INFANTILE PERTUSSIS

Infants aged <12 months typically have the most severe pertussis, often requiring hospitalization for respiratory or other complications.

The risk for pertussis death or severe pertussis is highest among infants in the first 6 months of life and remains elevated until infants have received 1-2 doses of pediatric DTaP.

Parents, especially mothers, have been identified as the most important source of infant pertussis. A parent is implicated in approximately 25% of cases in infants.

Vaccination of both parents of an infant before discharge from the hospital could prevent more than 38% of infant pertussis cases and deaths.

Tdap should be administered among adults and adolescents who anticipate contact with an infant aged <12 months both for personal protection and to reduce the risk for transmitting pertussis to infants.

VACCINE ADMINISTRATION

Children should get 5 doses of DTaP, one dose at each of the following ages: 2, 4, 6, and 15-18 months and 4-6 years.

Td is a tetanus-diphtheria vaccine given to adolescents and adults as a booster shot every 10 years, or after an exposure to tetanus under some circumstances. Tdap is similar to Td but also contains protection against pertussis. A single dose of Tdap is recommended for adolescents 11 or 12 years of age, or in place of one Td booster in older adolescents and adults age 19-64.

WHY GET VACCINATED?

Infants less than 12 months of age have a high risk of pertussis-related complications, hospitalizations, and death. Vaccinating adult contacts reduces the risk of transmitting pertussis to infants. Although pertussis is most serious in infants, it can also be serious in adults. Even adults who do not typically come in contact with young children should be vaccinated.

Most reported pertussis cases among adolescents and adults occur because of decline in protective immunity over time. Immunity against pertussis wanes five to ten years after the last childhood vaccination.

QUESTIONS?

If you have any questions or concerns related to the Tdap vaccine, please contact your local healthcare provider or the Independence Health Department to receive more information.

Prevention of Tetanus, Diphtheria, and Pertussis Among New Parents and Infants

For Health Care Providers

The Advisory Committee on Immunization Practice (ACIP) recommends a single dose of Tdap for adults 19-64 years of age to replace the next booster dose of tetanus and diphtheria toxoids vaccine (Td). The ACIP also recommends Tdap for adults who have close contact with infants younger than 12 months of age.
RISK OF PERTUSSIS

Pertussis results in substantial morbidity among adults and adolescents whose immunity to past childhood vaccination might have waned and who have not received the Tdap booster immunization.

In 2004, women aged 15-39 years accounted for 97% of all live births in the United States. During 2000-2006, a total of 103,940 cases of pertussis were reported to the CDC, where 27% of these cases occurred among persons aged 15-39 years of age.

Parents with pertussis, including new mothers, are the identified source of pertussis infection in >25% of pertussis cases in early infancy, when rates for complications and fatalities are highest. Infants aged <12 months account for 93% of pertussis-related deaths.

Tdap RECOMMENDATIONS FOR PREGNANT WOMEN

The Advisory Committee on Immunization Practices recommends that pregnant women who were not vaccinated previously with Tdap:

- Receive Tdap in the immediate postpartum period before discharge from hospital or birthing center.
- May receive Tdap at an interval as short as 2 years since the most recent Td vaccine.
- Receive Td during pregnancy for tetanus and diphtheria protection when indicated.
- Defer the Td vaccine indicated during pregnancy to substitute Tdap vaccine in the immediate postpartum period if the woman is likely to have sufficient protection against tetanus and diphtheria.

Although pregnancy is not a contraindication for receiving Tdap vaccine, health care providers should weigh the theoretical risks and benefits before choosing to administer Tdap vaccine to a pregnant woman.

Adult and adolescent women of childbearing age should receive the Tdap vaccine at a routine health assessment before conception to prevent morbidity of pertussis that could occur during pregnancy.