Saving Babies' Lives 2024: A report on progress Northern Ireland briefing

Sands & Tommy's Policy Unit

to save babies' lives

Summary of progress

- The stillbirth rate declined 17.7% in Northern Ireland between 2010 and 2022; however, comparing the rate over a three-year average shows a smaller reduction of 10.1%.
- The neonatal mortality rate has been higher in Northern Ireland than any other UK nation since 2013. The rate declined (-22.5%) between 2010 and 2022; however, the three-year average rate was the same in 2010-2012 as 2020-2022.
- Unlike stillbirths and neonatal deaths, the total number of miscarriages and miscarriage rates are not reported in Northern Ireland.

What needs to change

Although there is an ambition in England to halve rates of stillbirth, neonatal death, preterm birth, maternal death and brain injury by 2025, relative to 2010, there is no equivalent ambition in Northern Ireland. The Northern Ireland Executive must commit to reducing pregnancy loss and baby deaths and eliminating inequalities. Any future targets must have a clear and agreed baseline to measure progress against.

These targets should be the driving force behind a programme of policy activity, with funding and resources to meet them. This should include:

- A standardised data dashboard to monitor changes in outcomes in Northern Ireland over time as well as monitor variation across different Trusts and population groups. This should include collecting routine data on ethnicity, socio-economic status, or other social risk factors to identify the groups at most risk of pregnancy and baby loss, understand what is driving inequalities, and inform potential solutions.
- Collating key themes from individual service inspections regularly.
- More regular and consistent insight into staff and patient experience; the last national survey of pregnancy and birth experiences took place between 2014 and 2016. This should also include a process to capture insights from bereaved parents. The Department for Health should consider other metrics that could be reported to provide insights into staffing, including sickness absence and vacancy rates.
- Engaging with ongoing work in Scotland to develop a methodology to count miscarriages and consider the best methodology for the Northern Irish context.
- Consideration of policy mechanisms to encourage continued improvement in the number of perinatal deaths for which a review is started and completed using the Perinatal Mortality Review Tool.
- Learning from reviews and inquiries from across the UK which have consistently identified similar systemic issues with maternity and neonatal services. In the absence of evidence to the contrary, it should be assumed that these issues are as relevant in Northern Ireland as the rest of the UK and the Northern Ireland Executive should consider how best to address these issues in their context.

Introduction

The Saving Babies' Lives 2024 Progress report brings together data on pregnancy and baby loss across the UK and assesses progress to save more babies' lives and reduce inequalities. Health is a devolved matter, with policies, funding and the healthcare system overseen by devolved governments in each of the four nations. While each nation faces similar systemic issues, much of the data are reported separately. To analyse the data and support devolved policy makers, the Sands and Tommy's Joint Policy Unit is publishing a series of tailored briefings with the most recent data for each of the four UK nations. This briefing is focused on Northern Ireland. For additional analysis of trends across the UK, please see the Saving Babies' Lives 2024 report.

About the Sands and Tommy's Joint Policy Unit

Sands and Tommy's Joint Policy Unit is focussed on achieving policy change that will save more babies' lives during pregnancy and the neonatal period and on tackling inequalities in loss, so that everyone can benefit from the best possible outcomes.

Rates of pregnancy loss and baby deaths in Northern Ireland

Overall, the stillbirth and neonatal mortality rates declined in Northern Ireland between 2010 and 2022 (see Figure 1). The stillbirth rate declined by 17.7% while the neonatal mortality rate declined by 22.5%. Because stillbirths and neonatal deaths are rare occurrences, slight changes in the numbers can affect the rate, especially in smaller populations like Northern Ireland. This may partly explain some of the variability in the rates between 2010 and 2022.

Combining stillbirths and neonatal deaths (in the extended perinatal mortality rate) provides a larger sample to review progress over time. After a substantial decline between 2010 and 2011, progress to reduce the perinatal mortality rate has been limited.

Comparing the average rate over three-year periods reduces the effect of annual variability. The average stillbirth rate was 9.9% lower in 2020 - 22 compared to 2010 - 12 and the neonatal mortality rate was 2.0% lower. The extended perinatal mortality rate was 4.8% lower.

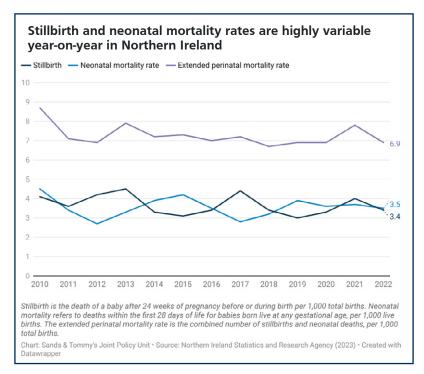


Figure 1. Stillbirth, neonatal mortality, and perinatal mortality rates in Northern Ireland between 2010 - 2022

Unlike stillbirths and neonatal deaths, the total number of miscarriages and miscarriage rates are not reported in Northern Ireland, or by any UK nation. Without a robust mechanism to count the number of miscarriages, we cannot fully understand the impact on the Northern Irish and UK population or know whether the miscarriage rate is increasing or decreasing. It also means that meaningful reduction targets cannot be set, nor evaluations of preventative interventions completed.

Comparisons across the UK

The stillbirth rate in Northern Ireland has often been lower than other UK nations since 2010, although progress to reduce the stillbirth rate has been slower than elsewhere (See Figure 2). Comparing average stillbirth rates over three years, to reduce the effect of annual variations, shows that the stillbirth rate in England declined the most (-21.9% between 2010 - 12 and 2020 - 22), followed by Scotland (-20.4%) and Wales (-12.6%). The reduction in the three-year average stillbirth rate was smallest in Northern Ireland (-10.1%).

In contrast, neonatal mortality rates have been highest in Northern Ireland since 2013 (see Figure 3). Neonatal mortality rates in Northern Ireland declined by the largest percentage overall between 2010 and 2021¹ (-17.8%), largely due to the high rate in 2010. When comparing average rates over three years, the rate increased 5.7% in Northern Ireland between 2010 – 12 and 2019 – 21, while they declined in England (-5.8%) and Scotland (-10.1%). Rates also increased in Wales (+2.4%).

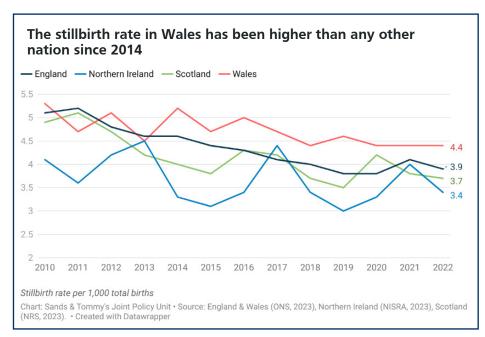


Figure 2. Stillbirth rate across the four nations between 2010 - 2022

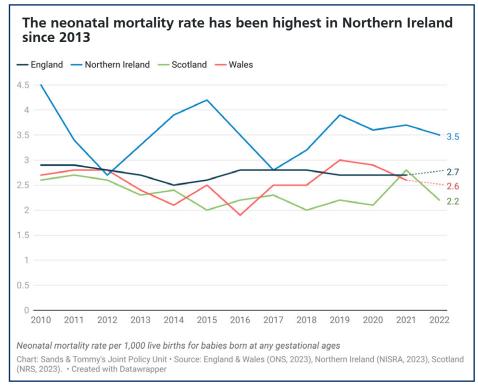


Figure 3. Neonatal mortality rates for all gestational ages across the four nations between 2010 and 2022

^{1.} Neonatal mortality data were not available for England & Wales at the time of publication

Inequalities in pregnancy losses and baby deaths

Across the UK, there are stark and persistent inequalities in pregnancy loss and baby deaths, with higher mortality rates among minoritised ethnic groups and people living in more deprived areas (1).

In Northern Ireland, babies born to mothers living in the most deprived areas are more likely to be small for gestational age and low birth weight, compared to those in the least deprived areas (2).

Better data are needed to identify the groups at most risk of pregnancy and baby loss in Northern Ireland as well as understanding what is driving inequalities and identifying potential solutions. Some explanations include differences in access to, and treatment by, maternity services, health behaviours, and personal and social contexts. Adolescent women and birthing people² may be at higher risk of poor pregnancy outcomes (3) and in Northern Ireland the teenage birth rate is five times higher among women and birthing people living in the most deprived areas (10.2 per 1,000 population) compared to those in the least deprived (2.0) (2). There is also a similar disparity in maternal smoking, with 21.1% of mothers in the most deprived areas recorded as smoking during pregnancy, compared to 4.1% in the least deprived areas (2).

Multiple reports across the UK have highlighted the impact of racism and discrimination which some individuals experience when engaging with health services. However, data on inequalities according to ethnicity are not reported for Northern Ireland.

Drivers of inequalities are explored in more detail in the Joint Policy Unit's 2024 Progress Report.

Systemic issues in maternity and neonatal services need to be addressed

Maternity and neonatal services are inspected by The Regulation and Quality Improvement Authority (RQIA). Unlike the Care Quality Commission inspections in England, ratings of services are not provided and the RQIA does not regularly report on the quality of services across Northern Ireland. The absence of regular, national reporting makes monitoring the quality of services across Northern Ireland challenging. Over a decade after the last Maternity Strategy for Northern Ireland was published in 2012, the RQIA led a review of maternity services in Northern Ireland in 2023 (4).

This review identified systemic issues which echo the themes that have repeatedly been highlighted by reviews and inquiries across the UK. Another review of midwifery services was also commissioned by the Department of Health (DoH) in 2023, although it is yet to be published (5).

In this section, we will briefly explore systemic issues where data and evidence for Northern Ireland are available. However, the lack of regular staff or parent surveys and regional reporting on the safety and quality of services makes ongoing monitoring challenging.

Staffing levels and training

The number of full-time equivalent (FTE) midwives and student midwives³ has remained stable in Northern Ireland between 2013⁴ and 2022: there were 1,086 FTE midwives in 2013 and 1,085 in 2022. The lack of change in the midwifery workforce is particularly striking in comparison to the 20.7% growth in FTE staff working in the NHS in Northern Ireland overall.

Despite this stable workforce, the number of FTE midwives/student midwives per 1,000 total births has grown 16.6% between 2013 and 2022, driven by the declining number of births in Northern Ireland over recent years (see Figure 4).

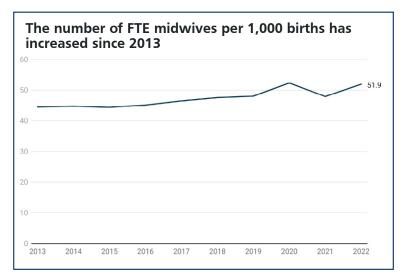


Figure 4. FTE Midwives/Student Midwives per 1,000 total births 2013 - 2022

- 2. The Sands & Tommy's Joint Policy Unit is committed to inclusivity and ensuring that everyone feels heard and seen. To recognise transgender and non-binary gestational parents, we refer to women and birthing people throughout this report. However, when referencing research, we will mirror the language used in the underlying study to avoid introducing inaccuracies.
 - For a full glossary of terms, please see the 2024 Progress Report.
- 3. The DoH does not report a breakdown of other staffing roles working in maternity and neonatal services, including neonatal nurses, maternity nurses and obstetricians.
- 4. Data from 2012 and before did not include student midwives and are not directly comparable with 2013 onwards.

Despite the increase in FTE midwives/student midwives per 1,000 births there are still concerns about the workforce in Northern Ireland. Although birth rates are falling, the profile of the birthing population is changing and now it has more complex needs. The average age of women and birthing people giving birth and the proportion with pre-existing medical conditions have been rising over the past decade in Northern Ireland. Women and birthing people are more likely to have been diagnosed with diabetes compared to a decade ago and today, over one in four pregnant women are obese (6). These changes affect women and birthing people's clinical needs and the staff required to meet them.

Headline FTE numbers also do not reflect the mix of professional experience within staff groups. The workforce's age profile can be used as a proxy for professional experience, assuming older midwives have more years of professional experience than younger midwives. The proportion of nurses and midwives aged 41 – 55 who registered with the Nursing and Midwifery Council in Northern Ireland has declined 8% between 2018 and 2022 (7). While the number of registered midwives has increased 19.6% among midwives aged 21-40, the falling number of middle-aged midwives may pose challenges for skills mix.

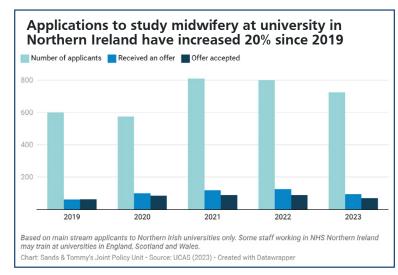


Figure 5. Number of applicants, offers received and offers accepted for midwifery courses at Northern Irish universities, 2019-2023

Although applications for midwifery courses in Northern Ireland have increased overall (+20.8%) since 2019, they have declined more recently (-10.5%) since 2021 (see Figure 5). This decline is lower than the UK overall (-27.0%) and does not show the sharp decline seen in Scotland (-40.3%) and Wales (-35.4%). However, the proportion of applicants who go on to receive and accept an offer at a Northern Ireland university is low: only 11.5% on average over the past 5 years. This may reflect the quality of applications and/or teaching capacity at universities in Northern Ireland. However, with only 70 applicants accepting their offer in 2023, and assuming a certain level of student attrition, the number of newly qualified midwives is enough to replace midwives leaving the NHS but is insufficient to grow the workforce. This is reflected in the relatively stable number of FTE midwives since 2013.

To increase the number of student midwives studying at universities in Northern Ireland, more university places must be commissioned. Although nursing and midwifery student places have increased since 2012 – 13, places have declined in 2023 – 24 due to budgetary constraints (8).

Reports from across the UK consider workforce challenges including sickness absence, vacancy rates and staff wellbeing. However, these data are not reported for Northern Ireland. The DoH also does not run regular staff surveys. The last survey took place in 2019 (9), but regular surveys are required to offer insights on staff satisfaction or other areas, including patient safety.

Culture of safety

Safety culture has been consistently identified as an issue in reviews and investigations. Having a good safety culture enables staff to escalate concerns about clinical care whenever necessary, with clear protocols in place to support this. The Maternity Safety Culture Staff Survey, cited by the RQIA (4), found that only a third (36.3%) of staff agreed that "bullying and undermining behaviours are dealt with effectively". Qualitative responses showed instances of bullying, undermining and incivility across all Trusts, although with some variation.

The RQIA review found that despite some examples of psychological safety and evidence that clinical teams worked well together, multidisciplinary working was more challenging, and a substantial proportion of staff felt they were not able to share concerns. The review also highlighted some doubts around the benefits of reporting incidents: only 56.6% of respondents to a survey believed that mistakes led to positive changes. However, without ongoing surveys of staff, it is challenging to monitor changes in this area.

Organisational leadership

An open learning culture should run from board-to-ward level and requires curious leaders who are problem-sensing rather than comfort seeking (10). However, the RQIA review found that no Trust had an effective governance system to support quality assurance within maternity services. Instead, the report noted Trusts had adopted a "firefighting" mode since the pandemic. The RQIA found that the link between maternity services and the Trust Board required strengthening across several areas:

- Neither midwifery nor obstetric leadership has regular, direct access to the Trust Board.
- No Trusts reported having a board-level maternity safety champion.
- Trust Boards and senior leaders are not always visible or accessible to clinical teams.

Data collection

Good quality, routine data are needed to identify variations between maternity and neonatal units and among different patient groups, and to inform improvements. The RQIA review found variation across Trusts in the types of metrics used to measure quality and safety within maternity. This limits the ability of Trust Boards to identify and address safety concerns and affects the DoH's oversight of maternity services across Northern Ireland.

Data related to ethnicity, socio-economic status or other social risk factors were not mentioned in the RQIA report. More complete data are required to inform personalised care plans for individuals, as well as informing and monitoring efforts to reduce disparities in maternal and neonatal outcomes.

Engagement with service users

Listening and learning from the experience of women and birthing people using maternity and neonatal services is vital to improving care. Although all individual services may engage with parents in some form, women and birthing people's opinions are not consistently sought across Northern Ireland: the last survey of pregnancy and birth experiences took place between 2014 and 2016 (11). The RQIA also does not consistently include parents' voices - for example, stating in a review of the Neonatal Unit at Royal Jubilee Maternity Services in September 2022 that there was "no opportunity to speak with patients or relatives during the inspection" (12).

Learning from reviews and investigations

When serious incidents do occur, it is important to have an independent, standardised method of investigating. As well as providing answers to families it is vital that lessons from reviews and investigations are shared and acted upon to prevent avoidable deaths in the future. The Perinatal Mortality Review Tool (PMRT) has been developed to standardise the review of perinatal deaths and create action plans for improvement. A timely review of care is important for parents and the NHS. Since the launch of the PMRT in Northern Ireland in 2020, the proportion of perinatal deaths with a review of care started and completed has increased (see Figure 6).

It is important that the proportion of reviews started and completed continues to improve. Incomplete reviews mean that any learning for health services and staff are not captured or acted upon, this could mean any mistakes being repeated in the future

Since the PMRT was launched, some measures of review quality have improved across the UK, such as the composition of review teams which include more external members and are more multi-disciplinary than in the past. Involving parents is another critical component of reviews; ensuring that parents are given the opportunity to ask questions or share concerns. In Northern Ireland, parents' perspectives were sought in 80% of reviews in 2022-23, but only 52% included their comments.

To be able to ask questions, parents need support to understand the review and should be given multiple opportunities to ask questions. One in five of the UK-based parents surveyed by Sands did not understand what the review entailed which limited their ability to engage with the process (13). Some parents may need additional support: the MBRRACE-UK Confidential Enquiries found that those parents with an identified language barrier never raised any questions or concerns as part of reviews (14,15).

For more information on PMRT trends across the UK, please see the <u>main report</u>.

Delivering care in line with nationally agreed standards

Nearly all (99%) of the PMRT reviews completed in Northern Ireland in 2022 - 23 found at least one issue with the care that was provided (16). Across the UK, 1 in 5 reviews identified at least one issue with the care which may have prevented a late miscarriage, stillbirth or neonatal death. Too often, avoidable deaths occur because of care that is not in line with nationally agreed standards, including recommendations in the National Institute for Health and Care Excellence (NICE) Guidance.

Operational statistics, such as gestational age at first booking, is not published for Northern Ireland so it is not possible to assess areas where guidance may not be being followed. However, some staff perceive a gap in locally appropriate guidance, following the withdrawal of national and regional guidance for Northern Ireland by DoH in 2022, which was not fully met by NICE guidelines (4).

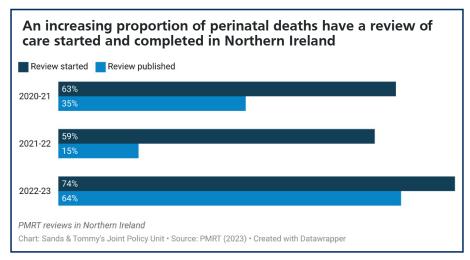


Figure 6. Proportion of perinatal deaths with a PMRT review started and completed by year in

Acronyms

• DoH: Department of Health

• FTE: Full-time equivalent

· NICE: National Institute for Health and Care Excellence

· NNAP: National Neonatal Audit Programme

• PMRT: The Perinatal Mortality Review Tool

• RCM: Royal College of Midwives

· RQIA: The Regulation and Quality Improvement Authority

References

- Draper ES, Gallimore ID, Smith LK, Matthews RJ, Fenton Alan C, Kurinczuk JJ, et al. MBRRACE-UK Perinatal Mortality Surveillance: UK perinatal deaths for births from 1 January 2021 to 31 December 2021. 2023.
- Public Health Information & Research Branch. Health Inequalities Annual Report 2024 [Internet]. 2024. Available from: www.nisra.gov.uk
- Nybo Andersen AM, Wohlfahrt J, Christens P, Olsen J, Melbye M. Maternal age and fetal loss: Population based register linkage study. Br Med J. 2000 Jun 24;320(7251):1708–12.
- 4. The Regulation and Quality Improvement Authority. RQIA Review of Governance Arrangements in Place to Support Safety Within Maternity Services in Northern Ireland [Internet]. 2023 May. Available from: www.rqia.org.uk.
- Department of Health. Department of Health. 2023 [cited 2024 Mar 20]. Department commissions new report into Midwifery Services in Northern Ireland. Available from: https://www. health-ni.gov.uk/news/department-commissions-new-reportmidwifery-services-northern-ireland
- Royal College of Midwives. Northern Ireland: State of maternity services 2023. 2023.
- 7. Nursing & Midwifery Council. *The NMC register Northern Ireland: 1 April 2021 31 March 2022.* 2022.
- Department of Health. Department of Health. 2023 [cited 2024 Apr 12]. Department welcomes supply of new nurses & midwives to NI workforce. Available from: https://www.health-ni.gov.uk/news/department-welcomes-supply-new-nurses-midwives-ni-workforce#:~:text=The%201%2C000%20 figure%20includes%20644,in%20the%20summer%20of%20 2024
- Health and Social Care. 2019 HSC STAFF SURVEY: Regional Benchmark Report [Internet]. 2019 [cited 2024 Mar 20]. Available from: https://www.health-ni.gov.uk/sites/default/files/publications/health/2019-HSC-Staff-Survey-Regional-Benchmark-Report.PDF

- 10. Dixon-Woods M, Martin G. *Organisational culture: problem-sensing and comfort-seeking.* 2023.
- Alderdice F, Hamilton K, Mcneill J, Lynn F, Curran R, Redshaw M. Birth NI: A Survey of Women's Experience of Maternity Care in Northern Ireland. Belfast; 2016 May.
- The Regulation and Quality Improvement Authority. Inspection Report: Belfast Health and Social Care Trust [Internet]. 2022 [cited 2024 Mar 20]. Available from: https://www.rqia. org.uk/RQIA/media/CareServices/020269_NeonatalUnit-RoyalJubileeMaternityServices_Care_05092022.pdf
- 13. Sands. In their own words: Parents' experiences of the hospital review of their care, Sands Survey 2021. 2021.
- Draper E, Gallimore I, Kurinczuk J, Kenyon S, on behalf of the MBRRACE-UK Collaboration. Perinatal Confidential Enquiry: A comparison of the care of Asian and White women who have experienced a stillbirth or neonatal death. 2023.
- Draper E, Gallimore I, Kurinczuk J, Kenyon S, on behalf of the MBRRACE-UK Collaboration. Perinatal Confidential Enquiry: A comparison of the care of Black and White women who have experienced a stillbirth or neonatal death. 2023.
- Chamberlain S, Kirk A, Kurinczuk JJ, Smith P, Bevan C, Brigante L, et al. Learning from Standardised Reviews When Babies Die. National Perinatal Mortality Review Tool Fifth Annual Report. National Perinatal Review Tool: Fifth Annual Report. Oxford: National Perinatal Epidemiology Unit. 2023.