

Newborn Metabolic Screening

Document Type	Policy
Function(s)	Clinical Service Delivery
Directorates	Women's Health (and Child Health)
Department(s) affected	Maternity (and Newborn)
Patients affected (if applicable)	All newborn babies at ADHB
Staff members affected	All ADHB clinicians in Maternity (and Newborn)
Key words	Guthrie, metabolic, screening
Author – role only	Metabolic Screening Educator
Owner (see ownership structure)	Owner: Midwifery Director – Women's Health
Edited by	Clinical Policy Advisor
Date first published	September 2001
Date this version published	January 2017 - reviewed
Review frequency	3 yearly
Unique Identifier	PP50/PCR/051

Contents

1. [Purpose of policy](#)
2. [Time of test](#)
3. [Informed consent](#)
4. [Lead maternity carer responsibilities – antenatal](#)
5. [Lead maternity carer responsibilities – post-natal period](#)
6. [Admitting office responsibility](#)
7. [Ward clerk responsibility](#)
8. [Midwife responsibility](#)
9. [Newborn service metabolic screening](#)
10. [Forwarding of cards to national testing centre](#)
11. [Taking the sample](#)
12. [Reports](#)
13. [Storage or return of samples](#)
14. [Associated ADHB documents](#)
15. [Corrections and amendments](#)

1. Purpose of policy

The newborn metabolic screening programme is a public health initiative offered to all New Zealand babies since 1969. It has the ability to detect a range of rare inborn errors of metabolism, endocrine and other genetic disorders before severe clinical manifestations affect the newborn.

All the above rare disorders are treatable; however successful treatment relies on timely samples and early diagnosis.

[Back to Contents](#)

2. Time of test

Newborn metabolic screening samples are taken at 48 hours or as soon after as possible using a recommended slicing lancet device. The sample should be dried horizontally for 2 - 3 hours, the flap wrapped over the blood cassette portion and sent to the laboratory as soon as possible.

[Back to Contents](#)

3. Informed consent

It is necessary to gain informed consent from mothers/legal guardian of all infants undergoing the screening test. Consent must be documented on the delivery summary or in newborn services in the baby's clinical record.

Testing is only undertaken where written evidence of consent has been ascertained. When screening is declined, the lead maternity carer (LMC) must document the decision to decline in both the mother's and baby's clinical record and hand over notes to Well Child/Tamariki Ora and/or primary care.

Phlebotomists must not take blood for the screening test unless consent has been clearly documented and all demographic documentation is correct and completed on the card.

Prior to taking the sample the staff member undertaking this procedure must also ensure that verbal consent is obtained from the mother prior to approaching the infant.

[Back to Contents](#)

4. Lead maternity carer responsibilities – antenatal

LMCs are responsible for discussing and documenting the woman's decision in regard to newborn screening during the antenatal period.

At this time the leaflet entitled "Your Newborn Baby's Blood Test" is given to the woman and discussed.

[Back to Contents](#)

5. Lead maternity carer responsibilities – post-natal period

The LMC completes the Newborn Record (S291) and documents acknowledgement of informed consent using the space provided on page 2 at the bottom left of the chart.

(The LMC's plan of care must be with the woman at time of admission to the delivery suite for reference if required.)

[Back to Contents](#)

6. Admitting office responsibility

The admitting office issues the registration details for the infant and attaches the screening card to the registration sheet.

Admitting undertake the distribution to ensure all infants born at Auckland City Hospital (ACH) receive a screening card prior to discharge.

[Back to Contents](#)

7. Ward clerk responsibility

The ward clerk checks the Newborn Record (S291) for consent and places the screening card on the clip. The midwife/phlebotomist ensures the blood test is undertaken.

If the acknowledgement of consent is not evident from the Newborn Record (S291) the ward clerk approaches the midwife caring for the infant. The midwife refers to the plan of care or discusses the issue of consent with the LMC. (The LMC's name and registration number must be clearly documented).

[Back to Contents](#)

8. Midwife responsibility

If the core midwife caring for the infant is undertaking the test, it is their responsibility to ensure that consent for taking the sample is obtained from the mother/parent/guardian prior to undertaking the procedure. On completion of testing, the midwife documents in the infant's clinical record that the procedure has been undertaken with parental consent. (The LMC's name and registration number must be clearly documented on the screening card).

[Back to Contents](#)

9. Newborn service metabolic screening

Within the newborn service where the LMC may not yet have discussed testing and/or antenatal records may not be available, medical or nursing staff must undertake to discuss screening with parents and document action accordingly.

[Back to Contents](#)

10. Forwarding of cards to national testing centre

Cards should be dried and sent promptly each day to LabPlus to prevent delays in delivery and testing of samples.

From ACH the cards should be forwarded in the internal mail addressed to:

Newborn Metabolic Screening
LabPlus
Building 31
Grafton Site

[Back to Contents](#)

11. Taking the sample

Please refer to the NSU [guidelines](#) for detail on taking the sample

[Back to Contents](#)

12. Reports

A report is sent to the listed LMC for each sample that is sent to the laboratory. The report will be:

- Negative screening
- Unsuitable sample
- Positive screening

A negative screening result means that biochemical markers are within normal range and the baby has low risk of having one of the conditions screened for. This should be discussed with the family and documented in the discharge and referral for well child/primary care.

An unsuitable sample will give unreliable results for screening. A repeat sample will be requested e.g. where the time is incorrect, there is insufficient blood or for some reason the sample gives unusual results.

Depending on the result or critical level of risk for a disorder, a positive result must be either phoned to the LMC or reported by letter. In the event the LMC cannot be contacted and the disorder is critical, the result must be phoned to the regional paediatric specialist.

It is the responsibility of the person requesting the test to ensure that the LMC contact details are clearly recorded in every case. Otherwise, it is the requestor's responsibility to follow up on the result.

[Back to Contents](#)

13. Storage or return of samples

When screening is complete, if the parent/guardian has not requested the return of the residual blood spots they are held indefinitely in secure storage.

To request return of residual blood spots, complete the return of blood spot form from the National Screening Unit (NSU) website and send with the sample. Residual blood spots may be used to improve programme quality through quality assurance processes.

The [request for return of sample form](#) can be downloaded from the National Screening Unit website.

[Back to Contents](#)

14. Associated ADHB documents

[Informed Consent](#)

[Infection Prevention & Control](#)

[Your Newborn Baby's Blood Test](#)

[Back to Contents](#)

15. Corrections and amendments

The next scheduled review of this document is as per the document classification table (page 1). However, if the reader notices any errors or believes that the document should be reviewed **before** the scheduled date, they should contact the owner or the [Clinical Policy Advisor](#) without delay.

[Back to Contents](#)