

# Resources



Minnesota Newborn Screening Program  
[www.health.state.mn.us/newbornscreening](http://www.health.state.mn.us/newbornscreening)



Baby's First Test  
[www.babysfirsttest.org](http://www.babysfirsttest.org)



Save Babies Through Screening Foundation  
[www.savebabies.org](http://www.savebabies.org)

# Newborn Screening *For Prenatal Providers*



Photo courtesy of Masimo

# NEWBORN SCREENING: what parents need to know

## What is newborn screening?

Newborn screening is a set of tests that check babies for serious, rare disorders. Most of these disorders cannot be seen at birth, but can be treated or helped if found early. The three tests include blood spot, hearing, and pulse oximetry screening.

## What is blood spot screening?

When a baby is between 24 and 48 hours old, a few drops of blood are collected from the baby's heel. These blood spots are sent to the Minnesota Department of Health newborn screening laboratory for testing. The laboratory screens for over 50 disorders that may affect how the body breaks down proteins (such as PKU), affect how the body makes energy (such as MCAD), affect the immune system (such as SCID), affect breathing and how the body gets nutrients from food (such as cystic fibrosis), cause hormone problems (such as congenital hypothyroidism), or cause blood problems (such as sickle cell anemia). For a complete list of disorders, visit: [www.health.state.mn.us/newbornscreening](http://www.health.state.mn.us/newbornscreening).

Blood spot screening can save babies' lives. Identifying and treating affected newborns before symptoms occur is the key to preventing significant health problems and even death.

## What is hearing screening?

When a baby is around 12 hours old, a hearing screen is performed to check for hearing loss in the range where speech is heard. One type of screening test uses soft rubber tips placed in each ear to deliver tones and measure the echo that occurs when the ear is functioning normally. The other screening test uses earphones to deliver test sounds while sensors placed on the baby's head and neck measure the baby's response to sound.

Identifying newborns with hearing loss and intervening early can make a significant difference in their language skills and development. Early intervention, regardless of the communication option chosen (i.e., oral, sign, or bimodal), has proven successful in improving a child's ability to access language and develop on track with their hearing peers.

## What is pulse oximetry screening?

When a baby is at least 24 hours old, a pulse oximetry screen is performed by placing small sensors on the baby's hand and foot to measure the amount of oxygen in the blood. This test checks for critical congenital heart disease (CCHD). Newborns with CCHD have a problem with either the structure of their heart or the way blood flows through it.

Babies sent home with undetected CCHD often require emergency care. Pulse oximetry screening with follow-up testing can identify newborns with CCHD so that they can get the treatment they need before complications occur.

## When will parents get their baby's results?

Hearing screening and pulse oximetry screening results are conveyed to parents immediately following the screen. Blood spot screening results are typically sent to birth providers within 3 to 7 days after birth. Parents are encouraged to ask their baby's primary care provider for results at the first well-child visit.



For more information, please visit the Minnesota Department of Health's Newborn Screening Prenatal Education page at

[www.health.state.mn.us/newbornscreening](http://www.health.state.mn.us/newbornscreening)

or

call 651-201-3548 to talk with a Minnesota Newborn Screening Program genetic counselor.

## Need more handouts?

Call the Minnesota Department of Health Newborn Screening Program at:

651-201-5466

or

800-664-7772

Providers can also order materials free-of-charge online at:

[www.health.state.mn.us/people/newbornscreening/ordering.html](http://www.health.state.mn.us/people/newbornscreening/ordering.html)

Refer to IC# 141-3037

## Provider Checklist:

- Give the expectant parent(s) a *Newborn Screening for Parents-to-be* handout.
- Discuss newborn screening with the expectant parent(s).
- Address any questions or concerns the expectant parent(s) have and refer them to the Newborn Screening Program website.

## What happens if a baby has a positive result?

The baby's care provider will arrange for further testing and evaluation to confirm the result. If confirmed, the provider will work with the family and medical specialists to arrange for any necessary interventions.

## What personal information is written on the newborn screening card?

The newborn screening card contains only the information about mom and baby that will help staff interpret test results and contact your baby's primary care provider if more testing or follow-up is needed. This includes, but is not limited to, baby's name, date of birth, time of birth, mom's name, and the name of baby's primary care provider or clinic.

## What happens to the remaining blood spots and results after screening?

After blood spot screening is complete, an average of 0.2 ml of dried blood is left. This dried blood and the associated test results are stored to allow for any follow-up testing, if needed. They may also be used for laboratory quality assurance, test improvement, and new test development.

For the most up-to-date storage practices, visit [www.health.state.mn.us/people/newbornscreening/families/parentaloptions.html](http://www.health.state.mn.us/people/newbornscreening/families/parentaloptions.html).

## What options do parents have?

Parents may elect to not have test results or blood spots stored or to have them destroyed at a later date. Parents can also authorize their child's blood spots and test results to be used for public health studies or research. Parents who do not want their baby screened by MDH may refuse screening and/or arrange for testing through a private laboratory.

Forms to request these options are available at <http://www.health.state.mn.us/people/newbornscreening/materials>.