



NEONATAL RESUSCITATION

Effective: January 1, 2025
Replaces: January 1, 2024

1. Patient Care Goals

- 1.1. Plan for resources based on number of anticipated patients e.g., mother and newborn or multiple births
- 1.2. Provide routine care to the newly born infant
- 1.3. Perform a neonatal assessment
- 1.4. Rapidly identify newly born infants requiring resuscitative efforts
- 1.5. Provide appropriate interventions to minimize distress in the newly born infant
- 1.6. Recognize the need for additional resources based on patient condition and/or environmental factors

2. BLS Treatment

- 2.1. Routine Medical Care – Pediatric (**700-S05**)
 - 2.1.1. Keep newborn level with placenta in neutral position for 60 seconds
 - 2.1.1.1. Provide drying, warming and mild stimulation
 - 2.1.1.2. Avoid hypothermia by drying, covering head and wrapping in towel
 - 2.1.2. Suction only if signs of obstruction
 - 2.1.3. After 1 minute clamp and cut cord about 5-6 inches from newborn's abdomen
 - 2.1.4. Assess respirations and apical pulse
- 2.2. If neonate is term, has strong cry, good tone and regular respirations, place skin to skin with mother. Provide additional warming if needed
- 2.3. If HR > 100 beats per minute, monitor for central cyanosis and provide blow-by oxygen as needed
- 2.4. If **Respirations** are gasping or apneic and HR <100:
 - 2.4.1. Position and clear airway
 - 2.4.2. Assist ventilations with **room air BVM** at a rate of **40–60** respirations per minute
 - 2.4.3. Apply SpO2 monitor to right palm
 - 2.4.3.1. Targeted preductal (right hand) SpO2 after birth:
 - 1 min: 60-65%
 - 2 min: 65-70%
 - 3 min: 70-75%
 - 4 min: 75-80%
 - 5 min: 80-85%
 - 10 min: 85-95%
- 2.5. If **Heart Rate** is **less than sixty (60)** beats per minute and unresponsive to **BVM**:
 - 2.5.1. Assist ventilations with **BVM** with titrated supplemental **oxygen to targeted preductal SpO2, AND**
 - 2.5.2. Start **chest compressions** at a rate of **90** compressions a minute, AND
 - 2.5.3. **Ventilate** every third chest compression
- 2.6. If **Heart Rate** is **greater than sixty (60)** beats per minute:



2.6.1. Continue to monitor and assist with ventilations as needed

3. ALS Treatment

- 3.1. Establish **vascular access (IV/IO)**
- 3.2. If **Heart Rate** is sixty (**60**) beats per minute or less after at least 30 seconds of assisted ventilation and 60 seconds of chest compressions with ventilation, administer:
 - 3.2.1. **Epinephrine** (1:10,000) 0.02 mg/kg IV/IO using length-based tape, followed by 3 mL normal saline flush, may repeat once
 - 3.2.2. Administer 10 ml/kg normal saline bolus for post resuscitative care

4. Pertinent Assessment Findings

- 4.1. It is difficult to determine gestational age in the field – if there is any doubt as to viability, resuscitation efforts should be initiated
- 4.2. Acrocyanosis, a blue discoloration of the distal extremities, is a common finding in the newly born infant transitioning to extrauterine life – this must be differentiated from central cyanosis

5. Key Documentation Elements

- 5.1. Historical elements
 - 5.1.1. Prenatal complications
 - 5.1.2. Delivery complications
 - 5.1.3. Date and time of birth
 - 5.1.4. Estimated gestational age
- 5.2. Physical exam findings
 - 5.2.1. Heart rate
 - 5.2.2. Respiratory rate
 - 5.2.3. Respiratory effort
 - 5.2.4. Appearance
 - 5.2.5. APGAR score at 1 minute and 5 minutes