

Statistical bulletin

Deaths registered in England and Wales: 2015

Annual data on death registrations contains death rates, cause of death data by sex and age and death registrations by area of residence and single year of age.



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1 . Main points

There were 529,655 deaths registered in England and Wales in 2015, an increase of 5.6% compared with 2014.

Age-standardised mortality rates (ASMRs) increased in 2015 by 5.1% for females and 3.1% for males; a change to the general decrease in rates in recent years.

In 2015, mortality rates for respiratory diseases (including flu) increased notably for both males and females.

Cancer was the most common broad cause of death (28% of all deaths registered) followed by circulatory diseases, such as heart disease and strokes (26%).

The infant mortality rate remained at 3.9 deaths per 1,000 live births in 2015.

2 . Statistician's quote

The first 3 months of the year contributed most to the increased number of deaths registered in England and Wales in 2015. Over 24,000 more deaths were registered between January and March 2015 compared with the same period in 2014. This period saw a peak in flu cases which resulted in a notable increase in mortality rates for respiratory diseases for both sexes.

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3 . Things you need to know

Important information for interpreting these mortality statistics:

- death statistics are compiled from information supplied when deaths are certified and registered as part of civil registration, a legal requirement
- figures represent the number of deaths registered in the calendar year
- figures represent deaths which occurred in England and Wales, these include the deaths of individuals whose usual residence was outside England and Wales

4 . Deaths increase in 2015

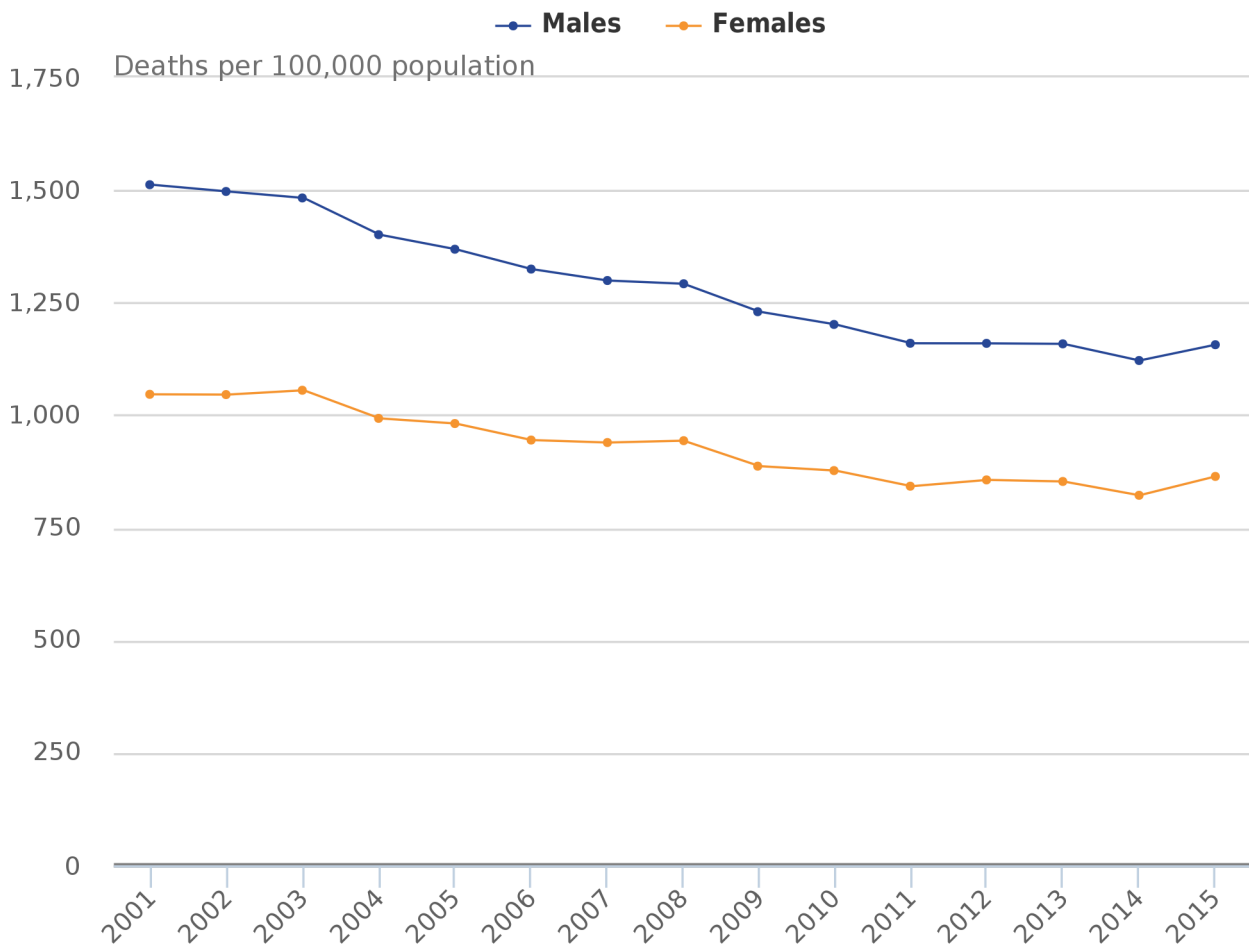
There were 529,655 deaths registered in England and Wales in 2015, compared with 501,424 in 2014; an increase of 5.6% as previously reported in our [provisional analysis of 2015 death registrations](#). This is the largest annual percentage increase since the 6.3% rise recorded between 1967 and 1968. The number of deaths has increased each year since 2011, with the exception of a 1.1% fall in 2014. The number of deaths is affected by the size and age structure of the population. As people are tending to live longer, leading to the population increasing in both size and age over time, we may also expect the number of deaths to increase.

Age-standardised mortality rates (ASMRs) are a better measure of mortality than simply looking at the number of deaths, as they take into account the population size, its age structure and the age distribution of deaths. Compared with 2014, ASMRs in 2015 increased for both sexes with 1,156.4 deaths per 100,000 population for males and 863.8 for females; the percentage increase was larger among females (5.1%) than males (3.1%).

With the exception of 2015, mortality rates have generally been decreasing (Figure 1). This is due to improved lifestyles and medical advances in the treatment and diagnosis of many illnesses and diseases. There have also been government initiatives to improve health through better diet and lifestyle.

Figure 1: Age-standardised mortality rates (ASMRs), 2001 to 2015

England and Wales



Source: Office for National Statistics

Notes:

1. Based on deaths registered in each calendar year.
2. These rates are for all ages and are standardised to the 2013 European Standard Population.

Age-specific mortality rates are used to compare mortality at different ages. Rates were notably higher at ages 75 and over for both males and females in 2015 compared with 2014 (Table 1).

Table 1: Age-specific mortality rates for age 75 and over, 2014 and 2015**England and Wales**

		Males				Females			
		75-79	80-84	85-90	90 and over	75-79	80-84	85-90	90 and over
Age-specific mortality rates	2015	40.6	72.3	129.4	244.4	27.9	53.8	102.0	219.3
	2014	39.6	70.2	124.7	227.4	27.2	51.2	95.4	199.0
% change 2014 to 2015		2.5	3.0	3.8	7.5	2.6	5.1	6.9	10.2

Source: Office for National Statistics

Notes:

1. Based on deaths registered in the calendar year.
2. Age-specific mortality rates represent the number of deaths at a particular age per 1,000 population at that age.

5 . Mortality rates for respiratory diseases increase

Cancer accounted for 28% of all deaths registered in 2015. It remained the most common broad cause of death for both men and women (31% of all male deaths and 25% of all female deaths registered in 2015).

Circulatory diseases, such as heart disease and stroke, accounted for just over a quarter (26%) of all deaths registered in 2015.

In 2015, mortality rates for respiratory diseases (including flu) increased notably for both men and women (Table 2). This is a change to the fairly steady decreases in mortality rates for the 3 main broad disease groups (cancer, respiratory and circulatory diseases) recorded over the last decade. The flu virus in 2015 was a strain known to [predominantly affect older people](#).

Table 2: Age-standardised mortality rates (ASMRs) for the 3 main broad disease groups, 2005, 2014 and 2015

England and Wales

		Males			Females		
		Cancer (C00-D48)	Circulatory diseases (I00-I99)	Respiratory diseases (J00-J99)	Cancer (C00-D48)	Circulatory diseases (I00-I99)	Respiratory diseases (J00-J99)
ASMRs (deaths per 100,000 population)	2015	340.5	319.4	171.1	233.7	212.6	123.6
	2014	344.6	319.4	155.9	235.9	210.2	108.9
	2005	381.1	506.4	203.2	254.9	342.6	142.7
% change	2014 to 2015	-1.2	0.0	9.7	-0.9	1.1	13.5
	2005 to 2015	-10.7	-36.9	-15.8	-8.3	-37.9	-13.4

Source: Office for National Statistics

Note:

1. Based on deaths registered in the calendar year.
2. ASMRs are for all ages and are standardised to the 2013 European Standard Population.
3. These categories correspond to the 3 chapters of ICD-10 with the largest number of deaths in England and Wales.

6 . The North East had the highest mortality rate in England (2015)

The North East had the highest age-standardised mortality rate (ASMR) among the regions of England in 2015, with 1,128.7 deaths per 100,000 population. Mortality rates were lowest in the South East, with 912.7 deaths per 100,000 population.

In 2015, the local authority in England with the highest ASMR was Blackpool (1,380.9). The City of London had the lowest (542.1). Mortality rates for some local authorities are based on relatively small populations – such calculations are often subject to random fluctuations and are consequently less robust. In Wales, Blaenau Gwent had the highest ASMR (1,195.4) while Monmouthshire had the lowest (896.5).

How have local levels of mortality changed since 2001?

ASMRs by local authority districts, 2001 to 2015, England & Wales

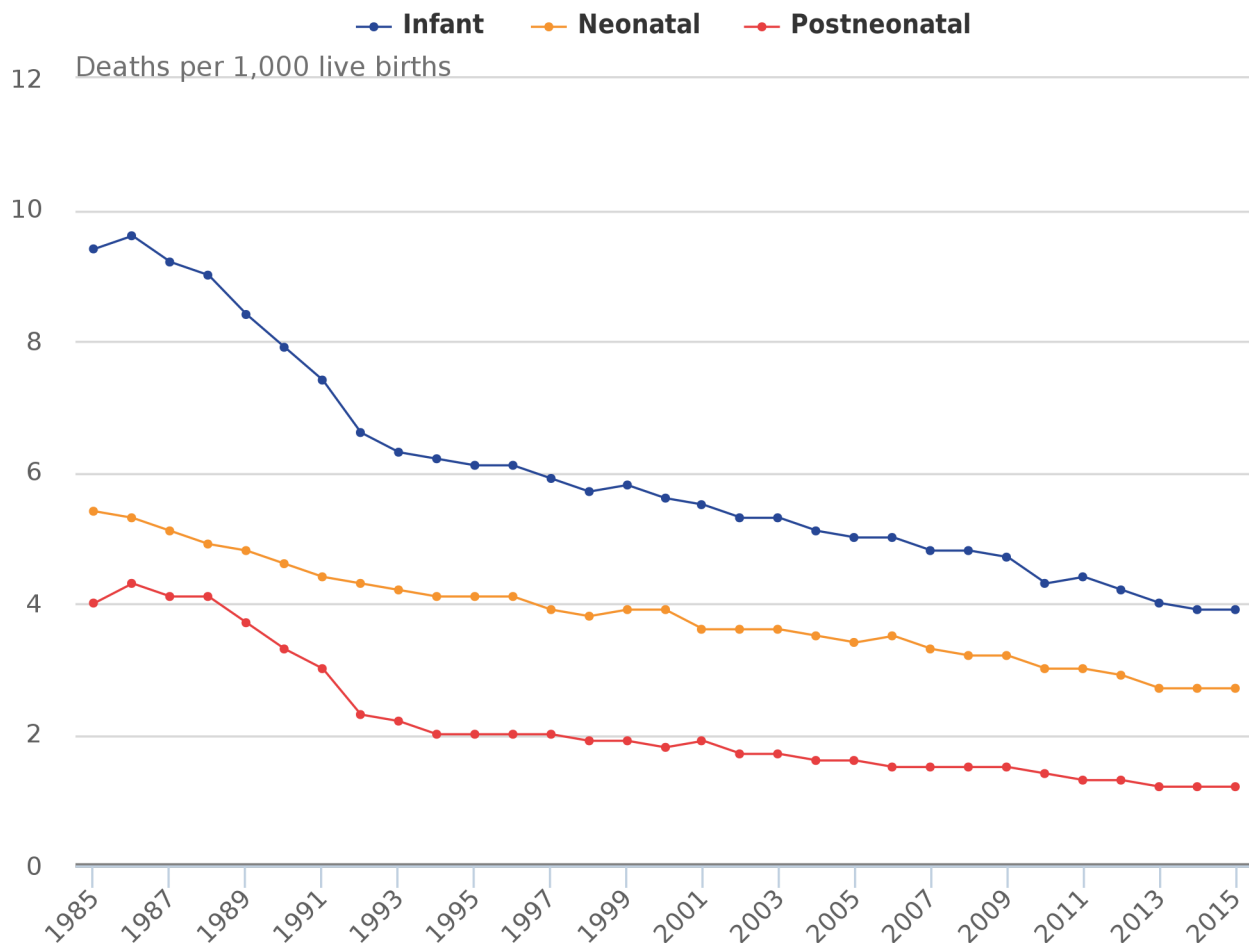
The substantial variation in mortality rates between different local areas reflects underlying differences in factors such as income deprivation, socio-economic status and health behaviour. It is recognised that higher levels of deprivation are present in the [north of England](#) and in the [Welsh valleys](#). Increased mortality rates for many causes of death have long been associated with higher levels of deprivation.

7 . Infant mortality rate remains unchanged in England and Wales

In 2015, there were 2,721 infant deaths (under 1 year of age) registered in England and Wales; resulting in an infant mortality rate of 3.9 deaths per 1,000 live births, unchanged from 2014. The neonatal rate (deaths under 28 days) and the postneonatal rate (deaths over 28 days and under 1 year) also remained unchanged in 2015. Small fluctuations in these rates have occurred over recent years, after a series of larger drops in the late 1980s (Figure 2).

Figure 2: Infant, neonatal and postneonatal mortality rates, 1985 to 2015

England and Wales



Source: Office for National Statistics

Notes:

1. Based on deaths registered in each calendar year.

There are many established risk factors for infant mortality; prematurity, low birthweight and multiple births are the most significant in terms of strength of association and consistency. [Risk factors are known to vary according to age at death](#). For example, the effect of low birthweight and prematurity is stronger in the first 28 days, while socio-economic status is strongly associated with deaths under 1 year.

Infant mortality rates vary by region and can fluctuate over time. In 2015, the West Midlands had the highest rate of all regions within England, with 6.1 deaths per 1,000 live births; the South East had the lowest (3.0). The infant mortality rate for Wales was 3.7 deaths per 1,000 live births.

Variation between areas may reflect underlying differences in maternal factors such as the mother's country of birth, socio-economic status and age ([Child mortality statistics](#) contains further information).

8 . Number of deaths in the UK rises

The provisional number of deaths registered in the UK in 2015 was 602,782; a rise of 5.7% compared with 2014.

In both Scotland and Northern Ireland, provisional figures suggest the number of deaths in 2015 increased by 6.2% and 5.9% respectively.

Similar increases in deaths have been reported within Europe, with [France](#) reporting a rise of 7.3%, [Spain](#) 6.7%, [Denmark](#) 2.4% and [Switzerland](#) 5.2%; some of these figures are provisional. Several countries have not yet released mortality figures for 2015.

9 . Links to related ONS statistics

More data on [deaths](#) and [births](#) in England and Wales in 2015 are available on our website. Commentary on stillbirths is included within [Births in England and Wales, 2015](#).

[Provisional analysis of the increase in deaths in 2015](#) was published in April 2016.

The number of deaths and death rates for the UK and constituent countries can be found in the [Vital Statistics: Population and Health Reference tables](#); an international comparison of numbers of deaths and death rates is also available. The [World Health Organization \(WHO\)](#) provides data on the leading causes of death in the world.

Further 2015 death statistics will be published later in 2016, see the [GOV.UK release calendar](#) for more details.

To meet user needs, very timely but provisional counts of death registrations are published:

- [provisional counts of weekly death registrations by sex, age group and region](#)
- [provisional counts of monthly death registrations by local authority](#)

Figures for 2016 have not been subject to the full quality assurance process so are considered provisional. Final monthly figures for 2015 will be published on 26 July 2016.

10 . Quality and methodology

1. This is the first time that final annual death registration statistics for England and Wales have been published for 2015. This release provides summary statistics on deaths, including infant mortality; detailed statistics are published in themed packages between October and February.
2. Mortality statistics are used for producing population estimates and projections and to quality assure the census estimates. They are also used to carry out further analysis on, for example: life expectancy; health expectancy; causes of death; and to further analyse infant mortality. They also enable the analysis of social and demographic trends.
3. The [Mortality Statistics Quality and Methodology Information](#) document contains important information on:
 - the strengths and limitations of the data
 - the quality of the output: including the accuracy of the data, how it compares with related data
 - uses and users
 - how the output was created
4. Our [User Guide to Mortality Statistics](#) provides further information on data quality, legislation and procedures relating to mortality and includes a glossary of terms. Information on how age-standardised mortality rates (ASMRs) are calculated is included.
5. Death figures reported here are based on deaths registered in the data year. This includes some deaths that occurred in the years prior to 2015 (25,172 deaths). ONS also takes an annual extract of death occurrences in the autumn following the data year to allow for late registrations. Further information on [the impact of registration delays for a range of causes](#) is available.
6. There is a large degree of comparability in death statistics between countries within the UK. There are some differences, although these are believed to have a negligible impact on the comparability of the statistics. These differences are outlined in [the Mortality Statistics Quality and Methodology Information](#) document.
7. The [Revisions policy for mortality statistics](#) is available on our website.
8. Deaths are cause coded using the World Health Organization's (WHO) International Classification of Diseases (ICD). Deaths are coded to ICD-10 using [IRIS](#) software (version 2013). Cause of death reported here represents the final underlying cause of death for ages 28 days and over. This takes account of additional information received from medical practitioners or coroners after the death has been registered.
9. The infant, neonatal and postneonatal mortality rates in this release have been calculated using the number of deaths registered in the data year. These rates can also be calculated using the number of deaths occurring in the data year; such rates are less timely since the occurrences dataset can only be taken some 9 months after the end of the data year to ensure it is acceptably complete.