Immunisation - getting good information and making decisions

FactSheet For Parents and Caregivers

**Why immunise?**
Immunisation helps our children avoid many diseases that can seriously harm them. The risk of potential complications from immunisation is very low compared to the risks from the diseases they help to protect against.

**Why immunise on time?**
Young infants are particularly at risk of serious complications from some diseases such as whooping cough, pneumococcal disease and *Haemophilus influenzae* type b (Hib) disease. Starting immunisation at 6 weeks of age helps to provide protection during the most vulnerable period of childhood. Delaying or missing immunisations reduces their protection when it’s needed most, increasing the risk of getting a disease.

**Are the diseases serious?**
Each disease carries its own set of risks. Some diseases are more serious at certain ages. Whooping cough for example is most dangerous in very young babies. Some diseases are rare but very serious for most people who get them, such as tetanus. Others, like measles, are very contagious. Everyone who gets measles will become ill, but it is impossible to predict who will get seriously ill and who won’t.

**How do vaccines work?**
When germs invade the body, the immune system deals with them by producing protective cells and small molecules called ‘antibodies’. When we come across a germ for the first time, our immune response is often slow, and we get sick.

After the infection however, our immune system remembers how to make the antibodies, so if we come into contact with the same germ again our immune system responds quickly and usually deals with it before we get sick.

Vaccines work in the same way, but use a killed or weakened form or fragment of the germ. In response to a vaccine, our immune system kicks in and produces antibodies to protect against the germ.

Vaccines teach the immune system to recognise the invaders should they present again at a later stage.

**How well do they work?**
Vaccines don't provide 100% protection to all people, but if most people are immunised the spread of the disease is reduced so the chance of exposure to the disease is much lower.

Your child needs to have all of the recommended doses of a vaccine to make sure they develop the best protection possible.

**Are vaccines safe?**
Before any vaccine can be used, it will have been through extensive scientific research and independent review, more than any other prescription medication. This process can take many years. Only vaccines that have a proven excellent safety profile are licensed in New Zealand. After a vaccine is introduced, like all medicines it continues to be monitored for safety both here and overseas.

**What are vaccines made of?**
All vaccines contain an active component (the antigen) which teaches the immune system to recognise the disease.

Vaccines may also have other components to keep the vaccine stable, stop unwanted bacterial growth or help the immune response. Sometimes people mistake these other components for toxins or poisons. In reality we eat, drink and come in contact with many of these components in far greater quantities than the amount in a vaccine. Aluminium, for example, which is in some vaccines to help the immune response, is in our drinking water, food and food packaging.

**The Immunisation Advisory Centre (IMAC)**
We are a nationwide organisation based at The University of Auckland. We provide independent, factual information about immunisation and vaccine preventable diseases to parents and health care professionals. The information is based on international and New Zealand scientific research and is supported by a large network of health professionals.

We are here to answer your questions and help you make decisions about immunisation.

Call us free on: 0800 IMMUNE (0800 466 863) weekdays 9am - 4.30pm.

Check out our website at: [www.immune.org.nz](http://www.immune.org.nz)