

Pertussis (Whooping Cough)

What is pertussis (whooping cough)?

Pertussis is a contagious respiratory disease caused by bacteria. Pertussis can cause very severe illness in younger children, but also causes illness in older children and adults. Children can get pneumonia and occasionally inflammation of the brain from pertussis. In rare cases (1 out of 200), pertussis can cause death (especially in children less than one year of age).

What are the symptoms of pertussis?

The symptoms of pertussis usually occur in two stages. The first stage begins like a cold, with a runny nose, sneezing, and possibly a low-grade fever. The second stage of pertussis includes uncontrolled coughing spells. When a child breathes in, they give a whooping noise. The second stage can last for 6 – 10 weeks.

Infants under 6 months:

Sometimes their symptoms are different. Small infants may stop breathing for a period of time. Also, they may not have a whoop. Infants that are not fully immunized have the most severe disease and many will require hospitalization.

Older children and adults:

In adults, pertussis starts like a cold, with a runny nose, sneezing, low-grade fever, and cough. Then it turns into bronchitis, which is raspy, hoarse coughing. This can last for weeks. The coughing spells may be so bad that the person can't sleep and may vomit.

Who gets pertussis?

Anyone can get pertussis. Infants and young children usually get the disease from an older brother or sister or an adult who may have a coughing illness. Vaccinated children are protected until the age of seven.

How is pertussis spread?

The bacteria that cause pertussis are found in the mouths, noses, and throats of infected people. The bacteria are spread in the air by droplets produced during sneezing or coughing. Pertussis is very contagious and most unvaccinated people living in a household will get the disease. Once a person is exposed, it takes seven to ten days before the first symptoms appear.

How long can a person spread pertussis?

Pertussis is very contagious during the early stage of the illness and becomes less contagious by the end of three weeks. Antibiotics will shorten the contagious period of the illness. Utah Department of Health Office of Epidemiology September, 2003

How is pertussis diagnosed?

A physician suspects pertussis when someone has the symptoms described above. A sample of mucus from the back of the nose must be taken during the early stage of the illness in order to find the bacteria. Laboratory tests can be done on the sample to identify the bacteria.

How is pertussis treated?

Infants younger than six months of age and persons with severe cases often require hospitalization. Severe cases may require oxygen and mild sedation to help control coughing spells. Antibiotics may make the illness less severe if started early. Generally, if a person is exposed to pertussis, specific antibiotics may help prevent the disease.

How can pertussis be prevented?

Getting vaccinated is the best way to prevent pertussis. Currently, the pertussis vaccines available in the United States are acellular pertussis antigens in combination with diphtheria and tetanus toxoids (DTaP, DTaP, combination vaccines, and Tdap).

Children should get four doses of DTaP, one dose at each of the following ages: 2, 4, 6, and 15-18 months and a booster dose given at 4-6 years. DT does not contain pertussis, and is used as a substitute for DTaP for children who cannot tolerate pertussis vaccine.

Tdap is recommended for all pre-teens going to the doctor for their regular check-up at age 11 or 12 years. Adults (between the ages of 19-64) who didn't get Tdap as a pre-teen or teen should get one dose of Tdap instead of the Td booster. Most pregnant women who were not previously vaccinated with Tdap should get one dose of Tdap post-partum before leaving the hospital or birthing center.

Parents can also help protect their very young infants by minimizing exposure (close contact) with persons who have cold symptoms or cough illness. Coughing people of any age, including parents, siblings and grandparents can have pertussis. When a person has cold symptoms or cough illness, they need to stay away from young infants as much as possible.

NOTE: Upper-case letters in these abbreviations denote full-strength doses of diphtheria (D) and tetanus (T) toxoids and pertussis (P) vaccine. Lower-case “d” and “p” denote reduced doses of diphtheria and pertussis used in the adolescent/adult-formulations. The “a” in DTaP and Tdap stands for “acellular,” meaning that the pertussis component contains only a part of the pertussis organism.

Prompt use of antibiotics is helpful in limiting other cases. Antibiotics should be given to all household contacts and other close contacts, such as those in day care. Children who develop symptoms within 14 days of exposure should be excluded from day care until a diagnosis can be made.

Where can I get further information?

- Your personal doctor
- Your local health department, listed in your telephone directory
- The Utah Department of Health, Immunization Program (801) 538-9450 or the Bureau of Epidemiology (801) 538-6191.