

Fetal Heart Rate Variability
Moderate or Marked

Significant Decelerations with >50% of contractions for 30 minutes

YES - Perform intrauterine resuscitation and notify provider

NO
- Reassess every 15 minutes

Dilation <6cm

Dilation ≥6cm

Second stage

Pattern continues?

Normal Labor Progress?

Normal Labor Progress?

YES
- Prepare for Cesarean Birth

NO
- reassess every 15 minutes

YES -
reassess every 15 minutes

NO -
Operative Birth

YES -
reassess every 15 minutes, Evaluate for OVB

NO -
Operative Birth

Operative Birth

Fetal Heart Rate Variability **Minimal**
or Absent



Perform intrauterine resuscitation and notify provider



Significant Decelerations with >30% of contractions for 30 minutes



YES – Assemble team for operative birth. Observe for 30 minutes



NO – Further evaluation and notify provider



Pattern continues?



Pattern continues?



YES
– Operative Birth



NO
– reassess every 15 minutes



YES – Assemble team for operative birth. Observe for 30 minutes



NO
– reassess every 15 minutes



Pattern continues?



YES
– Operative Birth



NO
– reassess every 15 minutes

Category 2 Fetal Heart Rate definitions

1. **Significant Decelerations** are defined as:
 - Variable decelerations lasting >60 seconds with nadir more than 60BPM below baseline
 - Variable decelerations lasting >60 seconds with nadir below 60BPM, regardless of baseline
 - Any late decelerations
2. **Intrauterine Resuscitation** includes measures to improve utero-placental perfusion and maternal/fetal oxygenation. This may consist of:
 - Repositioning the patient
 - Administration of supplemental oxygen if maternal saturation is <95%
 - Administration of IV fluid bolus
 - Reduce oxytocin by half if tachysystole and Category I pattern
 - Discontinue oxytocin if tachysystole and persistent Category II pattern
 - Consider administration of tocolytic (Terbutaline)
 - Consider alpha-adrenergic agonist (phenylephrine) if recent epidural and change in vital signs
 - Consider amnio-infusion for severe variable decelerations
3. **Normal Labor Progress** is:
 - In the active first stage of labor (≥ 6 cm dilation) dilation of ≥ 1 cm/h
 - In the second stage of labor (pushing) as progressive fetal descent. Advise to limit second stage to 1.5 hours in setting of Category II FHR tracing with moderate variability and significant decelerations

Category 2 Fetal Heart Rate definitions (continued)

4. Criteria for **Operative Vaginal Birth** include:
 - Fetal station at +2 or lower and identification of fetal position
 - Adequate maternal pelvis for estimated fetal size
 - Adequate maternal analgesia
 - Emptied maternal bladder
 - Informed consent
 - Availability of immediate Cesarean birth if OVB attempt fails

Notes on use of the algorithm:

- The FHR pattern is to be assessed over a 30-minute time period within this algorithm when making care decisions
- The algorithm is intended to guide care for late preterm or term infants (>34 weeks)
- If at any time the tracing reverts to Category I or III pattern, then abandon the algorithm
- Clinicians may abandon the algorithm if their clinical judgement is that further interventions are necessary

Adapted from: Shields LE, Wiesner S, Klein C, Pelletreau B, Hedriana HL. A Standardized Approach for Category II Fetal Heart Rate with Significant Decelerations: Maternal and Neonatal Outcomes. *Am J Perinatol.* 2018;35(14):1405-1410. doi:10.1055/s-0038-1660459