

# Polio

It has been 40 years since the introduction of vaccines that prevent Australians being crippled or dying from poliomyelitis (polio). In the polio epidemics of the 1950s, parents had to watch helplessly as the disease afflicted their children. Many needed leg braces to walk or 'iron lungs' to breathe.

Polio is a devastating disease that is now uncommon here due to immunisation and improved sanitation, but it is still a major problem in some parts of the world. It is important that people who travel to these countries have been vaccinated against polio. People who have been infected in other countries can bring polio into Australia.

## What causes polio?

A virus that lives in the throat and intestinal tract causes polio. People who get polio may not feel ill at all. Or, they may get a fever, sore throat, vomiting and muscle stiffness.

The virus can affect the nerves, and the person may lose the use of one or both arms or legs. They may not be able to breathe without the use of a machine.

There is no treatment for polio. Between 2% and 10% of people with polio die of it.

## What is post-polio syndrome?

For many Australians who caught polio before the 1960s, new problems have come to light. We now know that polio can cause more problems 25 to 35 years later, with the development of a condition known as post-polio syndrome.

The person may get much more tired, with muscle weakness, and sometimes shortness of breath, or pain. These late effects of polio are thought to be the result of the initial nerve damage slowly worsening with time. It is not contagious.

## How can I protect my child from polio?

Live oral polio vaccine is the vaccine recommended for most people in Australia to protect against this disease. It is given as drops by mouth.

The vaccine contains small amounts of the three types of polio



virus that have been made very weak. The vaccine passes through the child's intestines, helping to produce a strong immunity to polio.

## When should I vaccinate my child?

To protect your child from polio, he or she should receive the vaccine at:

- Two months
- Four months
- Six months

Children need boosters at:

- School entry (4-5 years)
- School leaving (15-19 years)

## Who should not receive the live polio vaccine?

A small number of people should not receive the live polio virus. People who are sick with a fever, have vomiting or diarrhoea, or are in early pregnancy, should not receive the live vaccine. People with weakened immune systems should not receive the live polio vaccine either. For example, those with:

- Some types of cancer, or having some cancer treatments

- HIV/AIDS
- Those on drugs such as steroids that may make it hard for the body to fight infection
- People who live in the same household as these people

However, most of these people can be safely protected by receiving an injectable form of killed vaccine.

## Is the vaccine safe?

The vaccine is very safe and effective. It has very few side-effects. Some people may have mild symptoms that settle, such as headache, loose stools or muscle aches.

A World Health Organisation study of the safety of live polio vaccine was conducted over 15 years and in 13 different countries. It concluded that oral polio vaccine was one of the safest vaccines in use. The risk from catching polio is far greater than any possible risk from the vaccine.

There is an extremely small possibility that a child given live polio vaccine might develop polio, or transmit it to someone in close contact with them who is not immune. The risk of this happening is one in every three million doses of vaccine distributed. In other words, a child has more chance of being struck by lightning than of getting polio from the vaccine.

## Do adults need the vaccine?

Only if they were not fully immunised as a child or if they are travelling overseas to countries where polio is more common. If someone in a household where a baby is being vaccinated has not been fully immunised against polio (eg. the mother of the baby), they should receive the vaccine at the same time as their baby.

*For further information on polio immunisation, talk to your family doctor or your local Public Health Unit.*