

## Intrapartum Fetal Monitoring

### What is fetal monitoring?

Fetal monitoring is a way for your doctor to know how your baby is doing during labor. The doctor and nurse use special equipment to listen to your baby's heartbeat and your contractions. There are two options: continuous electronic fetal monitoring or structured intermittent auscultation (say: STRUK-churd IN-tur-MITT-ent OSS-cul-TAY-shun). During prenatal visits, your doctor will discuss these options with you and decide which would be best for you and your baby. Your doctor may change to a different type of monitoring if there are concerns during labor.

### How does it work?

The simplest way to monitor is structured intermittent auscultation. Your nurse will press a special stethoscope against your stomach to listen to the baby's heartbeat at set times during labor, such as every 30 minutes. Some women prefer this method because it lets them move around during labor.

The most common way to monitor is external continuous electronic fetal monitoring. Two sensors are placed on your stomach. They measure your contractions and your baby's heartbeat. The sensors look like flat, gray hockey pucks. They have straps to hold them in place. They do not cause pain or harm to you or the baby.

The sensors send signals to a monitor next to your bed. Your doctor can check the monitor to see how labor is going overall. The sensors stay on your stomach for all of labor. With continuous electronic fetal monitoring, you usually need to stay in bed on your back during labor.

If your doctor needs more information about how your baby is doing, they may recommend internal monitoring. They will rupture your amniotic sac (like when your water breaks) for this process. Your doctor will insert a small sensor attached to a wire through your cervix and place it on your baby's scalp. This monitors your baby's heartbeat. A small tube can also be inserted into the uterus (womb) to measure the strength of your contractions. These methods can provide more accurate measures of your baby's heartbeat and your contractions.

### What do the lines on the electronic fetal monitor mean?

The monitor next to your bed will have two squiggly lines on it, one above the other. The top line shows the baby's heartbeat. The bottom line shows your contractions.

Your doctor will watch to make sure your baby's heartbeat does not get too low during your contractions. If it does, your doctor may have you

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change positions and give you oxygen. If the problem continues, you may need to have an assisted or cesarean delivery (c-section).

### What kind of monitoring will I need?

You will need structured intermittent auscultation if you have a low-risk pregnancy or if there are no complications during labor.

You will need continuous electronic fetal monitoring if you have a high-risk pregnancy or if complications occur during labor. You'll also need continuous monitoring if you have an epidural for pain control or if you receive medicine (such as oxytocin) to start or speed up labor.

### What is a normal heart rate for my baby?

Your baby's heart rate is normal if it stays between 110 and 160 beats per minute. It should increase during contractions and when the baby moves, and it should return to normal after the baby moves or after a contraction ends. Your contractions should be strong and regular during labor.

### What if my doctor detects a problem?

If your baby's heart rate goes outside the normal range for a set period of time (usually 10 minutes or

more), your doctor may suggest some of these simple changes:

- Changing your position
- Giving you fluids through a needle in your arm
- Giving you oxygen

Your doctor might also do the following:

- Stop oxytocin if you've been receiving it
- Give you medicine to relax your uterus, which decreases your contractions
- Flush your uterus with healthy (or safe) fluid if your water has broken.

If none of these changes help, your doctor may want to speed up delivery. To do this, you could have an assisted delivery using a special vacuum or forceps, or you may have a c-section.

### Where can I get more information?

Your doctor

American Academy of Family Physicians

<https://familydoctor.org>

<https://familydoctor.org/monitoring-babys-heart-rate-labor/>

American College of Obstetricians and Gynecologists

<https://www.acog.org/patient-resources/faqs/labor-delivery-and-postpartum-care/fetal-heart-rate-monitoring-during-labor>

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