SECTION 3
Basic Clinical Interventions for Maternal and Newborn Complications

Session 6-2: Newborn Screening
What is newborn screening?

• a simple procedure to find out if a baby has a congenital metabolic disorder that may lead to mental retardation or even death if left untreated.

What is the mandate for performing Newborn Screening on every baby?

– RA 9288 known as the “Newborn Screening Act of 2004” with its Implementing Rules and Regulations.
Why is it important to have newborn screening?

- Most babies with metabolic disorder look normal at birth.
- One will never know that the baby has the disorder until the signs and symptoms are manifested. By this time, irreversible consequences are already present.

When is newborn screening done?

- Ideally done on the 48th to 72nd hour of life (first 2 to 3 days of life).
- May also be done 24 hours from birth since some disorders are not detected if the test is done earlier than 24 hours from birth.
How is newborn screening done?

- Using the heel prick method, a few drops of blood are taken from the baby’s heel
- Blotted on a special absorbent filter card
- Blood is dried for 4 hours and sent to the Newborn Screening Center
Who may collect the sample for newborn screening?

A Trained
- physician
- nurse
- midwife or
- medical technologist
Where is newborn screening available?

- Available in participating Newborn Screening Facilities that includes
  - hospitals
  - lying-in centers
  - RHU’s
  - health centers.

- If babies are delivered at home, the baby may be brought to the nearest Newborn Screening Facility.
When are newborn screening results available?

- Seven (7) working days from the time the newborn screening samples are received parents should claim the results from their physician, nurse, midwife or health worker.

- Any laboratory result indicating an increased risk of a heritable disorder (i.e. positive screen) shall be immediately released, within twenty-four (24) hours, so that confirmatory testing can be immediately done.

A positive screen means that the newborn must be referred at once to a specialist for confirmatory testing and further management.
What are the five (5) disorders currently included in the newborn screening package?

<table>
<thead>
<tr>
<th>Screened</th>
<th>Effect if NOT SCREENED</th>
<th>Effect if SCREENED and TREATED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Congenital Hypothyroidism (CH)</td>
<td>Severe Mental Retardation</td>
<td>Normal</td>
</tr>
<tr>
<td>Congenital Adrenal Hyperplasia (CAH)</td>
<td>Death</td>
<td>Alive and Normal</td>
</tr>
<tr>
<td>Galactosemia (GAL)</td>
<td>Death or Cataracts</td>
<td>Alive and Normal</td>
</tr>
<tr>
<td>Phenylketonuria (PKU)</td>
<td>Severe Mental Retardation</td>
<td>Normal</td>
</tr>
<tr>
<td>G6PD Deficiency</td>
<td>Severe Anemia, Kernicterus</td>
<td>Normal</td>
</tr>
</tbody>
</table>
What are the roles of the RHU staff?

- Advocacy for the newborn screening of every baby. This starts during pregnancy. The family is also advised to start saving for the Php550.00 that is needed for the screening. The saving must start during pregnancy.

- Sample collection

- Assures transport of specimen to the nearest Newborn Screening Facility within twenty-four (24) hours following collection of the sample

- Advice and counsel parents upon receiving the screening results

(Source: Newborn Screening Center, Institute of Human Genetics, National Institute of Health, University of the Philippines Manila)