OB/GYN PROTOCOLS

Childbirth Protocol

Childbirth is a natural process. EMS providers called to a woman in labor should determine whether there is enough time to transport the expecting mother to the hospital or if delivery is imminent. If childbirth appears imminent, immediately prepare to assist with the delivery.

EMR Care, BLS Care, ILS Care, ALS Care

EMR, BLS, ILS & **ALS** Care should be focused on assessing the situation, initiating routine patient care and preparing for or providing patient transport. Special attention should be given to the privacy of the mother and concerns of immediate family members should be addressed.

1. Render initial care in accordance with the *Routine Patient Care Protocol*.
2. **Oxygen**: If respiratory distress noted, 15 LPM via NRM or 6 LPM via nasal cannula.
    a) If no obvious respiratory distress, apply pulse ox. If ≥ 94% and no signs/ symptoms of respiratory distress, no Oxygen is required. If ≤89% apply nasal cannula at 2-6 LPM. If unable to increase ≥ 94% move to 15 LPM via NRM.
3. Obtain a history on the patient including:
    a) Gravida (# of pregnancies) and PARA (# of live births)
    b) Expected delivery date
    c) Length of previous labor and if complications of previous pregnancies
    d) Onset of contractions
    e) Prenatal care (if any)
4. Allow the expectant mother to remain in a position that is most comfortable.
    a) If patient is supine, one provider should be dedicated to provide manual left uterine displacement, moving uterus to patients left side.
5. If delivery is not imminent, transport the patient on her left side.
6. Determine if there is adequate time to transport:
    a) Assess the nature, extent and time of contractions.
    b) Assess the patient for high-risk factors.
    c) Assess the status of the membranes and any discharge.
    d) Assess for pushing with contractions.
    e) Take into consideration the length of previous labor.
7. If delivery is imminent:
    a) Consider requesting additional ambulance
    b) DO NOT ATTEMPT TO RESTRAIN OR DELAY DELIVERY
    c) Position the mother supine on a flat surface if possible.
    d) Use full PPE – gloves, gown & goggles.
8. **(ILS & ALS) IV Fluid Therapy:** IVF 500mL fluid bolus's to maintain a systolic BP of at least 100mmHg.
    a) IV placement should be higher than the level of the diaphragm for medication administration
    b) While not a preferred location, if IO access is required, proximal humerus should be utilized (trauma, arrest, and/or hemorrhage situations)
9. Prepare for delivery:

Childbirth Protocol

a) Control delivery of the head so that it does not emerge too quickly. Support the infant's head as it emerges and protect the perineum with gentle hand pressure.
b) Assess for nuchal cord and, if present, gently remove the cord from around the newborn's neck.
c) Suction the mouth, then nose of the newborn with a bulb syringe as soon as the head is delivered.
d) As the shoulders emerge, guide the head & neck downward to deliver the anterior shoulder. Support and lift the head & neck slightly to deliver the posterior shoulder.
e) Ensure a firm hold on the baby as the rest of the newborn's body delivers.
f) Keep the newborn level with the mother's vagina until the cord stops pulsating and is double clamped.

Infant Post Partum Care

1. Begin the *Emergency Childbirth Record*.
2. Continue to suction the nose and mouth. Spontaneous respirations should begin within *15 seconds*.
    - If spontaneous respirations are not present, begin artificial ventilations with BVM & 100% O_2 at 30-40 bpm.
    - If no brachial pulse is present **OR** the pulse is less than 100 bpm, begin CPR.
3. Dry the newborn and wrap in a warm blanket, keeping the baby at the level of the mother's vagina until the cord is clamped and cut.
4. After the umbilical cord stops pulsating, clamp the cord at 3" & at 4" from the newborn's abdomen and cut between the clamps with the sterile scalpel found in the OB kit.
5. Assess the cord for bleeding and note the number of vessels present.
6. Obtain an APGAR score at ***1 minute*** and again at ***5 minutes*** after delivery.
7. Place ID tags on the mother and infant with the following information:
    - Name of the mother
    - Sex of the infant
    - Date and time of delivery
8. **DO NOT** separate the mother and infant unless both have ID tags.

Childbirth Protocol

Post Partum Care of the Mother

1. The placenta should deliver within 5-20 minutes. Collect the placenta in a plastic bag and bring it to the hospital with the mother. DO NOT pull on the cord to facilitate delivery of the placenta.
2. Do not delay transport for delivery of the placenta.
3. If the perineum is torn and bleeding, apply direct pressure with a 5x9 dressing or trauma dressing and have the patient bring her legs together.
   Massage the uterus until firm.
   To massage the uterus, place one hand with fingers fully extended just above the mother's pubic bone and use the other hand to press down into the abdomen and gently massage the uterus approximately 3 to 5 minutes until it becomes firm.
4. Be alert, excessive maternal bleeding (most commonly uterine atony) is a life threatening condition that requires aggressive treatment. Communication to the receiving facility and providing focused care for the mother will be required for successful resuscitation.

Documentation Requirements

1. Completed *Emergency Childbirth Record*
2. Document the date, time and place of delivery
3. Presence or absence of a nuchal cord
   - *If nuchal cord is present, document how many times the cord was wrapped around the baby's neck.*
4. Appearance of the amniotic fluid
5. Time the placenta was delivered and its condition
6. APGAR score at ***1 minute*** and ***5 minutes***
7. Any resuscitation / treatment rendered and newborn response to treatment

High-Risk Pregnancy Factors

- Lack of prenatal care
- Drug abuse
- Teenage pregnancy
- Diabetes
- Hypertension
- Cardiac disease
- Previous breech or C-section delivery
- Pre-eclampsia / Toxemia / Eclampsia
- Twins / Multiple birth pregnancy

Childbirth Protocol

Pre-Term OB

Transporting Units

1. Destination decisions must be informed decisions based on local and regional destination capabilities, time since onset and transportation distances.
    a. See *EMS Triage Destination Plan*.
    b. Patient refusal of appropriate destination must be documented as a refusal of care prior to patient being transported to a facility that is not certified to meet the patient's clinical needs.

Childbirth Protocol

Emergency Childbirth Record

(Complete and attach to the newborn patient care record)

1. Presentation (head or feet): _____

2. Date of Birth: _____

3. Time of Birth (*military time*): _____

4. Nuchal Cord: **YES** **NO** # of times cord wrapped around neck: _____

5. Time membranes ruptured (*military time*): _____

6. Appearance of amniotic fluid: **CLEAR (Cloudy)** **MECONIUM** **BLOOD-TINGED**

7. **APGAR Score:** Must be completed at ***1 minute*** and again at ***5 minutes***.

Element	*0*	*1*	*2*	*1 minute Score*	*5 minute Score*
Appearance (Color)	Body and extremities blue, pale	Body pink, extremities blue	Completely pink		
Pulse rate	Absent	< 100 bpm	> 100 bpm		
Grimace (Irritability)	No response	Grimace	Cough, sneeze, cry		
Activity (Muscle tone)	Limp	Some flexion of extremities	Active motion		
Respirations	Absent	Slow and irregular	Strong cry		
TOTAL SCORE:					

8. Time placenta delivered (*military time*): _____ **INTACT** **NOT INTACT**

9. Number of vessels in cord: _____

10. Infant resuscitation: **STIMULATION only** **OXYGEN** **O_2 with BVM**

- **CPR** **Time CPR began: _____** **Time CPR terminated: _____**

11. Remarks: _____
_____
_____

12. Signature & ID# of Paramedic/EMT: **1.** _____ **2.** _____

Childbirth Protocol

Critical Thinking Elements

- **Lower than normal blood pressure and higher than usual heart rate are normal vital sign changes with pregnancy.**
- **Signs & symptoms of shock in the pregnant patient include a systolic BP less than 90mmHg, lightheadedness and ALOC.**
- **Average labor lasts 8-12 hours but can be as short as 5 minutes.**
- **The desire to push during contractions is an indicator that delivery is imminent.**
- **Be respectful of the expected mother's privacy.**
- **Assess the patient for peripheral edema. This may indicate Pre-eclampsia / Eclampsia. Monitor patient closely and watch for seizure activity.**
- **Tag the mother and baby with the same information. Consider keeping a zip lock bag with name tags/ Sharpie attached to the O.B. kit itself.**
- **Green or brown amniotic fluid indicates the presence of Meconium (fetal stool) and should be reported immediately to the receiving facility staff.**

Obstetrical Complications Protocol

Obstetrical complications can rapidly lead to hypovolemic shock and threaten the life of the mother and child. Care should be focused on assessing the situation, initiating routine patient care and beginning treatment for shock. Monitor vitals closely.

EMR Care, BLS Care, ILS Care, ALS Care

Placenta Previa

Placenta previa occurs as a result of abnormal implantation of the placenta on the lower half of the uterine wall. Bleeding occurs when the lower uterus begins to contract and dilate in preparation for labor and pulls the placenta away from the uterine wall. The hallmark of *placenta previa* is the onset of painless bright red vaginal bleeding, usually in the 3rd trimester of pregnancy.

1. **(BLS)** Initiate ALS intercept.
2. Note the amount of bleeding.
3. Place the patient on her left side.
4. Load and transport as soon as possible.
5. **(ILS & ALS) IV Fluid Therapy:** 500mL fluid bolus's to maintain a systolic BP of at least 100mmHg.
6. **Contact Medical Control** as soon as possible.

Ectopic Pregnancy

Ectopic Pregnancy refers to the abnormal implantation of the fertilized egg outside of the uterus, usually in the fallopian tube. It can be a life-threatening condition and accounts for approximately 10% of maternal mortality in the 1st trimester. Typical presentation occurs in weeks 4-11after LMP. Patient may not know she is pregnant.

Ectopic pregnancy presents as abdominal pain which starts out as diffuse tenderness and then localizes as a sharp pain in the lower abdomen on the effected side. Assume that any female of childbearing age with lower abdominal pain is experiencing an ectopic pregnancy.

1. **(BLS)** Initiate ALS intercept.
2. **(ILS & ALS) IV Fluid Therapy:** 500mL fluid bolus's to maintain a systolic BP of at least 100mmHg.
3. **Contact Medical Control** as soon as possible.

Obstetrical Complications Protocol

Abruptio Placentae

Abruptio placentae is the premature separation of a normally implanted placenta from the uterine wall. Signs and symptoms can vary depending on the extent and character of the abruption. Abruptio placentae can be caused by even minor trauma. Bleeding can be massive.

1. Note the amount of bleeding.
2. Place the patient on her left side.
3. Load and transport as soon as possible.
4. **(BLS)** Initiate ALS intercept.
5. **(ILS & ALS) IV Fluid Therapy:** 500mL fluid bolus's to maintain a systolic BP of at least 90mmHg.
6. Establish a 2nd IV en route if time permits.
7. **Contact Medical Control** as soon as possible.

Antepartum & Postpartum Hypertension

Pre-eclampsia is defined as an increase in systolic blood pressure by 30mmHg and/or a diastolic increase of 15mmHg over baseline on at least two occasions at least 6 hours apart. *Pre-eclampsia* is most commonly seen in the last 10 weeks of gestation and is thought to be caused by abnormal vasospasm.

Pre-Eclampsia: Characterized by hypertension and edema to the hands and face (and protein in the urine).

Severe Pre-Eclampsia: Characterized by marked hypertension (160/100 or higher), generalized edema, headache, visual disturbances, pulmonary edema and a dramatic decrease in urine output (along with a significant increase of protein in the urine). May also present with RUQ pain.

Eclampsia: Characterized by generalized tonic-clonic seizure activity often preceded by flashing lights or spots before the eyes. Altered Mental Status may be present.

Obstetrical Complications Protocol

Antepartum & Postpartum Hypertension {Continued}

Antepartum Hypertension: Characterized by pregnancy with SBP> 140 or DPB > 90, headache, visual complications, AMS, stroke symptoms, or seizures.

Postpartum Hypertension: Characterized by pregnancy with SBP> 140 or DPB > 90, headache, visual complications, AMS, stroke symptoms, or seizures in the post delivery patient for up to six weeks.

Note: The risk of fetal mortality increases by 10% with each maternal seizure.

1. Assure minimal CNS stimulation to prevent seizures (*i.e.* do not check papillary light reflex).
2. Place the patient on her left side (if pregnant).
3. Load and transport as soon as possible.
4. **(BLS)** Initiate ALS intercept.
5. **(ILS & ALS) IV Fluid Therapy:** TKO.
6. If the patient is actively seizing, refer to the Seizure Protocol.
7. **Contact Medical Control** as soon as possible.

Transporting Units

Hypertensive antepartum and postpartum patients are especially challenging patients who can have very complex care needs. As such, transport to the most appropriate facility is necessary to provide the patient the best treatment options.

1. Patients meeting *EMS Triage Destination Plan* should be transported to a Level III Perinatal facility if at all possible.
    a. If unable to safely transport directly, include in documentation.
    b. If patient refuses, include documentation of informed refusal in communication with **Medical Control**.

Abnormal Delivery Protocol

EMR Care, BLS Care, ILS Care, ALS Care

Abnormal delivery situations can be especially challenging in the pre-hospital setting. Care should be focused on initiating *Routine Patient Care* to treat for shock and rapid transport to the hospital.

Breech Presentation

A *breech* presentation is the term used to describe a situation in which either the buttocks or both feet present first.

1. Render initial care in accordance with the *Routine Patient Care Protocol*.
2. **Oxygen**: If respiratory distress noted, 15 LPM via NRM or 6 LPM via nasal cannula.
    a. If no obvious respiratory distress, apply pulse ox. If ≥ 94% and no signs/ symptoms of respiratory distress, no Oxygen is required. If ≤89% apply nasal cannula at 2-6 LPM. If unable to increase ≥ 94% move to 15 LPM via NRM.
3. Load and transport as soon as possible.
4. **(BLS)** Initiate ALS intercept.
5. Never attempt to pull the baby from the vagina by the trunk or legs.
6. As soon as the legs are delivered, support the baby's body (wrapped in a towel).
7. After the shoulders are delivered, gently elevate the trunk and legs to aid in the delivery of the head.
8. The head should deliver in 30 seconds. If it does not – reach 2 fingers into the vagina to locate the infant's mouth. Press the vaginal wall away from the baby's mouth to provide unrestricted respirations.
9. **Contact Medical Control** as soon as possible.

Shoulder Dystocia

Shoulder dystocia is a halting of the natural progress of delivery due to failure to deliver the baby's shoulders. This occurs when the anterior shoulder becomes stuck on the mother's pubic symphysis. Occurs in up to 3% of deliveries. Failure to deliver the anterior shoulder in a timely fashion can result in permanent brachial plexus injury, fetal hypoxia and death. Risk factors for dystocia are a large for gestational age infant (estimated weight >3500 grams), maternal diabetes and maternal obesity.

Signs you should be concerned about shoulder dystocia:
- Turtle sign: delivery of the fetal head followed by retraction of the head into the vaginal canal
- >60 seconds between delivery of the fetal head and delivery of the shoulders

Abnormal Delivery Protocol

Shoulder Dystocia (cont.)

1. Render initial care in accordance with the *Routine Patient Care Protocol*.
2. **Oxygen**: If respiratory distress noted, 15 LPM via NRM or 6 LPM via nasal cannula.

    a. If no obvious respiratory distress, apply pulse ox. If ≥ 94% and no signs/ symptoms of respiratory distress, no Oxygen is required. If ≤89% apply nasal cannula at 2-6 LPM. If unable to increase ≥ 94% move to 15 LPM via NRM.
3. **(BLS)** Initiate ALS intercept. **If you are concerned about the possibility of shoulder dystocia update medical control of a complicated delivery.**

Steps to assist in shoulder delivery:

McRoberts Maneuver– hyperflexion of hips creates superior displacement of the pubic symphysis and sacral extension. Additional gentle downward suprapubic pressure helps further disengage the stuck anterior shoulder.

1. Ask mother to pull her knees to her chest keeping her thighs against her abdomen
2. Make a fist and apply gentle downward suprapubic (not fundal) pressure to help disengage the stuck shoulder
3. If these maneuvers fail to assist in delivery move on to the next maneuver

Rubin II Maneuver – gentle sweeping of the anterior shoulder in the direction the baby is facing to disengage the anterior shoulder from the pubic symphysis

1. Insert two fingers into the vaginal canal to the between baby's head and maternal pubic symphysis
2. Gently push the shoulder in the direction the baby is facing to disengage the shoulder from the symphysis
4. If this maneuver fails to assist in delivery move on to the next maneuver

Abnormal Delivery Protocol

Prolapsed Cord

A *prolapsed cord* occurs when the umbilical cord precedes the fetal presenting part. This causes the cord to be compressed between the fetus and the pelvis and blocks fetal circulation. Fetal death will occur quickly without prompt intervention.

1. Render initial care in accordance with the *Routine Patient Care Protocol*.
2. **Oxygen**: If respiratory distress noted, 15 LPM via NRM or 6 LPM via nasal cannula.
    a. If no obvious respiratory distress, apply pulse ox. If ≥ 94% and no signs/ symptoms of respiratory distress, no Oxygen is required. If ≤89% apply nasal cannula at 2-6 LPM. If unable to increase ≥ 94% move to 15 LPM via NRM.
3. **(BLS)** Initiate ALS intercept.
4. Place the mother in Trendelenburg Position..
5. **Do not pull on the cord and do not attempt to push the cord back into the vagina**.
6. Place a gloved finger/hand in the vagina between the pubic bone and the presenting part with the cord between the fingers and exert counter pressure against the presenting part.
7. Palpate the cord for pulsations.
8. Keep the exposed cord warm and moist.
9. Keep the hand in position and transport immediately.
10. **Contact Medical Control** as soon as possible.

Limb Presentation

Although relatively uncommon, the baby may be lying transverse across the uterus. In these cases, an arm or leg is the presenting part protruding from the vagina and will require delivery by cesarean section. **Under no circumstances should you attempt a field delivery** with a limb presentation.

1. Render initial care in accordance with the *Routine Patient Care Protocol*.
2. **Oxygen**: If respiratory distress noted, 15 LPM via NRM or 6 LPM via nasal cannula.
    a. If no obvious respiratory distress, apply pulse ox. If ≥ 94% and no signs/ symptoms of respiratory distress, no Oxygen is required. If ≤89% apply nasal cannula at 2-6 LPM. If unable to increase ≥ 94% move to 15 LPM via NRM.
3. **(BLS)** Initiate ALS intercept.
4. Place the mother in the Trendelenburg Position.
5. Avoid touching the limb (doing so may stimulate the infant to gasp). **Do not pull on the extremity and do not attempt to push the limb back into the vagina**.
6. **Contact Medical Control** as soon as possible.

Rape/Sexual Assault Protocol

Rape and sexual assault are acts of violence and may be associated with traumatic injuries, both external and internal. A thorough assessment of the patient's condition should be done and special attention should be given to the patient's mental health needs as well.

EMR Care, BLS Care, ILS Care, ALS Care

Care should be directed at conducting a thorough patient assessment, initiating routine patient care to assure that the patient has a patent airway, is breathing and has a perfusing pulse as well as beginning treatment for shock and preparing the patient for or providing transport.

1. Render initial care in accordance with the *Routine Patient Care Protocol*.
2. **Oxygen**: If respiratory distress noted, 15 LPM via NRM or 6 LPM via nasal cannula.
    a. If no obvious respiratory distress, apply pulse ox. If $\geq$ 94% and no signs/ symptoms of respiratory distress, no Oxygen is required. If $\leq$89% apply nasal cannula at 2-6 LPM. If unable to increase $\geq$ 94% move to 15 LPM via NRM.
3. Treat injuries according to the appropriate protocol.
4. Survey the scene and give special consideration to preserving any articles of evidence on or around the patient.
    a. Strongly discourage the patient from urinating, washing/showering or changing clothes.
    b. Collaborate with police to determine what articles (*i.e.* clothing) will be transported with the patient.
    c. **Do not** physically examine the genital area unless there are obvious injuries that require treatment.
    d. All linen used by the patient should be left with the patient in the Emergency Department.
5. Transport the patient and notify law enforcement of patient destination.
6. The following information / telephone numbers regarding services available to victims of abuse shall be offered to all victims of abuse, whether they are treated & transported or if they refuse treatment & transport to the hospital:

Crime Victims Compensation Program
(800)228-3368

Prairie Center Against Sexual Assault
(217) 744-2560
3 West Old State Capitol
Springfield, IL 62701

Rape/Sexual Assault Protocol

The use of drugs to facilitate a sexual assault is occurring with increasing frequency. These drugs can render a person unconscious or weaken the person to the point that they cannot resist their attacker. Some of the drugs can also cause amnesia and the patient will have no memory of the assault. Date rape drugs have a rapid onset and varying duration of effect. It is important for prehospital personnel to be aware of these agents as well as their effects.

Date Rape Drugs

Rohypnol – A potent benzodiazepine that produces a sedative effect, amnesia, muscle relaxation and slowing of psychomotor response. It is colorless, odorless & tasteless and can be dissolved in a drink without being detected. Street names include: *Ruffies, R2, Roofies, Forget-Pill* and *Roche*.

GHB – An odorless, colorless liquid depressant with anesthetic-type qualities. It causes relaxation, tranquility, sensuality and loss of inhibitions. Street names include: *Liquid Ecstasy and Liquid X.*

Ketamine – A potent anesthetic agent that is chemically similar to LSD. It causes hallucinations, amnesia and dissociation. Street names include: *K, Special K, Jet* and *Super Acid.*

Ecstasy – Causes psychological difficulties including confusion, depression, sleep problems, severe anxiety and paranoia. It can also cause physical symptoms including muscle tension, involuntary teeth clenching, nausea, blurred vision, faintness, chills and sweating. Street names include: *Beans, Adam, XTC, Roll, E, M and X*.

Critical Thinking Elements

- **Carefully and objectively document all of your findings including a thorough description of how & where the patient was found, all injuries/assessment findings and patient history.**
- **If a patient refuses treatment, refer to the *Patient Right of Refusal Policy*.**
- **Request local law enforcement if they have not already been called to the scene.**
- **Illinois law requires emergency services to bill a victim relief fund rather than bill the patient. Agencies must ensure they comply with all specifics of billing this patient population.**