SYMPTOMS: Newly born infant requiring resuscitative efforts.

Assessment, Treatment and Interventions EMR-O: EMT-R

- 1. If no resuscitation is required, warm, dry and stimulate the newborn; then clamp and cut the cord after 60 seconds or the cord stops pulsating.
- 2. If immediate resuscitation is required and the umbilical cord is still attached, clamp the cord in two places and cut between the clamps.
- 3. Warm, dry and stimulate infant. [Wrap infant in dry towel or thermal blanket to keep infant as warm as possible during resuscitation; keep head covered if possible.]
- 4. If weak cry, signs of respiratory distress, poor tone, or preterm gestation, position airway (sniffing position) and clear airway as needed. If thick meconium or secretions present and signs of respiratory distress, suction mouth then nose.
- 5. If heart rate greater than 100 beats per minutes:
  - a. Monitor for central cyanosis; provide blow-by oxygen as needed.
  - b. Monitor for signs of respiratory distress.
  - c. If apneic or significant respiratory distress
    - i. initiate bag-valve-mask ventilation with room air at 40-60 breaths per minute.
    - ii. Consider non-visualized airway if bag-valve mask ventilation is ineffective.
- 6. If heart rate less than 100 beats per minute:
  - a. Initiate bag-valve-mask ventilation with room air at 40-60 breaths per minute.
    - i. Primary indicator of effective ventilation is improvement in heart rate.
    - ii. Rates and volumes of ventilation required can be variable, only use the minimum necessary rate and volume to achieve chest rise and a change in heart rate.
  - b. If no improvement after 90 seconds, change oxygen delivery up to 100% O<sub>2</sub> as needed until heart rate normalizes.
  - c. Consider non-visualized airway if bag-valve-mask ventilation is ineffective.
- 7. If heart rate less than 60 beats per minute:
  - a. Ensure effective ventilations with supplementary oxygen and adequate chest rise.
  - b. If no improvement after 30 seconds, initiate chest compressions; two-thumbsencircling-hands technique is preferred.
  - c. Coordinate chest compressions with positive pressure ventilation (3:1 ratio, 90 compressions and 30 breaths per minute).
  - d. Consider non-invasive airway.
- 8. Consider checking a blood glucose for ongoing resuscitation, maternal history of diabetes, ill appearing or unable to feed.
- AEMT-R

9. Administer 20mL/kg normal saline IV/IO for signs of shock or post-resuscitative care.

INT-R

10. Administer epinephrine [0.01mg/kg IV/IO q 3-5 mins max 1mg].

INT-O; PARA-R

11. Consider endotracheal intubation if bag-valve mask ventilation is ineffective.

## Neonatal Resuscitation Algorithm – 2015 Update

