

## FACT SHEET

### **Pertussis**

Pertussis (whooping cough) is a highly contagious respiratory illness caused by a bacteria. It can be serious especially in young, un-immunized or under-immunized children. Infants under a year are at highest risk and are the highest reported age group who get pertussis. School age children age 7-10 also contribute many of the reported pertussis illnesses. Pertussis is has often been called the hundred day cough.

<http://www.cdc.gov/pertussis/index.html>

- Cause:** *Bordetella pertussis* is the bacteria that causes whooping cough. These bacteria attach to the respiratory cilia (finger-like extensions lining the respiratory tract), produce toxins that paralyze the cilia and cause inflammation in the upper respiratory tract this hinders clearing airway secretions and causes the coughing spells.
- Symptoms:** Symptoms of pertussis progress in three stages: the first symptoms are similar to a common cold: runny nose, sneezing, low-grade fever, and mild cough (catarrhal period). Within a week or two, the coughing becomes persistent and sometimes ends up with a high-pitched whoop (paroxysmal stage) and vomiting and may last up to six weeks. Child may appear well between episodes of the coughing. Attacks may continue for up to 10 weeks or more (convalescence stage) and are more common at night.
- Spread:** By droplets expelled during sneezing and coughing or direct contact with discharges from respiratory mucous membranes of infected persons.
- Incubation:** 6-21 days; usually 7 to 10 days from the time a person is exposed until symptoms develop.
- Contagious:** Persons with pertussis are most infectious during the catarrhal period and the first 2 weeks after cough onset (i.e., approximately 21 days). <http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/pert.pdf> Or until 5 days after the antibiotic treatment begins. Usually 4 weeks after intense coughing begins the ability of the bacteria to be transmitted lessens and the person is well enough to participate in normal daily activities.
- Diagnosis:** Pertussis is confirmed by swabbing the back of the nose and throat; preferably before antibiotic treatment is started.
- Reportable:** Immediately by the provider or laboratory to the local or state public health department.

**Treatment:**

Antibiotics and/or vaccines are used to treat the disease, depending on contact status. Household and other close contacts (including child care or school contacts) also should receive antibiotics, regardless of age and vaccination status because pertussis immunity from vaccination is not absolute and may not prevent infection. Prompt use of antibiotics in household contacts is effective in limiting secondary transmission (passing pertussis to others). Persons with a mild pertussis illness may not recognize it as pertussis and can transmit the infection.

**Prevention/Control:**

1. Nebraska state law requires that all children in child care settings or schools be protected by age-appropriate immunization against pertussis. The pertussis vaccine is given in combination with diphtheria and tetanus (DTaP). To enroll in child care or school, a child must show proof of having received the age-appropriate vaccine.
2. It is recommended that children receive 5 doses of pertussis vaccine, with the first 3 doses given at approximately 2 month intervals (2, 4, 6 months of age). The fourth dose should be given between 15 and 18 months of age. A fifth dose (booster) is given between 4 and 6 years of age. Vaccination should be completed by age 6. Vaccination boosters are indicated at present in person's aged 10-64 years of age.
3. If your child is not protected against pertussis, please contact your physician as soon as possible to have your child immunized.  
***Children who have not received pertussis vaccine may be excluded from any child care or school setting in which a case of pertussis confirmed.*** Please notify your child care provider or school if your child has been immunized so his/her records can be updated.
4.
  - Exposed children, especially those incompletely immunized, should be observed for respiratory symptoms for 21 days after last contact.
  - Symptomatic children with cough should be excluded from child care and school, pending physician evaluation.
  - ***A person with pertussis should not return to work or school until after at least five days of the recommended treatment.***
  - A five day antibiotic treatment course should be administered to all close contacts (Close contacts of cases include household contacts and others who have prolonged, close exposure) of persons with pertussis ***regardless of age and vaccine status.***
  - Children under age 7 who have not been immunized or who are not completely immunized should receive an additional dose of vaccine at this time.
5. If you or your child develop any of the described symptoms within the next 21 days, keep him/her at home and call your physician for an evaluation.