

# Tdap vaccination during pregnancy



By the Society for Maternal-Fetal Medicine (SMFM), with the assistance of Dr. Lorelei L. Thornburg and the SMFM Education Committee

## Why is vaccination against pertussis (whooping cough) important during pregnancy?

In 2012, more than 48,000 cases of pertussis were reported in the United States. For people who have not been vaccinated, pertussis is highly contagious. Pertussis is easily spread through the air when infected people cough. Approximately 90% of those who are not immune to pertussis can become infected. Pertussis in adults can cause significant illness such as a severe chronic cough lasting up to 3 months, but in newborns it can be life-threatening. Recent studies have shown that almost 1% of infants who need to be hospitalized die from pertussis, usually due to pneumonia and seizures.

The majority of pertussis cases in the United States, specifically hospitalizations and deaths related to this infection, occur in infants younger than 3 months of age. Babies cannot be vaccinated until they are 2 months old, so a newborn is at risk of getting infected until he or she can receive a vaccine. Vaccinating women in pregnancy may reduce the likelihood that their babies will be exposed to pertussis.

## Is the vaccine safe during pregnancy?

Tdap (combined tetanus, diphtheria and pertussis) vaccination in pregnancy has been shown in studies to be very safe. The vaccine contains pertussis bacteria that have been made inactive and proteins from tetanus and diphtheria that contain no bacteria. There are no known harmful effects on the developing baby.

## When and how often should the pertussis vaccine be given?

The vaccine should be administered in the third trimester, between 27 and 36 weeks' gestation. Following vaccination, the pregnant woman produces antibodies against the bacteria. These antibodies cross the placenta to the fetus, protecting the newborn against infection after delivery. Pregnant women should receive a Tdap vaccine during every pregnancy, regardless of when prior vaccinations were given, in order to provide maximum protection for the newborn.

## Who else in the household should get a Tdap vaccine?

All family members and caregivers who will have contact with the newborn should also be sure that their Tdap "booster" vaccine status is up to date. Even if they received a standard tetanus booster within the past 10 years, they should get the Tdap vaccination at least 2 to 3 weeks before the baby is born, to make sure immunity has started to develop.

## What are some side effects of the Tdap vaccine?

The vaccine has very few side effects. Pain and redness can occur where the injection is given. Rarely, inflammation of the blood vessels where the injection is given can occur. If any pain, redness, or swelling persists beyond a few days, contact your doctor.

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