Newborn screening is a simple blood test to help identify babies that may be at risk of having one or more of the disorders on the Texas Newborn Screening Panel. Most children appear healthy at birth and are from healthy families. Early detection of disorders allows early treatment that can prevent serious complications such as growth problems, developmental delays, seizures and death.

What happens to the blood spot cards after testing?

Dried blood spots remaining after newborn screening is completed are an essential part of the Newborn Screening Program. The cards are stored in a secure place and may be used until the Texas Department of State Health Services (DSHS) is required to destroy them.

Permissible uses include:
- To ensure DSHS newborn screening tests, equipment and supplies are working
- Developing new tests for newborn screening
- Study diseases that affect public health when approved by the Institutional Review Board

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Contact Information and Resources
Newborn Screening Unit
Clinical Care Coordination
- Phone: 512-776-3957
- Fax: 512-776-7450
- newborn@dshs.texas.gov

Result Reports and Remote Data Systems
- Phone: 512-776-7578
- Fax: 512-776-7533
- labinfo@dshs.texas.gov
- dshs.texas.gov/lab/remotedata.shtm

Newborn Screening Laboratory Educators
- Phone: 512-776-7585
- Fax: 512-776-7157

Newborn Screening Education Resources
- dshs.texas.gov/newborn/pubs.shtm

Sign up for Email List Service Announcements
- bit.ly/3tSbrPR

Contact Newborn Screening Laboratory
Department of State Health Services
Laboratory Services Section
Mail Code: 1947
PO BOX 149347
Austin, TX 78714-9347
Toll Free: 888-963-7111 x 7333
Phone: 512-776-7333

NewbornScreeningLab@dshs.texas.gov
dshs.texas.gov/lab/newbornscreening.shtm

Newborn screening is a simple blood test to help identify babies that may be at risk of having one or more of the disorders on the Texas Newborn Screening Panel.

Did you know?
More than 850 babies are diagnosed annually with a serious but treatable disorder identified through newborn screening in Texas. For more data on the Newborn Screening Annual Report visit dshs.texas.gov/lab/NBS/NBS-Annual-Report/NBS-Annual-Report.pdf.
Newborn Screening Overview
Each baby born in Texas is required by law to be tested for over 50 disorders or medical conditions.
- Collect the first screen when the baby is 24-48 hours of age
- Collect the second screen when the baby is age 7-14 days
- DSHS screens more than 350,000 babies each year
- DSHS tests more than 700,000 specimens each year
- The laboratory receives 2,000-3,000 specimens a day and processes specimens six days a week

Testing
- Small dots are punched from dried blood spots to start the testing
- Initial results are reviewed and re-tested as necessary
- DSHS Laboratory reports out-of-range results to NBS Clinical Care Coordination staff who begin follow-up protocols
- Results are reported to the submitting provider within three-to-four business days (Monday- Saturday)

Information About Some Newborn Screening Disorders

<table>
<thead>
<tr>
<th>Name of Disorder</th>
<th>What is the problem?</th>
<th>What is the treatment?</th>
<th>What happens without treatment?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amino Acid Disorders</td>
<td>Body can’t break down certain proteins</td>
<td>May include low protein diet, special medical foods and formula, and medication</td>
<td>Muscle weakness, seizures, intellectual disability, or death</td>
</tr>
<tr>
<td>Fatty Acid Oxidation Disorders</td>
<td>Body can’t break down certain fats and is unable to change some fats into energy</td>
<td>May include low fat diet, frequent food intake, supplementation with L-Carnitine and medium-chain triglycerides</td>
<td>Breathing problems, seizures, coma, or death</td>
</tr>
<tr>
<td>Organic Acid Disorders</td>
<td>Body can’t break down certain proteins and fats</td>
<td>Restricting protein in diet and vitamin supplements</td>
<td>Muscle weakness, breathing problems, seizures, intellectual disability, or death</td>
</tr>
<tr>
<td>Congenital Adrenal Hyperplasia</td>
<td>Body unable to produce certain hormones including cortisol which helps regulate response to stress and blood sugar levels</td>
<td>Lifelong hormone replacement therapy</td>
<td>Dehydration, diarrhea, vomiting, slow growth, and development; death, if untreated</td>
</tr>
<tr>
<td>Congenital Hypothyroidism</td>
<td>Body unable to produce enough thyroid hormone</td>
<td>Thyroid hormone replacement therapy</td>
<td>Intellectual and growth disabilities</td>
</tr>
<tr>
<td>Hemoglobin Disorders</td>
<td>Red blood cells can’t efficiently carry oxygen throughout the body</td>
<td>Daily penicillin</td>
<td>Illness, infections, or death</td>
</tr>
<tr>
<td>Biotinidase Deficiency</td>
<td>Body is unable to reuse and recycle the vitamin biotin</td>
<td>Daily dose of biotin</td>
<td>Hearing and vision problems, seizures, delay in development, death in severe cases</td>
</tr>
<tr>
<td>Cystic Fibrosis</td>
<td>Body produces excess mucus that is thick and sticky</td>
<td>May include breathing treatments, physical therapy, medications, proper diet</td>
<td>Breathing and digestive problems, early death</td>
</tr>
<tr>
<td>Galactosemia</td>
<td>Body can’t digest galactose, a sugar found in milk and milk products</td>
<td>Special diet with no milk or dairy products, including breast milk</td>
<td>Seizures, blood infections, liver disease, eye problems, or death</td>
</tr>
<tr>
<td>Severe Combined Immunodeficiency</td>
<td>Body can’t fight off serious and life-threatening infections, parts of immune system do not work properly</td>
<td>May include bone marrow transplant, medication, appropriate diet</td>
<td>Difficulty fighting infections, and early death</td>
</tr>
<tr>
<td>X-linked Adrenoleukodystrophy</td>
<td>Body can’t break down certain fats called very long chain fatty acids</td>
<td>May include stem cell transplant, medications, physical therapy, gene therapy, or experimental dietary therapies</td>
<td>Hearing and vision problems, seizures, loss of developmental abilities, and death</td>
</tr>
<tr>
<td>Spinal Muscular Atrophy</td>
<td>Body is unable to maintain certain nerve cells that control muscle movement</td>
<td>May include medication or gene therapy</td>
<td>Difficulty with activities such as crawling, walking, sitting up, and breathing in severe cases</td>
</tr>
</tbody>
</table>