

## **Newborn Resuscitation**

### **Initiating Chest Compressions**

Rationale: Newborn CPR is different than Infant CPR and not generally included in EMT class. It differs from Infant CPR in several significant ways:

	<b>Newborn</b>	<b>Infant</b>
<b>Rate of Compressions</b>	120/minute	at least 100/min
<b>Depth of Compressions</b>	0.5" – 0.75"	0.5" to 1"
<b>Compression:Ventilation Ratio</b>	3:1	5:1
<b>No. of Rescuers</b>	2 or more	1 or more
<b>Target Heart Rate</b>	80/min	60/min

Newborn resuscitation is designed to assist the baby in adjusting to life outside of the uterus. The care of a newborn is specialized, as the only time these skills will be used is in the minutes before, during or after birth, because this is the time period when the adjustments must occur.

Even though young infants are referred to as newborns, resuscitation for these babies follows Infant CPR guidelines.

The principles are the same: positive pressure ventilation coordinated with chest compressions in order to restore adequate cardiopulmonary function.

In the prehospital setting, it is not enough to simply perform CPR, but EMTs must also make decisions about transporting their patient. The step of preparing for transport is included in the skill sheet as an issue to pre-plan. Transportation while performing CPR is included in one of the Newborn Resuscitation Simulations.

## PPCC Newborn Resuscitation Skill Sheet

The students will demonstrate the following actions:

Stimulates, positions, suctions, dries and warms baby.  
**(Baby is limp and blue).**

Repeats stimulation and suctioning.  
**(Baby remains limp and blue).**

Verbalizes the need to ventilate baby.  
**(May briefly try oxygen administration while accessing BVM).**

Correctly positions newborn for ventilation.  
**(Avoids hyperextension, places pad under shoulders).**

Rescuer 1 ventilates correctly:

Squeezes BVM only until chest rises.

Rate is 40 - 60/min.

Attaches oxygen set at 10-15 lpm.

After 30 seconds, Rescuer 2 evaluates heart rate.

**(Heart rate is 50/min.)**

Rescuer 2 verbalizes the need for chest compressions.

Compresses correctly:

Rate is correct.

Depth is correct.

Hand position is correct.

Both hands encircling chest

Thumbs side by side or

overlapping on lower half of sternum

Thumbs remain on sternum between compressions.

OR

Tips of two fingers; middle finger and index or ring finger

Positioned perpendicular to the chest on the lower half of sternum.

Tips of fingers remain on sternum between compressions.

Rescuer 1 coordinates ventilations with compressions.

After 30 seconds of CPR, Rescuer 2 checks pulse.

Rescuers 1 and 2 continue CPR if heart rate not improved.

Rescuer 2 checks pulse every one minute thereafter.

Rescuers 1 and 2 prepare for transport.