

Polio:

What you need to know

What is polio?

Polio (poliomyelitis) is a highly contagious viral infection caused by the poliovirus. The poliovirus lives in the throat and in the feces of infected people. Although most people who catch polio will not develop symptoms, one in four people will develop symptoms similar to those seen when someone has influenza (the flu). A smaller proportion of people will develop severe symptoms that affect the brain (causing meningitis) and spinal cord (leading to paralysis, which is when you cannot move part or all of your body). In both cases, these complications can result in permanent disability or death.

While anyone can catch polio, children under five years of age are at higher risk for catching this disease.

While rare in Canada and much of the world due to the success of immunization programs, polio remains endemic (see text box: **What does endemic mean?**) in two countries – Afghanistan and Pakistan. Outbreaks of polio have also been reported in countries around the world; one of the reasons for this is that the virus can spread through international travel. There are strong ongoing global efforts to eradicate polio through immunization programs.



What does endemic mean?

A disease is considered endemic within a specific geographic region or group of people when it is:

- consistently present, and
- predictable (i.e., there is typically an expected/stable number of people that will catch the disease within a specific timeframe).

What you need to know

What are the symptoms?

Most people who catch polio will not have any symptoms at all. One in four people who are infected will develop symptoms similar to those seen when someone has influenza (the flu). These symptoms last two to five days and can include:

- fever
- headache
- sore throat
- nausea and vomiting
- fatigue



In more serious cases, muscle aches and stiffness in the neck and back may occur. In around 1% of cases, polio will **damage a person's nervous system** (brain and spinal cord) and cause **paralysis**.

Paralytic polio can lead to permanent disability, and up to 5% of children and up to 30% of adults who develop paralytic polio die.

Those who fully or partially recover from paralytic polio sometimes develop muscle weakness, pain, and paralysis later on in life. This is known as **post-polio syndrome**.

How is it spread?

Poliovirus enters the body through the mouth or nose and is spread through person-to-person contact. It is spread mainly by coming into contact with an infected person's feces. Examples include drinking, or swimming in, contaminated water, eating food that was prepared using contaminated water, and touching fecal material and then touching your mouth (i.e., if someone does not wash their hands after using the washroom and then touches an object you later touch).

Less commonly, polio can also be spread through close contact with others, such as coughing or sneezing next to someone.

What you need to know

Who should get immunized?

- Infants, children and adolescents, according to the childhood immunization schedule in their province/territory.
- Adults who have not previously been vaccinated against polio, or who have not been fully vaccinated against polio.
- Adults who have been previously immunized against polio but who require one extra booster dose if they are at risk of being exposed to polio (i.e., travelling to an area of the world where polio is active).



Publicly funded immunization schedules for polio may vary between provinces and territories.

Are you protected against polio?

Polio vaccines are safe and the most effective way to protect against polio infection. The polio vaccine is commonly combined with other vaccines – mainly diphtheria, tetanus, and pertussis vaccines – which means that you get protection against multiple diseases in one shot.

Talk to your doctor, nurse, pharmacist, or local public health office about getting the vaccine for you or your child. For more information, visit: <https://immunize.ca/polio>

References

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