

Pre-vaccination screening

**Immunisation service providers
should perform a pre-vaccination
health screen of all recipients to
determine----**

WHAT??????

Answer.....

- If there are any contraindications or precautions to the vaccines that are to be administered
- Whether alternative or additional vaccines should be considered

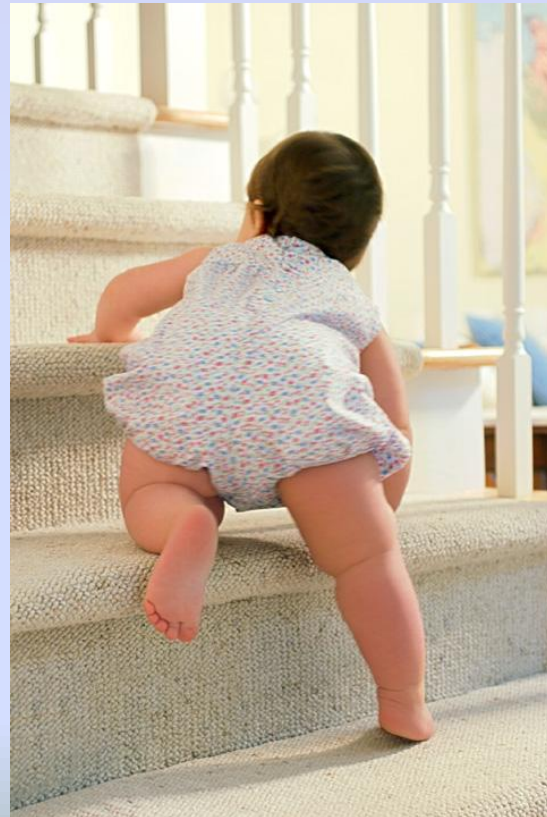
and

- To ensure that vaccinations are up to date

For some individuals

- Alterations to the routinely recommended vaccines may be necessary to
 - either eliminate or minimise the risk of adverse events
 - to optimise an individual's immune response
 - or to enhance the protection of a household contact against vaccine preventable diseases

Steps for pre-vaccination screening



PRE-VACCINATION CHECKLIST

The following information is needed to assess whether a person/child can be vaccinated and, if so, which vaccines they may require.

PLEASE TELL THE IMMUNISATION PROVIDER IF THE PERSON TO BE VACCINATED:

- is unwell today;
- has a disease which lowers immunity (eg. leukaemia, cancer, HIV/AIDS) or is having treatment which lowers immunity (eg. oral steroid medicines such as cortisone and prednisone, radiotherapy, chemotherapy);
- has had a severe reaction following any vaccine;
- has any severe allergies (to anything);
- has had any vaccine within the last month;
- has had an injection of immunoglobulin, received any blood products or a whole blood transfusion within the last 12 months;
- is pregnant;
- has a past history of Guillain-Barré Syndrome;
- was a preterm infant;
- has a chronic illness;
- has a bleeding disorder.

A DIFFERENT VACCINATION SCHEDULE MAY BE RECOMMENDED IF THE PERSON TO BE VACCINATED:

- identifies as an Aboriginal or Torres Strait Islander person;
- does not have a functioning spleen;
- is planning a pregnancy or anticipating parenthood;
- is a parent, grandparent or carer of a newborn;
- lives with someone who has a disease which lowers immunity, or lives with someone who is having treatment which lowers immunity.

BEFORE ANY VACCINATION TAKES PLACE, THE IMMUNISATION PROVIDER WILL ASK YOU:

- Do you understand the information provided to you about immunisation?
- Do you need more information to decide whether to proceed?
- Did you bring your/your child's vaccination record with you?

It is important for you to receive a personal record of your or your child's injections. If you do not have a record, ask your immunisation provider to give you one. Bring this record with you every time you or your child visit for vaccination. Make sure your doctor/nurse records all vaccinations on it. You may be asked to show this record to your child's childcare, preschool or school.

FOR FURTHER INFORMATION CONTACT THE TASMANIAN DEPARTMENT OF HEALTH AND HUMAN SERVICES
PUBLIC AND ENVIRONMENTAL HEALTH SERVICE
FREE CALL 1800 671 738



This resource is based on information contained within The Australian Immunisation Handbook: 9th Edition, 2008 and produced with funding provided by the Australian Government Department of Health and Ageing

COMPARISON OF EFFECTS OF VACCINES AND DISEASES

DISEASE	EFFECTS OF DISEASE	SIDE EFFECTS OF VACCINATION
Diphtheria - contagious bacteria spread by droplets. Cause severe throat and breathing difficulties.	About 1 in 15 children die. The bacteria release a toxin, which can produce nerve paralysis and heart failure.	DTaP/dTpa vaccine - about 1 in 10 has local inflammation or fever. Booster doses of DTaP may occasionally be associated with extreme (confidential) swelling of the limb, but the vaccine completely within a few days. Serious adverse events are very rare.
Hepatitis B - virus spread mainly by blood, sexual contact or from mother to newborn babies. Cause acute hepatitis or chronic carriage.	About 1 in 4 chronic carriers will develop cirrhosis or liver cancer.	About 1 in 15 will have injection site pain and 1 in 100 will have fever. Anaphylaxis occurs in about 1 in 600 000.
Hib - conjugate bacteria spread by respiratory droplets. Cause meningitis, epiglottitis (respiratory obstruction), septicaemia, otitis media.	About 1 in 20 meningitis patients die and 1 in 4 survivors have permanent brain or nerve damage. About 1 in 100 epiglottitis patients die.	About 1 in 30 has discomfort or local inflammation. About 1 in 50 has fever.
Human papillomavirus (HPV) - virus spread mainly via sexual contact	About 1 in 3 of cervical cancers worldwide have been associated with HPV16 and 1 in 10 with HPV18.	About 6 in 10 will have pain and 2 in 10 will have swelling at the site of injection and may occasionally be itchy, fever and sores.
Influenza - contagious virus spread by respiratory droplets. Cause fever, muscle and joint pain, pneumonia.	Cause increased hospitalisation in the elderly. High-risk groups include the elderly, diabetics and alcoholics.	About 1 in 10 have local reactions. Guillain-Barré syndrome occurs in about 1 in 1 million.
Measles - highly infectious virus spread by droplets. Cause fever, cough, rash.	1 in 15 children with measles develop pneumonia and 1 in 1000 develop encephalitis (brain inflammation). For every 10 children who develop measles encephalitis, 1 dies and 4 have permanent brain damage. About 1 in 100 000 develop SSPE (brain degeneration), which is always fatal.	About 1 in 10 has discomfort, local inflammation or fever. About 1 in 20 develops a rash, which is non-infectious. Fewer than 1 in 1 million recipients may develop encephalitis (inflammation of the brain).
Meningococcal infection - bacteria spread by respiratory droplets. Cause septicaemia (infection of the blood stream) and meningitis (infection of the tissues surrounding the brain).	About 1 in 10 patients die. Of those that survive, 1 in 20 has severe skin scarring or loss of limbs, and 1 in 20 has severe brain damage.	Conjugate vaccine - About 1 in 10 has local inflammation, fever, irritability, oedema or headache.
Mumps - contagious virus spread by saliva. Cause swollen neck and salivary glands, fever.	1 in 200 children develop encephalitis. 1 in 5 males post puberty develop inflammation of the testes. Occasionally mumps causes infertility or deafness.	1 in 100 vaccine recipients may develop swelling of the salivary glands. 1 in 2 million recipients develop mild encephalitis.
Pertussis - contagious bacteria spread by respiratory droplets. Cause whooping cough and vomiting, lasting up to 3 months.	About 1 in 200 whooping cough victims under the age of 6 months die from pneumonia or brain damage.	As for DTaP/dTpa vaccine (see diphtheria).
Pneumococcal infection - bacteria spread by respiratory droplets. Cause septicaemia, meningitis and occasionally other infections.	About 1 in 10 meningitis patients die.	70PCV - About 1 in 10 has local reaction or fever. 23PPV - about 1 in 2 has a local reaction.
Polio - contagious virus spread by faeces and saliva. Cause fever, headache, vomiting and may progress to paralysis.	While many infections cause no symptoms, about 1 in 20 hospitalised patients die and 1 in 2 patients who survive is permanently paralysed.	Local redness, pain and swelling of the site of injection are common. Up to 1 in 10 has fever, crying, and decreased appetite.
Rotavirus - virus spread by faecal-oral route. Cause gastroenteritis which can be severe.	In children <5 years of age, rotavirus infection in Australia account for approximately 10 000 hospitalisations every year, approximately 115 000 children visit a GP and approximately 22 000 children require an Emergency Department visit. Illness may range from mild, watery diarrhoea of limited duration to severe dehydrating diarrhoea and fever which can result in death.	1-0 is a licensed vaccine recipients may develop diarrhoea or vomiting in the week following vaccine administration.
Rubella - contagious virus spread by droplets. Cause fever, rash, swollen glands, but cause severe malformation to babies of infected pregnant women.	About 5 in 10 patients develop a rash and painful swollen glands. 5 in 10 adolescents and adults have congenital rubella. 1 in 3000 develops thrombocytopenia (bruising or bleeding). 1 in 6000 develops inflammation of the brain. 9 in 10 babies infected during the first 10 weeks after conception will have a major congenital abnormality (such as deafness, blindness, or heart defects).	About 1 in 10 has discomfort, local inflammation, or fever. About 1 in 20 has swollen glands, stiff neck, or joint pain. About 1 in 20 has a rash, which is non-infectious. Thrombocytopenia (bruising or bleeding) occurs after a first dose of MMR at a rate of 1 in 20 500.
Tetanus - caused by toxin of bacteria in soil. Cause cerebral muscle spasms, convulsions, lockjaw.	About 3 in 100 patients die. The risk is greatest for the very young or old.	As for DTaP vaccine (see diphtheria).
Varicella (chickenpox) - highly contagious virus. Cause low-grade fever and vesicular rash. Re-infection of the virus later in life cause herpes zoster (shingles).	1 in 100 000 patients develop encephalitis (brain inflammation). About 3 in 100 000 patients die. Infection during pregnancy can result in congenital malformations in the foetus. Onset of infection in the mother from 5 days before to 2 days after delivery results in severe infection in the newborn baby in up to one-third of cases.	About 1 in 5 has a local reaction or fever. A mild varicella-like rash may develop in 3 - 5 per 100 recipients.

Source: The Australian Immunisation Handbook: 9th Edition, 2008

**A comprehensive pre-vaccination
health screening is necessary to
assess.....**

WHAT ??????

Answer – to assess

- A person's medical fitness for vaccination and
- To determine whether a different vaccine schedule may be recommended



Steps to complete the screening process

1. Provide the person to be vaccinated or the parent/guardian etc with the Pre-vaccination checklist
 - Some of the questions in this checklist are deliberately non specific so to elicit as much important information as possible
 - The pre-vaccination checklist may be photocopied and handed to the parent etc just before vaccination and/or displayed in the clinic/surgery for easy reference

2. When any conditions are identified

- refer to table 1.3.2*

- as it provides the appropriate action with rationale

3. No one should be denied the benefits of vaccination by withholding vaccines for inappropriate reasons – see Table 1.3.4* False contraindications to vaccinations

* **The Australian Immunisation Handbook 9th ed.**



Conditions identified using the pre-vaccination screening checklist

Table 1.3.2* Responses to relevant conditions or circumstances identified by the pre-vaccination screening checklist page 17

* **The Australian Immunisation Handbook 9th ed.**

The following are examples to give an overview of what actions are to be taken if you have a client with a condition noted from your pre vaccination assessment

Condition/ Circumstance	Action	Rationale
Unwell today: - Acute febrile illness (T ≥38.5°C)	Defer all vaccines until afebrile	To avoid an adverse event in an already unwell child, or to avoid attributing symptoms to vaccination
Has a bleeding disorder	The subcut route could be considered as an alternative to IM route	IM injection may lead to haematomas in patients with disorders of haemostasis
Does not have a functioning spleen	Check vaccination status for pneumococcal, meningococcal and Hib vaccinations	Individuals with an absent or dysfunctional spleen are at an increased risk of severe bacterial infections --- IPV
Received live parental vaccine of BCG vaccine in past 4 weeks	Delay live vaccines by 4 weeks	The immune response to a live viral vaccine may interfere with the response to a second live viral vaccine if given within 4 weeks of the first
Has had any blood product in the past 7 months, or has had IM/IV immunoglobulin in the past 11 months	Make a return appointment for this vaccination – Refer to table 2.3.5 for recommended intervals	Antibodies within these products may interfere with the immune response to these vaccines

There are many more examples!

The chart also goes through circumstances and conditions such as:

- Pregnancy
- GBS
- born preterm
- Planning pregnancy
- Identifies as an Aboriginal of TSI
- Lives with someone who has impaired immunity
- Diseases lowering immunity or receiving treatment which lowers immunity
- Anaphylaxis following a previous dose of the relevant vaccine
- Severe (anaphylactic) allergy to a vaccine component
- Is a parent, grandparent or carer of a new born