IMJ
Official Journal of the Irish Medical Organisation

Ir Med J; June 2026; Vol 119; No. 6; P98
18th June, 2026

The National Neonatal Transport Programme marks 25 years

The National Neonatal Transport Programme (NNTP) recently celebrated its 25th anniversary[1]. It commenced operations in March 2001[2]. It is the service that transports ill infants between hospitals when they require specialized neonatal medical or surgical care. It is a national service provided to all maternity and paediatric hospitals.

The regional distribution of the NNTP activity is Dublin Midlands (50.4%), Dublin South East (17.6%), Dublin North East (15.4%), West & North West (9%), South West (5.1%), and Midwest (2.5%). This is a reflection of the population density within each region. The NNTP also provides attendance, resuscitation, stabilization, and transport for infants of mothers who require delivery in non-maternity hospitals. The two common indications being maternal cardiac disease and placenta accreta[3]. The NNTP is an endeavour that has been one of the most remarkable successes in Irish medicine. Since its inception, it has transported over 11,000 newborn infants.

For the first 13 years, it was a day-time service that operated between 9am and 5pm, seven days a week. It expanded to a 24/7 service on December 2, 2013. This led to a doubling of the annual number of transports from 300 to 600 per year[4]. In May 2025, the NNTP added a repatriation limb to its service. Currently, there are 50 acute retrievals and 25 repatriations each month. There was a total of 794 transports in 2025 with 76.7% taking place during daytime hours and 23.3% at night. Currently, 98% of transports are by road and 2% are by air.

The NNTP is built on the solid foundation that the safe transport of ill infants is an essential component of a regionalized neonatal service. The transports are undertaken by a highly specialized team consisting of neonatal nurses, neonatal doctors, specialized neonatal equipment, and a bespoke neonatal ambulance. The safety and reliability of the equipment is overseen by a team of clinical engineers.

The NNTP has resulted in the transport of ill infants becoming rapid, safe, and effective. This is important because ill infants are vulnerable to rapid deterioration and the margins for error are narrow. The treatment of many newborn conditions is time-critical which places an emphasis on rapid mobilization. Most infants are transported shortly after birth, almost 50% being less than 24-hours old. The common reasons for transfer are prematurity, neonatal medical conditions, congenital heart disease, surgical cases, and those requiring therapeutical hypothermia for hypoxic ischaemic encephalopathy.

The referring hospital contacts the National Emergency Operations Centre (NEOC) and provides clinical details to the dispatcher. If the criteria for acceptance are met, the referring hospital is connected to a conference call with the on-call NNTP neonatal consultant and

subsequently with the entire team. The criteria for acceptance are newborn infants' age 1-28 days (corrected age) and weight less than 5.5 kg, requiring NICU or HDU management.

Four criteria for benchmarking the quality of a neonatal transport service are mobilisation, response time, stabilisation time, and the infant journey phase. The interval between activation and departure from the base was within the target 40-45 minutes, and 80% were within 1 hour. The interval from departure to arrival at the referring hospital was an average of 2 hours with only 5% exceeding 3 hours. Stabilisation of the infant at the referring hospital took an average of 2 hours. The overall time from activation to return to base being 5 hours. All these timeframes are within the expectant international norms. The next phase needs to be the further expansion of air transport in order to further reduce retrieval times for the more distant referring hospitals such as Letterkenny, Castlebar, and Tralee.

NNTP commenced its repatriation service in May 2025. It is a five-day service from Monday to Friday, 0900 to 2000 hours. Repatriation is the retro-transfer of an infant to an appropriate level of care closer to home. Data shows that for newborn infants at less than 27 weeks gestation, it reduces by 14.7 days the amount of care provided further away from home than is necessary[5]. The transfers are undertaken by the NNTP neonatal nurses. In essence, this service is the retro-transfer of infants from the tertiary centres back to their local hospital when they are stable and no longer require intensive care or high-dependency care. It is beneficial for infants, their families, the local hospitals, and the neonatal services. The local healthcare staff become familiar with the infant. It provides an opportunity to plan the follow-up services for the infant after discharge home. It reduces the burden of travel for the parents. It increases the opportunities for them to visit their infant. It promotes the practice of Infant Family Centred Developmental Care (IFCDC). It is a key driver in the maintenance of infant patient flow into and out of the tertiary centres. It is an important cog in the philosophy best care-best time-best place. While the tertiary centre is best place in the early days after birth for a very preterm infant, the local NNU is the best place when they are over 1500g and their condition is stable. It enables infants to be transferred from the tertiary centres in a timely, safe, effective manner. It eliminates the previous practice in which the Level 1 and Level 2 NNUs have to undertake their own transports. It maintains the local NNUs participation in the care of preterm infants. It augments the experience and training of the healthcare staff. It is a key part of clinical networks.

It is worthwhile reflecting on why the NNTP has been such a success. All the participating staff believe in it and have done their utmost to support it. In 25 years (9,125 days), there has been no break in the service which is a tribute to the dedication of the nursing, medical, and ambulance staff. It has become a brand name for something that is of the highest quality. By quality is meant something that we know to be good. One of its strengths is that it is a single standardised national service with agreed SOPs and the elimination of variation. Close links

with the three Dublin NICUs with a guaranteed neonatal nurse workforce has provided great stability for the service.

The NNTP has made a truly invaluable contribution to the care of sick babies. Its services are greatly appreciated by all those working in both the referring and receiving hospitals and the babies and their families who benefit from it.

J.F.A. Murphy
Editor

References:

1. NNTP 25. National Neonatal Transport Programme (NNTP), 25 years of dedicated service 2001-2025. www.nntp.ie
2. Mullane D, Byrne H, Clarke T, Gorman F, Griffin E, Ramesh J, Rohinath T. Neonatal transportation: the effects of a national neonatal transportation programme. Ir J Med Sci 2004;173:105-108.
3. Moore CM, Bowden A, Fucikova H, Purna J, O'Çurrain E, Franta J. Infants born in a non-maternity hospital: the role of the National Neonatal Transport Programme (NNTP). Ir Med J 2021;114:325.
4. Noone D, Bowden A, Twomey A. The National Neonatal Transport Programme (NNTP) 2004-2009. Ir Med J. 2011;104:232-4.
5. Safe and effective repatriation of infants. A BAPM framework for practice. BAPM 2023:June.