Group Beta Streptococcus (GBS)

What is GBS? Why does it matter in pregnancy?
Group Beta Streptococcus (also known as GBS, Strep B, Beta Strep) is a bacterium commonly found in the lower intestines and genital tracts of 10-40% of pregnant women. Although GBS colonization is rarely harmful in healthy adults, newborn exposure to GBS during labor and birth can cause early-onset GBS disease - the leading infectious cause of serious illness in young infants in the United States.

How serious is early-onset GBS disease?
Newborns sick from GBS can develop septicemia (blood infection) leading to sepsis, a systemic and life-threatening illness that requires hospitalization. Sepsis occurs in 1 out of every 200 newborns (0.5%) born to GBS-positive women who are not treated in labor. Other serious infections, such as pneumonia and meningitis, can also occur. Of the full term babies that have GBS disease, 2-3% will die while up to 20% of preterm babies die. Survivors of GBS disease can suffer from permanent damage, including intellectual disability, blindness, deafness, and seizures.

Which babies are most at risk of getting GBS disease?
Half of all babies born to GBS-positive mothers will be colonized with GBS. However, only 0.5% of all infants born to GBS-positive women will get sick. Most of the babies that get sick from GBS are premature, so having a full term baby significantly decreases the risk that of your baby getting sick.

Known risk factors that increase the chances of a baby developing GBS disease include:
- Preterm labor (before 37 weeks)
- Ruptured membranes (ROM) for 18 or more hours
- Fever (above 100.4F) in labor, or chorioamnionitis (amniotic infection)
- GBS in mother's urine during pregnancy
- History of previous GBS infected baby

How do I know if I have GBS?
Most of the time, women who are colonized with GBS have no symptoms. Occasionally, GBS does cause symptomatic infections of the urinary tract, uterus and amniotic fluid (bag of waters). Routine testing for GBS in pregnancy involves taking a simple culture of the vagina and lower rectum with a cotton swab. Because GBS can come and go, screening is done late in pregnancy, preferably within five weeks of delivery. The screen will catch approximately 96% of woman who are colonized with GBS. Women who have had GBS in their urine during their current pregnancy or who have had a prior baby with GBS disease are presumed to be GBS-positive and do not need to be re-screened.

Updated: January 2016 (Tromblay)
What happens if I am GBS-positive?
It is the standard of care in the U.S. for GBS-positive women to receive intravenous (IV) antibiotic prophylaxis during labor. Receiving IV antibiotics in labor reduces the risk of GBS disease in your baby significantly. Less than 1 in 4,000 babies will develop sepsis if adequate antibiotic prophylaxis is done. In Washington, licensed midwives can provide IV antibiotics for you at the birth center or in your home.

What is the antibiotic process?
Antibiotics are most effective if given to the laboring woman at least four hours before birth. We would aim to give you one or more doses of antibiotics, starting when you are in active labor or when your water breaks, whichever is sooner. Each dose takes about 15-20 minutes to be given. Between doses, you would not need to be connected to an IV line and are free to move and use the tub. Penicillin is the antibiotic of choice, with alternatives including cefazolin, clindamycin, or vancomycin for women who are allergic to penicillin.

What are the risks and benefits of antibiotics in labor?
Risks include the chance of a rare, severe allergic reaction in the mother (1 in 10,000 – 100,000) and maternal and/or newborn yeast infections (1 in 7). Benefits include significantly reduced risk of early-onset GBS disease in the newborn.

Are there any alternatives to antibiotics in labor?
Receiving IV antibiotics in labor is the only proven treatment for preventing GBS disease. Other methods, such as using an antimicrobial wash (e.g. Hibiclens) or putting garlic in the vagina or taking oral antibiotics, have not been shown to be effective. Probiotics (e.g. lactobacillus) have been found to inhibit GBS growth. However, the effects of taking probiotics on maternal GBS colonization and newborn GBS infection have not been researched, although it is unlikely to do harm. Currently, there are no GBS vaccines.

What happens if I choose not to get antibiotics in labor or cannot get it in time due to a fast labor?
For women planning hospital birth who don’t receive adequate prophylaxis (having antibiotics “on board” for less than 4 hours prior to birth), observation of the newborn for 48 hours in-hospital is the standard of care. For our clients having home or birth center births, parents usually prefer instead to observe their newborn for signs of infection themselves at home after detailed discussion with the midwife about what to watch for and when to page.

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I have read all of the above and have had the opportunity to ask questions. I understand the benefits and risks treating GBS with IV antibiotics as well as refusing it.

_____ I consent to both GBS screening and IV antibiotics in labor if I am GBS positive.
_____ I consent only to GBS screening, but refuse IV antibiotics in labor if I am GBS positive.
_____ I refuse both GBS screening and IV antibiotics in labor.

Updated: January 2016 (Tromblay)