

# Immunisations

Immunisation has been a major factor in improving the health of communities over the past century, and general practice is the major location for vaccination in Australia. The safety and effectiveness of immunisation is well established. Despite this, a significant number of Australian adults remain unconvinced or fearful about immunisation. Registrars need to be up to date in relation to the ever-changing immunisation schedules, and be competent in dealing with reluctant parents.

<p><b>TEACHING AND LEARNING AREAS</b></p> 	<ul style="list-style-type: none"> <li>Principles of immunisation</li> <li>Cold chain and vaccine storage, including practice policy</li> <li>Obtaining valid consent from patients/parents</li> <li>Pre-vaccination screening checklist – risks and benefits/contraindications etc.</li> <li>How to administer vaccines, including appropriate positioning of infants</li> <li>Documentation and reporting policy</li> <li>Management and reporting of adverse events from immunisations</li> <li><a href="#">Management of anaphylaxis</a></li> <li>Childhood and adult immunisation schedules, and approach to catch up</li> <li>High risk populations e.g. immunosuppressed, pregnant, elderly, Indigenous</li> <li>Occupational vaccination e.g. Q Fever</li> <li>Travel immunisation</li> <li>Approach to vaccine objectors</li> </ul>				
<p><b>PRE-SESSION ACTIVITIES</b></p>	<ul style="list-style-type: none"> <li><a href="#">Immunise Australia Myths and Realities</a> - addresses some of the most commonly held myths about immunisation</li> </ul>				
<p><b>TEACHING TIPS AND TRAPS</b></p> 	<ul style="list-style-type: none"> <li>Re-check the age of the child and immunisation schedule every time</li> <li>Vaccination did not officially happen unless it is recorded and reported to ACIR</li> <li>Consent is generally assumed by presentation, but needs to be formally sought</li> <li>There is no need to push the air from the syringe, nor use alcohol wipes</li> <li>Regularly review the practice emergency trolley and anaphylaxis protocols</li> <li>Laboratory testing is often not needed to guide the need for catch-up vaccination</li> </ul>				
<p><b>RESOURCES</b></p> 	<table border="1"> <tbody> <tr> <td><b>Read</b></td> <td> <ul style="list-style-type: none"> <li><a href="#">10th Edition Australian Immunisation Handbook</a></li> <li><a href="#">RACGP Red Book Immunisation</a></li> <li><a href="#">Masta.travel.health.com</a></li> <li><a href="#">CDC travel immunisation</a></li> <li><a href="#">A positive approach to parents with concerns about vaccination for the family physician</a> – Useful AFP article</li> <li>SA online '<a href="#">Catch-up calculator</a>'</li> </ul> </td> </tr> <tr> <td><b>Watch</b></td> <td> <ul style="list-style-type: none"> <li><a href="#">TED Talk – The danger of science denials</a></li> </ul> </td> </tr> </tbody> </table>	<b>Read</b>	<ul style="list-style-type: none"> <li><a href="#">10th Edition Australian Immunisation Handbook</a></li> <li><a href="#">RACGP Red Book Immunisation</a></li> <li><a href="#">Masta.travel.health.com</a></li> <li><a href="#">CDC travel immunisation</a></li> <li><a href="#">A positive approach to parents with concerns about vaccination for the family physician</a> – Useful AFP article</li> <li>SA online '<a href="#">Catch-up calculator</a>'</li> </ul>	<b>Watch</b>	<ul style="list-style-type: none"> <li><a href="#">TED Talk – The danger of science denials</a></li> </ul>
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<p><b>FOLLOW UP/ EXTENSION ACTIVITIES</b></p> 	<ul style="list-style-type: none"> <li>Write out a catch up schedule for an unvaccinated 15 month old</li> <li>Role play your approach to an reluctant or concerned parent</li> <li>'Genevieve, a 34 year old teacher, brings her 3 year old daughter Rose to see you with an URTI. You routinely enquire about immunisations and are told that Rose had her first immunisation at 2 months of age and was miserable for two days afterwards. She has not had any since. Genevieve tells you that she very concerned that vaccination may cause "more harm than good." She says that she was advised by a herbalist that Rose was "allergic" to medical immunisation and therefore should not have further immunisations. Rose is otherwise well and has no medical problems.'</li> </ul>				

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## Clinical Reasoning Challenge

12 month old Freddie present with his mother for his 12/12 vaccinations.

QUESTION 1. For vaccination generally, which of the following are contraindications for all, or some (listed) vaccines? Choose up to FIVE.

- Atopy e.g. asthma, eczema, allergic rhinitis
- Proven allergy to hen's eggs
- Treatment with inhaled steroids
- Mild acute illness with low grade fever
- Current treatment with immunosuppressants (for live vaccines)
- Pprematurity
- Postnatal jaundice
- Live vaccine within one month
- Previous pertussis infection (for pertussis vaccination)
- Previous febrile seizures
- Age greater than that recommended for immunisation in the schedule
- Anaphylaxis to previous dose of that vaccine
- Sstable neurological conditions such as cerebral palsy
- Down's syndrome
- High dose steroids
- Family history of SIDS
- Previous medical history of pertussis, measles or rubella
- Acute febrile illness with fever >38.5 degrees
- Family history of convulsions
- Epilepsy

QUESTION 2. What are the serious adverse reactions to some or all childhood immunisations? List up to FOUR.

- 1 \_\_\_\_\_
- 2 \_\_\_\_\_
- 3 \_\_\_\_\_
- 4 \_\_\_\_\_

QUESTION 3. Five minutes after receiving a vaccine Freddie develops urticaria, a wheeze, facial swelling and respiratory distress. List FOUR steps you would take in your immediate management.

- 1 \_\_\_\_\_
- 2 \_\_\_\_\_
- 3 \_\_\_\_\_
- 4 \_\_\_\_\_

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## ANSWERS

### QUESTION 1

For vaccination generally, which of the following are contraindications for all, or some (listed) vaccines?

- Current treatment with immunosuppressants
- Live vaccine within one month
- High dose steroids
- Acute febrile illness with fever  $>38.5$  degrees C
- Anaphylaxis to previous dose of that vaccine

### QUESTION 2

What are the serious adverse reactions to some or all childhood immunisations?

- Anaphylaxis,
- Encephalitis
- Brachial neuritis
- Acute flaccid paralysis
- Hypotonic – hypo responsive episode
- Osteomyelitis

### QUESTION 3

Five minutes after receiving a vaccine Freddie develops urticaria, a wheeze, facial swelling and respiratory distress. List FOUR steps you would take in your immediate management.

- Give adrenaline by intramuscular injection
- Administer oxygen
- IV fluids
- Call an ambulance and transfer to hospital