Labor and Fetal Monitoring

Stages of labor, FHR strips, VEAL CHOP, NICHD categories, postpartum checks and Rh immune globulin

STAGES OF LABOR

STAGE	SPAN	KEY POINTS
1: latent	Onset to 6 cm	Contractions become regular
1: active	6 to 10 cm	Every 2 to 5 min, about 60 s each
2	10 cm to birth	Prolonged: over 3 h pushing (nullipara), 2 h (multipara)
3	Birth to placenta	Usually 5 to 30 min; longer raises bleeding risk
4	1 to 4 h after placenta	VS, fundus every 15 min for 1 h, then every 30 min

Tachysystole: more than 5 contractions in 10 min, averaged over 30 min.

Older review books: active 4 to 7, transition 8 to 10 cm.

READING THE FHR STRIP

FEATURE	DEFINITION	MEANING
Baseline	Mean FHR over 10 min	Normal 110 to 160 bpm
Tachycardia	Over 160 for 10 min	Maternal fever, terbutaline, fetal hypoxia
Bradycardia	Under 110 for 10 min	Hypotension, cord prolapse, abruption
Variability	Absent, minimal (1 to 5), moderate (6 to 25), marked (over 25)	Moderate is normal
Accelerations	Up 15 bpm for 15 s (10 for 10 s before 32 weeks)	Reassuring

EXAM TIP Moderate variability or accelerations: not acidemic now. Minimal variability may be sleep, opioids or magnesium.

DECELERATIONS AND VEAL CHOP

VEAL CHOP: Variable = Cord, Early = Head, Accelerations = OK, Late = Placenta.

TYPE	SHAPE	CAUSE	ACTION
Early	Gradual; mirrors the contraction	Head compression	None; document
Late	Gradual; nadir after the contraction peak	Placental insufficiency	Resuscitate; notify
Variable	Abrupt; down 15 or more for 15 s to under 2 min	Cord compression	Reposition; check for prolapse
Prolonged	Down 15 or more for 2 to under 10 min	Hypotension, tachysystole, prolapse, abruption	Resuscitate; notify now

Gradual: 30 s or more to nadir; abrupt: under 30 s. Recurrent: with half or more of contractions in 20 min.

EXAM TIP Late decelerations on oxytocin: stop it first, then reposition, give fluids and notify.

NICHD CATEGORIES AND RESUSCITATION

CATEGORY	CRITERIA	MEANING
I	110 to 160, moderate variability, no late or variable decels	Normal
II	Not I or III (tachycardia, minimal variability, prolonged decel)	Evaluate, treat the cause, notify; resuscitate if no accels or moderate variability
III	Absent variability with recurrent lates, recurrent variables or bradycardia; or sinusoidal	Resuscitate; expedite birth

- Stop or reduce oxytocin
- Lateral position; avoid supine (vena cava compression)
- IV bolus, often 500 to 1,000 mL LR; epidural hypotension: vasopressor per order
- Vaginal exam for prolapse (RN); rule out maternal pulse
- Tachysystole that persists off oxytocin: terbutaline 0.25 mg subcut per order
- Recurrent variables: amnioinfusion per provider
- Notify the provider; document; reassess

Doses: follow your institution's protocols. Oxygen: ACOG (2025) advises against routine use without maternal hypoxia; older books still list it. LPN/LVN scope (varies by state): recognize, reposition and report to the RN, who interprets and calls the provider.

SAFETY Sudden bradycardia after membranes rupture: check for prolapse. Hold the presenting part off the cord; knee-chest or head-down; minimal cord handling, never push it back; call for emergency cesarean.

POSTPARTUM ASSESSMENT (BUBBLE-HE)

- Breasts: filling, nipples, latch
- Uterus: firm, midline, height
- Bladder, bowel: voiding, distention
- Lochia: color, amount, odor, clots
- Episiotomy: redness, edema, hematoma
- Homans/extremities: DVT signs (Homans unreliable)
- Emotions: bonding, blues versus depression

TIME	FUNDUS	LOCHIA
After placenta	Firm, midline, not above the umbilicus	Rubra
Days 1 to 3	Stays firm; descends about 1 cm (a fingerbreadth) a day (classic teaching)	Rubra, red
Days 4 to 10	About midway to the symphysis by day 5 to 7	Serosa, pink-brown
To 6 weeks	Not palpable by 2 weeks; prepregnant size by 4 to 6 weeks	Alba, yellow-white, to 4 to 6 weeks

SAFETY Boggy fundus (atony, top cause of hemorrhage): massage until firm, empty the bladder; still boggy: notify, uterotonics per order. High, deviated fundus: full bladder. Report more than 1 pad an hour, clots bigger than a golf ball, or bright red trickle with a firm fundus (laceration). Hemorrhage: 1,000 mL or more in 24 h, or hypovolemia signs (older texts: over 500 mL vaginal).

RH IMMUNE GLOBULIN

- Who: Rh-negative, not sensitized (negative antibody screen)
- 28 weeks: 300 mcg IM
- Within 72 h of birth of an Rh-positive newborn
- Within 72 h of: bleeding after 20 weeks, abdominal trauma, amniocentesis or CVS, external version, ectopic
- Loss at 12 weeks or more (earlier: provider decides)
- Large fetal bleed: Kleihauer-Betke test sizes extra doses
- Mother only, never the newborn; follow your institution's protocols

EXAM TIP Exam setup: Rh-negative mother, negative indirect Coombs; Rh-positive newborn, negative direct Coombs. Give within 72 h; repeat each pregnancy.

Sources (15) are listed with links at rnbasics.com/sheets/maternity-fetal-monitoring.html. For education and exam preparation only. Not medical advice; follow current guidelines and your institution's protocols. RN Basics is an independent study aid not affiliated with any certifying body.