



PERTUSSIS (Whooping Cough)

Pertussis is a bacterial infection of the respiratory tract caused by the germ *Bordetella pertussis*. It generally starts with cold-like symptoms which leads to paroxysms or ‘fits’ of coughing and is often followed by a gasp for air with a “whoop” sound (which gives it the common name, “whooping cough”). Gagging or vomiting after coughing is another common sign of pertussis. A cough that doesn’t resolve within 2-3 weeks may be due to pertussis. Pertussis is often severe in infants who are more likely to develop complications such as seizures and pneumonia. Prior to the pertussis vaccine in the 20th century, it was a major cause of childhood mortality. Currently, pertussis is on the rise among older children and young adults, likely due to waning immunity from their last immunization. Generally, children receive their last dose of pertussis at kindergarten entry. Older children and adults usually have less severe symptoms, but can still spread the disease to infants and younger children. Currently, Tdap, a booster vaccine which combines tetanus, diphtheria and pertussis, is recommended for those persons 10 years of age and older. The booster is **not** recommended for treatment of illness.

The disease is spread through direct contact with nasal and respiratory secretions from infected persons, usually by the airborne route. It takes as long as 6 to 20 days -- usually 7 to 10 days -- to develop symptoms after exposure to the germ. Symptoms may last for up to 10 weeks. Those not treated with antibiotics are contagious for 3 weeks after the start of symptoms. Those treated with antibiotics are no longer contagious after 5 days of the recommended drugs.

The course of pertussis typically occurs in three stages:

1. The first stage, the *catarrhal* stage, has a slow onset and the symptoms resemble those of a cold with sneezing, low grade fever and a mild cough that lasts one or two weeks. This is the period of greatest communicability or infectiousness.
2. During the second stage, the *paroxysmal* stage, the cough persists and becomes more violent with repeated coughs, sometimes followed by a gasp for air and a high “whooping” sound. The diagnosis of pertussis may now be suspected. Mucus is often very thick and the combination of extended coughing and mucus may cause vomiting. There is no fever and except for the cough, children will appear normal. This stage may last 4-6 weeks, but can last as long as 10 weeks. The coughing attacks will occur more often at night, often interfering with sleep. Older children, adults, infants less than six months old, and those completely immunized may lack the whoop and have few paroxysms.
3. During the final stage, the *convalescent* stage, the symptoms will lessen and disappear over a period of 2-3 weeks. Some patients have recurrent bouts of all symptoms, including whoop during viral upper respiratory infections for many months after the onset of illness.

General recommendations are ALL household members and other close contacts of individuals with pertussis, regardless of immunizations, take antimicrobial medications (antibiotics). Depending on a contact’s age and immunization status, an additional vaccine may also be prescribed to limit the spread of illness and infection. Your primary doctor or local health department can help you identify those who would benefit from medication and/or additional vaccine. Please be alert to these symptoms and consult your physician should they occur.

FOR MORE INFORMATION:
SCHD Communicable Disease Unit 330-375-2662
Centers for Disease Control and Prevention www.cdc.gov
Mayo Clinic www.mayoclinic.com
Minnesota Department of Health www.health.state.mn.us