Perinatal Mortality

NATIONAL PERINATAL EPIDEMIOLOGY CENTRE

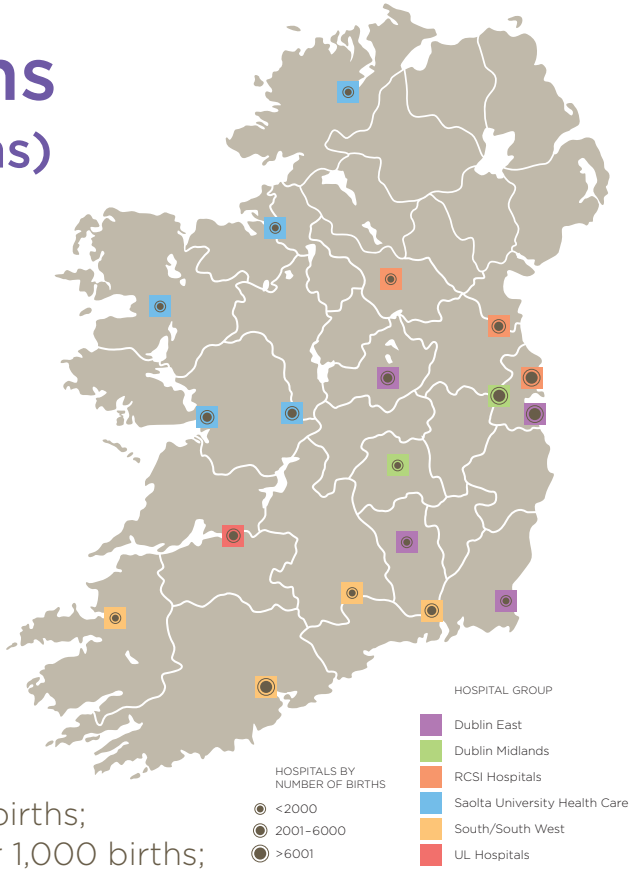
Based on the findings of Perinatal Mortality in Ireland Annual Report 2015

This is the fifth report of the national clinical audit on perinatal mortality in Ireland using the NPEC data collection tool and classification system. Anonymised data were reported by the 19 Irish maternity units on a total of 488 deaths arising from 65,904 births that occurred in 2015, of at least 500g birthweight and/or at least 24 weeks gestation.

460 perinatal deaths
(Stillbirth + Early Neonatal Deaths)

65,904 births

Stillbirths, early neonatal deaths accounted for 294 (60.2%), 166 (34.0%) respectively. A further 28 late neonatal deaths occurred.

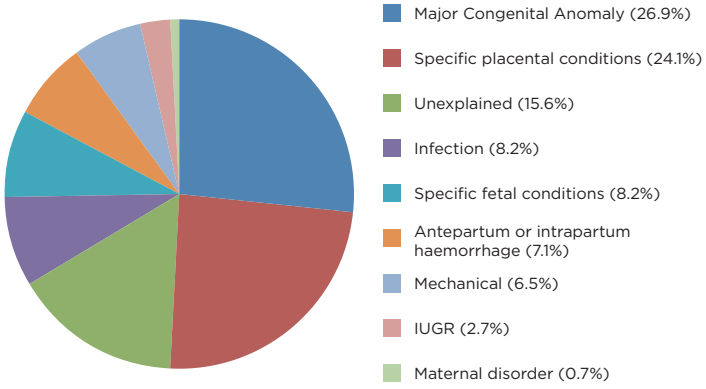


7/1000
Perinatal Mortality Rate
7 deaths per 1,000 births

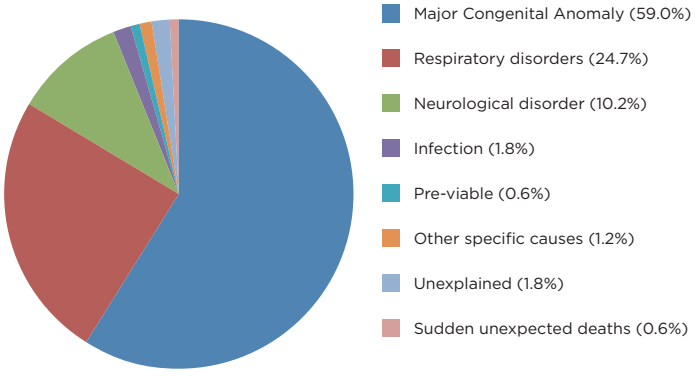
The perinatal mortality rate was 7.0 deaths per 1,000 births; corrected for congenital anomaly, the rate was 4.3 per 1,000 births; the stillbirth rate was 4.5 per 1,000 births; and, the early neonatal death rate was 2.5 per 1,000 live births.

35 early neonatal deaths with a birthweight <500g and a gestational age at delivery <24 weeks were reported.

Primary cause of death in stillbirths



Primary cause of early neonatal deaths



RECOMMENDATIONS

Recommendations actioned following the publication of 2013 and 2014 reports:

- All Irish maternity units now collect and submit data on perinatal deaths to inform the maternity services through the NPEC national audit on perinatal mortality. Whilst this is encouraging, the NPEC would like to stress the importance of ongoing submission of data on all neonatal deaths regardless of gestational age or weight at birth.

- With the support of the Faculty of Pathology, the NPEC have adapted the standardised terminology[1], as recommended at an international consensus meeting of pathology, in presenting the placental findings in cases of stillbirth and neonatal death.

Based on the findings of this report, the NPEC Perinatal Mortality Advisory Group makes the following recommendations:

- The establishment of a confidential enquiry for stillbirth and neonatal death should be considered in order to enhance the lessons which may improve care. An initial step would be the establishment of a standardised review of a case series of unexpected perinatal deaths associated with intrapartum events.

- Improved antenatal detection of fetal growth restriction (FGR) with timely delivery is a preventative strategy to reduce perinatal mortality.[2] The generation of customized birth weight centile charts for every woman during pregnancy is recommended and concomitantly, staff should be trained to plot symphysial fundal height (SFH) and scan weight estimates in order to reduce stillbirths in Ireland.

- Resourcing of perinatal pathology services on a regional and national basis, as recommended by the Faculty of Pathology would provide equal access to review for all perinatal deaths nationally and would facilitate an agreed approach to classification of autopsy, placental histology and cytogenetics.

- Anonymised placental histology reports on perinatal death should be submitted to the NPEC as part of this audit: this would facilitate standardised interpretation and classification of placental conditions.

- Further research exploring factors impacting on autopsy rates, particularly in the case of neonatal deaths, is warranted.

- NPEC supports the Institute of Obstetrics and Gynaecology in the recommendation that anatomy ultrasound is available universally in Ireland. This point is further highlighted in the Invited Commentary of the Perinatal Mortality in Ireland Annual Report 2015.

- Funding should be provided by the Health Service Executive (HSE) to ensure that staffing levels allow protected time for clinical audit. Robust clinical audit of perinatal outcomes in all maternity units in Ireland is vital for patient care, but such audit requires the protected time of clinical staff.

- A public health education programme on perinatal deaths and modifiable risk factors should be developed.

[1] Khong TY, Mooney EE et al (2016). Sampling and definition of placental lesions. Arch Pathol Lab Med 2016 Jul;140 (7):698-713

[2] Clinical Practice Guideline No 29 (2014). Fetal Growth Restriction Guideline - Recognition, Diagnosis and Management: Institute of Obstetricians and Gynaecologists, Royal College of Physicians of Ireland and Directorate of Strategy and Clinical Programmes, Health Service Executive.

The full report is available on the NPEC website.

National Perinatal Epidemiology Centre
Department of Obstetrics and Gynaecology
University College Cork

5th Floor, Cork University Maternity Hospital,
Wilton, Cork

+353 (0)21 420 5053
npec@ucc.ie
www.ucc.ie/en/obsgyn/npec
or @NPEC_UCC

NATIONAL PERINATAL EPIDEMIOLOGY CENTRE

NOCA National Office of Clinical Audit

UCC University College Cork, Ireland Coláiste na hOllscoile Corcaigh