

NCC EFM Exam Breakdown & Study Guide

1. **Content on exam:** -Pattern recognition & intervention: 70%

- Physiology: 11%
- Fetal assessment methods: 9%
- EFM equipment: 5%
- Professional issues: 5%

2. **Pattern recognition & intervention:** -FHR baseline

- FHR variability
- FHR accelerations
- FHR decelerations
- Normal uterine activity
- Abnormal uterine activity
- Fetal dysrhythmias
- Maternal complications
- Uteroplacental complications
- Fetal complications

learnexams

3. **FHR Descriptors:** 1) Baseline

- 2) Variability
- 3) Presence of accels
- 4) Presence of decels

5) Changes in trends overtime

4. **FHR Baseline:** Average FHR rounded to nearest 5 during a 10 min window

-110 to 160

-excludes accels, decels, & marked variability

-must have 2 mins to identify as a baseline (doesn't need to be continuous)

5. **Fetal Bradycardia:** <110 for e10 min

-Causes: hypotension (ex: after epi), cord prolapse, head compression, congenital defect, rapid descent, abruption or rupture, tachysystole, post dates, hypoglycemia, lupus (heart block)

-With " O₂, blood will be shunted to brain, heart, & adrenals, eventually " FHR to " O₂ demands of heart muscle

-Verify not mom's HR, vaginal exam (r/o prolapse), resuscitate, evaluate arrhythmia, expedite delivery

6. **Fetal Tachycardia:** >160 for e10 min

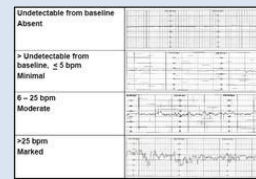
-Causes: fetal anemia, maternal fever or infection, fetal immaturity (preterm), SVT, maternal anxiety (catecholamines), dehydration, hyperthyroid, hypoxia

-Med causes: terbutaline, catecholamines (epinephrine, norepi)

-Assess mom's temp & infection risk (GBS, PROM)

7. **FHR Variability:** Irregular in amplitude & frequency, quantified by peak to trough

- Caused by sympathetic vs parasympathetic, r/t neuro maturity
- Less in preterm due to undeveloped CNS
- Absent: undetectable, flat
- Minimal: ≤ 5 bpm but detectable
- Moderate: 6-25 bpm
- Marked: >25 bpm (indeterminate baseline), significance unknown



8. **Minimal variability:** ≤ 5 bpm but detectable

Sleep, sedated, or sick

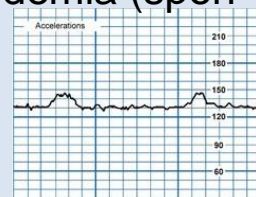
- Sleep cycle: 20-60 mins
- Sedated: CNS depressant (ex: mag), 1-2 hrs
- Sick (acidemia): unresolved w intervention
- Priority: maximize oxygenation (position, bolus, O2 if needed)

9. **Moderate variability:** 6 to 25 bpm

- Reliably predicts the absence of metabolic acidosis (even w decels)

10. **FHR Accelerations:** Reliably predicts absence of metabolic acidemia (spontaneous or stimulated)

- Onset to peak in <30 sec
- For ≥ 32 wks: 15x15 (peak ≥ 15 bpm above baseline lasting ≥ 15 sec)
- For <32 wks: 10x10
- Prolonged accel: 2-9 mins (at 10 becomes change of baseline)



11. **Early deceleration:** Nadir aligns w contraction peak, gradual onset (≥ 30 secs to nadir), benign vagal response

- 1) Pressure on fetal head

