



Pertussis, also known as “whooping cough,” is a highly contagious disease that can affect people of any age. Infants under one year of age and pregnant women in their third trimester are most vulnerable to the effects of pertussis.

WHAT IS PERTUSSIS?

Pertussis is a respiratory infection caused by the bacteria *Bordetella pertussis*. Pertussis is known for uncontrollable, violent coughing which often makes it hard to breathe. After coughing fits, someone with pertussis often needs to take deep breaths, which results in a “whooping” sound.

WHAT ARE THE SIGNS AND SYMPTOMS

Symptoms of pertussis usually develop within 5 to 10 days after being exposed to an infected person. Sometimes pertussis symptoms do not develop for as long as 3 weeks.

Pertussis symptoms occur in three stages.

FIRST STAGE:

➤ **Lasting one to two weeks.**

Symptoms are similar to those for the common cold:

- Runny nose
- Red, watery eyes
- Gradually worsening or irritating cough
- Possible sneezing
- Possible low-grade fever

SECOND STAGE:

➤ **Lasting one to six weeks or longer.**

- Coughing with no breath in between (breathing may even stop momentarily)
- Coughing spells that end in a high-pitched whoop as the person catches breath
- Coughing spells that end in vomiting
- Exhaustion after coughing fits

In adults, symptoms at this stage may resemble those for bronchitis: hacking cough, mucous, wheezing, fever, loss of energy.

Infants under six months of age, vaccinated children and adults may not whoop loudly or even at all.

THIRD STAGE:

➤ **Lasting one to two months.**

- Coughing episodes occur less often and become less severe
- Even after antibiotic treatment, a person may continue to cough as the body repairs the damage to the breathing passages. The cough may be worse at night. The person may also develop other respiratory infections, like pneumonia

People are not considered infectious at this point.

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HOW IS PERTUSSIS SPREAD?

The bacteria that cause pertussis are spread through droplets in the air when an infected person coughs or sneezes.

You can also become infected through direct contact with mucous from the nose or throat of an infected person.

Infants and young children usually catch pertussis from teenagers and adults, who may not experience coughing fits or the “whoop.”

HOW LONG ARE PEOPLE CONTAGIOUS?

Pertussis is most contagious in the first two stages, roughly three weeks or 21 days from the start of symptoms.

A person is no longer contagious after five days of treatment with antibiotics.

CAN YOU GET PERTUSSIS MORE THAN ONCE?

Yes. A previous pertussis infection does not always give lifelong immunity.

WHAT SHOULD I DO IF I THINK I HAVE PERTUSSIS?

If you think you have pertussis, call your healthcare provider. Let them know your symptoms and possible exposure to pertussis. The office may need to take special precautions for the time of your appointment so that the infection is not passed to others.

Someone who has pertussis should stay home from daycare, preschool/school or work until five full days of antibiotics are taken OR 21 days after symptoms begin.

WHAT SHOULD I DO IF I HAVE BEEN IN CONTACT WITH SOMEONE WHO HAS PERTUSSIS?

Monitor your health for symptoms of pertussis for the next three to four weeks. If symptoms develop, contact your healthcare provider. Explain that you have been exposed to pertussis and are now ill.

If you are not fully immunized against pertussis, call your healthcare provider and arrange to have your immunizations updated.

WHO IS AT RISK FOR HEALTH COMPLICATIONS FROM PERTUSSIS?

Pertussis can cause serious health complications and sometimes death in infants under one year of age. Pregnant women in their third trimester may pass the infection on to their newborn children.

One to three deaths occur every year in Canada due to pertussis.

WHAT ARE THE POSSIBLE HEALTH COMPLICATIONS?

Infants and young children are at the highest risk for serious health complications. Pertussis leads to pneumonia in more than one out of 20 children, and it can also lead to seizures, convulsions, brain damage and death.

Adults with underlying medical conditions may have difficulty fighting the infection and may also develop serious complications, such as:

- Weight loss due to vomiting
- Collapsed lung
- Pneumonia
- Rib fractures
- Severe breathing problems
- An increase in angina pain

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HOW IS PERTUSSIS DIAGNOSED?

Pertussis is confirmed by laboratory testing. To test for pertussis, your healthcare provider will insert a swab in your nose to collect a mucous sample from the back of your nasal passages.

If your healthcare provider believes you have pertussis, he or she may begin treatment before a diagnosis is confirmed through laboratory testing.

HOW IS PERTUSSIS TREATED?

Pertussis is usually treated with antibiotics. Take the antibiotics as prescribed. Be sure to complete all of the medication. Contact your healthcare provider if you experience any side effects from your medication.

While antibiotics destroy the bacteria that cause pertussis, coughing may continue because the air passages have become irritated.

CAN PERTUSSIS BE PREVENTED?

Immunization is the only known strategy to prevent outbreaks of pertussis. During outbreaks, antibiotic treatment helps stop the spread of the disease.

People who are infected can help stop the spread of the disease by avoiding contact with others:

- Five days after starting antibiotic treatment; or
- 21 days from the start of symptoms if antibiotics are not used

WHAT IS THE VACCINATION SCHEDULE FOR PERTUSSIS?

In Ontario, children under 18 years of age are entitled to free vaccination against pertussis.

- **Infants and toddlers** need four doses of the pertussis vaccine starting at two months of age. (This vaccine is combined with other vaccines to protect against childhood diseases such as diphtheria, tetanus, polio, and Haemophilus influenzae B.)
- **School-aged children** should receive a booster dose when they are between four and six years of age. Teenagers/adolescents should receive a booster of ADACEL® or Boostrix at ages 14 to 16

All adults 18 years of age and older, including those 65 years of age and older, are eligible to receive a single publicly funded dose of Tdap (Adacel/Boostrix). This adult dose replaces one of the Td booster doses, which is given every 10 years. If the Tdap booster dose is required earlier, they are eligible to receive 1 dose of Tdap regardless of the interval since the last dose of tetanus or diphtheria containing vaccine.

REFERENCES

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MORE INFORMATION



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