

Polio

Fact sheet

Polio is a highly infectious virus that can cause paralysis and death. Immunisation has dramatically reduced the incidence of polio, but it still exists in some developing countries.

What is polio?

Poliomyelitis (or "polio") is a viral infection that can cause paralysis and death.

In the past, polio was common especially in children. Since the late 1980s the World Health Organization (WHO) has led a campaign to eradicate polio, including mass vaccination against polio, and ongoing surveillance for cases.

Polio is now rare in most parts of the world.

In some developing countries however, polio continues to circulate. There are three types of 'wild' polio (known as WPV): type 1, type 2 and type 3. Type 2 and type 3 no longer exist. Only WPV type 1 remains.

Some countries overseas use a live, weakened form of polio as the vaccine. In some rare instances, the live polio vaccine can mutate and lead to people developing the infection and being able to spread it from person to person (known as circulating vaccine-derived polio, or cVDPV). This is uncommon but can occur in a setting with poor hygiene and sanitation, and low vaccination coverage.

You cannot get polio from the vaccine currently used in Australia. This is because the vaccine used in Australia uses a dead virus.

What are the symptoms of polio?

Most people infected with polio do not get symptoms.

10% of people who are infected with the virus get minor symptoms, including:

- fever
- Headache
- tiredness
- nausea
- vomiting

Most of these people completely recover.

A small proportion of people experience more severe paralysis symptoms, including:

- severe muscle pain with back or neck stiffness, due to a type of meningitis (inflammation of the lining of the brain without weakness)
- severe weakness in the arms and legs and muscles of the head and neck
- difficulty breathing due to weak diaphragm muscle.

Most people with acute paralysis symptoms recover, although the recovery is not complete in all people and some people die.

The time from being exposed to the polio and getting sick can range from 3 to 35 days but is commonly between 7-14 days.

Cases are most infectious from 10 days before onset of symptoms to 10 days after the onset of symptoms.

People can continue to shed the virus in their faeces (poo) for up to six weeks. Typically, the virus remains in the throat for 1-2 weeks.

If you experience any of these symptoms after returning from overseas, you should immediately contact your doctor or go to an emergency department. Tell your doctor about your symptoms and which country you visited.

How is polio spread?

Polio is spread:

- directly from person to person through contact with the faeces (poo) of an infected person, or when an infected person coughs or sneezes
- through drinking water contaminated with raw (untreated) sewerage
- when a person eats food that has been in contact with contaminated water or has been prepared by someone who has polio.

Who is at risk of getting polio?

Polio mainly affects children under 5 years of age, but anyone who is not immune (vaccinated) can get and spread polio.

Because of high rates of immunisation and clean drinking water, Australia is currently free from polio.

People who are not immune may become infected in countries where polio is still circulating. They may then carry the infection with them when they travel to another country, such as when visiting or returning to Australia.

People receiving visitors to their home from areas where polio continues to circulate, or outbreaks are occurring may also be at risk if they are not immune.

The [Global Polio Eradication Program website](#) shows countries where polio is currently circulating.

How is polio prevented?

Vaccination

Immunisation protects people against polio. While transmission does not currently occur in Australia, polio could be imported and spread amongst unimmunised populations.

Polio vaccination is provided free in NSW for all children, as part of the National Immunisation Program as a course of three injections at six weeks, four and six months of age, with a booster at 4 years.

For travellers to countries where polio still circulates, and health care workers who may look after patients with polio, a booster is recommended every 10 years.

If you are visiting a country where polio is circulating, speak to your GP to find out if your polio vaccination is up to date.

For more information on travel related vaccine advice see the [Australian Immunisation Handbook Vaccination for international travellers page](#).

Travellers may be required to show evidence of polio vaccination prior to entry or exit to some countries. See the [Smarttraveller website](#) to check your destination for warnings and requirements.

Practise good hygiene and eat and drink safely

When travelling, especially to areas with known polio circulation, people should ensure they:

- Wash their hands with soap and clean water regularly (particularly after toileting or before preparing food) or use a hand sanitiser if clean handwashing facilities are not available
- Only drink and prepare food with clean water
- Avoid coming into direct contact with sewage.

How is polio diagnosed?

Your doctor may investigate whether you have polio based on your symptoms and recent travel history.

To diagnose polio, your doctor would likely ask you for a sample of stool (poo) to test for the virus. They may also take a swab from your throat or take a sample of spinal fluid.

How is polio treated?

There is no specific treatment for polio. In severe cases people with polio may require intensive care to assist with breathing.

What is the public health response to polio?

Hospitals, laboratories, school principals, and childcare centres must notify suspected cases of polio to the local public health unit.

Public health unit staff will interview the doctor and patient (or carers) to find out how the infection occurred, identify other people at risk of infection, implement control measures (such as immunisation and restrictions on attending school or work), and provide other advice.

For further information please call your local Public Health Unit on 1300 066 055.

If you have polio symptoms and you are concerned, speak to your doctor right away, or in an emergency call 000. For health advice you can also health direct on 1800 022 222 for free 24-hour health advice or

Speak to your local pharmacist.