What’s New With Whooping Cough (Pertussis)?

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Whooping cough – also called pertussis – is a highly contagious and very serious respiratory infection caused by the bacteria Bordetella pertussis or Bordetella parapertussis.

What’s new with whooping cough?

In 2012, Illinois reported the highest number of whooping cough (pertussis) cases in the last 62 years (since 1950). According to the Illinois Department of Public Health, Illinois documented 2,026 cases of whooping cough last year. Iowa, on the other hand, reported 1,647 cases in 2012 – a 417% increase above the previous five-year average.

Pertussis normally peaks every three to five years. Nationally, the peaks have been getting higher and higher for the past 20-30 years. The Centers for Disease Control (CDC) says this could be due to increased awareness, better reporting, improved diagnostic tests, increased circulation of the bacteria causing the illness, and an apparent shorter length of immunity from current vaccines.

Before a vaccine was available, pertussis was a major cause of childhood illness and death in the United States. From 1940-1945, over one million cases of pertussis were reported. With the introduction of a vaccine in the late 1940’s, the number of reported cases decreased from 200,000 a year to a low of 1,010 cases in 1976. Since the 1980’s, the number of cases of pertussis has increased.

Transmission

The disease is passed among all age groups through airborne droplets and close contact – for example, when someone breathes, sneezes or coughs close to you. Pertussis has no distinct seasonal pattern, but it may increase in summer and fall.

Symptoms

Whooping cough may begin like a common cold – runny nose, sneezing, low-grade fever, and coughing. The pertussis cough continues, and may get worse. Coughing may come in violent fits.

Infants and children may or may not make a high-pitched “whoop” sound as they gasp for air when coughing. Very young infants may not cough as the disease progresses – instead, they may have difficulty breathing, or even stop breathing for short periods. More than half of affected infants less than one year old are hospitalized. For hospitalized infants, 67% may have slowed or stopped breathing (apnea). 1 out of 4 may develop pneumonia – and sadly, 1 or 2 out of 100 may die. Whooping cough can also cause seizures, convulsions, and encephalopathy (brain disease).

Teens and adults usually do not “whoop” when they cough. Coughing can last 10 weeks or more with children, teens, and adults. This disease is sometimes called the “100-day cough”. Adults with pertussis can have coughing fits, vomiting, and exhaustion. Complications such as pneumonia and rib fracture (from coughing) can occur. If you’ve been vaccinated and get pertussis, however, you’re less likely to have a severe infection.

Diagnosis

See your doctor immediately if you think you may have pertussis. The diagnosis of pertussis is usually made based on history and physical examination. A laboratory test may be done.

Testing

Metropolitan Medical Laboratory performs a Polymerase Chain Reaction (PCR) laboratory test for B. pertussis/B. parapertussis. This Real-Time PCR test is superior (more sensitive) and faster than traditional bacterial culture methods. An N/P (nasopharyngeal) polyester swab (Dacron®, rayon, or nylon tip…not cotton or calcium alginate), or a nasopharyngeal aspirate is collected. For more information, see the Test Guide at www.metromedlab.com, B. pertussis/B. parapertussis, and select the Supporting Document “Bordetella”.

Treatment

Pertussis is generally treated with antibiotics. Early treatment is very important.

Prevention

The CDC recommends that everyone get vaccinated to prevent whooping cough. All children, beginning at age two months, and all adults (including pregnant women during each pregnancy) should be vaccinated. Routine booster doses are also needed throughout life because protection decreases over time, and is not life-long.

The most vulnerable population for dying from pertussis is babies. Several doses of vaccine are necessary before babies are protected, and they can’t have vaccines until two months of age. It’s important that everyone around babies (to include grandparents and babysitters) is current with their vaccinations to protect babies. Getting vaccinated with Tdap is very important for family members and caregivers of new infants. Getting that vaccination could save a life. People with even a slight cough may have whooping cough.

There are two types of whooping cough vaccines – DTaP for infants and children, and Tdap for teens and adults. These vaccines are recommended by the CDC, The American Academy of Pediatrics, the American Academy of Family Physicians, and the American College of Physicians.

The DTaP vaccine now used by the CDC may not protect for as long of a time as the DTP vaccine previously used by the CDC. In the 1990’s, the United States switched from DTP to DTaP because of fewer side effects with DTaP.

For more information, see www.cdc.gov/pertussis.

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