“Sometimes the hardest pieces of a puzzle to assemble, are the ones missing from the box.”

Dixie Waters, Author
The Puzzle Pieces

- Authority to Immunise
- NSW Immunisation Schedule
- Australian Immunisation Handbook
- School Immunisation Program
- Australian Immunisation Register
- Catch Up
- Cold Chain
- Resources

NSW Government Illawarra Shoalhaven Local Health District
The PHU Immunisation Team

Tanya Nadjovska
Information Support Officer

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Program Support Officer

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School Vaccination Program Coordinator (Mon & Tues)

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Aboriginal Immunisation Health Worker

Haley Frew
Immunisation Coordinator
Thurs & Fri

Natasa Veselinovic
Immunisation Coordinator
Mon - Thurs (from 7/1/19)

Kath Tapper
Immunisation Coordinator
Mon - Wed (until 9/1/19)
Authority to Immunise
NSW MINISTRY OF HEALTH
POISONS AND THERAPEUTIC GOODS ACT 1966
Authorisation to Supply Poisons and Restricted Substances

Under the provisions of clauses 170 and 171 of the Poisons and Therapeutic Goods Regulation 2008, I, Judith Jackson, Chief Pharmacist, a duly appointed delegate of the Director-General of NSW Health, do hereby issue AUTHORITY to registered nurses and midwives, hereinafter specified as a class of persons, to supply those poisons and restricted substances listed in the Schedule hereto, either singly or in combination, pursuant to clauses 17 and 53 of the Regulation, subject to the following conditions:

1. The registered nurse/midwife is employed in connection with a vaccination program, and
2. The registered nurse/midwife administers a vaccine only in connection with that vaccination program, and
3. The registered nurse/midwife has successfully completed:
   a. The Department of Health Immunisation Accreditation Program for Registered Nurses, or
   b. The immunisation education program administered by the Australian College of Nursing or its predecessors, or
   c. An interstate or overseas immunisation education program that conforms to the National Guidelines for Immunisation Education for Registered Nurses, as approved by the Australian College of Nursing.
4. The secure storage, pre and post-vaccination assessment and administration of each vaccine is undertaken in accordance with the procedures specified in the current edition of the National Health and Medical Research Council's The Australian Immunisation Handbook, and
5. The poisons and restricted substances are stored at the temperature stated on the respective manufacturer's pack, and
6. During each vaccination clinic the registered nurse/midwife carries adrenaline for use in the treatment of anaphylaxis, and
7. The registered nurse/midwife ensures that procedures for the administration of adrenaline comply with the procedures specified in the current edition of The Australian Immunisation Handbook, and
8. The registered nurse/midwife reports each adverse event following immunisation to the local Public Health Unit, and
9. The registered nurse/midwife ensures that a medical officer is contactable for medical advice during the vaccination clinic,
10. To maintain authority to immunise, the registered nurse/midwife annually reviews best practice policy for immunisation. This may be, but is not limited to, attendance at seminars on current practices. An annual statement of proficiency in cardio-pulmonary resuscitation must also be obtained, and
11. The administration of tuberculin purified protein derivative for tuberculosis skin testing or tuberculosis vaccine may only be administered by a registered nurse who has completed additional education in the use of these substances and if the registered nurse's record of education states that this additional education has been completed.
- Now covers meningococcal B vaccine - Bexsero and Trumenba (≥10 years)
- Previously not covered as not included in Australian Immunisation Handbook
- Must be familiar with dosing as per Handbook recommendations

<table>
<thead>
<tr>
<th>Schedule</th>
<th>Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>adrenaline</td>
<td>pertussis vaccine</td>
</tr>
<tr>
<td>diphtheria toxoid</td>
<td>pneumococcal vaccine</td>
</tr>
<tr>
<td><em>Haemophilus influenzae</em> (type b) vaccine</td>
<td>poliomyelitis vaccine</td>
</tr>
<tr>
<td>hepatitis A vaccine</td>
<td>rotavirus vaccine</td>
</tr>
<tr>
<td>hepatitis B vaccine</td>
<td>rubella vaccine</td>
</tr>
<tr>
<td>human papillomavirus vaccine</td>
<td>tetanus toxoid</td>
</tr>
<tr>
<td>influenza vaccine</td>
<td>tuberculin (purified protein derivative)</td>
</tr>
<tr>
<td>measles vaccine</td>
<td>tuberculosis vaccine</td>
</tr>
<tr>
<td><strong>meningococcal vaccine</strong></td>
<td>varicella vaccine</td>
</tr>
<tr>
<td>mumps vaccine</td>
<td></td>
</tr>
</tbody>
</table>
NSW Immunisation Schedule

“Vaccination is important for the whole family from birth to end of life”
From 1st July 2018

Changes:
- Pneumococcal D3 moved from 6m to 12m
- Meningococcal ACWY at 12m
- Hib D4 moved to 18m
- Addition of Meningococcal ACWY for students in years 10-11
- Different vaccine brands
- Discard ALL old Gardasil (HPV4)
New PCV13 (Prevnar 13) schedule

- **Most children**
  - 2 months: Dose 1
  - 4 months: Dose 2

- **Indigenous (WA, SA, NT, Qld) Medical conditions**
  - 2 months: Dose 1
  - 4 months: Dose 2

- **First 6 months of program**, children (currently aged 6-11 months) given 6 month (3rd dose) dose may get 4th dose

- **12 months**: Dose 3
  - (Red arrow indicates 12-month dose for children aged 6-11 months)

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NCIRS Seminar Series 2018 #4 - Wednesday 11 July 2018, 1.00pm - 2.00pm
National Immunisation Program Schedule changes - Your questions answered
Background

2005 – 2018
“3 primary + 0 booster dose” schedule
• 2, 4 and 6 months
• continued when 13vPCV (Prevenar 13) replaced 7vPCV (Prevenar) in 2011
• decision based on experience with 7vPCV of optimum protection in infancy
7vPCV & 13vPCV 3 dose breakthrough cases in children aged < 5 years.
13vPCV three dose breakthrough cases by serotype up to Dec 2016

<table>
<thead>
<tr>
<th>Serotype</th>
<th>Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>57</td>
</tr>
<tr>
<td>6A</td>
<td>1</td>
</tr>
<tr>
<td>7F</td>
<td>1</td>
</tr>
<tr>
<td>19A</td>
<td>74</td>
</tr>
<tr>
<td>19F</td>
<td>30</td>
</tr>
<tr>
<td>14</td>
<td>1</td>
</tr>
<tr>
<td>23F</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: NNDSS enhanced IPD surveillance data
List 4.13.1: Conditions associated with an increased risk of invasive pneumococcal disease (IPD) in children and adults, by severity of risk

Category A: Conditions associated with the highest increased risk of IPD

- functional or anatomical asplenia, including:
  - sickle cell disease or other haemoglobinopathies
  - congenital or acquired asplenia (e.g. splenectomy), splenic dysfunction
- immunocompromising conditions, including:
  - congenital or acquired immune deficiency, including symptomatic IgG subclass or isolated IgA deficiency (Note: children who require monthly immunoglobulin infusion are unlikely to benefit from vaccination)
  - immunosuppressive therapy (including corticosteroid therapy ≥2 mg/kg per day of prednisolone or equivalent for more than 1 week) or radiation therapy, where there is sufficient immune reconstitution for vaccine response to be expected
  - haematological and other malignancies
  - solid organ transplant
  - haematopoietic stem cell transplant (HSCT)
  - HIV infection (including AIDS)
  - chronic renal failure, or relapsing or persistent nephrotic syndrome
- proven or presumptive cerebrospinal fluid (CSF) leak
- cochlear implants
- intracranial shunts
Category B: Conditions associated with an increased risk of IPD

- chronic cardiac disease
  - particularly cyanotic heart disease or cardiac failure in children
  - excluding hypertension only (in adults)
- chronic lung disease, including:
  - chronic lung disease in preterm infants
  - cystic fibrosis
  - severe asthma in adults (requiring frequent hospital visits and use of multiple medications)
- diabetes mellitus
- Down syndrome
- alcoholism
- chronic liver disease
- preterm birth at <28 weeks gestation
- tobacco smoking
IMD notification rate by serogroup and year, 1999–2017

Trends are not shown for serogroups A (n=6) and X (n=2)
Notifications and rates of IMD, Australia, 2002 to 2017*, by serogroup

*Data from the NNDOSS with a diagnosis date up until of 31 December 2017. Data was extracted on 5 January 2018.

*NG includes where meningococcal isolates could not be identified (‘not groupable’), other isolates not grouped and where serogroup was not known.
Table 2: People and age groups strongly recommended to receive meningococcal vaccination

<table>
<thead>
<tr>
<th>Population</th>
<th>6 weeks–23 months</th>
<th>2–4 years</th>
<th>5–14 years</th>
<th>15–19 years</th>
<th>20–24 years</th>
<th>≥25 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthy Aboriginal or Torres Strait Islanders</td>
<td>MenB MenACWY</td>
<td>MenB MenACWY</td>
<td>MenB MenACWY</td>
<td>MenB MenACWY</td>
<td>MenB MenACWY</td>
<td></td>
</tr>
<tr>
<td>People living in close quarters†</td>
<td></td>
<td></td>
<td>MenB MenACWY</td>
<td>MenB MenACWY</td>
<td>MenB MenACWY</td>
<td></td>
</tr>
<tr>
<td>Current smokers</td>
<td></td>
<td></td>
<td>MenB MenACWY</td>
<td>MenB MenACWY</td>
<td>MenB MenACWY</td>
<td></td>
</tr>
<tr>
<td>Occupational risk‡</td>
<td></td>
<td></td>
<td>MenB MenACWY</td>
<td>MenB MenACWY</td>
<td>MenB MenACWY</td>
<td></td>
</tr>
<tr>
<td>Travellers‡</td>
<td>MenACWY</td>
<td>MenACWY</td>
<td>MenACWY</td>
<td>MenACWY</td>
<td>MenACWY</td>
<td>MenACWY</td>
</tr>
</tbody>
</table>

* Individuals who meet the criteria for increased medical risk are recommended to receive MenB MenACWY MenACWY vaccine series (two doses).
† People living in close quarters include those living in a household or in other close quarters with a susceptible person (whether or not they have received the meningococcal vaccine).
‡ Occupations or situations where there is occupational risk of meningococcal disease are recommended to receive MenACWY vaccine series (three doses).
§ Travellers are recommended to receive MenACWY vaccine series (three doses).
### NCIRS Fact Sheet: Meningococcal Vaccines for Australians

http://www.ncirs.edu.au/provider-resources/ncirs-fact-sheets/

- Menactra and Prevenar13 should not be co-administered due to a decreased response to some of the pneumococcal serotypes
  - Use a different brand or
  - Give Prevenar13 first, then Menactra at least 1 month later

- Immune interference with sequential administration of Infanrix hexa and Nimenrix
  - Give together or
  - Give Nimenrix first, then Infanrix hexa can be given any time after

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**Table 3: Dose schedule recommendations for immunisation using MenACWY vaccines, by age and vaccine brand, and showing the number of doses required and minimum intervals**

<table>
<thead>
<tr>
<th>Age at commencement of vaccine course</th>
<th>MenACWY vaccine brand</th>
<th>Healthy individuals including Indigenous Australians, travellers and laboratory personnel</th>
<th>With any specified medical conditions associated with increased risk of meningococcal disease</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 weeks–5 months</td>
<td>Nimenrix*</td>
<td>3 doses (8 weeks between 1st and 2nd doses; 3rd dose at 12 months of age)</td>
<td>4 doses (8 weeks between doses; 4th dose at 12 months of age or 8 weeks after 3rd dose, whichever is later)</td>
</tr>
<tr>
<td></td>
<td>Menveo*</td>
<td>2 doses (2nd dose at 12 months of age)</td>
<td>3 doses (8 weeks between 1st and 2nd doses; 8 weeks between 2nd and 3rd doses)</td>
</tr>
</tbody>
</table>

| 6–8 months                           | Nimenrix†             | 2 doses (2nd dose at 12 months of age or 8 weeks after 1st dose, whichever is later)   | 3 doses (8 weeks between 1st and 2nd doses; 3rd dose at 12 months of age or 8 weeks after 2nd dose, whichever is later) |
|                                      | Menveo*               | 2 doses (8 weeks between doses)                                                       |                                                                      |

| 9–11 months                          | Menveo                | 2 doses (2nd dose at 12 months of age or 8 weeks after 1st dose, whichever is later)   | 3 doses (8 weeks between 1st and 2nd doses; 3rd dose at 12 months of age or 8 weeks after 2nd dose, whichever is later) |
|                                      | Nimenrix†             | 2 doses (8 weeks between doses)                                                       |                                                                      |

| 12–23 months                         | Menveo                | 2 doses (8 weeks between doses)                                                       |                                                                      |
|                                      | Nimenrix†             | 1 dose                                                                                  |                                                                      |

| ≥2 years§                           | Menveo                | 1 dose                                                                                  |                                                                      |
|                                      | Menactra§             | 2 doses (8 weeks between doses)                                                       |                                                                      |
|                                      | Nimenrix†             |                                                                                       |                                                                      |

| Booster doses for all ages          | Any brand             | Required every 5 years only for travellers and laboratory personnel facing ongoing risks | For those with ongoing increased risk for IMD who completed the primary series at:
|                                      |                       |                                                                                       | a) ≤6 years of age: 3 years after completion of primary immunisation schedule, then every 5 years thereafter
|                                      |                       |                                                                                       | b) ≥7 years of age: every 5 years after completion of the primary immunisation schedule |
If a young child (> 12 months old) has received Menitorix, should I recommend to the parent that the child also receives Nimenrix?

• No catch up program planned
  – Cannot receive Nimenrix via NIP

• Depends on the child’s risk, and parent’s ability and willingness to purchase vaccine privately

• Children with specific risk conditions should receive MenACWY vaccine as per Handbook recommendations
Meningococcal vaccination
The following vaccines are available free in NSW:

<table>
<thead>
<tr>
<th>AGE GROUP</th>
<th>VACCINE</th>
<th>VACCINE PROVIDER</th>
</tr>
</thead>
</table>
| 12 months of age  
*National Immunisation Program Schedule* | Nimenrix® (Men ACWY) | GPs & AMSs |
| 10-<15 years  
*NIP catch-up program* | NeisVac-C® (Men C) | GPs & AMSs  
*For children not vaccinated in infancy* |
| 15-19 years  
*NSW funded program* | Menactra® (Men ACWY) | GPs & AMSs  
*Catch-up for those not vaccinated at school* |
| Years 10 and 11 in 2018  
Year 10 in 2019  
*NSW funded program* | Menactra® (MenACWY)  
Nimenrix® (Men ACWY) | Schools |
# Bexsero Offers a Flexible Vaccination Schedule for Infants, Children, Adolescents and Adults

## Primary Immunisation

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Immunisation Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 – 5 months old*</td>
<td>2 doses, ≥2 months apart</td>
</tr>
<tr>
<td>6 – 11 months old</td>
<td>2 doses, ≥2 months apart</td>
</tr>
<tr>
<td>12 months – 23 months old</td>
<td>2 doses, ≥2 months apart</td>
</tr>
<tr>
<td>2 – 10 years old</td>
<td>2 doses, ≥1 month apart</td>
</tr>
<tr>
<td>11 – 50 years old*</td>
<td>2 doses, ≥1 month apart</td>
</tr>
</tbody>
</table>

## Booster

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Booster Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Second year of life</td>
<td>1 dose in the second year of life with an interval of at least 6 months between the primary series and the booster dose</td>
</tr>
<tr>
<td>Second year of life</td>
<td>1 dose in the second year of life with an interval of at least 2 months between the primary series and the booster dose</td>
</tr>
<tr>
<td>Need not established</td>
<td>Need not established</td>
</tr>
<tr>
<td>Need not established</td>
<td>Need not established</td>
</tr>
</tbody>
</table>

---

**Note:** Each dose is 0.5 mL. *The safety and efficacy of the vaccine in infants <8 weeks has not yet been established. No data available. **Alternate schedule available - refer to Product Information. **No data available in individuals above 50 years of age.
FEVER PROPHYLAXIS IN CHILDREN UNDER 2.8

1st DOSE

30 minutes†

15mg/kg paracetamol
30 minutes prior to vaccination†

VACCINATE

~6 hours‡

2 ADDITIONAL DOSES

6 hours‡

Note: The Australian Immunisation Handbook recommends the prophylactic use of paracetamol with every dose of BEXSERO administered to children <2 years of age, regardless of the presence of fever. Or as soon as practicable afterward. †ATAGI recommends doses of paracetamol to be given 6 hours apart.
<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Eligibility</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hepatitis B</strong></td>
<td>• Aboriginal people</td>
</tr>
<tr>
<td></td>
<td>• Household and sexual contacts of acute and chronic hepatitis B cases</td>
</tr>
<tr>
<td></td>
<td>• Immunosuppressed people</td>
</tr>
<tr>
<td></td>
<td>• People with HIV or hepatitis C</td>
</tr>
<tr>
<td></td>
<td>• Men who have sex with men</td>
</tr>
<tr>
<td></td>
<td>• Injecting drug users</td>
</tr>
<tr>
<td></td>
<td>• Sex workers</td>
</tr>
<tr>
<td></td>
<td>• Clients of sexual health clinics</td>
</tr>
<tr>
<td></td>
<td>• Not for overseas travel</td>
</tr>
<tr>
<td><strong>Human papillomavirus</strong> (HPV)</td>
<td>• Refugees (females and males) 20-26 years of age</td>
</tr>
<tr>
<td><strong>MMR</strong></td>
<td>• Unvaccinated individuals born during or after 1966</td>
</tr>
<tr>
<td></td>
<td>• For vaccination of rubella seronegative post natal women</td>
</tr>
<tr>
<td><strong>Rabies vaccine and human rabies immunoglobulin</strong></td>
<td>• Post-exposure treatment for Australian bat lyssavirus and rabies exposures (order via Public Health Unit on 1300 066 055)</td>
</tr>
</tbody>
</table>
Maternal Vaccination in Illawarra Shoalhaven Local Health District 2016-2018

Maternal vaccine coverage among Illawarra Shoalhaven women giving birth in ISLHD facilities has increased in recent years but remains sub-optimal with only one-in-two against pertussis and one-in-four immunised against influenza*.

Data source:
NSW Ministry of Health. NSW Perinatal Data Collection (EDWARD) [database]. Sydney, Australia: Centre for Epidemiology and Evidence, NSW Ministry of Health; 2018 [accessed 2018 Oct 31].

Caveats
These data are representative of women living in the Illawarra Shoalhaven Local Health District (ISLHD) and giving birth in ISLHD public facilities. They may not be representative of women birthing at home or in private health care facilities.

*Detailed data unable to be released at this time, however will be circulated when available.
Influenza (A, B, Not specified) notifications in Illawarra Shoalhaven residents, by month of disease onset. January 2017 to November 2018
Influenza (A, B, Not specified) notifications in NSW residents, by month of disease onset. January 2017 to November 2018
The Australian Immunisation Handbook provides clinical advice for health professionals on the safest and most effective use of vaccines in their practice.

These recommendations are developed by the Australian Technical Advisory Group on Immunisation (ATAGI) and approved by the National Health and Medical Research Council (NHMRC).

About the Handbook

What's changed?
The Australian immunisation Handbook is an up-to-date reference. The following pages have been updated recently.

- **What’s new**
- Pneumococcal disease
- Meningococcal disease
- Vaccination for people at occupational risk
- Vaccination for people who have recently received normal human immunoglobulin and other blood products
The “new” Handbook

• Not a “new” Handbook
  – some updates to supporting evidence and references

• Front page has “what’s changed”

• All 2018 schedule changes have been captured
  – HPV
  – Pneumococcal
  – Meningococcal
  – Hib

• Changes to recommendations appear at the top of each relevant disease page
Navigation

• Front page quicklinks
Handbook quicklinks

- About the Handbook
- Fundamentals of immunisation
- Vaccination procedures
- Catch-up vaccination
- Vaccination for special risk groups
- Vaccine preventable diseases
- Handbook tables
- Vaccines
Navigation

• Front page quicklinks
• Vaccine entry point
Hiberix

Details for Hiberix vaccine and its components.

Sponsor: GlaxoSmithKline Australia

Administration route: Intramuscular injection

Vaccine group: Monovalent vaccines

Registered for use in infants and children aged 2 months to 5 years.

Monovalent *Haemophilus influenzae* type b (Hib) vaccine.

Lyophilised pellet in a monodose vial with separate diluent.

Each 0.5 mL reconstituted dose contains:

- 10 µg Hib capsular polysaccharide (polyribosylribitol-phosphate) conjugated to approximately 25 µg tetanus toxoid (PRP-T)

The product information and consumer medicine information for Hiberix can have more details.
Navigation

- Front page quicklinks
- Vaccine entry point
- Recommendations entry point
Infants and children are recommended to receive 4 doses of Hib-containing vaccine.

People who have received a haematopoietic stem cell transplant are recommended to receive 3 doses of Hib vaccine.

People with functional or anatomical asplenia who were not fully vaccinated against Hib in childhood are recommended to receive 1 dose of Hib vaccine.
Navigation

• Front page quicklinks
• Vaccine entry point
• Recommendations entry point
• Search function
Navigation – disease chapter

• Order of sections in disease chapter has changed
  – those more often used and clinically relevant moved up (e.g. recommendations, vaccines, contraindications and precautions)

• Recommendation order
  – age-based
  – special group (ATSI, medical, pregnant women, occupation, travel, other)
  – laboratory testing
Recommendations

Children
- Children aged ≥12 months are recommended to receive 2 doses of measles-containing vaccine

Adolescents and adults
- Adolescents and adults born during or since 1966 are recommended to have received 2 doses of measles-containing vaccine

Occupational groups
- Healthcare workers born during or since 1966 are strongly recommended to have received 2 doses of measles-containing vaccine
- Childhood educators and carers born during or since 1966 are strongly recommended to have received 2 doses of measles-containing vaccine
- People born during or since 1966 who work in long-term care facilities are strongly recommended to have received 2 doses of measles-containing vaccine
- People born during or since 1966 who work in correctional facilities are strongly recommended to have received 2 doses of measles-containing vaccine

Travellers
- Travellers are strongly recommended to have received 2 doses of measles-containing vaccine

Serological testing for immunity to measles
- Serological testing for immunity to measles is not routinely recommended before or after receiving measles-containing vaccine
Navigation – disease chapter

• Hyperlinks
  – some jump you to another section within the chapter
  – others take you away from the chapter
    – links to other chapters
    – tables/figures

• Some words in the body text are hyperlinked to a glossary

• “View recommendation detail”
  – no additional information to what is within the chapter recommendation

Suggest ‘right click’ on hyperlink and ‘open in a new tab’ to retain place in Handbook...

repeated in all cases. See also Table. Minimum acceptable age for the 1st dose of scheduled vaccines in infants in special circumstances in Catch-up vaccination.

Children as young as 9 months of age can receive MMR vaccine in certain circumstances, including travel to highly endemic areas and during outbreaks. See Travellers. If an infant receives MMR vaccine at <12 months of age, they still need to receive 2 vaccine doses at 12 months of age.
Resources

• All table and figures in the Handbook

• Publications icon - infographics
  – summaries of Handbook information in a printable sheet

Publications
Fact sheets, infographics, reports, standards and guidelines, statistics, data and more

Handbook tables
List of tables used in the Handbook

Handbook figures
List of figures used in the Handbook
School Vaccination Program
Recap of 2018

What is being offered in school program in 2019
- Mainstream schools
- Intensive English Centre (IEC) school

School vaccination records

Catch ups for school program

Role of the General Practice

Overview of HPV vaccine in Australia
Recap of 2018

- Introduction of Gardasil 9 for year 7 students (discard 'Gardasil 4')
- 9-14 yrs - 2 doses given 6 months apart
- ≥ 15yrs or immunocompromised 3 doses (0, 2, 6 months)
- Meningococcal ACWY vaccine (Menactra) for year 10 and 11 students
Program 2019

- Year 7
  - Human Papillomavirus (HPV) Gardasil 9 (2 doses given 6 month apart)
  - Single dose dTpa - Boostrix

- Year 10
  - Meningococcal ACWY (Changing from Menactra to Nimenrix)
Intensive English Centre (IEC)

- Vaccines are offered to refugees and overseas students to bring them up to date with the NSW immunisation schedule
- Students who attend this school can range from 11-24 years old
- Often have incomplete or no record of vaccinations
- Vaccines given in the school program at IEC will be uploaded to AIR following our visit
## 2018 IEC Schedule

<table>
<thead>
<tr>
<th>AGE</th>
<th>VACCINE</th>
<th>SCHEDULE</th>
</tr>
</thead>
<tbody>
<tr>
<td>All (refugees &amp; non-refugees)</td>
<td>Measles-Mumps-Rubella (MMR)</td>
<td>2 doses, at least 1 month apart</td>
</tr>
<tr>
<td></td>
<td>Hepatitis B</td>
<td>2 doses at 0 and 4-6 months apart</td>
</tr>
<tr>
<td></td>
<td>Diphtheria-Tetanus-Pertussis (dTpa)</td>
<td>Single dose</td>
</tr>
</tbody>
</table>
| 12 year olds (non-refugees) | Human Papillomavirus (HPV)    | 2-dose HPV vaccine course with at least 6 calendar months between dose 1 and 2  
|                           |                                |                                               |
| Less than 14 year olds (refugees & non-refugees) | Varicella | Single dose                                     |
| 15-26 year olds (refugees & non-refugees) | Meningococcal ACWY (4vMenCV) | Single dose                                     |
| All (refugees only)       | Polio                          | 2 doses, at least 4 weeks apart               |
Records of School Vaccinations

- Record of vaccinations given to students on day of vaccination
- Students are encouraged to give this record to their parents - we know this does not always happen
- All records scanned into our local database - RECFIND
- HPV records now being uploaded to AIR - dTpa and Meningococcal not currently uploaded to AIR - watch this space
### Vaccination Record

#### Parent/Guardian Record of Vaccination

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Dose</th>
<th>Arm</th>
<th>Vaccine Batch Number</th>
<th>Time of Vaccination (Date)</th>
<th>Nurse's Signature</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPV</td>
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<td>dTpa</td>
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**Dose Date (DD/MM/YY)**

November 2017
- Where vaccination has been commenced in the school program we will endeavor to complete at school
- If HPV commenced in year 7 - we will offer catch up in year 8 in school program
- If HPV not commenced in year 7 - we are not able to offer catch up in school program - refer to GP to complete course
- If Boostrix not given in year 7 - will not offer catch up in school program - refer to GP
- If Men ACWY not given in year 10 - will not offer catch up in school program - refer to GP
If we are unable to complete vaccinations for whatever reason, an SMS will be sent to the parent advising them to complete vaccination at their GP.

- If the parent has not provided a mobile number, a letter will be sent.

Previously HPV was only provided free for students who commenced the course in year 7. As of July 2017 National Immunisation Program has been updated to provide free catch up vaccines for all individuals 10-19 yrs - including HPV!!!
What General Practices Need To Do??

- If any concerns about what vaccines are due - contact PHU to find out what has been given/what is due
- Parents do not need to provide a letter for the child to receive the vaccinations
- Please also check AIR prior to vaccinating - HPV doses now on AIR (1st Nov no more HPV register!)
- If parents bring their child in for school vaccination - contact PHU to withdraw their consent card to prevent doubling up on vaccines
9vHPV Vaccine (Gardasil 9)

- More than 100 HPV genotypes
- Some HPV types, including types 16, 18, 31, 33, 35, 45, 52 and 58, are designated as ‘high-risk’, as they are causally associated with the development of cancer.
- Other HPV types, including types 6, 11, 40, 42, 43, 44, 54, 61, 70, 72, 81 and 89, have been classified as ‘low-risk’ and are predominantly associated with non-malignant lesions, such as genital warts.
- 9v HPV vaccine provides protection against types 6, 11, 16, 18, 31, 33, 45, 52, 58 (majority high risk).
- Previous 4V HPV vaccine provides protection against HPV types 6, 11, 16, 18.
Evidence demonstrates that a 2 dose schedule (minimal interval 6 months) provides comparable protection to that of a 3 dose schedule in 9-14 year olds.

2 dose 9vHPV schedule is widely recommended internationally including by the World Health organisation.

Available at: [http://apps.who.int/iris/bitstream/10665/255353/1/WER9219.pdf?ua=1](http://apps.who.int/iris/bitstream/10665/255353/1/WER9219.pdf?ua=1)
Some Points to Remember…

- Immunocompromised children will still require 3 doses of HPV vaccine (0, 2 and 6 months)

- If the course is commenced when child 15 years or older will still require 3 doses (mostly IEC students)

- Student's who have received 1 dose HPV in school in 2018 will be retained in school program and offered 2nd dose in 2019 (with minimum 6 month interval)
Take Home Notes...

- Gardasil 9 and Boostrix for Year 7 students in 2019
- Meningococcal ACWY will be offered to all year 10 students in 2019
- Prior to providing vaccinations for school aged students including IEC students - please contact PHU and check AIR
- **Thankyou** for working in conjunction with the PHU to provide immunisations to school aged students!!
- Acknowledgements:
  - NSW Ministry of Health
  - Michelle Ferguson-Hannah
Australian Immunisation Register (AIR)

- Access
- Adding/adjusting information on AIR
- Importance of dose numbers

- History Statements
- Children born overseas
- Refugee records
Access

- Access is granted under a GP, NP or Midwife - using HPOS
  - It is acceptable to log in as another provider if you are providing care to the patient

- Select Register and follow the steps

- The GP will then receive:
  - A file to be saved on your computer
  - The GP/NP provider number to use to log in
  - A password

- To log on to AIR click Log on
Adding / Adjusting info

- Medical software able to send ‘batches’ of data
  - Will only upload if it is sent → delegate responsibility to a role

- Record Encounter
  - For missing imms and you have the record

- Update Encounter
  - Can only update encounters you have entered

- Secure Email
  - Can ask AIR to update/upload information

- Phone AIR 1800 653 809
  - Record/update/change dose number...
Order affects if overdue/missing doses

Don’t base catch-ups on “Due” imms on AIR: check records, call PHU

Different error codes e.g:
- Interval too close, dose invalid
- Duplicate antigen dose
- Higher dose number previously recorded
- Age on receipt of vaccine invalid

Click code to display meaning
History Statements

- History statements can be printed from AIR (pdf) and are required for:
  - Childcare/Early childhood - mandatory (from Jan 2018) must be up to date, on an approved catch-up schedule, or documented medical contraindication (if on catch up also need to provide AIR History Form with “Catch up” ticked)
  - Primary and Secondary school - must be supplied (secondary schools added from April 2018) unvaccinated students may be excluded from school if an outbreak occurs
- Children aged 14 years and over can request their own Immunisation History Statement from the AIR by using or creating their own Medicare online account through myGov
- Up to date if received all vaccines required (on the NIP) up to 5 years of age
Children born overseas

- Often require catch-up
- Overseas immunisation documentation is often hard to read (especially when faxed)
- If you require PHU to help, please try and scan and send the document to us AFTER you have spoken with the parent/carer/patient to see if they can help read the document
- Some shorter intervals may be allowed for children born overseas
- Medicare number not required to be on AIR
  - Search with last name, first name and DOB
Refugee vaccination overseas

- Often hard due to language barrier
- Contact TIS for translating service where required
- Often come to Aus with little or no vaccination records at all
- Serology can be performed: Hep B, MMR, Varicella
- Vaccination information document (HAPP):
  - (Oct 2018) provided to GPs and Refugees (last 2 pages are vaccination)
  - less vaccinations for the patient and may prevent revaccination of antigens/doses already received
  - saving time on lengthy catch-ups & money on vaccines that are not req.
(02) 4221 6770 or ISLHD-RefugeeHealth@health.nsw.gov.au
Further information/education