

Diphtheria tetanus pertussis hep B polio and Hib vaccine - for children

Diphtheria, tetanus, pertussis (whooping cough), hepatitis B, polio and haemophilus influenzae type b (Hib) are diseases that can cause serious illness or death. All these diseases can be prevented if your child is fully immunised. Children can receive a combined vaccine.

Tetanus is caused by bacteria that live in soil, dust and manure. Tetanus causes infection when it enters the body through a break in the skin.

Diphtheria and whooping cough are spread through the coughs and sneezes of an infected person. Around 10 per cent of people exposed to diphtheria die from the disease.

Polio can be caught from the faeces of an infected person which can contaminate food, water or hands. Polio is fatal in between 2 per cent and 5 per cent of cases, and causes permanent paralysis in about 50 per cent of cases.

Hepatitis B virus is spread through exposure of broken skin or mucous membranes to the blood or other body fluids of an infected person. It can also be transmitted from mother to child at birth or shortly after.

Hib was once the most common cause of life threatening infection in children under five. Despite its name, Hib is not a form of influenza (flu). Children under five should receive several doses to protect them from Hib.

Tetanus can be fatal

A break in the skin as small as a pinprick can allow tetanus to enter the body and cause infection. Tetanus attacks the nervous system leading to:

- Muscle spasms which begin in the jaw and neck
- Breathing difficulties
- Painful convulsions
- Abnormal heart rhythms.

Diphtheria causes a number of problems

Diphtheria bacteria are found in the mouth, nose and throat. Diphtheria leads to:

- **Difficulty swallowing and breathing** – caused by a membrane that grows in the throat as a result of the diphtheria infection. This can lead to suffocation.
- **Paralysis and heart failure** – when a poison produced by the bacteria spreads around the body.

Whooping cough makes breathing difficult

Whooping cough affects the air passages and breathing and can lead to:

- Coughing spasms – your child will gasp for breath between coughs.
- Vomiting after a coughing spasm.

Whooping cough is most dangerous to young babies

In babies younger than 12 months, whooping cough can lead to serious complications, such as:

- Haemorrhage
- Convulsions and coma

- Pneumonia (long term lung damage is possible)
- Inflammation of the brain
- Permanent brain damage.

Polio can cause mild symptoms or very severe illness

Polio is a virus which affects the digestive and nervous systems. Polio can cause:

- Fever, vomiting and muscle stiffness
- Permanent paralysis
- Death in up to 5 per cent of cases.

Combined vaccine is given

In Victoria, the combined vaccine is given free-of-charge to children when they are:

- Two, four and six months old
- Four years old (diphtheria, tetanus, whooping cough and polio)
- In Year 10 of secondary school, when adolescents receive a combined diphtheria, tetanus and whooping cough vaccine.

Your child requires all these injections to be fully protected. As adults, they will also need a combined diphtheria and tetanus booster on their 50th birthday.

It is also recommended that new parents or adults planning a family receive a booster dose of the diphtheria, tetanus and whooping cough vaccine to protect the new baby from whooping cough in the first months of life.

Side effects of the vaccine

Reactions to the vaccine are much less frequent than serious complications of the diseases.

Common reactions

Some children may experience a reaction to the vaccine. These are usually mild and may include:

- A mild temperature
- Irritability or crying. Your child may appear generally unsettled
- Drowsiness or tiredness
- Soreness and swelling in the area where the injection was given.

Reducing fever and soreness

You can help prevent injection site soreness and fever by:

- Drinking extra fluids.
- Not overdressing your child.
- Placing a cold, wet cloth over the sore injection spot.
- Giving your child paracetamol (such as Panadol) – check the recommended dose for their age.

If you are worried about your child's reaction to immunisation, contact your doctor or a hospital.

Pre-immunisation checklist

Before immunisation, tell your doctor or nurse if your child:

- Is unwell on the day of immunisation (temperature over 38.5C)
- Has ever had a serious reaction to any vaccine or if they have allergies.

Where to get help

- Your doctor
- Your local council immunisation service
- Department of Human Services – Immunisation Program Tel. 1300 882 008.

Things to remember

- Diphtheria, tetanus, pertussis (whooping cough), hepatitis B, polio and haemophilus influenzae type b (Hib) can lead to death.
- Serious side effects to immunisation are very rare.
- Several injections must be given to properly immunise your child.

Want to know more?

Go to More information for support groups, related links and references.

This page has been produced in consultation with, and approved by:

DHS - Communicable Disease Control

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