



# Childhood, infant and perinatal mortality in England and Wales, 2009

**Date:** 17 March 2011

**Coverage:** England and Wales **Theme:** Population

This statistical bulletin presents statistics on stillbirths, infant deaths and childhood deaths that occurred in 2009 in England and Wales.

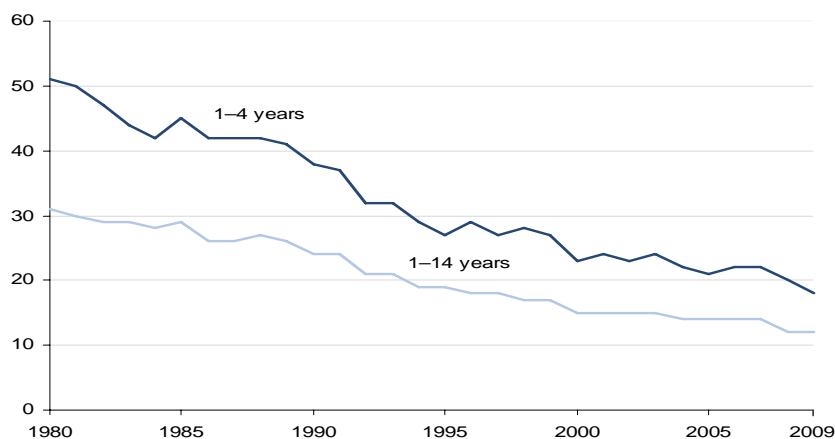
## Key findings

- The mortality rate for children aged 1 to 14 years was 12 deaths per 100,000 population in 2009, compared with 31 deaths per 100,000 population in 1980
- There were 3,191 infant deaths (under 1 year) that occurred in England and Wales in 2009 giving an infant mortality rate of 4.5 deaths per 1,000 live births. This compares with an infant mortality rate of 12 deaths per 1,000 live births in 1980
- In 2009 the infant mortality rates for very low birthweight babies (under 1,500 grams) and low birthweight babies (under 2,500 grams) were 175.9 and 38.3 deaths per 1,000 live births respectively

## Age-specific child mortality rates: by age, 1980–2009

### England and Wales

Rate per 100,000 population



Source: Office for National Statistics (ONS)

## Child mortality rates

Between 1980 and 2009 the age-specific mortality rate for children aged 1 to 14 years fell by 61 per cent from 31 deaths per 100,000 population in 1980 to 12 deaths per 100,000 population in 2009. The age-specific mortality rate for children aged 1 to 14 years remained unchanged from 2008. The age-specific mortality rate for children aged 1 to 4 years fell by 65 per cent over the same period from 51 deaths per 100,000 population in 1980 to 18 deaths per 100,000 population in 2009. The age-specific mortality rate for children aged 1 to 4 years in 2008 was 20 deaths per 100,000 population.

## Infant and perinatal mortality rates

There were 3,191 infant deaths (deaths under 1 year) that occurred in England and Wales in 2009 giving an infant mortality rate of 4.5 deaths per 1,000 live births. In 2009 there were 3,688 stillbirths and 1,685 deaths at age under 7 days in England and Wales giving a perinatal mortality rate of 7.6 deaths per 1,000 total births. The stillbirth rate was 5.2 stillbirths per 1,000 total births in 2009.

Since 1980 there has been a steady decline in neonatal mortality rates (deaths under 28 days) and postneonatal mortality rates (deaths between 28 days and 1 year) in England and Wales. The neonatal mortality rate fell by 60 per cent from 7.7 deaths per 1,000 live births in 1980 to 3.1 deaths per 1,000 live births in 2009. The postneonatal mortality rate fell by 68 per cent over the same period from 4.4 deaths per 1,000 live births in 1980 to 1.4 deaths per 1,000 live births in 2009.

This fall in infant mortality rates reflects the general decline in mortality rates overall in England and Wales over the same period.

## Age of mother at birth

Linking birth and infant death records improves our understanding of the key characteristics of the baby's parents that have been registered on the birth record (see Background note 2). In 2009, 98 per cent of infant deaths in England and Wales were successfully linked to their corresponding birth record. For these linked deaths, infant mortality rates were lowest among babies of mothers aged 30–34 years (3.9 deaths per 1,000 live births) and highest among mothers aged under 20 years (5.9 deaths per 1,000 live births). The infant mortality rate for all infant deaths linked to their corresponding birth record was 4.4 deaths per 1,000 live births in 2009.

## Birthweight

Low birthweight is one of the known risk factors for infant deaths. In 2009 the infant mortality rates for very low birthweight babies (under 1,500 grams) and low birthweight babies (under 2,500 grams) were 175.9 and 38.3 deaths per 1,000 live births respectively. This compares with an infant

mortality rate of 1.5 deaths per 1,000 live births for babies with a birthweight of 2,500 grams and over.

## Further information

Tables of data and further information on data quality, legislation and procedures relating to childhood, infant and perinatal mortality - *Child mortality statistics 2009*, are available at:

[www.statistics.gov.uk/StatBase/Product.asp?vlnk=15362](http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=15362)

Statistics on infant mortality in Scotland are available at:

[www.gro-scotland.gov.uk/statistics/theme/vital-events/deaths/bckgr-info/stillbirths/index.html](http://www.gro-scotland.gov.uk/statistics/theme/vital-events/deaths/bckgr-info/stillbirths/index.html)

Statistics on infant mortality in Northern Ireland are available at:

[www.nisra.gov.uk/demography/default.asp9.htm](http://www.nisra.gov.uk/demography/default.asp9.htm)

## Background notes

1. The live birth and stillbirth numbers are based on all births that occurred in the reference year plus any late birth registrations from the previous year. Mortality figures are based on deaths that occurred in the reference year.
2. The linkage of infant death records to their corresponding birth record has been conducted since 1975 to obtain information on social and biological factors of the baby and parents collected at birth registration. These include the baby's birthweight; gestational age; mother's age; mother's country of birth; father's socio-economic status (based on his occupation); and for those born within marriage, the number of previous children born. In 2009 of the 3,191 infant deaths that occurred, 3,138 were successfully linked to their corresponding birth records. Around two per cent of infant deaths cannot be linked to a birth record. The main reasons for this are either; a birth record cannot be found, or the birth was registered outside England and Wales.
3. Definitions used in child mortality statistics:
  - Stillbirth – born after 24 or more weeks completed gestation and which did not, at any time, breathe or show signs of life.
  - Early neonatal – deaths under 7 days.
  - Perinatal – stillbirths and early neonatal deaths.
  - Neonatal – deaths under 28 days.
  - Postneonatal – deaths between 28 days and 1 year.
  - Infant – deaths under 1 year.
  - Childhood – deaths between 1 and 15 years of age.
4. Stillbirths and perinatal mortality rates are reported per 1,000 total births (live and stillbirths).

Early neonatal, neonatal, postneonatal and infant mortality rates are reported per 1,000 live births.

Childhood mortality rates are reported per 100,000 population of the same age.

5. On 1 October 1992, the legal definition of a stillbirth was changed from a baby born dead after 28 or more weeks completed gestation to one born dead after 24 or more weeks completed gestation. This means that perinatal and stillbirth data for 2009 can only be compared with data from 1993 onwards.
6. Childhood mortality rates for 2009 in this bulletin have been calculated using the mid-2009 population estimates. These estimates are the latest available at the time of its production and were published on 24 June 2010. Further information on population estimates can be found on the ONS website at: [www.statistics.gov.uk/popest](http://www.statistics.gov.uk/popest)
7. The Tenth Revision of the *International Statistical Classification of Diseases and Related Health Problems* (ICD–10) has been used to classify cause of death at age 28 days and above. Available on the ONS website at:  
[www.ons.gov.uk/about-statistics/classifications/international/icd-10](http://www.ons.gov.uk/about-statistics/classifications/international/icd-10)  
A hierarchical classification in ICD–10 has also been developed by ONS for statistics relating to stillbirths and neonatal deaths. These are derived from a special death certificate (instead of the standard death certificate), which was introduced by ONS in 1986. More information on neonatal and stillbirth cause of death certificates can be found in section 2.11 of *Child mortality statistics*, 2009. Available on the ONS website at:  
[www.statistics.gov.uk/StatBase/Product.asp?vlnk=15362](http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=15362)
8. ONS is launching a new website on 30 April 2011 which will improve the way users can access our statistics. However, many existing bookmarks and links will no longer work and users will need to update them. Find out more at:  
[www.ons.gov.uk/about/what-we-do/programmes---projects/web-development/index.html](http://www.ons.gov.uk/about/what-we-do/programmes---projects/web-development/index.html)
9. Details of the policy governing the release of new data are available from the media office.
10. National Statistics are produced to high professional standards set out in the Code of Practice for Official Statistics. They undergo regular quality assurance reviews to ensure that they meet customer needs. They are produced free from any political interference.

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**Next publication:** Spring 2012

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