

HELP US SAVE BABIES AFFECTED BY ANY OF THESE DISORDERS.

Endocrine Disorders

- Congenital Hypothyroidism
- Congenital Adrenal Hyperplasia

Amino Acid Disorders

- Homocystinuria
- Hypermethioninemia/Methionine Adenosine Transferase Deficiency
- Maple Syrup Urine Disease
- Phenylketonuria
- Tyrosinemia Type I
- Tyrosinemia Type II, III

Fatty Acid Disorders

- Carnitine Palmitoyltransferase I Deficiency
- Carnitine Palmitoyltransferase II Deficiency
- Carnitine Uptake Deficiency
- Glutaric Acidemia Type II
- Long Chain Hydroxyacyl-CoA Dehydrogenase Deficiency
- Medium Chain-Acyl-CoA Dehydrogenase Deficiency
- Very Long Chain-Acyl-CoA Dehydrogenase Deficiency
- Tri-functional Protein Deficiency

Organic Acid Disorders

- 3-Methylcrotonyl CoA Carboxylase Deficiency
- Beta Ketothiolase Deficiency
- Glutaric Acidemia Type I
- Isovaleric Acidemia
- Methylmalonic Acidemia
- Multiple Carboxylase Deficiency
- Propionic Acidemia

Urea Cycle Defect

- Citrullinemia
- Argininosuccinic Aciduria

Hemoglobinopathies

- Alpha Thalassemia
- Beta Thalassemia
- Hemoglobin C
- Hemoglobin D
- Hemoglobin E
- Sickle Cell Disease

Others

- Galactosemia
- Glucose-6-Phosphate Dehydrogenase Deficiency
- Cystic Fibrosis
- Biotinidase Deficiency



REMINDERS TO PARENTS

G6PD deficiency is the most common condition among the ENBS Panel of Disorders.

Napthalene or moth ball, and some drugs including herbal medicine should be avoided by people with G6PD deficiency.

While waiting for the ENBS result, parents are advised not to expose their baby to moth ball. More so, all medications that will be given to the baby must be prescribed by a doctor.

If the ENBS result is G6PD deficient, consult the baby's doctor and proceed with the confirmatory test. Refer the result to your physician.

For further inquiries, please contact:

Your health workers at the hospitals / lying-in clinics / birthing homes / health centers

Newborn Screening Center - Northern Luzon
Mariano Marcos Memorial Hospital and Medical Center
San Julian, City of Batac, Ilocos Norte

Newborn Screening Center - Central Luzon
Angeles University Foundation Medical Center
MacArthur Highway, Lourdes Sur East, Angeles City

Newborn Screening Center - National Institutes of Health
Building H, UP Ayala Land Technohub Complex
Brgy. UP Campus, Commonwealth Ave., Diliman, Quezon City

Newborn Screening Center - Southern Luzon
Daniel O Mercado Medical Center
143 Narra St., Mountview Subd., Tanauan City

Newborn Screening Center - Visayas
West Visayas State University Medical Center
E. Lopez St., Jaro, Iloilo City

Newborn Screening Center - Central Visayas
Eversly Childs Sanitarium and General Hospital
Upper Jagobiao Rd, Mandaue City, Cebu

Newborn Screening Center - Mindanao
Southern Philippines Medical Center
J.P. Laurel Ave., Bajada, Davao City

Newborn Screening Reference Center
National Institutes of Health, UP Manila
1579 F. T. Benitez St., Ermita, Manila

**E-mail: info@newbornscreening.ph
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SAVE YOUR BABY FROM MENTAL RETARDATION



Basic Information About Expanded Newborn Screening



What is newborn screening?

Newborn Screening (NBS) is a simple procedure to find out if your baby has a congenital disorder that may lead to mental retardation or even death if left untreated.

What is Expanded Newborn Screening (ENBS)?

The expanded newborn screening program increased the screening panel of disorders from six (6) to more than twenty-eight.

Why is it important?

Most babies with metabolic disorders look “normal” at birth. By doing ENBS, metabolic disorders may be detected even before clinical signs and symptoms are present. As a result of this, treatment can be given early to prevent consequences of untreated conditions.*

When is it done?

ENBS is ideally done immediately after 24 hours from birth.

How is it done?

A few drops of blood are taken from the baby’s heel, blotted on a special absorbent filter card and then sent to Newborn Screening Center (NSC).

Who will collect the sample for ENBS?

The blood sample for ENBS may be collected by any of the following: physician, nurse, medical technologist or trained midwife.

Where is ENBS available?

ENBS is available in hospitals, lying-ins, rural health units, health centers and some private clinics.

How much is ENBS?

Expanded newborn screening costs ₱1750 and is included in the Newborn Care Package (NCP) for PhilHealth members.

What is Newborn Care Package?

NCP is a PhilHealth benefit package for essential health services of the newborn during the first few days of life. It covers essential newborn care, expanded newborn screening, and hearing screening tests.



What are the eligibility conditions for newborn to avail of the NCP?

Newborns are eligible for NCP if **all** of the following are met:

- Either of the parents are eligible to avail of the benefits,
- Born in accredited facilities that perform deliveries, such as hospitals and birthing homes; and
- Services were availed of upon delivery.

How can results be claimed?

Results can be claimed from the health facility where ENBS was availed. Normal ENBS results are available by 7 - 14 working days from the time samples are received at the NSC.

Positive ENBS results are relayed to the parents immediately by the health facility. Please ensure that the address and phone number you will provide to the health facility are correct.

What is the meaning of the newborn screening result?

A NEGATIVE SCREEN means that the ENBS result is normal.

A POSITIVE SCREEN means that the newborn must be brought back to his/her health practitioner for further testing.

What must be done when a baby has a positive ENBS result?

Babies with positive results must be referred at once to a specialist for confirmatory testing and further management.

What happens to the dried blood samples after screening?

After the dried blood spot has been tested, it will be stored in a secure locked area. The stored sample is retained to allow for normal quality assurance and may be used for ethics committee approved researches for the benefit of the general public.

**Long term follow-up and management of children with confirmed newborn screening conditions ensure that these children receive the full benefits of early identification through newborn screening.*

WHY SCREEN YOUR BABIES?

Effect if NOT SCREENED



- Severe Mental Retardation
- Death

Effect if SCREENED and TREATED early*



- Normal
- Alive

Endocrine Disorders

Amino Acid Disorders

- Mental retardation
- Coma and death from metabolic crisis
- Alive
- Normal growth
- Normal intelligence for some, learning problems to others

Fatty Acid Disorders

- Developmental and physical delays
- Neurologic impairment
- Sudden death
- Coma
- Seizure
- Enlargement of the heart & liver
- Muscle weakness
- Usually healthy in between episodes of metabolic crises
- Alive

Organic Acid Disorders

- Developmental delay
- Breathing problems
- Neurologic damage
- Seizures
- Coma
- Early death
- Alive
- Most will have normal development with episodes of metabolic crisis

Urea Cycle Defect

- Seizure
- Mental retardation
- Death
- Alive
- Normal intelligence

Hemoglobinopathies

- Painful crises
- Anemia
- Stroke
- Multi-organ failure
- Death
- Alive
- Reduces the frequency of painful crises
- May reduce the need for blood transfusions