

Patient Information Leaflet (PIL)

Fetal Heart Rate Monitoring

This information is intended to complement a discussion with the midwives and doctors caring for you and the type of fetal heart rate monitoring that is right for you and your baby.

What is fetal heart rate monitoring, and why is it offered?

Monitoring your baby's heartbeat (fetal heart rate monitoring) is a way of assessing your baby's well-being. It does not tell what will happen during birth, but gives a picture of how your baby is doing right now. Fetal monitoring may help identify changes in your baby's normal heart rate.

How do we listen to your baby's heartbeat and when will you have fetal monitoring?

There are two types of monitoring the fetal heart rate.

1. With a handheld Doppler or a Pinard stethoscope

A handheld **Doppler** (also called a sonicaid) is a battery-operated ultrasound device that is placed on your abdomen (tummy). You can hear the heartbeat through the device's speakers. It is waterproof and can be used in a birthing pool.



A **Pinard** stethoscope is a non-electrical device shaped like a small trumpet. One end is placed on your tummy, and the midwife listens to your baby's heartbeat by putting their ear to the other end. Only the midwife using the Pinard will hear your baby's heartbeat.



Using a handheld Doppler or a Pinard in pregnancy

We can listen to your baby's heartbeat with a Doppler or Pinard during your pregnancy. The National Clinical Guideline on Fetal Heart Rate Monitoring (2025) recommends offering this from 23 weeks of pregnancy. This means that from 23 weeks of pregnancy, we will offer to listen to your baby's heartbeat when you attend antenatal appointments or if you are admitted to hospital.

Using a handheld Doppler or a Pinard in labour

If your labour is low-risk and has no complications, we can use a handheld Doppler or a Pinard to check your baby's heartbeat. This is called intermittent auscultation or 'listening in'. It is the recommended way to monitor your baby's heartbeat if you are in labour between 37 weeks and 42 weeks pregnant and do not have any complications in your pregnancy or labour.¹

Intermittent auscultation lets you move about freely in labour because you are not connected to a machine with cables. This type of monitoring can be done at home or in the hospital. Each time we check your baby's heartbeat, we will listen for one minute. We do this right after a contraction, at regular times during labour, as it is the best time to see how your baby is coping with labour.

There is a lack of high-quality studies showing clear short- and long-term health benefits of fetal heart rate monitoring for mothers and babies. Research shows that using a Doppler picks up more changes in the baby's heartbeat than using a Pinard, but this can lead to more caesarean section births without showing any clear improvement in the baby's outcome.²

How often we listen to your baby's heartbeat depends on your labour progress. The National Guideline on fetal monitoring recommends listening to the baby's heartbeat every 15 minutes in the first stage of labour and at least every 5 minutes in the second stage of labour.¹

If there are any worrying changes in your baby's heartbeat, we will recommend continuous CTG monitoring. This might continue until your baby is born. However, if there are no concerns with your baby's heartbeat, we may offer to return to listening in at regular intervals instead.

2. CTG Monitoring (cardiotocograph)

CTG monitoring is a continuous recording of your baby's heartbeat.



Two discs are placed on your tummy and are held in place by two belts. One disc records the baby's heartbeat and the other records your contractions. Usually, these discs are connected to the CTG with wires, but more maternity units now have wireless options so that you can move around easily during labour.

Having a CTG during pregnancy

If you attend the Delivery Suite/Labour Ward, Day Assessment, or are admitted to the Antenatal Ward with a pregnancy-related issue, CTG monitoring may be recommended. The decision to offer CTG monitoring will depend on how far along you are in your pregnancy.

It is recommended that if you are 28 weeks pregnant or more and are in hospital with a pregnancy-related concern, you should be offered CTG monitoring.¹

If you are between 26 weeks and less than 28 weeks pregnant and are in hospital with a pregnancy-related concern, your obstetrician will decide whether CTG monitoring is needed based on your specific situation.¹

Having a CTG during labour

If you have any complications in your pregnancy, such as needing to be induced, having high blood pressure, or concerns about your baby's growth, you may be advised to have CTG monitoring during labour. This type of monitoring can only be done in the hospital. While you can stand, move around the bed, and change positions, your ability to move freely might be limited because the discs that monitor the baby's heartbeat are connected to the monitor with cables. Some hospitals offer wireless CTG monitoring, which allow you to move around more freely or even use the birthing pool. Talk to your midwife or doctor if you would like to know more about using wireless options.

A large review of studies compared CTG versus intermittent auscultation and looked at women who had straightforward pregnancies and women who had complications, like high blood pressure or concerns about the baby's growth. The review found that both methods were equally good when it came to the baby's long-term outcomes. There was no difference in the number of babies who died during or shortly after birth (about one in 300). Fits or seizures in babies were rare (about one in 500 births) but less likely

when CTG monitoring was used. There was no difference in the rate of cerebral palsy. However, using continuous CTG monitoring was linked to more caesarean births and assisted vaginal births (like forceps or vacuum), which carry risks for the mother.³

Sometimes it may be difficult to monitor your baby's heartbeat so we may recommend using a fetal scalp electrode (FSE), also called a 'clip'. This is a small spiral that is attached to the skin on your baby's head. It stays in place during labour and gives a more accurate reading of your baby's heartbeat. The wire is connected to the CTG monitor and is removed as your baby is born.

Decision-making about fetal monitoring

Your midwife or doctor will recommend a type of monitoring for you, taking into account any risk factors and your preferences. This plan might change as labour goes on, but any changes will be discussed with you. Their advice follows the national fetal heart rate monitoring guideline. If you decide to decline the recommended type of fetal monitoring, it is important that you have a discussion with your midwife or doctor during your pregnancy.

If you have any questions, write them down and talk to your midwife or doctor at your next appointment.

The national guideline for fetal heart rate monitoring can be accessed here

- Rowland M, Taylor J, McNamara K, Cronin M, Kinsella I, Murphy H, Carroll L, Murphy D, Purcell E, Murphy C. National Clinical Practice Guideline: Fetal Heart Rate Monitoring. National Women and Infants Health Programme and the Institute of Obstetricians and Gynaecologists. June 2025
- 2. Martis R, Emilia O, Nurdiati DS, Brown J. Intermittent auscultation (IA) of fetal heart rate in labour for fetal well-being. Cochrane Database of Systematic Reviews 2017, Issue 2. Art. No.: CD008680. DOI: 10.1002/14651858.CD008680.pub2
- 3. Alfirevic Z, Gyte G, Cuthbert A, Devane D. Continuous cardiotocography (CTG) as a form of electronic fetal monitoring (EFM) for fetal assessment during labour. Cochrane Database of Systematic Reviews. 2017 Issue 2. Art. No.: CD006066. DOI: 10.1002/14651858.CD006066.pub3