

Bundle Name: Intermittent Auscultation

Readiness

Every unit

- Provides initial and ongoing training for all maternity care professionals on evidencebased approaches to fetal heart rate (FHR) assessment, including intermittent auscultation (IA) and associated standardized documentation.¹⁻⁹
- Establishes a unit culture that supports the evidence-based use of IA as the preferred method of FHR monitoring for women at no a priori risk for developing fetal acidemia during labor and/or are at low risk for uteroplacental insufficiency.^{2,4,6-16}
- Establishes evidence-based practice guidelines and unit policy that delineate inclusion and exclusion criteria for IA and criteria for changing to another modality for assessing FHR if necessary.^{2,5-7}
- Provides the necessary equipment (hand-held Doppler) for each qualified candidate for IA.²
- Provides electronic FHR equipment for when transition to continuous monitoring is indicated.
- Ensures sufficient staffing to maintain adherence to evidence-based unit protocol for IA for all appropriate candidates.^{2, 4, 17-18}
- Promotes shared decision making by providing consumer education outlining evidencebased approaches to FHR assessment during labor.^{2,4,19-22}

Risk and Appropriateness Assessment – assess risk at admission and throughout labor

Every woman who presents in labor

- Is assessed for eligibility for IA.²⁻⁵
- Participates in shared decision making regarding approaches to FHR assessment.^{2,4,20-21}
- Receives ongoing assessment of fetal well-being consistent with the evidence-based unit policy.

Reliable Delivery of Appropriate Care

Every woman eligible for IA

- Is assessed in adherence with an evidence-based unit IA policy that includes established criteria for converting to continuous EFM.^{2-3,5-7}
- Receives FHR assessment with standardized timing, methodology, and documentation throughout labor and during significant clinical events such as vaginal examinations and rupture of membranes.²⁻⁸
- Is regularly informed of overall FHR assessment throughout labor and is provided with necessary education/information about these assessments.^{2,4}

Recognition and Response

Every woman for whom eligibility for IA use changes

- Will be transitioned to continuous electronic fetal monitoring as indicated by periodic or episodic changes in the FHR according to established criteria.^{2,4-5}
- Will be eligible to resume IA if continuous electronic fetal monitoring indicates the fetus is at low risk for fetal acidemia according to established criteria.²
- Will be involved in decision making about method of FHR assessment if the maternal or fetal or status changes.^{2,4,19-21}

Reporting/Systems Learning

Every unit

- Documents initial and ongoing training of nurses to ensure competency in performing IA and of all unit-based maternity care professionals in assessment of EFM tracings and associated documentation using the National Institute of Child Health and Human Development categories.^{2-4,8}
- Monitors outcomes and process metrics such as number of women who meet criteria for IA who receive it.²²
- Establishes multidisciplinary systems to support peer review of significant events/unexpected outcomes related to FHR assessment techniques.¹⁶
- Administers and evaluates patient satisfaction surveys that address decision making, comfort, education and process related to FHR assessment.¹⁹

References

- Alfirevic Z, Devane D, Gyte GM. Continuous cardiotocography (CTG) as a form of electronic fetal monitoring (EFM) for fetal assessment during labour. *Cochrane Database Syst Rev.* 2013;5:CD006066. doi: 10.1002/14651858.CD006066.pub2.
- American College of Nurse-Midwives. Intermittent auscultation for intrapartum fetal heart rate surveillance. *J Midwifery Womens Health*. 2010 ;55(4):397-403. doi: 10.1016/j.jmwh.2010.05.007.
- American College of Obstetricians and Gynecologists. Practice bulletin no. 116: management of intrapartum fetal heart rate tracings. *Obstet Gynecol.* 2010;116(5):1232-1240. doi: 10.1097/AOG.0b013e3182004fa9.
- Association of Women's Health, Obstetric and Neonatal Nurses. AWHONN position statement. Fetal heart monitoring. J Obstet Gynecol Neonatal Nurs. 2015;44(5). doi: 10.1111/1552-6909.12743.
- 5. Association of Women's Health, Obstetric and Neonatal Nurses. *Fetal Heart Monitoring Principles and Practices*. 5th ed. Dubuque, IA: Kendal Hunt; 2015.
- 6. Liston R, Sawchuck D, Young D, Society of Obstetrics and Gynaecologists of Canada, British Columbia Perinatal Health Program. Fetal health surveillance: antepartum and intrapartum consensus guideline. *J Obstet Gynaecol Can*. 2007;29(9 Suppl 4):S3-S56.
- National Institute for Health and Care Excellence. Intrapartum care of healthy women and their babies during childbirth. <u>http://www.nice.org.uk/guidance/cg55. Published</u> <u>September 2007</u>. Accessed August 25, 2015
- 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. *J Obstet Gynecol Neonatal Nurs*. 2008;37(5):510-515. doi: 10.1111/j.1552-6909.2008.00284.x.
- Devane D, Lalor JG, Daly S, McGuire W, Smith V. Cardiotocography versus intermittent auscultation of fetal heart on admission to labour ward for assessment of fetal wellbeing. *Cochrane Database Syst Rev.* 2012;2:CD005122. doi: 10.1002/14651858.CD005122.pub4.
- 10. MacDonald D, Grant A, Sheridan-Pereira M, Boylan P, Chalmers I. The Dublin randomized controlled trial of intrapartum fetal heart rate monitoring. *Am J Obstet Gynecol*. 1985;152:524-539.
- 11. Graham EM, Petersen SM, Christo DK, Fox HE. Intrapartum electronic fetal heart rate monitoring and the prevention of perinatal brain injury. *Obstet Gynecol*. 2006;108:656-666.
- 12. Madaan M, Trivedi SS. Intrapartum electronic fetal monitoring vs intermittent auscultation in postcesarean pregnancies. *Int J Gynaecol Obstet*. 2006;94(2):123-125.

- Parer JT, King T, Flanders S, Fox M, Kilpatrick SJ. Fetal acidemia and electronic fetal heart rate patterns: is there evidence of an association? *J Matern Fetal Neonatal Med.* 2006;19(5):289-294.
- 14. Tillet J. Intermittent auscultation of the fetal heartbeat; can nurses change the culture of technology? *J Perinat Neonat Nursing*. 2007;21(2):80-82.
- 15. Walker DS, Shunkwiler S, Supanich J, Williamsen J, Yensch A. Labor and delivery nurses attitudes toward intermittent fetal monitoring. *J Midwifery Womens Health*. 2001;46(6):374-380.
- 16. Agency for Healthcare Research and Quality. Strategies to reduce cesarean birth in lowrisk women. <u>http://www.effectivehealthcare.ahrq.gov/search-for-guides-reviews-andreports/?pageaction=displayproduct&productid=1291</u>. Published October 22, 2012. Accessed August 25, 2015.
- American Academy of Pediatrics, American College of Obstetricians and Gynecologists. *Guidelines for Perinatal Care.* 6th ed. Elk Grove Village, IL: American Academy of Pediatrics; 2007.
- Association of Women's Health, Obstetric and Neonatal Nurses. *Guidelines for Professional Registered Nurse Staffing for Perinatal Units.* Washington, DC: Association of Women's Health, Obstetric and Neonatal Nurses; 2010.
- 19. Hodnett ED. Pain and women's satisfaction with the experience of childbirth: a systematic review. *Am J ObstetGynecol*. 2002;186:S160-S172.
- Hersh S, Megregian M, Emeis C. Intermittent auscultation of the fetal heart rate during labor: an opportunity for shared decision making. *J Midwifery Womens Health*. 2014;59(3):344-349. doi: 10.1111/jmwh.12178.
- Torres J, De Vries R, Low LK. Consumer information on fetal heart rate monitoring during labor: a content analysis. *J Perinat Neonat Nurs*. 2014;28(2):135-143. doi: 10.1097/JPN.00000000000035.
- 22. Menard MK, Main EK, Currigan SM. Executive summary of the reVITALize initiative: standardizing obstetric data definition*s. Obstet Gynecol.* 2014;124(1):150-153. doi: 10.1097/AOG.00000000000322.