What is pertussis (whooping cough)?

Pertussis is a very contagious disease characterized by severe coughing and caused by the bacteria *Bordetella pertussis*. Among vaccine-preventable diseases, pertussis is one of the most commonly occurring in the United States. The disease can be very serious in children less than one year of age when it can cause lung infections and, less often, seizures or inflammation of the brain. In rare cases, pertussis can result in death in children less than one year of age.

Who gets pertussis?

Pertussis can occur at any age, but vaccination reduces the risk. It most commonly occurs in very young children who have not been vaccinated. Protection from vaccination wanes over time so even vaccinated persons can get pertussis. Pertussis in older children and adults often causes milder illness that may not be diagnosed.

How is pertussis spread?

The bacterium that causes pertussis is found in the nose and throat of infected people. These bacteria spread through the air in droplets produced by sneezing and/or coughing. Persons in the early stage of illness are the most contagious. Older children and adults are often the source of infection for infants with whom they have close contact. Antibiotics will shorten the length of time the illness can be spread. Children should be kept out of childcare or school until they have been treated with antibiotics for at least five days and are well enough to return. Adults with pertussis should stay home from work until they have been treated with antibiotics for at least five days.

What are the symptoms of pertussis?

The symptoms of pertussis occur in stages. The first stage begins like a cold with a runny nose, sneezing, mild fever, and cough. The cough lasts 1-2 weeks and then worsens. The second stage includes uncontrolled coughing followed by a whooping noise when the person breathe in air. During these severe coughing spells, a person might vomit, or the lips or face may look blue from a lack of oxygen. Between coughing spells a person may appear well. This stage can last 4-6 weeks. The last stage is when symptoms begin to disappear.

How soon after exposure do symptoms appear?

Symptoms usually appear 4-21 days after exposure.

How is pertussis diagnosed?

Pertussis can be diagnosed through blood tests or through a swab collected from the nasal passages. Nasal swabs are the preferred test because they are more sensitive and less likely to lead to a false positive test result.

What is the treatment for pertussis?

Certain antibiotics may make the illness less severe if started in the early stage of the disease.
Infants younger than six months of age and persons with severe cases may need to be hospitalized for treatment.

**How can pertussis be prevented?**

Pertussis can be prevented by vaccination. Pertussis vaccine is combined with vaccines for tetanus and diphtheria and given as a single injection. The combination vaccine (DTaP) is given at 2, 4, 6, and 15 months of age and when a child enters school. Current recommendations also advise that children receive a single booster dose of vaccine (Tdap), preferably at 11-12 years of age. Adults who anticipate having close contact with an infant younger than age 12 months (e.g., pregnant women, new parents, grandparents, childcare providers, and healthcare providers) also should receive a single booster dose. Other adults also may receive a single booster dose of vaccine if they have not had a booster previously.

**Can a person who had pertussis get it again?**

Yes. Protection from either vaccination or previous disease wanes with time (typically 5-10 years), so it is possible to get pertussis again. The disease may present as a persistent cough rather than typical pertussis.

**How can I learn more about pertussis?**

- If you have concerns about pertussis, contact your healthcare provider.

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