

Maternal, Newborn and  
Infant Clinical Outcome  
Review Programme



# MBRRACE-UK Perinatal Mortality Surveillance Report

UK Perinatal Deaths for Births from  
January to December 2015

## Summary Report



June 2017





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Infant Clinical Outcome  
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January to December 2015

## **Summary Report**

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on behalf of the MBRRACE-UK collaboration

June 2017

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The Healthcare Quality Improvement Partnership (HQIP) is led by a consortium of the Academy of Medical Royal Colleges, the Royal College of Nursing and National Voices. HQIP's aim is to promote quality improvement, and it hosts the contract to manage and develop the Clinical Outcome Review Programmes, one of which is the Maternal, Newborn and Infant Clinical Outcome Review Programme, funded by NHS England, NHS Wales, the Health and Social Care division of the Scottish government, the Northern Ireland Department of Health, the States of Jersey, Guernsey, and the Isle of Man. The programmes, which encompass confidential enquiries, are designed to help assess the quality of healthcare, and stimulate improvement in safety and effectiveness by systematically enabling clinicians, managers and policy makers to learn from adverse events and other relevant data. More details can be found at [www.hqip.org.uk/clinical-outcome-review-programmes-2/](http://www.hqip.org.uk/clinical-outcome-review-programmes-2/).

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# Introduction to Summary Report

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This is the summary of the MBRRACE-UK Perinatal Mortality Surveillance Report for births in 2015 within the United Kingdom and the Crown Dependencies. This year, for the first time, the full report will only be available as a downloadable document, which can be found on the MBRRACE-UK website ([www.npeu.ox.ac.uk/mbrpace-uk/reports](http://www.npeu.ox.ac.uk/mbrpace-uk/reports)).

This summary report contains the Executive Summary (including the Key Findings and Recommendations) together with a summary of births and extended perinatal deaths in the UK and Crown Dependencies and the reported mortality rates for Trusts and Health Boards in the UK.

## Acknowledgements

It is with grateful thanks that the MBRRACE-UK collaboration would like to acknowledge the contribution of the many healthcare professionals and staff from the health service and other organisations who were involved in the reporting of perinatal deaths in the UK. Without the generous contribution of their time and expertise it would not have been possible to produce this report. It is only through this collaborative effort that it has been possible to conduct this national perinatal mortality surveillance and to continue the UK tradition of national self-audit to improve care for mothers, babies and their families. Particular thanks go to:

- All MBRRACE-UK Lead Reporters and other staff in NHS Trusts, Health Boards and Health and Social Care Trusts across the UK and those from the Crown Dependencies, whose contribution made it possible to carry out this surveillance
- Office for National Statistics
- National Records of Scotland
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- All Wales Perinatal Service
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- Health Intelligence Unit, Public Health Services, Jersey
- Noble's Hospital, Isle of Man
- NHS Digital
- The Maternal, Newborn and Infant Clinical Outcome Review Independent Advisory Group
- Healthcare Quality Improvement Partnership
- MBRRACE-UK Third Sector Stakeholder Group Representatives
- MBRRACE-UK Royal College and Professional Association Stakeholder Group Representatives



# Foreword

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We welcome the publication of this third MBRRACE-UK annual report of the national perinatal mortality statistics for 2015. In reflecting on its findings, our starting point must be to remember that each one of the 4,392 extended perinatal deaths reported here represents the tragic loss of a much-loved and much-wanted child. For every family affected, the death of a baby is also the loss of a family's hopes and dreams for the future.

This report comes at a time of significant change to maternity and neonatal services in different parts of the UK. In England, in late 2015 the Health Secretary announced an ambition to reduce the rate of stillbirths, neonatal and maternal deaths by 50% by 2030. This ambition is being supported by the Maternity Transformation Programme now under way, which has at its heart the goal of safer, more personalised, kinder, professional and family friendly care, with the aspiration for every woman to have access to information to enable her to make decisions about her care. Following on from the Maternity Review which led to this Transformation Programme, NHS England is also undertaking a Neonatal Transformation Review. In Scotland, we have recently seen the publication of 'The Best Start: A Five-Year Forward Plan for Maternity and Neonatal Care in Scotland', which highlights the importance of evidence-based service redesign to deliver truly family-centred, safe and compassionate care. These changes are occurring in the context of the UK and the devolved Governments striving to reduce the rate of perinatal death, and so are also reflected in the work of NHS Wales' 1000 Lives Improvement National Stillbirth Working Group, and Northern Ireland's Maternal and Infant Steering Group.

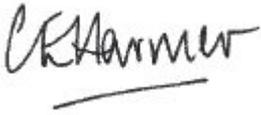
As highlighted in the Kirkup Report a key role of MBRRACE-UK is to provide information to enable the assessment of safety of care. The findings from the surveillance data this year are generally positive, with an overall reduction in stillbirth and neonatal death rates continuing the trend from last year. With three years' data having been collected MBRRACE-UK are now able to track the changes over time for the UK overall, as well as country-specific rates. It is welcome to see the effects of actions to reduce stillbirths – including the Saving Babies' Lives Care Bundle – becoming evident nationally.

However, in contrast neonatal death rates have only reduced marginally, and this merits far greater attention and action over the coming years. Just less than a third of all perinatal deaths occur in the neonatal period, with two thirds of the babies who die at this stage having been born preterm. Similarly two-thirds of stillbirths occur prior to the pregnancy reaching full term. Prematurity is not the primary cause of death for all of these babies, and in particular congenital anomalies play an important role, but complications in the context of prematurity inevitably increase the chances of a poor outcome. A better understanding of the causes of preterm birth and the development of interventions to prevent preterm birth are therefore urgently needed if we are to see a sustained reduction in the rates of perinatal deaths and in particular neonatal deaths.

Parents whose baby has died have the greatest stake of all in the review of their baby's death. For most parents, understanding what happened and sharing that information with friends, family, and existing or future siblings is part of coming to terms with the loss of a child. As two of the leading charities representing parents and families we would urge all maternity and neonatal units to follow the recommendation by MBRRACE-UK to review the care provided for all mothers and babies where a death has occurred. The need for a standardised tool to assist in local reviews has been championed for many years by charities such as ours, and by individual parents who have bravely spoken out about the need for change. We are therefore very pleased that the collaboration led by MBRRACE-UK has been commissioned to develop the national, standardised Perinatal Mortality Review Tool (PMRT) to support local review processes. Roll out of the early phase of the tool, together with training, is planned by the end of the year. In parallel the Royal College of Obstetricians and Gynaecologists (RCOG), the Royal College of Midwives, the British Association of Perinatal Medicine and research teams from Bristol and Manchester are investigating how best to incorporate the views and experiences of parents into the review process – an essential component of an effective review.

Use of the PMRT – in conjunction with the findings from the MBRRACE-UK perinatal confidential enquiries and the Each Baby Counts programme from the RCOG – has the capacity to be world-leading in the critical evaluation of care leading up to the death of a baby, as well as the quality of care for families in the aftermath.

Harnessing the learning from review will inform service improvements to ensure that the NHS across the UK is able to provide the very best care for every mother, baby and family and to prevent every perinatal death which is potentially avoidable. We therefore strongly commend this report to every individual and organisation involved in providing, commissioning and evaluating maternity and neonatal care across the UK. Together we can and must strive to go further and faster to reduce stillbirths and neonatal deaths.



Clea Harmer  
Chief Executive  
Sands



Caroline Lee-Davey  
Chief Executive  
Bliss

# Definitions used in this report

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<b>Late fetal loss</b>	A baby delivered between 22 <sup>+0</sup> and 23 <sup>+6</sup> weeks gestational age showing no signs of life, irrespective of when the death occurred.
<b>Stillbirth</b>	A baby delivered at or after 24 <sup>+0</sup> weeks gestational age showing no signs of life, irrespective of when the death occurred.
<i>Antepartum stillbirth</i>	A baby delivered at or after 24 <sup>+0</sup> weeks gestational age showing no signs of life and known to have died before the onset of care in labour.
<i>Intrapartum stillbirth</i>	A baby delivered at or after 24 <sup>+0</sup> weeks gestational age showing no signs of life and known to have been alive at the onset of care in labour.
<b>Neonatal death</b>	A liveborn baby (born at 20 <sup>+0</sup> weeks gestational age or later, or with a birthweight of 400g or more where an accurate estimate of gestation is not available) who died before 28 completed days after birth.
<i>Early neonatal death</i>	A liveborn baby (born at 20 <sup>+0</sup> weeks gestational age or later, or with a birthweight of 400g or more where an accurate estimate of gestation is not available) who died before 7 completed days after birth.
<i>Late neonatal death</i>	A liveborn baby (born at 20 <sup>+0</sup> weeks gestational age or later, or with a birthweight of 400g or more where an accurate estimate of gestation is not available) who died after 7 completed days but before 28 completed days after birth.
<b>Perinatal death</b>	A stillbirth or early neonatal death.
<b>Extended perinatal death</b>	A stillbirth or neonatal death.
<b>Termination of pregnancy</b>	The deliberate ending of a pregnancy, normally carried out before the embryo or fetus is capable of independent life.



# Executive Summary

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## Background

This is the third MBRRACE-UK Perinatal Mortality Surveillance Report and provides information on extended perinatal deaths in the UK and Crown Dependencies arising from births during 2015. MBRRACE-UK are commissioned by the Healthcare Quality Improvement Partnership (HQIP) to undertake the Maternal, Newborn and Infant Clinical Outcome Review Programme (MNI-CORP) on behalf of NHS England, NHS Wales, the Scottish Government Health and Social Care Directorate, the Northern Ireland Department of Health, the States of Guernsey, the States of Jersey, and the Isle of Man Government.

The aims of MNI-CORP are to collect, analyse and report national surveillance data and conduct national confidential enquiries in order to stimulate and evaluate improvements in health care for mothers and babies.

As in the surveillance reports for 2013 and 2014, the main report summarised here focuses on **the surveillance of all late fetal losses (22<sup>+0</sup> to 23<sup>+6</sup> weeks gestational age), stillbirths, and neonatal deaths**, with data presented by country, by Trust or Health Board of birth, by commissioning organisation, by local authority and by neonatal network.

The availability of three years' data from across the UK (a cohort of well over two million births) and improving quality of the data submitted to MBRRACE-UK has permitted, in addition, an exploration of:

- the influence on UK mortality rates of babies born at 22<sup>+0</sup> to 23<sup>+6</sup> weeks gestational age;
- the influence on UK mortality rates of babies who die due to a major congenital anomaly;
- time trends in neonatal, stillbirth and extended perinatal mortality rates for the UK and each of the constituent countries.

Also included in the main report are crude and stabilised & adjusted mortality rates based on English populations covered by individual Sustainability and Transformation Plans (STPs), with comparative data for the whole of each of the devolved nations.

## Methods

Deaths reported to MBRRACE-UK since 1 January 2013 through the secure online reporting system are:

- late fetal losses: a baby delivered between 22<sup>+0</sup> and 23<sup>+6</sup> weeks gestational age showing no signs of life, irrespective of when the death occurred;
- stillbirths: a baby delivered at or after 24<sup>+0</sup> weeks gestational age showing no signs of life, irrespective of when the death occurred;
- neonatal deaths: a liveborn baby (born at 20<sup>+0</sup> weeks gestational age or later, or with a birthweight of 400g or more where an accurate estimate of gestation is not available) who died before 28 completed days after birth.

Individual level information on all births in the UK is obtained in order to generate mortality rates adjusted for maternal, baby, and socio-demographic risk factors. This information is acquired through the collaboration of the following organisations: Patient Demographic Service (PDS) and Office for National Statistics (ONS) birth registration data (for England, Wales, and the Isle of Man); National Records Scotland (NRS) and Information Services Division (ISD) (for Scotland); Northern Ireland Maternity System (NIMATS) (for Northern Ireland), Health and Social Services Department (for the Bailiwick of Guernsey), and Health Intelligence Unit (for the Bailiwick of Jersey). The data is amalgamated to give a single dataset of births for the whole of the UK and the

Crown Dependencies. This data is then combined with the information on the deaths to obtain the final data for analysis.

## Analysis

The main findings of the report are represented in a combination of maps and tables showing both the crude and the stabilised & adjusted mortality rates for stillbirths, neonatal deaths, and extended perinatal deaths (stillbirths and neonatal deaths combined). Stabilisation is designed to take account of some of the random variation inherent in this type of data and adjustment takes account of some of the factors known to affect rates of survival in particular populations, e.g. the level of deprivation.

In order to ensure comparability of mortality rates, data is shown after excluding births occurring at less than 24<sup>+0</sup> weeks gestational age and terminations of pregnancy. Analysis of data for countries, commissioning organisations, local authorities, and populations covered by Sustainability and Transformation Plans (STPs) is based on mother's postcode at the time of birth. Analysis of data for Trusts and Health Boards as well as neonatal networks is based on the place of birth. For comparison purposes, the mortality rates for individual organisations are presented compared to the UK average, except for Trusts and Health Boards where the average mortality in similar organisations is used.

This year's report contains for the first time a more detailed assessment of the extent to which babies born at 22<sup>+0</sup> to 23<sup>+6</sup> weeks gestational age and babies affected by severe congenital anomalies influence reported mortality rates. A variety of factors aside from the quality of medical care influence the outcome for these babies. These include uptake of termination of pregnancy for severe anomalies recognised antenatally, local policies regarding the care of babies born at the limit of viability and differences in the attitude of both parents and medical staff about the advisability of treating severe congenital anomalies for which palliation is possible but is not a cure.

## Key findings

1. The rate of extended perinatal mortality in the UK has fallen from 6.04 to 5.61 deaths per 1,000 total births over the period 2013 to 2015 for babies born at 24<sup>+0</sup> weeks gestational age or later.
2. The fall in the extended perinatal mortality rate for the UK is mainly due to a reduction in the rate of stillbirth, which has fallen from 4.20 to 3.87 stillbirths per 1,000 total births, in particular for antepartum stillbirths of at least 32<sup>+0</sup> weeks gestational age.
3. There has been a small change in the rate of neonatal mortality in the UK over the period 2013 to 2015 from 1.84 to 1.74 deaths per 1,000 live births.
4. Deaths to babies born before 24<sup>+0</sup> weeks gestational age (both late fetal losses and neonatal deaths) and deaths due to congenital anomalies account for much of the variation in mortality rates between health organisations and geographical areas.
5. For the Trusts and Health Boards which care for the most complex pregnancies and deliveries, the reported mortality rates are likely to reflect their high-risk case-mix which cannot be fully accounted for by stabilisation and adjustment.
6. Data for Sustainability and Transformation Plan (STP) footprints (presented for the first time in this report) shows that there are marked variations in stabilised & adjusted rates of neonatal mortality between those areas in the north of England compared to those in the south, with rates ranging from 1.17 to 2.45 deaths per 1,000 live births.
7. Whilst there has been a steady improvement in data quality overall there continues to be a problem with the completion of maternal data for deaths occurring in children's hospitals.
8. There has been little improvement in the percentage of stillbirths in the UK for which placental histology is carried out: 88.8% in 2015 compared to 88.4% in 2014.

9. Almost one third of stillbirths (30.3%: 360 out of 1,190) with an unknown primary cause of death were potentially growth restricted (<10th centile birth weight).
10. Significant variation in the rates of extended perinatal mortality across the UK persist, even after taking into account the effects of chance variation and the case-mix differences we are able to account for, with stabilised & adjusted extended perinatal mortality rates for commissioning organisations ranging from 5.00 to 6.75 deaths per 1,000 total births.

## Recommendations

1. Close monitoring of mortality rates is required to ensure that the decline in rates of stillbirth is continued in order to meet Government ambitions.
2. A renewed focus on neonatal deaths is required in order to achieve a significant reduction in neonatal mortality rates from the position seen over the past three years.
3. More research is required to identify the extent to which deaths before 32 weeks gestational age are avoidable and to try to develop practices and policies which could reduce potential variation in management across the UK.
4. A national forum should be established by NHS England, NHS Scotland, NHS Wales, and Health and Social Care in Northern Ireland, in conjunction with professional bodies and national healthcare advisors responsible for clinical standards in relevant specialties, to agree the appropriate approach to reporting the influence on overall mortality rates of neonatal deaths and late fetal losses amongst babies born before 24 weeks gestational age and of deaths due to congenital anomalies.
5. Those Trusts and Health Boards providing the most complex care to particularly high-risk mothers and babies should ensure that the data provided to MBRRACE-UK is of the highest quality. This will permit more appropriate sub-analyses and comparisons.
6. Sustainability and Transformation Plans (STPs) in England need to address existing inequalities, particularly in relation to neonatal mortality.
7. All Trusts and Health Boards should endeavour to continue to improve the quality and completeness of data reported to MBRRACE-UK. Children's hospitals should develop and embed systems that allow for consistent liaison with birth hospitals to facilitate the collection of maternal details.
8. Placental histology should be undertaken (if possible) for all stillbirths, preferably by a perinatal pathologist.
9. Trusts and Health Boards should ensure that systems are in place to implement appropriate national guidance related to monitoring fetal growth.
10. There is a continuing need for Trusts and Health Boards with a stabilised & adjusted extended perinatal mortality rate that falls in the red or amber band to conduct a local review in order to develop an action plan to improve the quality of their care provision. However, all Trusts and Health Boards, irrespective of their extended perinatal mortality rate, should investigate individual stillbirths and neonatal deaths using a standardised process and independent multidisciplinary peer review as recommended in the Report of the Morecambe Bay Investigation as well as by the Perinatal Mortality Review Task and Finish Group convened by Sands and the Department of Health. The information within the MBRRACE-UK Perinatal Surveillance Reports (including the reports for individual Trusts and Health Boards) and recommendations from MBRRACE-UK Confidential Enquiries can facilitate this process.



# Perinatal Mortality Surveillance Report



## Lay Summary

### Baby deaths in the UK – the national picture for 2015

**MBRRACE-UK reports that 4,392 babies died before, during or soon after birth for mothers living in the UK. This represents a fall in the mortality rate from 6.04 per 1,000 births in 2013 to 5.61 per 1,000 births in 2015.**

As in previous reports, MBRRACE-UK compares rates of stillbirth and neonatal death\* focusing on deaths after 24 weeks of pregnancy and excluding terminations of pregnancy. The overall fall in the extended perinatal mortality\*\* rate is mainly due to a fall in stillbirths from 4.20 per 1,000 births in 2013 to 3.87 in 2015, particularly those occurring from 32 weeks of pregnancy onwards. However, there has been only a small reduction in the neonatal mortality rate from 1.84 per 1,000 births to 1.74 over the same period.

The full MBRRACE-UK report\*\*\* presents mortality rates for a number of different organisations delivering health services across all four countries of the United Kingdom. As the rate of perinatal death is influenced by poverty, ethnicity and the age of the mother, we report stabilised and adjusted rates which take into account the number of high risk women and babies an organisation cares for in order to make the comparisons as fair as possible.

### Improving our understanding – why babies die

Previous reports have highlighted the number of stillbirths which are unexplained. This has fallen from 49% in 2014 to 42% in 2015. Almost one third of these unexplained stillbirths were identified as potentially having poor growth highlighting the importance of close monitoring of fetal growth during pregnancy.

At least one in four stillbirths has a placental cause and examination of the placenta does not require parental consent. However, there has been little improvement in the number of placental investigations since 2014. They are carried out for around 89% of all stillbirths, meaning that for at least one in ten stillbirths there is no record of any detailed examination of the placenta. The report recommends placentas are sent for detailed examination if possible, in all cases.

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\* 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 time during pregnancy who lives, even briefly, but dies within 4 weeks of birth.

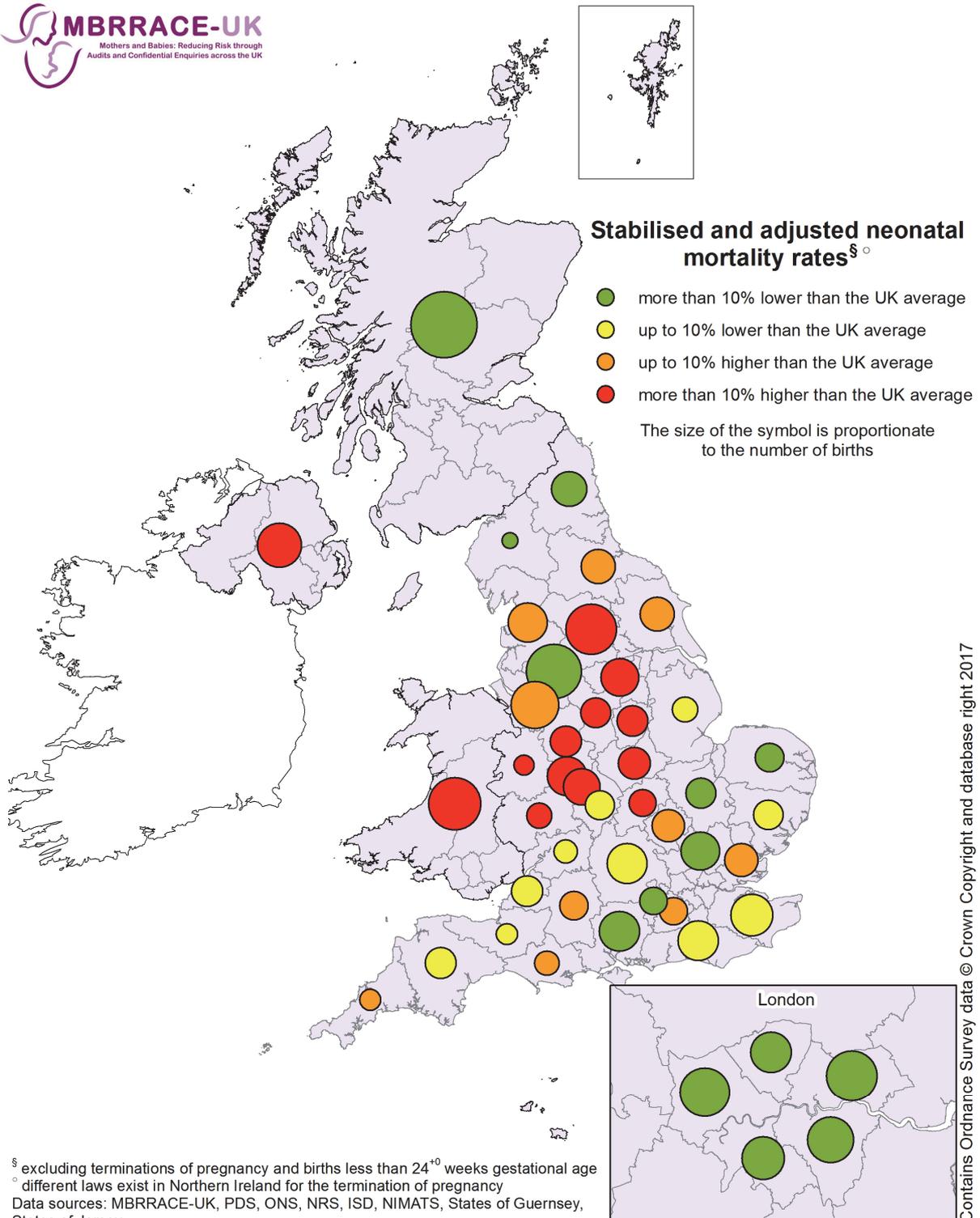
\*\* Extended perinatal death includes all stillbirths and neonatal deaths up to 4 weeks after birth

\*\*\*The full report is available online at [www.npeu.ox.ac.uk/mbrrace-uk/reports](http://www.npeu.ox.ac.uk/mbrrace-uk/reports)

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 Caroline Stickland, Bliss; Jane Plumb, Group B Strep Support; Maureen Treadwell, Birth Trauma Association; Elizabeth Draper, Jenny Kurinczuk and Lucy Smith from MBRRACE-UK

# Neonatal mortality rates by Sustainability and Transformation Plan (STP) footprint in England and by country elsewhere

Extended perinatal deaths for new healthcare areas in England, known as the Sustainability and Transformation Plan (STP) footprints, are shown in the full report alongside whole country rates for Wales, Scotland and Northern Ireland which have similar numbers of births to STP areas in England. These rates are based on where the mother lived which may be different from where the baby was born. The map included in this summary report shows that in England neonatal mortality rates in the south and east are generally lower than the rates for most areas in the midlands and the north. This reflects existing health and wealth inequalities in England.



<sup>§</sup> excluding terminations of pregnancy and births less than 24<sup>⁰</sup> weeks gestational age

<sup>°</sup> different laws exist in Northern Ireland for the termination of pregnancy

Data sources: MBRRACE-UK, PDS, ONS, NRS, ISD, NIMATS, States of Guernsey, States of Jersey

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# Understanding baby deaths in the UK in 2015

Out of 782,720 births\* in 2015...

**3,032** stillbirths

**1,360** neonatal deaths

\* of babies delivered from 24 weeks of pregnancy, excluding terminations of pregnancy



**11% of stillbirths did not have placental pathology**

**In addition, over 850 babies died at 22 and 23 weeks of pregnancy**



## Babies born at 22 and 23 weeks

The full report also looks in detail at the number of babies who died before 24 weeks of pregnancy. Many other European countries include all births from 22 weeks of pregnancy in their national registration statistics whereas in the UK, only babies born showing no signs of life from 24 weeks are registered as stillbirths. There is also variation between hospitals in decisions about whether a baby born at less than 24 weeks has shown signs of life before dying (and is registered as a birth and death) or hasn't (and so is not registered at all).

In 2015, there were over 850 deaths of babies born at 22 and 23 weeks. In some areas the percentage of babies registered as having been born alive at these gestations was almost twice as high compared to other areas. This is likely to reflect variations in how these babies are managed between hospitals rather than differences in the babies themselves.

This variation can have an enormous impact on parents' experiences, as the parents of babies who are not registered as births do not receive government support in the form of maternity/paternity leave and financial support. Improving the information collected about these deaths in future MBRRACE-UK reports will also improve comparisons in rates between the UK and other countries.

## Babies who die as a result of a congenital anomaly

There were over 700 deaths due to a congenital anomaly in 2015. In some cases the anomaly may have been identified during an antenatal scan. This is a particular issue for Northern Ireland (NI) where termination of pregnancy is not legal in most circumstances. Parents elsewhere in the UK may also make different decisions about whether to continue or terminate their pregnancies affected by congenital anomalies for personal, religious or cultural reasons. This variation may partly explain why the neonatal death rate in NI and some areas in the rest of the UK is higher than in others.

The MBRRACE-UK full report investigates the effect of both babies born before 24 weeks of pregnancy and those born with a congenital anomaly, to see how it impacts on the variation in mortality rates between different areas. To see the full report go to [www.npeu.ox.ac.uk/mbrrace-uk/reports](http://www.npeu.ox.ac.uk/mbrrace-uk/reports).

## Recommendations from the MBRRACE-UK 2017 report

- Neonatal deaths, which have remained static for 3 years, require a renewed focus
- Stillbirths need to be investigated closely to ensure the fall in rates continues
- Improved research is needed to understand if stillbirths before 32 weeks of pregnancy are avoidable
- A national forum should be formed to decide how to report deaths before 24 weeks and those due to congenital anomalies, and their impact on overall rates
- Organisations are urged to provide improved data on deaths at all stages of pregnancy so it is possible to make better comparisons between them
- All hospitals should carry out local reviews on every death to understand what happened, why it happened and how they can improve care to prevent similar deaths in the future

# Perinatal death in 2015 in the UK

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The data in this summary report relates to the information available for the UK about the rates of stillbirth, neonatal death, and extended perinatal death (stillbirth and neonatal deaths combined) for births that occurred in 2015 at 24<sup>+0</sup> weeks gestational age or later (excluding terminations of pregnancy).

Deaths reported to MBRRACE-UK are:

- late fetal losses: a baby delivered between 22<sup>+0</sup> and 23<sup>+6</sup> weeks gestational age showing no signs of life, irrespective of when the death occurred;
- stillbirths: a baby delivered at or after 24<sup>+0</sup> weeks gestational age showing no signs of life, irrespective of when the death occurred;
- neonatal deaths: a baby born alive at 20<sup>+0</sup> weeks gestational age or later, or with a birthweight of 400g or more (where an accurate estimate of gestation is not available), who died before 28 completed days after birth.

These definitions also include any late fetal loss, stillbirth, or neonatal death resulting from a termination of pregnancy.

In an effort to ensure complete data collection and to facilitate international comparisons, the eligibility criteria for MBRRACE-UK are based on gestational age at delivery irrespective of when the death occurred. Therefore, all births delivered from 22<sup>+0</sup> weeks gestational age showing no signs of life must be reported, irrespective of when the death occurred; the date of delivery and date of confirmation of death are both reported for these deaths.

In order to facilitate the comparability of mortality rates between organisations, births less than 24<sup>+0</sup> weeks gestational age and terminations of pregnancy have been excluded from the mortality rates reported in the main maps and tables of the main report and in this summary report. This avoids the influence of the wide disparity in the classification of babies born before 24<sup>+0</sup> weeks gestational age as a neonatal death or a fetal loss as well as the known variation in the rate of termination of pregnancy for congenital anomaly across the UK. The mortality rates reported include all eligible deaths, including deaths due to congenital anomalies.

The data shown in [Table 1](#) and [Table 2](#) is based on all births for which the country of residence of the mother was known. As previously, this led to the exclusion of a small number of births for mothers not resident in the UK ( $n = 423$ ). Using this approach the total number of births at 24<sup>+0</sup> weeks or greater gestational age (excluding terminations of pregnancy) in 2015 was slightly higher than in 2014: (782,720 versus 782,311 births respectively). However, there was a further decrease in both the total number of stillbirths (3,032 in 2015 compared with 3,252 in 2014) and neonatal deaths (1,360 in 2015 compared with 1,381 in 2014). More importantly, these combined changes led to a decrease in the reported mortality rates for 2015 across the UK as a whole; the crude extended perinatal mortality rate was 5.61 per 1,000 total births (5.92 in 2014), comprising 3.87 stillbirths per 1,000 total births (4.16 in 2014) and 1.74 neonatal deaths per 1,000 live births (1.77 in 2014).

In addition to the UK totals, the number of births, together with the number and rates of stillbirths, neonatal deaths and extended perinatal deaths are shown separately for the four countries of the UK and the Crown Dependencies based on the mother's country of residence.

**Table 1: Number of births, stillbirths, neonatal deaths, and extended perinatal deaths by country of residence: United Kingdom and Crown Dependencies, for births in 2015**

Number <sup>§</sup>	UK <sup>^</sup>	England	Scotland	Wales	Northern Ireland <sup>°</sup>	Crown Dep.
<b>Total births</b>	<b>782,720</b>	<b>667,398</b>	<b>55,100</b>	<b>33,442</b>	<b>24,382</b>	<b>2,398</b>
<b>Live births</b>	<b>779,688</b>	<b>664,777</b>	<b>54,909</b>	<b>33,305</b>	<b>24,303</b>	<b>2,394</b>
<b>Stillbirths</b>	<b>3,032</b>	<b>2,621</b>	<b>191</b>	<b>137</b>	<b>79</b>	<b>4</b>
<i>Antepartum</i>	2,612	2,269	156	116	69	2
<i>Intrapartum</i>	288	240	25	16	5	2
<i>Unknown timing</i>	132	112	10	5	5	0
<b>Neonatal deaths</b>	<b>1,360</b>	<b>1,140</b>	<b>69</b>	<b>70</b>	<b>78</b>	<b>3</b>
<i>Early neonatal deaths</i>	954	796	42	48	66	2
<i>Late neonatal deaths</i>	406	344	27	22	12	1
<b>Perinatal deaths</b>	<b>3,986</b>	<b>3,417</b>	<b>233</b>	<b>185</b>	<b>145</b>	<b>6</b>
<b>Extended perinatal deaths</b>	<b>4,392</b>	<b>3,761</b>	<b>260</b>	<b>207</b>	<b>157</b>	<b>7</b>

<sup>§</sup> excluding terminations of pregnancy and births <24<sup>+0</sup> weeks gestational age

<sup>°</sup> different laws exist in Northern Ireland for the termination of pregnancy

<sup>^</sup> including the Crown Dependencies

Data sources: MBRRACE-UK, ONS, PDS, NRS, ISD, NIMATS, States of Guernsey, States of Jersey

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**Table 2: Stillbirth, neonatal, and extended perinatal mortality rates (95% confidence intervals (CIs)) by country of residence: United Kingdom and Crown Dependencies, for births in 2015**

Rate per 1,000 births <sup>§</sup>	UK <sup>^</sup>	England	Scotland	Wales	Northern Ireland <sup>°</sup>	Crown Dep.
<b>Stillbirths<sup>†</sup></b>	<b>3.87</b>	<b>3.93</b>	<b>3.47</b>	<b>4.10</b>	<b>3.24</b>	<b>1.67</b>
	<b>(3.74 to 4.01)</b>	<b>(3.78 to 4.08)</b>	<b>(2.98 to 3.96)</b>	<b>(3.41 to 4.78)</b>	<b>(2.53 to 3.95)</b>	<b>(0.03 to 3.30)</b>
<i>Antepartum<sup>†</sup></i>	3.34	3.40	2.83	3.47	2.83	0.83
	(3.21 to 3.46)	(3.26 to 3.54)	(2.39 to 3.27)	(2.84 to 4.10)	(2.16 to 3.50)	(0.00 to 1.99)
<i>Intrapartum<sup>†</sup></i>	0.37	0.36	0.45	0.48	0.21	0.83
	(0.33 to 0.41)	(0.31 to 0.41)	(0.28 to 0.63)	(0.24 to 0.71)	(0.03 to 0.38)	(0.00 to 1.99)
<i>Unknown timing<sup>†</sup></i>	0.17	0.17	0.18	0.15	0.21	0.00
	(0.14 to 0.20)	(0.14 to 0.20)	(0.07 to 0.29)	(0.02 to 0.28)	(0.03 to 0.38)	(0.00 to 0.25)
<b>Neonatal deaths<sup>‡</sup></b>	<b>1.74</b>	<b>1.71</b>	<b>1.26</b>	<b>2.10</b>	<b>3.21</b>	<b>1.25</b>
	<b>(1.65 to 1.84)</b>	<b>(1.62 to 1.81)</b>	<b>(0.96 to 1.55)</b>	<b>(1.61 to 2.59)</b>	<b>(2.50 to 3.92)</b>	<b>(0.00 to 2.67)</b>
<i>Early neonatal deaths<sup>‡</sup></i>	1.22	1.20	0.76	1.44	2.72	0.84
	(1.15 to 1.30)	(1.11 to 1.28)	(0.53 to 1.00)	(1.03 to 1.85)	(2.06 to 3.37)	(0.00 to 1.99)
<i>Late neonatal deaths<sup>‡</sup></i>	0.52	0.52	0.49	0.66	0.49	0.42
	(0.47 to 0.57)	(0.46 to 0.57)	(0.31 to 0.68)	(0.38 to 0.94)	(0.21 to 0.77)	(0.00 to 1.24)
<b>Perinatal deaths<sup>†</sup></b>	<b>5.09</b>	<b>5.12</b>	<b>4.23</b>	<b>5.53</b>	<b>5.95</b>	<b>2.50</b>
	<b>(4.93 to 5.25)</b>	<b>(4.95 to 5.29)</b>	<b>(3.69 to 4.77)</b>	<b>(4.74 to 6.33)</b>	<b>(4.98 to 6.91)</b>	<b>(0.50 to 4.50)</b>
<b>Extended perinatal deaths<sup>†</sup></b>	<b>5.61</b>	<b>5.64</b>	<b>4.72</b>	<b>6.19</b>	<b>6.44</b>	<b>2.92</b>
	<b>(5.45 to 5.78)</b>	<b>(5.46 to 5.81)</b>	<b>(4.15 to 5.29)</b>	<b>(5.35 to 7.03)</b>	<b>(5.44 to 7.44)</b>	<b>(0.76 to 5.08)</b>

<sup>†</sup> per 1,000 total births

<sup>‡</sup> per 1,000 live births

<sup>§</sup> excluding terminations of pregnancy and births <24<sup>+0</sup> weeks gestational age

<sup>°</sup> different laws exist in Northern Ireland for the termination of pregnancy

<sup>^</sup> including the Crown Dependencies

Data sources: MBRRACE-UK, PDS, ONS, NRS, ISD, NIMATS, States of Guernsey, States of Jersey

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# Mortality rates for individual Trusts and Health Boards

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The data presented here summarises the stillbirth, neonatal mortality, and extended perinatal mortality rates for births in 2015 for individual Trusts and Health Boards. Babies have been allocated based on the Trust or Health Board in which they were born irrespective of where they died. These mortality rates are presented in two different ways: as a 'crude' mortality rate and as a 'stabilised & adjusted' mortality rate.

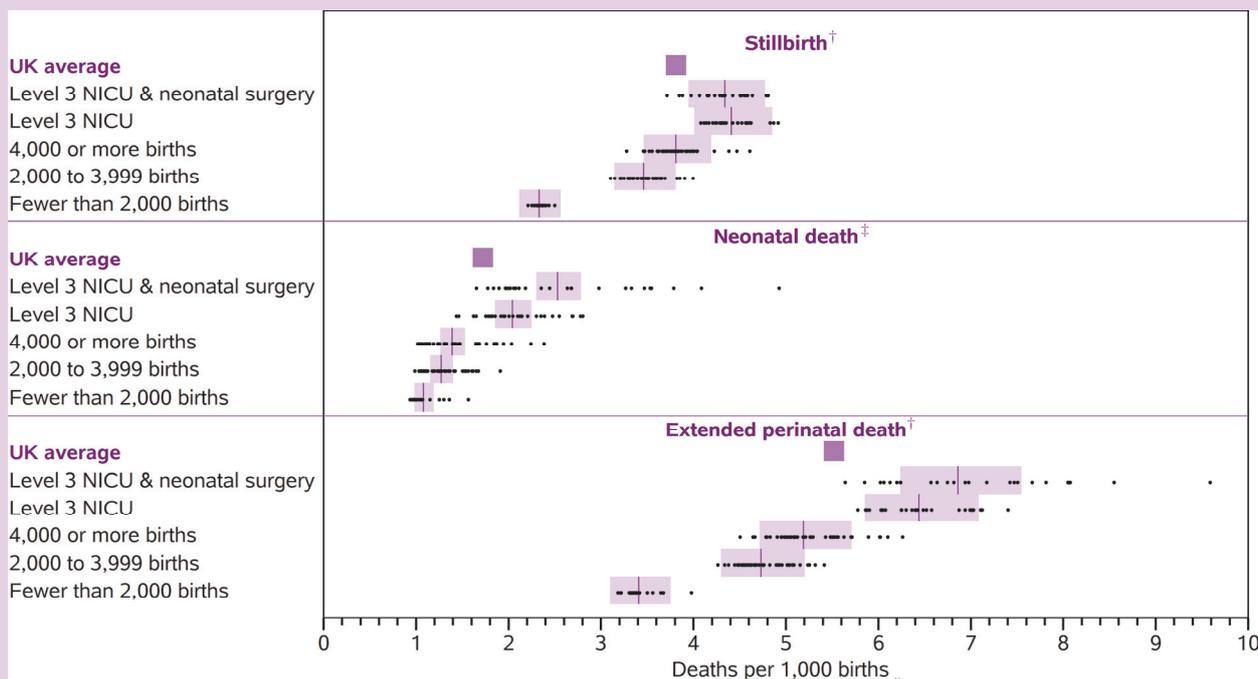
In addition, to account for the wide variation in case-mix, Trusts and Health Boards have been classified hierarchically into five mutually exclusive comparator groups, based on their level of service provision:

1. Level 3 Neonatal Intensive Care Unit (NICU) and Neonatal Surgery
2. Level 3 NICU
3. 4,000 or more births per annum at 24 weeks or later
4. 2,000-3,999 births per annum at 24 weeks or later
5. Under 2,000 births per annum at 24 weeks or later

In [Figure 1](#) the extent to which this classification reflects the risk profiles of the different types of unit is demonstrated. The average mortality rate for each comparator group is shown as a vertical purple line, with a shaded box representing  $\pm 10\%$  from the average.

We believe that this categorisation is useful in permitting units to consider their performance in relation to a comparator group of broadly similar units. However, we recognise that there are some limitations in the approach we have taken. This particularly affects units that happen to fall on the boundary between categories and, within the group that provides level 3 neonatal intensive care and have neonatal surgical provision, those units which provide intensive care to the most high risk cases. This includes units that are the focus for delivery of babies known to have a major cardiac anomaly and those units with a particularly high number of births with major congenital anomalies (e.g. Belfast). Such units will inevitably have higher rates of mortality when compared to otherwise similar services who do not provide intensive care for these types of cases.

**Figure 1: Stabilised & adjusted mortality rates by NHS Trust (England), Health Board (Scotland and Wales), Health and Social Care Trust (Northern Ireland) and Crown Dependency based on place of birth: United Kingdom and Crown Dependencies, for births in 2015**



† per 1,000 total births

‡ per 1,000 live births

§ excluding terminations of pregnancy and births <24<sup>+0</sup> weeks gestational age

Data sources: MBRRACE-UK, PDS, ONS, NRS, ISD, NIMATS, States of Guernsey, States of Jersey

Note: different laws exist in Northern Ireland for the termination of pregnancy

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The crude and the stabilised & adjusted stillbirth, neonatal mortality and extended perinatal mortality rates for UK Trusts and Health Boards are presented in Figures 2, 3, 4, 5, 6 and 7 and Tables 3, 4, 5, 6 and 7. Each of the tables contains data for a single comparator group. The average mortality rate used in each of the five tables is that of the relevant comparator group; for example, the reported mortality rates for Trusts and Health Boards with neonatal surgical provision and Level 3 NICUs have been compared to the average mortality rate derived from all of the Trusts and Health Boards providing this level of care.

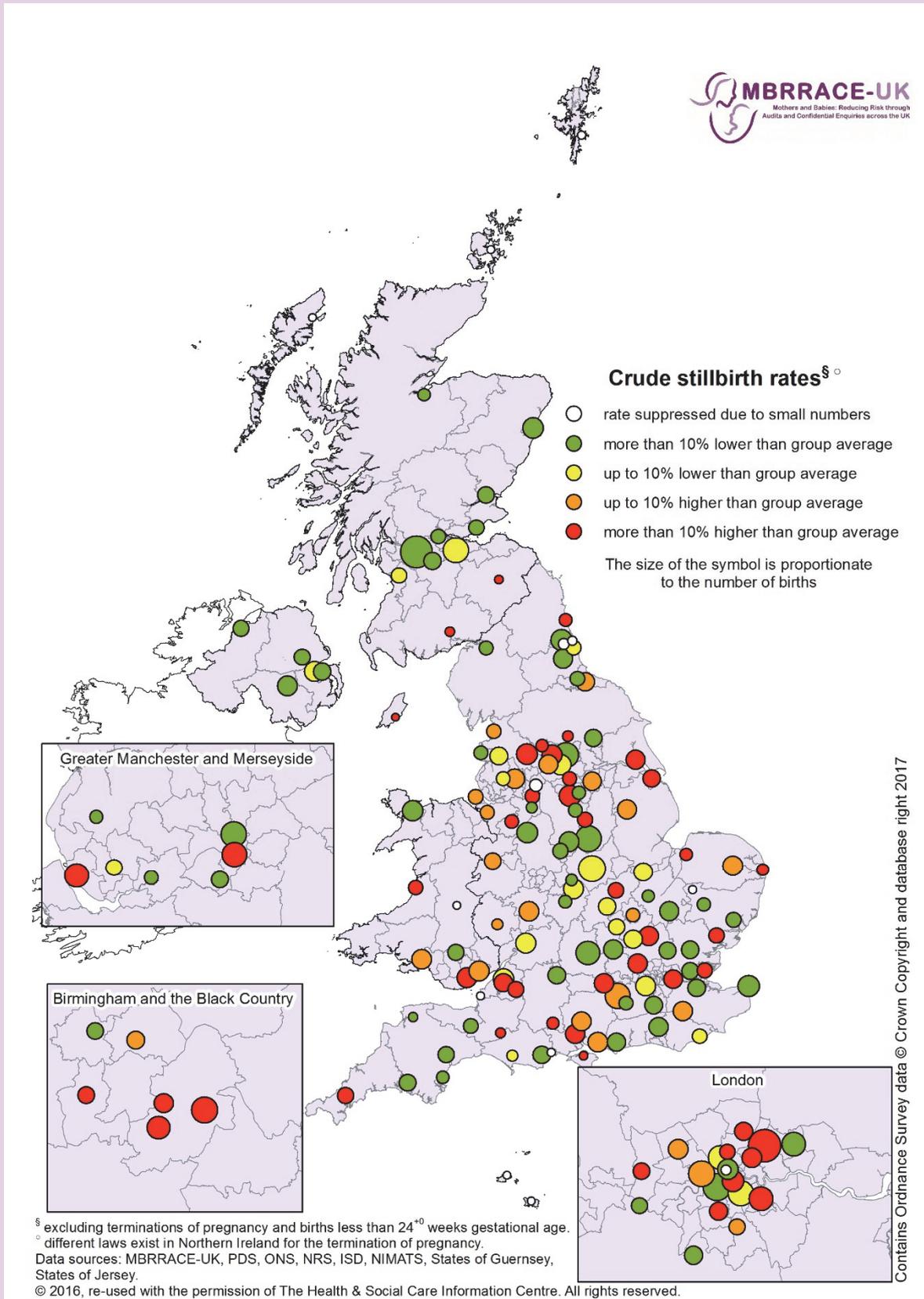
The colour coding used in the maps and tables is:

- green: more than 10% lower than the average;
- yellow: up to 10% lower than the average;
- amber: up to 10% higher than the average;
- red: more than 10% higher than the average.

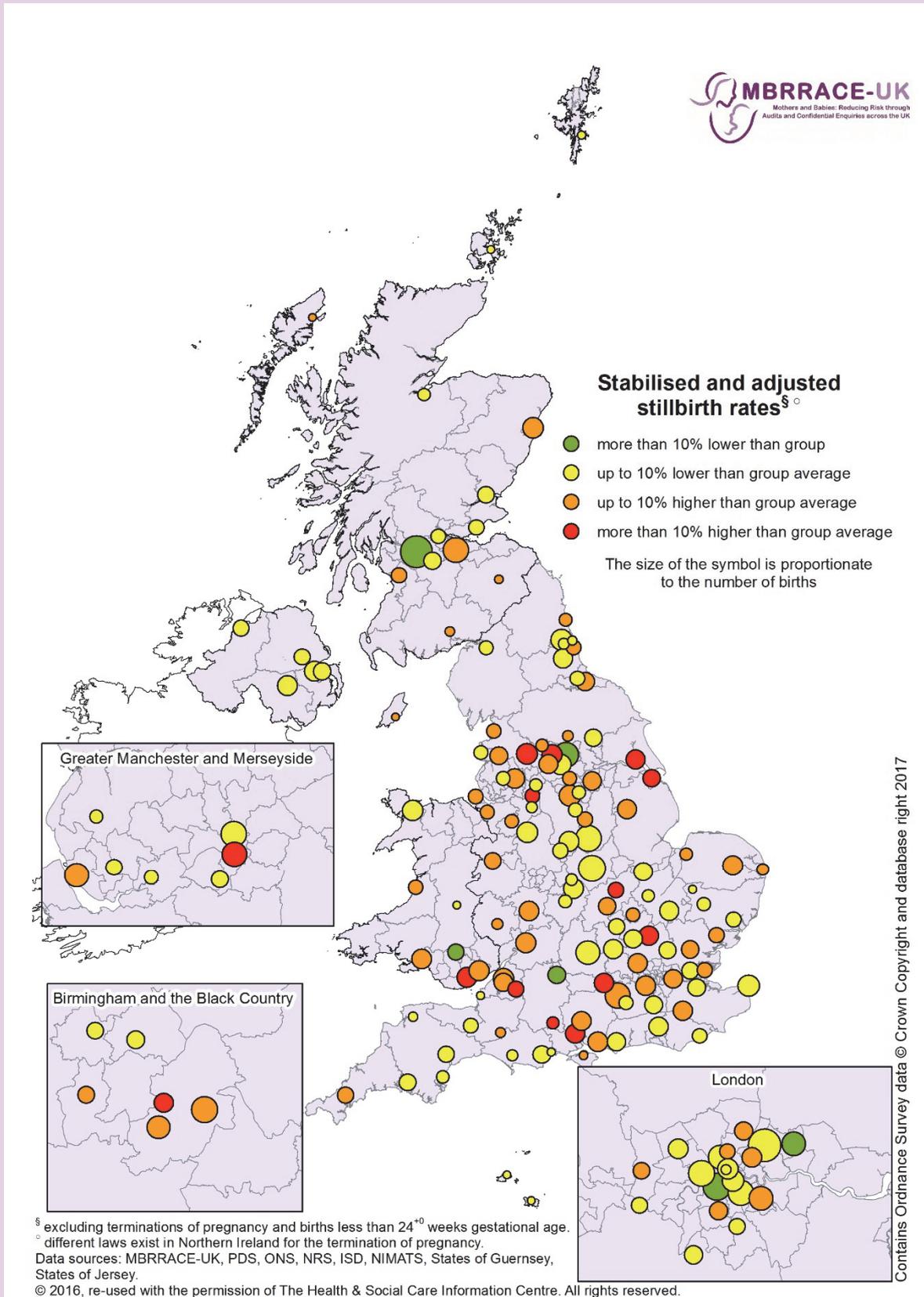
The size of the circles on each map represents the number of births in the population covered by the particular organisation, although there is a minimum size in order that the colour can be adequately seen.



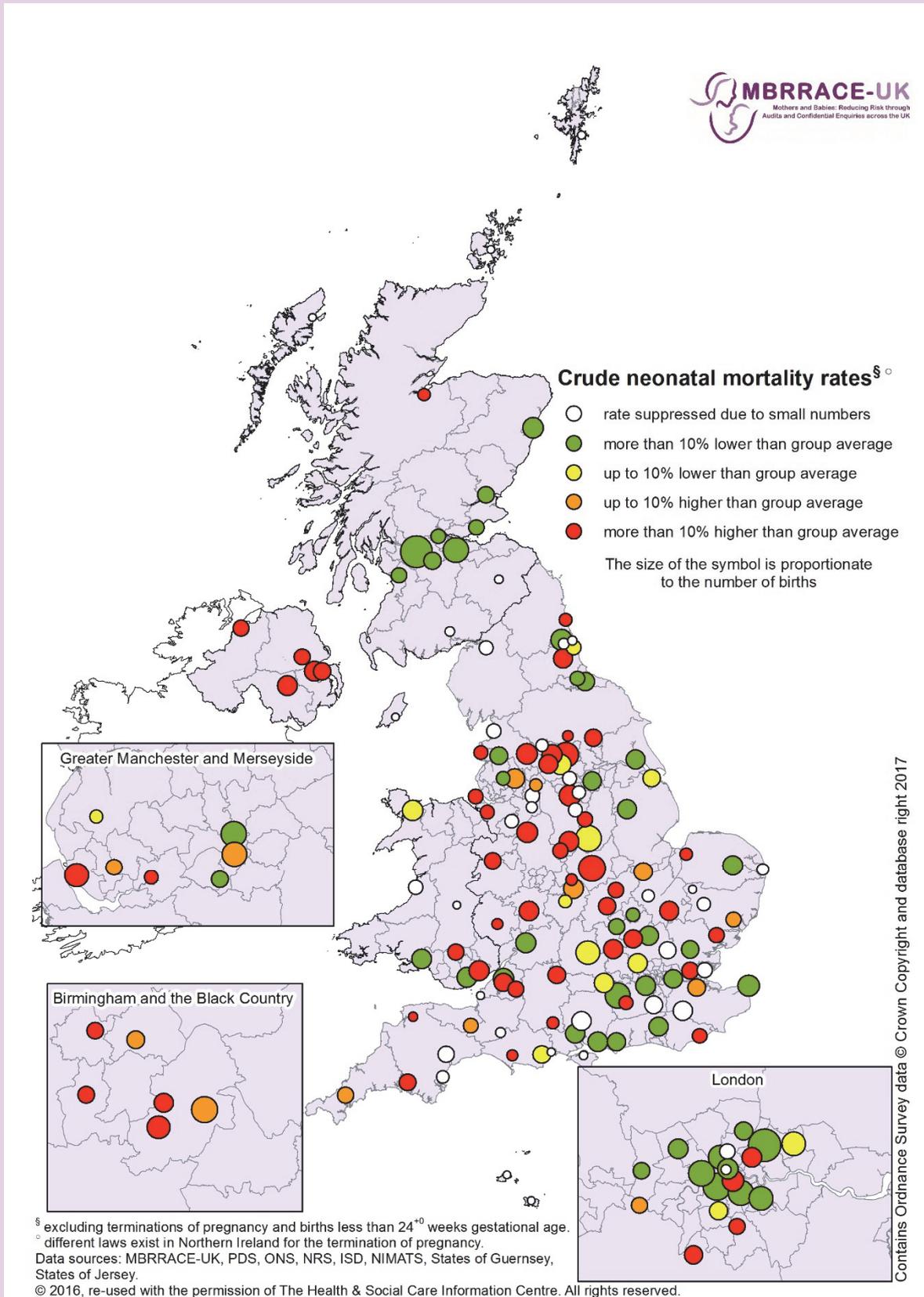
**Figure 2: Crude stillbirth mortality rates by NHS Trust (England), Health Board (Scotland and Wales), Health and Social Care Trust (Northern Ireland), and Crown Dependency based on place of birth: United Kingdom and Crown Dependencies, for births in 2015**



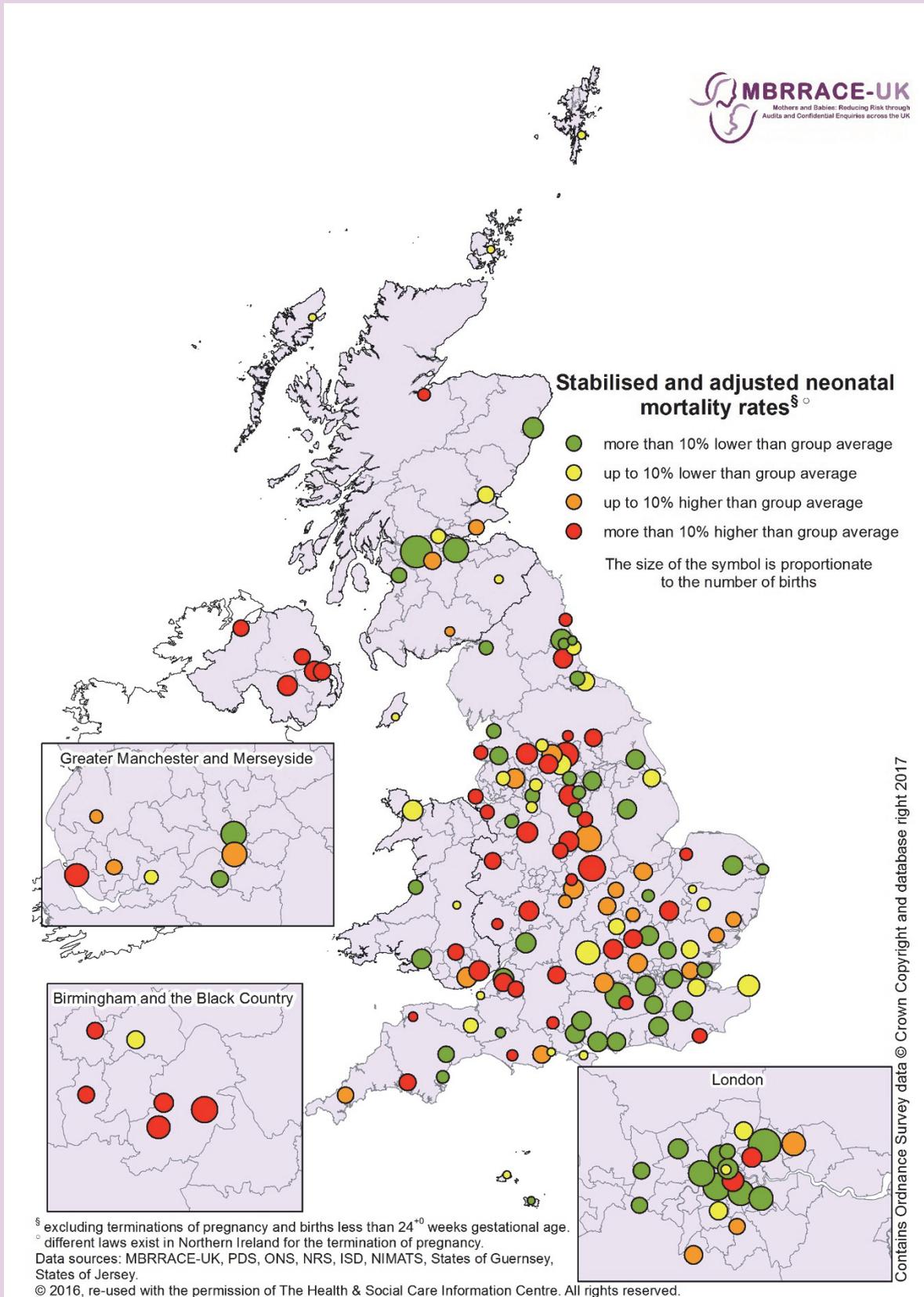
**Figure 3: Stabilised & adjusted stillbirth mortality rates by NHS Trust (England), Health Board (Scotland and Wales), Health and Social Care Trust (Northern Ireland), and Crown Dependency based on place of birth: United Kingdom and Crown Dependencies, for births in 2015**



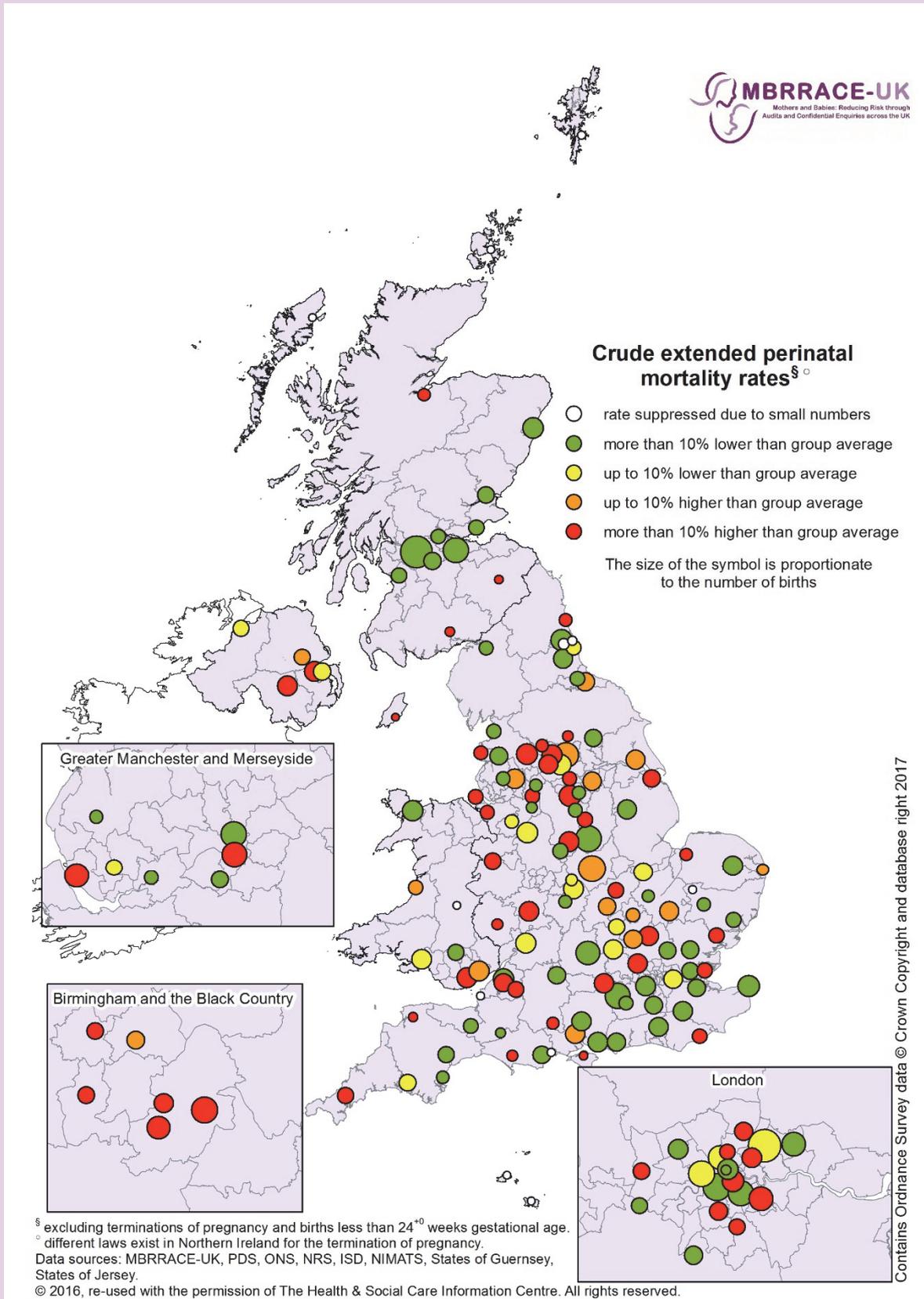
**Figure 4: Crude neonatal mortality rates by NHS Trust (England), Health Board (Scotland and Wales), Health and Social Care Trust (Northern Ireland), and Crown Dependency based on place of birth: United Kingdom and Crown Dependencies, for births in 2015**



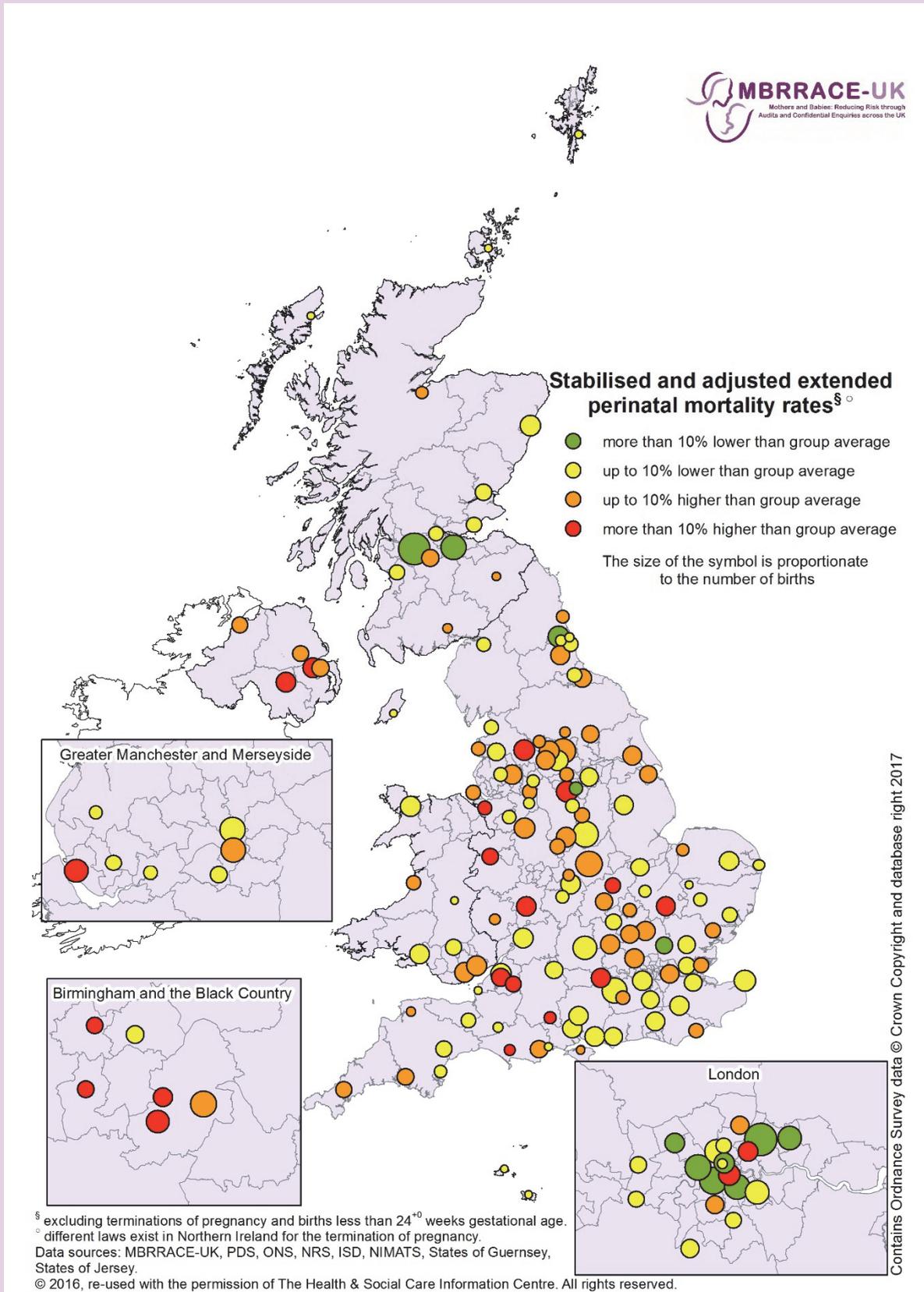
**Figure 5: Stabilised & adjusted neonatal mortality rates by NHS Trust (England), Health Board (Scotland and Wales), Health and Social Care Trust (Northern Ireland), and Crown Dependency based on place of birth: United Kingdom and Crown Dependencies, for births in 2015**



**Figure 6: Crude extended perinatal mortality rates by NHS Trust (England), Health Board (Scotland and Wales), Health and Social Care Trust (Northern Ireland), and Crown Dependency based on place of birth: United Kingdom and Crown Dependencies, for births in 2015**



**Figure 7: Stabilised & adjusted extended perinatal mortality rates by NHS Trust (England), Health Board (Scotland and Wales), Health and Social Care Trust (Northern Ireland), and Crown Dependency based on place of birth: United Kingdom and Crown Dependencies, for births in 2015**



**Table 3: Crude and stabilised & adjusted stillbirth, neonatal, and extended perinatal mortality rates by NHS Trust (England), Health Board (Scotland and Wales), Health and Social Care Trust (Northern Ireland), and Crown Dependency based on place of birth: United Kingdom and Crown Dependencies, for births in 2015.**

**FOR TRUSTS AND HEALTH BOARDS WITH NEONATAL SURGICAL PROVISION AND A LEVEL 3 NICU**

Organisation	Total births <sup>§</sup>	Rate per 1,000 births <sup>§</sup>					
		Stillbirth <sup>†</sup>		Neonatal <sup>‡</sup>		Extended perinatal <sup>†</sup>	
		Crude	Stabilised & adjusted (95% CI)	Crude	Stabilised & adjusted (95% CI)	Crude	Stabilised & adjusted (95% CI) <sup>#</sup>
Average for comparator group			4.34		2.53		6.86
Barts Health NHS Trust	16,134	5.21	4.17 (3.41 to 5.25)	1.62	1.90 (1.34 to 2.67)	6.82	6.13 (5.43 to 7.99) ●
Belfast Health & Social Care Trust <sup>o</sup>	5,955	4.03	4.31 (3.34 to 5.39)	5.06	4.09 (2.52 to 5.98)	9.07	8.55 (6.80 to 11.27) ●
Birmingham Women's NHS Foundation Trust	8,089	5.56	4.55 (3.74 to 5.52)	6.46	4.93 (3.67 to 6.67)	11.99	9.59 (8.15 to 12.35) ●
Brighton and Sussex University Hospitals NHS Trust	5,678	3.52	4.28 (3.24 to 5.52)	1.41	1.99 (1.29 to 3.10)	4.93	6.24 (5.33 to 8.33) ●
Cambridge University Hospitals NHS Foundation Trust	5,680	3.52	4.33 (3.42 to 6.09)	3.36	3.27 (1.87 to 4.51)	6.87	7.67 (6.22 to 9.58) ●
Cardiff and Vale University Health Board	6,062	5.61	4.79 (3.60 to 5.78)	2.16	2.68 (1.68 to 3.84)	7.75	7.47 (6.12 to 9.38) ●
Central Manchester University Hospitals NHS Foundation Trust	9,167	6.22	4.81 (3.77 to 6.09)	2.74	2.64 (1.78 to 3.67)	8.95	7.43 (6.29 to 9.51) ●
Chelsea and Westminster Hospital NHS Foundation Trust	11,058	3.26	3.85 (2.99 to 4.96)	1.27	1.97 (1.30 to 2.80)	4.52	5.85 (4.87 to 7.46) ●
Guy's and St Thomas' NHS Foundation Trust	6,794	5.45	4.34 (3.37 to 5.82)	4.29	3.54 (2.37 to 5.04)	9.71	7.82 (6.79 to 10.13) ●
Hull and East Yorkshire Hospitals NHS Trust	5,416	5.54	4.79 (3.77 to 6.03)	1.67	2.18 (1.32 to 3.20)	7.20	6.94 (5.56 to 8.81) ●
King's College Hospital NHS Foundation Trust	9,726	4.32	4.15 (3.41 to 5.07)	1.24	2.02 (1.33 to 2.81)	5.55	6.24 (5.34 to 7.75) ●
Liverpool Women's NHS Foundation Trust	8,391	5.01	4.64 (3.69 to 5.93)	4.31	3.33 (2.40 to 4.99)	9.30	8.06 (7.09 to 10.68) ●
NHS Grampian	6,383	3.76	4.42 (3.52 to 5.40)	0.94	1.84 (1.20 to 2.80)	4.70	6.24 (5.06 to 8.17) ●
NHS Greater Glasgow & Clyde	15,200	3.09	3.88 (3.00 to 4.79)	1.39	1.78 (1.26 to 2.61)	4.47	5.64 (4.75 to 7.11) ●
NHS Lothian	9,464	4.33	4.57 (3.78 to 5.51)	0.96	1.65 (1.11 to 2.44)	5.28	6.20 (5.26 to 7.92) ●
Norfolk and Norwich University Hospitals NHS Foundation Trust	5,769	4.51	4.58 (3.80 to 5.79)	1.57	2.06 (1.22 to 3.00)	6.07	6.57 (5.64 to 8.22) ●
Nottingham University Hospitals NHS Trust	9,796	3.78	4.15 (3.30 to 5.01)	2.46	2.68 (1.67 to 3.65)	6.23	6.82 (5.69 to 8.40) ●
Oxford University Hospitals NHS Trust	8,479	3.66	4.32 (3.40 to 5.45)	2.37	2.35 (1.47 to 3.48)	6.01	6.64 (5.75 to 7.95) ●
Sheffield Teaching Hospitals NHS Foundation Trust	6,992	5.01	4.52 (3.77 to 5.84)	4.46	3.47 (2.50 to 4.98)	9.44	8.08 (7.07 to 10.80) ●
St George's University Hospital NHS Foundation Trust	5,104	5.49	4.55 (3.74 to 5.71)	2.36	2.45 (1.60 to 3.89)	7.84	6.98 (6.17 to 8.75) ●
The Leeds Teaching Hospitals NHS Trust	9,646	2.80	3.71 (2.99 to 5.12)	4.16	3.79 (2.59 to 5.49)	6.95	7.51 (6.51 to 9.40) ●

Organisation	Total births <sup>§</sup>	Rate per 1,000 births <sup>§</sup>						
		Stillbirth <sup>†</sup>		Neonatal <sup>‡</sup>		Extended perinatal <sup>†</sup>		
		Crude	Stabilised & adjusted (95% CI)	Crude	Stabilised & adjusted (95% CI)	Crude	Stabilised & adjusted (95% CI) <sup>#</sup>	
The Newcastle upon Tyne Hospitals NHS Foundation Trust	6,989	3.29	4.06 (3.31 to 5.14)	1.44	1.97 (1.39 to 3.38)	4.72	6.02 (5.15 to 8.19)	●
University College London Hospitals NHS Foundation Trust	6,611	3.48	3.97 (3.17 to 5.43)	2.28	2.11 (1.45 to 2.96)	5.75	6.06 (5.11 to 8.30)	●
University Hospital Southampton NHS Foundation Trust	5,646	5.31	4.79 (3.75 to 6.12)	1.78	2.08 (1.43 to 3.06)	7.08	6.75 (5.75 to 8.99)	●
University Hospitals Bristol NHS Foundation Trust	5,015	4.79	4.51 (3.53 to 5.63)	4.01	3.53 (2.05 to 5.78)	8.77	8.05 (6.47 to 10.74)	●
University Hospitals of Leicester NHS Trust	10,386	4.14	4.23 (3.42 to 5.23)	2.80	2.98 (2.07 to 4.46)	6.93	7.17 (6.02 to 9.15)	●

§ excluding terminations of pregnancy and births <24<sup>+0</sup> weeks gestational age

† per 1,000 total births

‡ per 1,000 live births

# colours represent variation from comparator group average extended perinatal mortality rate

○ different laws exist in Northern Ireland for the termination of pregnancy

Data sources: MBRRACE-UK, PDS, ONS, NRS, ISD, NIMATS, States of Guernsey, States of Jersey

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**Table 4: Crude and stabilised & adjusted stillbirth, neonatal, and extended perinatal mortality rates by NHS Trust (England), Health Board (Scotland and Wales), Health and Social Care Trust (Northern Ireland), and Crown Dependency based on place of birth: United Kingdom and Crown Dependencies, for births in 2015.  
FOR TRUSTS AND HEALTH BOARDS WITH A LEVEL 3 NICU**

Organisation	Total births <sup>§</sup>	Rate per 1,000 births <sup>§</sup>					
		Stillbirth <sup>†</sup>		Neonatal <sup>‡</sup>		Extended perinatal <sup>†</sup>	
		Crude	Stabilised & adjusted (95% CI)	Crude	Stabilised & adjusted (95% CI)	Crude	Stabilised & adjusted (95% CI) <sup>#</sup>
Average for comparator group		4.41		2.04		6.44	
Abertawe Bro Morgannwg University Health Board	5,786	4.67	4.61 (3.85 to 6.06)	1.56	1.85 (1.27 to 3.18)	6.22	6.43 (5.69 to 8.61) ●
Aneurin Bevan Health Board	5,852	4.61	4.56 (3.76 to 5.28)	2.40	2.48 (1.65 to 3.87)	7.01	7.03 (6.05 to 9.05) ●
Ashford & St Peter's Hospitals NHS Foundation Trust	4,082	2.45	4.12 (3.15 to 5.22)	2.21	1.80 (1.17 to 2.96)	4.65	5.87 (4.68 to 7.48) ●
Bolton NHS Foundation Trust	5,828	4.46	4.43 (3.33 to 5.55)	2.24	2.10 (1.33 to 3.15)	6.69	6.52 (5.45 to 8.60) ●
Bradford Teaching Hospitals NHS Foundation Trust	5,758	7.29	4.92 (3.82 to 6.30)	2.45	2.12 (1.39 to 3.44)	9.73	7.01 (5.74 to 9.12) ●
City Hospitals Sunderland NHS Foundation Trust	3,108	4.18	4.42 (3.47 to 5.41)	1.94	1.96 (1.24 to 3.13)	6.11	6.36 (5.57 to 8.06) ●
East Kent Hospitals University NHS Foundation Trust	6,832	3.66	4.31 (3.50 to 5.13)	1.62	2.01 (1.38 to 3.33)	5.27	6.30 (5.27 to 8.57) ●
East Lancashire Hospitals NHS Trust	6,347	6.14	4.87 (3.74 to 6.06)	2.69	2.55 (1.66 to 4.51)	8.82	7.40 (6.15 to 9.18) ●
Heart of England NHS Foundation Trust	9,757	5.43	4.62 (3.71 to 5.89)	2.06	2.35 (1.59 to 3.40)	7.48	6.94 (6.00 to 8.92) ●
Homerton University Hospital NHS Foundation Trust	5,844	7.02	4.83 (3.79 to 6.02)	3.10	2.30 (1.51 to 3.39)	10.10	7.13 (5.82 to 9.03) ●
Imperial College Healthcare NHS Trust	10,096	4.75	4.34 (3.45 to 5.07)	1.19	1.46 (0.99 to 2.45)	5.94	5.78 (4.97 to 7.27) ●
Lancashire Teaching Hospitals NHS Foundation Trust	4,545	4.40	4.52 (3.70 to 5.89)	1.33	1.65 (1.00 to 2.62)	5.72	6.08 (5.23 to 7.97) ●
Luton and Dunstable Hospital NHS Foundation Trust	5,232	4.20	4.25 (3.48 to 5.18)	2.88	2.69 (1.66 to 4.42)	7.07	6.87 (5.88 to 8.85) ●
Medway NHS Foundation Trust	4,784	3.76	4.33 (3.36 to 5.35)	2.10	1.95 (1.28 to 2.91)	5.85	6.25 (5.25 to 7.63) ●
NHS Ayrshire & Arran	3,536	4.24	4.48 (3.61 to 5.73)	1.14	1.78 (1.01 to 3.16)	5.37	6.25 (5.10 to 8.02) ●
NHS Fife	3,417	3.22	4.29 (3.50 to 5.58)	1.76	2.14 (1.29 to 3.42)	4.98	6.41 (5.45 to 8.27) ●
NHS Lanarkshire	4,541	3.30	4.30 (3.50 to 5.40)	1.77	2.21 (1.39 to 3.82)	5.06	6.48 (5.41 to 8.70) ●
NHS Tayside	4,274	2.57	4.14 (3.21 to 5.38)	1.41	1.92 (1.14 to 3.01)	3.98	6.05 (5.14 to 8.00) ●

Organisation	Total births <sup>§</sup>	Rate per 1,000 births <sup>§</sup>						
		Stillbirth <sup>†</sup>		Neonatal <sup>‡</sup>		Extended perinatal <sup>†</sup>		
		Crude	Stabilised & adjusted (95% CI)	Crude	Stabilised & adjusted (95% CI)	Crude	Stabilised & adjusted (95% CI) <sup>#</sup>	
North Bristol NHS Trust	6,418	4.05	4.48 (3.36 to 5.94)	1.25	1.62 (0.91 to 2.71)	5.30	6.04 (4.92 to 7.79)	●
North Tees & Hartlepool NHS Foundation Trust	3,083	3.57	4.29 (3.25 to 5.37)	1.30	1.76 (1.06 to 2.93)	4.87	6.03 (5.18 to 7.72)	●
Plymouth Hospitals NHS Trust	4,381	2.97	4.21 (3.04 to 5.39)	3.43	2.69 (1.81 to 4.12)	6.39	7.02 (5.72 to 9.45)	●
Portsmouth Hospitals NHS Trust	5,865	4.43	4.58 (3.79 to 5.45)	1.03	1.44 (0.93 to 2.30)	5.46	5.86 (5.05 to 7.25)	●
South Tees Hospitals NHS Foundation Trust	5,054	4.75	4.59 (3.80 to 5.76)	1.79	2.00 (1.28 to 3.14)	6.53	6.58 (5.67 to 9.08)	●
The Pennine Acute Hospitals NHS Trust	9,394	3.94	4.08 (3.31 to 4.88)	1.50	1.82 (1.08 to 2.82)	5.43	5.90 (5.02 to 7.32)	●
The Royal Wolverhampton NHS Trust	4,382	3.88	4.24 (3.28 to 5.30)	3.89	2.78 (1.68 to 4.13)	7.76	7.11 (5.74 to 9.51)	●
University Hospitals Coventry & Warwickshire NHS Trust	6,154	4.22	4.36 (3.73 to 5.12)	2.12	2.05 (1.39 to 3.12)	6.34	6.40 (5.59 to 8.26)	●
University Hospitals of North Midlands NHS Trust	6,384	3.29	4.17 (3.30 to 5.29)	2.99	2.81 (1.97 to 4.03)	6.27	6.99 (5.88 to 8.82)	●
Wirral University Teaching Hospital NHS Foundation Trust	3,366	4.75	4.58 (3.72 to 5.70)	2.99	2.39 (1.55 to 3.47)	7.72	7.00 (5.83 to 8.99)	●

§ excluding terminations of pregnancy and births <24<sup>+0</sup> weeks gestational age

† per 1,000 total births

‡ per 1,000 live births

# colours represent variation from comparator group average extended perinatal mortality rate

○ different laws exist in Northern Ireland for the termination of pregnancy

Data sources: MBRRACE-UK, PDS, ONS, NRS, ISD, NIMATS, States of Guernsey, States of Jersey

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**Table 5: Crude and stabilised & adjusted stillbirth, neonatal, and extended perinatal mortality rates by NHS Trust (England), Health Board (Scotland and Wales), Health and Social Care Trust (Northern Ireland), and Crown Dependency based on place of birth: United Kingdom and Crown Dependencies, for births in 2015.  
FOR TRUSTS AND HEALTH BOARDS WITH 4,000 OR MORE BIRTHS  $\geq 24^{+0}$  WEEKS GESTATIONAL AGE PER ANNUM**

Organisation	Total births <sup>§</sup>	Rate per 1,000 births <sup>§</sup>						
		Stillbirth <sup>†</sup>		Neonatal <sup>‡</sup>		Extended perinatal <sup>†</sup>		
		Crude	Stabilised & adjusted (95% CI)	Crude	Stabilised & adjusted (95% CI)	Crude	Stabilised & adjusted (95% CI) <sup>#</sup>	
Average for comparator group			3.81		1.39		5.19	
Barking Havering & Redbridge University Hospitals NHS Trust	8,321	2.88	3.28 (2.57 to 4.29)	1.33	1.40 (0.88 to 2.38)	4.21	4.64 (3.83 to 6.01)	●
Basildon and Thurrock University Hospitals NHS Foundation Trust	4,456	2.92	3.62 (2.86 to 4.44)	1.58	1.48 (0.85 to 2.34)	4.49	5.09 (4.29 to 6.35)	●
Betsi Cadwaladr University Health Board	6,572	3.20	3.73 (2.87 to 4.59)	1.37	1.33 (0.77 to 2.17)	4.56	5.05 (4.17 to 6.42)	●
Buckinghamshire Healthcare NHS Trust	5,430	2.76	3.61 (2.89 to 4.38)	2.22	1.85 (1.33 to 3.27)	4.97	5.48 (4.66 to 6.92)	●
Calderdale & Huddersfield NHS Foundation Trust	5,430	4.05	3.84 (3.11 to 4.81)	1.85	1.67 (1.07 to 2.67)	5.89	5.50 (4.66 to 7.36)	●
County Durham & Darlington NHS Foundation Trust	5,315	2.82	3.62 (2.85 to 4.68)	1.70	1.65 (0.91 to 2.79)	4.52	5.26 (4.26 to 6.91)	●
Dartford & Gravesham NHS Trust	5,031	4.37	3.93 (3.24 to 4.84)	0.80	1.25 (0.71 to 2.03)	5.17	5.20 (4.50 to 6.49)	●
Derby Teaching Hospitals NHS Foundation Trust	5,996	3.17	3.66 (2.93 to 4.88)	2.68	1.87 (1.08 to 2.77)	5.84	5.63 (4.62 to 7.56)	●
Doncaster and Bassetlaw Hospitals NHS Foundation Trust	5,049	4.16	3.92 (3.17 to 5.24)	1.19	1.23 (0.77 to 2.07)	5.35	5.10 (4.34 to 6.72)	●
East and North Hertfordshire NHS Trust	5,545	5.59	4.38 (3.20 to 5.54)	0.73	1.12 (0.65 to 1.87)	6.31	5.43 (4.66 to 7.36)	●
Epsom and St Helier University Hospitals NHS Trust	4,948	3.03	3.68 (3.02 to 4.66)	1.62	1.42 (0.86 to 2.24)	4.65	5.10 (4.40 to 6.50)	●
Frimley Health NHS Foundation Trust	9,687	3.92	3.92 (3.01 to 4.59)	0.73	1.06 (0.63 to 1.61)	4.65	4.95 (4.24 to 5.88)	●
Gloucestershire Hospitals NHS Foundation Trust	6,092	3.78	3.92 (3.11 to 5.09)	1.15	1.25 (0.75 to 1.94)	4.92	5.12 (4.18 to 6.50)	●
Great Western Hospitals NHS Foundation Trust	4,873	1.85	3.46 (2.74 to 4.46)	1.64	1.68 (0.86 to 2.70)	3.49	5.10 (4.26 to 6.42)	●
Hampshire Hospitals NHS Foundation Trust	5,372	*	3.99 (3.17 to 5.14)	*	1.05 (0.56 to 1.87)	4.28	5.01 (4.15 to 6.57)	●
Kingston Hospital NHS Trust	5,836	3.77	3.88 (3.10 to 4.85)	0.52	1.09 (0.70 to 2.00)	4.28	4.99 (4.01 to 6.47)	●
Lewisham and Greenwich NHS trust	8,338	4.92	3.83 (3.14 to 4.48)	1.08	1.19 (0.76 to 2.06)	6.00	5.02 (4.19 to 6.29)	●
London North West Healthcare NHS Trust	6,016	3.82	3.61 (2.89 to 4.49)	0.83	1.06 (0.59 to 1.58)	4.65	4.67 (4.11 to 5.93)	●
Maidstone and Tunbridge Wells NHS Trust	5,700	*	3.96 (3.02 to 4.90)	*	1.02 (0.62 to 1.78)	4.21	4.95 (4.12 to 6.29)	●
Mid Essex Hospital Services NHS Trust	4,518	3.32	3.82 (3.14 to 4.94)	0.89	1.30 (0.77 to 2.06)	4.21	5.12 (4.33 to 7.08)	●

Organisation	Total births <sup>§</sup>	Rate per 1,000 births <sup>§</sup>						
		Stillbirth <sup>†</sup>		Neonatal <sup>‡</sup>		Extended perinatal <sup>†</sup>		
		Crude	Stabilised & adjusted (95% CI)	Crude	Stabilised & adjusted (95% CI)	Crude	Stabilised & adjusted (95% CI) <sup>#</sup>	
North Middlesex University Hospital NHS Trust	5,171	5.61	3.96 (3.22 to 5.07)	1.17	1.33 (0.75 to 2.25)	6.77	5.29 (4.53 to 7.27)	●
Northampton General Hospital NHS Trust	4,574	3.72	3.81 (3.04 to 4.88)	1.54	1.46 (0.81 to 2.64)	5.25	5.27 (4.32 to 7.01)	●
Northern Health & Social Care Trust <sup>°</sup>	4,068	3.20	3.77 (3.05 to 4.95)	2.22	1.76 (1.01 to 2.86)	5.41	5.56 (4.74 to 7.13)	●
Northern Lincolnshire and Goole Hospitals NHS Foundation Trust	4,533	5.52	4.22 (3.21 to 5.60)	1.33	1.32 (0.85 to 2.33)	6.84	5.50 (4.32 to 7.37)	●
Peterborough & Stamford Hospitals NHS Foundation Trust	4,962	3.63	3.77 (3.12 to 4.66)	1.42	1.41 (0.69 to 2.69)	5.04	5.18 (4.17 to 6.64)	●
Poole Hospital NHS Foundation Trust	4,495	3.34	3.80 (2.99 to 4.63)	1.34	1.42 (0.95 to 2.15)	4.67	5.21 (4.43 to 6.49)	●
Royal Berkshire NHS Foundation Trust	5,372	6.70	4.61 (3.44 to 6.14)	1.31	1.43 (0.85 to 2.39)	8.00	6.02 (4.79 to 8.78)	●
Royal Devon & Exeter NHS Foundation Trust	4,010	*	3.66 (2.92 to 4.66)	*	1.14 (0.65 to 2.01)	2.99	4.79 (4.13 to 6.35)	●
Royal Free London NHS Foundation Trust	8,396	3.69	3.70 (3.11 to 4.62)	1.08	1.26 (0.80 to 2.19)	4.76	4.95 (4.33 to 6.77)	●
Sandwell & West Birmingham Hospitals NHS Trust	5,530	8.14	4.47 (3.52 to 5.80)	2.19	1.65 (0.99 to 2.53)	10.31	6.10 (5.14 to 7.80)	●
South Eastern Health & Social Care Trust <sup>°</sup>	4,495	2.89	3.71 (3.09 to 4.77)	2.01	1.86 (1.21 to 3.22)	4.89	5.52 (4.71 to 7.94)	●
Southern Health & Social Care Trust <sup>°</sup>	5,930	3.37	3.79 (3.10 to 4.56)	3.21	2.38 (1.40 to 3.79)	6.58	6.26 (5.24 to 8.11)	●
Surrey & Sussex Healthcare NHS Trust	4,496	*	3.79 (3.03 to 4.66)	*	1.07 (0.55 to 2.24)	3.78	4.83 (3.98 to 6.55)	●
The Dudley Group NHS Foundation Trust	4,341	5.07	4.03 (3.20 to 5.17)	2.32	1.66 (1.10 to 2.64)	7.37	5.72 (4.62 to 7.48)	●
The Hillingdon Hospitals NHS Foundation Trust	4,465	4.93	3.83 (3.16 to 4.66)	0.90	1.15 (0.71 to 1.96)	5.82	4.98 (4.10 to 6.32)	●
The Mid Yorkshire Hospitals NHS Trust	6,220	3.70	3.75 (2.95 to 4.52)	1.29	1.32 (0.88 to 1.93)	4.98	5.06 (4.28 to 6.23)	●
The Princess Alexandra Hospital NHS Trust	4,144	*	3.48 (2.56 to 4.40)	*	1.04 (0.51 to 1.91)	1.93	4.51 (3.56 to 5.86)	●
The Shrewsbury and Telford Hospital NHS Trust	4,423	3.84	3.86 (3.11 to 5.27)	3.18	2.03 (1.18 to 3.33)	7.01	6.01 (5.13 to 7.68)	●
United Lincolnshire Hospitals NHS Trust	5,364	3.91	3.93 (3.04 to 4.86)	0.75	1.11 (0.61 to 1.63)	4.66	4.99 (4.02 to 6.15)	●
University Hospital of South Manchester NHS Foundation Trust	4,377	2.28	3.55 (2.76 to 4.60)	0.92	1.25 (0.75 to 2.23)	3.20	4.79 (3.98 to 6.33)	●
Walsall Healthcare NHS Trust	4,865	4.11	3.77 (3.08 to 4.61)	1.44	1.32 (0.73 to 2.29)	5.55	5.09 (4.39 to 6.87)	●
West Hertfordshire Hospitals NHS Trust	5,342	4.49	4.04 (3.20 to 5.06)	1.32	1.47 (0.89 to 3.16)	5.80	5.51 (4.66 to 7.03)	●
Western Health & Social Care Trust <sup>°</sup>	4,086	2.20	3.52 (2.84 to 4.64)	2.94	2.24 (1.42 to 3.56)	5.14	5.70 (4.67 to 7.61)	●
Western Sussex Hospitals NHS Foundation Trust	5,112	2.74	3.67 (2.81 to 4.68)	0.78	1.24 (0.78 to 2.04)	3.52	4.91 (4.14 to 6.31)	●
Worcestershire Acute Hospitals NHS Trust	5,737	4.18	4.00 (3.07 to 5.03)	2.28	1.85 (1.20 to 3.48)	6.45	5.89 (4.86 to 7.79)	●
York Teaching Hospital NHS Foundation Trust	4,834	2.48	3.63 (2.88 to 4.33)	2.07	1.95 (1.06 to 3.16)	4.55	5.55 (4.51 to 7.02)	●

§ excluding terminations of pregnancy and births <24<sup>+0</sup> weeks gestational age

† per 1,000 total births

‡ per 1,000 live births

# colours represent variation from comparator group average extended perinatal mortality rate

\* entry suppressed because of small number of deaths

○ different laws exist in Northern Ireland for the termination of pregnancy

Data sources: MBRRACE-UK, PDS, ONS, NRS, ISD, NIMATS, States of Guernsey, States of Jersey

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**Table 6: Crude and stabilised & adjusted stillbirth, neonatal, and extended perinatal mortality rates by NHS Trust (England), Health Board (Scotland and Wales), Health and Social Care Trust (Northern Ireland), and Crown Dependency based on place of birth: United Kingdom and Crown Dependencies, for births in 2015.  
FOR TRUSTS AND HEALTH BOARDS WITH 2,000 TO 3,999 BIRTHS ≥24<sup>+</sup> WEEKS GESTATIONAL AGE PER ANNUM**

Organisation	Total births <sup>§</sup>	Rate per 1,000 births <sup>§</sup>						
		Stillbirth <sup>†</sup>		Neonatal <sup>‡</sup>		Extended perinatal <sup>†</sup>		
		Crude	Stabilised & adjusted (95% CI)	Crude	Stabilised & adjusted (95% CI)	Crude	Stabilised & adjusted (95% CI) <sup>#</sup>	
Average for comparator group			3.46		1.27		4.73	
Airedale NHS Foundation Trust	2,208	*	3.57 (2.80 to 4.40)	*	1.20 (0.71 to 2.22)	5.43	4.76 (3.93 to 6.19)	●
Barnsley Hospital NHS Foundation Trust	2,940	*	3.65 (2.84 to 4.82)	*	1.11 (0.66 to 2.05)	5.44	4.74 (4.07 to 6.47)	●
Bedford Hospital NHS Trust	2,953	3.73	3.48 (2.83 to 4.56)	1.02	1.28 (0.67 to 2.31)	4.74	4.75 (4.05 to 6.13)	●
Blackpool Teaching Hospitals NHS Foundation Trust	2,937	3.06	3.40 (2.70 to 4.22)	2.73	1.53 (0.97 to 2.37)	5.79	5.01 (4.28 to 6.47)	●
Burton Hospitals NHS Foundation Trust	3,475	1.73	3.21 (2.44 to 4.12)	2.31	1.67 (0.98 to 3.20)	4.03	4.90 (3.90 to 6.88)	●
Chesterfield Royal Hospital NHS Foundation Trust	2,840	*	3.39 (2.45 to 4.36)	*	1.07 (0.57 to 1.86)	3.17	4.48 (3.54 to 5.67)	●
Colchester Hospital University NHS Foundation Trust	3,486	4.59	3.64 (2.85 to 4.52)	1.44	1.32 (0.69 to 2.53)	6.02	4.96 (3.99 to 6.66)	●
Countess of Chester Hospital NHS Foundation Trust	3,047	3.61	3.51 (2.72 to 4.64)	2.96	1.91 (0.87 to 3.71)	6.56	5.42 (4.28 to 7.45)	●
Croydon Health Services NHS Trust	3,801	3.68	3.29 (2.63 to 4.06)	1.58	1.27 (0.74 to 2.18)	5.26	4.56 (3.78 to 5.72)	●
Cwm Taf University Health Board	3,762	1.33	3.10 (2.51 to 3.83)	2.13	1.54 (0.94 to 2.66)	3.46	4.67 (3.82 to 6.48)	●
East Sussex Healthcare NHS Trust	3,180	3.46	3.45 (2.68 to 4.22)	2.21	1.62 (0.88 to 2.87)	5.66	5.07 (4.18 to 6.69)	●
George Eliot Hospital NHS Trust	2,044	1.96	3.32 (2.48 to 4.22)	2.45	1.57 (0.84 to 2.44)	4.40	4.91 (3.84 to 6.08)	●
Hinchingbrooke Health Care NHS Trust	2,318	*	3.45 (2.77 to 4.32)	*	1.06 (0.58 to 2.13)	3.02	4.53 (3.84 to 5.74)	●
Hywel Dda Health Board	3,361	*	3.64 (2.88 to 4.65)	*	1.12 (0.71 to 2.07)	5.06	4.76 (3.97 to 6.22)	●
James Paget University Hospitals NHS Foundation Trust	2,016	*	3.60 (2.85 to 4.60)	*	1.05 (0.51 to 2.25)	4.96	4.68 (3.91 to 6.07)	●
Kettering General Hospital NHS Foundation Trust	3,519	6.54	4.00 (3.10 to 5.52)	1.72	1.35 (0.82 to 2.34)	8.24	5.32 (4.50 to 7.08)	●
Mid Cheshire Hospitals NHS Foundation Trust	2,767	*	3.57 (2.88 to 4.67)	*	1.10 (0.65 to 1.89)	4.70	4.62 (3.73 to 6.67)	●
Milton Keynes University Hospital NHS Foundation Trust	3,915	3.32	3.36 (2.69 to 4.26)	1.03	1.26 (0.70 to 2.07)	4.34	4.61 (3.78 to 5.85)	●
NHS Forth Valley	3,137	2.23	3.31 (2.72 to 3.87)	0.96	1.25 (0.80 to 2.39)	3.19	4.56 (3.81 to 5.94)	●
NHS Highland	2,271	3.08	3.45 (2.79 to 4.59)	2.21	1.60 (0.77 to 3.39)	5.28	5.04 (4.05 to 7.08)	●
North Cumbria University Hospitals NHS Trust	2,975	*	3.39 (2.73 to 3.91)	*	1.06 (0.55 to 1.96)	3.03	4.45 (3.67 to 5.60)	●

Organisation	Total births <sup>§</sup>	Rate per 1,000 births <sup>§</sup>						
		Stillbirth <sup>†</sup>		Neonatal <sup>‡</sup>		Extended perinatal <sup>†</sup>		
		Crude	Stabilised & adjusted (95% CI)	Crude	Stabilised & adjusted (95% CI)	Crude	Stabilised & adjusted (95% CI) <sup>#</sup>	
Northumbria Healthcare NHS Foundation Trust	2,760	4.35	3.58 (2.86 to 4.72)	1.82	1.54 (0.75 to 2.65)	6.16	5.09 (4.29 to 6.54)	●
Royal Cornwall Hospitals NHS Trust	3,875	4.13	3.61 (2.88 to 4.73)	1.30	1.31 (0.71 to 2.17)	5.42	4.92 (4.11 to 6.52)	●
Royal Surrey County Hospital NHS Foundation Trust	2,962	1.35	3.22 (2.39 to 4.16)	2.03	1.65 (0.94 to 2.83)	3.38	4.83 (4.03 to 6.82)	●
Royal United Hospitals Bath NHS Foundation Trust	3,986	5.02	3.82 (2.83 to 4.92)	1.51	1.42 (0.90 to 2.08)	6.52	5.24 (4.16 to 6.75)	●
Salisbury NHS Foundation Trust	2,304	6.51	3.85 (2.84 to 5.06)	1.75	1.41 (0.82 to 2.43)	8.25	5.26 (4.00 to 7.02)	●
Sherwood Forest Hospitals NHS Foundation Trust	3,410	4.69	3.66 (2.82 to 4.60)	1.77	1.50 (0.89 to 2.58)	6.45	5.16 (4.22 to 6.62)	●
South Warwickshire NHS Foundation Trust	2,599	1.92	3.32 (2.59 to 4.31)	1.16	1.37 (0.66 to 2.43)	3.08	4.65 (3.61 to 6.04)	●
Southeast University Hospital NHS Foundation Trust	3,543	*	3.69 (2.80 to 4.72)	*	1.09 (0.57 to 1.93)	5.36	4.77 (3.79 to 6.33)	●
Southport & Ormskirk Hospital NHS Trust	2,573	1.94	3.30 (2.55 to 4.39)	1.17	1.28 (0.78 to 1.94)	3.11	4.57 (3.79 to 5.72)	●
St Helens & Knowsley Teaching Hospitals NHS Trust	3,813	3.15	3.40 (2.56 to 4.17)	1.32	1.32 (0.75 to 2.35)	4.46	4.71 (3.77 to 6.25)	●
Stockport NHS Foundation Trust	3,286	*	3.91 (2.90 to 4.97)	*	1.13 (0.62 to 2.02)	6.70	5.03 (3.96 to 6.43)	●
Tameside and Glossop Integrated Care NHS Foundation Trust	2,355	*	3.15 (2.42 to 3.90)	*	1.19 (0.65 to 2.08)	2.12	4.34 (3.56 to 5.69)	●
Taunton & Somerset NHS Foundation Trust	3,147	2.22	3.32 (2.60 to 4.10)	1.27	1.23 (0.75 to 1.97)	3.50	4.55 (3.82 to 6.09)	●
The Ipswich Hospital NHS Trust	3,715	2.42	3.31 (2.65 to 4.09)	1.35	1.32 (0.67 to 2.07)	3.77	4.63 (3.70 to 5.93)	●
The Queen Elizabeth Hospital King's Lynn NHS Foundation Trust	2,311	3.89	3.52 (2.74 to 4.34)	1.74	1.41 (0.72 to 2.60)	5.63	4.93 (3.94 to 6.54)	●
The Rotherham NHS Foundation Trust	2,616	*	3.34 (2.68 to 4.07)	*	0.99 (0.53 to 1.54)	3.06	4.27 (3.26 to 5.47)	●
Torbay and South Devon NHS Foundation Trust	2,238	*	3.25 (2.48 to 4.11)	*	1.13 (0.65 to 1.93)	1.79	4.38 (3.30 to 5.75)	●
University Hospitals of Morecambe Bay NHS Foundation Trust	3,157	*	3.50 (2.58 to 4.53)	*	1.03 (0.50 to 1.96)	3.80	4.52 (3.83 to 5.81)	●
Warrington & Halton Hospitals NHS Foundation Trust	2,856	2.10	3.30 (2.48 to 4.38)	1.40	1.25 (0.71 to 2.23)	3.50	4.56 (3.58 to 5.76)	●
West Suffolk NHS Foundation Trust	2,525	*	3.32 (2.62 to 4.37)	*	1.18 (0.74 to 2.45)	2.77	4.50 (3.91 to 5.94)	●
Whittington Health	3,672	*	3.56 (2.73 to 4.89)	*	1.05 (0.59 to 1.82)	5.45	4.62 (3.78 to 6.34)	●
Wrightington, Wigan & Leigh NHS Foundation Trust	2,808	3.21	3.43 (2.72 to 4.37)	1.07	1.17 (0.66 to 1.98)	4.27	4.59 (3.72 to 5.71)	●

§ excluding terminations of pregnancy and births <24<sup>+0</sup> weeks gestational age

† per 1,000 total births

‡ per 1,000 live births

# colours represent variation from comparator group average extended perinatal mortality rate

\* entry suppressed because of small number of deaths

○ different laws exist in Northern Ireland for the termination of pregnancy

Data sources: MBRRACE-UK, PDS, ONS, NRS, ISD, NIMATS, States of Guernsey, States of Jersey  
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**Table 7: Crude and stabilised & adjusted stillbirth, neonatal, and extended perinatal mortality rates by NHS Trust (England), Health Board (Scotland and Wales), Health and Social Care Trust (Northern Ireland), and Crown Dependency based on place of birth: United Kingdom and Crown Dependencies, for births in 2015.**

**FOR TRUSTS AND HEALTH BOARDS WITH FEWER THAN 2,000 BIRTHS  $\geq 24^{+0}$  WEEKS GESTATIONAL AGE PER ANNUM**

Organisation	Total births <sup>§</sup>	Rate per 1,000 births <sup>§</sup>					
		Stillbirth <sup>†</sup>		Neonatal <sup>‡</sup>		Extended perinatal <sup>†</sup>	
		Crude	Stabilised & adjusted (95% CI)	Crude	Stabilised & adjusted (95% CI)	Crude	Stabilised & adjusted (95% CI) <sup>#</sup>
Average for comparator group			2.33		1.08		3.41
Dorset County Hospital NHS Foundation Trust	1,876	2.13	2.32 (1.60 to 3.27)	3.74	1.57 (0.75 to 3.27)	5.86	3.98 (3.08 to 5.62) ●
East Cheshire NHS Trust	1,760	*	2.30 (1.59 to 3.31)	*	1.03 (0.35 to 2.33)	2.27	3.33 (2.42 to 5.20) ●
Gateshead Health NHS Foundation Trust	1,800	*	2.21 (1.37 to 3.00)	*	0.98 (0.25 to 2.11)	*	3.19 (2.01 to 4.60) ●
Harrogate and District NHS Foundation Trust	1,906	3.67	2.44 (1.61 to 3.45)	1.58	1.25 (0.57 to 2.66)	5.25	3.67 (2.55 to 5.39) ●
Isle of Man Department of Health and Social Care	778	*	2.38 (1.60 to 3.55)	*	1.00 (0.34 to 1.88)	3.86	3.38 (2.16 to 5.02) ●
Isle of Wight NHS Trust	1,233	*	2.37 (1.65 to 3.32)	*	1.05 (0.36 to 2.23)	4.06	3.42 (2.33 to 4.86) ●
NHS Borders	1,069	*	2.50 (1.96 to 3.57)	*	0.99 (0.30 to 2.26)	6.55	3.50 (2.61 to 5.09) ●
NHS Dumfries & Galloway	1,271	*	2.41 (1.62 to 3.52)	*	1.15 (0.30 to 2.06)	5.51	3.56 (2.26 to 5.32) ●
NHS Orkney	137	*	2.32 (1.48 to 3.17)	*	1.07 (0.28 to 2.30)	*	3.39 (2.06 to 4.89) ●
NHS Shetland	140	*	2.32 (1.54 to 3.21)	*	1.07 (0.29 to 2.51)	*	3.39 (2.17 to 5.28) ●
NHS Western Isles	186	*	2.39 (1.60 to 3.72)	*	1.05 (0.31 to 2.50)	*	3.41 (2.33 to 5.70) ●
Northern Devon Healthcare NHS Trust	1,422	2.11	2.32 (1.59 to 3.04)	2.82	1.36 (0.55 to 2.81)	4.92	3.68 (2.30 to 5.56) ●
Powys Teaching Health Board	142	*	2.32 (1.38 to 3.35)	*	1.07 (0.28 to 2.60)	*	3.39 (2.07 to 4.89) ●
RAF Lakenheath (48th Medical Group)	430	*	2.30 (1.59 to 3.22)	*	1.05 (0.47 to 2.17)	*	3.35 (2.32 to 4.70) ●
South Tyneside NHS Foundation Trust	1,322	*	2.28 (1.24 to 3.03)	*	0.93 (0.21 to 1.78)	*	3.22 (1.79 to 4.25) ●
States of Guernsey Health & Social Services	587	*	2.32 (1.49 to 3.46)	*	1.00 (0.25 to 2.45)	*	3.31 (1.99 to 5.62) ●
States of Jersey Health & Social Services	1,020	*	2.25 (1.33 to 2.90)	*	0.97 (0.24 to 1.84)	*	3.21 (2.00 to 4.61) ●
The Portland Hospital for Women and Children	1,513	*	2.28 (1.39 to 3.07)	*	1.07 (0.26 to 2.10)	1.98	3.34 (2.22 to 4.54) ●
The Royal Bournemouth and Christchurch Hospitals NHS Foundation Trust	314	*	2.31 (1.53 to 3.50)	*	1.06 (0.30 to 2.23)	*	3.37 (1.98 to 5.07) ●
Weston Area Health NHS Trust	198	*	2.32 (1.44 to 3.23)	*	1.07 (0.27 to 2.05)	*	3.38 (2.08 to 4.74) ●
Wye Valley NHS Trust	1,687	2.37	2.34 (1.62 to 3.13)	2.38	1.30 (0.55 to 2.88)	4.74	3.65 (2.73 to 5.51) ●
Yeovil District Hospital NHS Foundation Trust	1,492	*	2.36 (1.56 to 3.28)	*	0.95 (0.23 to 1.91)	2.68	3.32 (1.93 to 4.71) ●

§ excluding terminations of pregnancy and births <24<sup>+0</sup> weeks gestational age

† per 1,000 total births

‡ per 1,000 live births

# colours represent variation from comparator group average extended perinatal mortality rate

\* entry suppressed because of small number of deaths

○ different laws exist in Northern Ireland for the termination of pregnancy

Data sources: MBRRACE-UK, PDS, ONS, NRS, ISD, NIMATS, States of Guernsey, States of Jersey

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