

Condition Category

Amino Acid Disorders

Phenylketonuria (PKU) or Hyperphenylalaninemia
Maple Syrup urine Disease (MSUD)
Homocystinuria (cystathionine synthase deficiency) or Hypermethioninemia
Tyrosinemia type I and possibly type II or III
5-oxoprolinuria (glutathione synthetase deficiency)

Urea Cycle Disorder

Citrullinemia
Argininosuccinic aciduria (ASA)
Argininemia

Fatty Acid Oxidation Disorders

Short chain acyl-CoA dehydrogenase deficiency (SCAD)
Isobutyryl-CoA dehydrogenase deficiency (IBCD)
Glutaric aciduria, type 2 (GAI) or Multiple acyl-CoA dehydrogenase deficiency (MADD)
Medium/Short chain L-3-hydroxyacyl-CoA dehydrogenase deficiency (M/SCHAD)
Medium chain acyl-CoA dehydrogenase deficiency (MCAD)
Long chain 3-hydroxyacyl-CoA dehydrogenase def. (LCHAD)
Trifunctional protein deficiency (TFPD)
Very long chain acyl-CoA dehydrogenase deficiency (VLCAD)
Carnitine palmitoyl transferase deficiency, type 2 (CPTII)
Carnitine palmitoyl transferase deficiency, type 1A (CPT1A)
Carnitine/acylcarnitine translocase deficiency (CACT)
Carnitine uptake defect (CUD)

Organic Acid Disorders

Propionic academia (PA)
Methylmalonic academia (MMA)
Malonic aciduria (MA)
Multiple carboxylase deficiency (MCD)
3-hydroxy 3-methylglutaryl-CoA lyase deficiency (3HMG)
3-methylcrotonyl-CoA carboxylase deficiency (3MCC)
3-methylglutaconic aciduria (3MGA)
2-methylbutyryl-CoA dehydrogenase deficiency (2MBD)
Isovaleric academia, type 1 (GAI)
Beta-ketothiolase deficiency (BKT)

Carbohydrate Disorders

Glucose 6-Phosphate Dehydrogenase Deficiency (G6PD)
Galactosemia

Endocrine Disorders

Thyroid-stimulating hormone (TSH)
17-hydroxyprogesterone (17-OHP)

Pulmonary Conditions

Cystic Fibrosis

Hemoglobinopathies

Sickle Cell Anemia (Hb S/S)
Sickle-C Disease (Hb S/C)
S-β-thalassemia (Hb S/βTb)
Hb Variants (Var Hb)

Other Metabolic Disorders

Primary Immunological Deficiency

Severe Combined Immunodeficiency (SCID)

Biotinidase Deficiency (BIOT)

Disclaimer:

These tests should be considered screening tests only and the results of screening tests do not establish a diagnosis, but rather serves to identify an infant that may be at risk for a disorder included in the testing panel. The possibility of a disorder should never be ruled out solely based on the screening results.

For More Information :

Contact your Paediatrician / Obstetrician / your local doctor / Kangaroo Hospital



Kangaroo Care

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Newborn Screening Test

A Drop of Blood Can
Prevent Disability And Saves Lives !



Newborn Screening

The birth of a newborn baby brings unbound happiness to the new parents. Their joy doubles when the baby looks normal and healthy. But those joyous moments can be short lived if the baby is affected by any serious/life threatening disorders that are not apparent at birth. Newborn screening tests gives you an opportunity to identify those rare disorders in babies soon after their birth.

When and How Babies are Screened

A simple blood Test

A trained staff will take a few drops of blood from the baby's heel. The blood sample is sent to a newborn screening lab for testing.

- ▶ The test is performed when the baby is 48-72 hours old, by a simple prick on the baby's heel and collecting few drops of blood on a special filter paper card.
- ▶ The heel prick does not cause any harm to your baby. A fresh disposable specialized needle called a 'Lancet' is used for every baby, hence there is no chance of your baby getting any infection.

Should all babies be screened?

All babies should be screened, even if they look healthy, because some medical conditions cannot be seen by just looking at the baby. Finding these conditions soon after birth can help prevent some serious problems, such as brain damage, organ damage, and even death.

Because these disorders are present at birth and are often life threatening, it becomes even more important to identify babies with these disorders as early as possible and when asymptomatic. Otherwise the damage done may be permanent and irreversible.

Conditions Tested

More than 50 conditions are tested in newborn screening. These conditions are mainly related to:

- ▶ Metabolic conditions which affects how the body processes food.
- ▶ Endocrine conditions which affects the levels of important hormones.
- ▶ Hemoglobin conditions which affects the blood and cause anemia, infections and other health problems.
- ▶ Pulmonary conditions which affects growth and lungs.

Screening Results

If the results are "normal" (within range result) it means that the baby's test results did not show signs of any of the conditions included in the screening.

If the results are "Abnormal" ("high" or out-of-range result) it means that the baby's test results showed signs of one or more of the conditions included in the newborn screening. This does not always mean that the baby has the condition. It may just mean that more testing is needed.

The child's doctor might recommend that the child get screened again or have more specific tests to diagnose a condition.

What are the risks of not screening? Are there any alternatives to screening?

- ▶ Unfortunately affected babies who are not identified through screening will at some stage of life become sick and start to show symptoms of their illness.
- ▶ While they may be offered treatment at that stage but unfortunately their growth and development may already have been permanently impaired.
- ▶ Babies who receive early and continuous treatment can grow up to enjoy long, healthy and a productive life.

Is there any treatment to these disorders?

- ▶ The good news is – YES, most of the conditions can be treated if diagnosed early.
- ▶ The symptoms and effects can be decreased if they are detected and treated from birth, leading to reasonably normal and a healthy life.