

Listen2Baby Toolkit - IA counting methods and doppler devices

There is no evidence that one method of counting, or method of reading the fetal heart rate during IA, is easier to perform, or is more effective at identifying intrapartum fetal heart rate abnormalities. The Listen2Baby Toolkit does not recommend one IA method, but recommends that midwives are supported to use a method of IA with which they feel confident and are able to use over prolonged periods.

Listen2Baby observations of intrapartum care and conversations with midwives identified advantages and disadvantages of the different methods of fetal heart rate counting. Without evidence of relative effectiveness, no single method of 'fetal heart rate counting' or device should be mandated. Individual midwives may identify additional potential advantages or disadvantages to those found in our field work, and local discussions should be encouraged.

Comparison of counting with different Doppler devices

Doppler device	Audio only	Audio and number display	Audio and number display with optional graph
Potential Advantage	<p>The block counting method used with this device provides a structure with which to identify and communicate abnormalities.</p> <p>With practice, midwives become proficient in the method.</p>	<p>The fetal heart rate is displayed as well as heard.</p> <p>The lowest rate of the fetal heart rate during a deceleration, or highest during overshoot, can be identified and recorded.</p> <p>The 'variability' of the fetal heart rate can be seen as well as heard.</p> <p>The fetal heart rate can be known at a time when a clock or watch is not within sight.</p>	<p>The fetal heart rate is displayed as well as heard.</p> <p>The lowest rate of the fetal heart rate during a deceleration, or highest during overshoot, can be identified and recorded.</p> <p>The 'variability' of the fetal heart rate can be seen as well as heard.</p> <p>The fetal heart rate can be known at a time when a clock or watch is not within sight.</p> <p>Provides visual information on fetal heart rate variability.</p>
Potential Disadvantage	<p>Requires repetitive counting of the fetal heart rate.</p> <p>Requires midwives to repeatedly add several numbers – challenging when multiple demands conflict.</p> <p>Repetitive use may add to midwives' fatigue and reduced counting efficiency.</p>	<p>Distracting to see a number when counting the heart rate.</p>	<p>Distracting to see a number when counting the heart rate.</p>

Doppler device	Audio only	Audio and number display	Audio and number display with optional graph
<p>Potential Disadvantage</p>	<p>The lowest rate of the fetal heart heard during a deceleration, or highest rate when overshoot is occurring, is not identified or recorded.</p> <p>Block counting without a visual display may need more concentration, so may limit midwife's capacity to communicate when counting.</p> <p>More difficult to perform over a prolonged period such as when an abnormality is suspected.</p> <p>Where mandated, may reduce willingness of midwives not confident in the method to undertake IA.</p> <p>Relies on the availability and visibility of a clock or watch with a second hand.</p> <p>The level of concentration required by counting may reduce the ability of midwives to listen to audio patterns in the fetal heart rare.</p>		