Severe Cough? It could be Whooping Cough.

Public health officials are once again seeing an increase in cases of whooping cough, or pertussis, across the state of Nebraska. In 2010, there have been 174 cases thus far, including 4 cases in the South Heartland District of Adams, Clay, Nuckolls and Webster Counties.

Pertussis is a highly contagious bacterial infection of the respiratory tract that is spread through coughing and sneezing. Typically, the disease begins with cold-like symptoms such as a runny nose, sneezing, low-grade fever, and an occasional cough. After one to two weeks, the cough becomes more severe and can develop into paroxysmal coughing or “coughing fits” that can end in a whooping sound as the patient tries to catch their breath. At times, a person can cough to the point of vomiting. This cough can last for weeks. Pertussis can be treated with antibiotics, but although treatment stops an infected person from spreading the disease, it does not stop the coughing episodes.

If you have a pertussis infection, you can spread the pertussis bacteria to others from the beginning of your cold-like symptoms until three weeks after you begin coughing. If your doctor prescribes appropriate antibiotic therapy, this will reduce the period you can spread the disease to about 5 days after you begin taking the antibiotics. You should stay home from day care, school, work or other activities for the first five days of antibiotic treatment. If you have (or are suspected to have) pertussis, you should stay away from young children and infants until you receive proper treatment.

Historically, whooping cough was considered a common childhood disease. According to the Centers for Disease Control and Prevention (CDC) there were, on average, over 147,000 reported cases of pertussis each year during 1922-1925 and approximately 5% of these patients died. With the introduction of the pertussis vaccination in the 1940’s, pertussis is now known as a “Vaccine Preventable Disease”. By 1998, the number of pertussis cases had decreased by nearly 96%. In 2004-2005, there were 66 reported pertussis deaths in the U.S. and most (85%) were in infants under 3 months of age.

So how can you protect yourself and your family? The short answer is to be sure that you and your children receive the vaccination against pertussis. The CDC recommends that children receive 5 doses of DTaP which is a combination vaccine that includes protection against diphtheria, tetanus and pertussis. This vaccine is recommended at 2, 4, and 6 months. The fourth shot is given between 15 and 18 months of age, and a fifth shot is given before a child enters school, at 4–6 years of age. Parents can also protect their children from infection by keeping them away from anyone with a cough or cold symptoms, particularly if they have been diagnosed with pertussis.

Protection against diphtheria, tetanus and pertussis wanes over time. Prior to 2005, the only booster available was against tetanus and diphtheria (called Td). Now there is a booster vaccination which also contains protection against pertussis called Tdap that is available to teens and adults. The CDC recommends a Tdap booster for children aged 11-12 years of age.
Adults should also receive a dose of Tdap instead of the Td booster. This is critically important for families who have or are caregivers for infants, as these children are not fully protected and are most at risk for serious illness.

Pertussis can cause serious and sometimes life-threatening complications in infants and young children, especially those who are not fully vaccinated. In infants younger than 1 year of age who get pertussis, more than half must be hospitalized. The younger the infant, the more likely treatment in the hospital will be needed. Of those infants who are hospitalized with pertussis about:

- 1 in 5 get pneumonia (lung infection)
- 1 in 100 will have convulsions (violent, uncontrolled shaking)
- Half will have apnea (slowed or stopped breathing)
- 1 in 300 will have encephalopathy (disease of the brain)
- 1 in 100 will die

Individuals who have not received a booster dose of vaccination can become ill with pertussis, but often have a milder or atypical illness and may not have the signature “whoop”. Unfortunately, individuals with mild or atypical illness can still spread the disease to those who are vulnerable to infection including those who are more at risk of complications.

What if you have been in contact with a person infected with pertussis? If you were a close contact, meaning you are a family member, you had face-to-face contact or shared a confined space with that person for a period of time, or you had direct contact with the sneeze or cough from a person with pertussis, then the CDC recommends antibiotic prophylaxis (prophylaxis means “prevent beforehand”), which could prevent you from developing the illness.

We can all work together to protect the most vulnerable among us with a few simple steps: Be aware that pertussis is a preventable disease. Be aware of the symptoms of pertussis. Be aware that treatment is available. Visit with your physician if you suspect pertussis. And, as always, remember to: sneeze in your sleeve, cover your cough, wash your hands frequently, and stay home when you are sick. YOU can help protect the public’s health!

For more information about pertussis, please visit South Heartland’s website at [www.southheartlandhealth.org](http://www.southheartlandhealth.org) or call 402-462-6211 (toll free 1-877-238-7595).

* * * * * * * * * *

Anita Sullivan, RN, is the Health Surveillance Coordinator for South Heartland District Health Department. She may be reached as 402-462-6211 or toll-free at 1-877-238-7595.