



San Rafael



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Whooping Cough Epidemic Sweeps Marin County

On Wednesday, June 23, 2010 the Marin Independent Journal ran an article that states we are in the middle of a Whooping Cough (Pertussis) epidemic in Marin County. There have been 181 cases this season in Marin so far and the outbreak is suspected to widen. Vaccination confers about 70% immunity and helps protect against further spread. Close family contact is generally required to catch the disease. Children should be vaccinated against the disease, family members and caregivers need a booster. The recommendation is to receive one pertussis immunization in a lifetime without a booster. The pertussis vaccination is now included in the tetanus/diphtheria vaccine. Most adults have received a diphtheria/tetanus (dT) vaccination but not necessarily the Tdap which has been used commonly for the past 3-4 years. If it is more than 2 years since a dT booster, one is eligible to receive the Tdap and firefighter/paramedics may contact Kaiser Occupational Health Department for an appointment for the booster.

Pertussis (Whooping Cough) summary

Pertussis is a highly contagious bacterial disease that causes uncontrollable, violent coughing. The coughing can make it hard to breathe. A deep "whooping" sound is often heard when the patient tries to take a breath. Symptoms Initial symptoms, similar to the common cold, usually develop about a week after exposure to the bacteria.

Severe episodes of coughing start about 10 to 12 days later. In children, the coughing often ends with a "whoop" noise. The sound is produced when the patient tries to take a breath. The whoop noise is rare in patients under 6 months of age and in adults.

Coughing spells may lead to vomiting or a short loss of consciousness. Pertussis should always be considered when vomiting occurs with coughing. In infants, choking spells are common.

Other pertussis symptoms include:

- Runny nose
- Slight fever (102 °F or lower)
- Diarrhea

Treatment

If started early enough, antibiotics such as erythromycin can make the symptoms go away more quickly. Unfortunately, most patients are diagnosed too late, when antibiotics aren't very effective. However, the medicines can help reduce the patient's ability to spread the disease to others.

Infants younger than 18 months need constant supervision because their breathing may temporarily stop during coughing spells. Infants with severe cases should be hospitalized.

An oxygen tent with high humidity may be used. Fluids may be given through a vein if coughing spells are severe enough to prevent the person from drinking enough fluids.

Sedatives (medicines to make you sleepy) may be prescribed for young children.

Cough mixtures, expectorants, and suppressants are usually not helpful and should NOT be used.

Causes

Pertussis, or whooping cough, is an upper respiratory infection caused by the *Bordetella pertussis* or *Bordetella parapertussis* bacteria. It is a serious disease that can cause permanent disability in infants, and even death.

When an infected person sneezes or coughs, tiny droplets containing the bacteria move through the air, and the disease is easily spread from person to person. The infection usually lasts 6 weeks.

Whooping cough can affect people of any age. Before vaccines were widely available, the disease was most common in infants and young children. Now that most children are immunized before entering school, the higher percentage of cases is seen among adolescents and adults.

Tests & diagnosis

The initial diagnosis is usually based on the symptoms. However, when the symptoms are not obvious, pertussis may be difficult to diagnose. In very young infants, the symptoms may be caused by pneumonia instead. To know for sure, the health care provider may take a sample of mucus from the nasal secretions and send it to a lab, which tests it for pertussis. While this can offer an accurate diagnosis, the test takes some time, and treatment is usually started before the results are ready. Some patients may have a complete blood count that shows large numbers of lymphocytes.

Prognosis

In older children, the outlook is generally very good. Infants have the highest risk of death, and need careful monitoring.

Prevention

DTaP vaccination, one of the recommended childhood immunizations, protects children against pertussis infection. DTaP vaccine can be safely given to infants. Five DTaP vaccines are recommended. They are usually given to children at ages 2 months, 4 months, 6 months, 15-18 months, and 4-6 years.

The Tdap vaccine should be given around age 11 or 12, and every 10 years thereafter.

During a pertussis outbreak, unimmunized children under age 7 should not attend school or public gatherings, and should be isolated from anyone known or suspected to be infected. This should last until 14 days after the last reported case.

Some health care organizations strongly recommend that adults up to the age of 65 years receive the adult form of the vaccine against pertussis.

Complications

- Pneumonia
- Convulsions
- Seizure disorder (permanent)
- Nose bleeds
- Ear infections
- Brain damage from lack of oxygen
- Bleeding in the brain (cerebral hemorrhage)
- Mental retardation
- Slowed or stopped breathing (apnea)
- Death

- Source: Medical Director SRFD/CMFD, EMS Liaison Kaiser San Rafael

FOR MORE INFORMATION CONTACT:

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