Score of 7 or above normal. 4-6 fairly low. 3 or below critically low. Indicator of requirement for medical attention.

**APGAR Score**

<table>
<thead>
<tr>
<th>Score of 0</th>
<th>Score of 1</th>
<th>Score of 2</th>
<th>Component of Acronym</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Blue-grey or pale all over</td>
<td>Blue-grey at extremities body pink</td>
<td>Body and extremities pink</td>
</tr>
<tr>
<td>Pulse rate</td>
<td>Absent</td>
<td>&lt; 100 beats per minute</td>
<td>&gt; 100 beats per minute</td>
</tr>
<tr>
<td>Reflex (grimace)</td>
<td>No response to airways being suctioned</td>
<td>Grimace on airway suction</td>
<td>Grimace &amp; pull away, cough, sneeze</td>
</tr>
<tr>
<td>Activity (muscle tone)</td>
<td>Limp; no movement</td>
<td>Some flexion of arms and legs</td>
<td>Active motion</td>
</tr>
<tr>
<td>Respiratory Effort</td>
<td>Absent</td>
<td>Weak cry; slow or irregular breathing</td>
<td>Good strong cry; normal rate and effort of breathing</td>
</tr>
</tbody>
</table>

**Heel prick (Guthrie test)**

Newborn heel prick (Guthrie) test → Screens for various, rare conditions – developmental (non-genetic), inherited (genetic).

- Performed when baby is 2-7 days old.
- Baby's heel pricked with needle; blood spots are placed on a blood spot card for analysis.

**Inborn Errors of Metabolism (IEM)**

- A group of genetic disorders caused by abnormal functioning of enzymes in metabolic pathways.
  - A single gene defect in most cases - monogenetic disorders – rare.

**Which IEMs are Often Monitored?**

**Developmental**:  
- Congenital Hypothyroidism

**Genetic**:  
- Sickle cell disease
- Cystic fibrosis (CF)
- Phenylketonuria (PKU)
- Medium-chain acyl Co-A dehydrogenase deficiency (MCAD)
- Maple syrup urine disease (MSUD)
- Homocystinuria (HCU)
- Isovaleric acidaemia (IVA)

**Rare: 1:4,000, congenital hypothyroidism >1:250,000 (MSUD)**