

# PERTUSSIS (WHOOPIING COUGH)

## PERTUSSIS (WHOOPIING COUGH)

Pertussis (whooping cough) can be a serious illness, especially in young, unimmunized children.

**CAUSE:** *Bordetella pertussis*, a bacterium

**SYMPTOMS:** The first symptoms of pertussis are like those of a common cold, such as a runny nose, sneezing, low-grade fever, and a mild cough. After a week or two, a persistent cough develops which occurs in explosive bursts, sometimes ending with a high-pitched whoop and vomiting. Between bursts of coughing the child appears well. Coughing attacks may continue up to 10 weeks and are more common at night. Pertussis is frequently complicated by pneumonia and ear infections, particularly in infants. Pertussis is the most severe during the 1<sup>st</sup> year of life. Death from pertussis is rare.

**SPREAD:** By droplets that are expelled during sneezing and coughing.

**INCUBATION:** It takes 6 to 20 days, usually 7 to 10 days from the time a person is exposed until symptoms develop.

**CONTAGIOUS PERIOD:** The contagious period may be variable depending on the immunization status of the person. It begins at the time of early cold-like symptoms, before a persistent cough and explosive bursts of coughing develop. Those treated with antibiotics are contagious until 5 days after treatment begins.



Until 5 days after antibiotic treatment begins or for 4 weeks after intense coughing begins and is well enough to participate in normal daily activities.



**REPORTABLE!**

**Provider:** This disease is reportable to the health department. In Douglas County call 444-7214. Outside Douglas County call your local or state health department.

**Parents/guardians:** inform your child care provider if your child has this illness.



## **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. 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 is not routinely indicated at present in persons 7 years or older.
3. If your child is not protected against pertussis, please contact your physician or public health clinic as soon as possible to have your child immunized. **Children who have not received pertussis vaccine may be excluded from any child care setting in which a case of pertussis occurs.** Please notify your child care provider 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 20 days after last contact. Symptomatic children with cough should be excluded from child care, pending physician evaluation. Chemoprophylaxis with erythromycin is recommended for close contacts in child care, irrespective of immunization status. Children under age 7 who are unimmunized or who are not completely immunized should receive an additional dose of vaccine at this time.
5. The American Academy of Pediatrics 2003 Red Book recommends:
  - a. **Immunization:** Household and other close contacts younger than 7 years of age who have had at least four doses of pertussis vaccine should receive a booster dose of DTaP, unless a booster was given within the past 3 years or they are more than 6 years old. Children who have received their third dose 6 months or more before exposure should be given the fourth dose at this time. Children who are unimmunized or who have received fewer than four doses of pertussis vaccine (DTaP or DTP) should start or continue their pertussis immunizations according to the recommended schedule.
  - b. **Chemoprophylaxis:** Household and other close contacts (including child care contacts) also should receive erythromycin for 10 to 14 days, regardless of age and vaccination status because pertussis immunity from vaccination is not absolute and may not prevent infection. Prompt use of chemoprophylaxis in household contacts is effective in limiting secondary transmission. Persons with mild illness that may not be recognized as pertussis can transmit the infection. For those who cannot tolerate erythromycin, please consult with your physician for alternatives.
6. **If your child develops any of the symptoms as described on page 113 in the**

**next 20 days, keep him/her at home and call your physician.**

7. **Diagnosis:** To confirm a diagnosis of pertussis, laboratory tests are performed on material taken on a swab from the back of the nose and throat. Lab tests are less accurate when antibiotics have been given.



For more information, you or your physician may call the Douglas County Health Department at 444-7241 or your local health department.