

Group B Streptococcal Infections

What is GBS Disease and how common is it?

The GBS bacterium is the most common **cause** of sepsis (blood infection) and meningitis (infection of the fluid and lining surrounding the brain) in newborns. GBS infection causes newborn pneumonia and is **more common** than other, better known, newborn problems such as rubella, congenital syphilis, and spina bifida. Approximately 8,000 babies in the U.S. get GBS Disease each year and about 300 of these babies die (3.75% of those who become SICK). **The statistical chances of a baby having a fatal infection are approximately ONE out of 13,333 births.** This is slightly less than the rate for maternal mortality (the statistical chances of a woman dying) associated with vaginal birth, which is one out of 16,666. Babies that survive a **serious** GBS infection, particularly those who have meningitis, **may** have long-term problems, such as hearing or vision loss or learning disabilities. In pregnant women, GBS can cause urinary tract infections, uterine infections (amnionitis, endometritis and stillbirth).

Does everyone who has Group B Strep get sick with GBS Disease?

No. Many people carry GBS in/on their bodies but do not become ill. These people are “colonized.” Adults can be colonized in the bowel, genital tract, urinary tract, throat, or respiratory tract. 15% to 40% of pregnant women are colonized with **GBS** in the rectum or vagina. Because GBS usually does not cause problems for the adult female, many women carry it and do not know it. GBS can cause serious illness to a baby born to a woman who carries the bacteria. A fetus **may become colonized** with GBS if the mother is colonized with GBS in the rectum or vagina at birth; colonization occurs during labor or birth.

How does GBS Disease affect newborns?

Approximately 1% to 2% of babies who are colonized with GBS develop signs and symptoms of GBS Disease. Three-fourths of the cases of GBS disease among newborns occur in the first week of life (“Early-Onset GBS Disease”), and **most** of these cases are apparent within a few hours after birth. Sepsis, pneumonia, and meningitis are the most common problems. Premature babies **are more susceptible** to GBS infection than full-term babies are, **however most babies (75%) who get GBS Disease are full term.** GBS Disease may also develop in infants one week to several months after birth. Meningitis is more common with Late-Onset GBS Disease.

How do babies get sick from GBS Disease?

Babies are exposed to GBS during labor and delivery. If a mother’s membranes are ruptured (“water breaks”), her baby may come in contact with GBS if the bacteria travel upward from the vagina into the uterus. A baby may also be exposed to GBS while passing through the vagina. There is some evidence that GBS **may** cross intact membranes, exposing the baby while it is still in the uterus. GBS exposure may cause preterm births, stillbirths or miscarriages, but is **only one possible cause.**

Can pregnant women be checked (screened) for GBS?

Yes. GBS colonization can be detected during pregnancy by a vaginal and rectal swab. The CDC (Center for Disease control) recommends that you be screened for GBS at 35-37 weeks. Vaginal/rectal cultures done at this time are 90% accurate in predicting who will be GBS+ at delivery. A positive culture result means that you are **colonized** with GBS - **NOT** that you or your baby are or will become ill. **GBS** can come and go from your body (so if your test results were negative, you might in fact be positive at your time of delivery. What you can do is make sure you know when it’s more likely for babies to develop GBS infection and what the signs of this infection in babies are.

If I have a POSITIVE GBS culture, what are my treatment options?

It is **NOT** recommended that colonized women (GBS+) take oral antibiotics before labor, as recent studies indicate that such course of treatment does not prevent **GBS Disease** in newborns. According to the CDC, the recommended treatment, **to reduce the risk of GBS infection in newborns of colonized women**, is for the mothers to receive intrapartum (during labor) intravenous (I.V.) Antibiotic treatment. Mothers planning home births can choose either intramuscular (IM) or intravenous (IV) antibiotics, depending on their collaborating physicians’ recommendations. In addition, **ANY** pregnant woman who **previously** had a baby with GBS Disease or who has a urinary tract infection caused by GBS should receive antibiotics during labor. Intravenous antibiotics should be given for at least 4 hours prior to delivery where possible. For women in labor, the recommended doses of penicillin G are 3 g (or 5 mU) intravenously initially and then 1.5 g (or 2.5 mU IV every 4 hours until delivery. For women allergic to penicillin, the recommended doses of Clindamycin are 900 mg intravenously every 8 hours until delivery OR Erythromycin, 500 mg IV every 6 hours until delivery.