Polio – immunisation

Summary

- Until polio is eradicated globally, it can re-emerge in any country, so polio immunisation remains important in Australia.
- If children and adults are not immunised, polio may re-establish in Australia.
- New cases of polio in Australia are rare, but the disease remains a health risk for travellers to some countries of the world.
- In Victoria, the polio vaccine for children is combined with vaccines for other infectious diseases.
- You need several doses of the inactivated polio vaccine before you are fully protected from polio.

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.

Symptoms of new weakness, joint and muscle pain and fatigue can occur years after an initial bout of polio and are known as post-polio syndrome.

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 and global polio eradication

The Global Polio Eradication Initiative aims to eliminate all cases of polio around the world. It is a global public health plan, with immunisation as an important part of the program. 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. Since 1986, the only new case of polio in Australia was reported in July 2007. This person was a traveller who acquired his infection in Pakistan.

If Australian children and adults are not immunised, polio could again become a problem in this country.

Immunisation against polio

Immunisation is the best protection against polio and is recommended for all infants, children and adults.

In November 2005, an inactivated polio vaccine (IPV) replaced the oral vaccine in Australia. This vaccine is given by injection, rather than by mouth and, in Victoria, is combined with vaccines for other infectious diseases when given to children at two, four and six months and at four years of age.

Protection against polio is available free of charge under the National Immunisation Program Schedule. In Victoria, immunisation against polio is free for:

- babies at two, four and six months – immunisation in the form of a diphtheria, tetanus, whooping cough, hepatitis B, polio and Haemophilus influenzae type b (Hib) vaccine (six-in-one vaccine)
- children at four years – a booster dose in the form of a diphtheria, tetanus, whooping cough, polio vaccine (four-in-one vaccine)
- children up to and including nine years of age – catch up immunisation with combination vaccines is available

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- young people aged 10 to 19 years who want to catch up on missed free National Immunisation Program vaccines
- Aboriginal and Torres Strait Islander people, vulnerable people, refugees and asylum seekers from ten years of age who have not been fully vaccinated – catch-up immunisations with a polio-only vaccine are available. ('Vulnerable people' are defined as people who have experienced hardship that prevented them from accessing the vaccine earlier. They are vaccinated based on an individual assessment by an immunisation provider.)

The injectable polio vaccine is interchangeable with the oral polio vaccine (which is no longer available in Australia). 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.

Polio immunisation for adults

All adults should make sure that they have been vaccinated against polio. Adults receiving the polio vaccine for the first time should have 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.

Adults do not need a booster dose unless they are at special risk. You are at risk and should arrange with your doctor to get a booster if you:
- intend to travel to areas where polio is present – check with your doctor if you are travelling outside of Australia, especially to Nigeria, India, Pakistan, Afghanistan, Angola or Chad
- are a laboratory worker likely to handle laboratory specimens that contain live poliovirus.

Booster doses of the vaccine are recommended every 10 years for at-risk adults. If you are travelling overseas, speak to your doctor before you go about whether you need a booster polio immunisation for the countries you are visiting.

Pre-immunisation checklist

Before receiving the vaccine, tell your doctor or nurse if you (or your child):
- are unwell (temperature over 38.5 °C)
- have allergies to any other medicines or substances
- have had a serious reaction to any vaccine
- have had a serious reaction to any component of the vaccine
- have had a severe allergy to anything
- are pregnant.

Side effects of polio vaccines

Immunisations containing the vaccine against polio are effective and safe, although all medications can have unwanted side effects.

Side effects from polio vaccines are uncommon and usually mild and temporary (occurring in the first few days after vaccination). They may include:
- muscle aches
- localised pain, redness, itchiness and swelling at the injection site (usually for one to two days)
- occasionally, an injection-site lump (nodule) that may last many weeks – treatment is not needed
- low-grade temperature (fever)
- children can be unsettled, irritable, cry, are generally unhappy, drowsy and tired.

Specific treatment is not usually required. However, treatment options that can reduce the side effects of the polio vaccine include:
- giving extra fluids to drink and not overdressing if there is a fever
- although routine use of paracetamol after vaccination is not recommended, if pain or fever is present, paracetamol can be given. Check the label for the correct dose or speak with your pharmacist, (especially
when giving paracetamol to children).

**Concerns about immunisation side effects**

If the side effect following immunisation is unexpected, persistent or severe, or if you are worried about yourself or your child’s condition after a vaccination, see your doctor or immunisation nurse as soon as possible or go directly to a hospital.

Immunisation side effects may be reported to AEFI-CAN – the national Adverse Events Following Immunisation Clinical Assessment Network. This vaccine safety and central reporting service is known as SAEFVIC in Victoria.

It is also important to seek medical advice if you (or your child) are unwell, as this may be due to other illness rather than because of the vaccination.

**Rare side effects of immunisation**

There is a very small risk of a serious allergic reaction (anaphylaxis) to any vaccine. This is why you are advised to stay at the clinic or medical surgery for at least 15 minutes following immunisation in case further treatment is required.

Another rare side effect of some vaccines is the hypotonic-hyporesponsive episode (HHE), which only occurs in babies. The baby may show signs of paleness, limpness and be unresponsive. This may occur from 1 – 48 hours following vaccination. The whole episode may last from a few minutes to 36 hours. If your baby shows signs of HHE, call triple zero (000) for an ambulance immediately.

Follow-up of children with HHE shows no long-term neurological or other side effects.

**Immunisation and HALO**

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

Talk to your doctor or immunisation provider if you think you or someone in your care has health, age, lifestyle or occupation factors that could mean immunisation is necessary. You can check your immunisation HALO using the Immunisation for Life infographic.

**Where to get help**

- Your GP (doctor)
- In an emergency, always call triple zero (000)
- Emergency department of your nearest hospital
- Local government immunisation service
- **Maternal and Child Health Line** (24 hours) Tel. 132 229
- **NURSE-ON-CALL** Tel. 1300 60 60 24 for expert health information and advice (24 hours, 7 days)
- Immunisation Section, Department of Health and Human Services, Victorian Government Tel. 1300 882 008
- Smartraveller.gov.au, Australian Government Tel. 1300 555 135 (from within Australia) or +61 2 6261 3305 (from overseas)
- **National Immunisation Hotline** Tel. 1800 671 811
- Pharmacist
- **SAEFVIC** Tel. 1300 882 924 (choose option 1) – the line is attended between 9 am and 4 pm and you can leave a message at all other times

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