

Streptococcal Infections (Group B)

(Group B Strep)

What is group B streptococcus (GBS)?

Group B streptococcus (group B strep or GBS) is a type of bacteria that causes illness in newborn babies, pregnant women, the elderly, and adults with other illnesses, such as diabetes or liver disease. GBS is the most common cause of life-threatening infections in newborns.

Newborn Babies and Group B Strep

Group B strep (GBS) is the most common cause of blood infection (sepsis) and meningitis (infection of the fluid and lining around the brain) for newborns. GBS is also a frequent cause of newborn pneumonia, which is more common than other well-known newborn problems like rubella, congenital syphilis, and spina bifida.

Transmission from mother to infant occurs just before or during delivery. After delivery, infants are occasionally infected via person-to-person transmission in the nursery.

How does GBS affect newborns?

About half of GBS disease cases in newborns occurs 1-6 days following delivery (known as early onset GBS), and most cases start within the first 24 hours of life. With early onset GBS, sepsis, pneumonia, and (occasionally) meningitis are the most common problems.

GBS disease may also develop in infants from 1 week to several months after birth (known as late onset GBS). With late onset GBS infections, meningitis or sepsis are the most common problems. Late onset GBS disease is slightly less common than early onset GBS disease.

What are the symptoms of GBS in a newborn?

The symptoms for early-onset group B strep can seem like other problems in newborns. Some symptoms are fever, difficulty feeding, irritability, or lethargy (limpness or hard to wake up the baby). If you think your newborn is sick, get medical help right away.

Can GBS disease among newborns be prevented?

Yes! Most early onset GBS disease in newborns can be prevented by giving the mother antibiotics through an IV during labor. Any pregnant woman who has had a baby with GBS disease in the past or who has a bladder infection caused by GBS should receive antibiotics during labor.

Pregnancy and Group B Strep

The bacteria that cause GBS disease normally live in the intestine, vagina, or rectum. Approximately 25% (1 in 4) of pregnant women carry GBS bacteria in their vagina or rectum. For most women, there are no symptoms of carrying group B strep bacteria.

How will I know if I need antibiotics to prevent passing GBS to my baby?

You should get a screening test late in pregnancy (35-37 weeks) to see if you carry group B

strep. The test is simple and does not hurt. A “Q-tip” like swab is used to collect a sample from the vagina and the rectum. The sample is sent to a laboratory for testing. If the test is positive, you should get antibiotics through an IV during labor. You should also get antibiotics through an IV during labor if any of the following apply to you:

- If you had a previous baby who became sick with GBS disease.
- If you had a bladder/urinary tract infection during this pregnancy caused by GBS.
- You do not know if you are a carrier for GBS and you go into labor starting at less than 37 weeks (pre-term labor).
- Your water breaks more than 18 hours before labor starts.
- You have a fever during labor.

Are there symptoms if you are a GBS carrier?

Most pregnant women have no symptoms when they are carriers for GBS bacteria. Sometimes, GBS can cause bladder infections during pregnancy or infections in the womb during labor or after delivery.

Being a carrier (testing positive for GBS, but having no symptoms) is common. About 25% of women may carry the bacteria at any time. This doesn't mean that they have GBS disease, but it does mean that they are at higher risk for giving their baby a GBS infection during birth.

Are there risks from taking antibiotics to prevent GBS disease in my newborn?

Penicillin is the most common antibiotic used. Women that are allergic to penicillin can be given other antibiotics. Penicillin is very safe and effective for preventing GBS disease in newborns. A very small percentage (about 10%) of women may have mild reactions to penicillin, and an even smaller percentage (about 1 in 10,000) will have a severe allergic reaction that requires emergency treatment.

A pregnant woman who is a group B strep (GBS) carrier and who gets antibiotics at full-term delivery can feel confident knowing that she has only a 1 in 4,000 chance of delivering a baby with GBS disease. However, if a pregnant woman who is a GBS carrier does not get antibiotics at the time of delivery, her baby has a 1 in 200 chance of developing GBS (more than 20 times the risk of developing the disease compared to those who receive treatment).

Will having a C-section prevent GBS in a newborn?

A C-section should not be used to prevent early-onset GBS infection in an infant. If you need to have a C-section for other reasons, and you are GBS positive, you will not need antibiotics for GBS treatment, unless you begin labor or your water breaks before the surgery begins.

What should I do if my water breaks early?

If your water breaks early, get to the hospital immediately. If you have not had a GBS test, or if you don't know if you have been tested, talk with your doctor about GBS disease prevention. If you have already tested positive for GBS, remind the doctors and nurses during labor.

Can I breastfeed my baby if I am GBS positive?

Yes. Women who are GBS positive can breastfeed safely. There are many benefits for both the mother and child.

Group B Strep and Adults

Group B Strep can affect more than just newborns and pregnant women. GBS infections occur in other age groups as well (both men and women). The rate of GBS infections increases with age and among those with serious medical conditions including: diabetes mellitus, liver disease, history of stroke, history of cancer, or bed sores.

Group B strep is more common among residents in nursing-home/long-term care facilities and bedridden hospitalized patients. Oftentimes GBS is acquired after recent trauma, or after having certain invasive hospital procedures such as surgery.

What are the symptoms of group B strep disease in adults?

Group B strep can cause mild disease in adults, such as urinary tract infections or bladder infections. Such infections are treated the same way that urinary tract infections caused by other bacteria are treated (with antibiotics), and are usually not serious.

However, more serious infections, known as invasive disease (infections where the bacteria have entered a part of the body that is normally not exposed to bacteria) can occur several different ways. Common problems in adults are: bloodstream infections, pneumonia, skin and soft-tissue infections, bone and joint infections, and meningitis (meningitis is rare).

If a doctor suspects a GBS infection, a sample of sterile body fluid (blood or spinal fluid) will be taken. Group B strep is diagnosed when the bacteria are grown from cultures of the sterile body fluid (cultures take a few days to grow).

How are group B strep infections treated?

Group B strep bacteria are most often treated with antibiotics. However, soft tissue and bone infections may require surgery. Treatment will vary according to the kind of group B strep infection a person has.

Is there any way to prevent group B strep disease in adults?

Standard infection control measures, particularly for patients who are hospitalized or in nursing homes, help reduce the risk of bacterial infections, including those caused by group B strep.

Where can I get more information?

- Your personal doctor
- Your local health department, listed in your telephone directory
- The Utah Department of Health, Bureau of Epidemiology (801) 538-6191
- The Centers for Disease Control and Prevention website www.cdc.gov/groupbstrep