

## Standard Operating Procedure (SOP)

SOP Title	<b>Auscultation of the Fetal Heart- (Antenatal &amp; Intrapartum) Including irregular fetal heart rate</b>		
SOP Number	039		
Care Group	Women and Children's		
Version Number	3		
Effective Date	20 <sup>th</sup> March 2024	Review Date	March 2027
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Approved by	MGG, Maternity Governance		
Approval date	20 <sup>th</sup> March 2024		
Distribution	All Maternity Areas		
Location	Maternity Services		

Document Control				
Version	Date	Author	Status	Comments
1	4 <sup>th</sup> October 2016	Paula Pryce	New in this format	Previously clinical guideline (Auscultation- antenatally and Intrapartum).
2	23 <sup>rd</sup> October 2020	Kate Tomlinson/Jacqui Bolton		Full review by Kate Tomlinson, Fetal Monitoring Midwife and Jacqui Bolton Guideline Midwife. No changes to process
3	20 <sup>th</sup> March 2024	Steph Chatham GLM Paula Pryce FM Lead Midwife	Full review	Full review. Removed reference to handheld records as no longer used and removed CTG at MLU as no longer local practice

SOP Objectives	<ul style="list-style-type: none"> <li>To provide guidance on how and when to auscultate the fetal heart rate during the antenatal period and intrapartum.</li> <li>To provide guidance on what actions to take if there are concerns regarding the fetal heart rate.</li> </ul>
Scope	<ul style="list-style-type: none"> <li>All women accessing SaTH maternity services.</li> <li>To be read in conjunction with the following maternity guidelines- Fetal monitoring for labour and birth (076), Care in labour on consultant unit (086) &amp; Intrapartum care on a MLU/home (078).</li> </ul>
Performance Measures	Compliance with this SOP will be audited as part of the Shrewsbury and Telford Hospital NHS Trust's five-year rolling programme of NICE and local guideline audits, unless circumstances require an earlier or more frequent audit. The audit will be carried out using the auditable standards and the results will be reported and acted on in accordance with the Trust Clinical Audit Policy (CG25).

In this SOP we use the terms ‘woman’ or ‘mother’ throughout. These should be taken to include people who do not identify as women but are pregnant or have given birth.

Number	Brief	Responsibility
1	<p><b>Definitions</b></p> <p><b>Auscultation</b> - the process of listening to the sounds of the body, in this case the fetal heart.</p> <p><b>FHR</b> - fetal heart rate.</p> <p><b>Normal range of fetal heart rate for intermittent monitoring</b> - 110 to 160 beats per minute (bpm).</p> <p><b>Normal/reassuring range of fetal heart rate monitoring for EFM in labour</b>- 100-160bpm</p> <p><b>Non reassuring range of FHR</b> 161-180bpm</p> <p><b>Abnormal range of FHR</b> – above 180 bpm or below 100bpm</p> <p><b>EFM</b> - electronic fetal monitoring (Guideline no. 040).</p> <p><b>Pinards stethoscope</b> - a trumpet-shaped instrument used to auscultate the fetal heart.</p> <p><b>Fetal doppler (sonicaid)</b> - an electronic device used to detect fetal heart rate.</p> <p><b>Regular Irregularity</b>- Regular oscillation of the baseline which may alter for variable time periods suggesting heart block or SVT as follows: --- ----- --- -----</p> <p><b>Irregular Irregularity</b>- irregular oscillation of the baseline as follows: -- +--+ -+ -+ -+ -</p> <p><b>USS</b>- Ultrasound Scan</p>	

2	<p><b>Antenatal auscultation of the fetal heart</b></p> <p>Auscultation of the fetal heart may confirm that the fetus is alive but is unlikely to have any predictive value and routine listening is therefore not recommended. However, when requested by the mother, auscultation of the fetal heart may provide reassurance. (NICE)</p> <ul style="list-style-type: none"> <li>• The fetal heart can be auscultated at each antenatal appointment after 20 weeks' gestation at maternal request.</li> <li>• Auscultation will take place after abdominal palpation, using either a pinnard or fetal Doppler.</li> <li>• If there is concern, the maternal pulse will be palpated to distinguish between the two heart rates.</li> <li>• The FHR will be recorded as a single rate.</li> <li>• If a vaginal assessment is undertaken the FHR will be auscultated prior to this and on completion.</li> <li>• Be aware of a low baseline for gestation and clinical indication.</li> <li>• If concerns arise from auscultation, after 26 weeks gestation, a CTG will be undertaken in triage.</li> <li>• All findings will be documented in the MIS. This will include any deviations or concerns that may occur and the action that was taken.</li> </ul>	Midwife/Obstetrician
3	<p><b>Intermittent Auscultation in Labour</b></p> <ul style="list-style-type: none"> <li>• Regular intermittent auscultation of the fetal heart is recommended for women following a risk assessment who are identified as low risk in established labour in any birth setting (NICE 2023).</li> <li>• At least every 15 minutes immediately following a contraction in the first stage of labour</li> <li>• At least every 5 minutes immediately following a contraction in the second stage of labour.</li> <li>• Auscultation should be for at least 1 minute.</li> </ul>	Midwife
4	<p><b>Irregular Fetal Heart rate</b></p> <p>Irregular fetal heart rhythms are common in practice, but there is little information available on their significance or appropriate management (Copel et al 2000). These are often due to 'missed' or ectopic beats. The missed beats may be frequent and may give the impression of a regular irregularity.</p> <p>If there are concerns regarding the fetal heart rate during IA (this includes missed beats, regular or irregular) referral to triage will be required for further assessment. Including a computerised CTG if 26/40), an Obstetric review and ongoing care plan made.</p> <p>Regular irregularities are suggestive of a structural malformation and referral to a fetal medicine specialist will be required.</p> <p>If the EFM shows episodes where the baseline is either elevated at around 220bpm or low at around 60 bpm a detailed ultrasound scan will be booked with a Fetal-Maternal Specialist.</p> <p>If the EFM is non reassuring or abnormal, urgent referral to the obstetric team is necessary. An USS may be indicated.</p>	Midwife/Obstetrician

6	<p><b>References</b></p> <p>NICE (2023) Intrapartum Care. National Institute for Health and Clinical Excellence, London.</p> <p>NICE (2023) Fetal Monitoring in Labour. National Institute for Health and Clinical Excellence, London.</p> <p>NICE (2020) Antenatal care for uncomplicated pregnancies overview- NICE pathways. National Institute for Health and Clinical Excellence, London.</p> <p>Copel, et al (2000) The clinical significance of the irregular fetal heart rhythm. American Journal of Obstetrics &amp; Gynecology. 182 (4):813-819, April 2000.</p>	
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