

Immunisation of children

The importance of immunisation

The use of vaccines during childhood has dramatically reduced the number of deaths from the basic infectious diseases. Immunisation is vital preventive medicine, and parents have a responsibility to make sure their children are immunised. Whenever we have an infection, our bodies automatically defend themselves by producing substances called *antibodies* that neutralise the infection. These antibodies remain in the body to fight further contact with germs, and this protection is called *immunity*. A vaccine works by stimulating the production of antibodies, which fight infection, and to give us this immunity.

What diseases do we vaccinate against?

The following are funded as part of the Australian Governments national recommended schedule.

Diphtheria

Diphtheria is a bacterial infection that causes a membrane to grow across the throat and block the airway. It is now rarely seen because of the successful immunisation program.

Whooping cough

Whooping cough (*pertussis*) is a serious bacterial infection of the chest that causes a dramatic cough in children as they struggle to breathe. It is still a common infection in our community, but immunisation has made it a milder disease. Children who have not been immunised can get severe attacks.

Tetanus

This is another bacterial infection; it causes a severe infection known as *lockjaw*. Although cases still occur, it is rare because of our awareness of the problem.

Note: Diphtheria, tetanus and whooping cough is given as a combined vaccine (triple antigen) on four occasions.

Polio

Polio, once a common disease, is a severe viral infection of the nervous system. It causes paralysis of parts of the body. The vaccine is given by injection as four doses.

Hepatitis B

Hepatitis B vaccine should commence just after birth followed by three boosters.

Hepatitis A

Two doses are required for Aboriginal and Torres Strait Islander people living in areas of higher risk.

Measles

Measles is a very serious viral illness that can cause serious brain damage (due to encephalitis) in its victims. An injection given at 12 months and then a booster at 10 to 16 years provide immunity. The vaccine is now combined with mumps and rubella.

Mumps

Mumps is one of the well-known infectious diseases of childhood that is now being controlled with immunisation. It can infect the brain (meningitis and encephalitis) and the testicles in young men.

Rubella

Rubella or German measles is not a serious disease except if contracted during the first 3 months of pregnancy, when it can cause serious problems in the baby. The vaccine is available for all children at 12 months and then during early adolescence for schoolgirls. Being immune to rubella takes a great load off the mind of any expectant mother.

Haemophilus influenzae type B (HiB)

This is a serious bacterial infection that caused many deaths from meningitis and epiglottitis. The vaccine was introduced in 1992, and infections are now rarely seen. Four doses are given.

Meningococcus

Vaccination at 12 months is given to immunise against the C strain of the potentially deadly meningococcal infection.

Varicella (chickenpox)

The vaccine is recommended as a single dose at 18 months but can be given from 12 to 13 months. It should be considered at 10 to 13 years if there is no history of varicella.

Pneumococcus

Pneumococcus causes respiratory infections such as pneumonia. Vaccination is recommended for children as a three-dose series; extra doses are required for those at risk.

Viral gastroenteritis

A vaccine against rotavirus infection is now available as 3 doses.

Human papillomavirus (HPV)

Human papillomavirus (HPV) is associated with genital warts and cervical cancer. It is given to 12- to 13-year-old girls at school.

Are there any side effects?

The vaccines usually are free of side effects, although a mild reaction can occur. Sometimes an injection can cause the child to be quite ill, and it usually is the whooping cough (*pertussis*) component. Your doctor will be able to advise about this.

The Australian standard vaccination schedule (recommended by the National Health and Medical Research Council, Australia) can be viewed online at <http://immunise.health.gov.au> or ask your doctor.