

Preterm Labor

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What is preterm labor?

The length of a pregnancy is 40 weeks. In most pregnancies, labor starts between 37 weeks and 42 weeks after a woman's last menstrual period. When it begins before 37 weeks, it is considered preterm. About 1 in 10 babies born in the United States is born preterm.

There are many reasons for preterm labor. In most cases of preterm labor, however, the exact cause is not known.

How does labor start?

Labor starts with regular contractions of the *uterus*. The *cervix* thins out (effacement) and opens up (dilates) so the baby can enter the birth canal. It is not known for certain what causes labor to start. Hormones produced by the woman, *placenta*, and *fetus* play a role. Changes in the uterus, which may be caused by these hormones, may cause labor to start.

What can happen if my baby is born too early?

Serious illness or death can occur because the baby is not yet ready for life on his or her own. Preterm birth accounts for most newborn deaths. Growth and development in the last part of pregnancy are vital to the baby's health. The earlier the baby is born, the greater the chance he or she will have health problems.

Preterm babies (also called premature babies or "preemie") tend to grow more slowly than term babies. They also may have problems with their eyes, ears, breathing, and nervous system. Learning and behavioral problems are more common in children who were preterm babies.

What factors increase the risk of preterm labor?

The following factors increase the risk of preterm labor:

- Preterm labor or preterm birth in a previous pregnancy
- Smoking
- · Cocaine use

- Multiple pregnancy
- Abnormal cervix (due to surgery, for instance) or uterus
- Abdominal surgery during this pregnancy
- Problems with the placenta
- Too much amniotic fluid
- Infection while pregnant
- Bleeding in the second or third trimester of your pregnancy
- Being underweight
- Having a mother or grandmother who took DES (diethylstilbestrol, a medication given to many pregnant women in the 1950s and 1960s)
- Little or no prenatal care
- · Having a child with chromosomal disorders

Certain health factors also may be linked to an increased risk of preterm birth:

- Short cervical length as measured by *ultrasonography*
- Increased amounts of the protein fetal fibronectin in vaginal discharge

What are the signs and symptoms of preterm labor?

Call your health care provider right away if you notice any of these symptoms:

- Change in type (watery, mucus, or bloody) of vaginal discharge
- Increase in amount of discharge
- Pelvic or lower abdominal pressure
- · Constant, low, dull backache
- · Mild abdominal cramps, with or without diarrhea
- Regular or frequent contractions or uterine tightening, often painless
- Ruptured membranes (your water breaks with a gush, or sometimes even a trickle of fluid)

How can preterm labor be diagnosed?

Preterm labor can be diagnosed only by finding changes in the cervix when you are having regular contractions. To help diagnose preterm labor, your health care provider may use the following tests:

- Ultrasonography—This exam may be used to measure the length of the cervix and estimate the size, age, and position of the fetus. You may be watched for a time and then examined again to see whether your cervix changes.
- Fetal fibronectin—This test is used to measure the amount of a certain protein that helps predict the risk of preterm delivery.
- Fetal monitoring—These tests are used to record the heartbeat of the fetus and contractions of your uterus.

You also may have a pelvic exam and tests to look for infections of the vagina or cervix.

If I am at risk of preterm labor, what can I do to decrease the risk?

If you are at risk of preterm labor or preterm delivery, you may be advised to take certain steps to help prevent preterm birth. Early prenatal care is important. You may need to see your health care provider more often for exams and tests. Women who have had a previous preterm delivery may be given *progesterone*, a hormone to help prevent another preterm delivery.

If you smoke or if you use certain illegal drugs, such as cocaine, stop immediately. Both increase the risk of preterm birth. In many cases, women at risk for preterm labor do not have to take leave from their jobs. However, you may be advised to avoid heavy lifting or other hard or tiring tasks during pregnancy.

If you take childbirth preparation classes, tell the teacher you are at risk for preterm labor. He or she may advise you to skip certain exercises. Women at risk also may be advised to cut down on travel. Ask your doctor about these and other changes you may need to make in your daily routine. You may be advised to restrict sexual activity or to monitor yourself for contractions after sex.

How do I monitor myself for contractions?

After about 20 weeks of pregnancy, you may be asked to monitor yourself for signs of uterine activity or tightening. To monitor yourself, lie down on your side and gently feel the entire surface of your lower abdomen with your fingertips. You are feeling for a firm tightening over the surface of your uterus. These feelings of tightening usually are not painful.

If you feel contractions, keep monitoring for an hour. Keep track of when each contraction starts and ends and the total number that occur in 1 hour. Having some uterine activity before 37 weeks of pregnancy is normal. If your contractions occur 4 times every 20 minutes or you have 8 contractions in an hour, call your health care provider right away. You may be

in preterm labor. You should contact your health care provider each time you have 8 or more contractions per hour, unless he or she has advised otherwise.

Will my health care provider try to stop labor?

Your doctor may try to stop labor if

- it is detected early enough
- · you and your baby are not in danger from infection, bleeding, or other complications

What medications are used to slow or stop preterm labor?

You may be given medications called *tocolytics* that stop contractions. As with all medications, tocolytics can have side effects. Each woman responds in her own way. Talk to your doctor about the possible side effects that your medication can cause.

If it looks as though you may have the baby early, you may be given a medication called a *corticosteroid*. This substance crosses the placenta and helps the baby's lungs mature. Studies suggest that corticosteroids are most likely to help your baby when given between 24 weeks and 34 weeks of pregnancy.

In what cases might my baby be delivered preterm?

Sometimes preterm labor may be too far along to be stopped, or there may be reasons that the baby is better off being born, even if it is early. These reasons can include the following:

- Infection
- High blood pressure
- Bleeding
- · Signs that the fetus may be having problems

What are the special needs of preterm babies?

Many preterm babies need special medical care to breathe, eat, keep warm, and treat any health problems that may arise. They may be cared for in a neonatal intensive care unit (NICU) for weeks and sometimes months. You or your baby may be moved to a different hospital that can provide this type of care. The care your baby needs depends on how early he or she is born. Preterm babies can have physical and mental disabilities that can be long-term, such as abdominal problems and problems with breathing. Babies born before 32 weeks of pregnancy are the most likely to have health problems (see Early Preterm Birth).

Glossary

Amniotic Fluid: Fluid in the sac surrounding the fetus in the woman's uterus.

Cervix: The lower, narrow end of the uterus.

Corticosteroid: Hormones given to help fetal lungs mature, for arthritis, or other medical conditions.

Fetal Fibronectin: A protein produced during pregnancy.

Fetal Monitoring: A procedure in which instruments are used to record the heartbeat of the fetus and contractions of the mother's uterus during labor.

Fetus: The developing offspring in the uterus from the ninth week of pregnancy until the end of pregnancy.

Placenta: Tissue that provides nourishment to and takes away waste from the fetus.

Prenatal Care: A program of care for a pregnant woman before the birth of her baby.

Progesterone: A female hormone that is produced in the ovaries and makes the lining of the uterus grow. When the level of progesterone decreases, menstruation occurs.

Tocolytics: Medications used to stop or slow preterm labor.

Ultrasonography: A test in which sound waves are used to examine internal structures. During pregnancy, it can be used to examine the fetus.

Uterus: A muscular organ located in the female abdomen that contains and nourishes the developing embryo and fetus during pregnancy.

If you have further questions, contact your obstetrician-gynecologist.

FAQ087: Designed as an aid to patients, this document sets forth current information and opinions related to women's health. The information does not dictate an exclusive course of treatment or procedure to be followed and should not be construed as excluding other acceptable methods of practice. Variations, taking into account the needs of the individual patient, resources, and limitations unique to institution or type of practice, may be appropriate.

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