

## FACT SHEET #6

### INFECTIONS DURING PREGNANCY AND THEIR EFFECT ON PRETERM BIRTH

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#### INFECTIONS ARE ONE OF THE MAJOR CAUSES OF PRETERM BIRTH

Some researchers estimate that 30% to 80% of preterm births are triggered by infections. Some of these infections may not even have symptoms that the mother would recognize. Infection sets off a response in the mother's body that can make the uterus irritable and more likely to contract. Infections in the mother can also affect the developing baby. Early in the pregnancy, infections can cause damage to developing organs. Later in the pregnancy, they can cause preterm labor. Some infections at the time of delivery can put the baby at risk for life-threatening infections. If the baby is born preterm, the immune system is still not well developed, and that baby will have a harder time fighting off an infection after birth.

#### INFECTIONS IN THE FIRST HALF OF PREGNANCY MAY DAMAGE THE FETUS

A number of uncommon but serious infections can cause significant damage to the developing fetus if the mother gets the infection during the first half of the pregnancy. These include:

- Rubella or German measles
- CMV or cytomegalovirus, a common infection in preschool children
- Toxoplasmosis, a parasite found in some cats, mice, raw meat, raw eggs, and unpasteurized milk
- Chicken pox, a common viral disease in young children
- Syphilis, a sexually transmitted disease

All of these can cause damage to the baby's brain, eyes, and other organs if the mother contracts the infection during the first half of pregnancy; thankfully, the number of cases where the baby actually is affected is very low. The best protection is good hand washing, early detection, and avoiding situations where you might get exposed to any of these things. A pregnant woman should talk to her health care provider if she believes she may have been exposed to any of these situations.

#### INFECTIONS IN THE SECOND HALF OF PREGNANCY MAY CAUSE PRETERM BIRTH

- Urinary tract infections (UTIs) are infections of the bladder or kidneys and are common during pregnancy. However, they can put the mother at risk for delivering preterm, even if the mother is not aware she has a UTI. The healthcare provider will likely check the mother's urine at one or more prenatal visits during the pregnancy to be sure there is no infection or excessive bacteria there. A pregnant woman should also notify her health care provider if she has any symptoms of a UTI, which include discomfort or burning with urination, blood in the urine, or frequent urination. UTIs need to be treated with antibiotics before they turn into more serious infections.

- Bacterial vaginosis (BV), or “vaginitis,” is an overgrowth of bacteria that are commonly present in the vagina. When this becomes an infection, there is often a whitish-yellow discharge from the vagina, itching around the vagina, or burning with urination. BV is associated with an increased risk for preterm delivery and needs to be treated with antibiotics. A pregnant woman should tell her health care provider if she has any of these symptoms.
- Infections of the teeth and/or gums have been associated with a 4 to 7-fold increased risk for preterm delivery. It is important for a pregnant woman to brush and floss her teeth regularly during pregnancy, and see a dentist for a checkup at least once during her pregnancy.

### INFECTIONS AT THE TIME OF BIRTH CAN PUT THE BABY AT RISK FOR SERIOUS INFECTION

- Group B strep (GBS) is a common bacteria carried in the vagina of 20% to 30% of all women. It generally does not cause disease in adults, but in a newborn can cause severe life-threatening illnesses: pneumonia (infection in the lungs), sepsis (infection in the bloodstream), and/or meningitis (infection of the fluid and linings around the brain). Even if a mother has GBS, it is rare for the baby to be so severely infected (about 1 in 100). But because the disease in newborns is so devastating, all pregnant women are tested for GBS in the last few weeks of pregnancy, and if they have GBS, they are given an antibiotic during labor and delivery to protect the baby. Remember when she gets tested and tell her labor room nurses if she is positive for GBS.
- Herpes simplex virus (HSV) is most commonly associated with fever blisters, which are no problem during pregnancy. However, if a woman has the genital form of herpes at the time of the delivery or when her water breaks, especially a first-time infection, it does pose a risk to the baby. If delivered vaginally, the baby gets exposed to the herpes virus, and if that causes infection in the baby, it can result in overwhelming infection and meningitis, and can cause death or permanent brain damage. So if there is active genital herpes, your health care provider may deliver the baby by Cesarean section to keep from exposing the baby. If the mother has a skin breakout around her vaginal area, she should notify her provider so they can check for HSV.
- Chorioamnionitis. If infection elsewhere in the mother’s body settles into the membranes around the baby’s bag of water, then it endangers the baby. The most common bacteria to do this are *E coli* (from UTIs) and GBS (from vagina or urine). If the infection does cause labor to start, then induction or c-section may be indicated to get the baby away from those bacteria, which can cause life-threatening illness in the baby.

Be alert to these and any other infections during pregnancy. A pregnant woman should call her health care provider if she has signs of infection, or is exposed to others with contagious infections. Immunizations should be kept up to date and she should get a flu shot, even before she gets pregnant. Preventing and treating infections during pregnancy can help prevent preterm birth. ***Healthy Babies are Worth the Wait!***