

Monitoring Your Baby's Heartbeat In Labour

(also referred to as Fetal Monitoring)



What is fetal heart monitoring?

Most babies go through labour and are born without any problems. Some babies may develop difficulties during labour which can be identified from monitoring their heartbeat.

The information from monitoring your baby's heartbeat will be used along with other information surrounding your pregnancy (referred to as risk factors). This information and your preferences will all be considered to provide a plan of care which is specific to you.

Your baby's heartbeat can be monitored in two ways:

- Intermittent auscultation or IA – this is a handheld device use to listen to your baby's heartbeat at regular intervals.
- Cardiotocograph or CTG – this is a machine used to record a continuous reading of your baby's heartbeat and contractions. In the UK approximately 60% of women will have continuous CTG at some stage of their labour (NICE, 2014).

The recommended method will depend on your care pathway and will consider a variety of factors, including your pregnancy, your baby's development, and your preferences.

How is it done?

Intermittent auscultation can be done in two ways:

1. By using an instrument like an ear trumpet called a pinard stethoscope.



2. By using a handheld machine called a doppler or sonicaid. Both devices are placed onto your abdomen and your midwife will then listen and count your baby's heartbeat rate.



It is recommended that your baby's heartbeat is listened to every 15 minutes in the first stage of labour and every 5 minutes in the second (pushing) stage, but your midwife may do this more frequently if required.

If you are planning a home birth or using the birth centre, your baby's heartbeat will be monitored with a pinard stethoscope or doppler. If a problem is detected, you may be advised to have continuous fetal monitoring so that the midwife or doctor can make a holistic assessment of you and your baby's wellbeing. This will mean a transfer to labour ward within the hospital.

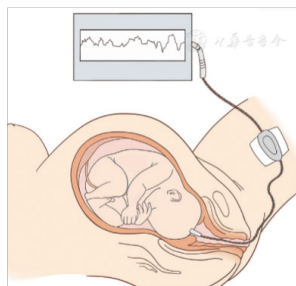
Continuous electronic fetal monitoring can also be done in two ways:

1. Abdominal or external CTG - Two elasticated belts are placed around your abdomen, like a belt. One belt will hold a device which will constantly record your baby's heartbeat. The other belt will hold a device that monitors your contractions. Both devices are attached to a machine via a lead. These have a range of about 1-2 meters.

It is sometimes still possible to use the pool on labour ward, using a wireless CTG. This will depend on your individual circumstances and availability of the equipment.



2. Fetal scalp electrode or FSE - One elastic belt is placed around your abdomen to hold a device to monitor your contractions. Another device, called a fetal scalp electrode (FSE) is attached to your baby's head. The FSE is attached during a vaginal examination and is placed under the surface layer of your baby's skin. The electrode then records the electrical activity of your baby's heartbeat. This is known as Fetal electrocardiogram or FECG.



The use of an FSE is not routine. It may be offered if there is difficulty in monitoring your baby's heartbeat from the abdominal device. The electrode can pick up the signals of your baby's heartbeat more easily because it is directly attached to your baby. It does not cause harm, although you may notice a small graze on your baby's head after birth. This electrode stays in place until your baby is born.

Why Do I Need Fetal Heart Monitoring?

It is important to understand how your baby is coping in labour so the midwives and doctors caring for you can assess if any intervention is required. If your baby is not coping, the pattern of your baby's heartbeat usually changes, and this could mean that your baby needs to be born more quickly or you may need medication to slow down your contractions.

Your baby's heartrate will be assessed regularly throughout your labour.

With intermittent auscultation, your baby's heartbeat will be checked every 15 minutes in the first stage of labour and every 5 minutes/or after each contraction in the second stage of labour.

With continuous monitoring, your baby's heartbeat will be assessed every hour by two midwives. This is an assessment called 'fresh eyes' to ensure that the CTG review is accurate and provides the opportunity for a 'second opinion'. During a fresh eyes assessment, it is routine for a second midwife to attend your room and is not a cause for concern. If there are any concerns with the monitoring of your baby's heartbeat, this will be discussed with you along with any recommended actions.

If you are healthy and have had a low-risk pregnancy, then the recommended method for fetal heart monitoring is usually intermittent auscultation.

If you have a health concern or any factor relating to your pregnancy that puts you or your baby at an increased risk of complications in labour developing, then the recommended method for fetal heartrate monitoring is via a CTG.

Examples of risk factors which recommend continuous CTG monitoring in labour include:

- Diabetes.
- Raised blood pressure or pre-eclampsia.
- You are having an epidural as pain relief.
- You have had any significant bleeding from your vagina before or during labour.
- You have previously had a caesarean section.
- You have a multiple pregnancy.
- Your baby is predicted to be small.
- Your baby is a breech presentation (bottom first).
- If when your waters break, they are not clear in colour.
- If the midwife using intermittent auscultation detects a problem.

What Are The Risks Of Fetal Heart Monitoring?

- Being attached to the CTG monitor for continuous monitoring can limit your options to move, however you will still be able to adopt a variety of positions such as standing, using the birthing ball, squatting and kneeling. You will not be restricted to the bed.
- Sometimes the CTG trace can be difficult to interpret, this may lead to different midwives or doctors being asked for their opinion and may enter your birthing space to review.
- CTG monitoring can be associated with higher rates of surgical intervention for suspected fetal distress. 15% increase in an instrumental vaginal delivery (FIGO 2015). However, it does reduce the chances of your baby having a problem at birth and the need for your baby to be admitted to the special care baby unit.
- Your care team will consider a range of factors, including your preferences, when making any recommendations. You will be kept fully informed about what is happening. You will be seen by a doctor or a senior midwife (or both) if there are any monitoring concerns regarding your baby. We always encourage you to ask any questions that you may have to ensure you can make an informed decision.

What Are The Benefits Of Fetal Heart Monitoring?

Understanding how your baby is coping with labour can help us to support you to have a safe labour and birth. It may enable us to detect changes early on if your baby begins to have any problems during your labour.

If your baby is not coping well then, the midwife and doctor involved in your care will discuss a plan with you and you will be able to make an informed decision about how to act on any concerns.

What Other Options Are There?

Choosing to have your baby monitored in labour is entirely your choice, and you can change your decision at any time. You can choose to not monitor your baby's heartbeat at all, or you may wish for your baby to be monitored at intervals outside of the recommended guidance.

If you wish to use the birth centre, or have a home birth, please note that the only method of monitoring your baby's heartbeat, at these locations, is via a handheld doppler or pinard. We are unable to provide continuous monitoring via a CTG unless on labour ward.

You can discuss your wishes with your midwife or doctor during your pregnancy labour and they will help you to make an informed decision surrounding the monitoring of your baby's heartbeat in labour.

What happened if I choose not have any fetal heart monitoring?

The type of monitoring you have whilst you are in labour is your choice.

Your midwife and or doctor will be able to discuss the recommended method and the reasons why. You can then make an informed choice.

If you are considering not to have any fetal heart monitoring during labour it would be best to discuss this further with your midwife, obstetrician or PMA (professional midwifery advocate). Once you have made an informed decision, a plan will be made and included in your notes so those caring for you in labour are aware.

Of course you can change your mind at any time.

Where Can I Find Further Information?

Tommy's Pregnancy hub:



NICE: Fetal monitoring in labour



If you would like to speak to a midwife about the information in this leaflet, please contact your named community midwife. Alternatively, a midwife on the labour ward will be happy to advise you.

Emma Sheikh

Fetal Monitoring Lead Midwife

Email: emma.sheikh@nhs.net

Lorraine Hawkins

Consultant midwife

Email: Lorraine.hawkins8@nhs.net

If you do not understand this leaflet, we can arrange for an interpreter.

إذا كنت لا تستطيع فهم محتويات هذه النشرة فيمكننا عمل الترتيبات لتوفير مترجم شفوي لك.

এই প্রচারপুস্তিকাটি যদি আপনি বুঝতে না পারেন, তবে আপনার জন্য আমরা একজন অনুবাদকের ব্যবস্থা করে দিতে পারি

如你不明白本單張的內容，我們可安排口譯員服務。

如你不明白本传单的内容，我们可安排口译员服务。

اگر مندرجات این جزوه را نمیفهمید، ما می‌توانیم مترجم در اختیارتان بگذاریم.

Jeśli masz trudności w zrozumieniu tej ulotki, możemy zorganizować tłumacza.

Useful websites

www.nhs.uk

www.northamptongeneral.nhs.uk

NICE (2022) Fetal Monitoring in Labour, NICE guidance [NG229]
<https://www.nice.org/guidance/ng229>

FIGO (2015) Consensus guidelines on intrapartum fetal monitoring: Physiology of fetal oxygenation and the main goals of intrapartum fetal monitoring. <https://www.figo.org>

Other information

Northampton General Hospital operates a smoke-free policy. This means that smoking is not allowed anywhere on the Trust site, this includes all buildings, grounds and car parks.

Leaflets, information, advice and support on giving up smoking and on nicotine replacement therapy are available from the local Stop Smoking helpline on 0845 6013116, the free national helpline on 0300 123 1044, email: smokefree@nhft.nhs.uk and pharmacies.

Car parking at Northampton General Hospital is extremely limited and it is essential to arrive early, allowing ample time for parking. You may find it more convenient to be dropped off and collected.

This information can be provided in other languages and formats upon request including Braille, audio cassette and CD. Please contact (01604) 523442 or the Patient Advice & Liaison Service (PALS) on (01604) 545784, email: ngh-tr.pals@nhs.net

Northampton General Hospital NHS Trust, Cliftonville, Northampton NN1 5BD.
www.northamptongeneral.nhs.uk

Desktop Publishing by the Communications Department

Updated February 2025

NGV2459