### Minnesota Department of Health

# **Pertussis (Whooping Cough)**

### What is pertussis?

Pertussis, or whooping cough, is a disease that affects the lungs. Pertussis bacteria are spread from person to person through the air. A person with pertussis develops a severe cough that usually lasts four to six weeks or longer. Pertussis can be very serious, especially in infants.

### What are the symptoms of pertussis?

The first symptoms of pertussis are similar to a cold: sneezing, a runny nose, possibly a low-grade fever, and a cough. After one or two weeks, the cough becomes severe as noted by the following:

- The cough occurs in sudden, uncontrollable bursts where one cough follows the next without a break for breath.
- Many children will make a high-pitched whooping sound when breathing in after a coughing episode. Whooping is less common in infants and adults.
- During a coughing spell, the person may vomit.
- The person's face or lips may look blue from lack of oxygen.
- The cough is often worse at night.
- Between coughing spells, the person seems well, but the illness is exhausting over time.
- Coughing episodes gradually become less frequent, but may continue for several weeks or months until the lungs heal.

## What are the complications of pertussis?

- Pertussis in infants is often severe, and infants are more likely than older children or adults to develop complications.
- The most common complication of pertussis is bacterial pneumonia.
- Rare complications include seizures, inflammation of the brain, and death.

### Who gets pertussis?

- Anyone of any age can get pertussis.
- Teenagers and adults account for more than half of reported cases.
- Cases in school-age children continue to increase.
- Older children and adults usually have less severe illness, but they can still spread the disease to infants and young children.

### Is there a vaccine for pertussis?

Yes. There are two pertussis vaccines (DTaP and Tdap). Both vaccines are given in combination with tetanus and diphtheria. Your age determines which vaccine you should receive.

- DTaP vaccine is given to **children through 6 years of age.** Children should receive shots at 2, 4, 6, and 15-18 months of age, and at 4 to 6 years of age.
- Children 7 through 10 years who are not fully vaccinated against pertussis should receive a single dose of Tdap. Children who have never received any doses, or don't know if they have, should receive a series of three vaccinations containing tetanus and diphtheria toxoids, and one of these should be Tdap.
- Adolescents 11 through 12 years should receive a single dose of Tdap, which is usually given at their pre-adolescent check-up.
- Adolescents 13 through 18 years who missed getting the Tdap should get it the next time they see their health care provider.
- Adults age 19 through 64 years should receive a single dose of Tdap. This is especially important if they will be in contact with infants younger than 1 year of age.
- Adults 65 years and older who have or anticipate having close contact with an infant younger than 1 year of age should receive a single dose of Tdap. It can also be given to other adults who wish to be protected against pertussis disease.
- **Pregnant women** who haven't received a dose of Tdap should receive Tdap preferably in the late second or third trimester. If Tdap wasn't given during pregnancy the new mother should get Tdap right after delivery.

**Timing of Tdap**: If you haven't received Tdap yet but have received Td vaccine recently, you should get Tdap. Ask your health care provider for Tdap at your next visit.

Children who have completed some or all of the recommended vaccinations for pertussis may still get pertussis disease but will generally have a milder illness.

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### Is there a lab test for pertussis?

Yes. To test for pertussis, the nasal passages are swabbed. Material on the swab is then examined in the lab for the presence of pertussis bacteria.

### How is pertussis spread?

The bacteria are found in fluids from the mouth and nose of someone with pertussis. The bacteria are spread when fluid containing the bacteria gets in your nose or mouth. This can happen when a person with pertussis coughs or sneezes on you, or by touching the fluid and then touching your eyes, nose, or mouth. In general, a person is at greater risk of getting pertussis if they are within three feet of someone with pertussis for at least 10 hours a week. This is considered **close contact**.

The period between exposure to the bacteria and onset of illness is usually 7 to 10 days but may be as long as 21 days.

## When and for how long can a person spread pertussis?

Pertussis is most infectious (most likely to spread to others) early in the illness.

Persons who have pertussis but have completed five days of antibiotics can no longer spread the disease.

Persons who have the disease but do not take antibiotics can spread the disease during the first three weeks they are coughing. (Note: The cough will generally last longer than three weeks until the lungs are healed.)

### Can pertussis be treated?

Pertussis can be treated with antibiotics, but treatment may not cure the symptoms. However, antibiotics will reduce the spread of disease to others.

Antibiotics lessen the symptoms if given during the early stages of illness. When antibiotics are started later in the illness, the damage from pertussis is already done and the cough will last until the lungs heal. Pertussis bacteria die off naturally after three weeks of coughing. If antibiotics are not started within that time, they are no longer recommended.

Antibiotics can also be given to **close contacts** of persons with pertussis to prevent or lessen the symptoms.

### How can pertussis be prevented?

Vaccinate all children on time. This is the best way to prevent pertussis. Also, everyone should:

- Avoid close contact with others who are coughing or otherwise ill
- Wash their hands often
- Stay at home if ill
- Cover their cough with a tissue or cough into their sleeve
- Seek medical attention if they develop pertussis-like symptoms or have been exposed to someone with pertussis

If you have pertussis, avoid infecting others. Stay at home and avoid close contact with others until you have taken antibiotics for at least five full days and are no longer infectious to others. Or, if you're not taking antibiotics, stay at home for at least three weeks after your cough began.

