Did you know?

Significant or unexpected adverse events following immunisation should be reported to SAEFVIC, the Victorian vaccine safety service.

Reports to SAEFVIC may be made at any time:
Online: www.saeivic.org.au
Tel: 1300 882 924 (select option #1) during business hours only
Fax: (03) 9345 4163


The latest version of the handbook was distributed in June 2014 to GPs and paediatricians who are registered on the Australian Medicare database. You can order more copies from your Medicare Local or online at <www.immunise.health.gov.au> code ITO 158 (limit of five copies per order). An online version of the handbook is available on the Immunise Australia website at <www.immunise.health.gov.au>. Use the updated version of the handbook for the best results.

Use the current Australian Immunisation Handbook 10th edition (updated January 2014) to help plan a catch-up vaccine program. Tables to assist the catch-up plan are on page 49 for children younger than 10 years of age and page 63 for people 10 years and older.

Preventable cold chain breaches have increased in the first half of 2014 with vaccines being left out of fridges and fridges being unplugged being the main issue. Educate all clinic staff, including cleaners and tradespeople, about the importance of the fridge power source. Check unused vaccine stock is returned to the vaccine fridge when the procedure is complete and vaccine deliveries are checked and refrigerated promptly.

The Childhood pneumococcal vaccine information brochure and the Infant hepatitis B vaccine information brochure have been updated in a range of community languages. These resources assist clients who read a language other than English to provide informed consent. Download the translated resources from the department’s immunisation website at <www.health.vic.gov.au/immunisation/factsheets/language.htm>.

Year 9 secondary school boys (aged 14 to 15 years) have until the end of 2014 to have the human papillomavirus (HPV) vaccine (Gardasil®) doses for free. The vaccine course does not need to be recommenced if the spacing between doses has exceeded the recommended timeframe. An adolescent with an incomplete vaccine course should be recalled and encouraged to complete all doses. From 2015, any incomplete Gardasil® vaccine doses will need to be purchased on prescription for this group.
Scheduled vaccines for children


The birth dose of hepatitis B vaccine is recommended to be given within the first seven days but ideally within the first 24 hours of birth. The two-month vaccines can start from six weeks of age. The four-year-old vaccines can be given from three years and six months of age.

Preventable cold chain breaches

All immunisation providers need to take measures to reduce the chance of preventable cold chain breaches. There has been an increase in two preventable breach causes in the first half of 2014, the fridge being unplugged or vaccine left on the bench.

Providers reported 19 breaches due to the fridge being unplugged. This compares with 28 reports for the whole of 2013. There were 27 reports of vaccine being left on the bench for the first half of 2014 compared to 31 for the whole of 2013.

All vaccine fridges must be plugged in securely. A sign should be placed over the power point alerting all clinic staff, including cleaners and tradespeople, that the fridge should never be unplugged. You can order these signs from the Immunise Australia website at <www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/resources-menu>.

The other preventable cause requiring diligence from providers is to ensure vaccine is immediately checked and packed into the fridge after delivery or returned to the fridge after accessing a ten-pack and not left on the bench. Educate your reception staff receiving a vaccine delivery and medical staff to prevent this occurring.

<table>
<thead>
<tr>
<th>Age / School year</th>
<th>Disease</th>
<th>Vaccine brand</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birth</td>
<td>Hepatitis B</td>
<td>H-B-Var II Pediatric</td>
<td>Give within 7 days of birth</td>
</tr>
<tr>
<td>2 months</td>
<td>Diphtheria, tetanus, parotitis, hepatitis B, poliomyelitis, Haemophilus influenzae type b, Pneumococcal, Rotavirus</td>
<td>Infanrix Hexa</td>
<td>All vaccines can be given from 6 weeks of age</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Prevenar 13 RotaTeq</td>
<td></td>
</tr>
<tr>
<td>4 months</td>
<td>Diphtheria, tetanus, parotitis, hepatitis B, poliomyelitis, Haemophilus influenzae type b, Pneumococcal, Rotavirus</td>
<td>Infanrix Hexa</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Prevenar 13 RotaTeq</td>
<td></td>
</tr>
<tr>
<td>6 months</td>
<td>Diphtheria, tetanus, parotitis, hepatitis B, poliomyelitis, Haemophilus influenzae type b, Pneumococcal, Rotavirus</td>
<td>Infanrix Hexa</td>
<td>See increased risk category section</td>
</tr>
<tr>
<td>12 months</td>
<td>Measles, mumps, rubella, Haemophilus influenzae type b, meningococcal C</td>
<td>M-M-R II /Priorix Mantorix</td>
<td>See increased risk category section</td>
</tr>
<tr>
<td>18 months</td>
<td>Measles, mumps, rubella, chickenpox</td>
<td>Priorix-Tetra</td>
<td>Prior chickenpox infection is not a contra-indication to chickenpox vaccination</td>
</tr>
<tr>
<td>4 years</td>
<td>Diphtheria, tetanus, parotitis, polio, Measles, mumps, rubella</td>
<td>Infanrix IPV M-M-R II /Priorix</td>
<td>See increased risk category section</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>The 4-year-old MMR vaccine dose ends in December 2015 Can be given from 3 years and 6 months of age</td>
</tr>
</tbody>
</table>
Becoming a nurse immuniser

Nurse immunisers work in a variety of health care settings, including but not limited to local council community-based services, general practice, community health, aged care, hospitals, correctional services, workplace health services and the armed forces.

The Chief Health Officer has recognised the following nurse immuniser programs of study for Registered Nurses in Victoria. Successful completion of any of these courses can open up a range of work opportunities for Registered Nurses. The programs cover:

- epidemiology of vaccine preventable disease
- the role of immunisation in public health
- the immunisation schedule
- guidelines and policy relevant to the field.

La Trobe University Nurse Immuniser Program
School of Nursing and Midwifery
La Trobe University
Bundoora Vic 3086
Tel: (03) 9479 5951
Fax: (03) 9479 5988
Email: nip@latrobe.edu.au

Immunisation Education for Registered Nurses – University of Tasmania
Visit the website for enquiry and enrolment details.

The College of Nursing - Immunisation Course for Registered Nurses
College of Nursing
14 Railway Parade
Burwood NSW 2134
Post: Locked Bag 3030 Burwood NSW 1805
Tel: (02) 9745 7500
Fax (02) 9745 7501
Freecall: 1800 265534 or 1800 COLLEGE

Australian Catholic University
The School of Nursing & Midwifery (Queensland)
Certificate of Immunisation Course
Phone: (07) 3623 7276
Email: sue.kellner@acu.edu.au or jacqueline.meachen@acu.edu.au

The University of Melbourne
General Practice and Primary Health Care Academic Centre
Immunisation and Travel Health
General Practice and Primary Health Care Academic Centre
University of Melbourne
200 Berkeley Street Carlton 3053
Tel: +61 3 8344 7276
Fax: +61 3 9347 6136.
Email: gp-enquiries@unimelb.edu.au

Continual professional development (CPD)
Undertaking a minimum of 20 hours of CPD annually is required to maintain nursing registration. Nurse immunisers can include a variety of relevant activities as their CPD, such as attending education provided by the Immunisation Nurse Special Interest Group (INSIG). Find out more about becoming a member of INSIG by visiting <www.anmfvic.asn.au/sigs/topics/2316.html>.

The Australian College of Nursing offers immunisation updates in Victoria. Find out more by emailing <studentservices@acn.edu.au>.

Contacting the Victorian TB Program

On 16 June 2014, the Victorian Tuberculosis (TB) Program relocated from the Department of Health to Melbourne Health, located at the Peter Doherty Institute for Infection and Immunity. The relocated program continues the statewide support of all Victorian patients with active TB and conducts contact tracing and screening to minimise public health risk.

Information about TB, PPD and BCG

The Victorian TB Program continues to provide health professionals with information about TB, Purified Protein Derivative (PPD – Tubersol®) and the Bacille Calmette-Guerin (BCG) vaccine. People can access information via telephone, email or presentation.

Contact

Victorian Tuberculosis Program
Peter Doherty Institute for Infection and Immunity
792 Elizabeth Street
Melbourne 3000
Tel: (03) 9342 9478
Fax: (03) 8344 0781
Email: vtpadmin@mh.org.au

Ordering PPD and BCG

Orders for PPD: Supplies of Tubersol can be ordered using the Government funded vaccine order form at http://docs.health.vic.gov.au/docs/doc/Government-funded-vaccine-order-form

Note: supplies of Victorian Government-funded Tubersol are not available to travel clinics for the purpose of pre-travel testing for adults, hospital pharmacy departments, pathology providers or student health services. These groups can access Tubersol through the pharmaceutical wholesaler Clifford Hallam (Tel: (03) 9554 0500).

Orders for BCG: Recent supply shortages have been rectified. Under current arrangements, the Department of Health only provides government-funded BCG vaccine to Monash Children's Hospital and the Royal Children’s Hospital. There is anecdotal evidence that limiting the number of health professionals administering BCG has reduced the number of adverse reactions to the BCG vaccine in Victoria.

If you have questions about ordering PPD or BCG, please contact the Immunisation Section, Department of Health on 1300 882 008.

Immunisation catch-up quiz: test your skills

(find the answers on the back page)

Case 1: A healthy 15-month-old baby presents with a history of the two- and four-month vaccines given on time, however the baby has missed the six- and 12-month vaccines. What catch-up plan would you develop for this baby?

Case 2: A baby from overseas presents and has had a birth dose of hepatitis B and two further doses at six weeks and six months of age. Does the baby require any further doses of hepatitis B vaccine?

Case 3: A healthy five year old presents from overseas and has documented evidence of receiving all the due vaccines including four doses of a combination vaccine DTPa-IPV (diphtheria, tetanus, pertussis, inactivated polio). The fourth booster dose was given at 18 months of age. Is the child recommended any catch-up vaccines?
Measles cases in Victoria rise in 2014

An increased number of confirmed cases of measles have occurred in Melbourne since 1 January 2014, the highest since 2001. The graph below shows cases as at 30 June 2014.

Notified cases of measles by year, Victoria, 1 Jan 1997 to 30 Jun 2014

Cases have occurred in returned travellers, healthcare workers, and locals with no history of travel.

Key points to remember

- With an average incubation period of 10 days, measles is highly infectious (airborne transmission) and can persist in the environment for at least 30 minutes.
- Be alert for measles in patients presenting with a febrile rash.
- Minimise the risk of transmission within your department/practice:
  - Avoid keeping patients with a febrile rash illness in shared waiting areas.
  - Give the suspected case a single-use mask and isolate them until a measles diagnosis can be excluded.
  - Leave any consultation rooms used in the assessment of patients with suspected measles vacant for at least 30 minutes after the consultation.
- Notify Communicable Disease Prevention and Control at the Department of Health of suspected or confirmed cases immediately on 1300 651 160.
- Take blood for serological confirmation and nose and throat swab for PCR diagnosis.
- Promote timely patient vaccinations.
- Healthcare facilities should check their staff vaccination records - all staff born during or since 1966 should have documentation of two doses of measles-containing vaccine or laboratory-confirmed measles immunity. Non-immune staff should receive MMR vaccine, unless contraindicated.

Who is at risk of measles?

- People born in Australia during or since 1966 who do not have documented evidence of receiving two doses of a measles-containing vaccine or documented evidence of laboratory-confirmed measles are considered susceptible to measles. This includes adults born in the late 1960s to mid-1980s; especially the 1978–1982 birth cohort as many missed being vaccinated as infants (when vaccine coverage was low), while during their childhood a second dose was not yet recommended and disease exposure was decreasing.
- People who are immunocompromised

The most important clinical predictors are:

- generalised maculopapular rash (usually starting on the face), lasting three or more days
  - fever (at least 38°C, if measured) present at the time of rash onset
  - cough or coryza or conjunctivitis.

Measles is transmitted by airborne droplets and direct contact with discharges from respiratory mucous membranes of infected persons and, less commonly, by articles freshly soiled with nose and throat secretions. The incubation period is variable and averages 10 days (range: seven – 18 days) from exposure to the onset of fever, with an average of 14 days from exposure to the onset of rash. The infectious period of patients with measles is roughly five days before to four days after the appearance of the rash.
Moving Boostrix® to Year 7 of secondary school

The diphtheria-tetanus-pertussis (Boostrix®) vaccine will transition from Year 10 to Year 7 in secondary school in 2015. To achieve the transition, the Boostrix® vaccine will be offered to all secondary school students in Years 7, 8, 9 and 10 in 2015. In the community setting these children are aged 12 to 16 years. From 2016, only Year 7 (12 to 13 years of age) students will be offered the Boostrix® vaccine.

The booster dose of diphtheria-tetanus-pertussis (dTpa) vaccine for adolescents was introduced into the National Immunisation Program schedule in 2004. At the time the vaccine was recommended for adolescents between 15–17 years of age. Local councils visit every secondary school in Victoria to administer the Boostrix® vaccine to students.

The benefits of the transition of Boostrix® vaccine to Year 7 include:

- Earlier boosting protection against diphtheria, tetanus and pertussis for adolescents
- Optimising control of pertussis infection to vulnerable family and community members
- A simpler school-based vaccine program targeting a single year level from 2016
- Improved Boostrix® vaccine uptake in the school-based program by administering it to younger children aged 12 to 13 years, where their participation is greater.

### Adolescent vaccine program

<table>
<thead>
<tr>
<th>Year 7* (12-13 years)</th>
<th>Year 8* (13-14 years)</th>
<th>Year 9* (14-15 years)</th>
<th>Year 10* (15-16 years)</th>
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<tbody>
<tr>
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<td>HPV HPV HPV</td>
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<td>Varicella Varicella Varicella</td>
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</tbody>
</table>

= number of doses

*dTp = Diphtheria, tetanus, pertussis (whooping cough) vaccine

HPV = Human papillomavirus vaccine

Varicella = Chickenpox vaccine

*Or age equivalent
### Gardasil® vaccine catch-up program for Year 9 boys ends in 2014

Year 9 secondary school boys (aged 14 to 15 years) have until the end of 2014 to have the human papillomavirus (HPV) vaccine (Gardasil®) doses for free. Your medical centre can order the Gardasil® vaccine for adolescent boys aged 14 to 15 years of age or in Year 9 of secondary school.

From January 2015, Gardasil® vaccine is not a free vaccine for this age cohort. The Gardasil® vaccine will need to be purchased on prescription. An adolescent with an incomplete vaccine course in 2015 should be recalled and encouraged to complete all doses.

Boys and girls aged 12 to 13 years or in Year 7 of secondary school are eligible for the free Gardasil® vaccine in the ongoing secondary school-based vaccine program or in a community setting such as a GP clinic or local council community session.

Promote the importance of a complete course of HPV vaccine with your adolescents and their parent or guardian and report all HPV vaccine doses administered to the National HPV Vaccination Program Register.

### AusVaxSafety: new enhanced surveillance system

From March 2014, the National Centre for Immunisation Research and Surveillance is coordinating a new system to monitor adverse events following immunisation with influenza vaccine in children under five years of age. AusVaxSafety brings together information collected through Vaxtracker in New South Wales/Victoria and FAST (Follow up and Active Surveillance of Trivalent influenza vaccine) in Western Australia.

Using these systems, parents and carers of children who received influenza vaccine were sent an SMS message or email three days after vaccination asking them to provide information on whether their child experienced any adverse event after vaccination. Data from all parent and carer reports are combined and analysed each week.

These findings demonstrate that the Vaxirip® and Fluarix® influenza vaccines registered and recommended for use in children under five years of age are safe. AusVaxSafety surveillance shows 2014 seasonal influenza vaccine is safe in children under five years of age. Note the bioCSL Fluvax® influenza vaccine should not be given to children under 5 years of age.

As of 22 June 2014, AusVaxSafety surveillance has collected information from the parents and carers of 735 children given the 2014 influenza vaccine. The surveillance shows that:

- fewer than one in five (18.4 per cent) children vaccinated had a mild reaction at the injection site (e.g. pain or redness) or a systemic reaction (e.g. headache or irritability) after vaccination
- fewer than one in 15 (6.5 per cent) children had fever after vaccination
- reported reactions were generally mild and resolved within one to two days
- no serious vaccine reactions were reported.

These findings are well within the expected range and demonstrate that the influenza vaccines registered and recommended for use in children under five years of age are safe.

Surveillance also shows that the 2014 influenza vaccine has a good safety profile in adults, including pregnant women.
Answers to catch-up quiz questions

Case 1:

Give today: Infanrix hexa®, Prevenar 13®, MMR11® or Priorix®
In one month give: Menitorix®
Next due immunisation at 18 months of age: Priorix-Tetra®

Case 2: No. Although it is not routinely recommended in Australia, infants or toddlers who have received a three-dose schedule of monovalent vaccine (often given overseas) with doses at birth, 1–2 months of age and up to six months of age can also be considered fully vaccinated. The important consideration is that there should have been an interval of at least two months between the second and third doses, and that the final dose should not be administered before 24 weeks of age.

(Source: Australian Immunisation Handbook, 10th Edition 2013, page 218)

When reporting hepatitis B vaccines administered overseas to the Australian Childhood Immunisation Register (ACIR) complete a history statement recording the birth dose of hepatitis B vaccine as dose 1.

Case 3: Yes. Give a booster dose of Infanrix IPV® vaccine (DTPa-IPV) as the minimum age for the four-year-old booster dose of Infanrix IPV® is 3.5 years of age.

Further reading

Genital warts in young Australians five years into national human papillomavirus vaccination program: national surveillance data

This study aimed to assess the effect of the vaccination program, five years after its introduction, on genital wart presentations to eight sexual health clinics across Australia, by looking at proportions of new patients found to have genital warts. The authors previously reported a 59 per cent reduction in warts in women and 39 per cent in heterosexual men 12 to 26 years of age after two years of the vaccination program. Retrospective data was provided by the eight centres on all Australian-born patients presenting for the first time between 2004 and 2011. Data was collected as to whether genital warts were present. Two centres collected self-reported HPV vaccination status. The pre-vaccination period was defined as January 2004 to June 2007 and the post-vaccination period as July 2007 to December 2011.


Contact

For further information on the Immunisation Section please contact:
Immunisation Section, Department of Health
50 Lonsdale Street, Melbourne 3000

Phone: 1300 882 008
Fax: 1300 768 088
Email: immunisation@health.vic.gov.au