drug-related deaths was one fifth. Fifteen of the persons that died in accidents from drugs were women but in suicides committed with drugs, the share of women was clearly higher, 38 per cent. Most drug-related deaths in absolute numbers occurred among persons aged 25 to 29.

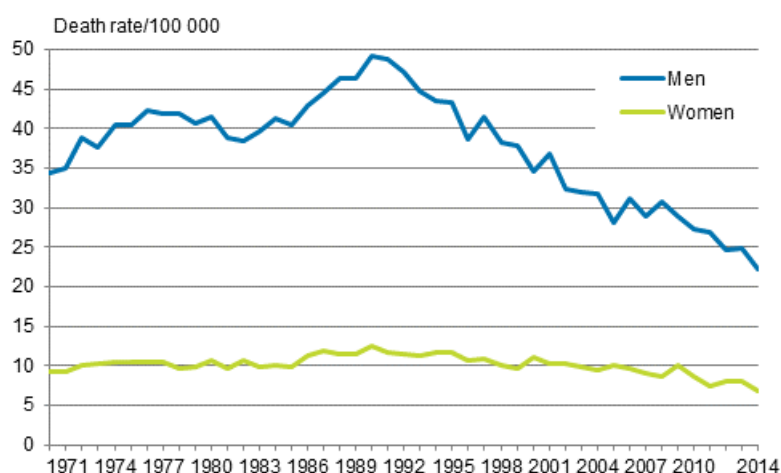
6. Number of suicides fell clearly

In 2014, suicides were committed by 789 persons, which was nearly 100 fewer than in the year before. The number of suicides was at its highest in 1990, when there were over 1,500 suicides in Finland. Since then, suicide mortality has decreased by nearly 30 per cent in ten years.

Men's suicide mortality is much higher than women's. In 2014, suicide mortality or the number of suicides a year per 100,000 population was 14.4, being 22.3 for men and 6.9 for women. Three out of four of the persons who committed a suicide were men.

Suicides are a central cause of death for young people. One-third of young people aged between 15 and 24 that died had committed suicides. The share of suicides in all causes of death is high because other mortality among young people is so low. Of all persons that committed suicides, one in ten were young people aged under 25. The suicide mortality of young men has been declining in Finland in recent years. Suicide mortality among young women has, in turn, remained relatively unchanged, but it is clearly lower than among young men. Young people's suicide mortality in Finland is high by European comparison. According to Eurostat's statistics for 2012, suicide mortality among young people was higher than in Finland only in Lithuania and Latvia. By contrast, for persons aged 65 and over, suicide mortality in Finland did not differ from the EU average. Of those who committed suicides, one in five were aged over 65.

Figure 10. Suicide mortality 1970 to 2014



7. Three maternal deaths in 2014

The number of children who died under the age of one year grew from 2013, but the infant mortality rate was exceptionally low in 2013. In 2014, overall 125 children died in infancy, that is, under the age of one, which was 27 more children than in 2013. Infant mortality was 2.2 per 1,000 live-born children. The main causes of death among children under the age of one were perinatal reasons and inborn malformations (Table 3). Infectious diseases, accidents and violence are rare causes of death for infants.

In 2014, there were 163 stillbirths, which was slightly higher than in the year before (147). Perinatal mortality (deaths during the first week and stillborn) was 3.9 per thousand births. Around one-half of children dying during their first year of life die during their first week of life (in the early neonatal period) and 65 per cent during the first four weeks of life (in the neonatal period). The main causes of death after the neonatal period are inborn malformations and cot deaths. In 2014, there were 14 cot deaths. Cot deaths mostly occur to children over the age of one month.

The mortality of children aged 1 to 14 has nearly halved over the past twenty years. In 2014, the number of deaths among children was 87, which is nine more than in the previous year. This corresponds with approximately 10 deaths per 100,000 children. The commonest causes of death for children aged 1 to 14 were cancers and accidents.

Over the past ten years, women dying from reasons related to pregnancy or childbirth has been three per year, on average. The year 2011 was the first year in the history of the statistics on causes of death when there were no maternal deaths. In 2014, there were three maternal deaths, which meant that maternal mortality was 5.2 deaths per 100,000 live-born children.

More information about mortality during infant and perinatal period can be found in Appendix table 3.

Figure 11. Mortality during infant and perinatal period in 1992–2014

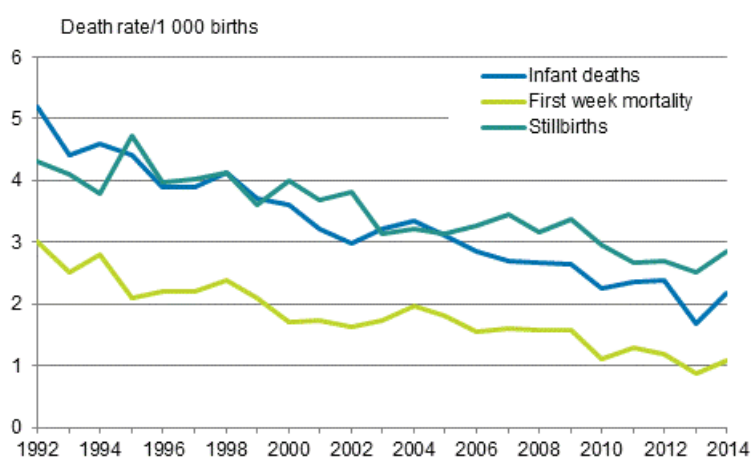


Table 4. Causes of death among children under the age of one 2002, 2009, 2012 and 2014

	2002	2009	2012	2013	2014
Total deaths	165	160	141	98	125
Certain conditions originating in the perinatal period (P00–P96)	75	74	51	41	46
Congenital malformations and chromosomal abnormalities (Q00–Q99)	51	52	43	31	42
Sudden infant death syndrome (R95)	13	15	12	11	14
Diseases of circulatory system and respiratory system (J00–J99, I00–I99)	4	5	7	3	3
Endocrine, nutritional and metabolic diseases (E00–E90)	0	5	5	3	6
Other diseases and unknown	17	4	19	7	10
Accidents and assault (V01–Y89)	5	5	4	2	4

Appendix tables

Appendix table 1a. Deaths by underlying cause of death and by age in 2014, both sexes

Underlying cause of death (54-group classification)	Ages total	0–14	15–64	65–
01-54 TOTAL DEATHS (A00-Y89)	52 409	212	8 661	43 536
01-41 DISEASES AND ACCIDENTAL POISONING BY ALCOHOL (A00-R99, X45)	48 730	185	6 928	41 617
01-03 Certain infectious and parasitic diseases (A00-B99, J65)	310	3	50	257
01 Tuberculosis (A15-A19, B90, J65)	40	0	0	40
02 Human immunodeficiency virus (HIV) disease (B20-B24)	3	0	3	0
03 Other infectious and parasitic diseases (A00-A09, A20-B19, B25-B89, B91-B99)	267	3	47	217
04-22 Neoplasms (C00-D48)	12 270	23	2 479	9 768
04-21 Malignant neoplasms (C00-C97)	11 915	23	2 452	9 440
04 Malignant neoplasms of lip, oral cavity and pharynx (C00-C14)	217	0	66	151
05 Malignant neoplasm of oesophagus (C15)	274	0	80	194
06 Malignant neoplasm of stomach (C16)	413	0	94	319
07 Malignant neoplasm of colon (C18, C19)	821	0	169	652
08 Malignant neoplasm of rectum, anus and anal canal (C20-C21)	408	0	86	322
09 Primary malignant neoplasm of liver and intrahepatic bile ducts (C22)	489	0	95	394
10 Malignant neoplasm of pancreas (C25)	1 080	0	223	857
11 Malignant neoplasm of larynx, trachea, bronchus and lung (C32-C34)	2 192	0	477	1 715
12 Malignant melanoma of skin (C43)	228	0	57	171
13 Malignant neoplasm of breast (C50)	817	0	255	562
14 Malignant neoplasm of cervix uteri (C53)	53	0	18	35
15 Malignant neoplasm of uterus (C54-C55)	194	0	35	159
16 Malignant neoplasm of ovary (C56)	346	0	86	260
17 Malignant neoplasm of prostate (C61)	859	0	55	804
18 Malignant neoplasm of kidney (C64)	360	0	68	292
19 Malignant neoplasm of bladder (C67)	242	0	28	214
20 Malignant neoplasm of lymphoid, haematopoietic and related tissue (C81-C96)	1 177	4	171	1 002
21 Other malignant neoplasms	1 745	19	389	1 337
22 Other neoplasms (D00-D48)	355	0	27	328
23-24 Endocrine, nutritional and metabolic diseases (E00-E90)	679	19	154	506
23 Diabetes mellitus (E10-E14)	498	1	112	385
24 Other endocrine, nutritional and metabolic diseases (E00-E09, E15-E90)	181	18	42	121
25 Dementia, Alzheimers disease (F01, F03, G30, R54)	8 116	0	45	8 071
26 Other diseases of the nervous system and sense organs excl. alcohol-related	1 645	14	252	1 379
27-30 Diseases of the circulatory system excl. alcohol-related (I00-I425, I427-I99)	19 555	4	1 958	17 593
27 Ischaemic heart diseases (I20-I25)	10 337	0	997	9 340
28 Other heart diseases excl. rheumatic and alcohol-related (I30-I425, I427-I52)	1 844	2	314	1 528
29 Cerebrovascular diseases (I60-I69)	4 428	1	381	4 046
30 Other diseases of the circulatory system (I00-I15, I26-I28, I70-I99)	2 946	1	266	2 679
31-35 Diseases of the respiratory system (J00-J64, J66-J99)	1 837	4	198	1 635
31 Influenza (J09-J11)	45	1	12	32
32 Pneumonia (J12-J18, J849)	204	2	23	179
33 Bronchitis and emphysema (J40-J44, J47)	1 167	0	125	1 042
34 Asthma (J45-J46)	89	0	4	85
35 Other diseases of the respiratory system (J00-J06, J20-J39, J60-J64, J66-J848, J85-J99)	332	1	34	297

Underlying cause of death (54-group classification)	Ages total	0–14	15–64	65–
36 Diseases of the digestive system excl. alcohol-related diseases	1 253	1	197	1 055
37 Diseases of the genitourinary system (N00-N99)	315	2	26	287
38 Congenital malformations (Q00-Q99)	177	51	84	42
39 Other diseases excl. alcohol-related	557	62	126	369
40 Ill-defined and unknown causes of mortality (R96-R99)	175	2	101	72
41 Alcohol-related diseases and accidental poisoning by alcohol	1 841	0	1 258	583
42-53 ACCIDENTS AND VIOLENCE excl. accidental poisoning by alcohol (V01-X44, X46-Y89)	3 202	27	1 564	1 611
42-49 Accidents excl. accidental poisoning by alcohol (V01-X44, X46-X59, Y10-Y15, Y85-Y86)	2 226	18	798	1 410
42 Land traffic accidents	201	9	131	61
43 Other land transport accidents	41	0	26	15
44 Water transport accidents (V90-V94)	47	0	26	21
45 Others and unspecified transport accidents (V95-V99)	12	0	10	2
46 Accidental falls (W00-W19)	1 141	1	149	991
47 Accidental drownings (W65-W74)	115	2	62	51
48 Accidental poisonings excl. accidental poisoning by alcohol (X40-X44, X46-X49, Y10-Y15)	243	0	210	33
49 Other accidents and sequelae of accidents	426	6	184	236
50 Suicides (X60-X84, Y87.0)	789	2	624	163
51 Assault (X85-Y09, Y87.1)	78	6	67	5
52 Event of undetermined intent (Y16-Y34, Y87.2)	93	1	72	20
53 Other external causes and sequelae of other external causes (Y35-Y84, Y88-Y89)	16	0	3	13
54 NO DEATH CERTIFICATE	477	0	169	308

Appendix table 1b. Deaths by underlying cause of death and by age in 2014, males

Underlying cause of death (54-group classification)	Ages total	0–14	15–64	65–
01-54 TOTAL DEATHS (A00-Y89)	25 864	116	5 949	19 799
01-41 DISEASES AND ACCIDENTAL POISONING BY ALCOHOL (A00-R99, X45)	23 454	100	4 631	18 723
01-03 Certain infectious and parasitic diseases (A00-B99, J65)	139	3	27	109
01 Tuberculosis (A15-A19, B90, J65)	19	0	0	19
02 Human immunodeficiency virus (HIV) disease (B20-B24)	0	0	0	0
03 Other infectious and parasitic diseases (A00-A09, A20-B19, B25-B89, B91-B99)	120	3	27	90
04-22 Neoplasms (C00-D48)	6 476	13	1 354	5 109
04-21 Malignant neoplasms (C00-C97)	6 314	13	1 339	4 962
04 Malignant neoplasms of lip, oral cavity and pharynx (C00-C14)	143	0	52	91
05 Malignant neoplasm of oesophagus (C15)	185	0	62	123
06 Malignant neoplasm of stomach (C16)	244	0	59	185
07 Malignant neoplasm of colon (C18, C19)	401	0	100	301
08 Malignant neoplasm of rectum, anus and anal canal (C20-C21)	245	0	54	191
09 Primary malignant neoplasm of liver and intrahepatic bile ducts (C22)	303	0	66	237
10 Malignant neoplasm of pancreas (C25)	535	0	134	401
11 Malignant neoplasm of larynx, trachea, bronchus and lung (C32-C34)	1 417	0	319	1 098
12 Malignant melanoma of skin (C43)	145	0	39	106
13 Malignant neoplasm of breast (C50)	4	0	1	3
14 Malignant neoplasm of cervix uteri (C53)	0	0	0	0
15 Malignant neoplasm of uterus (C54-C55)	0	0	0	0
16 Malignant neoplasm of ovary (C56)	0	0	0	0
17 Malignant neoplasm of prostate (C61)	859	0	55	804
18 Malignant neoplasm of kidney (C64)	203	0	46	157
19 Malignant neoplasm of bladder (C67)	168	0	19	149
20 Malignant neoplasm of lymphoid, haematopoietic and related tissue (C81-C96)	600	2	98	500
21 Other malignant neoplasms	862	11	235	616
22 Other neoplasms (D00-D48)	162	0	15	147
23-24 Endocrine, nutritional and metabolic diseases (E00-E90)	352	9	98	245
23 Diabetes mellitus (E10-E14)	270	0	73	197
24 Other endocrine, nutritional and metabolic diseases (E00-E09, E15-E90)	82	9	25	48
25 Dementia, Alzheimers disease (F01, F03, G30, R54)	2 499	0	23	2 476
26 Other diseases of the nervous system and sense organs excl. alcohol-related	830	8	124	698
27-30 Diseases of the circulatory system excl. alcohol-related (I00-I425, I427-I99)	9 421	3	1 524	7 894
27 Ischaemic heart diseases (I20-I25)	5 532	0	850	4 682
28 Other heart diseases excl. rheumatic and alcohol-related (I30-I425, I427-I52)	905	2	240	663
29 Cerebrovascular diseases (I60-I69)	1 786	1	240	1 545
30 Other diseases of the circulatory system (I00-I15, I26-I28, I70-I99)	1 198	0	194	1 004
31-35 Diseases of the respiratory system (J00-J64, J66-J99)	1 149	3	134	1 012
31 Influenza (J09-J11)	21	1	8	12
32 Pneumonia (J12-J18, J849)	114	1	16	97
33 Bronchitis and emphysema (J40-J44, J47)	790	0	83	707
34 Asthma (J45-J46)	23	0	2	21
35 Other diseases of the respiratory system (J00-J06, J20-J39, J60-J64, J66-J848, J85-J99)	201	1	25	175
36 Diseases of the digestive system excl. alcohol-related diseases	582	0	131	451
37 Diseases of the genitourinary system (N00-N99)	141	1	19	121

Underlying cause of death (54-group classification)	Ages total	0–14	15–64	65–
38 Congenital malformations (Q00-Q99)	87	31	39	17
39 Other diseases excl. alcohol-related	240	27	72	141
40 Ill-defined and unknown causes of mortality (R96-R99)	108	2	74	32
41 Alcohol-related diseases and accidental poisoning by alcohol	1 430	0	1 012	418
42-53 ACCIDENTS AND VIOLENCE excl. accidental poisoning by alcohol (V01-X44, X46-Y89)	2 102	16	1 187	899
42-49 Accidents excl. accidental poisoning by alcohol (V01-X44, X46-X59, Y10-Y15, Y85-Y86)	1 379	11	612	756
42 Land traffic accidents	144	4	99	41
43 Other land transport accidents	34	0	23	11
44 Water transport accidents (V90-V94)	44	0	24	20
45 Others and unspecified transport accidents (V95-V99)	10	0	8	2
46 Accidental falls (W00-W19)	587	1	116	470
47 Accidental drownings (W65-W74)	87	1	50	36
48 Accidental poisonings excl. accidental poisoning by alcohol (X40-X44, X46-X49, Y10-Y15)	179	0	157	22
49 Other accidents and sequelae of accidents	294	5	135	154
50 Suicides (X60-X84, Y87.0)	599	1	472	126
51 Assault (X85-Y09, Y87.1)	51	3	45	3
52 Event of undetermined intent (Y16-Y34, Y87.2)	69	1	57	11
53 Other external causes and sequelae of other external causes (Y35-Y84, Y88-Y89)	4	0	1	3
54 NO DEATH CERTIFICATE	308	0	131	177

Appendix table 1c. Deaths by underlying cause of death and by age in 2014, females

Underlying cause of death (54-group classification)	Ages total	0–14	15–64	65–
01-54 TOTAL DEATHS (A00-Y89)	26 545	96	2 712	23 737
01-41 DISEASES AND ACCIDENTAL POISONING BY ALCOHOL (A00-R99, X45)	25 276	85	2 297	22 894
01-03 Certain infectious and parasitic diseases (A00-B99, J65)	171	0	23	148
01 Tuberculosis (A15-A19, B90, J65)	21	0	0	21
02 Human immunodeficiency virus (HIV) disease (B20-B24)	3	0	3	0
03 Other infectious and parasitic diseases (A00-A09, A20-B19, B25-B89, B91-B99)	147	0	20	127
04-22 Neoplasms (C00-D48)	5 794	10	1 125	4 659
04-21 Malignant neoplasms (C00-C97)	5 601	10	1 113	4 478
04 Malignant neoplasms of lip, oral cavity and pharynx (C00-C14)	74	0	14	60
05 Malignant neoplasm of oesophagus (C15)	89	0	18	71
06 Malignant neoplasm of stomach (C16)	169	0	35	134
07 Malignant neoplasm of colon (C18, C19)	420	0	69	351
08 Malignant neoplasm of rectum, anus and anal canal (C20-C21)	163	0	32	131
09 Primary malignant neoplasm of liver and intrahepatic bile ducts (C22)	186	0	29	157
10 Malignant neoplasm of pancreas (C25)	545	0	89	456
11 Malignant neoplasm of larynx, trachea, bronchus and lung (C32-C34)	775	0	158	617
12 Malignant melanoma of skin (C43)	83	0	18	65
13 Malignant neoplasm of breast (C50)	813	0	254	559
14 Malignant neoplasm of cervix uteri (C53)	53	0	18	35
15 Malignant neoplasm of uterus (C54-C55)	194	0	35	159
16 Malignant neoplasm of ovary (C56)	346	0	86	260
17 Malignant neoplasm of prostate (C61)	0	0	0	0
18 Malignant neoplasm of kidney (C64)	157	0	22	135
19 Malignant neoplasm of bladder (C67)	74	0	9	65
20 Malignant neoplasm of lymphoid, haematopoietic and related tissue (C81-C96)	577	2	73	502
21 Other malignant neoplasms	883	8	154	721
22 Other neoplasms (D00-D48)	193	0	12	181
23-24 Endocrine, nutritional and metabolic diseases (E00-E90)	327	10	56	261
23 Diabetes mellitus (E10-E14)	228	1	39	188
24 Other endocrine, nutritional and metabolic diseases (E00-E09, E15-E90)	99	9	17	73
25 Dementia, Alzheimers disease (F01, F03, G30, R54)	5 617	0	22	5 595
26 Other diseases of the nervous system and sense organs excl. alcohol-related	815	6	128	681
27-30 Diseases of the circulatory system excl. alcohol-related (I00-I425, I427-I99)	10 134	1	434	9 699
27 Ischaemic heart diseases (I20-I25)	4 805	0	147	4 658
28 Other heart diseases excl. rheumatic and alcohol-related (I30-I425, I427-I52)	939	0	74	865
29 Cerebrovascular diseases (I60-I69)	2 642	0	141	2 501
30 Other diseases of the circulatory system (I00-I15, I26-I28, I70-I99)	1 748	1	72	1 675
31-35 Diseases of the respiratory system (J00-J64, J66-J99)	688	1	64	623
31 Influenza (J09-J11)	24	0	4	20
32 Pneumonia (J12-J18, J849)	90	1	7	82
33 Bronchitis and emphysema (J40-J44, J47)	377	0	42	335
34 Asthma (J45-J46)	66	0	2	64
35 Other diseases of the respiratory system (J00-J06, J20-J39, J60-J64, J66-J848, J85-J99)	131	0	9	122
36 Diseases of the digestive system excl. alcohol-related diseases	671	1	66	604
37 Diseases of the genitourinary system (N00-N99)	174	1	7	166
38 Congenital malformations (Q00-Q99)	90	20	45	25

Underlying cause of death (54-group classification)	Ages total	0–14	15–64	65–
39 Other diseases excl. alcohol-related	317	35	54	228
40 Ill-defined and unknown causes of mortality (R96-R99)	67	0	27	40
41 Alcohol-related diseases and accidental poisoning by alcohol	411	0	246	165
42-53 ACCIDENTS AND VIOLENCE excl. accidental poisoning by alcohol (V01-X44, X46-Y89)	1 100	11	377	712
42-49 Accidents excl. accidental poisoning by alcohol (V01-X44, X46-X59, Y10-Y15, Y85-Y86)	847	7	186	654
42 Land traffic accidents	57	5	32	20
43 Other land transport accidents	7	0	3	4
44 Water transport accidents (V90-V94)	3	0	2	1
45 Others and unspecified transport accidents (V95-V99)	2	0	2	0
46 Accidental falls (W00-W19)	554	0	33	521
47 Accidental drownings (W65-W74)	28	1	12	15
48 Accidental poisonings excl. accidental poisoning by alcohol (X40-X44, X46-X49, Y10-Y15)	64	0	53	11
49 Other accidents and sequelae of accidents	132	1	49	82
50 Suicides (X60-X84, Y87.0)	190	1	152	37
51 Assault (X85-Y09, Y87.1)	27	3	22	2
52 Event of undetermined intent (Y16-Y34, Y87.2)	24	0	15	9
53 Other external causes and sequelae of other external causes (Y35-Y84, Y88-Y89)	12	0	2	10
54 NO DEATH CERTIFICATE	169	0	38	131

Appendix table 2. Deaths from accidents by external cause and deaths from alcohol intoxication 2014

External cause	Deaths from accidents	Of which under alcohol intoxication	
		Persons	%
Accidental deaths (excl. poisonings)	1 983	316	15,9
Transport accidents	255	42	16,5
Falls	1 141	103	9,0
Drowning	161	76	47,2
Eating, inhalation of food (W79)	44	10	22,7
Heat of sauna (W92)	44	12	27,3
Fire (X00–X09)	70	31	44,3
Natural cold (X31)	60	25	41,7
Other accident	208	17	8,2

Appendix table 3. Mortality during infant and perinatal period 1987–2014

	Perinatal deaths (stillbirths and first week deaths)	Perinatal mortality/ 1000 births (incl. stillbirths) ¹⁾	Stillbirths	First week mortality	First week mortality/ 1,000 births	Neonatal deaths	Neonatal mortality ²⁾	Infant deaths	Infant mortality ³⁾
1987	505	8,4	311	194	3,2	252	4,2	370	6,2
1988	530	8,3	333	197	3,1	250	3,9	385	6,1
1989	495	7,8	282	213	3,4	261	4,1	382	6,0
1990	507	7,7	307	200	3,1	245	3,7	368	5,6
1991	531	8,1	305	226	3,5	276	4,2	383	5,9
1992	490	7,3	288	202	3,0	248	3,7	344	5,2
1993	428	6,6	267	161	2,5	195	3,0	285	4,4
1994	431	6,6	248	183	2,8	220	3,4	300	4,6
1995	429	6,8	299	130	2,1	172	2,8	251	4,0
1996	378	6,2	242	136	2,2	176	2,9	238	3,9
1997	368	6,2	239	129	2,2	165	2,8	233	3,9
1998	373	6,5	237	136	2,4	169	3,0	236	4,1
1999	329	5,7	208	121	2,1	154	2,7	213	3,7
2000	325	5,7	228	97	1,7	136	2,4	205	3,6
2001	306	5,4	208	98	1,7	122	2,2	181	3,2
2002	304	5,5	213	91	1,6	117	2,1	165	3,0
2003	276	4,9	178	98	1,7	120	2,1	182	3,2
2004	300	5,2	187	113	2,0	142	2,5	193	3,3
2005	286	4,9	182	104	1,8	125	2,2	179	3,1
2006	284	4,8	193	91	1,5	119	2,0	168	2,9
2007	298	5,1	204	94	1,6	109	1,9	159	2,7
2008	283	4,7	189	94	1,6	116	1,9	159	2,7
2009	300	4,9	205	95	1,6	122	2,0	160	2,6
2010	248	4,1	181	67	1,1	91	1,5	138	2,3
2011	239	4,0	161	78	1,3	97	1,6	142	2,4
2012	232	3,9	161	71	1,2	85	1,4	141	2,4
2013	197	3,4	147	50	0,9	61	1,0	98	1,7
2014	225	3,9	163	62	1,1	81	1,4	125	2,2

1) Perinatal mortality = Stillborn (the duration of the mother's pregnancy at least 22 weeks or birth weight at least 500 g) and deaths during the first week of life per thousand births (incl. stillborn).

2) Neonatal mortality = The number of deaths during the four first weeks of life per thousand live births.

3) Infant mortality = The number of deaths at under one year per thousand live births.

Appendix table 4. Mean population 2014 by age and sex

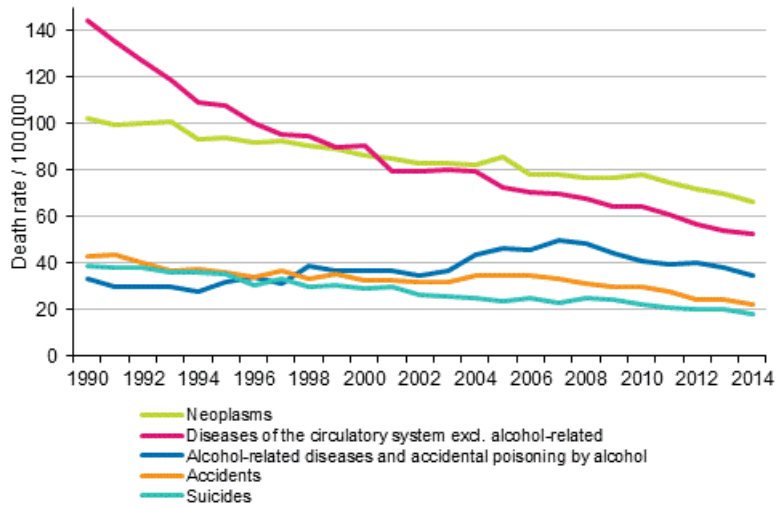
Age	Total	Males	Females
Total	5 461 512	2 686 114	2 775 398
0	58 040	29 738	28 302
1–4	243 532	124 456	119 076
5–9	302 523	154 566	147 957
10–14	291 721	149 230	142 491
15–19	310 064	158 198	151 867
20–24	341 479	174 519	166 960
25–29	339 750	174 194	165 556
30–34	353 084	181 866	171 218
35–39	342 278	175 941	166 337
40–44	315 260	160 890	154 370
45–49	363 792	183 930	179 862
50–54	375 259	188 187	187 072
55–59	372 568	184 427	188 142
60–64	378 199	185 132	193 068
65–69	366 425	176 011	190 414
70–74	237 394	109 007	128 388
75–79	194 993	83 610	111 383
80–84	143 599	54 613	88 986
85–89	89 570	28 140	61 430
90–94	34 545	8 123	26 423
95+	7 443	1 341	6 102

Appendix table 5. Standard population used in calculating age-standardised figures (Eurostat 2012)

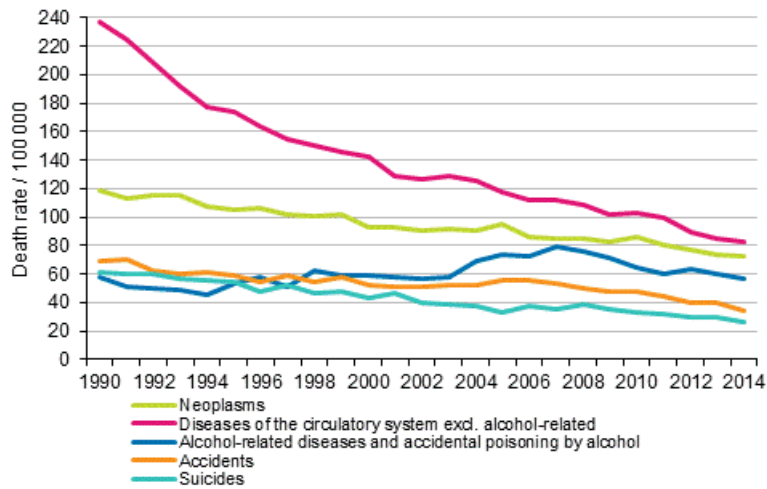
Age	Standard population
0	1 000
1–4	4 000
5–9	5 500
10–14	5 500
15–19	5 500
20–24	6 000
25–29	6 000
30–34	6 500
35–39	7 000
40–44	7 000
45–49	7 000
50–54	7 000
55–59	6 500
60–64	6 000
65–69	5 500
70–74	5 000
75–79	4 000
80–84	2 500
85–89	1 500
90–94	800
95+	200
Total	100 000

Appendix figures

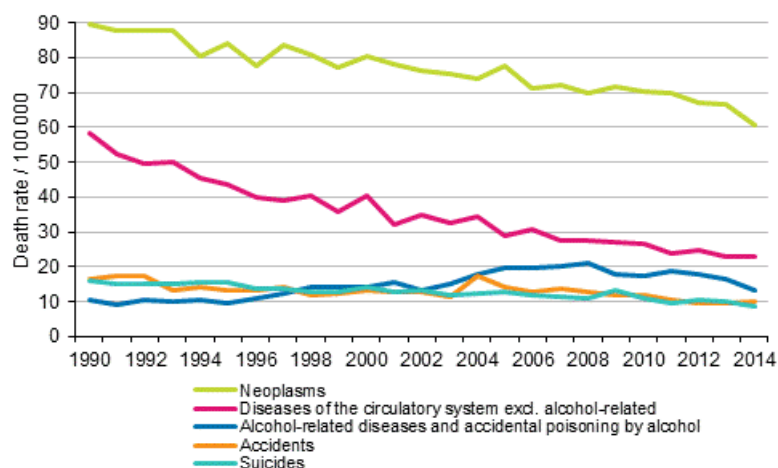
Appendix figure 1. Age-standardised mortality of working-age people (aged 15 to 64) from different causes of death in 1990 to 2014



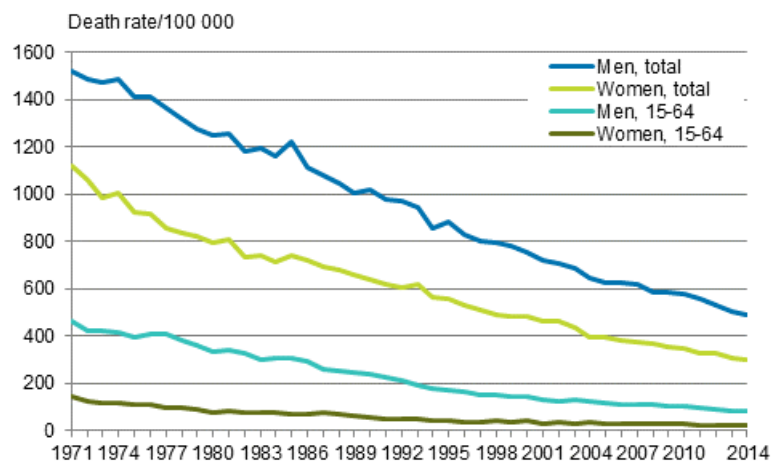
Appendix figure 2. Age-standardised mortality of working-age men (aged 15 to 64) from different causes of death in 1990 to 2014



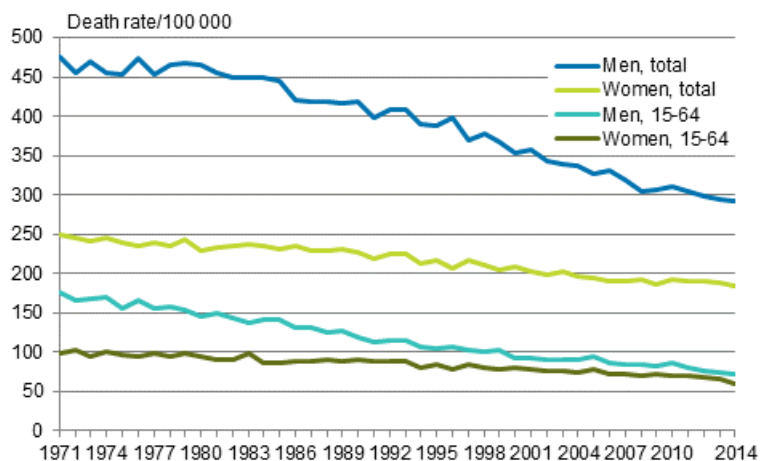
Appendix 3. Age-standardised mortality of working-age women (aged 15 to 64) from different causes of death in 1990 to 2014



Appendix figure 4. Age-standardised mortality from diseases of the circulatory system in 1971 to 2014



Appendix figure 5. Age-standardised mortality from neoplasms in 1971 to 2014



Quality Description: Causes of death 2014

1. Relevance of statistical information

In the statistics on causes of death, statistical data are produced annually on the causes of death of persons permanently resident in Finland. The statistics are compiled on the basis of death certificates. The data are supplemented with and verified against data on deaths from the Population Information System of the Population Register Centre. Statistics Finland has death certificates and data on causes of death from 1936 onwards.

Cause of death data are highly significant for general information systems describing the population's state of health. Cause of death data are used in various medical surveys, and by combining the data with other Statistics Finland's data files, it is possible to study, for instance, differences in mortality between different population groups.

Investigating the cause of death and the related procedures including the production of statistics and archiving of death certificates is based on the act (1973/459) and decree (1973/948) on the investigation of the cause of death. In April 2011, Commission Regulation (EC) No 1338/2008 was passed and it confirms the variables, specifications and metadata which the EU Member States have to supply as concerns statistics on causes of death.

Concepts

Causes of death are obtained from death certificates. Data on underlying causes of death have been collected in database tables from 1969 onwards and from 1987, in addition to the underlying cause of death, there are also data on **immediate, intermediate and contributing causes of death**:

- The underlying cause of death is the disease which has initiated the series of illnesses leading directly to death. In accidental or violent deaths, the underlying cause of death is the external reason which caused the injury or poisoning leading to death. The underlying cause of death issued by the physician's death certificate is not directly applied to statistics compilation, but it is used when forming the underlying cause of death in the statistics.
- The statistical underlying cause of death is determined according to the selection and application rules of the International Classification of Diseases (ICD-10) compiled by the World Health Organisation (WHO). On their basis, the underlying cause of death is determined from the causes of death given by the physician in the death certificate. Annual causes of death statistics are made according to the underlying cause of death determined for the statistics. Other causes of death are mainly used in surveys.
- The immediate cause of death refers to the disease, failure or injury whose symptoms cause the person to die. However, the mechanisms of death, e.g. cardiac arrest, are not regarded as immediate causes of death.
- The intermediate cause of death refers the condition which leads from the underlying cause to the immediate cause of death.
- The contributing cause of death are other significant circumstances that contributed to the death recorded in the part II of the death certificate but are not related to the cause-consequence chain in part I of the death certificate.

In the case of **stillbirths and infants dying before the age of 28 days** the statistical data include the child's main cause of death, the mother's main reason contributing to the child's death, and two other reasons contributing to the child's death.

Stillbirths include a foetus or a newborn who shows no signs of life at the time of birth after a pregnancy lasting at least 22 weeks or the newborn weighing at least 500 grams. This concept has been used in Finnish annual tables since 1987. In the earlier used definition, stillbirths were newborns or foetuses when the duration of pregnancy had been at least 28 weeks. The changed concept also influenced the definition of perinatal deaths for stillbirths. Terminations of pregnancy prior to the 22nd week of pregnancy are considered miscarriages. Terminations of pregnancy are not included in the cause of death statistics.

Infant mortality refers to the share of deaths in infancy (at under one year) per thousand live births. **Neonatal mortality** refers to the share of deaths during the four first weeks of life per thousand live births. The figure is often given in tables as per mil. **Early neonatal mortality** refers to the number of deaths during the first week of life relative to the live births. **Late neonatal mortality** refers to the number of deaths which occur at the age of 7 to 27 days relative to the live births.

Perinatal mortality refers to the share of stillbirths and deaths during the first week of life among all births (incl. stillbirths). The age during the first week is calculated in hours.

Perinatal mortality is calculated by dividing the number of stillbirths and deaths during the first week of life by the number of all births during the statistical year. The age during the first week is calculated in hours.

More concepts of the cause of death statistics can be found at: http://tilastokeskus.fi/til/ksyyt/kas_en.html

2. Methodological description of survey

The cause of death statistics data are total data including all deaths in Finland or abroad of persons permanently resident in Finland at the time of their death. Statistics on stillbirths are made separately; cases of stillbirths are not included in deaths during the statistical reference year. The statistics on stillbirths are supplemented with data from the birth register of the National Institute for Health and Welfare (THL).

Death certificates are issued by the physician establishing the death. If determining the cause of death requires an autopsy, the death certificate is issued by a forensic pathologist after the information acquired from the autopsy is complete. The physician issuing the death certificate delivers the certificate to the regional unit of the National Institute for Health and Welfare (THL) where the deceased was a resident. A forensic pathologist there verifies the correctness of the certificate and the certificates are sent on to Statistics Finland. In addition, the health care unit or the physician has to report the death to the Population Information System. At Statistics Finland, the death certificate data are compared with data on the deceased obtained from the Population Information System and lists of missing death certificates are sent to THL for monitoring purposes. The data files on causes of death are supplemented with other demographic data from the Population Information System.

Death certificates are received at Statistics Finland in paper form from THL. Death certificates are scanned at Statistics Finland in picture format and part of the data is read optically to the database. Diagnosis texts and cause of death codes issued by physicians are checked with the help of an electronic dictionary. The statistical underlying cause of death is determined according to the selection and application rules of the International Classification of Diseases (ICD-10) compiled by the World Health Organization (WHO). Some of the statistical underlying causes of death are coded automatically with the application and part manually utilising the description of events written by the physician.

Since 1996, causes of death have been coded according to the international ICD-10 classification (International Statistical Classification of Diseases and Related Health Problems). The ICD-10 classification is an international classification maintained by the World Health Organization (WHO) describing causes of death, illnesses, accidents and reasons for using health care services. The classification can be found on [WHO's pages](#). Causes of death are coded mainly in the most accurate level of the classification, the 3-digit level is the publication level. In certain cases, specifying codes according to the Finnish national classification of diseases are used. THL maintains the Finnish version of the ICD-10 classification of diseases.

In the publication, the mortality rate can be measured with the general mortality rate, where the number of deaths is divided by mean population and multiplied by one thousand or one hundred thousand. The mortality rate can also be calculated by age group, when deaths in each age group are expressed as a proportion to the population of corresponding age.

Age-standardised mortality rate refers to mortality where the effect of age structure is eliminated by age standardisation. The standardisation used in cause of death statistics is made by using direct age standardisation (standardised death rate, SDR), which means that mortality figures for the year in question

have been used to calculate how many people would die if the age structure of the population remained the same throughout time. The formula for direct standardisation is as follows:

$$SDR = \sum (m_i P_i / P) \times 100\,000$$

m_i = mortality rate in age group i

P_i = standard population in age group i

P = standard population

Mortality and the generality of causes of death are heavily dependent on age. For this reason, age standardisation is used in the statistics when comparing mortality differences of different times and areas. In the publication on cause of death statistics, the 'new' standard population of Europe has been used since 1996 as the standard population when calculating age-standardised mortality rates (Appendix 5). Different standard population has been used in the age-standardised mortality figures published by Eurostat, for which reason the figures differ from those released by Statistics Finland.

3. Correctness and accuracy of data

The death certificate form is confirmed by the Ministry of Social Affairs and Health. The physician records the cause of death on the death certificate as a code and as a text specifying the diagnosis. At Statistics Finland, the causes of death are coded mainly on the basis of the diagnosis text.

In case the information in the death certificate is deficient, inconsistent or difficult to classify, the information about the event recorded on the death certificate or a medical expert will be consulted or more information is requested from the issuer of the death certificate. In cases of alcohol and medicinal poisonings, the additional information used consists of the research results from the register of forensic chemistry. The underlying cause of death is determined from the event information in the death certificate in about 1,000 cases yearly. Around 700 cases are handled by a medical expert every year. Additional information is requested from the issuer of the death certificate in about 100 cases per year. Additional information is obtained for some 200 cases per year from the register of forensic chemistry.

In practice, the coverage of the cause of death statistics is around 100 per cent, because the data on death are verified from the Population Information System. The number of deaths on which no information on the cause of death is obtained has previously been 100 to 150 per year, but in the last few years the number of missing death certificates has been growing. In 2014, there were 477 missing death certificates. Of them, 12 were deaths abroad on which only a notification on death was obtained. The data derived from late death certificates are combined to the survey database and death certificate archives.

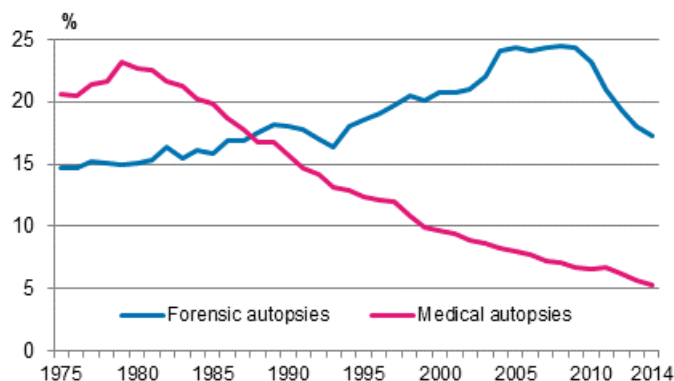
Number of death certificates missing from statistics yearly

Year	Number	Proportion of all deaths, %
2000	40	0,1
2005	118	0,2
2006	135	0,3
2007	139	0,3
2008	146	0,3
2009	157	0,3
2010	107	0,2
2011	132	0,3
2012	226	0,4
2013	267	0,5
2014	477	0,9

Most causes of death are based on clinical data, but qualitatively better data for death certificates are derived from autopsies. The share of autopsies in all deaths were highest in Finland of all Nordic countries.

The number of forensic autopsies has decreased fast in Finland since 2010, however. In 2014, a forensic autopsy was performed for 17 per cent and a medical autopsy for 5 per cent of dead persons.

Share of forensic and medical autopsies in death cases in 1975 to 2014



4. Timeliness and promptness of published data

Cause of death data are produced yearly and they are completed at the end of the following year. The data are final and describe the deaths during the previous calendar year of persons permanently resident in Finland. After the data are published, death certificates are not added afterwards to the annual data of the statistics, but they are included in research data and death certificate archives.

5. Accessibility and transparency/clarity of data

The data of the cause of death statistics are published yearly under the topic Health on the home pages of the cause of death statistics and the tables are released in Statistics Finland's StatFin database. The tables of the cause of death statistics are made according to the underlying cause of death.

The cause of death statistics are available starting from 1936. The data for 1936 to 1968 are in table format in the paper publications. From 1969, there are data as a time series database. Tailored tables and research data can be made from unit-level data at Statistics Finland to customer needs. A licence is always needed for unit-level research data. The application for licence can be found on [Statistics Finland's home page](#). Cause of death data can also be combined to other datasets by means of the person number (e.g. with population census and employment statistics data).

Cause of death data are also published for international sources and databases, such as:

— The Nordic Statistical Yearbook "Health Statistics for the Nordic Countries"

<http://nowbase.org/Publications.aspx>

— Eurostat's database, e.g. <http://ec.europa.eu/eurostat>

— WHO's databases, e.g. European Health for All database, <http://www.euro.who.int/en/data-and-evidence>

Statistics Finland also maintains Finland's death certificate archive. The archive contains Finnish residents' death certificates from 1936 onwards. Copies of death certificates and unit-level cause of death data are released from the archive to the purposes prescribed in the act on the investigation of the cause of death (459/1973). They are mainly released to the dead person's next of kin, pension institutions and official use and for scientific research and statistical surveys. Instructions for applying for death certificates and on the licence procedure can be found on Statistics Finland's web pages.

6. Comparability of statistics

The classification of causes of death used in the statistics has changed a number of times. Since 1996, causes of death have been coded according to the ICD-10 classification (International Statistical Classification of Diseases and Related Health Problems). Between 1987 and 1995, the data were coded using the national classification of diseases 1987 and from 1969 to 1986, the international classification ICD-8 was in use.

To improve the comparability of cause of death data from different years, Statistics Finland has made time series classifications. The longest comparable national time series classification (54 categories) contains data from 1969 onwards. In addition, use is made of a 72-category classification where data are available from 1998. This classification complies in main aspects with the 65-category European shortlist classification used by the EU, which was used by Eurostat from 1998 to 2013. Since the beginning of 2014, an updated 86-category European shortlist 2012 classification has been available on Eurostat's website. This classification has also been available on the data of the causes of death statistics at Statistics Finland.

7. Coherence and consistency/uniformity

The cause of death statistics are the only comprehensive statistics on causes of death in Finland. Other Statistics Finland's statistics describing the mortality rate and causes of death are vital statistics, [statistics on road traffic accidents](#) and [occupational accident statistics](#).

The data on deaths published by Statistics Finland's vital statistics are comprehensive statistics on the number of deaths. The number of deaths per year differs somewhat from the number of deaths in the cause of death statistics. The difference is mainly caused by that the vital statistics do not contain deaths registered as deaths after the compilation time of the statistics (the end of the following year's January). In the vital statistics for 2014, the number of deaths was 52,186, which was 223 deaths fewer than in the cause of death statistics. The number of deaths under the age of one year was 124 in the vital statistics and 125 in the cause of death statistics. When calculating infant mortality, the number of deaths under the age of one in the vital statistics is used in official connections.

The statistics on road traffic accidents compile statistics on deaths in road traffic. Data are obtained from the information system of the police. The coverage of the data is checked against those of the cause of death statistics. The figures deviate from those in the cause of death statistics by some tens of cases each year. The deviation is due to the following differences in the statistical criteria:

- The statistics on road traffic accidents contain all deaths in traffic in the area of Finland, whereas the cause of death statistics include all deaths of the permanent population of Finland occurring either in Finland or abroad.
- The cause of death statistics are compiled on the basis of the day of the death, but the time period of the statistics on road traffic accidents is the day of the accident and at most the 30 following days.
- In the cause of death statistics suicides committed in traffic are included in suicides, in the statistics on road traffic accidents they are regarded as road traffic accidents.

Occupational accident statistics are compiled on the basis of information on insurance activities and the statistics include all those accidents at work on which insurance institutions have paid compensation. By contrast, in the cause of death statistics the information on occupational accidents is derived from death certificates as defined by the physician. The number of deaths from occupational accidents differs yearly very little from the figures in the cause of death statistics.

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Source: Causes of death, Statistics Finland