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



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 ds.des.texas.gov/lab/NBS/NBS-Annual-Report/NBS-Annual-Report.pdf.

Contact Information and Resources

Newborn Screening Unit Clinical Care Coordination

Phone: 512-776-3957Fax: 512-776-7450

newborn@dshs.texas.gov

Result Reports and Remote Data Systems

Phone: 512-776-7578Fax: 512-776-7533

· labinfo@dshs.Texas.gov

· dshs.texas.gov/lab/remotedata.shtm

Newborn Screening Laboratory Educators

Phone: 512-776-7585Fax: 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

 $\underline{NewbornScreeningLab@dshs.texas.gov}$

dshs. texas. gov/lab/newbornscreening. shtm

Texas Newborn Screening Laboratory



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.



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

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

For more information about Texas Newborn Screening visit: dshs.texas.gov/lab/newbornscreening.shtm