

Preterm Labor Patient Education

Anatomy of Pregnancy

Pregnancy brings about many physical changes. The baby grows in your uterus supported by an organ called the placenta. The placenta begins to form and grow at the time the fertilized egg implants in the uterus. The placenta aids in the delivery of nutrients and oxygen the baby needs for growth; it also helps remove waste products and produces hormones that support your pregnancy.

When you are pregnant, you have up to 50% more blood in your bloodstream. This is so the placenta and baby will receive enough blood to work well. If the placenta does not have enough blood flowing through it, the uterus may become "irritable" and start contracting. The blood vessels that bring blood to and from the placenta lie behind the uterus. When you lie on your back later in pregnancy, the weight of the uterus and baby on these vessels may decrease the amount of blood flow to the placenta. This is why your doctor or nurse asks you to lie on your side, especially if you had preterm contractions. Lying on your side, or with a pillow or wedge under your hip, will help prevent a drop in blood flow to the placenta and the oxygen flow to the baby.

The baby floats inside the amniotic sac located inside your uterus. This sac is filled with a watery fluid (amniotic fluid), which cushions the baby. This sac does not normally break until labor begins.

Your cervix is located at the bottom of your uterus. During pregnancy, your cervix is pointed toward the back of your vagina and is firm (like the tip of your nose) and closed. When labor begins, the cervix begins to shorten and open. This allows the baby to pass from the uterus into the vagina and then out of your body.

What is Preterm?

The length of pregnancy is counted from the first day of your last period. Your due date is calculated as 40 weeks from the first day of your last period. Here are some other terms that are used:

- A *miscarriage* is a pregnancy that ends before 20 weeks
- A *delivery* is a pregnancy that ends at or after 20 weeks
- A *term birth* is delivery at or after 37 weeks
- A *preterm birth* is delivery between 20 and 37 weeks

Why is Preterm Labor a Problem?

Babies born before 37 weeks may have various problems due to incomplete growth and immature development. Generally, the earlier babies are born, the more severe their problems. These problems can affect your child for many years. Early identification of preterm labor may help you stay pregnant longer.

Who is at Risk for Preterm Birth?

- Previous preterm labor or preterm birth
- Current pregnancy with twins, triplets or more
- Abnormally shaped uterus or surgery on the uterus
- Incompetent cervix, cone biopsy or large fibroids
- Severe kidney and urinary tract infections
- Cervical dilation or effacement before 36 weeks
- Excessive uterine contractions before 36 weeks
- Bleeding, placenta previa, too much or too little amniotic fluid
- Women having their first birth at 18 or less or 35 years or more
- Women with unusual physical or mental stress

What will happen if you have to go to the hospital early?

It can be very upsetting to go to the hospital before your due date. By letting you know what to expect, we hope you will be better prepared.

You may be told by your health care provider to go to the hospital if you are experiencing signs and symptoms associated with preterm labor. You will be admitted by a nurse who will take your temperature, blood pressure, etc. and place a fetal monitor on your abdomen to see if you are having contractions and check the baby's heartbeat.

After you have been checked in, you will be evaluated and a decision made on whether or not you are in labor. This may take a few minutes or a few hours. If you are in preterm labor, treatment may include bedrest, uterine activity monitoring and possibly, an IV and/or medication. If you are not in labor, you may be sent home.

Warning Signs of Preterm Labor

You have a better sense of the changes occurring in your body than anyone else and therefore you are the best person to identify these early signs. Reporting them to your doctor may mean better management of your pregnancy. The following are signs that occur in preterm labor. However, they can also be part of a healthy pregnancy. Think about if any of these signs are a change from the way you normally feel.

- **Uterine contractions** A contraction is a tightening of the muscle in the uterus. Using your fingertips, you should be able to indent your uterus when it is relaxed. During a contraction you can feel your uterus tighten and become hard. Irregular contractions occur normally throughout pregnancy; they usually do not hurt and can occur at any time. Preterm contractions may also be painless, but there is often a pattern to the "tightenings." Your uterus will feel hard over the entire surface and this tightening may occur every 10 minutes or closer. Each contraction may last from 30-60 seconds.

Remember, preterm labor contractions are often painless and occur every 10 minutes or closer.

- **Menstrual-like cramps** These are felt low in the abdomen, just above the pubic bone. The cramping may have a pattern or feel almost constant.
- **Low, dull backache** The backache is located mainly in the lower back and may radiate to the sides or front. It may be rhythmic or constant and is not relieved by change of position.
- **Pelvic pressure** You may feel pressure or a fullness in the pelvic area, in your back or thighs. It may feel as though the baby is going to “fall out.”
- **Intestinal cramps** These may occur with or without diarrhea. You may have the feeling of “gas Pains.”
- **Increase or change in vaginal discharge** The amount may be more than you normally have. It may be more mucousy or watery. The color may become pink or brownish, indicating the cervix may be changing.
- **“Something’s not right.”** Many women with preterm labor have a sense that things do not feel as they did before.

What to do if you think you have preterm labor

- Go to the bathroom and empty your bladder
- Drink plenty of fluids
- Lie down on your side and rest
- Record any contractions you have. Record both the time the contraction begins, as well as the time it ends (start time and end time)
- Call your health care provider if you have 5 or more contractions at regular intervals in the next hour

Emergency Situations

Sometimes, a problem can occur that needs immediate attention. If you notice any of the signs below, **CALL YOUR DOCTOR**.

- **Bleeding** If you have vaginal bleeding, a large gush or steady stream of bright red blood, it is an emergency. Get help right away, lie on your side and put your feet higher than your head. Save any pads or cloths used to catch the blood.
- **Rupture of the bag of water (amniotic sac)** Sometimes the bag of water breaks prematurely. If you notice a gush of fluid or a steady trickle, call your doctor. Note any color or odor of the fluid and save pads if you go to the hospital.
- **Severe stomach pain** If you have sharp, constant, severe pain that doesn’t go away when you change position, with or without contractions or bleeding, call your doctor.

How You Can Help Yourself at Home

If your health care provider believes that you are at risk for preterm labor or experiencing any of the early warning signs, you may be told to do these things:

- **Increase your rest** Resting on your side is a helpful way to keep your uterus relaxed. You may be asked to elevate the foot of your bed (or couch) so that your hips are slightly higher than your head – this will keep the pressure of the baby off of your cervix.
- **Fluid intake** During your pregnancy, it is even more important to drink 6-8 glasses of fluid per day as recommended for adults.
- **Bedrest** Your doctor may ask you to take rest periods ranging from 1-2 hours twice a day to modified or complete bedrest.
- **Decrease strenuous activity** Your doctor may ask that you do not do any heavy physical activity such as jogging, running, tennis or frequent trips up and down stairs. You may also have to limit heavy lifting, cleaning and long trips.
- **Change in job activities** Certain work activities may need to be changed or stopped. Your doctor will talk to you if this becomes a possibility.
- **Sexual activity** Your health care provider may ask that you stop or limit your sexual activities

Always remember to follow your physician's instructions about your prenatal care and activities

What is Labor?

Labor is the process by which the uterus contracts or tightens in a regular pattern and causes the cervix to open and prepare for delivery. When both uterine contractions **and** cervical change occur, you are in labor. If this occurs before 37 weeks, you are in preterm labor. The changes in the cervix can be evaluated during a vaginal exam by your practitioner. The cervical changes that occur during labor include:

- Softening of the cervix
- Effacement or thinning and shortening of the cervix
- Dilation or opening of the cervix
- Movement of the cervix from a backward to a forward position in the vagina
- Lowering of the baby's presenting part (usually the head) into the birth canal

These are changes that your doctor or midwife will look for to determine if you are in labor. Your role in the early detection of labor is to notice uterine contractions and report signs of preterm labor.

What Causes Preterm Labor?

The cause of preterm labor is not well understood. We know that certain things are associated with preterm labor and may increase your risk for early delivery. Common factors include carrying twins or triplets or having had a preterm delivery in the past. At this time, preterm labor can't be prevented. We can only do the next best thing – identify it early and try to help the pregnancy continue and increase your baby's chances for a healthy life.