

If you had a prior preterm birth (PTB), you should see your doctor before your next pregnancy or as early as possible during pregnancy to discuss the best options for your care.

## What Is Preterm Birth?

A birth is considered preterm if it is more than three weeks before the due date. Preterm babies may have many types of health problems. PTB can happen for many reasons.

It is helpful to divide PTB into two main types:

- **Medically indicated PTB** is when the doctor starts the birth process (induction of labor or scheduled cesarean) because of issues such as high blood pressure, poor fetal growth, placenta problems or other conditions.
- **Spontaneous PTB** is when the birth process starts naturally, such as preterm labor, rupture of the membranes (ROM) or cervix opening (dilating) without labor.

The following information focuses primarily on spontaneous PTB.

### If I Had a Previous PTB, Will It Happen Again?

If your prior PTB was medically indicated, the odds of a repeat PTB depend on the reason for the PTB. Your doctor will review your history, estimate the odds of a repeat PTB and discuss whether any treatments will reduce the odds.

With a prior spontaneous PTB, the odds of a repeat PTB are about 1 in 3 (30%) overall.

Many factors increase the risk, including:

- Prior PTB very early in pregnancy
- Multi-fetal pregnancy (twins, triplets, etc.) in current pregnancy
- Abnormalities of the uterus, such as large fibroids
- Abnormalities of the cervix, such as lacerations or insufficiency
- Health conditions like high blood pressure, diabetes, kidney disease and autoimmune disorders
- Uterus, vagina, bladder, kidneys or systemic (whole-body) infections
- Smoking, vaping, non-prescription drug use and alcohol consumption
- Inadequate intake of essential nutrients, including folic acid and iron
- A short interval between pregnancies
- Age under 18 years or over 35 years
- Low income, which is associated with limited access to health care, financial stress, poor living conditions and poor nutrition
- Black, Native American and Alaska Native race, due to inequities in income, racism and other social drivers of health

#### What Can I Do To Lower the Odds of a Repeat Spontaneous PTB?

You can take several general steps to decrease the chance of another PTB, including:

- Prioritizing prenatal care: Attend all prenatal appointments.
- **Maintaining a healthy lifestyle:** Maintain a balanced diet, exercise regularly (with your doctor's approval) and avoid smoking, vaping, alcohol and non-prescription drug use.
- **Managing chronic conditions:** Work with your doctor to manage blood pressure, diabetes and other health problems.
- **Minimizing stress:** Use relaxation techniques and social support. Seek professional help if needed.
- **Asking questions:** Don't hesitate to ask your doctor if you have questions or concerns. Be sure to report any symptoms such as cramping, pain, fever, bleeding and unusual discharge.

While these steps may decrease the odds of a repeat PTB, they will not eliminate the risk.



# Do Doctors Recommend Other Steps to Lower the Odds of a Repeat Spontaneous PTB?

Yes, other recommendations include:

- **Cervical length screening:** The cervix is the passageway between the uterus (womb) and the vagina. The cervix is measured by ultrasound during the middle part of pregnancy. If you had a prior spontaneous PTB, this ultrasound may be repeated several times. If the cervix is short or open, your doctor may recommend other treatments such as progesterone or cerclage.
- **Progesterone:** The placenta makes this natural hormone during pregnancy. Adding extra progesterone may sometimes reduce the risk of a repeat PTB.
  - » Vaginal progesterone may be given for a short cervix. This decreases the odds of PTB almost by half and may be considered an alternative to cerclage.
  - » Vaginal progesterone can also be given as a preventative based on a history of prior PTB. There is evidence favoring this, but benefits have yet to be shown consistently.
  - » Injectable hydroxyprogesterone caproate is no longer available. The FDA withdrew approval for this medication after a large clinical trial that did not show any benefits.
- **Cerclage:** This procedure places a stitch (suture) around the cervix to help it stay closed. The stitch placement is a surgery performed in a hospital operating room.
  - » A cerclage is placed as a preventative based on a history of prior PTB. This approach may be favored instead of having multiple ultrasounds to check the cervix length.
  - » Cerclage can also be placed for treatment of a short cervix. In this setting, cerclage reduces the odds of a repeat PTB almost by half. Vaginal progesterone may be used instead of or in addition to cerclage.

While taking these steps may minimize the reoccurrence of a PTB, they will not eliminate the risk. Your doctor will discuss the pros and cons of the different approaches. After this discussion, you and your doctor will decide which steps are best for you.

## Are There Long-Term Health Concerns Associated With PTB?

People who have had a PTB have higher odds of high blood pressure, high cholesterol, diabetes, heart disease or stroke than people who have given birth without PTB. This increase in risk is found for those with both medically indicated and spontaneous PTB.

Because of these risks, it is recommended that you establish ongoing care with a primary care provider (such as an internal medicine specialist or family medicine doctor) and be evaluated every year for:

- High blood pressure
- Weight management
- Dietary review
- Cholesterol and triglyceride screening blood tests
- Diabetes (A1c) screening blood test

Be sure to tell your primary care provider about your history of PTB.

Additional Resources:

rileychildrens.org/health-info/prior-preterm-birth

ncbi.nlm.nih.gov/pmc/articles/PMC3648852

