

FACT SHEET

Pertussis

What is Pertussis?

Pertussis (whooping cough) is a highly contagious respiratory disease. Pertussis is the only vaccine-preventable disease with rising case rates in the U.S.

It gets its name from the bacterium *Bordetella pertussis* and uncontrollable, violent coughing that causes a whooping sound when trying to breathe. Pertussis most commonly afflicts infants and young children and can be fatal. Babies too young to be immunized are particularly vulnerable.



Among adults, whooping cough can interfere with routine activities including work, sleep, adequate exercise and nutrition for many weeks.

Exposure Risk

Healthy people become infected when they inhale droplets coughed or sneezed into the air by an infected person. Without precautions such as immunization and good personal hygiene practices, the disease tends to spread in schools, health care facilities, the workplace and other communal settings.

In California, public health officials declared a whooping cough epidemic in June 2014 following a spike in reported cases in April and

May 2014. Meanwhile, from Jan. 1-Aug. 16, 2014, 17,325 cases of pertussis were reported to the Centers for Disease Control and Prevention (CDC) by all 50 states and Washington, D.C. – a 30 percent increase compared with the same time period in 2013.

In 2012, 48,277 cases of pertussis were reported to the CDC, including 20 pertussis-related deaths, the most cases reported since 1955. In 2013, 13 states and Washington, D.C., reported an increase in pertussis cases compared with 2012. The majority of deaths have occurred among infants younger than 3 months old. The highest rates of disease are observed in infants and children 7 to 10 years old; rates have also increased among adolescents up to age 15.

Prevention

Immunization for pertussis is recommended for both children and adults. The childhood vaccine is called DTaP (diphtheria, tetanus and pertussis). The CDC recommends a total of five doses of DTaP vaccine, with a dose administered at 2, 4, 6 and 15-18 months and at 4-5 years of age. DTaP may be given at the same time as other vaccines. Parents are advised to consult a pediatrician for recommendations about children who may be ineligible for the vaccine or who should postpone receiving it.

The pertussis booster for adolescents and adults is called Tdap – another combination vaccine that prevents tetanus, diphtheria and pertussis. Tdap also may be given at the same time as other vaccines. Td is a similar vaccine that protects against tetanus and diphtheria but not pertussis. A Td booster is recommended every 10 years for adults.

When adults are vaccinated against pertussis, it helps reduce illness impacts and prevent the

spread of disease to others who have not been immunized or had a chance to build up immunity. Widespread immunization to reduce the spread of infection is referred to as “herd” or community immunity.

Recommendations



Adults are advised to check their immunization records and/or with their personal physician to verify whether they have already been vaccinated. One dose of Tdap is routinely given at age 11 or 12. People who did not get Tdap at that age should get it as soon as possible.

Tdap is especially important for health care professionals and anyone having close contact with a baby younger than 12 months. Women are advised to get a dose of Tdap during every pregnancy to protect newborns.

Tdap is **not** recommended for individuals who have:

- had a life-threatening allergic reaction after a dose of any tetanus, diphtheria or pertussis vaccine
- a severe allergy to any part of the vaccine (advise your doctor of any allergies)
- experienced a coma, long or multiple seizures within seven days after a childhood dose, unless a cause other than the vaccine was found

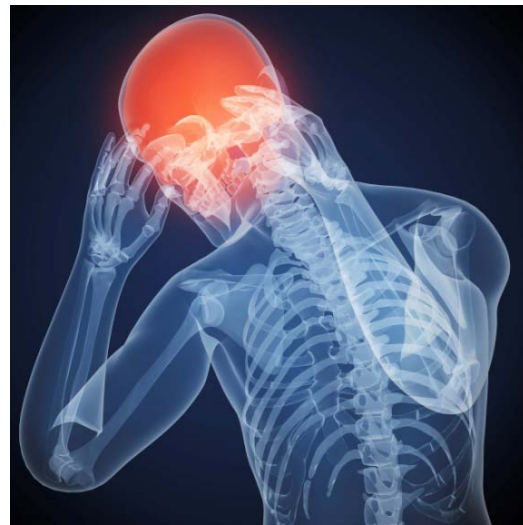
Adults are advised to seek medical advice prior to receiving the vaccine if they:

- have epilepsy or another nervous system problem
- have experienced severe pain or swelling after any vaccine for diphtheria, tetanus or pertussis
- have had Guillain Barré Syndrome
- aren't feeling well on the day the shot is scheduled

Possible Side Effects

Mild side effects following Tdap vaccination may include:

- pain, redness or swelling where the shot was given
- mild fever of at least 100.4°F
- headache
- tiredness
- nausea, vomiting, diarrhea, stomach ache
- chills, body aches, sore joints, rash, swollen glands (uncommon)



Moderate side effects following Tdap vaccination may include the same as above, plus swelling of the entire arm where the shot was given. Severe reactions are rare but may include swelling, severe pain, bleeding and redness where the shot was given.

Emergency medical treatment should be sought if there are signs of a severe allergic reaction such as high fever, hives, swelling of the face and throat, difficulty breathing, rapid heartbeat, dizziness or weakness.

Symptoms, Diagnosis and Treatment

Early symptoms of whooping cough can last for up to two weeks and usually include:

- runny nose
- low-grade fever (generally minimal throughout the course of the disease)
- mild, occasional cough
- apnea, or a pause in breathing, in infants

As the disease progresses, symptoms include:

- paroxysms (fits) of coughing followed by a high-pitched “whoop”
- vomiting
- exhaustion

Whooping cough typically is diagnosed through signs and symptoms, recent possible exposures and lab tests. It is treated with antibiotics. About half of infants with whooping cough are hospitalized.

Early recognition and treatment helps prevent severe symptoms and the spread of disease. If a family member has pertussis, other relatives may be given antibiotics to help prevent the spread of infection. After three weeks, antibiotics are not likely to be effective because bacteria causing the illness subsides on its own.

Why are Infection Rates Climbing?

Before 2005 in the U.S., only young children received the pertussis vaccine. Waning immunity, changes in vaccine composition, parents who decline vaccination for their children and carriers who are not aware they are contagious are also cited as reasons for the resurgence of this preventable disease.

In Summary

Whooping cough can be prevented by taking precautions against the spread of disease, including good personal hygiene (frequent hand washing or use of hand sanitizer, covering one’s mouth when coughing or sneezing, disposing of soiled tissues), early recognition and treatment, staying home when ill, and most importantly, vaccination.

Resources

1. Check with your supervisor, personal physician or the medical team at WorkCare: 800-455-6155; www.workcare.com
2. Visit the Centers for Disease Control and Prevention website: www.cdc.gov/pertussis
3. Refer to your local public health department for prevention recommendations and reporting requirements.