

What is pertussis (whooping cough)?

Pertussis is a disease, characterized by severe coughing, caused by the bacterium *Bordetella pertussis*. The disease can be very serious in children less than 1 year of age where 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 1 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. Pertussis can also occur in older children and adults, where it can cause milder illness that may not be diagnosed.

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 breathes in air. During these severe coughing spells, a person may vomit, or their lips or face may look blue from a lack of oxygen. Between coughing spells a person may appear well. This stage may last 4-6 weeks. The last stage is where symptoms begin to disappear.

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. Antibiotics will shorten the length of time the illness can be spread – children should be kept out of childcare until they have been treated with antibiotics for at least five days and are well enough to return.

How soon after exposure do symptoms appear?

Symptoms usually appear between 4 and 21 days after exposure to someone with the illness. If a person is exposed to pertussis, antibiotic treatment may help prevent or lessen the disease.

How is pertussis diagnosed?

A physician may suspect pertussis from the symptoms described above. To be sure of the diagnosis, a swab of the back of the nose, taken during the early stage of the illness, can be tested for the *Bordetella* bacteria.

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 immunization with pertussis vaccine. Pertussis vaccine is given at 2, 4, 6, and 15 months of age, and when a child enters school. Current recommendations also advise that persons 11–18 years of age should receive a single booster dose of pertussis vaccine, preferably at 11–12 years of age. Adults may also receive a single booster dose of pertussis vaccine, if they have not previously had a booster.

Household members and close contacts (such as other children in childcare settings) of a person with pertussis should be treated with antibiotics, whether or not they have been immunized. If started early, this may prevent illness or make it less severe. Close contacts less than seven years old who are either unimmunized, or who have received fewer than four doses of the pertussis vaccine, should finish the immunization process as soon as possible. Contacts who may be eligible for a booster dose should contact their healthcare provider. Children who develop symptoms within 21 days of exposure should see a physician right away for testing for pertussis.