Protect Vulnerable Infants from Pertussis
Immunize Mothers with Tdap during Third Trimester of Every Pregnancy

Pertussis is a continuing threat to Californians, though the magnitude of the threat can vary by year. Over 10,800 cases of pertussis were reported in California during 2014, the most in 70 years. Consistent with historical cycles of 3 to 5 years between years of higher incidence, the last pertussis epidemic in California occurred in 2010.

Young Infants at Highest Risk of Severe Pertussis
Infants younger than 2 months of age are most susceptible to hospitalization and death from pertussis, but immunization against pertussis is not recommended until at least 6 weeks of age. However, infants can be protected until they are old enough to be vaccinated by maternal antibodies that are transferred through the placenta from vaccinated mothers to their infants. Early evidence shows that maternal immunization with Tdap during the third trimester of pregnancy can prevent pertussis in young infants. Studies from the United Kingdom suggest that maternal pertussis vaccination may be approximately 90% effective in preventing pertussis in young infants.

Optimal Timing of Maternal Tdap Administration
To maximize protection of young infants, the federal Advisory Committee on Immunization Practices (ACIP) recommends that all women should be administered Tdap between 27 and 36 weeks of each pregnancy.

- Women immunized with Tdap during a prior pregnancy or during the first or second trimester of a current pregnancy appear to have low levels of pertussis antibodies at delivery.
- Transplacental transport of antibodies occurs mainly after 30 weeks’ gestation.
- At least two weeks are needed for a maximal response to immunization.

If Tdap is not administered during pregnancy, it should be given immediately postpartum. This will not provide direct protection to the infant, but may prevent transmission of pertussis from mother to infant.

Safety
Your pregnant patients might be concerned about receiving a vaccination while pregnant. Tdap vaccine is safe and important for pregnant women and their infants. A recent study found no increased risk of adverse events among women who received Tdap vaccine during pregnancy or their infants. Infants in the first several months of life are at the greatest risk of severe illness from pertussis but are too young to be directly immunized, thus vaccination during pregnancy is critical.

Other Close Contacts
Everyone (e.g., parents, siblings, grandparents, childcare providers, and healthcare personnel) who anticipates close contact with an infant younger than 12 months of age should receive Tdap if they have not already done so.

The California Department of Public Health encourages you to adopt the ACIP recommendations for use of Tdap in pregnant women to help ensure that your pregnant patients receive Tdap vaccination as well as all other indicated vaccinations. Please take a moment to answer a one-question survey to help us evaluate the utility of this article at: https://www.surveymonkey.com/s/XVLWS8H.
References


