

## FACT SHEET

### Group B Streptococcal Disease (GBS), Invasive Disease

GBS is a bacterial illness commonly found in the gastrointestinal, genitourinary tracts and less common in the pharynx. It is most often seen in newborn babies, pregnant women, and the elderly and is the most common cause of life-threatening infections in newborns.

**Early onset disease usually occurs within the first 24 hours of life and less than a week; late onset disease happens after 3-4 weeks of age (range 7-89 days of age).**

In newborns, sepsis, pneumonia and meningitis are the most common problems. Most adult group B strep disease occurs in those with serious medical conditions as in diabetes mellitus; liver disease; stroke history, cancer or dermal ulcers.

<http://www.cdc.gov/groupbstrep/about/index.html>

**Cause:** *Streptococcus agalactiae* bacteria or group B streptococcus (GBS).

**Symptoms:** In early onset symptoms of respiratory distress, apnea, shock, pneumonia, and meningitis occur. Late onset is manifested by blood infections or meningitis, or it presents as soft tissue infections or sepsis. Pregnancy related infections are sepsis, amnionitis, urinary tract infection, and stillbirth.

**Spread:** 10-30% of adults carry the bacteria in their gastrointestinal and genital tracts without having symptoms. Intrapartum transmission via ascending spread from vaginal and/or gastrointestinal GBS colonization can occur during pregnancy.

Mode of transmission of disease in non-pregnant adults and older infants (>1 week) is unknown. Group B strep disease among non-pregnant adults may often be acquired after recent trauma, or after having certain invasive hospital procedures like surgery.

**Incubation:** Infants: early onset 1 to 7 days; late onset 7 days to several months.

**Precautions:** Standard precautions in the health care settings; good hand washing is the single most effective prevention of diseases.

**Diagnosis and Treatment:**

GBS disease is diagnosed when the bacterium is grown from cultures of sterile body fluids, such as blood or spinal fluid. Cultures take a few days to complete. GBS infections in both newborns and adults are usually treated with antibiotics (e.g., penicillin or ampicillin) given through a vein.

**Prevention:**

Most GBS disease in newborns can be prevented by giving certain pregnant women antibiotics through the vein during labor. 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.

Pregnant women who carry GBS should be offered antibiotics at the time of labor or membrane rupture. GBS carriers at highest risk are those with any of the following conditions:

- fever during labor
- rupture of membranes (water breaking) 18 hours or more before delivery
- labor delivery before 37 weeks

Because women who carry GBS but do not develop any of these three complications have a relatively low risk of delivering an infant with GBS disease, the decision to take antibiotics during labor should balance risks and benefits. Penicillin is very effective at preventing GBS disease in the newborn and is generally safe. A vaccine for pregnant women to produce antibodies against the disease is being developed.