



NEONATAL RESUSCITATION

BLS Procedures

If **NO IMPROVEMENT** in muscle tone/respiratory effort after **1 minute** of opening the airway and drying/stimulating:

BEGIN PPV– 1 breath every 3 seconds
(Using a self-inflated infant BVM using Room Air)

Assist with gentle and appropriate PPV for **30 seconds**, ensuring good chest rise, then **check for a heart rate**.

HEART RATE < 60 BPM	HEART RATE 60-99 BPM	HEART RATE ≥ 100 BPM
Reassess Ventilations	Reassess Ventilations	Continue PPV 40-60 breaths/min
Corrective Steps <ul style="list-style-type: none">▪ Adjust head▪ Consider adding O₂▪ Clear/Suction Airway	Corrective Steps <ul style="list-style-type: none">▪ Adjust head▪ Consider adding O₂▪ Clear/Suction Airway	Monitor for spontaneous respiratory effort
Begin Compressions 100/minute	N/A	N/A

3:1 Compression/Ventilation Ratio
Reassess Heart Rate every 60 seconds

ALS Prior to Base Hospital Contact

ALS Management

- Establish IO line only in presence of CPR – *IO Indicated in patients weighing >3kg*
- Asystole, PEA, or Persistent Bradycardia (HR < 60bpm)
 - Epinephrine **1mg/10mL**
 - IO – **0.01mg/kg** (0.1mL/kg) every 3-5 mins
- Establish early Base Hospital Contact

Advanced Airway Management

- Supraglottic Airway Device for patients weighing ≥2kg
- Refer to [Policy 546: Supraglottic Airway Device](#)

Base Hospital Physician Orders Only

Consult with ED Physician for further treatment measures.

Additional Information

Miscellaneous

- Early Base Hospital Contact should be made for all pediatric cardiac arrests
- If HR remains below 60bpm despite resuscitative measures, consider hypovolemia

Withholding Resuscitation Efforts

- Resuscitation may be withheld for extremely preterm infants (< 23 weeks or < 9 inches long)
 - Sensitivity to the desires of the parent(s) may be considered
 - If uncertain as to gestational age, begin resuscitation and establish BHC

Oxygen Saturation in Neonates

- Refer to [Appendix A](#) for age-appropriate vital signs and refer to chart for Target Oxygen Saturation Table for further reference.

Target Oxygen Saturation Table

1 min	60%-65%
2 min	65%-70%
3 min	70%-75%
4 min	75%-80%
5 min	80%-85%
10 min	85%-95%

Initial oxygen concentration for PPV

> 35 weeks' GA	21% oxygen
<35 weeks' GA	21%-30% oxygen