

# 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.

At the disease's low point, in early 2003, it was endemic in only six countries: Nigeria, Niger, Egypt, Pakistan, Afghanistan and India. Unfortunately some countries stopped vaccinating against polio for various reasons. Now in 2005, some countries that were considered polio free have been reinfected by a strain of the virus that broke out in northern Nigeria, and crossed Africa and the Red Sea.

There are now 16 countries with recently diagnosed cases of polio, one of which is our neighbour, Indonesia. Until this recent outbreak, Indonesia had not had a case of polio since 1995. In the first six months of 2005, 225 children have been paralysed by the disease, which was thought to have been re-introduced by an Indonesian working in Saudi Arabia or by a pilgrim who went to Mecca in January.

## 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?

In the past, polio vaccination was given by mouth and was a live weakened polio vaccine. This vaccine has now been replaced by an inactivated polio vaccine (IPV) that is administered by injection.

The advantage of IPV is that it has fewer side effects. For example it does not cause diarrhea as the oral vaccine could do. Importantly, as it is no longer a live vaccine, it cannot cause polio itself (which oral polio vaccine could cause in extremely rare cases).

## 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:

- Four years of age

## 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 or muscle aches. There is an occasional injection site nodule, which may last many weeks.

## Do adults need the vaccine?

Only if they were not fully immunised as a child or if they are travelling over-



seas to countries where polio is more common.

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