



**OCT. 24, 2012**

## **HEALTH ADVISORY**

### **State Health Department Reporting that Pertussis Cases Have More Than Doubled in 2012**

The number of pertussis cases has more than doubled this year in comparison to 2011. To date this year, 168 cases of pertussis have been reported in 24 counties. The counties with the highest number of cases include Ward, Burleigh, Cass, Grand Forks, Morton and Williams. The majority of cases have occurred in those younger than 18; however, there are a significant number of adult cases as well. Seven cases have been hospitalized. Pertussis incidence typically peaks every three to five years. The most recent notable peak in North Dakota was in 2004 when 757 cases were reported. In 2009, 30 cases were reported, 58 cases in 2010, and 70 cases in 2011. Many other states are currently reporting increased cases of pertussis.

Pertussis (known as whooping cough) is a contagious disease that lasts for many weeks or months and can cause severe coughing with a "whooping" sound or coughing that leads to vomiting. The disease can be life threatening for infants and is usually spread by adults to infants. Generally, the illness is less severe in those who are vaccinated and may present as just a prolonged cough.

#### **Testing:**

**The North Dakota Department of Health (NDDoH) recommends providers consider testing for pertussis when evaluating any patient with an unexplained, prolonged cough illness (longer than 14 days) characterized by one or more of the following symptoms:**

- ÉParoxysms
- ÉWhoop
- ÉPost-tussive gagging/vomiting
- ÉApnea

Testing for pertussis should include a specimen for both culture and polymerase chain reaction (PCR). Pertussis testing kits are available at most major medical centers and from the Division of Laboratory Services at the NDDoH (701.328.6272). The fee for pertussis testing through the NDDoH is \$51.

Standardized serology tests are not available, making the results of commercially-available serology tests difficult to interpret. Positive serology results from a private laboratory are not confirmatory. Patients meeting the clinical case definition that are serologically positive but not culture or PCR positive are not considered lab confirmed cases and should be reported as clinically diagnosed probable cases. Cases not meeting the clinical case definition that are serologically positive but not culture or PCR positive are not lab confirmed cases and will not be considered probable cases until the clinical case definition is met.

## **Treatment:**

**The Department of Health recommends that people presenting with the above symptoms be considered presumptive pertussis cases and be treated and excluded from community activities, including school, child care or work, until five days of antibiotics have been completed. Do not wait for laboratory testing results to treat.** If treatment is started early in the course of illness, symptoms may be lessened. Only the antibiotics listed on the Pertussis Treatment and Chemoprophylaxis Guidelines are effective in treating pertussis: [www.ndhealth.gov/Immunize/Documents/Disease/Pertussis\\_Tx.pdf](http://www.ndhealth.gov/Immunize/Documents/Disease/Pertussis_Tx.pdf).

Some health-care providers are reportedly prescribing a one- or three-day course of azithromycin (Zithromax®) in place of the five-day course that is currently one of the standard pertussis treatment options. While this may be appropriate for some respiratory illnesses, the data from published randomized clinical trials using a three-day course for treatment of pertussis are insufficient. The standard recommendations for a five-day course will remain unchanged until new data from comparative studies are available.

## **Contacts:**

Patients are most infectious early in the illness, but communicability may persist for three weeks after onset of cough. Treatment is not necessary for suspect cases that have had a cough for longer than 21 days.

Antimicrobial therapy decreases communicability and may limit the spread of disease. **All people identified as close contacts of confirmed pertussis cases, regardless of symptoms, should be placed on the appropriate antibiotics.** The NDDoH will refer close contacts to their primary care provider for evaluation and treatment.

The incubation period for pertussis is usually seven to 10 days, but can range from four to 21 days. Symptomatic contacts to confirmed cases should be treated and reported to the NDDoH. They do not need to be tested as they will be considered epi-linked cases and investigated by the NDDoH. Symptomatic contacts should be prescribed antibiotics and advised to exclude themselves from all activities (i.e., child care, work, school) until antibiotics have been taken for **five days** or 21 days of cough have passed.

## **Pertussis Immunization:**

Diphtheria, tetanus and acellular pertussis vaccine (DTaP) should be administered routinely to infants at 2, 4, 6 and 15 to 18 months of age. A booster dose of DTaP should be given at 4 to 6 years of age. DTaP vaccine should not be given to children seven years of age and older.

The Advisory Committee on Immunization Practices (ACIP) recommends vaccination of the following individuals with tetanus, diphtheria and acellular pertussis vaccine (Tdap):

- Adolescents should be routinely vaccinated at 11 to 12 years of age.
- Catch-up of adolescents who did not receive Tdap at 11 to 12 years of age.
- A single dose of Tdap should replace a Td booster (recommended every 10 years) for all adults not previously vaccinated with Tdap.
  - Including adults 65 years of age and older.
- Incompletely vaccinated children age 7 to 10 years.
- Health-care workers.

- Pregnant women (preferably during the third or late second trimester, after 20 weeks gestation).
- People in contact with infants (parents, grandparents, caregivers, child-care providers, etc.).

Tdap should be administered, regardless of when the last Td was administered.

There are two Tdap vaccines licensed in the United States, Adacel<sup>®</sup> and Boostrix<sup>®</sup>. The ACIP recommends that either vaccine, regardless of licensure ages, be used for anyone ages 7 and older, including adults ages 65 and older. Both Tdap vaccines are currently licensed as a one-time dose.

The NDDoH supplies DTaP, DTaP-containing and Tdap vaccines for all Vaccines For Children (VFC) eligible children (18 and younger and either Medicaid eligible, American Indian, uninsured or underinsured). DTaP, DTaP-containing and Tdap vaccines are also available for insured children at universal local public health units.

State-supplied Tdap may be ordered for uninsured and underinsured adults. Please refer to the Immunization Program website at [www.ndhealth.gov/Immunize](http://www.ndhealth.gov/Immunize) for additional information regarding pertussis.

Please contact the NDDoH Division of Disease Control, at 701.328.2378 or toll-free at 800.472.2180 with any questions or concerns regarding this issue.

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*Categories of Health Alert messages:*

- *Health Alert conveys the highest level of importance; warrants immediate action or attention.*
- *Health Advisory provides important information for a specific incident or situation; may not require immediate action.*
- *Health Update provides updated information regarding an incident or situation; no immediate action necessary.*
- *Health Information provides general information that is not necessarily considered to be of an emergent nature.*

*This message is being sent to local public health units, clinics, hospitals, physicians, tribal health, North Dakota Nurses Association, North Dakota Long Term Care Association, North Dakota Healthcare Association, North Dakota Medical Association, and hospital public information officers.*