**Protect Vulnerable Infants from Pertussis**

**Immunize Mothers with Tdap during Every Pregnancy**

Pertussis is a continuing threat to Californians, though the magnitude of the threat can vary by year. Over 9,100 cases of pertussis were reported in California during 2010, the most in more than a half-century. Consistent with historical cycles of 3-5 years between years of higher incidence, cases are likely to increase between 2013 and 2015 in comparison to 2012 (1).

**Young Infants at Highest Risk of Severe Pertussis**

Infants younger than two months of age are most susceptible to hospitalization or death from pertussis, but immunization against pertussis is not recommended until at least 6 weeks of age. However, infants can be protected by maternal antibodies that are transferred through the placenta. Early evidence suggests that maternal immunization with Tdap during the third trimester of pregnancy can prevent 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 during every pregnancy, preferably between 27 and 36 weeks’ gestation:

* 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.

**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. ACIP is currently considering whether Tdap boosters are indicated for contacts of infants.

**References**

1. California Department of Public Health. Pertussis summary reports. <http://www.cdph.ca.gov/programs/immunize/Pages/PertussisSummaryReports.aspx>
2. CDC. Updated Recommendations for Use of Tetanus Toxoid, Reduced Diphtheria Toxoid, and Acellular Pertussis Vaccine in Pregnant Women-Advisory Committee on Immunization Practices, 2012. MMWR, 2013; 62 (7): 131-135. Available at: <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6207a4.htm>
3. Healy CM, Rench MA, Baker CJ. Importance of timing of maternal Tdap immunization and protection of young infants. Clin Infect Dis 2013;56:539-44.