

Perinatal Mortality Surveillance Report

Summary



Baby deaths in the UK: the national picture for 2018

Every year MBRRACE-UK produces a “Perinatal Mortality Surveillance” report which provides rates for stillbirths and neonatal deaths, and also for these deaths combined; known as ‘extended perinatal deaths’. It is useful to both commissioners of health care and healthcare professionals to know if any of these rates fail to reach either local or national targets for reduction. This is because the things that might influence higher rates of death in certain areas, and the work that health services are doing to ensure there are strategies in place to avoid preventable deaths, will be different dependent on how and when the baby died.

Of course, many other people are concerned about rates of stillbirth and neonatal death around the UK, from parents who have themselves experienced the stillbirth or death of a baby, to organisations working as advocates for improving maternity and neonatal care, families and parents-to-be, as well as the general public.

The report looks at baby deaths in different ways – for both where the mother lived and also for where the baby was born. As the rate of death is influenced by poverty, ethnicity and the age of the mother, some of the rates take into account the number of high risk women and babies each organisation cares for in order to make comparisons as fair as possible. Because there are so many different organisations and types of organisations involved in planning and delivering healthcare, the full details of all the rates are contained in a separate “Tables and Figures” document.

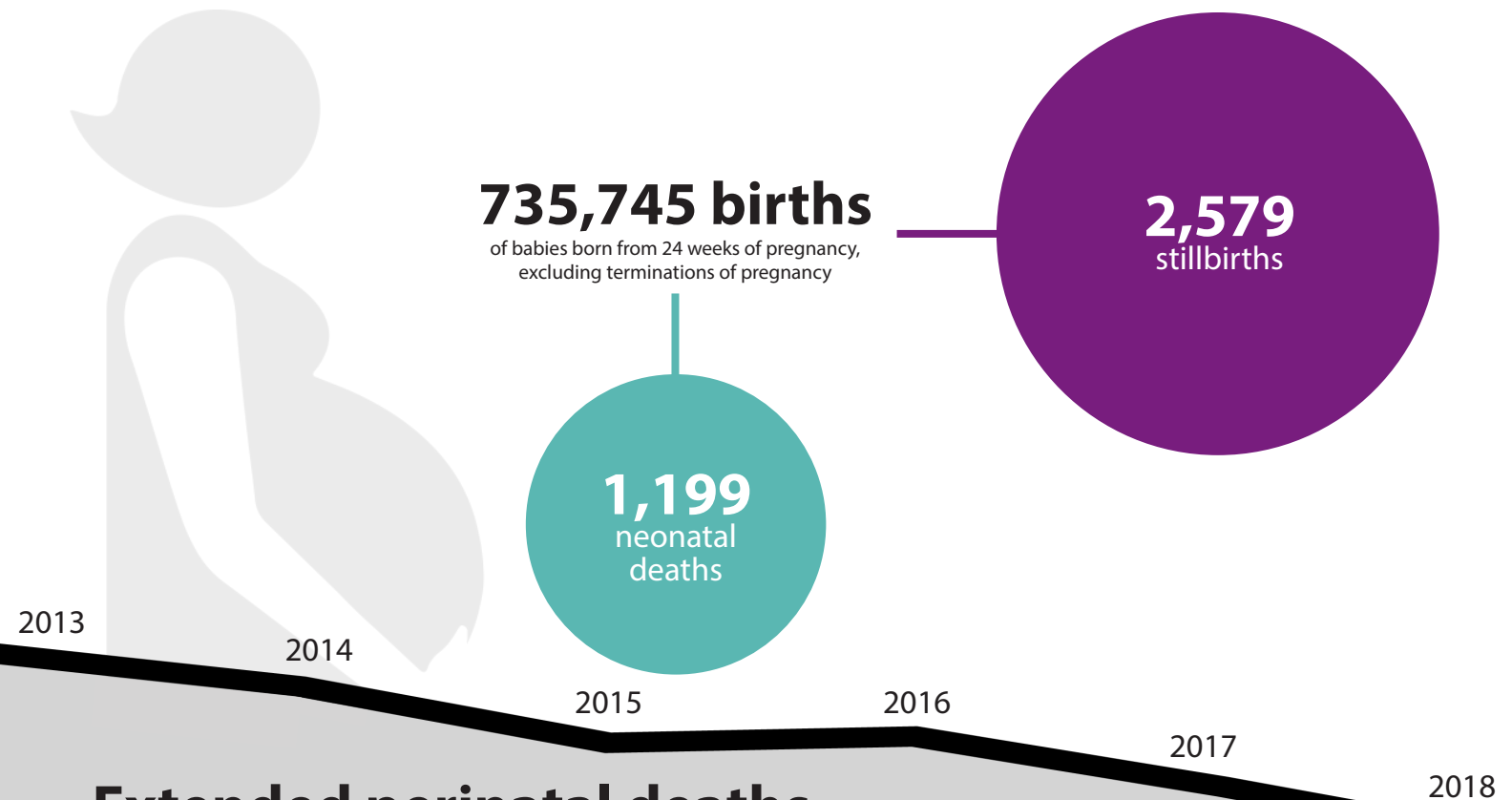
The full report, “Tables and Figures” and a “Technical Document” which explains how we collect data on babies and how we calculate the mortality rates, are all available here: www.npeu.ox.ac.uk/mbrrace-uk/reports/.

A **stillbirth** is a death occurring before or during birth once a pregnancy has reached 24 weeks.

A **neonatal death** is a baby born at any gestation who lives, even briefly, but dies within 4 weeks of birth.

MBRRACE-UK reports most mortality rates for babies who were born at 24 weeks or later, because there is currently no legal requirement to register babies born before 24 weeks with no signs of life at birth. However, because we know that babies born before 24 weeks are at a high risk of dying, we sometimes look at those babies separately so we have a better idea of how high that risk is.

Baby deaths in the UK: 2018



Extended perinatal deaths

Reduced by 15% over five years, from 6.04 per 1,000 total births in 2013 to 5.13 per 1,000 total births in 2018.

This is equivalent to **670 fewer baby deaths** in 2018 compared with 2013.

Stillbirths

Reduced by 16% from 4.20 per 1,000 total births in 2013 to 3.51 per 1,000 total births in 2018.

This is equivalent to **500 fewer stillbirths** in 2018 compared with 2013.

Neonatal deaths

Reduced by 11% from 1.84 per 1,000 live births in 2013 to 1.64 deaths per 1,000 live births in 2018.

This is equivalent to **170 fewer neonatal deaths** in 2018 compared with 2013.

Baby deaths by gestational age for babies born from 22 weeks



3,085
stillbirths
(incl. 22-23 week losses)

4,638
babies died in 2018

1,553
neonatal deaths

17%
22⁺⁰ - 23⁺⁶ weeks

22%
24⁺⁰ - 27⁺⁶ weeks

15%
28⁺⁰ - 31⁺⁶ weeks

21%
32⁺⁰ - 36⁺⁶ weeks

25%
37 weeks +

23%
22⁺⁰ - 23⁺⁶ weeks

22%
24⁺⁰ - 27⁺⁶ weeks

11%
28⁺⁰ - 31⁺⁶ weeks

16%
32⁺⁰ - 36⁺⁶ weeks

28%
37 weeks +

Almost
3/4
of babies who died
were born before
37 weeks

The greatest reduction in the neonatal mortality rate is in births at 32 to 36 weeks

Fell by a fifth

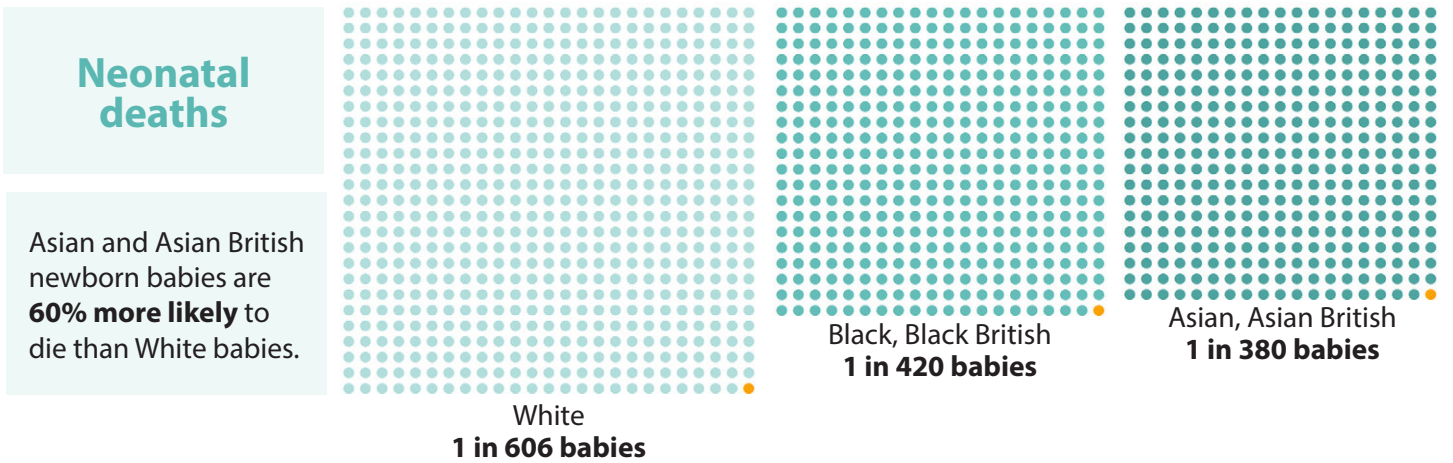
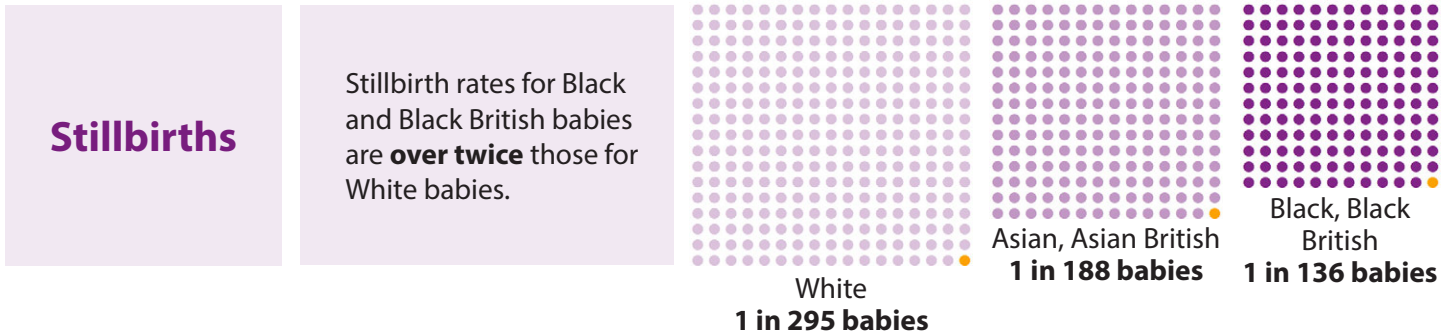
between 2014 and 2018

The overall reduction in the stillbirth rate is mainly due to a fall in the rate of term stillbirths

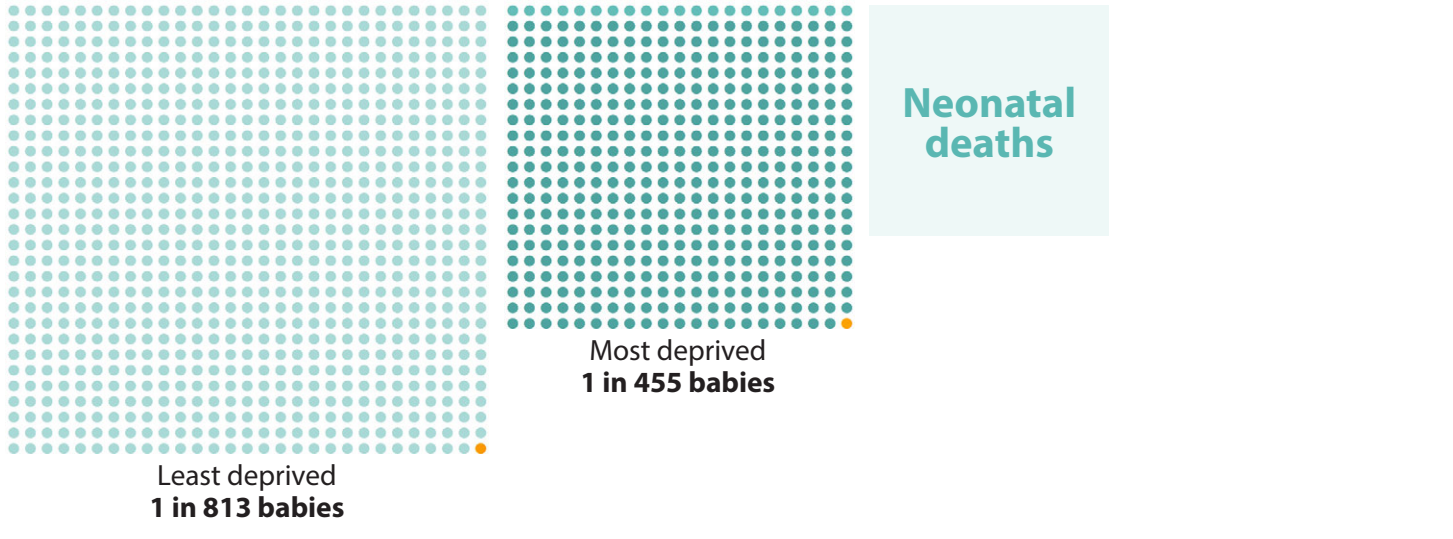
Fell by a quarter

between 2014 and 2018

Effect of ethnicity and living in a deprived area on baby deaths



Lowest risk ← **The smaller the square, the higher the risk** → Highest risk ■



Mortality rates for Trusts and Health Boards

Comparing different organisations

Mortality rates vary between hospitals, particularly if those hospitals care for larger numbers of babies or very sick babies. MBRRACE-UK use the number of babies born in an organisation, as well as whether they have either a neonatal intensive care unit (NICU) or a NICU and facilities for surgery for newborn babies, in order to group together similar Trusts and Health Boards. We then compare the mortality rates for each organisation to the average mortality rates for their own particular group.

Stillbirths

After making allowances for the number of babies they look after, and the complexity of the care they deliver, most Trusts and Health Boards have stillbirth rates which are close to the average for their group. If you don't include babies born with congenital anomalies which aren't compatible with life, all Trusts and Health Boards have stillbirth rates which are close to the average.

Percentage of Trusts and Health Boards with a stillbirth rate within 5% of their group average

■ All stillbirths ■ Stillbirths, not including congenital anomalies



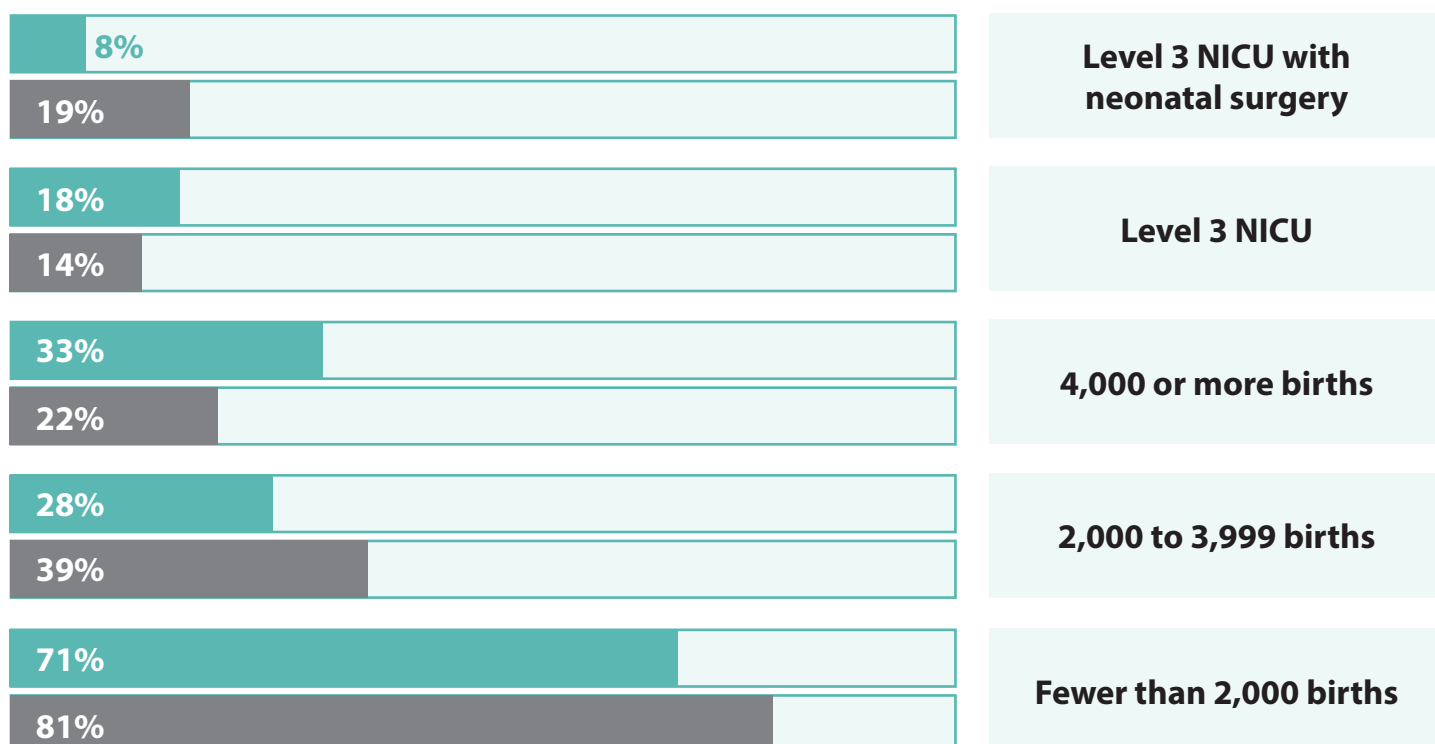
All Trusts & Health Boards

Neonatal deaths

After making the same adjustments, the difference in the rates of newborn babies who die is much wider. Even if you allow for the fact that some hospitals look after higher numbers of babies who are born with congenital anomalies which are not compatible with life, this big difference remains. This means there is more we need to understand about these women and babies and the care they receive.

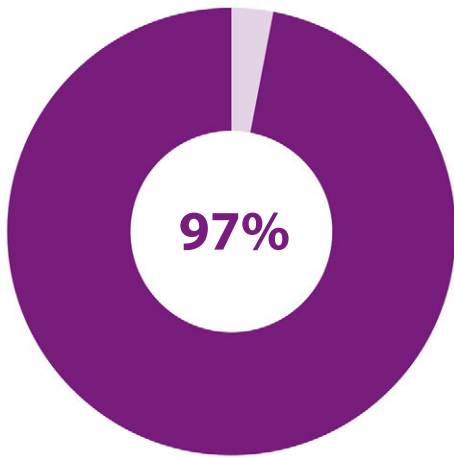
Percentage of Trusts and Health Boards with a neonatal mortality rate within 5% of their group average

■ All neonatal deaths ■ Neonatal deaths, not including congenital anomalies



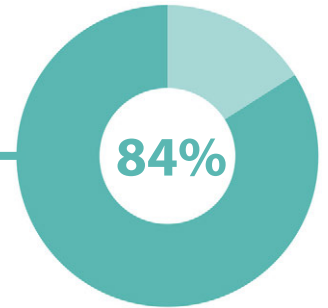
Offer of post-mortem examination

Stillbirths

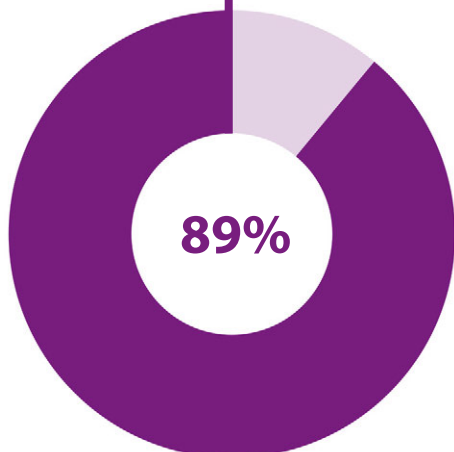


What proportion of parents were offered a **post-mortem examination** after the death of their baby?

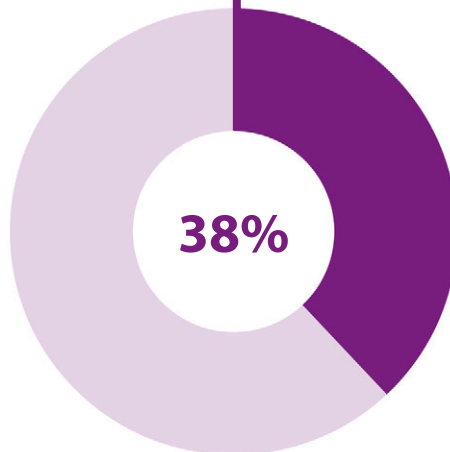
Neonatal deaths



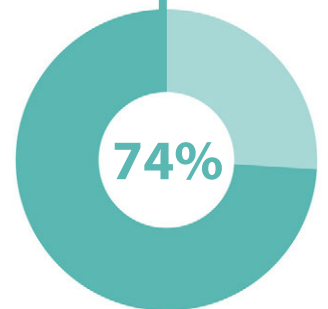
What proportion of stillbirths had **placental histology** investigations carried out?



What proportion of stillbirths had **problems with the placenta or cord** identified as the main cause of death?



When a baby died on day one after birth, or where the death was related to events during birth, what proportion had **placental histology** investigations carried out?



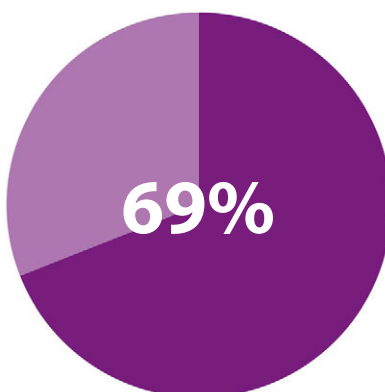
Reporting information about baby deaths

How many baby deaths were notified within the MBRRACE-UK benchmark time?

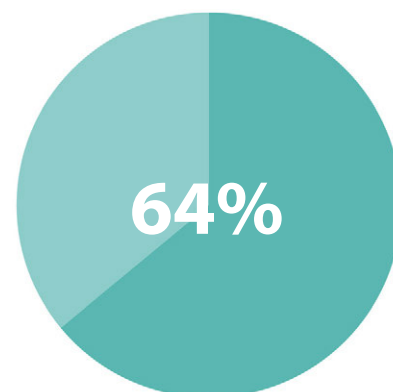
MBRRACE-UK benchmark



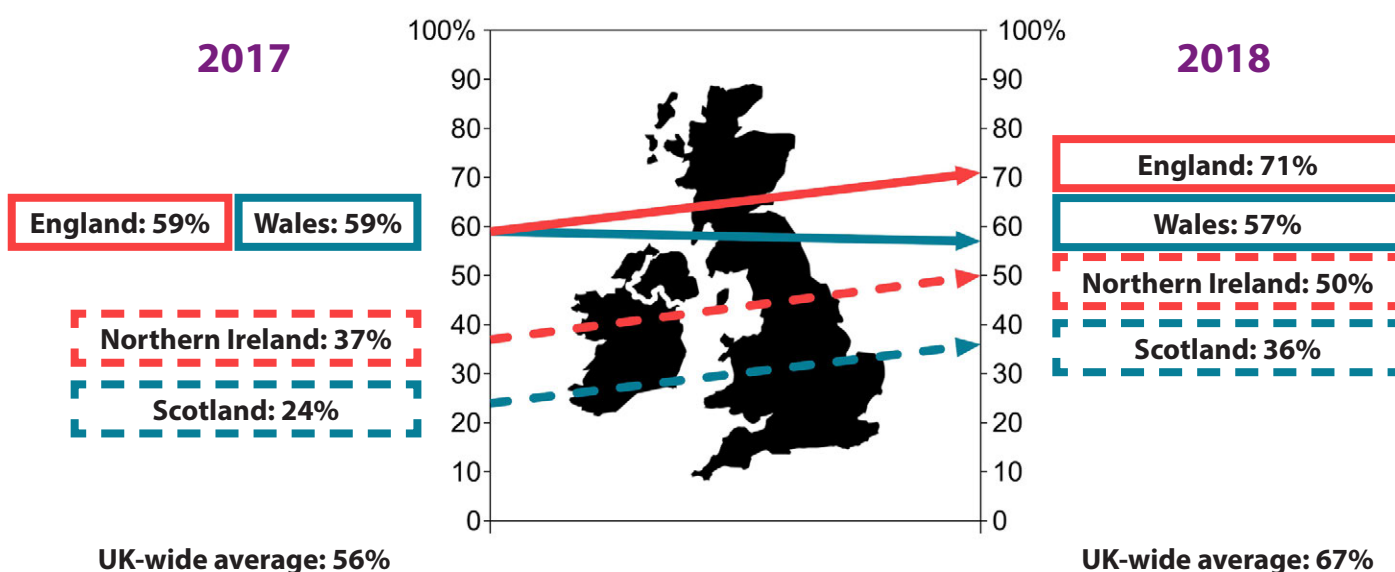
Stillbirths



Neonatal deaths



How does this vary for all baby deaths across the UK?



How complete is key information?

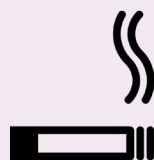
MBRRACE-UK receives high quality information from Trusts & Health Boards.



Over 95% complete

There needs to be more focus on the completeness of some key information.

Smoking status



92%

Booking date



94%

Alive at the start of labour?



87%

Information about carbon monoxide monitoring is improving.



43% complete in 2016 to 56% complete in 2018

What can we do to reduce baby deaths?

We need...

- ... more public health measures for women at greater risk of their baby dying.
- ... to focus on what national programmes already exist to reduce baby deaths and understand their impact on reducing the number of babies born before term (37 weeks).
- ... to support poorer women throughout pregnancy, childbirth and early parenting, by ensuring different agencies who support them, from social care to health services, work together.
- ... to understand what support women from Black and Asian communities specifically need around conception, pregnancy and childbirth.
- ... organisations to routinely use the MBRRACE-UK tool that's been developed and helps units record and monitor their deaths, as and when they happen in real-time, to understand why there are high rates of deaths.
- ... to understand which neonatal deaths are potentially avoidable in those areas where rates are high.
- ... to understand why less than half of parents consent to post mortem and ensure that staff are trained to understand the concerns and needs parents may have when making these decisions.
- ... to ensure an examination of the placenta is carried out by a specialist pathologist for every baby who dies in a neonatal unit.
- ... all deaths to be notified to MBRRACE-UK within a week, and ideally within 2 days of the death occurring.
- ... information about every death to be fully completed and reported to MBRRACE-UK within 2 months so that a local hospital review can be completed to help parents understand why their baby died.

Design by Ian Gallimore.

Pregnant by Lorie Shaull, Microscope by Creative Stall, United Kingdom & Ireland map by Randomhero, Data Quality by Eucalypt, Cigarette by Andrew Nielsen, Birth by Adrien Coquet, Carbon Monoxide by Hamish, from the Noun Project.

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