### Neonatal Resuscitation

**Treatment Protocol**

**Last Reviewed:** October 4, 2022  
**Last Revised:** July 1, 2023

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**BLS Patient Management**

<table>
<thead>
<tr>
<th>APGAR</th>
<th>0</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Blue</td>
<td>Pink Core / Blue Extremities</td>
<td>Pink</td>
</tr>
<tr>
<td>Pulse</td>
<td>Absent</td>
<td>Slow</td>
<td>Fast</td>
</tr>
<tr>
<td>Grimace</td>
<td>Absent</td>
<td>Weak</td>
<td>Strong</td>
</tr>
<tr>
<td>Activity</td>
<td>Absent</td>
<td>Weak</td>
<td>Strong</td>
</tr>
<tr>
<td>Respirations</td>
<td>Absent</td>
<td>Weak</td>
<td>Strong</td>
</tr>
</tbody>
</table>

- Dry, stimulate and swaddle in a dry receiving blanket and head cover then place with the mother as clinically indicated
- Assess using the APGAR scoring system. Based on APGAR scores, presentation, and clinical assessment
  - Suction secretions from mouth and nose
  - Monitor SpO2 while attached to the right upper extremity (a preductal location)
  - Provide blow-by oxygen
  - Assist ventilations with PPV and supplemental oxygen
  - Organize the resuscitation team and perform High Performance (HP) CPR according to current REMSA training and standards with a 3:1 compression ratio
    - Ensure High Performance (HP) CPR by utilizing assigned roles and tasks during resuscitation (i.e., Pit Crew CPR)
    - Emphasize correct hand placement, compression depth (hard) and rate (fast) with complete chest recoil
    - Minimize interruption of chest compressions
    - Avoid hyperventilation

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**ALS Patient Management**

- Establish, maintain, and ensure peripheral IV and/or IO access for emergency stabilization
  - Consider the need for additional sites as clinically indicated
- When required, ensure HP CPR is being performed according to current REMSA training and standards
  - Attach, interpret, and continuously monitor EtCO2. If EtCO2 is less than 10 mmHg, attempt to improve CPR quality
- For neonatal resuscitation
  - **INITIAL AND REPEAT ADMINISTRATIONS REQUIRE A BASE HOSPITAL ORDER (BHO).**
    - Dextrose 5 mL / kg (10% solution) IV/IO bolus or drip. For assistance with accurate dosing, refer to the REMSA PMDR or REMSA app.
  - **INITIAL AND REPEAT ADMINISTRATIONS REQUIRE A BASE HOSPITAL ORDER (BHO).**
    - Epinephrine 0.01 mg / kg (0.1 mg / mL concentration) IV/IO. For assistance with accurate dosing, refer to the REMSA PMDR or REMSA app.
  - **INITIAL AND REPEAT ADMINISTRATIONS REQUIRE A BASE HOSPITAL ORDER (BHO).**
    - Naloxone 0.1 mg / kg IV/IO/IM/IN. For assistance with accurate dosing, refer to the REMSA PMDR or REMSA app.
  - **INITIAL AND REPEAT ADMINISTRATIONS REQUIRE A BASE HOSPITAL ORDER (BHO).**
    - Sodium Bicarbonate 1 mEq / kg IV/IO push. For assistance with accurate dosing, refer to the REMSA PMDR or REMSA app.
- **DISCONTINUING RESUSCITATION OF A PEDIATRIC PATIENT REQUIRES A BASE HOSPITAL PHYSICIAN ORDER (BHPO).**