

SYMPTOMS: Patient pregnant and in labor. Imminent birth/delivery with crowning.

Signs of imminent birth:

- Contractions
- Crowning
- Urge to push
- Urge to have bowel movement
- Membrane rupture
- Bloody mucus discharge

Assessment, Treatment, and Interventions

ALL LEVELS

1. Obtain brief history.
 - a. Length of pregnancy
 - b. Number of pregnancies
 - c. Number of viable births
 - d. Number of nonviable births
 - e. Last menstrual period
 - f. Due date
 - g. Prenatal care
 - h. Number of expected babies
 - i. Drug use and maternal medication use

No signs of imminent birth.

EMR-O; EMT-R.

2. If no signs of imminent birth, transport in position of comfort or left lateral recumbent position if tolerated.
3. Obtain and monitor vital signs.
 - a. If mother is hypotensive, place patient in left lateral recumbent position.
 - b. Manually displace uterus to the left if patient lying supine.
4. Monitor contractions. Document:
 - a. Length
 - b. Time from beginning of one to beginning of next.
 - c. Strength
5. If abnormal presentation noted during contraction (breech, arm, leg, or cord noted) contact medical control. Encourage patient not to push. Call for ALS.

Signs of imminent birth, assist in delivery of baby:

6. Help mother to position of comfort while allowing visualization of birth canal/baby's head.
7. Most common presentation - baby's head nose down toward mother's back.
8. Use hands to support baby's head as it moves with contractions to allow a slow controlled delivery of the infant.
9. Once delivery of the head is complete it commonly will rotate to the mother's right.
10. Support the baby's head with one hand
11. Check for cord around baby's neck
 - a. If present, slip cord over the head
 - b. If unable to free the cord from the neck double clamp the cord and cut between the clamps.

12. Do not suction the infant's airway (even with a bulb syringe).
13. Gentle grasp the head with hand over the ears, and guide head down to allow delivery of the anterior shoulder.
14. Gently guide the head up to allow delivery of the posterior shoulder.
15. Slowly deliver the remainder of the infant. Remember the baby is slippery. Hold firmly but gently.
16. Record APGAR scores at 1 and 5 minutes. [See chart on following page]
17. After 1-3 minutes, clamp cord about 6 inches from the abdomen with 2 clamps; cut the cord between the clamps.
 - a. If resuscitation is needed, clamp cord and cut as soon as possible
 - b. Suctioning should be reserved for infants who have obvious obstruction to the airway or require positive pressure ventilation.
 - c. Follow **Neonatal Resuscitation guideline (P-1)** as needed for further care of infant.
18. Dry and warm infant; wrap in towel and place on mother's chest unless resuscitation needed.
19. The placenta will deliver spontaneously, often within 5-15 minutes of the infant.
 - a. Do not force the placenta to deliver; Do not pull on umbilical cord
 - b. Contain all tissue in plastic bag and transport.
20. After delivery, encourage the infant to nurse.
21. If significant bleeding, massage the fundus of the uterus (top/near belly button) vigorously to promote uterine contractions and help control bleeding.
 - a. Estimate maternal blood loss
 - b. Treat for hypovolemia as needed.
22. Transport infant secured in seat or isolette unless resuscitation needed.
23. Keep infant warm during transport.
24. Notify medical control if post-partum hemorrhage
 - a. Administer oxygen. Ventilate as needed.
 - b. Transport in head down, left lateral recumbent position.
 - c. Loose bulky dressing may be placed in the vagina (do not pack)
 - d. Call for ALS intercept if signs of shock.

CONSIDERATIONS:

Most deliveries proceed without complications. If complications of delivery occur the following are recommended.:

- Shoulder dystocia – If delivery fails to progress after head delivers, quickly attempt the following:
 - Hyperflex mother's hips to severe supine knee-chest position.
 - Apply firm suprapubic pressure to attempt to dislodge shoulder.
 - Apply high-flow oxygen to mother.
 - Transport as soon as possible
 - Contact on-line medical control and/or closest receiving facility for consultation and to prepare team.
- Prolapsed umbilical cord
 - Place gloved hand into vagina and gently lift baby's head and body off cord.
 - Assess for pulsations in cord
 - Maintain until relieved by hospital staff
 - Consider placing mother in prone knee-chest position or extreme Trendelenburg.
 - Apply high-flow oxygen to mother.
 - Transport as soon as possible.
 - Contact on-line medical control as needed.

- Breech birth
 - Place mother supine, allow the buttocks and trunk to deliver.
 - If head fails to deliver, place gloved hand into vagina with fingers between infant's face and vaginal wall to create an open airway.
 - Apply high-flow oxygen to mother.
 - Transport as soon as possible.
 - Contact on-line medical control and/or closest appropriate receiving facility for medical consultation and to prepare team.
 - The presentation of an arm or leg through the vagina is an indication for immediate transport to hospital.
 - Assess for presence of prolapsed cord and treat as above.
- Excessive bleeding during active labor may occur with placenta previa
 - Obtain history from patient
 - Placenta previa may prevent delivery of infant vaginally
 - C-Section needed, transport urgently.
 - Notify receiving facility.
- Maternal cardiac arrest
 - Apply manual pressure to displace uterus from right to left
 - Treat per the **Cardiac Arrest guideline [R-1]** for resuscitation care. Defibrillation and medications should be given for same indications and doses as if non-pregnant patient.
 - Transport as soon as possible if infant is estimated to be over 24 weeks gestation. Perimortem Cesarean section at receiving facility is most successful if done within 5 minutes of maternal cardiac arrest.
 - Notify receiving facility.

APGAR Score

Sign	0	1	2
Appearance	Blue Pale	Body pink Extremities blue	Completely pink
Pulse	Absent	Slow – less than 100	≥ 100
Grimace	No response	Grimace	Cough or sneeze
Activity	Limp	Some flexion	Active motion of extremities
Respirations	Absent	Slow Irregular	Good Crying

