

Consult your doctor to ensure that this information is right for your child. Information below is for general information and does not constitute medical advice.

What is whooping cough?

Whooping cough (pertussis) is a highly contagious bacterial infection of the upper respiratory system.—specifically, the area where the nasal passages meet the back of the throat (nasopharynx). The infection causes irritation in breathing passages, resulting in severe coughing spells. The illness has three distinct stages and can last months.

Whooping cough is most severe and more likely to cause complications, such as pneumonia, when it occurs in the first 4 months of life, especially in babies who are born prematurely or who have not been immunized. Older adults also are at increased risk for complications.

What causes whooping cough?

Whooping cough is caused by infection with *Bordetella pertussis* or *B. parapertussis* bacteria. The infection easily spreads from person to person through respiratory secretions or mucus, such as can be emitted during coughing or sneezing. The incubation period is about 7 to 14 days, meaning that symptoms develop about 1 to 2 weeks after exposure to the bacteria.

Although whooping cough is more common in children, adults can also become infected. You can prevent or decrease the severity of whooping cough infection in your child by keeping immunizations up to date. Whooping cough vaccine is not currently recommended for adults; however, a booster immunization is expected to be available for adolescents and adults in the near future.

After being immunized or after recovering from whooping cough infection, you are temporarily immune but can become infected again years later. Adults can spread the illness, especially to unimmunized children. Babies who are not immunized may catch whooping cough from adult caregivers who are not aware that they have the illness.

What are the symptoms?

Symptoms of whooping cough typically last 6 to 10 weeks (but may last longer) and occur in three stages.

* Stage 1: Coldlike symptoms, such as sneezing, runny nose, mild coughing, watery eyes, and sometimes a mild fever, last from several days to 2 weeks. An infected person is most contagious during this stage.

* Stage 2: Coldlike symptoms fade, but the cough worsens, changing from a dry, hacking cough to bursts of uncontrollable, often violent coughing. During a coughing episode, it may be temporarily impossible to take a breath because of the intensity and repetition of coughs. When finally able to breathe, the person may take in a sudden gasp of air through airways narrowed by inflammation, sometimes causing a whooping noise. Vomiting and severe exhaustion often follow a coughing spell. However, between coughing episodes, the infected person often appears normal. This is the most serious stage of whooping cough, usually lasting from 2 to 4 weeks or longer.

* Stage 3: Although the person improves and gains strength, the cough may become louder and sound worse. Coughing spells may occur sporadically for weeks to months and may flare up if a cold or other upper respiratory illness develops. This final stage may last longer in people who have never received the whooping cough vaccine.

Healthy adults who become infected with whooping cough often have a much milder form of the illness compared to children. However, adults age 60 years and older are at increased risk of having severe symptoms and developing complications. The severity of symptoms is, in part, influenced by whether a person was immunized against whooping cough and how long ago the immunization was given. The protection against whooping cough provided by the vaccine wears off over time.

How is whooping cough diagnosed?

A person with whooping cough may appear normal between coughing episodes, which often delays a diagnosis or makes it more difficult. However, a health professional may suspect whooping cough during an exam when symptoms are present and recent cases have been reported in the community. Sometimes other coughing illnesses, such as the common cold or bronchitis, have specific symptoms that can distinguish them from whooping cough, such as a high fever, sore throat, or wheezing.

To confirm the diagnosis, the health professional will collect mucus from the nasopharynx and have it tested for specific types of bacteria that cause whooping cough. Laboratory results usually are not available for 10 to 14 days. If whooping cough is suspected, treatment will be started before the lab results are available.

Sometimes, blood tests or X-rays may be done to rule out other diseases or conditions. A pulse oximeter may be used to check blood oxygen levels and to help guide treatment.

How is whooping cough treated?

Whooping cough is treated with antibiotics, primarily to help reduce the spread of infection. If given during the very early stage of the illness, antibiotics may help shorten the illness. Home treatment measures, such as a cool air humidifier, can also be used to help reduce the discomfort of symptoms.