



How we monitor your baby's heart rate

when you are in labour



National
Women & Infants
Health Programme

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Building a
Better Health
Service



What is the leaflet about?

This leaflet tells you why we monitor (check) your baby's heartbeat when you are in labour and the types of monitoring we use.

Why do we monitor your baby's heartbeat?

We monitor and record your baby's heartbeat while you are in labour to check how your baby is coping. This is called fetal heart rate monitoring. This will help to provide reassurance that your baby is coping with labour. Most babies cope with labour without any problems, however some babies may experience difficulties. One of the best ways of finding out which ones are having difficulties is to listen to the baby's heartbeat regularly throughout labour.

What types of monitoring do we use?

We can use one of the following two methods of fetal heart rate monitoring when a woman is in labour.

- Intermittent auscultation
- Electronic fetal monitoring

Let us talk you through each type so you understand what is involved.

1. **Intermittent auscultation** is a method of listening to the baby's heartbeat. This method is done at set times during labour.
2. **Electronic fetal monitoring** is a method used to record the baby's heartbeat and the contractions during labour. This method can be done at set times during labour or non-stop throughout labour.

The choice of which method is used depends on how your labour is going and your risk of problems.

Intermittent auscultation

Intermittent auscultation involves listening to your baby's heartbeat at set times. There are two ways of listening to the baby's heartbeat with intermittent auscultation:

1. **A Doppler** is a small hand-held device that is pressed against your tummy. This device uses a form of ultrasound to convert sound waves into signals of your baby's heart you can hear.



2. **A Pinard** (a trumpet-shaped stethoscope) is placed against your tummy to enable your midwife to hear your baby's heartbeat.



Typically, the baby's heart rate is measured for one minute after a contraction every fifteen minutes during the first stage of active labour and every five minutes during the second stage. If your midwife is worried, she may recommend that your baby's heartbeat is monitored continuously using electronic fetal monitoring.

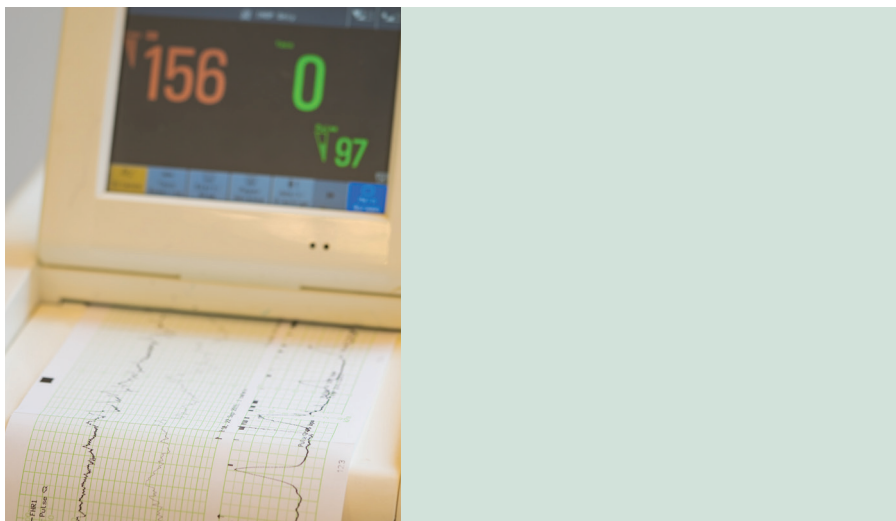
Electronic fetal monitoring

Electronic fetal monitoring uses special equipment to measure the response of the baby's heartbeat to the labour process. Electronic fetal monitoring can be external (outside), internal (inside), or both.

1. **External monitoring:** A CTG (cardiotocography) records your baby's heartbeat continuously and it can be viewed on a screen or from a paper print out. This works by having two flat round discs known as transducers placed on your tummy and held in place by two elasticated belts. One of these transducers picks up the frequency of contractions whilst the other detects the baby's heartbeat.



2. **Internal monitoring:** Less common and used when it is difficult to monitor your baby's heartbeat through your tummy. For internal monitoring, a small device called a fetal scalp electrode is inserted through the vagina and placed on the baby's scalp. This device records the heartbeat on a graph. Contractions are picked up by an external transducer.



What do fetal heart rate patterns mean?

It is normal for a baby's heart rate to vary between 110 and 160 beats a minute. This is much faster than your own heart rate, which is about 60 to 100 beats per minute. When your baby moves, their heart rate increases and this forms a pattern.

Certain changes in this pattern may show a change in how your baby is coping with labour. Abnormal fetal heart rate patterns do not always mean there is a serious problem. Other tests may be needed to get a better idea of what is going on with your baby.

For further information, speak to your midwife or doctors. Alternatively, download <https://bit.ly/3m52cHV>