

What is pertussis? Pertussis, more commonly known as **whooping cough**, is caused by a bacterium (germ), *Bordatella pertussis*, that lives in the mouth, nose and throat. The germ is highly contagious and is easily spread from person to person.

How is pertussis spread? The bacteria are shed in discharges from the nose and throat and then spread to others through coughing and sneezing. An infected person is contagious from just before onset of symptoms until up to three weeks after symptoms start. Treatment with antibiotics shortens the contagious period to about five days.

Who can get pertussis? Anyone can get pertussis, it is not just a disease that affects children. Individuals who have not received the pertussis vaccine or children that have not completed vaccination for pertussis are at risk. Additionally, while proper vaccination against pertussis improves immunity in children, this immunity may decline 3-12 years after completing the vaccination resulting in increased susceptibility in adolescents and adults.

What are the symptoms of pertussis? Symptoms usually appear 5 to 10 days after exposure, but can take as long as 21 days. The first symptoms are similar to those of a common cold: a runny nose, sneezing, low-grade fever and a mild, occasional cough. The cough gradually becomes severe and, after one to two weeks, the patient has spasmodic bursts of numerous, rapid coughs. The characteristic high-pitched "whoop" comes from breathing in after a coughing episode. During such an attack, the patient may turn blue, vomit and become exhausted. Between coughing attacks, the patient usually appears normal. Coughing attacks occur more frequently at night. The attacks increase in frequency for a couple of weeks, then remain at the same level for two to three weeks, and then gradually decrease. Coughing may last as long as 10 weeks. Recovery is gradual, and coughing episodes can recur with subsequent respiratory infections for months after the onset of pertussis.

Can there be complications? Although most people recover, complications of pertussis can be severe. It can be a critical illness in children younger than 1 year of age, especially in premature babies or those with lung disease. The most common complication and the cause of pertussis-related deaths is bacterial pneumonia. Less serious complications include ear infections, loss of appetite and dehydration. Although infrequent, complications affecting the brain, such as convulsions and inflammation, may occur, especially in infants, and can have long-term effects or cause death.

How is pertussis treated? Pertussis is usually treated with the antibiotic erythromycin. Studies have documented that azithromycin and clarithromycin may also be effective. When these antibiotics can not be used trimethoprim – sulfamethoxazole can be used as an alternative. Some children may need to be hospitalized. People in close contact (regardless of age or vaccination status) with children or adults who have been diagnosed with pertussis usually need to be treated with antibiotics.

Can pertussis be prevented? Every child should get pertussis vaccine at 2, 4, 6 and 15 months of age and another dose at 4 to 6 years old. This vaccine is given in the same shot with diphtheria and tetanus vaccines (DTP). Immunization is required for child care and school attendance. New booster vaccines became available in 2005 that will offer continued protection against pertussis, diphtheria and tetanus for adolescents and adults. These vaccines have been added to the recommended schedule of vaccinations for adolescents. Adults with routine contact with infants less than twelve months of age should receive a booster dose. All close contacts of a person with pertussis, regardless of age or vaccination status, should be treated with an appropriate antibiotic to prevent illness.