	COUNTY OF SACRAMENTO EMERGENCY MEDICAL SERVICES AGENCY	Document #	9009.16
	PROGRAM DOCUMENT: **PEDIATRIC** **Neonatal Resuscitation**	Draft Date:	02/25/95
		Effective:	05/01/18
		Revised:	06/15/17
		Review:	09/01/19

EMS Medical Director

EMS Administrator

Purpose:

A. To serve as the treatment standard for EMT's and Paramedics in resuscitation of the neonate – (defined as birth to 28 days).

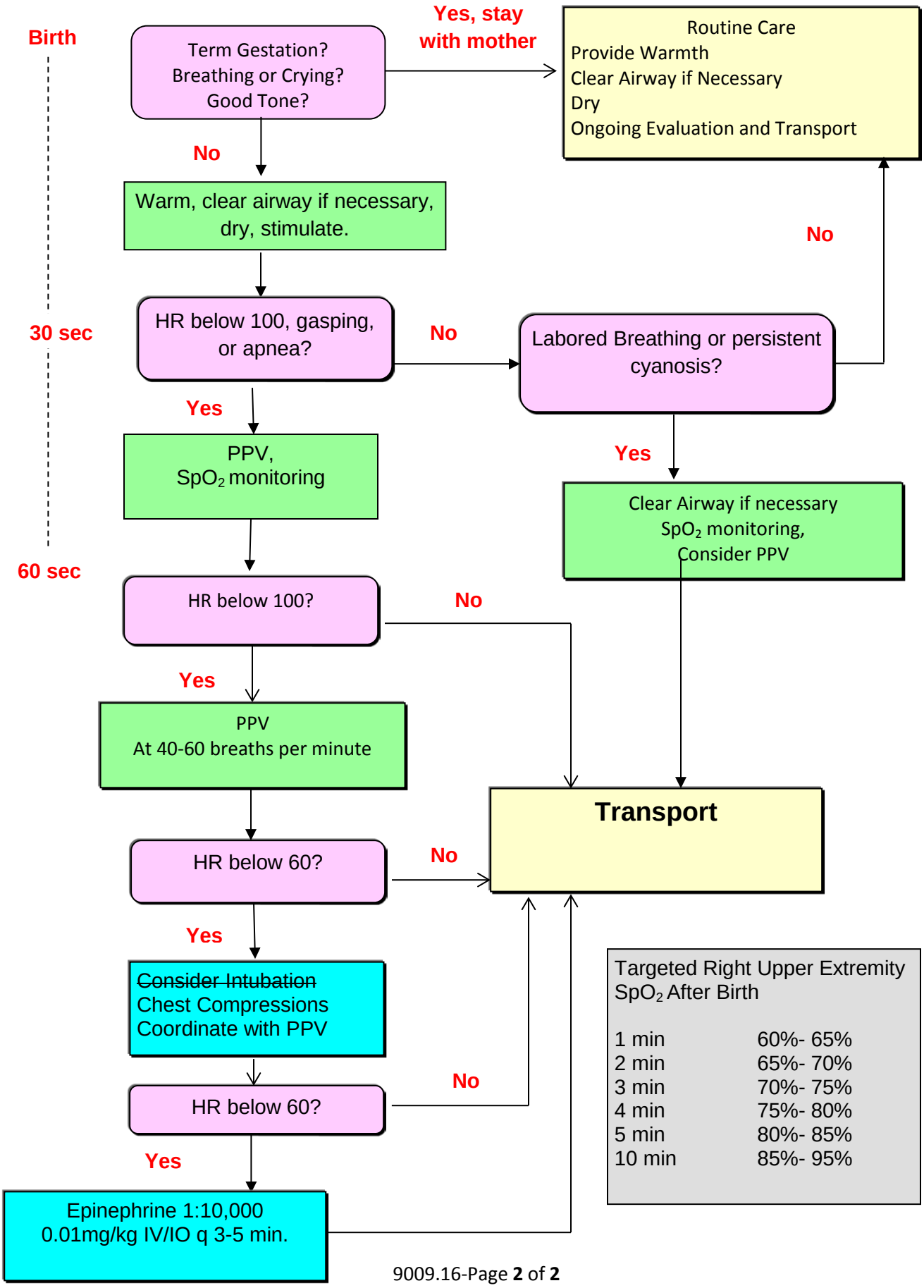
Authority:

A. California Health and Safety Code, Division 2.5
B. California Code of Regulations, Title 22, Division 9

Protocol:

American Heart Association 2010 -- Neonatal Resuscitation Notes:

A. Neonatal cardiac arrest is predominantly asphyxia; so maintain the A-B-C resuscitation sequence with a 3:1 compression-to-ventilation ratio.
B. Once positive-pressure ventilation (PPV) or supplementary oxygen administration is begun, assessment should consist of simultaneous evaluation of 3 clinical characteristics: heart rate, respiratory rate, and evaluation of the state of oxygenation. State of oxygenation is optimally determined by a pulse oximeter rather than by simple assessment of color.
C. Pulse oximetry, with a probe attached to the right upper extremity, shall be used to assess any need for supplementary oxygen. For babies born at term, it is best to begin resuscitation with air rather than 100% oxygen. Administration of supplementary oxygen, using "blow-by" method, should be guided by oximetry monitored from the right upper extremity (i.e., usually the wrist or palm).
D. Suctioning immediately after birth (including suctioning with a bulb syringe) should be reserved for babies who have an obvious obstruction to spontaneous breathing or require positive-pressure ventilation.
E. Positive-pressure ventilation should be administered with sufficient pressure to increase the heart rate or create chest expansion; excessive pressure can seriously injure the pre-term lung


Birth
Term Gestation?
Breathing or Crying?
Good Tone?
Yes, stay with mother
Routine Care
Provide Warmth
Clear Airway if Necessary
Dry
Ongoing Evaluation and Transport
No
Warm, clear airway if necessary, dry, stimulate.
30 sec
HR below 100, gasping, or apnea?
No
Labored Breathing or persistent cyanosis?
No
Yes
PPV, SpO2 monitoring
Yes
Clear Airway if necessary SpO2 monitoring, Consider PPV
60 sec
HR below 100?
No
Yes
PPV
At 40-60 breaths per minute
Transport
HR below 60?
No
Yes
~~Consider Intubation~~
Chest Compressions
Coordinate with PPV
HR below 60?
No
Yes
Epinephrine 1:10,000
0.01mg/kg IV/IO q 3-5 min.
Targeted Right Upper Extremity 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%