

SECTION: PM-11

PROTOCOL TITLE: General Newborn Care

REVISED: January 28, 2010

GENERAL COMMENTS: Care is focused around an Assessment→ Action →Reassessment Cycle. These Critical re-assessments are done every 15-30 seconds, moving up and down the Inverted Pediatric Pyramid as needed.

BLS SPECIFIC CARE: See General Pediatric Care Protocol PM-1

Critical Assessments

- Critical reassessments include:
 - Heart Rate
 - Respiratory Effort/Vigor
 - Peripheral and Central Perfusion

Critical Interventions

- Heat Conservation and Stimulation
 - Dry, warm and use “Port-a-warm Mattress”
 - Tactile Stimulation (rub back)
- Oxygenation and Ventilations
 - Blow-by O₂
 - BVM
 - Properly pad under shoulders to maintain good airway alignment
- Chest Compressions: 3 compressions:1 ventilation ratio
 - Initiate for complete cardiac arrest and for HR <60 refractory to Drying, warming, stimulation, oxygenation and ventilations

ILS SPECIFIC CARE: See General Pediatric Care Protocol PM-1

ALS SPECIFIC CARE: See General Pediatric Care Protocol PM-1

- Oxygenation and Ventilation
 - ETT placement for patient’s refractory to BLS measures.
 - Trans-tracheal suction of meconium prior to ventilation.
 - OG to decompress stomach

Pharmacologic therapy:

- **Epinephrine:**
 - Indicated if heart rate remains < 60 bpm despite adequate ventilation with 100% oxygen and chest compression
 - IV/IO:
 - 0.01-0.03 mg/kg 1:10,000 every 3-5 minutes as needed
 - ETT:
 - 0.03-0.1 mg/kg 1:10,000 every 3-5 minutes as needed

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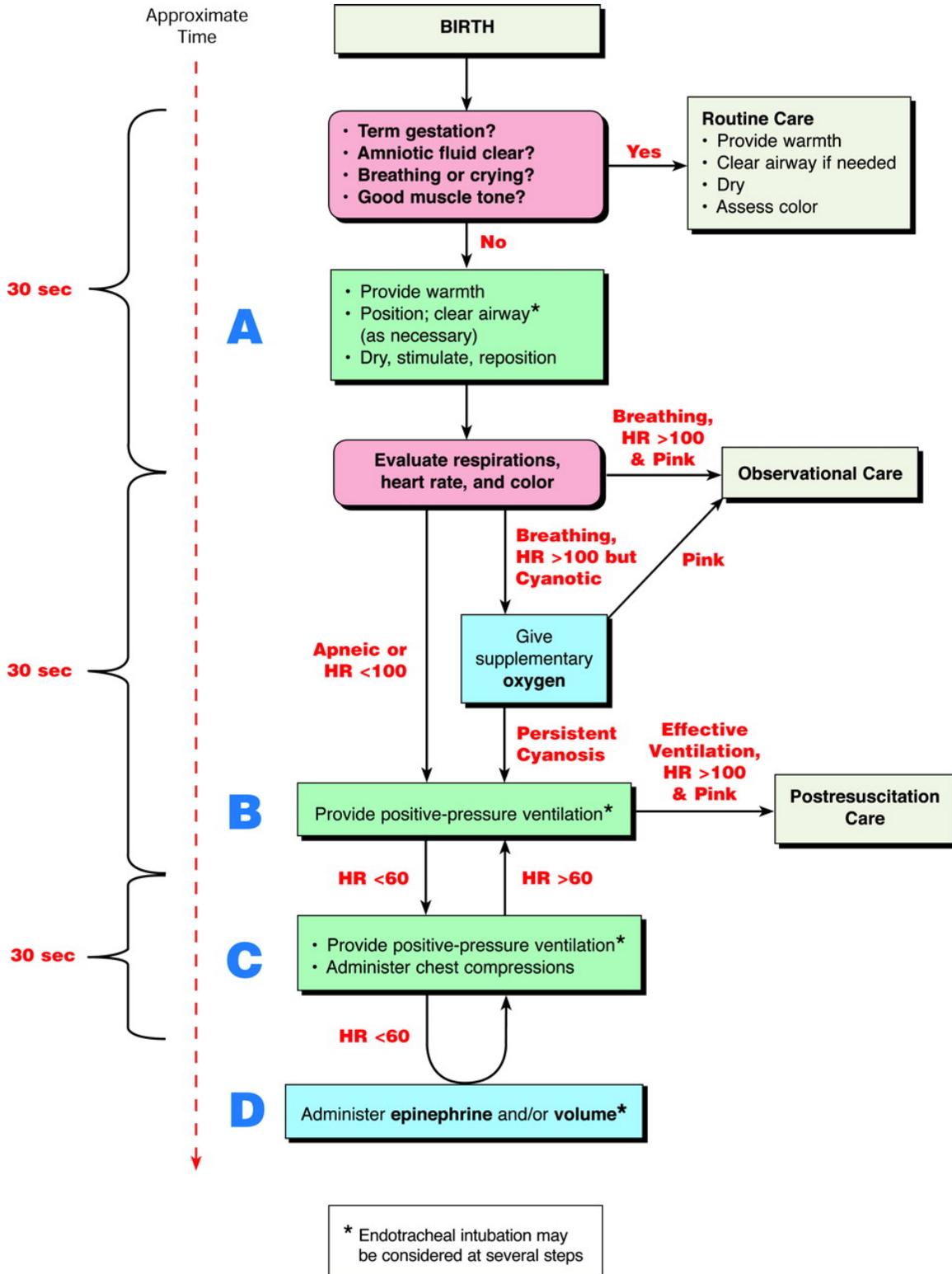
GENERAL NEWBORN CARE

- Dextrose
 - For neonatal hypoglycemia.
 - Blood glucose level < 40 mg/dl
 - 2 ml/kg D₁₀
- Narcan (naloxone)
 - 0.1 mg/kg
 - Do not administer to newborn of a mother with history of narcotics dependence
 - Indicated if **both** of the following are present:
 - Continued respiratory depression after positive pressure ventilation has restored normal heart rate and color
 - History of maternal narcotic administration/ingestion within the last 4 hours

Fluid therapy : IV/IO

- Indicated if neonate appears to be in shock, there is evidence of blood loss (e.g. placental abruption/previa or blood loss from umbilical cord) and is unresponsive to resuscitation
- 10 ml/kg normal saline over 5-10 minutes
- Administer a second dose if necessary

Neonatal Care/Resuscitation



GENERAL NEWBORN CARE

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GENERAL NEWBORN CARE

PHYSICIAN PEARLS:

Basic Newborn Care is focused around respiratory support with hypothermia and hypoglycemia close seconds.

Newborns lose heat rapidly and need to be kept warm to decrease oxygen demands and prevent metabolic acidosis.

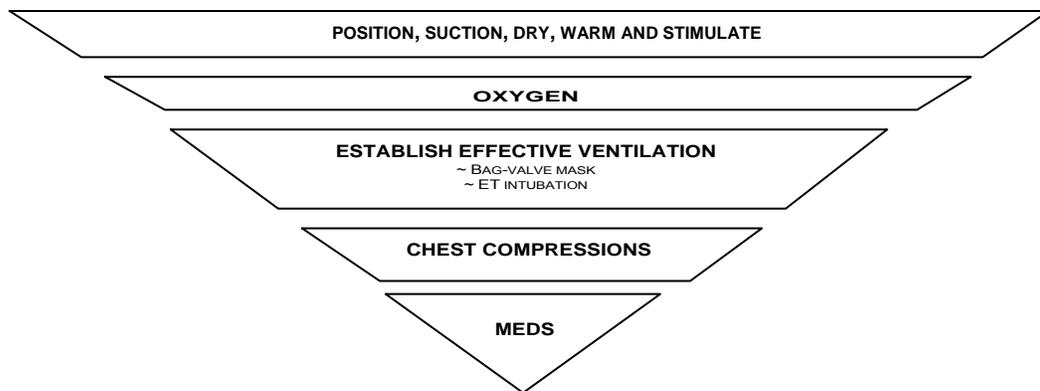
Narcan should be used with caution in narcotic depressed newborns, and only after ventilation with O₂ has proved unsuccessful.

When dealing with such a short trachea, remember that movement less than 1 centimeter in endotracheal tube position can result in inadvertent extubation. Consider immobilization of entire head and neck to protect tube placement.

If there is thick meconium present in the amniotic fluid at the time of delivery, the infant should be intubated and any meconium present in the airway should be suctioned prior to stimulation using the meconium aspirator. Discard the ET tube used to suction the meconium and intubate with a clean ET tube.

Always be prepared for resuscitation at childbirth. Risk factors, while important, are poor predictors of birth asphyxia. Up to half of newborns that require resuscitation have no identifiable risk factors before birth.

Chest Compressions: The 2-thumb, (encircling-hands method) of chest compression is preferred, and is believed to provide better CPR. Depth of compression is one-third the diameter of the chest and sufficient to generate a palpable pulse. The ratio should be **APGAR** Score: Perform 1 and 5 minute APGAR assessment



Sign	0	1	2
Heart Rate	Absent	<100	>100
Respirations	Absent	Slow, ineffective, irregular	Good and Crying
Muscle Tone/ activity	Limp	Some Flexion	Active Motion
Reflex Irritability /Grimace	None	Grimace	Cough or sneeze Pulls away
Color	Central Cyanosis Blue/Pale	Central Pink Peripheral Blue	Completely Pink