

September 11, 2009

Pertussis (whooping cough) Fact Sheet

- 1. What is pertussis (whooping cough)? Pertussis is a highly contagious disease involving the lungs and airways. It is caused by the bacteria *Bordetella pertussis* which is found in the nose, mouth, and throat of an infected person. More than 200 cases are reported each year in Pennsylvania, mostly in children. Other cases of pertussis occur but are not diagnosed, especially in adults, since illness in adults may be milder than in children.
- 2. Who gets pertussis? Pertussis can occur at any age, but is usually seen in children. There has been an overall increase in cases in recent years, with a disproportionate increase in adolescents and adults.
- 3. How do you get pertussis? People get pertussis by breathing in airborne droplets from the nose and mouth of already infected persons. Older children and adults may have milder disease and may spread it to unimmunized infants and young children. An infected person is most contagious early in the course of illness. If untreated, an infected person can spread pertussis for up to 3 weeks after coughing starts. Antibiotic treatment limits contagiousness to five days after treatment is started.
- 4. How soon do symptoms start? Symptoms usually start 5 to 10 days after exposure to another person with the disease, but may take as long as 20 days to develop.
- 5. What are the symptoms of pertussis? Pertussis begins as a mild illness like the common cold. Sneezing, runny nose, low-grade fever, and mild coughing progress to severe coughing. Some persons have episodes of rapid coughing followed by a high-pitched whoop as they take a deep breath. However, not everyone with pertussis has a whooping cough, especially very young infants. Severe cough may continue for many weeks despite proper treatment. Symptoms may be milder in older children and adults. However, pertussis can be a serious disease, especially in infants and young children. Complications can include pneumonia, dehydration, seizures, encephalopathy (a disorder of the brain), and death.
- 6. How is pertussis diagnosed? Diagnosis is based on the recovery of the bacteria from nasopharyngeal specimens obtained early in the course of the disease.
- 7. How is pertussis treated? Antibiotics may be useful early in the disease. Antibiotics are particularly helpful in reducing spread of the disease to other persons. However, once severe symptoms begin, antibiotics may not have any effect on symptoms.
- 8. How can pertussis be prevented?

- a. The single best control measure is adequate vaccination of children. The Pertussis vaccine is usually given together with other vaccines such as diphtheria and tetanus (DTaP vaccine). Recent changes in the Pertussis vaccine have improved its safety while keeping a high level of protection. Children should be routinely immunized at ages 2, 4, 6, and 15 months, and again at 4-6 years. In Pennsylvania and many other states, adequate Pertussis immunization is required for school entry.
- b. In 2005, a new combination tetanus, diphtheria and acellualar Pertussis vaccine (Tdap) was approved for use in adolescents and adults. Tdap is recommended for use in all 11-18 year olds, preferably at a preventive care visit at age 11 or 12 years. Adults under 65 years of age should receive a single dose of Tdap to replace a single dose of tetanus-diphtheria (Td) for booster immunization against tetanus, diphtheria, and pertussis if they received their most recent Td ≥ 10 years earlier. Tdap may be given at an interval shorter than 10 years since receipt of the last Td to protect against pertussis. There is no Pertussis vaccine approved for adults aged 65 years and older.
- c. Adults under 65 years of age who have or anticipate having close contact with an infant < 12 months of age (e.g., parents, childcare providers, health-care providers) should receive a single dose of Tdap. Ideally, Tdap should be given at least 1 month before beginning contact with the infant. Women should receive a dose of Tdap immediately after giving birth to a child if they have not previously received Tdap. Any woman who might become pregnant is encouraged to receive a single dose of Tdap.
- d. Health-care personnel who work in hospitals or ambulatory care settings and have direct patient contact should receive a single dose of Tdap as soon as feasible if they have not previously received Tdap. Priority should be given to vaccination of health-care personnel with direct contact with infants aged <12 months. An interval as short as 2 years from the last dose of Td is recommended for the Tdap dose. Other health-care personnel (i.e., those who do not work in hospitals or ambulatory care settings or who do not have direct patient contact) should receive a single dose of Tdap according to the routine recommendation and interval guidance for use of Tdap among adults. However, these personnel are encouraged to receive the Tdap dose at an interval as short as 2 years following the last Td. Hospitals and ambulatory care facilities should provide Tdap for health-care personnel and use approaches that maximize vaccination rates such as education about the benefits of vaccination, convenient access, and provision of Tdap at no charge.
- e. When pertussis does occur, preventive antibiotic treatment is sometimes recommended for household and other close contacts of the person with pertussis.
- 9. For more information about pertussis: http://www.cdc.gov/ncidod/dbmd/diseaseinfo/pertussis-t.htm

This fact sheet provides general information. Please contact your physician for specific clinical information.