NCLEX 2026 • NGN

MATERNITY / ANTEPARTUM & INTRAPARTUM ASSESSMENT

Fetal Presentations, FHT Location & Leopold Maneuvers

Identification of fetal lie, presentation, position, and attitude — plus where to auscultate fetal heart tones and how to perform the four Leopold maneuvers with NCLEX-aligned nursing care.

SOURCE TRANSPARENCY

This topic is not present in your uploaded personal notes. Content is synthesized from standard NCLEX references: Saunders Comprehensive Review for the NCLEX-RN 2026 (Silvestri), ATI Maternal Newborn Nursing, Lippincott Manual of Nursing Practice, AWHONN Perinatal Nursing (5th ed.), and ACOG/AWHONN intrapartum assessment standards.

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Definition & Key Terms

Four fetal descriptors must be assessed before and during labor. They guide labor progression, route of delivery, and where to listen for fetal heart tones (FHT).

FETAL LIE

Spine vs. mother's spine

- **Longitudinal** (parallel) — normal
- **Transverse** (perpendicular) — requires C-section
- **Oblique** (at an angle) — unstable

PRESENTATION

Body part entering pelvis first

- **Cephalic** (head) — 96%
- **Breech** (buttocks/feet) — 3–4%
- **Shoulder** — <1%

POSITION

Presenting part vs. maternal pelvis

3-letter code: `L / R` `O / S / M / A` `A / P / T` — e.g., **LOA** = ideal.

ATTITUDE

Relation of fetal parts to each other

- **Flexion** (chin to chest) — ideal
- **Extension** — face/brow presentation, dystocia

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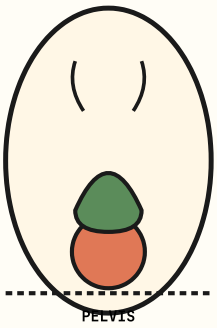
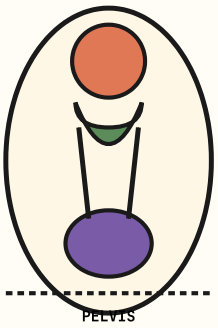
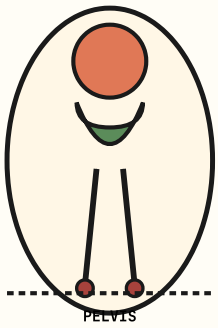
Types of Fetal Presentations



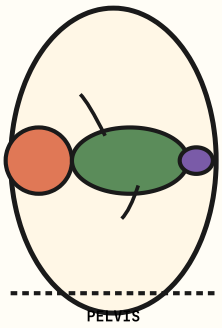
CEPHALIC (VERTEX)
96% — IDEAL



FRANK BREECH
HIPS FLEXED, KNEES EXTENDED



FOOTLING BREECH
ONE OR BOTH FEET DOWN



SHOULDER / TRANSVERSE
⚠ C-SECTION REQUIRED

PRESENTATION	FREQUENCY	PRESENTING LANDMARK	VAGINAL DELIVERY?
Cephalic – Vertex (occiput)	96%	Occiput (O)	✓ Yes — optimal
Cephalic – Brow	Rare	Sinciput	Often C/S
Cephalic – Face	Rare	Mentum (M)	Only if mentum anterior
Breech (Frank / Complete / Footling)	3–4%	Sacrum (S)	C/S preferred
Shoulder (transverse lie)	<1%	Acromion (A)	✗ C-section required

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Fetal Position — Three-Letter Code

Position describes the relationship of the **presenting part's landmark** to the **maternal pelvis**. Always written as 3 letters.

1ST LETTER — SIDE

L or R

Left or **R**ight side of mother's pelvis

2ND LETTER — LANDMARK

O / S / M / A

Occiput · **S**acrum · **M**entum · **A**cromion

3RD LETTER — PELVIS

A / P / T

Anterior · **P**osterior · **T**ransverse of maternal pelvis

CODE	MEANING	SIGNIFICANCE
LOA	Left Occiput Anterior	**Most common, ideal** — easiest labor
ROA	Right Occiput Anterior	Also favorable
LOP / ROP	Occiput Posterior	"Back labor" — prolonged, painful; may need rotation
LSA / RSA	Sacrum Anterior (breech)	Breech — C/S indicated
LMA / RMP	Mentum (chin)	Face presentation — vaginal birth only if mentum anterior

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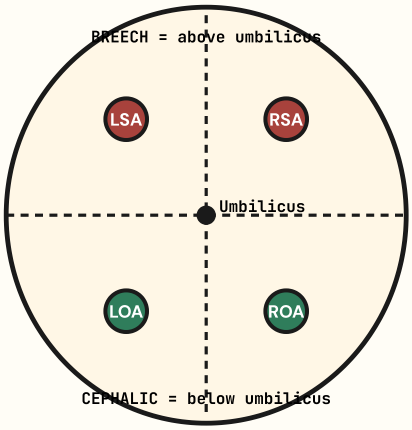
Fetal Heart Tone (FHT) Auscultation Location

FHT is heard best **through the fetal back**. Location on the maternal abdomen depends on presentation and position.



FHT LOCATION MAP — MATERNAL ABDOMEN (4 QUADRANTS)

Quick Rule

Cephalic → FHT **below** the umbilicus (LLQ or RLQ)
Breech → FHT **above** the umbilicus (LUQ or RUQ)
Transverse → FHT at/just below umbilicus, midline

Normal FHR Parameters

- **Baseline FHR:** 110–160 bpm
- **Tachycardia:** >160 × 10 min (fever, hypoxia, maternal stimulants)
- **Bradycardia:** <110 × 10 min (head compression, hypoxia) 🚨
- **Auscultate q30 min** active labor / q15 min 2nd stage (low-risk)

Equipment: Doppler ultrasound (most common), DeLee fetoscope, or external EFM transducer. Place transducer over the location of the fetal back as identified by Leopold's.

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Leopold's Maneuvers — The Four Steps

Four systematic external abdominal palpations to determine fetal **lie, presentation, position, attitude, and engagement** — performed after 36 weeks and before FHT auscultation.

Pre-Procedure Setup (Nursing Care): ① Have client **empty bladder** first (comfort + accurate palpation) · ② Position **supine** with knees slightly flexed · ③ Place a **wedge under right hip** (left lateral tilt) to prevent supine hypotensive syndrome · ④ **Warm your hands** (cold hands cause uterine contraction) · ⑤ Drape for privacy · ⑥ Explain procedure.

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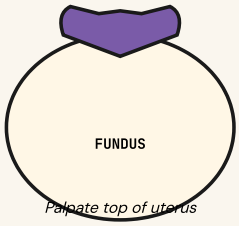
Fundal Grip — What's on Top?



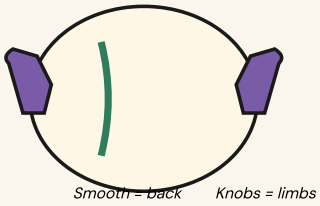
Both hands at fundus. Determine what's there:

- **Head** = hard, round, firm, *ballotable*
- **Breech** = soft, irregular, less defined, not ballotable

Identifies: Fetal lie + presentation

2

Umbilical / Lateral Grip — Where's the Back?



Hands on both sides of abdomen. One palm steadies while the other palpates:

- **Smooth, firm, convex** = fetal *back*
- **Irregular, knobby, ballotable** = small parts (arms/legs)

Identifies: Position (L vs R) — *and where to put the Doppler!*

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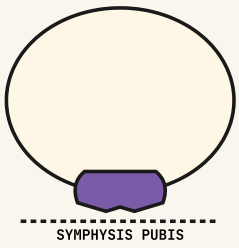
Pawlik's Grip — What's the Presenting Part?



One hand grasps lower abdomen above symphysis pubis using thumb and fingers:

- **Hard + round** = head (cephalic)
- **Soft + irregular** = breech
- **Moves freely** = not engaged · **Fixed** = engaged

Identifies: Presenting part + engagement

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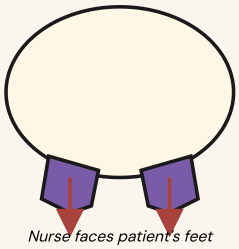
Pelvic Grip — Attitude & Cephalic Prominence



Nurse faces patient's feet. Both hands slide down sides toward pelvic inlet:

- Cephalic prominence on **same side as small parts** = *flexion* (ideal)
- Cephalic prominence on **same side as back** = *extension* (face/brow)

Identifies: Attitude + degree of descent

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Priority Nursing Interventions (ABC + Safety)

Before & During Leopold's

- **Assess** gestational age (Leopold's done after 36 weeks for accuracy)
- **Have client void** — full bladder distorts palpation and causes discomfort
- **Position supine with wedge under right hip** to prevent vena cava compression / supine hypotensive syndrome (left lateral tilt)
- **Warm hands** — cold triggers uterine contractions
- **Observe abdomen first** — note shape, scars, striae, fetal movement
- **Perform between contractions** if in labor

After Leopold's

- **Auscultate FHT** over the fetal back (identified in Maneuver 2)
- **Document:** lie, presentation, position, attitude, engagement, EFW (estimated fetal weight), FHR
- **Compare** fundal height with gestational age (McDonald's rule)
- **Notify HCP** if malpresentation (breech, transverse) → may need ECV or C/S
- **Monitor** for contractions, fetal movement, and any complaints of pain

🚨 **RED FLAGS — Notify HCP immediately:** Transverse lie at term · Footling breech in labor · FHR <110 or >160 sustained · Absent FHT · Decreased fetal movement · Cord palpated/visualized (prolapse) — knee-chest or Trendelenburg position immediately

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NCLEX Test Traps — Wrong vs. Right

✗ "Auscultate FHT at the umbilicus for every patient."
✓ FHT location depends on presentation. Cephalic = below umbilicus; breech = above; transverse = at midline.

✗ Confusing fetal *lie* with fetal *presentation*.
✓ Lie = spine-to-spine (longitudinal/transverse). Presentation = part entering pelvis first (cephalic/breech/shoulder).

✗ Performing Leopold's with a full bladder.
✓ Always have client void first — full bladder distorts palpation findings and increases discomfort.

✗ Positioning the laboring client flat supine.
✓ Place a wedge under the right hip → left lateral tilt to prevent supine hypotensive syndrome (compression of vena cava by gravid uterus).

✗ Assuming LOP is "fine because the head is down."
✓ Occiput posterior causes "back labor," prolonged labor, and increased need for rotation — flag for the provider.

✗ Reading the 3-letter code in the wrong order.
✓ Always: Side → Landmark → Pelvis (e.g., L-O-A = Left-Occiput-Anterior).

✗ Skipping Leopold's before EFM application.
✓ Leopold's tells you *where* to place the Doppler/ultrasound transducer — over the fetal back.

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Patient & Family Education

What to Expect

- Empty bladder before the exam for comfort and accuracy
- Procedure takes ~3–5 minutes; nurse will palpate in 4 areas
- You'll feel pressure but it should not be painful — speak up if it is
- Most babies turn head-down by 36 weeks on their own

If Malpresentation Found

- **Breech at 36–37 wks:** Provider may offer *ECV* (external cephalic version) to turn baby
- Discuss pelvic tilts, knee-chest position, side-lying with provider
- Understand birth plan may include C-section

Warning Signs — Call Provider

- Decreased fetal movement (<10 kicks in 2 hr)
- Vaginal bleeding or fluid leakage
- Sudden severe abdominal pain
- Persistent contractions before 37 weeks
- Feeling "something" in the vagina (possible cord prolapse — emergency)

Position Comfort

- Sleep on the **left side** after 20 weeks (best uterine perfusion)
- Use pillows between knees for hip support
- Avoid prolonged flat supine — risk of supine hypotensive syndrome

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Memory Boosters & Mnemonics

4 LEOPOLD STEPS

"Fundus → Sides → Pubis → Pelvis"

F-S-P-P. Top → middle → just-above-pubis → deep pelvic descent.

FHT QUICK RULE

"Head Down = Heart Low"

Cephalic → listen **below** umbilicus. Breech → listen **above**.

POSITION CODE

"Side-Spot-Spot"

1st = mother's **S**ide · 2nd = baby's landmark **S**pot · 3rd = pelvic **S**pot.

BREECH TYPES

"Frank, Full, Foot"

Frank = legs up (most common). **Complete** = cannonball. **Footling** = foot first (highest cord prolapse risk).

PRE-LEOPOLD SETUP

"BLEW" — Bladder Empty, Lay supine + wedge, Explain, Warm hands

Don't blow the assessment — set up first.

IDEAL POSITION

"LOA = Lady's Optimal Arrival"

Left Occiput Anterior — head down, facing mom's right side, occiput toward front. Best for vaginal birth.

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NCJMM Clinical Judgment Scenario (Six-Step)

Case: A 28-year-old G2P1 at 38 weeks gestation presents to L&D for evaluation of contractions. Vital signs: BP 118/72, HR 84, RR 18, T 98.6°F. FHR has not yet been located. The nurse prepares to perform Leopold's maneuvers.

STEP 1 · RECOGNIZE CUES

G2P1, term gestation, contractions present, FHT not yet auscultated. Patient needs immediate fetal assessment and positional identification. Bladder fullness, maternal position, and hand temperature all influence accuracy.

STEP 2 · ANALYZE CUES

Without knowing presentation, FHT cannot be reliably located. Supine positioning at this gestation risks supine hypotensive syndrome. Cold hands could trigger contractions during palpation.

STEP 3 · PRIORITIZE HYPOTHESES

Priority 1: Determine fetal lie/presentation/position to locate FHT. **Priority 2:** Prevent maternal hypotension and fetal compromise. **Priority 3:** Identify any malpresentation requiring HCP notification.

STEP 4 · GENERATE SOLUTIONS

Have client void → position supine with right-hip wedge → warm hands → perform all 4 Leopold's between contractions → use Maneuver 2 findings to place Doppler over the fetal back → auscultate FHT → document complete assessment.

STEP 5 · TAKE ACTION

Nurse performs Leopold's: Maneuver 1 reveals soft, irregular fundus (= breech). Maneuver 2 → fetal back palpated on maternal right side. Maneuver 3 → hard round head at fundus, confirmed. **Presentation: breech, position RSA.** FHT auscultated in RUQ at 142 bpm. Nurse notifies HCP of malpresentation.

STEP 6 · EVALUATE OUTCOMES

FHT located and within normal limits (110–160). Maternal BP stable due to lateral tilt. HCP notified of breech presentation; ultrasound ordered to confirm; ECV vs. C-section discussed with patient. Documentation complete: lie/presentation/position/FHR/maternal response.