

## Polio - immunisation

Poliomyelitis (polio) is a serious infectious disease caused by a virus. Symptoms vary from mild, flu-like symptoms to life-threatening paralysis. Between two and five per cent of people who develop paralytic polio will die. Half of those who survive will have permanent paralysis.

Polio can be prevented with immunisation. All children and adults should receive the vaccine. If you are not immunised, you could contract polio if your food, water or hands are contaminated with the faeces (poo) of an infected person.

Serious side effects or allergic reactions to the vaccine are rare. If you are concerned about your reaction or your child's reaction to any vaccine, see your doctor immediately.

### Immunisation can prevent polio becoming widespread

The first new case of polio in Australia since 1986 was reported in July 2007. This case was in a traveller who acquired his infection in Pakistan. The entire western Pacific region, including Australia, has been declared polio-free since 2000.

New cases of polio in Australia are rare, but the disease remains a health risk for travellers to some countries of the world. If Australian children and adults are not immunised, polio could again become a problem.

### Immunisation and HALO

Generally, the immunisations you may need are decided by your health, age, lifestyle and occupation. Together, these factors are referred to as HALO.

HALO is defined as:

- **Health** – some health conditions or factors may make you more vulnerable to vaccine-preventable diseases. For example, premature birth, asthma, diabetes, heart, lung, spleen or kidney conditions, Down syndrome and HIV will mean you may benefit from additional or more frequent immunisations.
- **Age** – at different ages you need protection from different vaccine-preventable diseases. Australia's National Immunisation Program sets out recommended immunisations for babies, children, older people and other people at risk, such as Aboriginal and Torres Strait Islanders. Most recommended vaccines are available at no cost to these groups.
- **Lifestyle** – lifestyle choices can have an impact on your immunisation needs. Travelling overseas to certain locations, planning a family, sexual activity, smoking, and playing contact sport that may expose you directly to someone else's blood, will mean you may benefit from additional or more frequent immunisations.
- **Occupation** – you are likely to require additional or more frequent immunisations if you work in an occupation that exposes you to vaccine-preventable diseases or puts you into contact with people who are more susceptible to problems from vaccine-preventable diseases such as babies or young children, pregnant women, the elderly, and people with chronic or acute health conditions. Workers in aged care, childcare, healthcare, emergency service or sewerage repair and maintenance need to discuss their immunisation needs with their doctor. Some employers help with the cost of relevant vaccinations for their employees.

### The polio vaccine

Before November 2005, the oral (given by mouth) polio vaccine was routinely provided in Australia. This vaccine contains small amounts of weakened live poliovirus. In rare cases (about one in every 2.5 million doses), it can cause paralysis (vaccine-associated paralytic poliomyelitis, or VAPP).

In November 2005, an inactivated polio vaccine (IPV) replaced the oral vaccine (OPV) in Australia. This vaccine is given by injection, rather than by mouth, and does not cause vaccine-associated paralysis.

In Victoria, the polio vaccine is combined with vaccines for other diseases, such as diphtheria, tetanus and pertussis (whooping cough).

## Polio immunisation for children

For babies and children, a course of four injections is required for long-lasting immunity. In Victoria, the combined vaccine is given free of charge to children at:

- **Two, four and six months** (diphtheria, tetanus, pertussis, hepatitis B, polio and *Haemophilus influenzae* type b vaccine)
- **Four years of age** – prior to starting school (diphtheria, tetanus, pertussis and polio vaccine).

The injectable vaccine is interchangeable with the oral polio vaccine (which is no longer available in Australia). So if a child had one or more doses of the oral polio vaccine before 1 November 2005, their remaining doses can be given as injectable vaccine.

Catch-up immunisations are available free of charge to children under eight years of age who have not been fully immunised against the disease. Indigenous (Aboriginal and Torres Strait Islander) people, refugees and humanitarian entrants can also have free immunisation.

## Polio immunisation for adults

Adults having a polio immunisation for the first time should receive a course of three injections with an interval of four weeks between the doses. If you have not received at least three doses of polio vaccine, speak to your doctor about catch-up doses.

Booster doses of the vaccine are recommended every ten years for adults who are healthcare workers in contact with patients with polio. If you are travelling overseas, speak to your doctor before you go about whether you need a booster polio immunisation for the country or countries you are visiting. For a list of countries where polio is still present, visit [www.polioeradication.org](http://www.polioeradication.org)

## Before polio immunisation

Before receiving the vaccine, tell your doctor or nurse if you or your child:  
Has had a serious reaction to any vaccine or vaccine component (for example, neomycin)  
Is unwell on the day of immunisation (temperature over 38.5°C).

## Side effects of the polio vaccine

All vaccines and medicines can have side effects. However, these are usually not serious. Severe reactions to the polio vaccine are rare – they are much less common than the effects that occur with the disease itself. Some people may experience a mild adverse reaction to the vaccine. These tend to happen soon after immunisation and continue for a couple of days.

Minor side effects may include:

- Muscle aches
- Mild temperature
- Soreness, redness and swelling at the injection site
- Unsettled and grizzly behaviour
- Sleepiness.

There is a very small risk of a serious allergic reaction to any vaccine. It is important to stay at the clinic where the immunisation was given for 15 minutes after the immunisation.

## Reducing the side effects of the polio vaccine

Side effects of the vaccine can be reduced:

- Give paracetamol to reduce any fever – check the label for the correct dose (especially for children)
- Hold a cold, wet cloth against the injection site
- Drink extra fluids
- Make sure to avoid overheating – don't overdress your child.

If you are concerned about any reaction to the vaccine, contact your doctor or hospital.

## Where to get help

- Your doctor
- Your local maternal and child health nurse
- NURSE-ON-CALL Tel. 1300 60 60 24 – for expert health information and advice (24 hours, 7 days)
- Department of Health Immunisation Section, Tel. 1300 882 008
- Department of Foreign Affairs and Trade – Smart Traveller website
- Your local council immunisation service
- National Immunisation Infoline Tel. 1800 671 811

## Things to remember

- New cases of polio in Australia are rare, but the disease remains a health risk for travellers to some countries of the world.
- If children and adults are not immunised, polio may re-establish in Australia.
- In Victoria, the polio vaccine for children is combined with vaccines for other diseases.
- You need several doses of the inactivated polio vaccine before you are fully protected.

**This page has been produced in consultation with, and approved by:**

Department of Health - Communicable Disease Prevention and Control Unit

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