IMMINENT CHILDBIRTH IN THE FIELD

INDICATION:

- Progressive childbirth before mother can be transported to an ERC for controlled delivery of baby.

SIGNS OF IMMINENT CHILDBIRTH:

- Body part of the unborn child is visible within the birth canal, usually the top of the head or forehead but may be buttocks, hands, or feet.
- Contractions (strong muscle cramps experienced by the mother and palpable over the lower abdomen) that are approximately 3 minutes or less apart.
- Leaking of amniotic fluid (ruptured membranes) that is blood tinged or cloudy in character with onset of contractions.
- A mother with active contractions reports feeling that she needs to have a bowel movement.
- A mother with active contractions reports an uncontrollable urge to push the child down or out.
- Sudden vaginal bleeding associated with contractions.
- History of previous vaginal childbirth with active contractions 3 minutes or less apart.

PROCEDURE:

1. Explain to the mother that you will assist her to deliver the baby.
2. Assure an ALS response is in route, if not already done
3. Calm the mother as much as possible; use reassuring and normal voice tones.
4. Use universal blood borne precautions, with a minimum of sterile gloves and mask.
5. Assure that the mother's clothing is not in a position to restrict the birthing process; the mother's legs should be free to move.
6. Allow the mother to assume a position comfortable for her. Be aware that in some cultures, squatting or assuming a position on "all fours" is preferred for birthing.
7. Allow the mother to push down the baby when she feels the unstoppable urge to do so. This should occur concurrent with contractions.
8. Using one hand, support the area below the birth canal with moderate pressure and slowly control delivery of head as much as possible to prevent tearing of mother's perineal tissue.
9. Assist the delivery by supporting the baby's head as it emerges. Allow the head to rotate to one side which will occur naturally to allow the body to be delivered.
10. If the umbilical cord is looped around the baby's neck, insert a finger below the cord and move it over the head to free the baby for delivery (sometimes the cord can be wrapped twice around the neck).
11. While supporting the baby's head allow the shoulders to be delivered, usually top or anterior shoulder first, then the lower or posterior shoulder second. Delivery of the shoulders is often difficult and may require gently moving the head downward to allow the anterior shoulder to deliver and then moving the head upward to allow the posterior shoulder to deliver.
12. Allow the remainder of the baby's body to deliver while carefully holding the baby's head and supporting the baby's neck.
13. Once delivered, keep the baby at the level of the vagina while drying the baby with clean towels. Ensure obvious fluids are gently wiped from the baby's mouth and nose area. Do not use a bulb syringe to suction the baby unless clearly needed (e.g., BVM ventilation indicated due to gasping respirations or apnea). Drying the baby should naturally stimulate the baby to cry and initiate breathing. If child remains bluish in skin color, provide oxygen 6 L/min by "blow by" technique.

14. After waiting more than 30 seconds after birth, clamp the umbilical cord. Place umbilical clamps at 4 and 6 inches away from the baby, then cut between the clamps (for safety, use scissors, not a scalpel or knife). If the baby is depressed (i.e., flaccid, apnea/gasping respirations, persistent central cyanosis), the cord should be clamped and cut immediately to facilitate the newborn resuscitation procedure.
15. Place the dried, naked baby, skin-to-skin on the mother's abdomen to allow for breast-feeding, then wrap the baby and mother together in a warm blanket. Alternatively, wrap the baby in the baby wrap provided in the O.B. kit, then place the baby on its side with the mother.
16. If umbilical clamps are not available, place baby on mother's chest above the level of the abdomen and uterus. Instruct mother to hold baby securely during transport.
17. Allow the placenta to deliver naturally. Do not pull on the umbilical cord.
18. If the placenta delivers, package it in a bag or wrapped towel and transport with the baby to allow for examination of the placenta for potential abnormalities by the receiving physician.
19. Comfort the mother and assure her that post-delivery contractions are normal and the contractions will help decrease bleeding.
20. To aid in inducing uterine contraction and decrease bleeding after delivery of baby, firmly massage the uterus by pressing and massaging over the anterior lower abdomen.
21. Document time of delivery and condition of baby (breathing, muscle tone, color). Assess APGAR Score at 1 minute and 5 minutes from delivery (see APGAR) chart below)
22. Transport to the nearest ERC or hospital where mother's physician is on medical staff if mother and baby stable and transport time less than 20 minutes.
23. Keep baby warm and observe to assure breathing is adequate and color pink. If breathing poor, stimulate the baby by drying with towel or gently rubbing feet with hands. If secretions are in baby's mouth, roll to one side to allow drainage.

SPECIAL CIRCUMSTANCES:

Breech Presentation: (Buttocks or feet present first as opposed to head)

1. Follow the procedure for normal presentation delivery, with the exception that you **do not touch the baby until the head delivers.** Touching and stimulating the skin of a baby in breech position can induce the baby to gasp and aspirate amniotic fluid while still in the birth canal.

2. As the shoulders deliver, encourage the mother to push to deliver the head and clear the birth canal.

Depressed Neonate (Blue Baby or Non-breathing Baby):

If the baby is depressed (i.e., flaccid, apnea/gasping respirations, persistent central cyanosis), the cord should be clamped and cut immediately to facilitate the newborn resuscitation procedure, which includes the following:

1. Assure baby is dry and warm, the airway is clear, and the baby is positioned to keep the airway open.
2. Stimulate the baby by rubbing the back with a towel.
3. If stimulation fails to revive the baby, begin BVM ventilation.
4. If above steps fail and heart rate less than 60 bpm, initiate chest compressions.
5. Provide oxygen after about 5 minutes or if chest compressions are initiated.

SPECIAL CIRCUMSTANCES (continued):

Post-partum Hemorrhage:

1. If after delivery of the baby the mother continues to have vaginal bleeding, massage the uterus with firm pressure over the lower abdomen. As the uterus contracts, it is often palpable through the abdominal wall allowing for more direct massaging of the uterus.

2. Most often, the placenta will deliver with massaging and bleeding will gradually decrease. Continue to massage the uterus over the abdomen until bleeding is minimal.

Maternal Seizure During or After Delivery:

1. Seizure of the mother during or after delivery is an extreme emergency. Protect the baby and attend to the mother's airway (suctioning if available and keeping clear and open), immediately notify the 911 dispatch center of the change in status.

APGAR SCORE:

- The Apgar Score measures a newborn's physical status.
- Each of the five categories are scored from 0-2 and then totaled. Apgar scoring is done twice: 1 minute after birth and 5 minutes after birth.
- Resuscitation, if needed, should not await Apgar scoring.

Scoring	*0*	*1*	*2*
Heart rate	Absent	Slow (below 100)	100
Respiratory Effort	Absent	Weak Cry; Hypoventilation	Strong Cry
Muscle Tone	Limp	Slight Flexion of Extremities	Active Flexion
Reflex irritability*	No response	Some Grimace	Cough, sneeze, cry, or withdrawal
Color	Blue, pale	Body pink, extremities blue	Completely pink

* Test for reflex irritability by using a mild pinch to the abdomen or slapping the feet

A total (summed) APGAR score of the following values, 1 minute after birth, indicates:

7-10	a healthy neonate.
4-6	a potentially sick neonate.
0-3	a severely depressed neonate.

5 minutes after birth a healthy neonate APGAR score should be 7 -10; below 7 requires constant monitoring and management as described above for a depressed neonate.