Pertussis (also known as whooping cough) can be a serious illness, especially in young, unvaccinated children. Adults and older children with pertussis may be the source of infection for infants and young children. This is a concern because in recent years, more adults, adolescents, and school-aged children have been contracting pertussis.

CAUSE  
*Bordetella pertussis* bacteria.

SYMPTOMS  
Pertussis begins with a runny nose, sneezing, mild cough, and possibly a low-grade fever. After a week or two, a persistent cough develops, which may occur in explosive bursts (paroxysmal coughing), sometimes ending in a high-pitched whoop and vomiting. A whoop may be absent in older children, adults, and infants younger than 6 months. Coughing attacks occur more frequently at night. The coughing attacks usually increase during the first two weeks of illness and then remain the same for two or three more weeks before gradually decreasing. Some people, particularly infants, may develop pneumonia and ear infections. Pertussis can occur in vaccinated children, but the illness is usually milder.

Older children and adults may have a less typical cough; however, it is usually persistent and may lead to vomiting or a whoop. Although the disease may be less severe in adults and older children, they can unknowingly infect infants and preschoolers who are at risk for serious illness.

SPREAD  
When a person with pertussis coughs or sneezes tiny droplets with pertussis bacteria into the air and another person breathes them in.

INCUBATION  
It takes 4 to 21 days, usually 7 to 10 days, from the time a person is exposed until symptoms start.

CONTAGIOUS PERIOD  
Begin at the time of early cold-like symptoms, before a persistent cough and explosive bursts of coughing start. Persons remain contagious until three weeks after explosive bursts of coughing begin. Those treated with antibiotics are contagious until 5 days of treatment are completed.

EXCLUSION  
Until 5 days after appropriate antibiotic treatment begins. During this time the person with pertussis should NOT participate in any childcare, school, or community activities. If not treated with 5 days of antibiotics, exclusion should be for 21 days after cough onset.

If there is a high index of suspicion that the person has pertussis, exclude until 5 days of antibiotics are completed or until the laboratory test comes back negative.

DIAGNOSIS  
To confirm a diagnosis of pertussis, laboratory tests are performed on material collected by placing a flexible swab through the nostril to the back of the nose and throat. Some lab tests (pertussis cultures) are less accurate after antibiotics are given or if significant time has passed since the onset of symptoms.

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PERTUSSIS (WHOOPING COUGH)

TREATMENT  Antibiotics shorten the time a person with pertussis can give it to others, but may do little to lessen their symptoms. Treatment is most effective if started soon after cough begins. Antibiotics are usually not given to people who have had a cough for more than 21 days because they will no longer be helpful.

PREVENTION/CONTROL

• Minnesota state law requires that all children 2 months of age or older enrolled in childcare settings or schools be vaccinated against pertussis (along with tetanus and diphtheria) or have a legal exemption. Children should receive DTaP at 2 months, 4 months, 6 months, and 15 to 18 months and a booster dose at 4-6 years of age.

• Studies have shown that protection from the pertussis vaccine (DTP/DTaP) decreases from 3 to 5 years after the last vaccination.

There is a pertussis-containing vaccine (Tdap) for adolescents and adults. **Adolescents**: Routine vaccination at ages 11 or 12. Adolescents aged 13 through 18 should receive a single dose of Tdap, if they have not received a Td (tetanus/diphtheria) booster in the last 5 years.

**Adults Ages 19 through 64**: One dose of Tdap vaccine is recommended in place of the next booster of Td. Tdap is recommended for adults having close contact with infants less than 12 months of age, providing the interval of the most recent Td was two years or more.

• People who develop the symptoms of pertussis within 21 days of exposure should stay home and call their healthcare provider.

• Cover your nose and mouth with a tissue when coughing or sneezing, or cough/sneeze into your sleeve. Dispose of used tissues.

• Wash hands thoroughly with soap and warm running water after contact with secretions from the nose or mouth. **Thorough handwashing is the best way to prevent spread of communicable diseases.**

• Clean and sanitize mouthed toys, objects, and surfaces at least daily and when soiled.

• People who are exposed to pertussis and who are not up to date on pertussis vaccinations should contact their healthcare provider or public health clinic to be vaccinated.

• Public health will determine if preventive antibiotics are needed if someone in your childcare or school develops pertussis.

FOR MORE INFORMATION
Kentucky Department for Public Health Frankfort, KY  http://chfs.ky.gov/dph/
Kentucky Regional Poison Center Louisville, KY  EMERGENCY: 1-800-222-1222
Lake Cumberland District Health Department Somerset KY  www.lcdhd.org  (606) 678-4761
The Centers for Disease Control and Prevention (CDC) Atlanta, GA  Toll free: 1-800-311-3435  www.cdc.gov

Prepared by Hennepin County Human Services and Public Health Department (HSPHD)

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