

Perinatal Mortality Surveillance Report



Lay Summary

Babies' deaths in the UK – the national picture for 2014

In 2014 there were 5,623 registered deaths of babies who died either before, during or shortly after birth in the UK. This means around 15 babies died every day in the UK in 2014 and shows little change from 2013.



**Babies died
every day**

The focus of the MBRRACE-UK report

The report compares rates of stillbirth and neonatal death* between different organisations delivering healthcare across the UK. While there were 5,623 registered deaths of babies in 2014, this report focuses on babies who were born after 24 weeks of pregnancy and died before or during birth or within 4 weeks of their birth and excludes terminations of pregnancy. The aim for future reports is to include babies born at 22 and 23 weeks of pregnancy to allow for direct comparisons with European countries, many of which use a definition of stillbirth as early as 22 weeks of pregnancy.

In 2014 there were 4,633 extended perinatal deaths** from 24 weeks to mothers resident in the UK, which means almost 6 deaths for every 1,000 births. This shows little change from 2013 when there were 4,722 deaths from 24 weeks' gestation.

The full report presents the mortality rates in different ways – for both where the mother lived and again for where the baby was born. As the rate of death is influenced by poverty, ethnicity and the age of the mother, the rates take into account the number of high risk women and babies the organisation cares for in order to make comparisons as fair as possible.

MBRRACE-UK is a team of researchers, clinicians and representatives of parent groups and charities. The lay report was written by Charlotte Bevan, Sands, on behalf of Ann Chalmers, Child Bereavement UK; Jenny Chambers, ICP Support; Jane Plumb, Group B Strep Support; Sarah McMullen, National Childbirth Trust; Keith Reed, Twins and Multiple Births Association; Clare Storey, International Stillbirth Alliance; Liz Thomas, Action against Medical Accidents; Maureen Treadwell, Birth Trauma Association; Elizabeth Draper, Pauline Hyman-Taylor, Sara Kenyon, Jenny Kurinczuk and Lucy Smith from MBRRACE-UK.

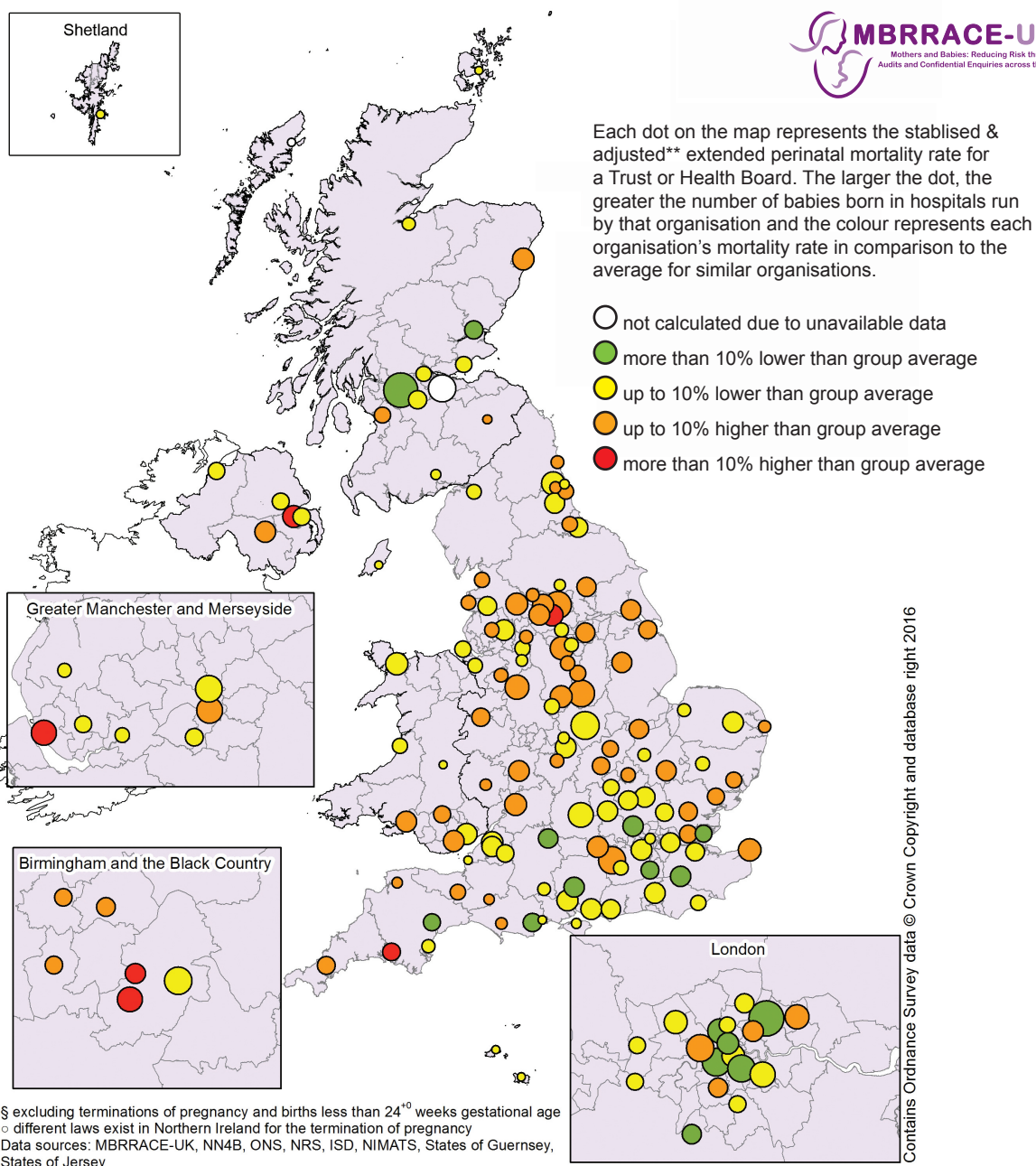
* Stillbirth is a death occurring before or during birth once a pregnancy has reached 24 weeks and neonatal death is a baby born at any gestation who lives, even briefly, but dies within 4 weeks of birth.

** Extended perinatal death includes all stillbirths and neonatal deaths up to 4 weeks after birth.

Mortality rates: comparing similar Trusts and Health Boards

Here, we present mortality rates between Trusts and Health Boards* based on where the baby was born, rather than where the mother lived. Since women with medical problems during pregnancy are often transferred to units with specialist care, those organisations will have a higher number of very sick mothers and babies to look after and therefore may have higher mortality rates. In order to compare Trusts and Health Boards fairly, they were grouped according to the level of obstetric and neonatal care they offer:

1. Neonatal intensive care unit and a surgical unit for babies
2. Neonatal intensive care unit only
3. Maternity units delivering 4,000 or more babies each year
4. Maternity units delivering 2,000-3,999 babies each year
5. Maternity units delivering 1,999 or fewer babies each year



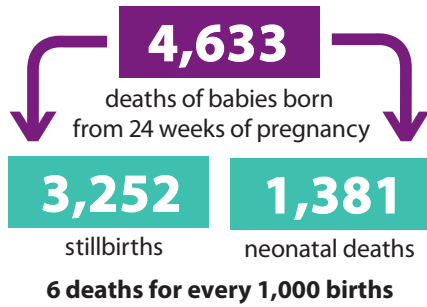
* NHS Trust (England and Northern Ireland) or Health Board (Wales and Scotland): a care provider planning and managing care in a specific geographical area.

** Stabilised & adjusted rates take into account the number of births in a particular Trust or Health Board, as well as risks including poverty, ethnicity, the baby's sex, the age of the mother and whether the pregnancy is a multiple. For a fuller explanation see the FAQs at <https://www.npeu.ox.ac.uk/MBRRACE-UK>

Understanding babies' deaths in the UK: 2014

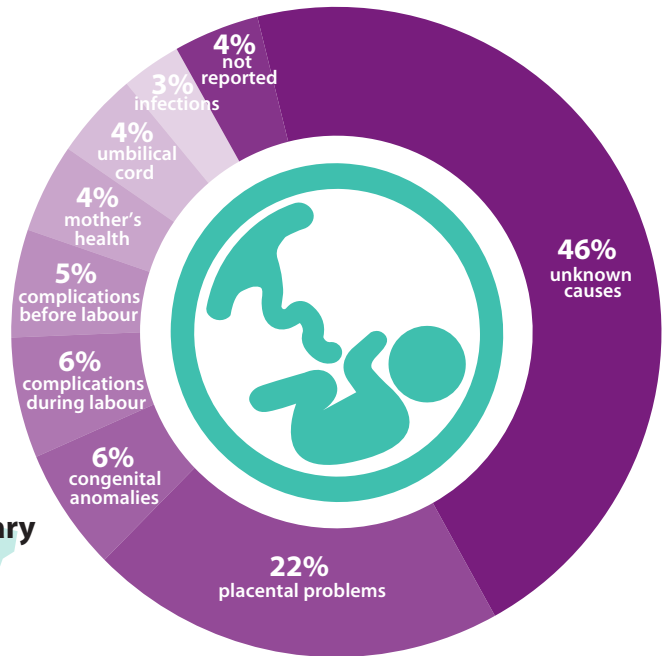
Out of over 780,000 births in 2014...

5,623 registered deaths of babies before, during or within the first 4 weeks of birth

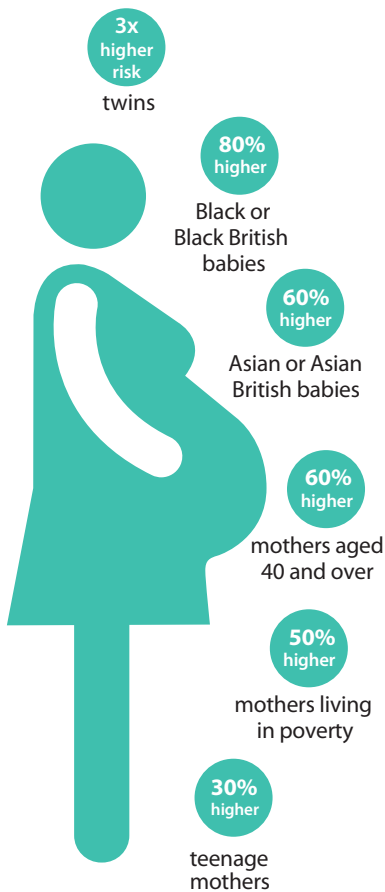


What do we know about why babies die?

Causes of stillbirth



What risks do we know about babies who die before, during or shortly after birth?



How do rates vary across the UK?

Local mortality rates varied across the UK even after taking into account differences in poverty, ethnicity and the age of the mother

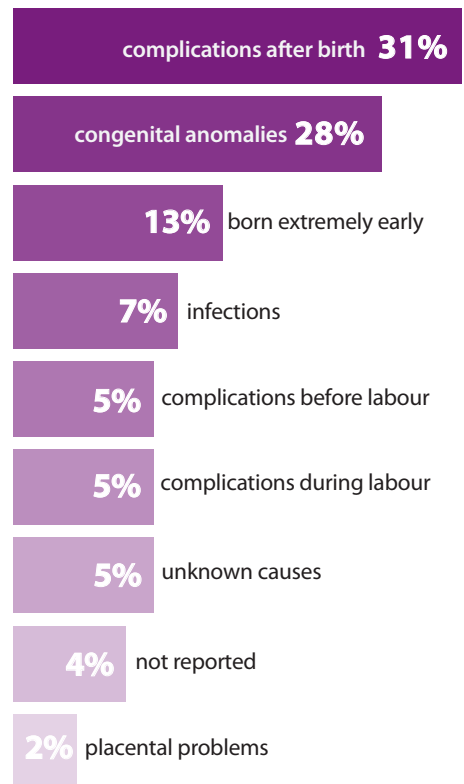
They ranged from **4.9** to **7.1** per 1,000 births

When do babies die?

1 in 3 die at term, when the baby has reached 37 weeks' gestation

1 in 4 die before 28 weeks' gestation

Causes of neonatal death



Post-mortem

9 out of every 10 families were offered a post-mortem; 4 out of every 10 families consented to post-mortem



What do we know about why babies die?

In order to reduce the number of babies dying in the future, the underlying causes of stillbirths and neonatal deaths need to be understood. However the cause of almost 50% of stillbirths and just over 5% of neonatal deaths was described as unknown. This may be partly explained by difficulties in classifying deaths or by lack of knowledge about the causes of stillbirth. It may also be because organisations have not properly reviewed deaths to fully understand what happened.

Although a post-mortem examination was offered to 90% of bereaved families, only 42% were reported as providing consent for limited or full post-mortem. Examination of the placenta alone can offer vital clues as to why the baby died and is the single most important investigation after a stillbirth. In 12% of stillbirths in 2014 this wasn't undertaken.

While we understand some of the risk factors – twins and multiples, for instance, carry a threefold risk of mortality – and causes of stillbirth and neonatal death, there are still gaps in our knowledge and we know that deaths occur in pregnancies thought to be low risk. Rates are also affected by population risks such as smoking, obesity and consanguinity (when the parents are close relatives). Importantly, however, they may be affected by the quality of care delivered.

National initiatives

While the vast majority of births in the UK end well the extended perinatal mortality rate of 5.9 deaths per 1,000 births is significantly higher than rates reported in other high-income European countries. There is, therefore, an increasing national focus on the need to prevent the deaths of babies before, during or shortly after birth with a number of national initiatives.

- The Royal College of Obstetricians and Gynaecologists' *Each Baby Counts*
<https://www.rcog.org.uk/eachbabycounts>
- NHS England's *Saving Babies' Lives* Care Bundle
<https://www.england.nhs.uk/2016/03/stillbirths>
- NHS Wales' *1000 Lives Improvement*, National Stillbirth Working Group
<http://www.1000livesplus.wales.nhs.uk>
- Scotland's *Maternity and Children's Quality Improvement Collaborative*
<http://www.scottishpatientsafetyprogramme.scot.nhs.uk/programmes/mcqic>
- The *Northern Ireland Maternal and Infant Loss* (NIMI) steering group

Recommendations from the MBRRACE-UK report

- All organisations should carry out local reviews for all stillbirths and neonatal deaths using a standardised process, assessing quality of care for each individual death, identifying local factors which may be responsible and any lessons to be learned.
- All parents should be offered a post-mortem when their baby dies to help establish or exclude possible causes which may affect a future pregnancy. A specialist perinatal pathologist should perform post-mortem and placental examinations.
- Healthcare, policy and professional leads in the UK should establish targets reflecting national aspirations for rates of stillbirth and neonatal deaths to save lives and improve services for the future.