

NEWBORN METABOLIC SCREENING PROGRAMME (NMSP)

BLOOD SAMPLE PROTOCOL (HEEL PRICK) FOR LEVEL 3 NEONATAL INTENSIVE CARE UNITS (NICU)

SCOPE OF THE PROTOCOL

This protocol describes screening for specific metabolic disorders in newborns that are admitted to NICU.

OVERVIEW OF THE SCREENING PROTOCOL

Metabolic screening protocol in New Zealand to date is to obtain a heel prick sample from all babies at 48 hours when consent has been obtained from the parents.

Many very low birth weight and sick babies have false positive screens for congenital adrenal hyperplasia due to their immaturity at 48 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. Therefore, a revised protocol for NICU babies has been developed in consultation with NZ endocrinologists, paediatricians and neonatologists.

Due to updated screening technology it is noted that a specific amount of feeding is no longer required.

GENERAL PRINCIPLES

- **Blue coloured blood spot cards are to be used for all babies in level 3 NICU**
- **A sample from all babies at 48 hours of age or as soon as possible thereafter**
- **A second sample at 2 weeks for babies with a birth weight less than 1500 g**
- **A third sample at 4 weeks for babies with a birth weight less than 1000 g**

- **Results highly suggestive of a screened disorder will be phoned**
- **All results will be reported with the last scheduled sample**
- **Reporting will be to the individual(s) and/or role named on the card**

Note: the screening programme will no longer be sending 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

Any queries regarding this protocol, please call Dr Dianne Webster at the National Testing Centre on 09 307 4949 x 23019.

Blood spot card for NICU/SCBU babies

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NTC USE ONLY

BABY NAME _____

NHI # _____

NTC USE ONLY

BABY INFORMATION - USE LABEL

NHI Number _____

Surname _____

First Name _____

Sex: _____

MOTHER'S INFORMATION - if not on label

Surname _____ First Name _____

REPORT TO

Name or role _____

COPY TO (LMC OR WELL CHILD PROVIDER)

Name _____ Address _____

Hospital _____ Ethnicity: _____

Birth Time: _____ Birth Date: _____

Birth Wt. (g) _____ Gestation age _____ wk

Collection Time _____ Collection Date _____

Select 1st 2nd 3rd sample