

What disorders are screened in Ohio

Amino Acid Disorders

These conditions are caused by a problem with the body's ability to properly use certain amino acids found in food. Poisonous chemicals build up in the body starting soon after birth and can damage the brain and other organs. Brain and organ damage and other health problems may occur. Special diets or supplements may help treat these problems. The Ohio program screens for 9 amino acid disorders: Argininemia, Argininosuccinic Acidemia, Citrullinemia, Homocystinuria, Hypermethioninemia, Maple Syrup Urine Disease, Phenylketonuria (PKU), Tyrosinemia Type I, II and III.

Fatty Acid Disorders

This group includes conditions that interfere with the body's ability to turn fat into energy. Babies with fatty acid disorders can have seizures, extreme weakness, and heart and breathing problems. Special diets, eating frequently, and medication may help prevent symptoms. The Ohio program screens for 9 fatty acid disorders: Carnitine/Acylcarnitine Translocase Deficiency, Carnitine Palmitoyl Transferase Deficiency Type II, Carnitine Uptake Defect, Glutaric Acidemia Type II, Long Chain Hydroxyacyl CoA Dehydrogenase Deficiency, Medium Chain Acyl-CoA Dehydrogenase Deficiency (MCAD), Short Chain Acyl-CoA Dehydrogenase Deficiency, Trifunctional Protein Deficiency, Very Long Chain Acyl-CoA Dehydrogenase Deficiency.

Organic Acid Disorders

Babies with one of these disorders cannot remove certain waste products from their blood. This can lead to vomiting, low blood sugar, coma or death. Treatment may include a special diet and medication. The Ohio newborn screen tests for 10 Organic acid disorders: 2-Methylbutyryl-CoA Dehydrogenase Deficiency, 3-Hydroxy-3-Methylglutaryl-CoA Lyase Deficiency, 3-Ketothiolase Deficiency, 3-Methylcrotonyl-CoA Carboxylase Deficiency, Glutaric



Acidemia Type I, Isobutyryl-CoA Dehydrogenase Deficiency, Isovaleric Acidemia, Methylmalonic Acidemia, Multiple CoA Carboxylase Deficiency, and Propionic Acidemia.

Biotinidase Deficiency occurs when babies cannot properly use the vitamin biotin. Problems with skin rashes, seizures, hearing loss, or mental retardation may be prevented by adding extra biotin to the diet.

Congenital Adrenal Hyperplasia (CAH) results when the body does not make certain hormones produced by the adrenal glands. Babies with this condition can develop life threatening episodes of dehydration and coma. Baby girls can have abnormal looking genitalia. Medication may help prevent life-threatening complications of this condition.

Congenital Hypothyroidism results when the baby's body does not make enough thyroid hormone to keep the baby growing and developing. Medication may help prevent growth problems and mental retardation.

Cystic Fibrosis is an inherited disease of the lungs and digestive system that can cause recurring chest infections and malnourishment. Early detection may improve growth and decrease risk of infections.

Galactosemia occurs when the baby's body cannot break down part of milk sugar (galactose). A special diet without milk sugar may prevent brain and liver damage.

Sickle Cell Disease and other Hemoglobinopathies are disorders that affect red blood cells. Some of these disorders can cause severe pain, frequent infections, other serious health problems or even death. Taking antibiotics daily greatly lowers the chance of infection and other problems.

Severe Combined Immunodeficiency includes a group of rare but serious immune disorders. The baby's body is unable to make certain cells that protect the body from infection. Untreated infants develop life-threatening infections due to bacteria, viruses and fungi. Treatment can reduce the threat of infections.



why

must my baby be screened?

Ohio's Newborn Screening Program

Tests that could save your baby's life!



Why does my baby need newborn screening?

- Newborn Screening identifies certain health problems early.
- Babies with rare health problems can look healthy at birth.
- If problems are found, early treatment may help prevent serious problems like mental retardation or death.
- Ohio's law requires newborn screening to be done on all babies born in the state.

How and when will my baby be tested?

- Before you leave the hospital, a few drops of blood will be taken from your baby's heel.
- The blood sample is sent to Ohio's newborn screening lab.
- Newborn screening needs to be done at least 24 hours after birth and before the baby is five days of age.
- Your baby was not born in a hospital? Contact your midwife, doctor, or local health department for help in arranging the newborn screening test.

How do I find out my baby's results?

- The results of your baby's newborn screening testing will be sent to the birth hospital and to your baby's health care professional.
- Make sure that both your hospital and health care professional have your correct address and phone number to reach you if needed.
- You should ask about newborn screening results when you take your baby for the first health check up.



What if my baby needs further testing?

- Your baby will need to be retested if you leave the hospital before 24 hours.
- Some babies need to be retested because there is a problem with the blood sample.
- A few babies need to be retested because the first test showed a possible health problem.
- Your baby's health professional will contact you if your baby needs to be tested further. They will tell you why the baby needs to be retested and what to do next.
- If your baby needs further testing, get it done right away.

How many health problems does Ohio screen for?

- Ohio screens for thirty-six different health problems. *(Listed on the other side)*
- Ohio screens for all health problems recommended by the March of Dimes.

Can my baby be screened for other health problems?

- There may be other newborn screening tests available besides those required in Ohio. More information is available by contacting: The National Newborn Screening and Genetics Resource Center at (512) 454-6419 or <http://genes-r-us.uthscsa.edu/>

What will be done with my baby's blood sample after all testing is completed?

- Newborn screening samples are kept in storage at the Ohio Department of Health Laboratory for two years. After that time, your baby's blood sample is destroyed.

How is my baby's blood spot card used in the newborn screening program?

- Newborn screening samples are only used for the newborn screening process. This includes: initial screening tests, confirmatory tests, quality control verifications, method validations, research on test method improvement, new test method development for disorders in the existing panel and new test method development for new disorders considered for addition to the newborn screening panel. These method developments may be performed in the state laboratory or in any non-commercial laboratory. When this is done outside of the state laboratory, Institutional Review Board clearance shall be obtained before the work is done.

What if I have questions?

- Ask your baby's health professional if you have questions or concerns.
- Check our web site: www.odh.ohio.gov/odhPrograms/phl/newbrn/nbrn1.aspx.

