

Newborn Screening

CHILD AND TEEN CHECKUPS (C&TC) FACT SHEET FOR PRIMARY CARE PROVIDERS

C&TC Requirements

General

Primary care providers are required to review each infant's newborn screening results and follow all recommendations made by the Minnesota Department of Health (MDH) Newborn Screening (NBS) program regarding follow-up.

Personnel

Physicians, nurse practitioners, certified nurse midwives, physician assistants, nurses, medical assistants and lab technicians are able to ensure that newborn screening was conducted.

Documentation

Obtain copies of newborn screening results from birth hospital and place in child's medical record. If results are not available from hospital, contact the NBS Program (1-800-664-7772). Document action taken based on test result.

Newborn Screening

Hospitals are required to perform newborn screening including blood spot, hearing, and pulse oximetry screening (Minnesota Statute 144.125). Newborns are screened for over 50 congenital and heritable disorders. For abnormal tests, following MDH recommendations is critical.

Each year on average, about 150 Minnesota newborns are diagnosed with a disorder by the blood spot screen, 300 more are found to have congenital hearing loss, and over 125 have critical congenital heart disease (Minnesota Department of Health, 2015).

Information about consent and recent legislative changes that affect retention of results and specimens can be found at [Blood Spots and Test Results: Retention Practices \(www.health.state.mn.us\)](http://www.health.state.mn.us).

Results and Follow-up

All abnormal (positive) newborn screening results should be followed up on immediately:

- Create an action plan to complete additional tests, evaluations, and referrals if needed.
- Contact the family to discuss results, the infant's health status, and a follow-up plan.
- Coordinate medical care for the newborn, support the family, and convey information about diagnostic test results and treatments to the NBS program.
- Providers and parents can direct questions to a NBS program genetic counselor by calling 651-201-3548.

Healthcare providers may also be contacted by NBS Program staff to obtain a repeat specimen if an infant had a borderline result or if it was determined to be unsatisfactory for any reason.

Screening results should be documented in the child's medical record, preferably at the first well-child visit. If a child under one year of age was not screened at birth, call NBS program staff to discuss if a newborn screening specimen should be obtained.

Please note: newborn screening is not diagnostic testing. False positive and false negative results may occur. Newborn screening should not replace diagnostic testing in any circumstances.

Screening Procedure

Blood Spot Screening

Between 24 and 48 hours of age, a few drops of blood from the newborn's heel will be screened for over 50 rare but treatable disorders. Results are mailed to the submitting provider within three to seven days of birth. If a newborn has an abnormal blood spot screening result, NBS program genetic counselors will contact infant's

primary care provider to discuss recommended follow-up. In some cases, the primary care provider information given at the hospital is not correct; for this reason it is essential that primary care providers ensure they have received a copy of the newborn screening results for every child. Refer to [Blood Spot Screening Results \(www.health.state.mn.us\)](http://www.health.state.mn.us) for descriptions of possible results.

Hearing Screening

Initial hearing screening is best performed after 12 hours of age but prior to hospital discharge to check for hearing loss in the range where speech is heard. Providers should make sure the results are in the child's chart and ensure completion of appropriate follow-up if the child did not receive the screen or did not pass the screen.

The Early Hearing Detection and Intervention (EHDI) program goals are called the 1-3-6 plan:

- Initial screening before *one month* of age.
- Diagnostic audiological evaluation before *three months* of age if the infant did not pass the screen.
- Children identified with hearing loss will receive interventions before *six months* of age.

Refer to [Hearing Screening for Primary Care Providers \(www.health.state.mn.us\)](http://www.health.state.mn.us)

Pulse Oximetry Screening

When a newborn is at least 24 hours old, a pulse oximetry screen will be done to assess for congenital heart disease (CCHD). All newborns with abnormal screens must have a comprehensive evaluation for causes of hypoxemia before they are discharged home. Providers should make sure the results are in the child's chart and continue to monitor for symptoms.

If the child did not pass the screen, assist the family in making any necessary follow-up appointments. For more information refer to [Pulse Oximetry Screening \(www.health.state.mn.us\)](http://www.health.state.mn.us).

Professional Recommendations

American Academy of Pediatrics (AAP)

- The AAP recommends newborn screening and appropriate follow-up as a part of routine well child care. See [Recommendations for Preventive Pediatric Health Care \(www.aap.org\)](http://www.aap.org).

Resources

Minnesota Department of Health

- [MDH Newborn Screening Program \(www.health.state.mn.us\)](http://www.health.state.mn.us).
- [Child and Teen Checkups \(C&TC\) \(www.health.state.mn.us\)](http://www.health.state.mn.us).

Minnesota Department of Human Services

- [Minnesota Health Care Programs Provider Manual C&TC Section \(www.dhs.state.mn.us\)](http://www.dhs.state.mn.us)

American Academy of Pediatrics (AAP)

- [Improving Newborn Screening Follow-up in Pediatric Practices: Quality improvement Innovation Network \(www.pediatrics.aappublications.org\)](http://www.pediatrics.aappublications.org)

Centers for Disease Control and Prevention

- [Newborn Screening \(www.cdc.gov\)](http://www.cdc.gov)

Genetic Resources

- [Genetic Home Reference \(www.ghr.nlm.nih.gov\)](http://www.ghr.nlm.nih.gov)
- [National Newborn Screening & Genetic Resource Center \(www.newsteps.org\)](http://www.newsteps.org)

References

Minnesota Department of Health. (2015, January). *Newborn Screening Provider Manual*. Retrieved from Minnesota Department of Health: www.health.state.mn.us

For More Information

Minnesota Department of Health
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To obtain this information in a different format, call: 651-201-3760.