

Newborn Metabolic Screening Programme

Preterm Metabolic Bloodspot Screening Protocol (from 1 July 2024)

SCOPE OF THE PROTOCOL

This protocol describes the timing of screening for newborns in NICU or Special Care Baby Unit (SCBU).

OVERVIEW OF THE SCREENING PROTOCOL

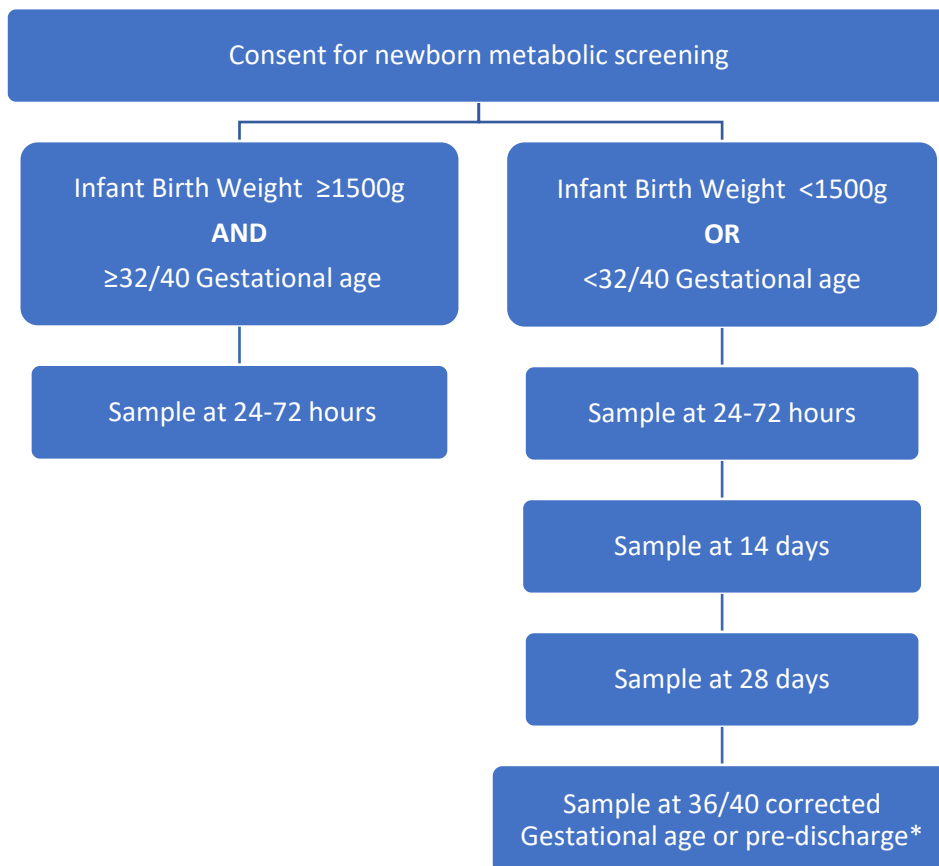
The newborn metabolic screening protocol in New Zealand is to obtain a blood spot sample from all babies from 24 hours of age once informed consent is obtained from the parents/whānau for collecting and storing or returning the sample.

Many babies that are born preterm, have very low birth weight, or are sick have false positive screens for screened conditions at 24 hours. There is also a risk of screening missing the diagnosis of congenital hypothyroidism because the pituitary hypothalamic axis is insufficiently developed to produce an elevated level of TSH in response to a low thyroxine level. Thus, a preterm protocol is needed to ensure that these babies are appropriately screened for congenital hypothyroidism and other disorders.

GENERAL PRINCIPLES

- Blue coloured blood spot cards are to be used for all babies in a NICU or SCBU at the time of screening, or who are under 32/40 gestational age or 1500g birthweight.
- Results highly suggestive of a screened disorder will be phoned.
- All results will be reported.
- Reporting will be to the individual(s) and/or role named on the card.

PROTOCOL FOR ROUTINE SAMPLES:



*Unless there has already been a bloodspot sample collected within 2 weeks

Additional key points:

- The screening programme does not send reminders that further samples need collecting.
- Complete screening and correct result interpretation and reporting rely on clinical staff filling the forms correctly and taking the samples at the right time.
- For further details on the Newborn Metabolic Screening Programme (NMSP) please see www.nsu.govt.nz
- For screening results please call LabLINK at Auckland District Health Board on 0800 522 7587

This protocol has been developed in consultation with New Zealand endocrinologists, general paediatricians and neonatologists.

From 1 July 2024 this protocol replaces the Newborn Metabolic Screening Protocol for Babies Under 1500 grams.