

Perinatal Mortality Surveillance Report

Summary 2019



Baby deaths: the UK national picture

Every year MBRRACE-UK collects and analyses the numbers and rates of baby deaths in the UK. We then produce a "Perinatal Mortality Surveillance" report which summarises the rates of stillbirth and neonatal deaths (together known as 'extended perinatal deaths') for the different nations and organisations planning and delivering maternity and neonatal care in the UK. This information is useful to people commissioning and delivering healthcare in developing different strategies to avoid preventable deaths, as those strategies will be different depending on how and when the baby died, and what factors influence a baby's risk of dying.

Since the risk of a baby dying is influenced by poverty, ethnicity and the age of the mother, some of the rates take this into account. This is in order to make comparisons as fair as possible between all the different organisations delivering healthcare, where some may care for more 'high risk' women and babies than others.

The report may also be of interest to other people who are concerned about rates of stillbirth and neonatal death in 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.

We have tried to make the information as accessible as possible. For the first time this year, we have presented our analyses for the many different organisations delivering healthcare using interactive maps. You can find these at: www.npeu.ox.ac.uk/mbrpace-uk/reports/. You will also find the full report here, as well as a "Tables and Figures" report and a "Technical Document" which explains how we collect data on babies and how we calculate the mortality rates.

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 the risk of dying is for that group.

Baby deaths in the UK: 2019 for babies born from 24 weeks



 2,399 stillbirths

 1,158 neonatal deaths

2013

 716,825 births

2019

Extended perinatal deaths
↓ 18% since 2013

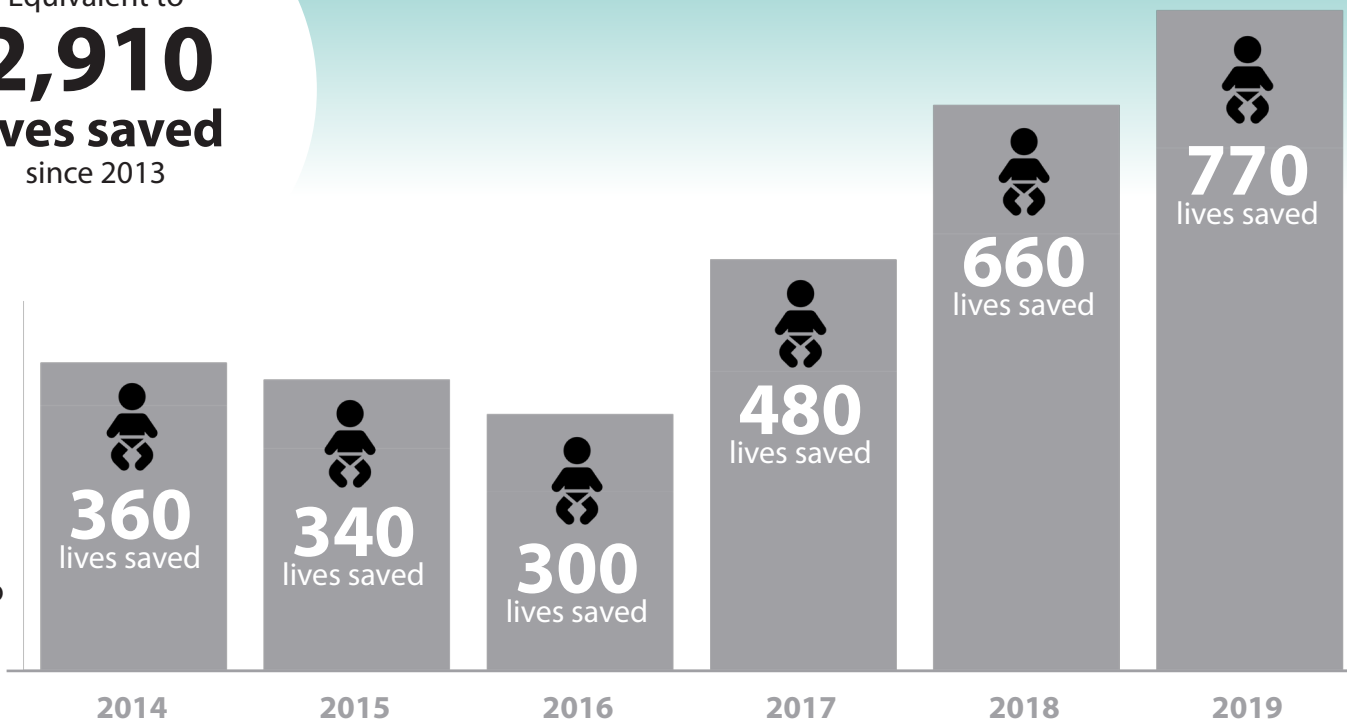
Mortality rates continue to fall

Stillbirths
↓ 20% since 2013

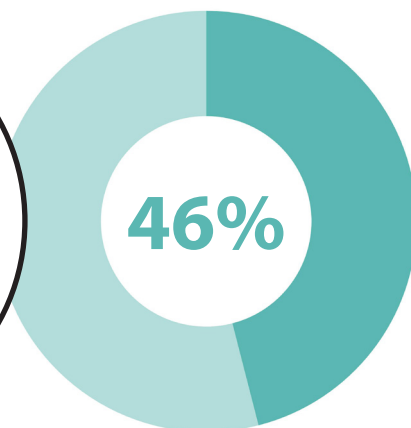
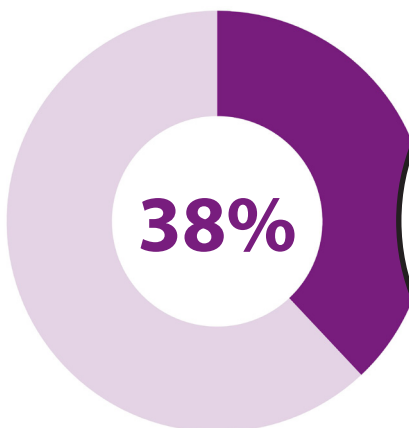
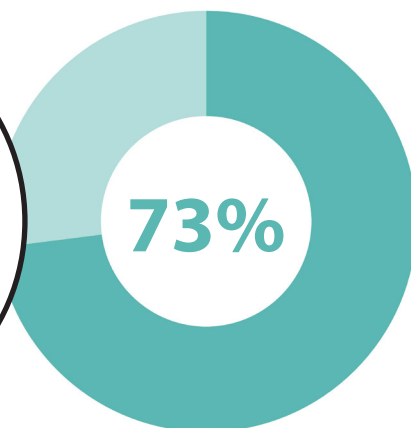
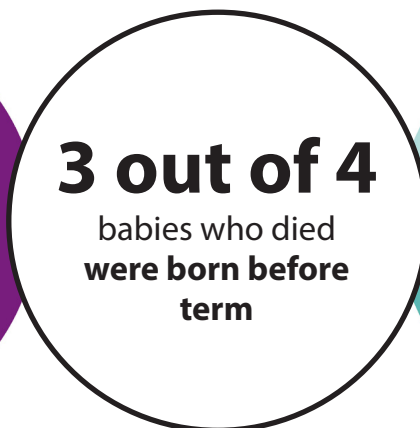
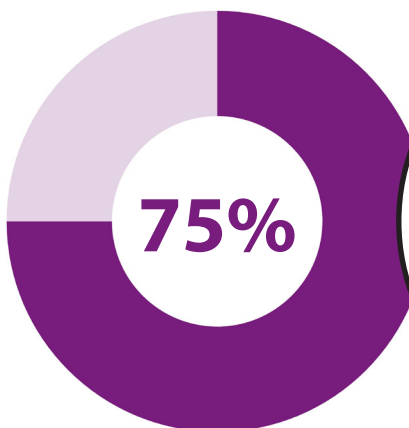
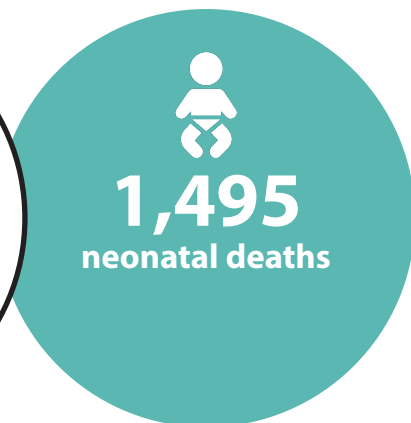
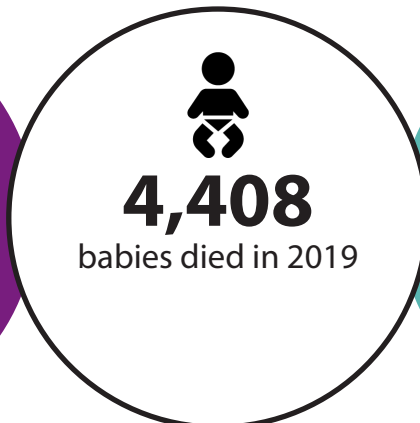
Neonatal deaths
↓ 12% since 2013

Equivalent to
2,910
lives saved
since 2013

Compared to
rates in 2013



Baby deaths by gestational age for babies born from 22 weeks



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

Stillbirths at 37+ weeks fell by 19%

between 2015 and 2019

The greatest reduction in the neonatal mortality rate was in **very preterm** births

Neonatal deaths at 28 to 31 weeks fell by 14%

between 2015 and 2019

Extremely preterm
Less than 28 weeks

Very preterm
28 to 31 weeks

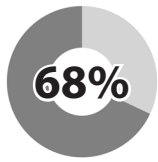
Moderate to late preterm
32 to 36 weeks

Term
37 weeks and over

How does ethnicity, mother's age and living in a deprived area affect baby deaths?



Stillbirth and neonatal mortality rates **increased with deprivation** and were higher for mothers under 25 years and over 35 years across all ethnic groups.



living in deprived areas

Many babies of **Black and Black British** ethnicity are born to mothers living in deprived areas. They are **much more affected** by the higher rates of stillbirth associated with deprivation.

Lowest stillbirth & neonatal mortality rates



White

+



25-34

+

1

Least deprived

Highest stillbirth rates



Black or Asian

+



Over 35

+

5

Most deprived

Highest neonatal mortality rates



Black or Asian

+



Under 25 or Over 35

+


5


Most deprived

How does ethnicity, mother's age and living in a deprived area affect baby deaths?


How to read these charts

- Each square** represents a different group of babies, grouped according to their ethnicity, mother's age and the level of deprivation where their mother lived.



- The **size of the square** indicates the number of babies in this group, as a proportion of all babies of this ethnicity.







Least babies (0.4%)

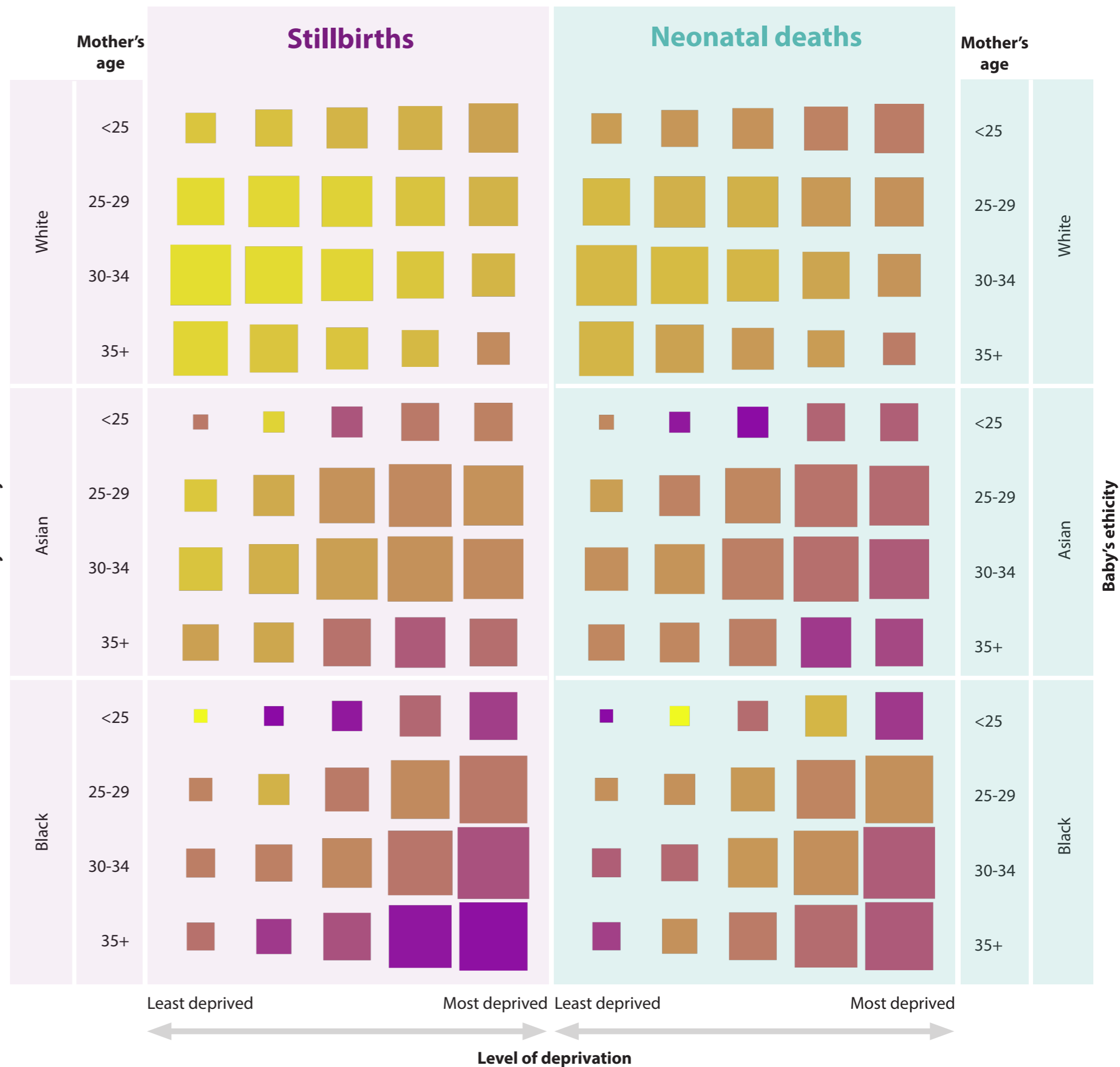


Most babies (11.8%)
- The **colour of the square** indicates the perinatal mortality rate for this group, per 1,000 births.

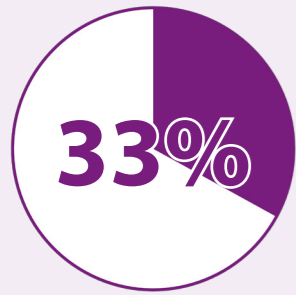


Lowest rate (1.21) Highest rate (10.78)
- But it is the **combination** which tells you the most. For example:

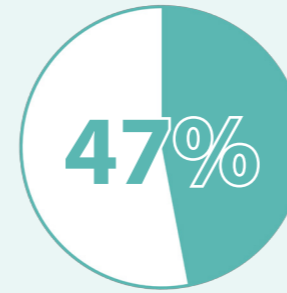
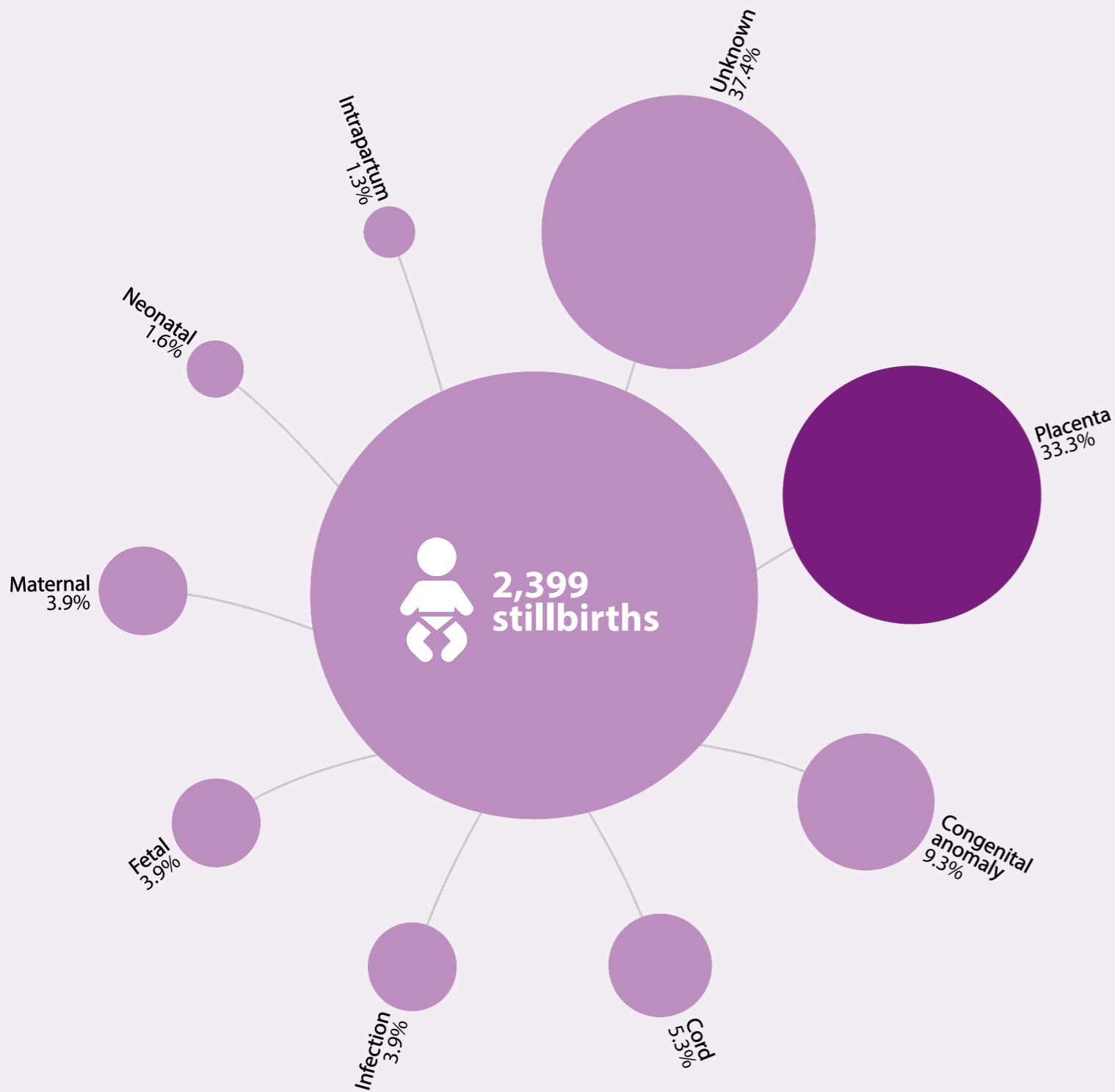
 -  A **low proportion of babies** of this ethnicity are in this group, and the mortality **rate is low**.
 -  A **high proportion of babies** of this ethnicity are in this group, and the mortality **rate is low**.
 -  A **low proportion of babies** are in this group, and the mortality **rate is high**.
 -  A **high proportion of babies** of this ethnicity are in this group, and the mortality **rate is high**.



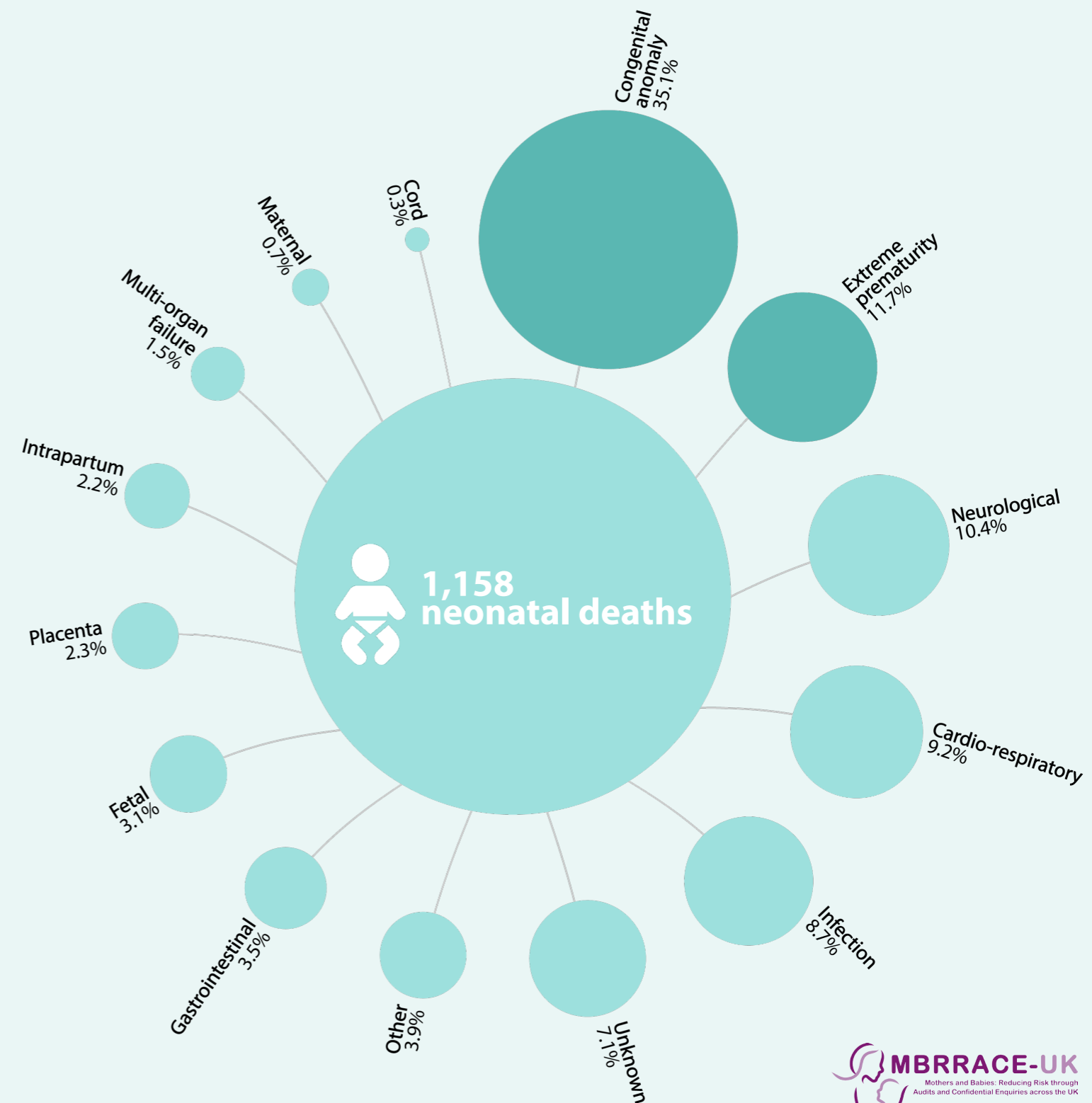
Causes of baby deaths in 2019



Deaths due to problems with the placenta made up **a third of all stillbirths**. This proportion has increased between 2015 and 2019 as more placental examinations were carried out after a baby's death.



Almost half of neonatal deaths were of babies who were born extremely early or who had congenital anomalies which were not compatible with life.



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 those caused by congenital anomalies

97%

100%

All Trusts & Health Boards

Neonatal deaths

After making the same allowances, 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 those caused by congenital anomalies

15%

12%

Level 3 NICU with
neonatal surgery

17%

21%

Level 3 NICU

29%

24%

4,000 or more births

18%

36%

2,000 to 3,999 births

65%

75%

Fewer than 2,000 births

Stillbirth and neonatal mortality rates for individual Trusts and Health Boards are shown in interactive maps and tables, which can be found online at www.npeu.ox.ac.uk/mbrance-uk/reports/.

What can we do to reduce baby deaths?

What do we need to do?

- ✓ Develop research and interventions to reduce inequalities between women, focusing on preventing deaths for those mothers most at risk of their baby dying because of factors associated with ethnicity, age and social deprivation.
- ✓ Improve implementation of existing prevention programmes, focusing on research and prevention of pre-term birth, particularly extremely pre-term birth.
- ✓ Use the [MBRRACE-UK guidance](#) to assess signs of life in babies born before 24 weeks.
- ✓ Improve access and support for women aged under 20 or over 35, to ensure they are empowered with the right contraception advice and can make informed decisions around pregnancy risks.
- ✓ Make information about congenital anomalies a part of all routine pre-conception care for women who may be at risk of this outcome when they become pregnant.
- ✓ Notify all baby deaths to MBRRACE-UK within 2 working days of the death.
- ✓ Use the interactive maps MBRRACE-UK provides to compare mortality rates between organisations.

What do we need to do better?

- ✓ Support poorer women throughout pregnancy, childbirth and early parenting, by ensuring the different agencies who support them, from social care to health services, work together.
- ✓ Understand what support women from Black and Asian communities specifically need around conception, pregnancy and childbirth.
- ✓ Organisations should routinely use the tool developed by MBRRACE-UK to help units monitor their deaths, as and when they happen in real-time, to understand sooner why rates may be high.
- ✓ Understand which neonatal deaths are potentially avoidable in those areas where rates are high.
- ✓ Understand why less than half of parents consent to a post-mortem and ensure that staff are trained to understand the concerns and needs parents may have when making these decisions.
- ✓ Ensure an examination of the placenta is carried out by a specialist pathologist for every baby who dies in a neonatal unit.

Design by Ian Gallimore.

Baby by Vectorstall, Pregnant by b farias, from the Noun Project.

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