

What is pertussis?

Pertussis, or whooping cough, is a highly contagious respiratory infection caused by the bacteria *Bordetella pertussis*.

Who gets pertussis?

Pertussis can occur at any age. Although most of the reported cases occur in children under five years, the number of cases in adolescents and adults is increasing, probably due to waning of vaccine immunity. Adolescents and adults and those partially protected by the vaccine may have milder disease which is not diagnosed as pertussis. Pertussis is thought to account for up to 7% of cough illnesses per year in adults.

How is pertussis spread?

Pertussis is primarily spread by direct contact with the discharges from the nose and throat of infected individuals. Frequently, older siblings or other adult household members who may be harboring the bacteria in their nose and throat can bring the disease home and infect an infant in the household.

What are the symptoms of pertussis?

Pertussis begins as a mild upper respiratory infection. Initially, symptoms resemble those of a common cold, including sneezing, runny nose, low-grade fever, and a mild cough. Within two weeks, the cough becomes more severe and is characterized by episodes of numerous rapid coughs followed by a crowing or high-pitched whoop. A thick, clear mucous may be discharged with the coughing. These episodes may recur for one to two months and typically are more frequent at night. Young infants, adolescents, and adults sometimes do not have these typical coughing spells. Older people or partially immunized children may have milder symptoms.

How soon after infection do symptoms appear?

The incubation period is usually 7 to 10 days, with a range of 4 to 21 days.

When and for how long is a person able to spread pertussis?

A person can transmit pertussis from the onset of symptoms to three weeks after the onset of coughing episodes. The period of communicability can be reduced to five days after appropriate antibiotic therapy is begun.

How is pertussis diagnosed?

Early diagnosis and treatment are very important because antibiotics can help prevent severe illness and reduce the chances of a close contact developing the disease. If pertussis is suspected, swabs of respiratory secretions are collected and sent to the laboratory for testing.

Can pertussis be treated?

Yes, antibiotics are available to treat pertussis. It is important that treatment be started as soon as possible. Treating pertussis early can make the illness less severe and help prevent spreading the illness to other people.

Does past infection with pertussis make a person immune?

One attack usually confers immunity comparable to that provided by vaccine. Getting sick with pertussis doesn't provide lifelong protection, so people should continue to receive recommended pertussis vaccines even if they've had the disease.

What are the complications associated with pertussis?

Young infants are at the greatest risk for complications. Serious complications of pertussis include pneumonia, seizures, encephalopathy (disorders of the brain), and death. Less serious complications include ear infections, loss of appetite, and dehydration.

What is the vaccine for pertussis?

Vaccination is recommended for infants and children, adolescents, adults, and pregnant women.

- Children should be immunized with the DTaP (diphtheria toxoid in combination with tetanus toxoid and acellular pertussis) vaccine at 2, 4, 6, and 15 to 18 months of age and between 4 and 6 years of age.
- Adolescents and adults (regardless of age) who have never received Tdap should receive a single dose of Tdap. This should be followed by a Td or Tdap booster every 10 years.
- Pregnant women should receive a single dose of Tdap during every pregnancy, preferably during weeks 27-36 of gestation.

See the Centers for Disease Control and Prevention (CDC) website for the most current vaccine recommendations: www.cdc.gov/vaccines/vpd/dtap-tdap-td/public.

What can be done to prevent the spread of pertussis?

The single most effective control measure is maintaining the highest possible level of immunization in the community. The treatment of cases of pertussis with the appropriate antibiotic is important, as is the treatment of close contacts of cases. In addition, medical professionals should consider the diagnosis of pertussis in adolescents and adults with persistent coughs. People who have or may have pertussis (including those with a persistent cough) should stay away from young children and infants until properly evaluated by a physician.

For more information, please visit these websites:

- CDC Pertussis: www.cdc.gov/pertussis
- CDC Pertussis Vaccination: www.cdc.gov/vaccines/vpd/pertussis
- CDC ACIP DTaP/IPV/Hib/HepB ACIP Vaccine Recommendations: www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/dtap-ipv-hib-hepb.html
- CDC ACIP DTaP/Tdap/Td ACIP Vaccine Recommendations: www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/dtap.html