# Perinatal Mortality in Ireland

Annual Report 2021

NATIONAL PERINATAL EPIDEMIOLOGY CENTRE

**The perinatal mortality rate (PMR) was 5.87 per 1,000 total births in 2021.**
Corrected for Major Congenital Anomaly (MCA), the rate was 3.78 per 1,000 total births

**The stillbirth rate was 3.91 per 1,000 total births**

**The early neonatal death rate was 1.96 per 1,000 live births.**

A **stillbirth** is when a baby is born at or after 24 weeks of pregnancy, or weighing 500g or more, with no signs of life

**Neonatal death** is when a baby dies within the first 28 days of being born.

**Overall perinatal mortality rate (PMR)** is the number of stillbirths and early neonatal deaths per 1,000 total births (live births and stillbirths from 24 weeks gestation or weighing >500g).

**Corrected PMR** is the Perinatal mortality rate excluding perinatal deaths associated with or due to a major congenital anomaly.

**Births occurring in 2021 of ≥500g birthweight or at ≥24 weeks gestation**

**60,841** Total Births

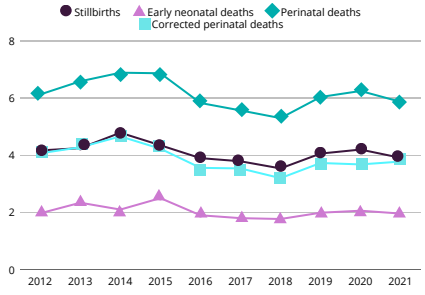
**357** Total Perinatal Deaths
Includes stillbirths and neonatal deaths

**238** Stillbirths

**119** Early Neonatal Deaths

**40** Late Neonatal Deaths

In Ireland, the Perinatal Mortality rate has remained **steady over the last decade,** showing no significant decrease.




## Maternal Characteristics

**+40**

Women aged 40 or older had an increased risk of perinatal death

Irish Traveller, Asian and Black ethnicities were overrepresented in the mothers who experienced perinatal deaths in 2021

**BMI**

Women with a BMI of 25 or higher had a 46% higher risk of perinatal mortality

## Infant Characteristics

Low birthweight centiles were associated with perinatal deaths in 2021, particularly stillbirths.

Multiple pregnancies had an increased risk of perinatal death, which accounted for 13.7% of all perinatal deaths.

A diagnosis of FGR was reported for 20.7% of the 348 deaths (missing data for 9 cases), 54 (23.5%) stillbirths and 18 (15.3%) early neonatal deaths.

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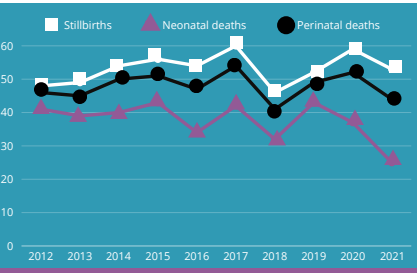
## Lowest autopsy uptake rate since 2018

- The rate of autopsy uptake in 2021 (44%) is **lower** than the rate of 52.3% reported in 2020.
- This rate remains **higher for stillbirths** than for early neonatal deaths (54% vs. 25%)
- In 78% of the 193 cases where an autopsy was not performed, **an autopsy was offered.**




## Recommendations

Based on the findings of this and previous reports, the NPEC Perinatal Mortality National Clinical Audit Governance Committee makes the following recommendations:

- Robust clinical audit of perinatal outcomes in all maternity units in Ireland is vital for quality patient care. Funding should be provided to ensure protected time for clinical audit and implementation of its findings. This funding might be best channeled through midwifery and obstetric management posts where clinical audit is embedded within job descriptions. Owner; the Quality and Patient Directorate in the HSE.

- National data on social factors impacting on perinatal loss, e.g. smoking and alcohol abuse, remain difficult to collate. Consideration should be given to methodologies to capture this information consistently. Owner; the NPEC and the NWIHP.

- A communication policy should be developed regarding neonatal outcomes in babies whose care has been transferred post-delivery. This should ensure the flow of vital information between tertiary maternity units/ paediatric centres and the referring maternity unit that is essential to inform appropriate follow up care, including counselling of women experiencing perinatal loss. It is also necessary to inform clinical audit in the referring maternity unit. Owner: National Clinical Lead for Neonatology and NWIHP.

- The establishment of a confidential review for stillbirth and neonatal deaths should be considered in order to enhance the learning to assist better care. This could take the format of a standardized review of specific cohorts, such as:
  - unexpected intrapartum related deaths
  - multiple pregnancies
  - Stillbirths (normally formed babies)

  These cohorts could be reviewed on a rolling basis. Owner; the National Women and Infants Health Programme (NWIHP) and the Institute of Obstetricians and Gynaecologists (IOG).

- All healthcare professionals (obstetricians, GPs and midwives) should see every interaction with a woman as an opportunity to address weight, nutrition and lifestyle to optimize her health. This also supports the HSE Programme 'Making Every Contact Count' (MECC). Owner; All Healthcare staff.

- Standardised approach to improved antenatal detection of fetal growth restriction (FGR) with timely delivery is a potential preventative strategy to reduce perinatal mortality.

- A multidisciplinary working group should be developed to address a national standardised approach to the detection of FGR. A national approach should include a standardised training program for all staff involved in antenatal care and also evaluate the use of a standard growth curve and management options across the Irish maternity service. Owner; the NWIHP and the IOG.

Progress: A working group has been established to address this, and a guideline is in development. The NWIHP, through work stream 5 of the National Neonatal Encephalopathy Action Group (NNEAG), will engage with the guideline development team around national rollout and implementation.

- The NPEC advocates the introduction and use of a 'Care Bundle' approach in an attempt to lower perinatal mortality; similar approaches in other countries have achieved a reduction.

The **National Perinatal Epidemiology Centre (NPEC)** is a national clinical audit and research centre based at University College Cork with offices at Cork University Maternity Hospital and directed by Professor Richard A. Greene.

Our comprehensive approach to audit ensures the quality and integrity of our audit process, ultimately contributing to improved perinatal care.

At the NPEC, we acknowledge that the statistics presented in our reports represent our patients, and we use this data to learn from past experiences and produce recommendations for improved care.

Read our reports or learn more about our audits and research on our website and social media channels

- Perinatal Mortality National Clinical Audit
- Severe Maternal Morbidity Audit
- Planned Homebirths Audit
- Very Low Birth Weight Infants Audit
- Neonatal Hypothermia Audit

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