

# Vaccination: Deciding to vaccinate your children

## Why vaccinate?

Vaccination helps people stay healthy by preventing serious infections and diseases that can lead to permanent disability or death, even in strong and healthy people.

Vaccination works by using the body's natural defences to build resistance to specific infections before people come into contact with them in the community. Vaccines interact with the immune system by producing an immune response similar to that produced by a natural infection, but without exposing the person receiving the vaccine to the disease and its potential complications.<sup>1,2</sup>

Vaccination not only protects your own family, but also protects others by helping to control serious diseases in our community.

## What does history tell us?

"Having suffered polio for three years as a child and now experiencing after effects later in life, I really wish the vaccine was available in my day. People would be crazy not to protect their children from such a terrible disease, especially when it's free and so easy." Ellenor, aged 80 years

Vaccination works. Just ask older members of our community. Many saw or experienced the effects of vaccine-preventable diseases first hand. Nowadays, it's hard to appreciate how devastating infectious childhood diseases can be, because decades of vaccination mean that few people now experience the consequences.

Like many medications, no vaccine is 100% effective. However, if everyone in Australia was vaccinated, it would be much harder for infections to spread from person to person, and throughout the whole population, due to higher levels of immunity. Eventually, some diseases could be eradicated completely.

## Who decides which vaccines are included on the schedule?

The Australian Department of Health and Ageing is responsible for deciding which vaccines will be included on the national immunisation schedule, as part of its Immunise Australia program. There are two advisory bodies called the National Immunisation Committee (NIC) and the Australian Technical Advisory Group on Immunisation (ATAGI). These bodies are made up of medical and other experts who develop, deliver and advise the Australian Government on the Immunise Australia program.<sup>3</sup>

While the same diseases are covered across Australia, States and Territories determine which combination of vaccines best suits their local needs. Extra vaccines are provided for some groups such as Aboriginal and Torres Strait Islander people and people with particular medical conditions that make them more susceptible to disease.

## Many deaths and disabilities in children have been prevented as a direct result of vaccination:

- Haemophilus influenzae type B disease (Hib): Before the Hib vaccine was introduced to Australia in 1992, Hib was a major cause of meningitis (inflammation of the brain) with ten to fifteen children under six years dying each year. Since the vaccine was introduced, cases have dropped by more than 90 per cent and Hib is now extremely rare.<sup>6</sup>
- Diphtheria: In the early 1900s, diphtheria caused more deaths in Australia than any other infectious disease, but increasing use of diphtheria vaccines since 1945 has led to its virtual disappearance.<sup>7</sup>
- Polio: Following the introduction of polio vaccine, there has been a dramatic decrease in polio infection in Australia. There have been no reported deaths due to polio in Australia for many years, however, considerable numbers of Australians still suffer or die from post-polio complications (143 reported deaths between 1997 and 2006).<sup>8</sup>

## Who shouldn't be vaccinated?

If your child has suffered allergic reactions or is undergoing therapy which suppresses the immune system, check with your doctor before having them vaccinated. There are a few other circumstances when people should not be vaccinated (eg some vaccines are not recommended for children with some chronic illnesses, high fevers or acutely unwell) so check with your immunisation provider each time anyone in your family gets vaccinated.

## Weighing it up

"We saw the power of the chickenpox vaccine when only one child was vaccinated and everybody else in the family, including us as parents, got sick. My husband had such a severe case that he couldn't work, had trouble breathing and is now left with scars from the spots." Tina, mother of two school age children.

You have to weigh up many things in life and vaccination is no different.

The risk of experiencing a side effect from having a vaccination is far less than the risk of severe complications associated with a vaccine preventable disease.

Many vaccine preventable diseases are highly contagious and can be overwhelming to the body's defences. Most unvaccinated people who come into contact with an infected person will catch the disease.

For example, where there is a case of whooping cough, up to 90 per cent of unimmunised household contacts will catch the disease.<sup>4</sup> This means it is not only important for babies to be vaccinated against whooping cough, but also for all family members to be up to date with their boosters.

Vaccination records might be needed to enrol your child in childcare or school. Unvaccinated children will be excluded from school if there is an outbreak of certain vaccine preventable diseases.

Queensland children currently have a high vaccination rate with 93 per cent of children aged 24 to 27 months being fully immunised.<sup>5</sup>

## To find out more about immunisation:

- visit [www.qld.gov.au/health/conditions/immunisation/index.html](http://www.qld.gov.au/health/conditions/immunisation/index.html)

- visit [www.immunise.health.gov.au](http://www.immunise.health.gov.au)
- talk to your doctor or immunisation provider
- call 13 HEALTH (13 43 25 84)

## References

1. Centers for Disease Control and Prevention. May 2009 (11th edition), Epidemiology and Prevention of Vaccine-Preventable Diseases.
2. The Australian Immunisation Handbook (9th edition). 2008, Appendix 5: Commonly asked questions about vaccination.
3. Australian Government, Department of Health and Ageing. Immunise Australia [Online] Available at: [www.immunise.health.gov.au/](http://www.immunise.health.gov.au/)
4. Australian Government, Department of Health and Ageing, 2008. Myths and Realities. (4th edition).
5. Australian Childhood Immunisation Register. September 2010. Available at [www.medicareaustralia.gov.au/public/services/acir/](http://www.medicareaustralia.gov.au/public/services/acir/)
6. The Australian Immunisation Handbook (9th edition). 2008, Part 3: Vaccines listed by disease.
7. Gidding, H.F., Burgess, M.A. & Kempe, A.E. 2001, 'A short history of vaccination in Australia', Medical Journal of Australia, vol.174, pp 37-40.
8. Australian Bureau of Statistics, 2008. 3303.0 Causes of Death, Australia, 2006.