

## Monitoring in Labour

### Why would my baby's heart beat need monitoring during labour?

Most babies come through labour without problems but there are a few who don't cope so well. During contractions blood can't get through the placenta (afterbirth) so easily. This is normal and most babies cope without any problems. If a baby is not coping well, this may be reflected in the pattern of their heartbeat.

### How is a baby monitored during labour?

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

### Intermittent Monitoring

If you are healthy and have had a trouble-free pregnancy this is the recommended method of monitoring your baby's heartbeat during labour. This should happen every fifteen minutes during the first stage of labour, increasing to once every five minutes (or once every contraction) in the second stage. This is the simplest way to listen to the baby's heartbeat and is done by the midwife using a Pinard stethoscope, or a hand held 'Doppler'. A Pinard is a trumpet shaped stethoscope that helps the midwife to hear your baby's heartbeat through your abdomen (tummy). A 'Doppler' is a small hand held device, which looks like microphone. It is placed against your abdomen and helps you, your midwife your birth partner to listen to your baby's heartbeat at the same time.

When this method of monitoring is used to listen to your baby's heart beat you will be able to move around during labour.

### Continuous Monitoring

This is a method of observing the baby's heartbeat by using a machine called a Cardiotocograph (CTG). The machine allows us to hear your baby's heart beat and record it on graph paper. This recording is obtained by placing 2 plastic pads onto your abdomen, one will record the heartbeat and one will record the contractions. Continuous monitoring keeps track of your baby's heartbeat for the whole of your labour.

Current research evidence does not support the need for your baby's heartbeat to be monitored using a CTG when you arrive at the hospital.

Sometimes the midwife or doctor may recommend that continuous monitoring be used to listen to your baby's heartbeat. This may be because there are known **risk factors** relating to **this pregnancy** such as:

- Your pregnancy is more than 42 weeks
- Your pregnancy is less than 36 weeks

- You have high Blood Pressure
- Your baby is a small baby (noted on the ultrasound scan)
- You have bled from your vagina at any time during your pregnancy
- You have a twin or triplet pregnancy
- You have previously had Caesarean Section

There are known **risk factors** relating to **your labour** such as:

- Your pregnancy is less than 36 weeks
- You are having Epidural analgesia (pain relief injected into the back)
- Your labour is induced (started artificially) or strengthened with a drip (oxytocin)
- You have Meconium stained liquor. This happens when your baby opens its bowels whilst inside your womb.
- Your baby is breech (going to be born bottom first)
- You have a long labour i.e. more than 10 hours in established labour shown on Partogram (the graph used to show how your labour is progressing).
- Your temperature becomes high (38°C) on two checks during your labour, at least one hour apart.

There are known risk factors that are linked to **your health** such as:

- Diabetes
- Infection
- Pre- eclampsia
- Problems with your heart or kidneys

You may wish to have continuous monitoring for your own reasons.

The midwife or doctor caring for you during labour will be happy to explain the recording from the monitor, please feel free to ask for extra information if you need this.

Being attached to the monitor can limit your ability to move around. Whilst it may be okay to stand up or sit down, it will not be possible to have a bath or move from room to room.

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

In some cases where there is more concern about the baby's heart rate, a small clip called a Fetal Scalp Electrode (FSE) may be attached to skin on the baby's head, this is then connected to the CTG machine to obtain a more accurate recording.

If there are any worries about the CTG recording it may be necessary to take a sample of blood from the baby's head. This test is called a **Fetal Blood Sample**, sometimes referred to as an FBS. Your midwife or doctor will ask your permission to perform a vaginal examination, during this examination a sample of blood will be taken directly from the skin of the baby's scalp. For

this examination it is usually necessary for your legs to be raised up and supported either side of the bed in stirrups. This test will measure the amount of acid in the baby's blood. This reading will help us to decide whether your baby is distressed and needs to be delivered. Sometimes this test may be repeated if necessary.

This information was generated from The Women's Information Network Group in the Liverpool Women's Hospital.

This information is not intended to replace discussion with either medical or midwifery staff. If you have any questions regarding the contents of this leaflet please discuss this with a midwife or obstetrician. The hospital is heavily involved in research and you might be asked to consider taking part in a research study. A midwife or doctor will discuss this with you and answer any questions that you may have.

For further information there is a list of useful web sites which can be found on the Liverpool Women's Hospital web site.

Go to

[www.lwh.org.uk](http://www.lwh.org.uk)

Click on

Clinical Services

↓

Support & Information

↓

Useful organisations

If you require any advice about the information on the web sites please speak to a midwife or doctor at the hospital or a community midwife at the GP surgery

**This leaflet can be made available in other formats on request**

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