

FACTS ABOUT PERTUSSIS (WHOOPIING COUGH)

General Questions About Pertussis

What is pertussis?

Pertussis, or whooping cough, is a contagious illness that is spread when an infected person sneezes or coughs and another individual breathes in the bacteria.

Who gets pertussis?

Pertussis can occur at any age. It may be very severe in infants and young children (especially those who have not had 3 doses of pertussis vaccine), resulting in hospitalization, seizures, long-term neurological problems, and even death. Pertussis can occur in immunized individuals, because the immunity gained from vaccination typically wanes over time. Although widespread use of pertussis vaccines had reduced the number of pertussis cases, this disease has been increasing in recent years.

What are the symptoms of pertussis?

Symptoms usually appear between 7 to 10 days after exposure to the bacteria, but can develop 4 to 21 days after exposure. The disease starts with cold-type symptoms: low-grade fever, runny nose and mild cough. Within two weeks, the cough becomes more severe and is characterized by episodes of fits of coughing. Vomiting, breathlessness, a change in facial color, and/or whooping sound may follow the coughing fits. In between coughing fits, the individual may look and feel fine. These coughing fits may continue for several months, and are more frequent at night.

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.

People who think they have pertussis should be evaluated by a physician.

How is pertussis spread?

Pertussis is spread through droplets when an infected person coughs, sneezes or talks. The first symptoms usually appear 7 to 10 days after exposure. The greatest risk of spread is during the early stages of the illness through the first three weeks of coughing. Those treated with antibiotics are considered contagious until they have completed 5 days of an appropriate antibiotic.

What are the complications of pertussis?

In infants younger than 1 year of age who get pertussis, more than half (57%) must be hospitalized. The younger the infant, the more likely treatment in the hospital will be needed. Complications for infants with pertussis include:

- pneumonia (lung infection)
- convulsions (violent, uncontrolled shaking)
- apnea (slowed or stopped breathing)
- encephalopathy (disease of the brain)
- death

Teens and adults can also get complications from pertussis, but they are usually less serious in this older age group, especially in those who have been vaccinated.

The most common complications in teens and adults with pertussis are:

- Weight loss
- Loss of bladder control
- Passing out
- Rib fractures from severe coughing

Are some people at higher risk from pertussis?

Yes. Infants, people who have weakened immune systems, and people with chronic respiratory conditions are most at risk of developing complications from pertussis.

Persons who might expose someone else who is high risk include pregnant women (particularly in their third trimester), members of a household with infants or pregnant women, child care workers who take care of infants under one year old, childbirth educators, and health care workers who have face-to-face contact with infants under one year old or pregnant women.

Getting vaccinated against pertussis is especially important for people who are considered high risk or who may expose someone who is high risk.

Pertussis Diagnosis, Treatment, and Testing

How do I know if I have pertussis?

Pertussis (pertussis) can be diagnosed by a medical provider by taking into consideration if you have been exposed to pertussis, reviewing your symptoms, and doing a laboratory test which involves taking a sample of secretions (with a swab or syringe filled with saline) from the back of the throat through the nose.

What is the treatment for pertussis?

A health care provider may prescribe an appropriate antibiotic such as azithromycin (Zithromax, or Z-pack), clarithromycin, or erythromycin. There are other antibiotics that might also be used. These antibiotics will reduce the contagious period, but will not reduce the cough symptoms unless taken in the very early stage of the infection.

Exposure to Pertussis

What do I do if I was exposed to someone who has pertussis?

See your health care provider as soon as possible. You may be given antibiotics that can stop you from getting the disease. If you start to have symptoms of pertussis, try to stay away from other people until treated (or until another diagnosis for the cough proves it's not contagious).

How should employers handle employees returning to work who have had pertussis?

Employers should talk with their Human Resources Office to understand their company policies, procedures, and labor agreements. Employers should not share individual employee health information with others. Employers can also call their state or local health department for guidance.

Are there special cleaning requirements for pertussis?

No. Pertussis usually spreads by breathing in the pertussis bacteria. This germ comes out of the mouth and nose when an infected person coughs or sneezes. While the pertussis bacteria can live on a surface or object for several days, most people do not get pertussis by contact with that surface or object. The best protection is getting vaccinated. Also, try to stay away from people who are coughing and sneezing. If you are sick, try to stay away from people until your illness is treated; cover your mouth when you cough or sneeze; and wash your hands often.

Petussis Epidemic in Colorado

How common is pertussis in Colorado?

Even with the success of pertussis vaccines, the disease is still common in Colorado and in the rest of the United States. An average of 324 cases of pertussis were reported in Colorado each year during the past 5 years. Colorado is currently experiencing an epidemic of pertussis. Over 700 cases of pertussis have been reported so far in Colorado during 2012.

What parts of Colorado have pertussis?

The pertussis epidemic in Colorado is widespread throughout the state but most cases are from the Denver Metro area and front range counties.

Why is there more pertussis in some years than others?

Reported cases of pertussis vary from year to year and tend to peak every 3-5 years. Our last peak year in Colorado was 2005 when 1383 cases were reported. This pattern is not completely understood, but that's why it's important that everyone get vaccinated. If it weren't for vaccines, we'd see many more cases of pertussis.

What should I do if I live in an outbreak area?

You can make sure you and your loved ones are up to date with recommended pertussis vaccines. There are two types of pertussis vaccines – DTaP for infants and children and Tdap for adolescents and adults. Getting vaccinated with Tdap is especially important for family members with and caregivers of new infants. Also, if caring for an infant, keep him or her away from anyone with cough or cold symptoms.

Should I delay travel to an area that is having a pertussis outbreak?

No, but those traveling to an area with a pertussis outbreak should make sure they are up to date on their vaccines including the pertussis vaccine.

Pertussis Prevention and Vaccination Recommendations

What can be done to prevent the spread of pertussis?

The most effective measure is to maintain the highest level of pertussis immunization in our community. Immunization records of children, adolescents, and adults should be reviewed to ensure they are up-to-date on their DTaP/Tdap shots. Persons not up to date with their pertussis shots should receive DTaP/Tdap vaccine as soon as possible. Persons with pertussis should avoid contact with others until they have taken 5 full days of an appropriate antibiotic. Close contacts of a case of pertussis should receive a course of an appropriate antibiotic to prevent pertussis.

Is there a vaccine for pertussis?

The vaccine for pertussis is given in combination with diphtheria and tetanus. Immunization authorities routinely recommend that five doses of DTaP (diphtheria, tetanus, pertussis) vaccine be given at two, four, six, 15 to 18 months of age, and between four and six years of age and a single dose of Tdap be administered at 11-12 years of age. All adults aged 19 years and older who have not yet received a dose of Tdap should receive a single dose. Tdap should be administered regardless of interval since last tetanus or diphtheria toxoid-containing vaccine.

If I had pertussis, should I still get vaccinated?

Yes. When someone gets pertussis, their body develops a natural immunity. However, it is unknown how long that immunity lasts for each person, so routine vaccination against pertussis is recommended.

How long are you protected if you get pertussis?

It's unclear how long immunity lasts but immunity does decline over time — whether the immunity came from getting the disease or from the vaccine. That's why experts recommend that all children and adults get vaccinated, even if they've had pertussis.

Should I get vaccinated again if I had a Tdap shot a few years ago?

The current recommendation is that everyone should get one dose of Tdap. CDC is looking at this issue very closely and recommendations may change.

Will vaccination recommendations change?

It's possible that the recommendations might change. Information from current epidemics in the United States will help the CDC to develop and adjust recommendations.

Questions about Vaccine Efficacy

Do the vaccines really work?

Yes. The pertussis vaccine is very effective at protecting us from severe and deadly disease.

How long does the DTaP vaccine for younger kids last?

Recent studies show that the DTaP vaccine that young kids now get doesn't last as long as expected, and protection wears off over time. In the 1990s, the United States switched to a new pertussis vaccine for kids. This vaccine (DTaP) causes fewer side effects than the old vaccine (DTP) but doesn't last as long. This may explain why there are more pertussis cases in older children. Children and teens 11-14 years old today are the first group of kids to get only the newer DTaP vaccine as babies; they didn't get any doses of the old vaccine.

How long does the Tdap vaccine last?

Vaccine experts aren't sure about that yet. There are more reported pertussis cases among 11-14 year olds – a changing trend across the country that indicates a shorter duration for Tdap vaccine protection against pertussis. The CDC is studying how long the Tdap vaccine lasts and how well it protects people. The study will also look for any differences between kids who got the original DTP (whole cell) vs. the more recent DTaP (acellular) vaccines.

If the vaccine doesn't last very long, why should I be vaccinated?

The vaccine we use now (DTaP) works very well for the first couple of years. Even after five years, people still have 70 percent protection from pertussis. People who are vaccinated and still get sick have a milder, shorter illnesses, and are less likely to spread the disease to others; this is especially important for babies. Infants who are too young to get vaccinated usually get pertussis from a family member or caregiver. Infants are at the most risk for getting very sick and potentially dying from pertussis.

If I got vaccinated, can I still get pertussis?

It's possible, however, vaccinated people who get pertussis have milder symptoms, a shorter illness, and are less likely to spread the disease to other people.

How many vaccinated people are getting sick?

There have been many pertussis cases reported among people who've been vaccinated. That's not a surprise — it's known that the vaccine protection declines over time. However, according to CDC, data from California's epidemic in 2010 showed that unvaccinated children are eight times more likely to get pertussis than fully vaccinated children.

Vaccine Safety

Are there side effects from the vaccine?

Like any medication, vaccines may cause side effects. Most are mild:

Pain, redness, or swelling at the injection site.

Mild fever.

Headache.

Tiredness.

Nausea, vomiting, diarrhea, or stomach ache.

Chills, body aches, sore joints, rash, or swollen glands (uncommon).

I'm unsure if I've had the Tdap vaccine; is it harmful to get it again?

No. For most people, the benefits of protection against pertussis outweigh the risk of any side effects. Check with your health care provider if you have specific concerns.

Is the pertussis vaccine safe for pregnant women?

Yes. The Advisory Committee on Immunization Practices (ACIP) has determined that there is no elevated risk of adverse events among pregnant women who have received Tdap vaccine, or in their newborns.

Both tetanus and diphtheria toxoids (Td) and tetanus toxoid (TT) vaccines have been used extensively in pregnant women worldwide since the 1960s to prevent tetanus in newborns. Td and TT vaccines administered during pregnancy have not been shown to harm either the mother or baby/fetus.

Women who have not previously received the vaccine should see their health care provider to get Tdap, preferably during the third or late second trimester of pregnancy (after 20 weeks gestation).

Is the pertussis vaccine safe for women who are breastfeeding?

Yes. Women who are breastfeeding can receive the vaccine. Tdap vaccine can and should be given to anyone, including breastfeeding women, who are frequent close contact with infants. Preventing pertussis in mothers and other caregivers can reduce the chance that the infant will get pertussis. Also, by breastfeeding, mothers can pass antibodies they've made in response to the Tdap shot on to their infants, which may reduce an infant's chances of getting sick with pertussis. This is especially important for infants younger than 6 months of age, who have no other way of receiving enough pertussis antibodies, since they are not fully protected until their third dose of DTaP vaccine at 6 months of age.

How to Get and/or Pay for Pertussis Vaccination

Where can I get the pertussis vaccine?

There are many places that offer pertussis vaccine:

Your health care provider.

Most pharmacies.

Your local health department.

Does Medicare cover the vaccine?

Yes. Medicare Part D covers the cost of the adult vaccine (called Tdap) for adults aged 65 and older. Since it is a prescription drug benefit, coverage depends on the use of that benefit so far during the year. Call 1-800-633-4227 with questions about Medicare. Health care workers with questions should contact their patients' Part D plan for Part D vaccine information.

Does Medicaid cover the vaccine?

Yes. Medicaid covers the pertussis vaccine per the recommended immunization schedule. Submit questions about your coverage online.

How can I pay for the vaccine if I'm uninsured?

There may be programs that can help you. Call your local health department to find out if free vaccination clinics are planned in your community.

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