Esse Health e-Newsletter Article

What's up with Pertussis?

An Update on the Whooping Cough Outbreak in the St. Louis Metro Area

By: Dr. Richard Lazaroff, Pediatrician at Esse Health Creve Coeur Pediatrics

The St. Louis County Health Department reported in November 2010 that there have been 426 cases of pertussis statewide this year, with the largest number of cases coming from St. Louis County (126 cases). This rate in Missouri represents a 32 percent increase over the five-year average.

Many in St. Louis are aware that pertussis, or what is commonly called whooping cough, is currently in our community, but may not understand why. After all, it is a communicable bacterial infection that we have immunized children against since 1938. Several factors have conspired to make this disease a persistent problem in our community and throughout the United States.

Before we discuss these factors, let us review the disease. Pertussis is a three phase illness. Phase 1 is the catarrhal phase and is hard to distinguish from the common cold. Patients have a runny nose and a mild cough. Fever is not seen with this phase, nor is it seen during the entire illness, unless complications occur. Phase 2 is the paroxysmal phase and usually lasts two weeks. During this phase, patients have coughing fits that may end with a prolonged inspiratory effort or whoop. It is during this phase that young infants have difficulty getting oxygen which can lead to brain injury and rarely death. Phase 3 is the convalescent phase where patients cough less often, but at times nearly as severely. This phase lasts two to six weeks. Patients are most contagious during the first (catarrhal) phase when most do not consider themselves very ill. They remain contagious until they have received proper antibiotic treatment or three weeks of the illness have passed. However, it must be remembered that antibiotic treatment does not change the course of the illness. Patients with pertussis will cough for two months or longer. The incubation period is 7 to 10 days, with a range of 4 to 21 days.

So, why do we still see pertussis/whooping cough? First, only since 2005 have we had a vaccine (Tdap) that could be safely given to adults and adolescents. These people served as a reservoir of infection. Only recently have more of these people been receiving the vaccine. There has been a special push to immunize women leaving the hospital after childbirth and to immunize those adults who will have close contact with new babies.

Second, the vaccine is not 100 percent effective. We believe that vaccine gives good immunity to 80-85 percent of those properly immunized. Therefore, even immunized patients can become sick with pertussis.

Thirdly, some families choose not to immunize their children. Others ask for "alternative" immunization schedules, which often results in some children not completing their immunization schedule in a timely manner.

Each of these practices places some children at extra risk and also leads to reduced "herd immunity" of the community, allowing more spread when an outbreak occurs.

Lastly, the very nature of the infection plays a role. Those who become sick are rarely suspected of having the infection during Phase 1 (catarrhal phase) when they are most contagious. This allows for spread of the infection.

What can we do to improve the situation?

1) We must be vigilant in diagnosis at the earliest phases of the illness. We must treat those we suspect have pertussis with proper antibiotics and exclude them from school or the workplace until they have completed their antibiotics.
2) We must treat their close contacts with antibiotics to prevent the infection from developing.
3) We must obtain the highest rates possible of immunization in our communities. We must continue to immunize infants and children in a timely manner and do everything possible to reduce the number of families who opt out of immunizing their children. Special attention must also be paid to getting adults and adolescents immunized with the Tdap vaccine.

For more information about Esse Health, please visit us on-line at www.essehealth.com.

Dr. Richard Lazaroff is a Pediatrician at the Esse Health Creve Coeur office
11630 Studt Ave., Ste. 200
St. Louis, MO 63141
Phone: (314) 567-7337