

POLIO (Poliomyelitis)

What is polio?

Polio (poliomyelitis) is a disease caused by a virus. In the past, polio was common, especially in children, and caused paralysis and death. After the introduction of the polio vaccine the disease is now rare in most parts of the world, although it persists in some developing countries.

What are the symptoms?

Most people infected with polio do not have any symptoms. About ten percent of people who are infected with virus have a minor illness with fever, headache, lethargy, nausea and vomiting. Most of these people completely recover. About two percent go on to experience severe muscle pain with back or neck stiffness, called non-paralytic aseptic meningitis (inflammation of the lining of the brain without weakness).

Less than one percent of people who are infected develop a severe weakness called acute flaccid paralysis. This usually affects the limbs but it can also affect the muscles of the head and neck and the diaphragm muscle that is used for breathing. Most people with acute flaccid paralysis recover although the recovery is not complete in all people and some people die.

How is polio spread?

Polio is spread by the fecal-oral route. The virus can be found in bowel movements (feces) and spread through close contact with an infected person via small amounts of feces on unwashed hands. The virus can be found in the air after someone who is infected with polio coughs or sneezes and can be inhaled.

How is polio diagnosed?

Polio is diagnosed by a history of exposure to the disease, symptoms, and laboratory testing. As some other infections can cause similar symptoms, laboratory testing of stool samples, throat swabs or spinal cord fluid is required to confirm the diagnosis of polio.

Who is at risk of polio infection?

Polio is very rare in Canada, but there are still outbreaks in other parts of the world. Anyone at any age who has not had the disease or been immunized is at risk.

People who are not immune may become infected in countries where polio still exists. They may then bring the infection with them when they travel to Canada.

How can polio be prevented?

The best way to protect against polio is to be immunized. The [New Brunswick Routine Immunization Schedule](#) provides polio vaccine as part of a diphtheria, tetanus, pertussis, polio and haemophilus influenzae type b vaccine (DTaP-IPV-Hib) at two, four, six and 18 months of age and (DTaP-IPV) at four years of age.

Adults traveling to areas where polio still exists may require a booster. Before traveling to countries where polio is occurring, remember to seek advice from a health-care provider or a travel health clinic.

How is polio treated?

There is no specific cure for polio and treatment is mainly to support cases with acute flaccid paralysis while their weakness is severe. Cases with acute flaccid paralysis may require intensive care to assist breathing.

What is the public health response?

Health-care providers, hospitals and laboratories, schools and childcare centres must notify suspected cases of polio to Public Health. Public Health staff will interview the health-care provider and patient (or care-givers) to find out how the infection occurred, identify other people at risk of infection, implement control measures (such as immunization and restrictions on attending school or work) and provide other advice.

Further Information

For additional information, contact your health-care provider, [local Public Health office](#) or Tele-Care 811.

Useful websites:

- Canadian Coalition for Immunization Awareness and Promotion www.immunize.cpha.ca
- Public Health Agency of Canada www.phac-aspc.gc.ca
- Canadian Pediatric Society www.cps.ca

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