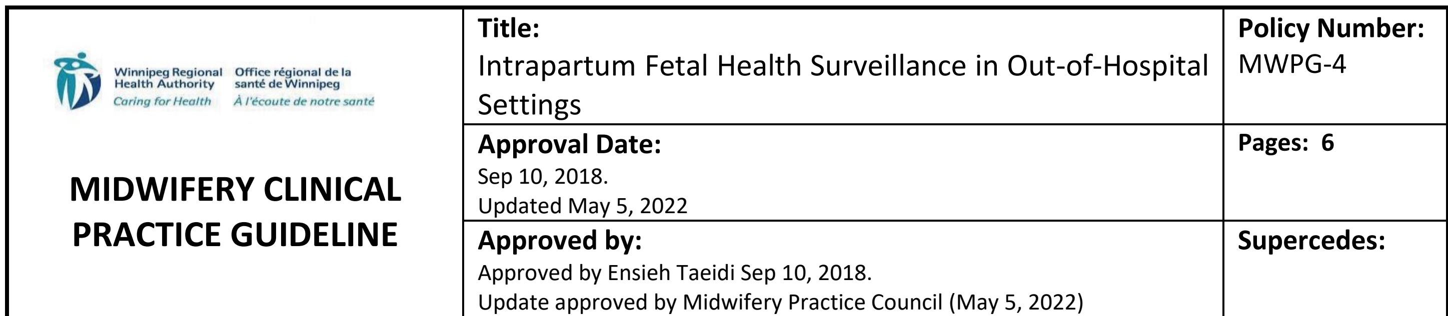

MIDWIFERY CLINICAL PRACTICE GUIDELINE	Title: Intrapartum Fetal Health Surveillance in Out-of-Hospital Settings	Policy Number: MWPG-4
	Approval Date: Sep 10, 2018. Updated May 5, 2022	**Pages:** 6
	Approved by: Approved by Ensieh Taeidi Sep 10, 2018. Update approved by Midwifery Practice Council (May 5, 2022)	**Supercedes:**

A. PREAMBLE

Guidelines outline recommendations to guide health care practitioners in specific practice situations and to support the process of informed decision-making with clients. The best available evidence is helpful in assisting thoughtful management decisions and may be balanced by experiential knowledge and clinical judgment. It is not intended to demand unquestioning adherence to its doctrine as even the best evidence may be vulnerable to critique and interpretation. The purpose of practice guidelines is to enhance clinical assessment and decision-making in a way that supports practitioners to offer a high standard of care. This is supported within a model of well-informed, shared decision-making with clients in order to achieve optimal clinical outcomes.

B. INTENT

To assist the midwife in providing fetal surveillance to clients who are in active labour in an out-of-hospital setting.

C. DEFINITIONS

First Stage of Labour:	Presence of uterine contractions leading to cervical change. The first stage of labour includes the latent and active phases.
Latent 1st stage:	Presence of uterine activity resulting in progressive cervical change proceeding to active phase.
Active 1st stage:	Presence of a contraction pattern leading to cervical effacement and dilatation at 4 cm or greater in a nulliparous woman or 4 to 5 cm dilatation in a parous woman.
Second stage of labour:	Begins with complete dilatation of the cervix and ends with the birth of the baby.
Passive 2nd stage:	Full dilatation without active pushing.
Active 2nd stage:	Full dilatation with active pushing.

D. GUIDELINE

1. Facilitate an informed choice discussion and decision regarding place of birth and fetal health surveillance (Appendix A).

2. Intermittent auscultation (IA) is the preferred method of fetal health surveillance for a client with a healthy, full term pregnancy in spontaneous labour with no or minimal risks for adverse perinatal outcomes.

3. When the client is in active labour, establish a baseline fetal heart rate (FHR) through auscultation (Appendix B). Ensure maternal pulse is documented at the initial assessment.

4. Refer to Appendix B: Auscultation Procedure and Appendix C: Decision Support Tool.

5. The frequency of assessments by IA:

Latent Phase:	There is limited data on which to base recommendations for fetal health surveillance in the latent phase of labour. Optimally, most clients will be in their own home with family support. Some clients may be assessed at home or at the Birth Centre in latent labour. Some clients may be admitted to the Birth Centre due to other circumstances (e.g. distance to home, weather).
Active 1st Stage:	Every 15 to 30 minutes
Passive 2nd Stage:	Every 15 minutes
Active 2nd Stage:	Every 5 minutes

6. The frequency of assessment of maternal pulse:

Latent Phase:	Initial assessment
Active 1st Stage:	Every 4 hours with intact membranes, every 2 hours with ruptured membranes
Active 2nd Stage:	Every 15-30 minutes

At any time when there is uncertainty between the maternal heart rate and fetal heart rate.

7. Assess FHR before:
   - Artificial rupture of membranes
   - Initiation of nitrous oxide
   - Water immersion

8. Assess FHR after:
   - Artificial or spontaneous rupture of membranes
   - Cervical assessment
   - Abnormal uterine activity patterns (e.g. increased resting tone or tachysystole)

- Any clinically significant event during labour (e.g. maternal hypotension, bleeding)

9. If the FHR is assessed to be abnormal in the first stage of labour or passive 2nd stage:
   - Institute intrauterine resuscitation
   - If the FHR is not responsive to treatment
     - Initiate transport to the hospital
     - Consider drawing the client's blood for group, screen, crossmatch and CBC

10. Intrauterine resuscitation includes:
    - Assess maternal vitals and differentiate maternal pulse from FHR, apply SP02 monitor
      - Give oxygen 8-10L/minute if maternal hypovolemia or hypoxia suspected
    - Repositioning the client
    - Performing a vaginal exam to assess cervical change and rule out cord prolapse
    - Giving IV fluid bolus with crystalloid solution
    - Coaching to modify maternal breathing or pushing if needed

11. If the FHR is assessed to be abnormal in active 2nd stage, institute intrauterine resuscitation, call EMS and assess the total clinical picture to decide whether to expedite the birth of the baby or transport to the hospital.

12. If the FHR is abnormal and birth is imminent
    - Expedite the birth of the baby with maternal position, effort, perineal pressure and consider episiotomy
    - Prepare for NRP

13. Document all findings and corrective actions of abnormal FHR in the progress notes in addition to the standard care maps.

E. REFERENCES

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Canadian Perinatal Programs Coalition (2022). Fundamentals of Fetal Health Surveillance: A Self-Learning Manual. Available from ubccpd.ca

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SOGC (2020). Fetal Health surveillance: Antepartum and intrapartum consensus guideline. No. 396. *JOGC, 29*(9).

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2022-2023 Midwifery Practice Council

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Appendix A: Considerations for FHS when Facilitating OOH Place of Birth Informed Choice Decisions

The College of Midwives of Manitoba Standard for OOH Birth defines eligibility criteria. If a client is eligible for OOH birth, the client should be made aware that national and community guidelines recommend electronic fetal monitoring (EFM) for the below indications. The midwife shall include the following applicable points in the informed choice discussion for place of birth decisions.

Obstetrical history, health history or prenatal indications for continuous EFM in labour:

- Planned trial of labour after one caesarean section (regardless of parity)
- BMI greater than 40
- Post-dates equal to or greater than 41+3 weeks gestational age without a non-stress test and biophysical profile or Fetal Assessment
- Post-term pregnancy equal to or greater than 42 weeks

Intrapartum indications for continuous EFM in labour:

- Induced labour with Cervidil or Prostin
- Any abnormal finding (i.e. abnormal vaginal bleeding, abnormal maternal vitals)
- Prolonged rupture of membranes (greater than 24 hours)
- Abnormal FHR identified with IA
- Meconium-stained amniotic fluid
- Prolonged labour
    - Intrapartum labour dystocia after active labour has been established (less than 2cm dilation or no cervical change despite efforts to optimize fetal position and encourage effective contractions)
    - Active 2nd stage of labour exceeding 2 hours in duration

If these indications arise during intrapartum care at a home or at a birth centre, the midwife shall discuss with the client that EFM is recommended and therefore a transport to hospital is advised.

- If a client declines a transport to the hospital for continuous EFM, the midwife shall follow the College of Midwives of Manitoba Policy "When the Client Requests Care outside the Midwifery Standards of Practice".
- If the client declines transport in active labour, the midwife will document the discussion and continue to provide respectful care to the client and the client's family.
- If the birth is imminent, the midwife shall call EMS and facilitate the birth as per the guideline.

Appendix B: Auscultation Procedure

1. At initial assessment, perform Leopold's maneuvers to determine fetal position.
2. Place doppler or fetoscope over area of maximum intensity of the fetal heart sounds.
3. Listen to the FHR and take the maternal pulse to differentiate maternal pulse from FHR.
4. At labour admission, establish baseline by listening to the FHR for 60 seconds between contractions.
5. FHR characteristics assessed by IA include
   - Baseline FHR
   - Rhythm of FHR (regular or irregular)
   - Presence of accelerations
   - Presence of decelerations
6. On-going FHR assessments:
   a. Auscultate the FHR immediately after a contraction
   b. Count the FHR in a 30 or 60 second interval and convert to beats per minute (6 second counts may be used in 2nd stage if needed). Listen for 60 seconds when possible.
   c. Listen for accelerations.
   d. Listen for decelerations (abrupt or gradual) and amount of time it takes for the deceleration to return to baseline.
   e. Listen for rhythm.
   f. If it sounds like an acceleration or deceleration is occurring, count for 6 seconds during the peak or nadir.
   g. Document findings. If a deceleration is auscultated, document details of the deceleration (depth and characteristics of return to baseline; i.e. gradual or abrupt) in the progress notes.
7. Assess and document the maternal heart rate concurrently with the FHR:
   a. At initial assessment when determining baseline fetal heart rate
   b. At any time when there is uncertainty between the maternal heart rate and fetal heart rate
   c. Based on the stage of labour
      - In the active first stage and passive second stage of labour:
      - every 4 hours with intact membranes
      - In the active first stage and passive second stage of labour:
      - every 2 hours with ruptured membranes
      - In the active second stage of labour: every 15-30 minutes
8. Assess and document uterine contraction patterns when performing intermittent auscultation.
9. Always interpret the FHR in the conjunction with the total clinical picture.
10. Classify the FHR as normal or abnormal.

Normal FHR	**Abnormal FHR**
Baseline FHR 110 – 160 bpm	Abnormal Baseline: a-Bradycardia FHR < 110 bpm b-Tachycardia FHR > 160 bpm c- Changing FHR baseline
Regular rhythm	Irregular rhythm
Presence of accelerations.* An abrupt increase of FHR above baseline, ≥ 15 bpm, lasting ≥ 15 *Note: abrupt means that the onset of acceleration to peak in < 30 seconds*	Decelerations – abrupt or gradual Presence of decelerations, especially if the FHR is slow to recover after a contraction
	Tachysystole is present

*Accelerations suggest the presence of fetal well-being. However, since auscultation is done intermittently, the absence of accelerations on its own is not necessarily concerning and does not make the auscultation findings abnormal. When considering the significance of the absence of accelerations and whether other actions to determine fetal well-being are indicated, it is important to consider the auscultation findings in light of the total clinical picture, including the general activity of the fetus, the stage of labour and other risk factors

Appendix C: Intermittent Auscultation Decision Support Tool for OOH Settings