Tetanus, Diphtheria and Pertussis (Tdap) Vaccine

This sheet is about exposure to the Tetanus, Diphtheria and Pertussis (Tdap) vaccine in pregnancy and while breastfeeding. This information should not take the place of medical care and advice from your healthcare provider.

**What are tetanus, diphtheria, and pertussis?**

Tetanus is a bacterial disease. It causes tightening of the muscles and painful muscle spasms in the body. Even with good medical care, 10-20% of people with tetanus die from the disease. The tetanus bacteria come from soil and animal waste. The bacteria get into the body through an open cut or sore.

Diphtheria is a bacterial infection that often starts with a fever and sore throat. A thin layer (called a membrane) can form over the back of the throat and airways, making it hard to breathe. Without treatment, diphtheria is often deadly. People get the illness from other people with diphtheria through droplets when they cough or sneeze. The use of vaccines 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. Fast, heavy coughing can cause a high-pitched whooping sound when breathing in. People get pertussis from other people with pertussis through droplets when they cough or sneeze. In people not vaccinated, the chance of getting pertussis in a household with an infected person is 80%. Pertussis is most serious in infants. In an outbreak in 2010 in California, 10 infants died. Serious disease and the need for hospital care can happen in up to 5% of teens and adults that get pertussis.

**Do these diseases cause problems in pregnancy?**

Tetanus and diphtheria infections can be deadly to a pregnant woman and can cause the loss of the baby. Birth before 37 weeks of pregnancy (premature birth) is also a concern. Tetanus can happen in infants whose mothers did not have enough tetanus protection to pass on to the newborn baby. Tetanus in the newborn period is more common in developing countries and is often deadly.

Pertussis infection 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 reports of problems for the baby. Premature infants or infants with health problems and infants less than 6 months of age can have severe pertussis. Pertussis has the potential to cause severe risks to the health of the pregnant person and baby.

**What is the Tdap vaccine?**

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

The Tdap vaccine is noninfectious, meaning you cannot get the diseases from the vaccine. People get the vaccine by an 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?**

There is no recommended waiting period for the Tdap shot. Pregnant people can get the vaccine at any time during pregnancy.

**Does taking the Tdap vaccine increase the chance for miscarriage?**

Miscarriage can occur in any pregnancy. The Tdap vaccine does not increase the chance for miscarriage.

**Does the Tdap vaccine increase the chance of birth defects?**

Every pregnancy starts out with a 3-5% chance of having a birth defect. This is called the background risk. Noninfectious vaccines do not increase the chance for birth defects or problems in pregnancy. The tetanus and diphtheria vaccine have a long history of use during pregnancy without increased risk.
Does the Tdap vaccine increase the chance of other pregnancy related problems?

Based on the studies reviewed, the Tdap vaccine does not increase the chance for other pregnancy problems, such as preterm delivery (having the baby before 37 weeks), low birth weight (weighing less than 5 pounds, 8 ounces [2500 grams] at birth), pre-eclampsia (a pregnancy related medical condition) or stillbirth.

Why should people who are pregnant get the Tdap vaccine during late pregnancy?

In the past, people who were pregnant did not regularly get the Tdap vaccine because pertussis was uncommon in adults. However, this is no longer the case and outbreaks have been happening across the United States. It is recommended that people who are pregnant get the vaccine during the third trimester of pregnancy (between weeks 27-36). However, it can be given anytime during pregnancy. Receiving the shot in the third trimester can help the baby get as many of the mother’s antibodies as possible. After delivery, these antibodies provide some protection against pertussis until the baby can receive his/her own vaccines. If all household members and caregivers get the vaccine, it can lower the chance for the baby to get pertussis.

I had Tdap in my last pregnancy. Do I need it again?

It has been recommended to get the Tdap vaccine in the third trimester of every pregnancy. Discuss current recommendations with your healthcare team.

Does the Tdap vaccine in pregnancy affect future behavior or learning for the child?

Studies have not been done to see if Tdap vaccines in pregnancy can cause behavior or learning issues for the child. However, no vaccine given in pregnancy has caused behavior or learning issues for the child.

Breastfeeding and the Tdap vaccine:

Noninfectious vaccines like Tdap are compatible with breastfeeding. If you get the vaccine while breastfeeding, it can help prevent you from getting sick and passing the illness to your baby. Be sure to talk to your healthcare provider about all of your breastfeeding questions.

If a male gets a Tdap vaccine, could it affect fertility (ability to get partner pregnant) or increase the chance of birth defects?

There is no proof that vaccines will affect sperm, and vaccines given to men do not reach the developing baby. Vaccination of others in the home will help protect the newborn from illness. In general, exposures that fathers or sperm donors have are unlikely to increase risks to a pregnancy. For more information, please see the MotherToBaby fact sheet Paternal Exposures at https://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/.

MotherToBaby is currently conducting a study to learn more about the pertussis vaccine in pregnancy. If you are pregnant and have received the pertussis vaccine (TDAP / DTAP), and you are interested in learning more about this study, please contact MotherToBaby Pregnancy Studies at 877-311-8972 or visit https://mothertobaby.org/join-study/.

Please click here to view references.