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Tdap (tetanus, diphtheria, pertussis) Vaccine and Pregnancy

This sheet talks about the risks that exposure to the Tdap vaccine can have during pregnancy. With each pregnancy, all women have a 3% to 5% chance of having a baby with a birth defect. This information should not take the place of medical care and advice from your health care provider.

What are tetanus, diphtheria, and pertussis?

Tetanus is a bacterial disease. It causes tightening of the muscles and painful muscle spasms throughout the body. Even with modern care, 10-20% of individuals with tetanus die from the disease. The bacteria that cause tetanus can be found in soil and animal waste. Tetanus enters a person's body through an open wound.

Diphtheria is a bacterial infection that often starts with a fever and sore throat. A membrane can form over the back of the throat and airways, making it difficult to breathe. Without treatment, diphtheria is often deadly. Vaccination has made diphtheria uncommon in the United States, Canada, and many other countries.

Pertussis (also called whooping cough) is a bacterial illness that usually begins with symptoms like those of the common cold. Severe coughing can develop over several weeks. Rapid fits of coughing can cause a high-pitched whooping sound when inhaling.

Pertussis is most serious in young infants, who often need to be hospitalized. One percent of infected infants develop pertussis-related seizures and another 1% will die. Hospitalization and severe disease happens in up to 5% of teens and adults.

Are these conditions contagious?

Tetanus cannot be spread from person to person. Diphtheria and pertussis are contagious and are spread through the air when a person coughs or sneezes. If not immunized, there is about an 80% chance that a person

living in a household with an infected family member will catch pertussis.

Do these diseases cause pregnancy problems?

Tetanus and diphtheria can be deadly to a pregnant woman and can result in loss of the baby. Premature birth is also a concern. Tetanus can occur in infants whose mothers did not have adequate tetanus protection to pass on to their newborn baby. Tetanus in the newborn period is more common in developing countries and is often deadly.

Pertussis during pregnancy has not been well studied. There were no pregnancy complications seen in one series of 32 women who had pertussis late in pregnancy. There are a few reports of problems for the baby, but it is not known if those findings were due to maternal pertussis. Severe disease could be a risk to the mother's and the baby's health.

What is the Tdap vaccine?

The Tdap vaccine provides protection against tetanus, diphtheria, and pertussis for teens and adults. Childhood vaccination for these diseases does not provide lifelong protection. The brand names of Tdap are Adacel[®] and Boostrix[®].

The Tdap vaccine is noninfectious, meaning you cannot get the diseases from the vaccine. The vaccine is given as a one-time injection. Like any vaccine, it does not provide 100% protection against the diseases.

I just got the Tdap vaccine, how long should I wait until I get pregnant?

Since the Tdap vaccine is noninfectious, there is no specific waiting period before trying to get pregnant.

I didn't know I was pregnant when I got the Tdap vaccine - is there a risk to my baby?

Noninfectious vaccines have not been shown to cause birth defects or pregnancy complications. The manufacturer of Adacel[®] has collected outcomes for 95 women who received Tdap just before or during pregnancy and they reported no increase in birth defects or other harmful effects. Larger studies are ongoing.

There is an outbreak of pertussis in my area, should I get the Tdap vaccine even though I am pregnant?

Yes. If you are at an increased risk for getting the disease, it is usually recommended that you get the vaccine, regardless of pregnancy status.

In the past, Tdap was not recommended during pregnancy due to pertussis being uncommon in adults, but this is no longer the case. There was also a theoretical concern that the vaccine could decrease the infants' immune response to their own vaccines after birth. There is no evidence to support this theoretical concern.

In fact, maternal vaccination during pregnancy, along with vaccination of the father and other adult care givers, may provide some protection to newborn babies before they receive their own vaccines against pertussis.

I am pregnant and just learned I do not have sufficient protection against tetanus. Should I get the Tdap vaccine if I live in a state without a pertussis epidemic or outbreak?

If you are at increased risk for tetanus, but not pertussis, you may consider getting the Td vaccine, which provides protection against diphtheria and tetanus. This vaccine has been used successfully for many years in pregnancy. Regardless of pregnancy status, it is important to be vaccinated against tetanus.

I am pregnant and traveling to an area where there is diphtheria. Should I get the Tdap vaccine?

If you are only at increased risk for diphtheria, you may consider getting the Td vaccine, which provides protection against diphtheria and tetanus. This vaccine has been used successfully for many years in pregnancy.

Can I receive the Tdap vaccine while breastfeeding?

Yes. Noninfectious vaccines like Tdap are compatible with breastfeeding.

The father of the baby received the Tdap vaccine around the time that I got pregnant. Is there a risk to the baby?

No. There is no evidence that vaccines will affect the sperm, and vaccines given to men do not get to the developing baby. Vaccination of the father will help protect the newborn from being infected.

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If you have questions about the information on this fact sheet or other exposures during pregnancy, call OTIS at 1-866-626-6847.