



## Whooping Cough (Pertussis)

### What is whooping cough?

A contagious bacterial infection that causes a range of illnesses, from mild cough to severe disease

### What are the signs or symptoms?

- Begins with cold-like signs or symptoms.
- Coughing that may progress to sudden, severe coughing, which may cause
  - Vomiting while coughing
  - Loss of breath; difficulty catching breath
  - Cyanosis (ie, blueness)
- Whooping (ie, high-pitched crowing) sound when inhaling after a period of coughing (may not occur in very young children).
- Coughing persists for weeks to months.
- Fever is usually absent or minimal.
- Symptoms more severe in infants (those younger than 12 months).
- Infants younger than 6 months may develop complications and often require hospitalization.

### What are the incubation and contagious periods?

- Incubation period: 5 to 21 days; usually 7 to 10 days.
- Contagious period: From the beginning of symptoms until 3 weeks after the cough begins, depending on age, immunization status, previous episodes of infection with pertussis, and antibiotic treatment. An infant who has no pertussis immunizations may remain infectious for 6 weeks or more after the cough starts.

### How is it spread?

Respiratory (droplet) route: Contact with large droplets that form when a child talks, coughs, or sneezes. These droplets can land on or be rubbed into the eyes, nose, or mouth. The droplets do not stay in the air; they usually travel no more than 3 feet and fall onto the ground.



Coughing baby

### How do you control it?

- Whooping cough is a vaccine-preventable disease; however, protection is incomplete and decreases over time.
- Follow the most recent immunization schedule for children and adults. A booster immunization containing tetanus, diphtheria, and acellular pertussis (Tdap) should be given to all 11-year-olds and adults at the time of their next planned tetanus booster and to all who care for infants, regardless of how recently they had their last tetanus booster.
- Review immunization status of all children and staff members. Make sure all are up to date with their vaccine that protects against pertussis. All staff members should have received Tdap vaccine.
- Use good hand-hygiene technique at all the times listed in Chapter 2.
- Preventive antibiotic treatment for exposed household and other close contacts of an infected individual, including staff members, and exposed, incompletely immunized children in educational settings who have close or extensive contact with an individual with confirmed pertussis infection.
- Household members and close contacts who are incompletely immunized should complete their immunizations as well as receive the preventive antibiotic treatment.
- Testing staff members who develop respiratory symptoms after exposure to someone with confirmed pertussis may be recommended by the local health department.

## What are the roles of the educator and the family?

- Report the infection to the staff member designated by the early childhood education program or school for decision-making and action related to care of ill children. That person, in turn, alerts possibly exposed family and staff members and parents of unimmunized children to watch for symptoms and notifies the Child Care Health Consultant.
- All adults who have contact with a child who has pertussis in educational settings also should be advised to seek testing if symptoms develop.
- Report the infection to the local health department. If the health professional who makes the diagnosis does not inform the local health department that the infected child is a participant in an early childhood education program or school, this could delay controlling the spread.
- Ensure all children have received their immunization series according to the current schedule.
- Encourage staff members without record of receiving Tdap vaccine to receive the vaccine unless contraindicated.
- Monitor incompletely immunized children for respiratory signs or symptoms for 21 days after last contact with a person infected with pertussis.
- Monitor staff members for respiratory signs or symptoms and recommend treatment if cough develops within 21 days of exposure to pertussis.

## Exclude from educational setting?

### Yes.

- Pertussis is a highly contagious illness for which routine exclusion of infected children is warranted.
- Exclude close contacts (including educators) who are coughing until they receive appropriate evaluation and treatment.

## Readmit to educational setting?

### Yes, when all the following criteria are met:

- After 5 days of appropriate antibiotic treatment.
- Untreated children should be excluded from educational settings for 21 days after the onset of cough.
- When the child is able to participate and staff members determine they can care for the child without compromising their ability to care for the health and safety of the other children in the group.

## Comment

Older children, adolescents, and adults are most responsible for spreading pertussis because their immunity from the pertussis vaccine lessens over time. A cough present longer than 2 weeks, especially with vomiting after coughing, should raise suspicion of a pertussis infection.

