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# Monitoring your baby's heartbeat in labour

## Women's Health



## Further Information

Further information is available by logging onto:

<https://www.nice.org.uk/guidance/ng229/informationforpublic>

NHS 111:

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## Further Information

We endeavor to always provide an excellent service, but should you have any concerns please, in the first instance, raise these with the Matron, Senior Nurse or Manager on duty. If they cannot resolve your concern, please contact our Patient Advice and Liaison Service (PALS) on 01932 723553 or email [asp-tr.patient.advice@nhs.net](mailto:asp-tr.patient.advice@nhs.net). If you still remain concerned the team can advise about how to make a formal complaint.

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pregnancy problems when deciding what treatment (if any) is needed. This would always be done with your input. Sometimes, simple changes such as altering your position or reducing the number of contractions you are having is all that is needed. In some cases, the team may recommend the immediate birth of your baby, and options for the safest and quickest method of delivery will depend on what stage of labour you are in.

For additional information about fetal monitoring, and all other aspects of pregnancy and childbirth, speak to your midwife or doctor.

## **Monitoring your baby's heartbeat in labour**

This leaflet is designed to give you information about how we care for your unborn baby while you are in labour. It will describe the benefits and disadvantages of different types of fetal monitoring, and it will aim to answer some of your questions.

### **Introduction**

This leaflet is adapted from a guideline (CG190) produced by the National Institute of Clinical Excellence (NICE) for the NHS in England and Wales.

Everyone has the right to be informed and to share in decision making about their health care. Health care staff should respect and consider the wishes of the people in their care. Guidelines are recommendations for good practice. There may be good reasons why your treatment differs from the recommendations in this leaflet, depending on your individual circumstances and wishes.

### **Why monitor my baby's heartbeat in labour?**

During labour, contractions reduce the blood flow to the placenta. This is normal and most babies cope without any problems. It is recommended that the heartbeat of all babies is monitored during labour because this provides information to your midwife or doctor on how well your baby is coping. It is important to note that no

monitoring is perfect. There will always be a few babies who have problems in labour that monitoring may not detect.

## **What are the methods for fetal heart monitoring?**

Your baby's heartbeat can be monitored in several ways which are explained on the following pages.

Your baby's heart rate can be counted either at regular intervals ('intermittent auscultation') or continuously (electronic fetal monitoring). Before starting any monitoring, the midwife or doctor will monitor your heartbeat as well as your baby's to make sure they can tell them apart.

When you are in labour, your midwife will complete a risk assessment to advise you on the safest and best way of monitoring your baby's heartbeat in labour.

### **Intermittent auscultation (with pinard stethoscope or a handheld 'doppler')**

If you are healthy and have no medical conditions then you will be assessed as having a low-risk pregnancy, this is the recommended method of monitoring your baby's heartbeat. Your baby's heartbeat can be monitored using a Pinard stethoscope (a trumpet shaped device), which will enable the midwife or doctor to hear your baby's heartbeat through your abdomen. More commonly a Doppler (a battery-operated handheld electronic device), is used so that you can also listen to your baby's

## **Advantages or benefits of EFM**

- You will be able to see quite clearly the pattern of your baby's heart rate
- By continuously monitoring your baby's heart rate the midwife or doctor can detect any concerns
- EFM can be reassuring for both you and your birth partner
- EFM is useful when there is an existing reason for the midwife or doctor to be concerned about your baby

## **Disadvantages or risks of EFM**

- You might not be able to move as much as you want with EFM. Whilst you can adopt different positions in labour, continuous monitoring may limit your movement.
- In low-risk pregnancies, EFM does not offer any advantages or improved outcomes over intermittent auscultation

## **What happens if a problem is suspected?**

If you are having intermittent auscultation either at home, birth centre or labour ward, you will be advised to have continuous EFM, and transferred to Labour Ward (if not already there) where this can be provided.

The team caring for you are trained in how to interpret the CTG in your pregnancy and health. If there are any concerns, they will consider the current clinical situation along with any existing

would have agreed to. A FSE connects to the CTG machine to monitor the baby's heartbeat accurately.

Midwives and obstetric doctors are trained to read and interpret features on the CTG trace to assess how well your baby is coping with your labour and will look at different elements of the CTG trace. These include the usual rate of the fetal heart (FHR), the amount the FHR changes each time it beats, whether the FHR increases or decreases, and the frequency and strength of contractions. These are all considered in relation to how the labour is progressing and any complications which may be present in pregnancy or labour. If there are concerns these will be referred to a more senior midwife or doctor and further interventions may be offered.

It is normal for there to be changes in the pattern of the heartbeat, for example, when your baby is sleeping or moving around. Sometimes the sound disappears or the monitor stops showing the heart rate on the paper or visual display. This is usually due to the baby moving away from the sensor and does not necessarily mean that there is a problem. National guidelines recommend that the CTG trace is assessed hourly by a second midwife or a doctor. This is called 'fresh eyes'. Your midwife will invite another midwife or doctor, with your consent, into your room to do this. The midwife will explain this to you but please ask if you would like more information.

heartbeat. If you plan to have a home birth, intermittent auscultation is the only type of fetal monitoring available.

Once you are in established labour, the midwife will listen to your baby's heartbeat for a full minute after each contraction, every 15 minutes when you are in the first stage of labour, and every 5 minutes once we have determined you are in the second stage of labour until your baby is born. When intermittent auscultation is used, your midwife will complete an hourly review called **PAUSES** which takes into consideration the whole clinical picture as well as your thoughts and wishes, to ensure that you are receiving the right care in the safest place for you and your baby. Every 2 to 4 hours, your midwife will complete this review with a second midwife.

#### **Advantages / benefits of intermittent auscultation**

- You can move around freely during your labour
- When pregnancy has been straightforward, intermittent auscultation reduces the chance of unnecessary intervention

#### **Risks / disadvantages of intermittent auscultation**

- Very sudden changes in the baby's heartbeat may not be detected. However, this is rare in low risk pregnancies

If any concerns are detected in your baby's heart rate, you will be advised to have continuous electronic fetal monitoring.

## Electronic fetal monitoring (EFM)

Sometimes your midwife or doctor may offer and recommend continuous monitoring. This may be for several reasons relating to you and your baby's health. The reasons for using continuous monitoring should be discussed between you, your midwife and/or your doctor. For example:

- Your midwife or doctor has already listened to your baby's heartbeat using a Pinard stethoscope or 'Doppler' and thinks that your baby may be unwell.
- You have health problems such as:
  - Diabetes controlled by medication
  - Infection
  - Pre-eclampsia
  - Problems with your heart or kidneys
- Factors relating to your current or a previous pregnancy such as:
  - Your pregnancy has lasted more than 42 weeks
  - You are having an epidural analgesia (pain relief injected into the back)
  - You have had bleeding from your vagina during or before labour
  - Your labour has been induced (started artificially) due to pregnancy complications or strengthened with a drip (oxytocin)
  - You develop a fever in labour

- You have a twin/triplet pregnancy
- You have previously had a Caesarean birth
- Your baby is small or premature
- Your baby is in breech (bottom first) position

You may decide to have continuous fetal monitoring for personal reasons; you can discuss this with a midwife or doctor before your labour starts.

Continuous EFM records your baby's heart rate electronically using a cardiotocograph (CTG) machine which continuously prints out the heart rate. This is sometimes called a 'trace' or a 'CTG'.

Two flat round sensors will be held in place by elasticated belts against your abdomen. One of these sensors detects the frequency and length of the contractions whilst the other detects the baby's heartbeat. This is a painless procedure, but it sometimes restricts your mobility. The wires are long therefore you will still be able to move around, including sitting and standing, beside the monitor.

There are several cordless (telemetry) monitors which allow you to move more freely in labour and can also be used in the birthing pool on labour ward. If your midwife does not use the cordless machine, please do ask if they are available.

Sometimes it can be difficult to monitor your baby's heartbeat with abdominal sensors. In this circumstance, the midwife may consider applying a fetal scalp clip (FSE) to the baby's head. This is only done with your consent during a vaginal examination you