

OBSTETRICS GYNECOLOGY

Revised: August 2016

Reviewed 2023

APGAR SCORING CHART

Sign	0	1	2	1 minute	5 minute
Appearance (color)	Blue or Pale	Body pink with blue extremities	Completely pink		
Pulse (Heart rate)	Absent	<100	>100		
Grimace (irritability)	No Response	Some motion, or crying	Vigorous crying		
Activity	Flaccid or limp	Poor	Active motion		
Respiratory Effort	Absent	Slow, irregular	Good effort, crying		

ABNORMAL DELIVERY

NOTE: Rapid transport to an appropriate receiving facility is indicated for any abnormal presentation or other condition causing prolonged labor.

FR/BLS TREATMENT:

1. **INITIAL MEDICAL CARE.**
2. Exam perineum.
3. If prolapsed cord is noted:
 - a. Assist mother to flex her knees on her chest.
 - b. Insert a sterile gloved hand into the vagina and lift baby off the umbilical cord.
 - c. **DO NOT REMOVE YOUR HAND.**
 - d. Cover exposed portion of cord with saline-moistened sterile dressing.
4. If breech presentation is noted and labor has stopped:
 - a. Insert sterile gloved hand into vagina forming a “V” around baby’s nose during delivery of the head following delivery of the body.
5. If breech delivery is imminent:
 - a. Deliver with steady traction to the shoulder level. Sweep each arm over the chest.
 - b. Deliver the head with traction and extension.
6. If shoulder dystocia noted:
 - a. If head is delivered, apply steady downward and posterior traction. This may dislodge shoulder.
 - b. If shoulder not dislodged, flex patient’s knees on her abdomen and continue steady traction.
 - c. If a second provider is available, have them push straight down on the pubic symphysis to help dislodge the shoulder.
7. Clamp and cut the cord as soon as time allows after cord stops pulsating.
8. Resuscitate if needed.
9. Call for intercept per INTERCEPT CRITERIA.

ILS/ALS TREATMENT:

1. Continue **FR/BLS TREATMENT**.
 2. Assess fetal heart tones via Doppler if available.
 3. Consider IV NS KVO or 20 ml/kg fluid bolus to maintain SBP of 90-100.
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MECONIUM ASPIRATION

NOTE: It may not be possible to clear the airway of all meconium before the need to initiate ventilation.

FR/BLS TREATMENT:

1. Complete delivery.
2. If baby cries right away begin routine neonatal care. *This is true even if meconium is present.*
3. If baby does not cry, and thick/particulate meconium present after delivery:
 - a. Continue to suction the airway until clear.
 - b. Ventilate between suctioning attempts with BVM if needed.
4. Record APGAR score at 1 and 5 minutes.
5. Continue routine neonatal care; dry, warm, position, suction and stimulate.
6. Administer supplemental OXYGEN as needed. If respirations are inadequate and/or heart rate is <100, refer to the NEONATAL RESUSCITATION protocol.
7. Initiate transport** and call for intercept per INTERCEPT CRITERIA.
8. Contact Medical Control.

ILS/ALS TREATMENT:

1. Continue **FR/BLS TREATMENT**.
2. If baby does not cry right away and meconium is thick and particulate:
 - a. Visualize the hypopharynx with a laryngoscope.
 - b. Remove any residual meconium with large bore catheter.
 - c. Intubate the trachea with ET tube and meconium aspiration adapter.
 - d. Apply suction to the ET tube (no more than 100 mm Hg) and slowly remove the ET tube from the trachea.
 - e. Re-intubate with a new ET tube and repeat suctioning until aspiration material is clear.
3. If infant is unstable, ventilation may be required prior to removal of all meconium.
4. Proceed with neonatal resuscitation as needed.

**** Only if transporting agency**

NEONATAL RESUSCITATION

NOTE: Priorities for neonatal resuscitation include management of airway, breathing, circulation and temperature maintenance.

FR/BLS TREATMENT:

1. Dry neonate thoroughly and keep warm throughout transport.
2. Position and suction mouth, then nose as needed.
3. Gentle stimulation and repositioning as needed.
4. If meconium staining is present, refer to MECONIUM ASPIRATION protocol.
5. Evaluate respirations.
 - a. If respirations are adequate but cyanosis is present, administer supplemental OXYGEN by blow by technique.
 - b. If supplemental oxygen, BVM ventilation, or persistent cyanosis is present, apply pulse oximeter to right upper extremity (pre-ductal). For up to 10 minutes after birth, it may be NORMAL for SpO₂ to be 70-80%. Newborn heart rate is best predictor of oxygenation and response to resuscitation.
 - c. If neonate is apneic or respirations are inadequate, ventilate with BVM and 100% oxygen at 40-60 breaths/minute.
 - d. Reassess every 30 seconds.
6. Evaluate heart rate.
 - a. If heart rate is > 100, monitor and transport.
 - b. If heart rate is < 100, ventilate with BVM and 100% oxygen.
 - c. If heart rate <60, continue ventilation at 40-60/min and administer chest compressions, ratio of 3:1 compressions to ventilations (120/min).
7. Evaluate skin color:
 - a. If skin is pink or pink with peripheral cyanosis, monitor.
 - b. If skin is cyanotic throughout, administer supplemental OXYGEN by blow-by technique.
8. Initiate transport. ** Call for intercept per INTERCEPT CRITERIA.
9. Contact Medical Control.

ILS/ALS TREATMENT:

1. Continue **FR/BLS TREATMENT**.
 2. If unable to manually ventilate, consider intubation and refer to PEDIATRIC UNIVERSAL AIRWAY MANAGEMENT Algorithm
 3. If heart rate < 60 despite ventilations and chest compressions,
 - a. Continue ventilations and chest compressions and consider endotracheal intubation.
 - b. Administer EPINEPHRINE (1:10,000) 0.01 mg/kg ET/IV/IO every 3-5 minutes, as needed.
 - c. Establish vascular access.
 - d. NS at KVO; consider fluid bolus of 10 ml/kg.
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3. Consider NARCAN 0.1 mg/kg ET/IV/IO/SQ.

****Only if transporting agency**

NORMAL DELIVERY

EXCLUSIONS:

1. Pre-term labor
2. Abnormal presentation (i.e. breech, prolapsed cord, limb)

FR/BLS TREATMENT:

1. **INITIAL MEDICAL CARE.**
2. Exam perineum for crowning.
3. If crowning is not present:
 - a. Prepare for transport. Consider transporting patient in left lateral recumbent position if able.
 - b. Frequently reassess for crowning.
4. If crowning present, prepare for delivery.
 - a. Encourage the patient to perform slow steady pushes with contractions.
 - a. Support the head with gentle pressure as it presents.
 - b. After delivery of head, suction airway orally then nasally.
 - c. Check for and reduce a nuchal cord if present
 - d. Keep baby positioned level with mother's heart until cord is cut.
 - e. Place baby on maternal chest / abdomen for warmth, skin to skin contact (if applicable).
5. Deliver infant normally and record APGAR scores at 1 and 5 minutes.
6. Provide routine neonatal care (dry, warm, position, suction, stimulate).
7. The cord should be clamped, and then cut after pulsations of the cord stop.
8. Wrap baby to preserve warmth, and place on mother's abdomen or chest.
9. Consider massaging uterus to control bleeding.
10. Consider placenta delivery if extended ETA. **Never pull on cord in an attempt to hasten delivery.**
11. Call for intercept per INTERCEPT CRITERIA.

ILS/ALS TREATMENT:

1. Continue **FR/BLS TREATMENT.**
 2. Consider IV NS KVO or 20 ml/kg fluid bolus to maintain SBP of 90-100.
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PRE-ECLAMPSIA

NOTE: If seizure activity occurs in the pre-eclamptic patient, refer to the Seizure protocol and contact Medical Control.

CRITERIA:

1. Last trimester through 2 weeks following delivery with both of the following:
 - a. SBP > 140/90
 - b. Facial or extremity edema

FR/BLS TREATMENT:

1. **INITIAL MEDICAL CARE.**
 2. Assessment and history; attempt to minimize external stimuli.
 3. Place patient in left lateral recumbent position.
 4. Call for intercept per INTERCEPT CRITERIA.
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ILS/ALS TREATMENT:

1. Continue **FR/BLS TREATMENT.**
 2. NS KVO or saline lock.
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3. **ALS ONLY:** Medical control may consider MAGNESIUM SULFATE

PRE-TERM LABOR/DELIVERY

NOTE: If pre-term delivery occurs, refer to neonatal resuscitation protocol as needed.

CRITERIA:

1. Less than 36 weeks gestation
2. Contractions regular.

EXCLUSION:

1. Abnormal presentation

FR/BLS TREATMENT:

1. **INITIAL MEDICAL CARE.**
2. Exam perineum for crowning.
3. Obtain history of pregnancy and pre-natal care.
4. Place patient in left lateral recumbent position.
5. Refer to NORMAL DELIVERY protocol if needed.
6. Call for intercept per INTERCEPT CRITERIA.

ILS/ALS TREATMENT:

1. Continue **FR/BLS TREATMENT.**
 2. NS at KVO or saline lock.
 3. If bleeding develops, consider 20 ml/kg fluid bolus of NS to maintain SBP of 90-100.
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VAGINAL BLEEDING

FR/BLS TREATMENT:

1. **INITIAL MEDICAL CARE.**
 2. Exam perineum.
 3. Obtain history of pregnancy and pre-natal care.
 4. Massage uterus if bleeding is post-delivery.
 5. Place patient in left lateral position and elevate legs if able.
 6. Call for intercept per INTERCEPT CRITERIA.
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ILS/ALS TREATMENT:

1. Continue **FR/BLS TREATMENT**.
 2. Administer 20 ml/kg NS or LR fluid bolus to maintain SBP 90-100.
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