

# Group B Streptococcus and Pregnancy



Group B streptococcus (GBS) is a type of bacteria that is found in 10–30% of pregnant women. A woman with GBS can pass it to her baby during labor and delivery. Most babies who get GBS from their mothers do not have any problems. A few, however, will become sick. This illness can cause serious health problems and even death in newborn babies. It usually can be prevented with a routine screening test that is given during prenatal care.

This pamphlet explains

- how GBS may affect a newborn
- testing and treatment for GBS
- treatment in special situations

## What Is GBS?

GBS is one of the many bacteria that live in the body and usually do not cause serious illness. It is found in the digestive, urinary, and reproductive tracts of men and women. In women, it can be found in the vagina and rectum. GBS is not a *sexually transmitted disease*. Also, although the names are similar, GBS is different from group A streptococcus, the bacteria that causes “strep throat.”

A person who has the bacteria but shows no symptoms is said to be *colonized*. The number of bacteria that a person has may change over time. A person colonized with a large number of bacteria may have low levels of bacteria months or years later. It also is possible for the number of bacteria to decrease to levels that cannot be detected.

Most pregnant women who are colonized with GBS have no symptoms or health effects. A small number may develop a urinary tract infection or infection of the *uterus* caused by GBS. The most serious health effect is that a woman colonized with GBS late in her pregnancy can pass it to her baby. For this reason, women are tested for GBS late in pregnancy. If GBS is present, a woman will receive treatment during labor.

## Effects on the Newborn

There are two types of GBS infections in newborns. Although both types of infections can be serious, most infants recover with no lasting effects. However, about 5% of babies infected with GBS will die.

1. Early-onset infections—Early-onset infections occur during the first week of life, generally within the first 24–48 hours after birth. These infections can occur as the baby moves through the birth canal of a woman who is colonized with GBS. Only a few babies who are exposed to GBS develop an infection. Certain factors, such as *preterm* birth, may increase the risk of a baby becoming infected. The most common problems caused by early-onset GBS infections are lung infections, blood infections, and *meningitis*.
2. Late-onset infections—These infections occur after the first 6 days of life. Late-onset infections may be passed from the mother to the baby during birth or they may be caused by contact with other people who are colonized with GBS. Late-onset infection can lead to meningitis and other diseases, such as pneumonia (see box “Signs and Symptoms of Late-Onset Infection”).

GBS testing late in pregnancy and treatment during labor can help prevent early-onset infections. However, it does not prevent late-onset infections.

### Signs and Symptoms of Late-Onset Infection

Although treatment with antibiotics during labor helps prevent early-onset GBS infection, it does not prevent late-onset GBS infection. Babies may pick up GBS from people they come in contact with or through other means. The antibiotic given during birth does not protect a baby from these kinds of GBS infections. Late-onset GBS infection most commonly causes meningitis. In newborns, the signs and symptoms of meningitis can be hard to spot. If your baby has any of the following signs or symptoms, contact your pediatrician right away:

- Slowness or inactivity
- Irritability
- Poor feeding
- Vomiting
- High fever

## Testing and Treatment

To help prevent early-onset GBS infection, women are tested for GBS late in pregnancy, between weeks 35 and 37. The test is called a culture. In this test, a swab is used to take a sample from the woman's vagina and rectum. This procedure is quick and is not painful. The sample is sent to a lab where it is grown in a special substance. It may take up to 2 days to get the results.

If results of the culture test are positive, showing that GBS is present, you most likely will receive treatment with **antibiotics** during labor to help prevent GBS from being passed to your baby. Antibiotics help get rid of some of the bacteria that can harm the baby during birth. The antibiotics work only if they are given during labor. If treatment is given earlier in pregnancy, the bacteria may regrow and be present during labor.

Even if you had a negative GBS test result in a previous pregnancy, you still need to be tested during each pregnancy. If you had a positive GBS test result in a prior pregnancy, you need to be tested again during each pregnancy. You may no longer have the bacteria.

Penicillin is the antibiotic that is most often given to prevent early-onset GBS infection in new-borns. If you are allergic to penicillin, tell your health care provider before you are tested for GBS. Women with mild allergic reactions can take an antibiotic called cefazolin. If you have had a severe reaction to penicillin, such as hives or **anaphylaxis**, the bacteria in the sample need to be tested to determine the choice of antibiotic.

If you had a previous baby with GBS infection or if your urine has GBS bacteria during this pregnancy, you are at high risk of passing GBS on to your baby during labor and delivery. You will receive treatment during labor to protect your baby from infection. You will not need to be tested between weeks 35 and 37 of pregnancy.

### Do You Need Treatment for GBS During Labor and Delivery?

You will need treatment for GBS during labor and delivery if you have any of the following:

- A previous baby with GBS infection
- GBS is found in the urine during this pregnancy
- A positive culture test result during this pregnancy
- Your GBS status is not known (you did not have a GBS culture test during this pregnancy, the test was not complete, or the results are not known) and any of the following occur:
  - You go into labor at less than 37 weeks of pregnancy
  - Your water breaks 18 hours or more before

delivery

- You have a fever during labor

You will not need treatment for GBS during labor and delivery if you have the following:

- A planned cesarean delivery, and it is done before your labor starts or water breaks even if you are GBS positive
- A negative result from a GBS test done between weeks 35 and 37 of this pregnancy

## Special Situations

Women who have planned a **cesarean birth** do not need to be given antibiotics for GBS during delivery if their labor has not begun or the **amniotic sac** has not ruptured (their water has not broken). However, these women should still be tested for GBS because labor may occur before the planned cesarean birth. If the test result is positive, the baby may need to be monitored for GBS infection after birth.

If a woman goes into labor but has not yet been tested for GBS, she may be given antibiotics in certain situations. The box "[Do You Need Treatment for GBS During Labor and Delivery?](#)" lists some of the different situations in which antibiotic treatment for GBS is and is not needed.

## Finally...

GBS can cause serious health problems in newborns. It is important to know about GBS so that you can protect your baby. Pregnant women are tested for GBS late in pregnancy. If you are GBS positive, treatment during labor and delivery may help prevent early-onset GBS infection in your baby. Tell your health care provider about your GBS status in past pregnancies, whether you have had a baby infected with GBS, and whether you are allergic to penicillin.

## Glossary

**Amniotic Sac:** Fluid-filled sac in the mother's uterus in which the fetus develops.

**Anaphylaxis:** An allergic reaction with symptoms ranging from hives and itching to breathing problems and shock. It can be life-threatening for some people.

**Antibiotics:** Drugs that treat infections.

**Cesarean Birth:** Birth of a baby through incisions made in the mother's abdomen and uterus.

**Colonized:** Having bacteria in your body that could cause illness, but having no symptoms of the disease.

**Meningitis:** Inflammation of the membranes of the brain or spinal cord.

**Preterm:** Born before 37 weeks of pregnancy.

**Sexually Transmitted Disease:** A disease that is spread by sexual contact, including chlamydia, gonorrhea, genital warts, herpes, syphilis, and infection with human immunodeficiency virus (HIV, the cause of acquired immunodeficiency syndrome [AIDS]).

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

This Patient Education Pamphlet was developed by the American College of Obstetricians and Gynecologists. Designed as an aid to patients, it sets forth current information and opinions on subjects related to women's health. The average readability level of the series, based on the Fry formula, is grade 6–8. The Suitability Assessment of Materials (SAM) instrument rates the pamphlets as “superior.” To ensure the information is current and accurate, the pamphlets are reviewed every 18 months. The information in this pamphlet 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 the institution or type of practice, may be appropriate.

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ISSN 1074–8601

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