
Pertussis (Whooping Cough)

What You Need To Know

Center for Disease Control and Prevention

<http://www.cdc.gov/features/pertussis/>

Pertussis (whooping cough) is very contagious and can cause serious illness—especially in infants too young to be fully vaccinated. Make sure your children get their recommended 5 shots on time. Teen and adult vaccination is also important, especially for families with newborns.

Pertussis (whooping cough) is a very contagious disease caused by a type of bacteria called *Bordetella pertussis*. Among vaccine-preventable diseases, pertussis is one of the most commonly occurring ones in the United States.

For Health Care Professionals: Updated Vaccine Recommendations

Updated Tdap immunization recommendations (MMWR, 21 Oct 2011) recommend

- Implementing a Tdap vaccination program for pregnant women
- Administering Tdap during pregnancy, preferably during the third or late second trimester (after 20 weeks gestation)
- Administering Tdap to adolescents and adults at least 2 weeks before having close contact with an infant

See [Updated Recommendations for Use of Tetanus Toxoid, Reduced Diphtheria Toxoid and Acellular Pertussis \(Tdap\) Vaccine in Pregnant Women and Persons Who Have or Anticipate Having Close Contact with an Infant Aged Less than 12 Months –Advisory Committee on Immunization Practices \(ACIP\), 2011](#)

Pertussis Vaccine Protection

There is high vaccine coverage for children nationwide. However, protection from the childhood vaccine fades over time. Adolescents and adults need to be revaccinated, even if they were completely vaccinated as children.

Also, pertussis vaccines are very effective but not 100% effective. If pertussis is circulating in the community, there is still a chance that a fully vaccinated person can catch this very contagious disease. When you or your child develops a cold that includes a prolonged or severe cough, it may be pertussis. The best way to know is to contact your doctor.

Pertussis Symptoms

Pertussis can cause serious illness in infants, children and adults. The disease starts like the common cold, with runny nose or congestion, sneezing, and maybe mild cough or fever. But after 1–2 weeks, severe coughing can begin.

Unlike the common cold, pertussis can become a series of coughing fits that continues for weeks. Pertussis can cause violent and rapid coughing, over and over, until the air is gone from the lungs and you are forced to inhale with a loud "whooping" sound. In infants, the cough can be minimal or not even there.

Infants may have a symptom known as "apnea." Apnea is a pause in the child's breathing pattern.

Disease Complications

Pertussis is most severe for babies; more than half of infants younger than 1 year of age who get the disease must be hospitalized. About 1 in 5 infants with pertussis get pneumonia (lung infection), and about 1 in 100 will have convulsions. In rare cases (1 in 100), pertussis can be deadly, especially in infants.

How Pertussis Spreads

People with pertussis usually spread the disease by coughing or sneezing while in close contact with others, who then breathe in the pertussis bacteria. Many infants who get pertussis are infected by parents, older siblings, or other caregivers who might not even know they have the disease.

Pertussis Outbreaks

Reported cases of whooping cough vary from year to year and tend to peak every 3-5 years. In 2010, 27,550 cases of pertussis were reported in the U.S.—and many more cases go unreported. Twenty-seven deaths were reported – 25 of these deaths were in children younger than 1 year old. Since the 1980s, there's been an increase in the number of cases of pertussis, especially among teens (10–19 years of age) and babies younger than 6 months of age.

Preventing Pertussis

The best way to prevent pertussis is to get vaccinated. Parents can also help protect infants by keeping them away as much as possible from anyone who has cold symptoms or is coughing.

Vaccine Recommendations

For Infants and Children: In the US, the recommended pertussis vaccine for children is called DTaP. This is a safe and effective combination vaccine that protects children against three diseases: diphtheria, tetanus, and pertussis. For maximum protection against pertussis, children need five DTaP shots. The first three shots are given at 2, 4, and 6 months of age. The fourth shot is given between 15 and 18 months of age, and a fifth shot is given when a child enters school, at 4–6 years of age. If a 7-10


year old is not up-to-date with DTaP vaccines, a dose of Tdap should be given before the 11-12 year old check up.

For Pre-teens and Adolescents: Vaccine protection for pertussis, tetanus, and diphtheria can fade with time. Pre-teens going to the doctor for their regular check-up at age 11 or 12 years should get a booster vaccine, called Tdap. Teens and young adults who didn't get a booster as a pre-teen should get one dose when they visit their health care provider.

For Adults: Adults who didn't get Tdap as a pre-teen or teen should get one dose of Tdap. Pregnant women who have not been previously vaccinated with Tdap should get one dose of Tdap during the third trimester or late second trimester – or immediately postpartum, before leaving the hospital or birthing center. By getting Tdap during pregnancy, maternal pertussis antibodies transfer to the newborn, likely providing protection against pertussis in early life, before the baby starts getting DTaP vaccines. Tdap will also protect the mother at time of delivery, making her less likely to transmit pertussis to her infant. Getting vaccinated with Tdap at least two weeks before coming into close contact with the infant is especially important for families with and caregivers of new infants. Adults 65 years and older who have close contact with infants should also get a dose of Tdap if they never have before.

The easiest thing for adults to do is to get Tdap instead of their next regular tetanus booster—the Td shot that is recommended for adults every 10 years. The dose of Tdap can be given earlier than the 10-year mark, so it's a good idea for adults to talk to a health care provider about what's best for their specific situation.

More Information

- [Parents' Guide to Childhood Immunizations](#)
- [Pertussis: Summary of Vaccine Recommendations](#)
- [Learn more about pertussis disease](#)
- [Hear What Pertussis Sounds Like](#)
- [Listen to a Podcast](#)

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