

**What is pertussis?**

Pertussis, or “whooping cough,” is a very contagious respiratory disease caused by bacteria. It is a vaccine-preventable disease that is usually mild in vaccinated children and adults, but can be serious in infants. All children attending child care facilities and entering schools are required to be immunized against pertussis.

**Who is at risk for pertussis?**

Everyone is at risk for pertussis, but infants and unvaccinated children are at the highest risk for developing severe complications from pertussis.

**What are the symptoms of pertussis?**

There are three stages of pertussis. The first stage begins like a cold with a runny nose, sneezing, mild fever and cough that slowly gets worse. These symptoms last for one to two weeks. The second stage consists of uncontrolled coughing spells (paroxysms) and when people breathe in, can make a whooping sound (especially babies). During severe coughing spells, a person may gag, vomit or become blue in the face from lack of air. Between coughing spells, the person often appears to be well. The coughing spells may be so severe that it is hard to eat, drink, or breathe. During this stage, infants may stop breathing or turn blue. This coughing stage may last for six or more weeks. The final stage is when symptoms gradually improve over weeks to months.

**How soon do symptoms appear?**

The incubation period is usually seven to 10 days, but may be as short as five and as long as 21 days.

**How is pertussis spread?**

The bacteria that cause pertussis live in the nose, mouth and throat, and are sprayed into the air when an infected person sneezes, coughs or talks. Other people nearby can then inhale the bacteria and become infected. Infants often get pertussis from older children or adults.

**When and for how long is a person able to spread the disease?**

Pertussis is contagious from the onset of cold-like symptoms until three weeks after coughing begins.

**How is a person diagnosed?**

A health care provider will diagnose pertussis by collecting a sample of mucus from the back of the nose. Laboratory tests are then performed on the sample. Pertussis is difficult to diagnose in adolescents and adults without laboratory testing because the disease can mimic bronchitis in those age groups.

## **What is the treatment?**

Infants may need hospitalization and/or supportive care. Antibiotics will help to prevent transmission of the illness to others and may possibly reduce the severity of disease if given early in the course of the illness. Those treated with antibiotics are contagious until five days of treatment are completed. Anyone who is exposed to pertussis should also be given antibiotics to prevent themselves from being contagious if they develop the disease, even if they were vaccinated. In addition, it is helpful to get plenty of rest and fluids.

## **Does past infection make a person immune?**

No. Someone who has previously had pertussis can develop the disease again in the future. It is unknown how long immunity to pertussis lasts.

## **Should children or others be excluded from child care, school, work or other activities if they have pertussis?**

Yes. People who have pertussis should be excluded from activities until five days of recommended antibiotic treatment have been completed. People with pertussis who do not take antibiotics should be excluded until 21 days after cough onset. Symptomatic contacts (contacts with a cough) of pertussis cases also should be excluded from activities until five days of antibiotic treatment are completed.

## **What can be done to prevent the spread of pertussis disease?**

There are two vaccines that protect against pertussis. All pertussis vaccines also protect against diphtheria and tetanus. The childhood vaccine is called DTaP and the vaccine for older children, adolescents, and adults is called Tdap. Generally a child will receive five doses of DTaP, given in a series starting at 2 months of age with a final dose prior to starting elementary school. The childhood DTaP vaccine is not given to people age 7 or older. North Dakota state law requires all children attending child cares and schools to be vaccinated against pertussis. It is recommended that adolescents receive one dose of Tdap at age 11 or 12 to protect themselves against pertussis. Tdap is required for entry into seventh grade. Women should receive a dose of Tdap during each pregnancy. All adults should also receive a dose of Tdap if they have not previously received one. This is especially important for those who have significant contact with infants, such as child care providers and new or expecting parents. Pregnant women are recommended to receive a dose of Tdap during each pregnancy.

Routine hand washing may prevent the spread of pertussis.

## **Additional Information:**

Additional information is available at [www.ndhealth.gov/disease](http://www.ndhealth.gov/disease) or by calling the North Dakota Department of Health at 800.472.2180.

**This disease is a reportable condition. As mandated by North Dakota law, any incidence of this disease shall be reported to the North Dakota Department of Health.**

Resource:

American Academy of Pediatrics. [Pertussis (Whooping Cough)]. In: Kimberlin DW, Brady MT, Jackson MA, Long SS, eds. *Red Book: 2015 Report of the Committee on Infectious Diseases*. 30<sup>th</sup> ed. Elk Grove Village, IL: American Academy of Pediatrics; 2015: 608-621.