Pertussis (Whooping Cough) FACT SHEET

What is pertussis?
Pertussis, also called “whooping cough,” is a very contagious disease caused by bacteria. Pertussis is usually mild in older children and adults, but it may cause serious problems in very young children (i.e., infants less than one year of age).

What are the symptoms of pertussis?
Pertussis symptoms have two stages. The first stage (which lasts 1 to 2 weeks) begins like a cold, with a runny nose, sneezing, mild fever, and cough which slowly gets worse. The second stage is marked by uncontrolled coughing spells and a whooping noise (in young children) when the person inhales. During severe coughing spells, a person may vomit or become blue in the face from lack of air. Between coughing spells, the person often appears to be well. The coughing spells may be so bad that it is hard for babies to eat, drink, or breathe normally. This coughing stage may last for 6 or more weeks. Adults, teens, and vaccinated children often have milder symptoms that mimic bronchitis or asthma. Some infants may only have apnea (failure to breath), and may die from this.

How is pertussis spread?
The germs that cause pertussis live in the nose, mouth and throat, and are sprayed into the air when an infected person sneezes, coughs or talks. Other people nearby can then inhale the germs. Touching a tissue or sharing a cup used by someone with pertussis can also spread the disease. The first symptoms usually appear about 7 to 10 days after a person is exposed. Infants often get pertussis from older children or adults.

Who can get pertussis?
Pertussis is most common among infants less than a year old, but anyone can get it. Pertussis can be hard to diagnose in very young infants, teens and adults because their symptoms often look like a cold with a nagging cough.

Is pertussis dangerous?
It can be, especially for infants. Pertussis can cause breathing problems (apnea), pneumonia, and swelling of the brain (encephalopathy), which can lead to seizures and brain damage. Pertussis can also cause death (rarely), especially in very young infants.

How is pertussis diagnosed?
A doctor may think a patient has pertussis because of the symptoms, but a sample of mucus must be taken from the back of the nose for testing. This sample is then tested by a laboratory to determine whether the patient has pertussis.
How is pertussis treated?
Antibiotics can make the disease milder if they are started early enough, and will help to prevent transmission of the illness to others. Anyone who is exposed to pertussis should also be given antibiotics to prevent the disease, even if they were vaccinated. In addition, it is helpful to get plenty of rest and fluids. Treatment for young children may include supportive therapy such as fluids, oxygen, and mild sedation to help the child during the prolonged period of coughing.

Can pertussis be prevented?
Yes, there is a vaccine to prevent pertussis. It is given along with diphtheria and tetanus vaccines in the same shot (called DTaP). Five doses of vaccine, given in a series starting at 2 months of age, are needed to protect a child from pertussis. The vaccine works for most children, but it wears off after a number of years. The vaccine is not given to persons 7 years of age or older.

A safe and effective pertussis vaccine for adolescents and adults was licensed in 2005. Called Tdap, the vaccine is routinely recommended as a one time booster. The preferred age for routine booster vaccination with Tdap for adolescents is 11 or 12 years old. Adolescents aged 10 through 18 years should receive a single dose of Tdap instead of Td for booster immunization against tetanus, diphtheria, and pertussis if they have completed the recommended childhood DTP/DTaP vaccination series. An interval of at least 5 years is recommended between Td and Tdap to reduce the risk of local and systemic reactions. However, an interval of only 2 years can be used in settings with an increased risk for pertussis or its complications, such as during an outbreak in the community. Tdap is also recommended as one time booster for older adolescents and adults aged 19 through 64 years if they received their last dose 10 or more years earlier.

Is the pertussis vaccine safe?
Yes, it is safe for most people. Some children will get a slight fever and be cranky for a day or two after getting a DTaP shot. Some children will have a sore spot and some swelling or redness where the shot was given. Only rarely will a child have a more serious side effect, such as prolonged crying, convulsions or high fever. DTaP (diphtheria, tetanus and acellular pertussis vaccine) is less likely to cause side effects than the DTP (diphtheria, tetanus and whole-cell pertussis vaccine) and is now used routinely in the United States. However, following the 4th and 5th DTaP doses there are more local reactions (pain, redness, or swelling at the site of injection) compared with the first 3 DTaP doses.

Though there is a very slight risk of problems caused by the vaccine, pertussis or whooping cough is extremely serious. It can last for weeks or months and lead to serious complications. Pertussis causes about 10-20 deaths each year in the United States. That is why experts recommend that all infants and children be given a full series of DTaP vaccine unless there is a medical reason not to receive the vaccine.

What should I do if I have been exposed to pertussis?
If you have been exposed to pertussis, contact your healthcare provider or the local health department immediately. Your provider or the local health department can determine if you will need antibiotics or testing for pertussis. Also talk with your provider or the local health department about your immunization history.
Where can I get more information?
Your doctor or nurse
Your local health department 502-863-3971
Center for Disease Control website; www.CDC.gov