



POSITION STATEMENT

Standard Nomenclature for Intrapartum Fetal Heart Rate Surveillance

The American College of Nurse-Midwives (ACNM) maintains the following:

- Evaluation of the fetal heart rate provides essential information for risk assessment during labor and birth.
- Standard nomenclature should be used to communicate all critical, clinical assessment values.
- Effective and seamless communication among health care providers is a key patient safety goal, and the adoption of standard nomenclature for critical, clinical data supports this objective.
- Research is needed to determine risks and benefits of continuous, electronic, fetal heart rate monitoring and intermittent fetal heart rate auscultation, particularly in low-risk labors.

Background

Multiple methods of surveillance of the fetus's heart rate are used during labor, including intermittent Doppler or ultrasound; continuous, electronic, fetal heart rate monitoring; and intermittent fetal heart rate auscultation. In the case of electronic, fetal heart rate monitoring, definitions were established in 1997 and updated in 2008 by a multidisciplinary panel convened under the auspices of the National Institute of Child Health and Human Development (NICHD).¹ These definitions are now commonly referred to as the NICHD nomenclature, and they provide clinicians with a clear set of objective definitions for terms used during electronic, fetal monitoring (see Table 1). Standardization of this nomenclature has been recognized by experts and professional organizations as crucial to communication and collaboration between all members of the health care team.²

Routine use of continuous, electronic, fetal heart rate monitoring has not been shown to improve infant mortality rates and has been associated with increased rates of interventions such as instrumental and cesarean birth.^{3,4} However, when continuous, electronic, fetal heart rate monitoring is used, ACNM supports use of the NICHD nomenclature to promote meaningful, collaborative practice within the team framework of perinatal care and to build a culture of safety for mothers and infants. ACNM encourages the use of intermittent auscultation as the standard of care for women with low-risk pregnancies. Midwives should follow practice guidelines for intermittent auscultation that include protocols for frequency, technique, and documentation and recommendation on when to change to continuous, electronic, fetal heart rate monitoring.⁵ Furthermore, ACNM encourages multidisciplinary, evidence-based education and competency assessment in fetal heart rate evaluation for all members of the perinatal health care team.

REFERENCES

1. Macones GA, Hankins GD, Spong CY, Hauth J, Moore T. The 2008 National Institute of Child Health and Human Development Research Workshop report on electronic fetal heart rate monitoring. *Obstet Gynecol.* 2008;112:661-666.

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3. Alfirevic Z, Dclan D, Gyte G ML, Cuthbert A. Continuous cardiocartography as a form of electronic fetal monitoring (EFM) for fetal assessment during labour. *Cochrane Database Syst Rev.* 2017;2:CD006066. doi: 10.1002/14651858.CD006066.pub3.
4. Paterno MT, McElroy K, Regan M. Electronic fetal monitoring and cesarean birth: a scoping review. *Birth.* 2016;43:277-284.
5. American College of Nurse-Midwives. Intermittent auscultation for intrapartum fetal heart rate surveillance: clinical bulletin no. 60. *J Midwifery Womens Health.* 2015;60(5):626-632.

Source: Division of Standards and Practice

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Table 1. NICHD Terminology for Fetal Heart Rate (FHR) Characteristics

| Term | Definition |
|------------------------|--|
| Baseline Rate | Mean FHR rounded to increments of 5 bpm during a 10-minute segment excluding periodic or episodic changes, periods of marked variability, and segments of baseline that differ by > 25 bpm. Duration must be \geq 2 minutes |
| Bradycardia | Baseline rate of < 110 bpm for \geq 10 minutes |
| Tachycardia | Baseline rate of > 160 bpm for \geq 10 minutes |
| Variability | Fluctuations in the baseline FHR of 2 cycles/minute or greater. Visually quantitated as the amplitude of the peak-to-trough in BPM |
| Absent variability | Amplitude from peak to trough undetectable |
| Minimal variability | Amplitude from peak to trough > undetectable and \leq 5 bpm |
| Moderate variability | Amplitude from peak to trough 6-25 bpm |
| Marked variability | Amplitude from peak to trough > 25 bpm |
| Acceleration | Visually apparent abrupt increase (onset to peak is < 30 sec.) of FHR above baseline. Peak is \geq 15 bpm. Duration is \geq 15 bpm and < 2 minutes. In gestations < 32 weeks, peak of 10 bpm and duration of 10 seconds is acceleration |
| Prolonged acceleration | Acceleration > 2 minutes and < 10 minutes duration |
| Early deceleration | Visually apparent gradual decrease (onset to nadir is \geq 30 sec.) of FHR below baseline. Return to baseline associated with a uterine contraction. Nadir of deceleration occurs at the same time as the peak of the contraction. Generally, the onset, nadir and recovery of the deceleration occur at the same time as the onset, peak, and recovery of the contraction |
| Late deceleration | Visually apparent gradual decrease (onset to nadir is \geq 30 sec.) of FHR below baseline. Return to baseline associated with a uterine contraction. Nadir of deceleration occurs after the peak of the contraction. Generally, the onset, nadir, and recovery of the deceleration occur after same time as the onset, peak, and recovery of the contraction |
| Variable deceleration | Visually apparent abrupt decrease (onset to nadir is < 30 sec.) in FHR below baseline. Decrease is \geq 15 bpm. Duration is \geq 15 seconds and < 2 minutes |
| Prolonged deceleration | Visually apparent abrupt decrease (onset to nadir is < 30 sec.) in FHR below baseline. Decrease is \geq 15 bpm. Duration is \geq 2 minutes but < 10 minutes |

Note. bpm = beats per minute. Adapted from Macones GA, Hankins GDV, Spong CY, Hauth J, Moore T. The 2008 National Institute of Child Health and Human Development workshop report on electronic fetal monitoring: update on definitions, interpretation, and research guidelines. *Obstet Gynecol.* 2008;112:661–666