

## OUR DATA COLLECTION PROCESS

Retrospective reviews of inpatient medical records have been used as a gold standard approach when assessing multiple outcomes and rates of adverse events. Therefore, for the purposes of the National Neonatal TH review, medical records were considered the primary source of information. Data were collected on site (paper charts) and/or via the electronic health record (MNCMS) in the 19 maternity units/hospitals and neonatal intensive care units or special care baby units (NICU/SCBU) in the Republic of Ireland. The National Clinical Programme for Paediatrics and Neonatology (NCPPN), NPEC and the National Women and Infants Health Programme collected data on all cases of neonatal TH in 2020 by taking an active case ascertainment approach.

The data was uploaded to the electronic register facilitated by NPEC and were processed in a pseudonymised format. No identifiers are included in the dataset.

For further information on the Neonatal Therapeutic Hypothermia Audit, please contact Paul Corcoran [pcorcoran@ucc.ie](mailto:pcorcoran@ucc.ie) or Indra San Lázaro Campillo [indra.campillo@ucc.ie](mailto:indra.campillo@ucc.ie)

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NATIONAL  
PERINATAL  
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## NEONATAL HYPOTHERMIA IN IRELAND



## THE NATIONAL PERINATAL EPIDEMIOLOGY CENTRE

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.

### OUR OBJECTIVE

The NPEC's objective is to collaborate with Irish maternity services to translate clinical audit data and epidemiological evidence into improved maternity care for families in Ireland.

### COLLABORATE WITH US

At the NPEC we are always looking to collaborate. Get in touch with if you are looking for opportunities for students, data requests or research collaborations.



## THERAPEUTIC HYPOTHERMIA

Before birth, a small group of infants are exposed to reductions of oxygen or blood supply. These term infants are identified as having abnormal neurological behaviour are diagnosed with hypoxic-ischaemic encephalopathy (HIE) at or shortly after birth.

Therapeutic Hypothermia (TH) is now considered the standard treatment for term infants with moderate to severe HIE. It is a therapy during which the infant is cooled within six hours of birth to a targeted core body temperature of between 33°C to 34°C for a duration of 72 hours. Following the 72 hour period, the infant is rewarmed to normal body temperature over a 6-12 hour period.

TH is regarded as the greatest single advance in Neonatology over the last 25 years as research has demonstrated it reduces the rate of death, severe disability and lifelong cerebral palsy reduction for these infants.

In Ireland, TH is administered in four tertiary maternity hospitals: National Maternity Hospital, Rotunda Hospital, Coombe Women and Infants University Hospital and Cork University Maternity Hospital). All infants born in other hospitals requiring this treatment are transferred to one of these four tertiary hospitals.

## PURPOSE OF THIS AUDIT

The primary aim of this audit is to present an overview and national statistics on Neonatal TH in the Republic of Ireland.

The review will examine the clinical details around each case of Neonatal TH. This will include the mothers' demographics, antenatal details, labour and delivery. The infant's resuscitation, neurological assessment, treatment, the supportive clinical care, the examination of the placenta and follow up data if applicable.

\*The data that the NPEC receives is not identifiable. A code is assigned to each case that the hospital stores in relation to the patient identifiers, the NPEC does not have access to this identifiable information.