

2018 Immunisation Update



A puzzling time?!!

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

Dixie Waters, Author



Health
Illawarra Shoalhaven
Local Health District

The Puzzle Pieces



Authority to Immunise



NSW Immunisation Schedule



Australian Immunisation Handbook



School Immunisation Program



Australian Immunisation Register



Catch Up



Cold Chain



Resources



Health
Illawarra Shoalhaven
Local Health District

The PHU Immunisation Team



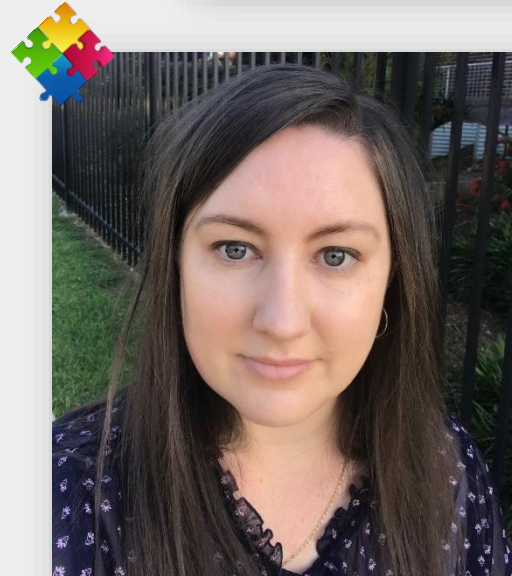
Tanya Nadjovska
Information Support
Officer



Lanie Swarzencki
Program Support Officer



David Boucher
School Vaccination
Program Coordinator
(Mon & Tues)



Michelle Ferguson-Hannah
School Vaccination
Program Coordinator
(Wed-Fri)

The PHU Immunisation Team



Tanya Simpson

Aboriginal Immunisation
Health Worker



Kath Tapper

Immunisation Coordinator
Mon - Wed (until 9/1/19)



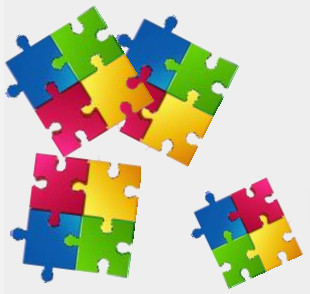
Haley Frew

Immunisation Coordinator
Thurs & Fri

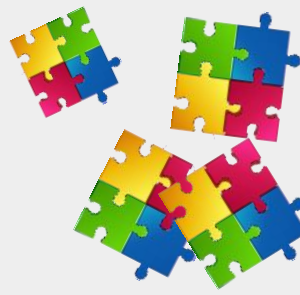


Natasa Veselinovic

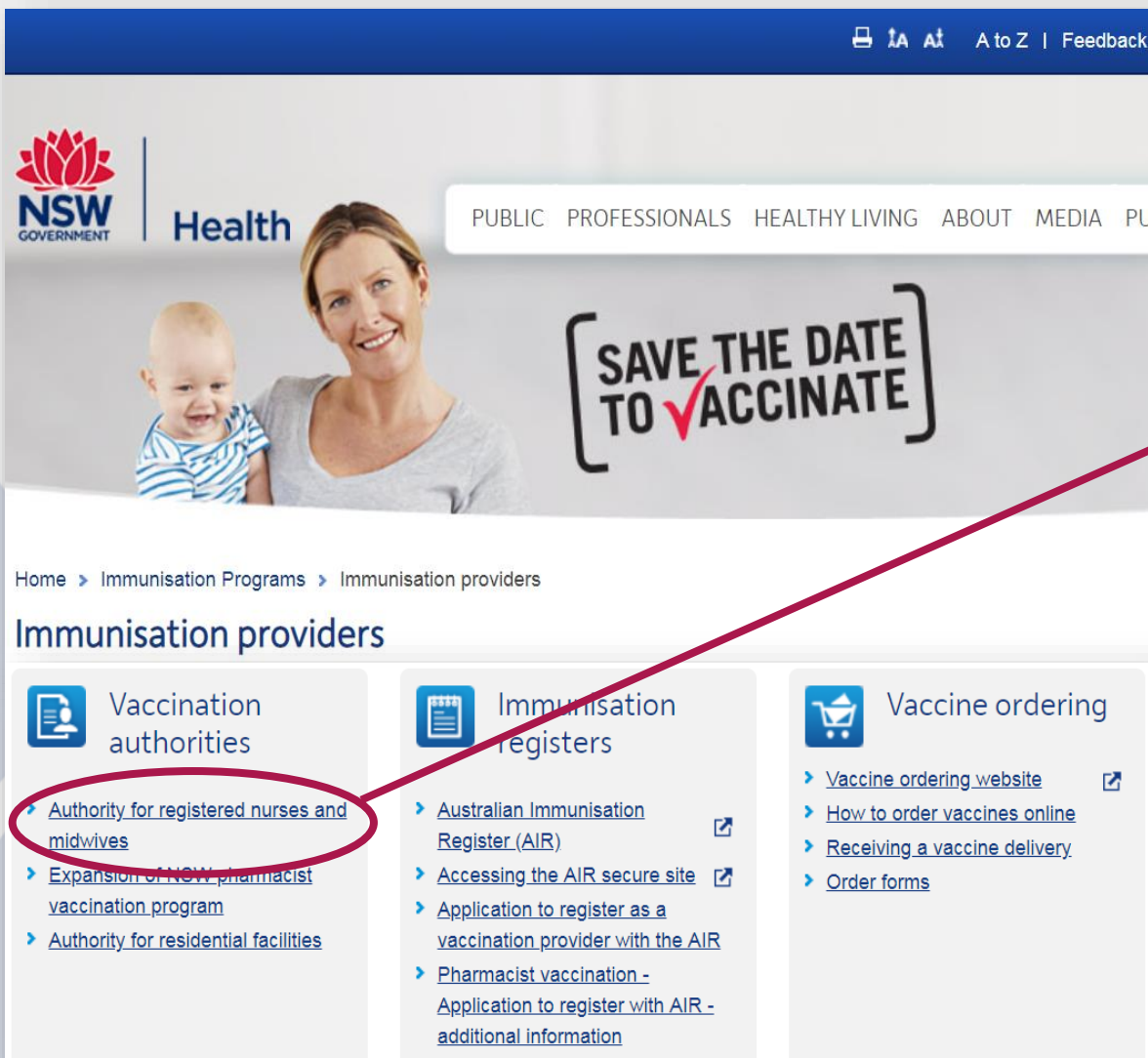
Immunisation Coordinator
Mon - Thurs (from 7/1/19)



Authority to Immunise



Authority to Immunise




NSW GOVERNMENT | Health

PUBLIC PROFESSIONALS HEALTHY LIVING ABOUT MEDIA PU


SAVE THE DATE TO VACCINATE

Home > Immunisation Programs > Immunisation providers


Immunisation providers

**Vaccination authorities**

- [Authority for registered nurses and midwives](#)
- [Expansion of NSW pharmacist vaccination program](#)
- [Authority for residential facilities](#)

**Immunisation registers**

- [Australian Immunisation Register \(AIR\)](#)
- [Accessing the AIR secure site](#)
- [Application to register as a vaccination provider with the AIR](#)
- [Pharmacist vaccination - Application to register with AIR - additional information](#)

**Vaccine ordering**

- [Vaccine ordering website](#)
- [How to order vaccines online](#)
- [Receiving a vaccine delivery](#)
- [Order forms](#)

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 Mackson, Chief Pharmacist, a duly appointed delegate of the Director-General of NSW Health, do hereby issue **AUTHORITY** to registered nurses and midwives, hereby specified as a class of persons, to supply those poisons and restricted substances listed in the Schedule hereunder 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, and
- (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.



SCHEDULE

adrenaline	pertussis vaccine
diphtheria toxoid	pneumococcal vaccine
<i>Haemophilus influenzae</i> (type b) vaccine	poliomyelitis vaccine
hepatitis A vaccine	rotavirus vaccine
hepatitis B vaccine	rubella vaccine
human papillomavirus vaccine	tetanus toxoid
influenza vaccine	tuberculin (purified protein derivative)
measles vaccine	tuberculosis vaccine
meningococcal vaccine	varicella vaccine
mumps vaccine	

- 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

NSW Immunisation Schedule



"Vaccination is important for the whole family
from birth to end of life"



NSW Immunisation Schedule

➤ 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)

NSW Immunisation Schedule

from 1 July 2018



AGE	DISEASE	VACCINE
CHILDHOOD VACCINES		
Birth	Hepatitis B	H-B-VAX II OR ENGERIX B
6 weeks	Diphtheria, tetanus, pertussis, <i>Haemophilus influenzae</i> type b, hepatitis B, polio	INFANRIX HEXA
	Pneumococcal	PREVENAR 13
	Rotavirus	ROTARIX
4 months	Diphtheria, tetanus, pertussis, <i>Haemophilus influenzae</i> type b, hepatitis B, polio	INFANRIX HEXA
	Pneumococcal	PREVENAR 13
	Rotavirus	ROTARIX
6 months [†]	Diphtheria, tetanus, pertussis, <i>Haemophilus influenzae</i> type b, hepatitis B, polio	INFANRIX HEXA
12 months	Meningococcal ACWY	NIMENRIX
	Pneumococcal	PREVENAR 13
	Measles, mumps, rubella	MMR II OR PRIORIX
18 months	Diphtheria, tetanus, pertussis	INFANRIX OR TRIPACEL
	Measles, mumps, rubella, varicella	PRIORIX TETRA OR PROQUAD
	<i>Haemophilus influenzae</i> type b	ACT-HIB
4 years	Diphtheria, tetanus, pertussis, polio	INFANRIX-IPV OR QUADRACEL
ADOLESCENT VACCINES - SCHOOL VACCINATION PROGRAM		
Year 7	Diphtheria, tetanus, pertussis	BOOSTRIX
	Human papillomavirus (2 doses)	GARDASIL 9
Years 10 - 11 (in 2018)	Meningococcal ACWY	MENACTRA
ADULT VACCINES		
Pregnant women	Influenza (Annually-any trimester)	INFLUENZA
	Pertussis (Third trimester, ideally 28-32 weeks)	BOOSTRIX OR ADACEL
65 years and over	Influenza (Annually)	FLUAD OR FLUZONE HIGH DOSE
	Pneumococcal (One dose)*	PNEUMOVAX 23
70 years (Catch-up for 71-79 years until 31 October 2021)	Zoster	ZOSTAVAX
AT RISK GROUPS		
6 months and over with medical risk conditions [†]	Influenza (annual)	INFLUENZA
All children 6 months to < 5 years (in 2018)		
Aboriginal people 15 years and over		
Aboriginal people 15-49 years with medical risk factors	Pneumococcal*	PNEUMOVAX 23
Aboriginal people 50 years and over		
65 years and over		

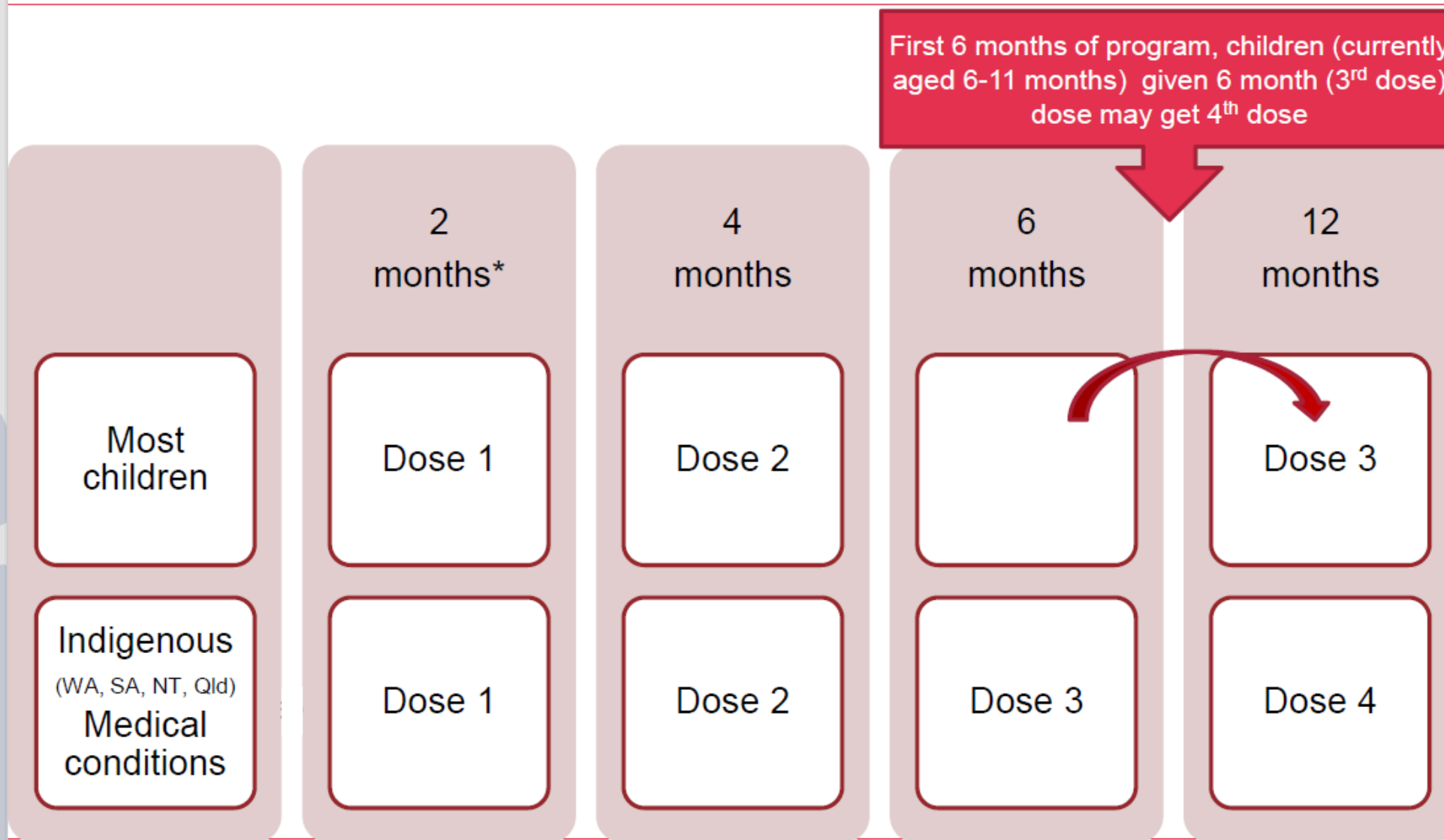
[†] Refer to the current online edition of The Australian Immunisation Handbook for all medical risk factors and conditions

* Refer to the current edition of The Australian Immunisation Handbook for timing of doses

† at risk children require an additional dose of pneumococcal (Prevenar 13)



New PCV13 (Pprevnar 13) schedule



Background

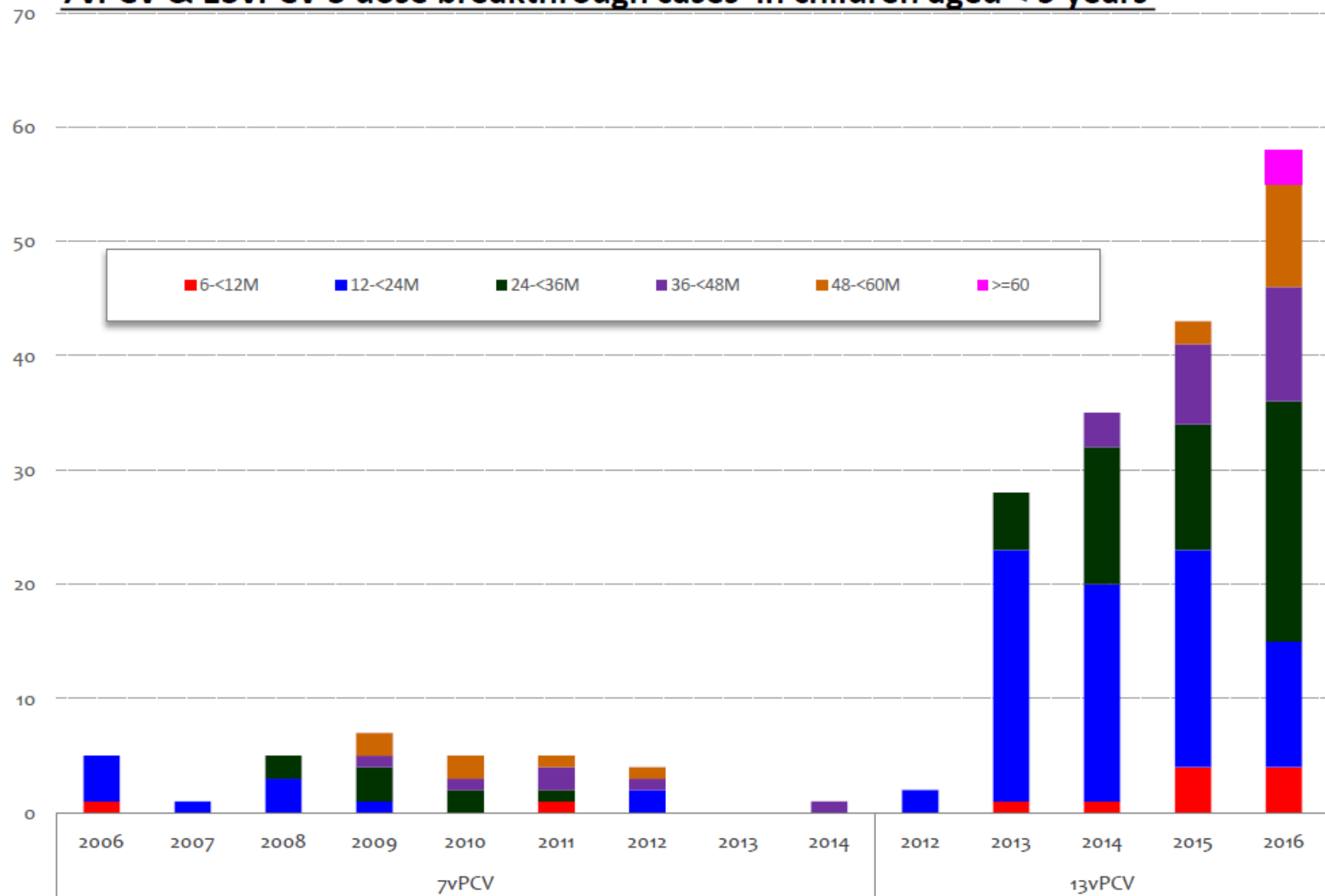


2005 – 2018

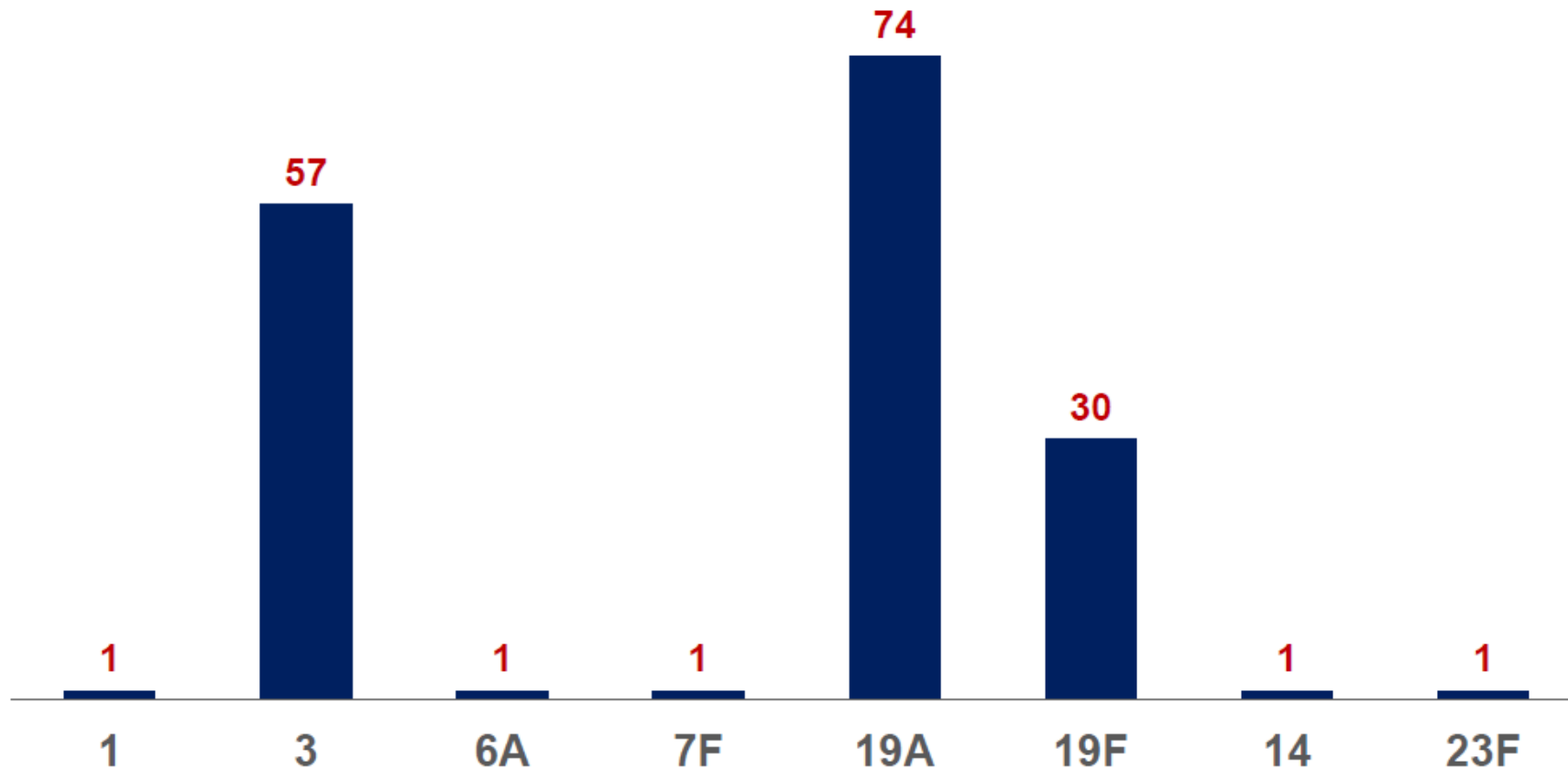
“3 primary + 0 booster dose” schedule

- 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



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

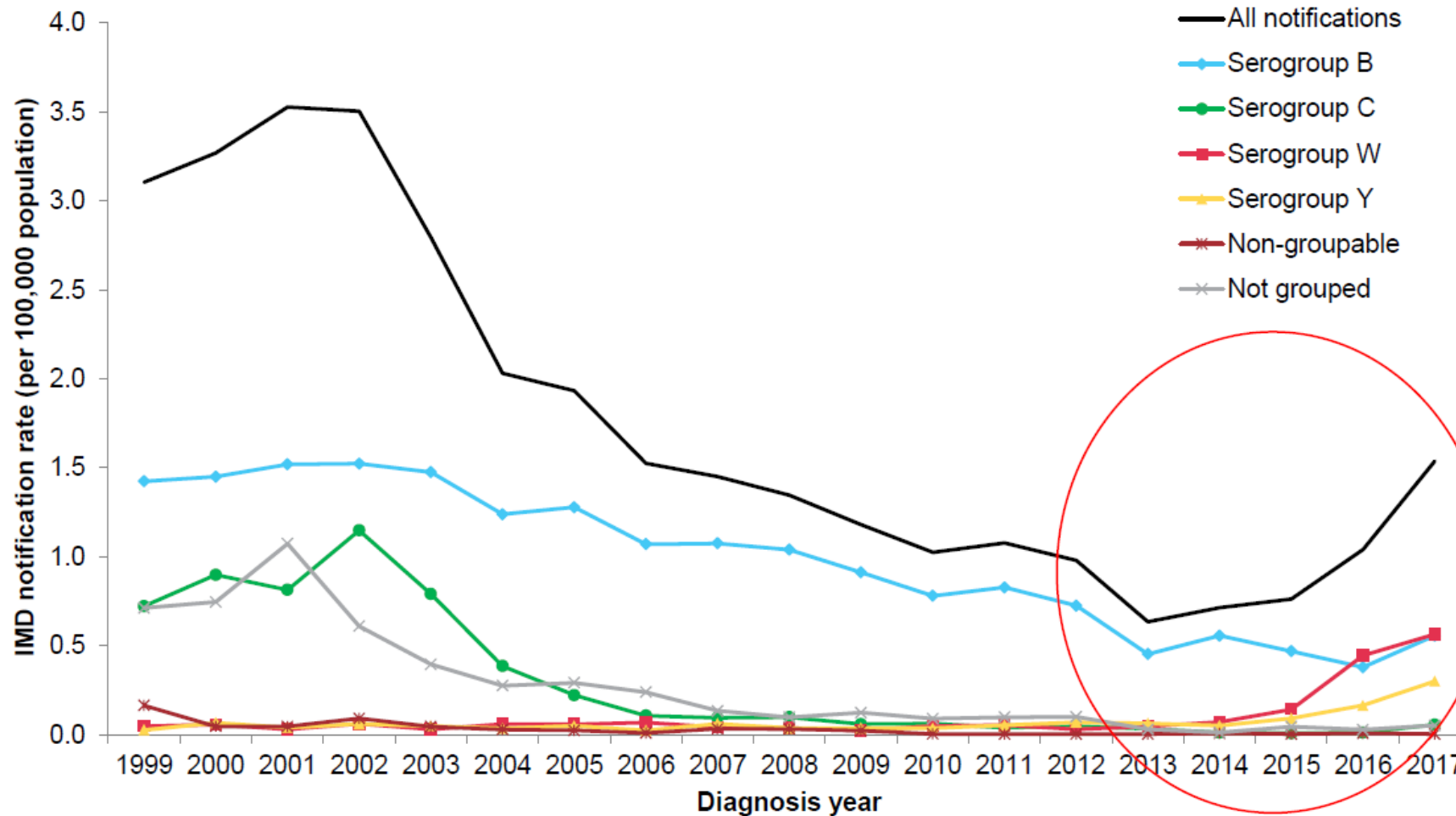




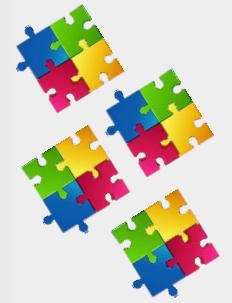
Category B: Conditions associated with an increased risk of IPD

- 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[¶]

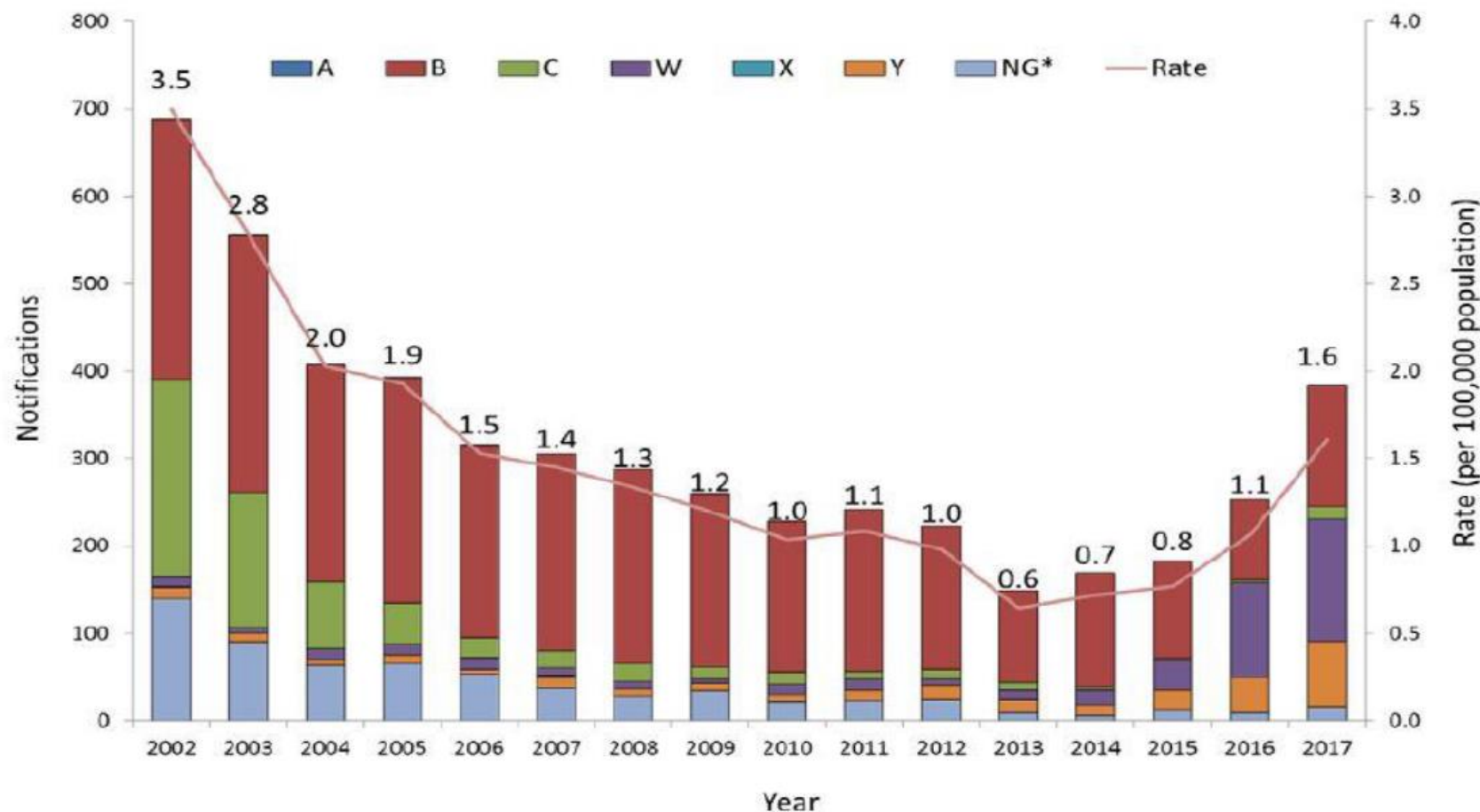
IMD notification rate by serogroup and year, 1999–2017



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 NNDSS 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.

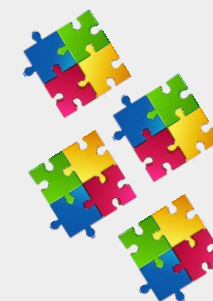




Table 2: People and age groups strongly recommended to receive meningococcal vaccination

Population	6 weeks–23 months	2–4 years	5–14 years	15–19 years	20–24 years	≥25 years
Healthy Aboriginal or Torres Strait Islanders	MenB MenACWY	MenB MenACWY	MenB MenACWY	MenB MenACWY		
Healthy Non-Indigenous	MenB MenACWY			MenB MenACWY		
Increased medical risk[*]	MenB MenACWY	MenB MenACWY	MenB MenACWY	MenB MenACWY	MenB MenACWY	MenB MenACWY
People living in close quarters[†]				MenB MenACWY	MenB MenACWY	
Current smokers				MenB MenACWY	MenB MenACWY	
Occupational risk[#]				MenB MenACWY	MenB MenACWY	MenB MenACWY
Travellers[‡]	MenACWY	MenACWY	MenACWY	MenACWY	MenACWY	MenACWY



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

Age at commencement of vaccine course	MenACWY vaccine brand	Healthy individuals including Indigenous Australians, travellers and laboratory personnel	With any specified medical conditions associated with increased risk of meningococcal disease
6 weeks–5 months	Menveo*	3 doses (8 weeks between 1st and 2nd doses; 3rd dose at 12 months of age)	4 doses (8 weeks between doses; 4th dose at 12 months of age or 8 weeks after 3rd dose, whichever is later)
	Nimenrix†		
6–8 months	Menveo*	2 doses (2nd dose at 12 months of age)	3 doses (8 weeks between 1st and 2nd doses; 8 weeks between 2nd and 3rd doses)
	Nimenrix†		
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†		
	Menactra#		
12–23 months	Menveo	2 doses (8 weeks between doses)	2 doses† (8 weeks between doses)
	Menactra#	2 doses (8 weeks between doses)	
	Nimenrix	1 dose	
≥2 years‡	Menveo	1 dose	2 doses (8 weeks between doses)
	Menactra#§		
	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

NCIRS Fact Sheet: Meningococcal Vaccines for Australians
<http://www.ncirs.edu.au/provider-resources/ncirs-fact-sheets/>

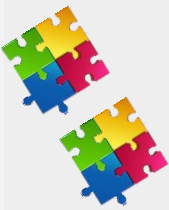
- Menactra and Prevenar13 should not be co-administered due to a decreased response to some of the pneumococcal serotypes
 - Use a different brand or
 - Give Prevenar13 first, then Menactra at least 1 month later
- Immune interference with sequential administration of Infanrix hexa and Nimenrix
 - Give together or
 - Give Nimenrix first, then Infanrix hexa can be given any time after



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



INVASIVE MENINGOCOCCAL DISEASE

Information for NSW General Practitioners & Aboriginal Medical Services

Please distribute this information to all staff



Dr Vicky Sheppard
Director, Communicable Diseases Branch

10 September 2018













Meningococcal vaccination

The following vaccines are available free in NSW:

AGE GROUP	VACCINE	VACCINE PROVIDER
12 months of age <i>National Immunisation Program Schedule</i>	Nimenrix® (Men ACWY)	GPs & AMSs
10-<15 years <i>NIP catch-up program</i>	NeisVac-C® (Men C)	GPs & AMSs <i>For children not vaccinated in infancy</i>
15-19 years <i>NSW funded program</i>	Menactra® (Men ACWY)	GPs & AMSs <i>Catch-up for those not vaccinated at school</i>
Years 10 and 11 in 2018 Year 10 in 2019 <i>NSW funded program</i>	Menactra® (MenACWY) Nimenrix® (Men ACWY)	Schools

BEXSERO OFFERS A FLEXIBLE VACCINATION SCHEDULE FOR INFANTS, CHILDREN, ADOLESCENTS AND ADULTS.⁴



PRIMARY IMMUNISATION	 2 – 5 months old*  2 doses, ≥2 months apart	 6 – 11 months old  2 doses, ≥2 months apart	 12 months – 23 months old  2 doses, ≥2 months apart	 2 – 10 years old  2 doses, ≥1 month apart	 11 – 50 years old [^]  2 doses, ≥1 month apart
	Second year of life  1 dose in the second year of life with an interval of at least 6 months between the primary series and the booster dose	Second year of life  1 dose in the second year of life with an interval of at least 2 months between the primary series and the booster dose	Need not established	Need not established	Need not established

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[†]

VACCINATE



~6 hours[‡]

2 ADDITIONAL DOSES



6 hours[‡]



15mg/kg paracetamol
30 minutes prior to vaccination[†]

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.² [†]Or as soon as practicable afterward. [‡]ATAGI recommends doses of paracetamol to be given 6 hours apart.



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Vaccine	Eligibility
Hepatitis B	<ul style="list-style-type: none">• Aboriginal people• Household and sexual contacts of acute and chronic hepatitis B cases• Immunosuppressed people• People with HIV or hepatitis C• Men who have sex with men• Injecting drug users• Sex workers• Clients of sexual health clinics <p>Not for overseas travel</p>
Human papillomavirus (HPV)	<ul style="list-style-type: none">• Refugees (females and males) 20-26 years of age
MMR	<ul style="list-style-type: none">• Unvaccinated individuals born during or after 1966• For vaccination of rubella seronegative post natal women
Rabies vaccine and human rabies immunoglobulin	<ul style="list-style-type: none">• Post-exposure treatment for Australian bat lyssavirus and rabies exposures (order via Public Health Unit on 1300 066 055)

Extra vaccines
funded by NSW
Health





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.

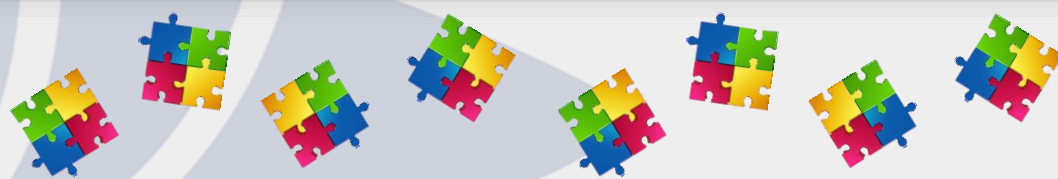
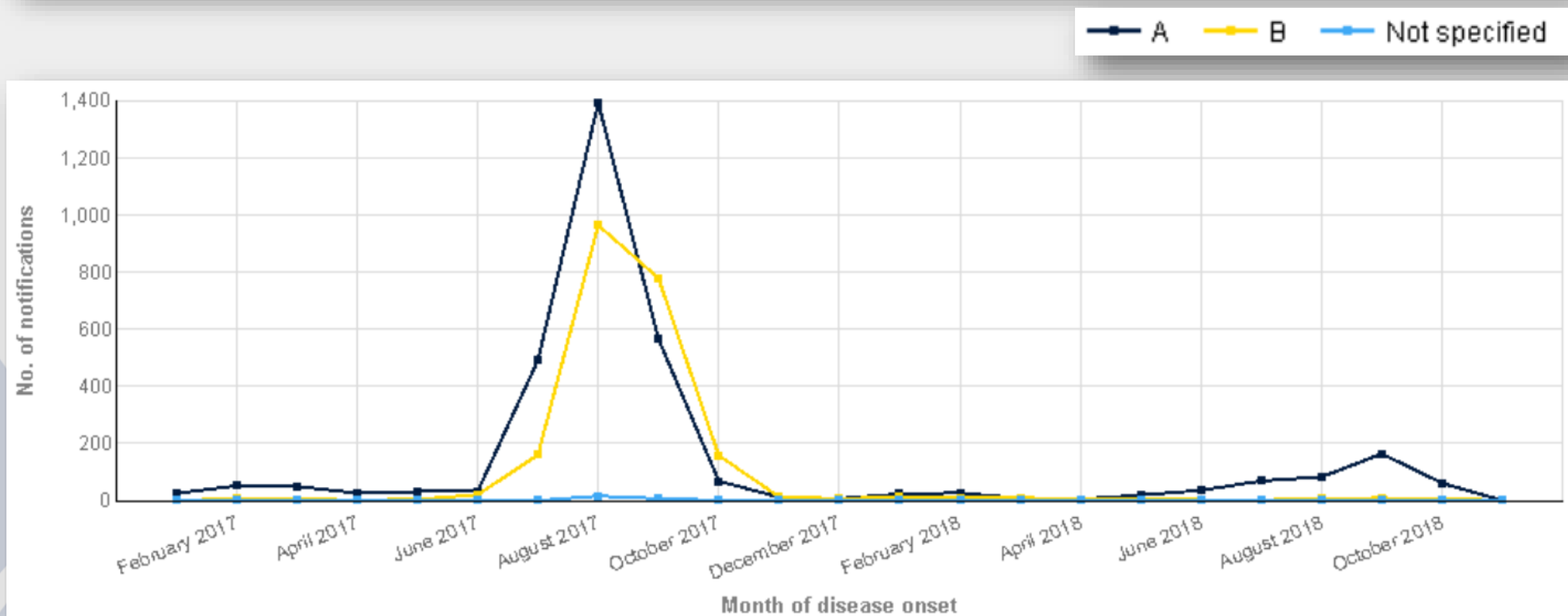
*Detailed data unable to be released at this time, however will be circulated when available.



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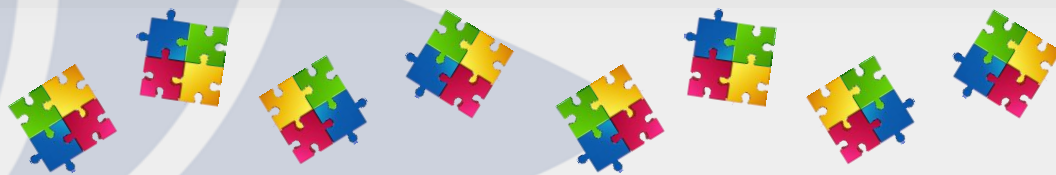
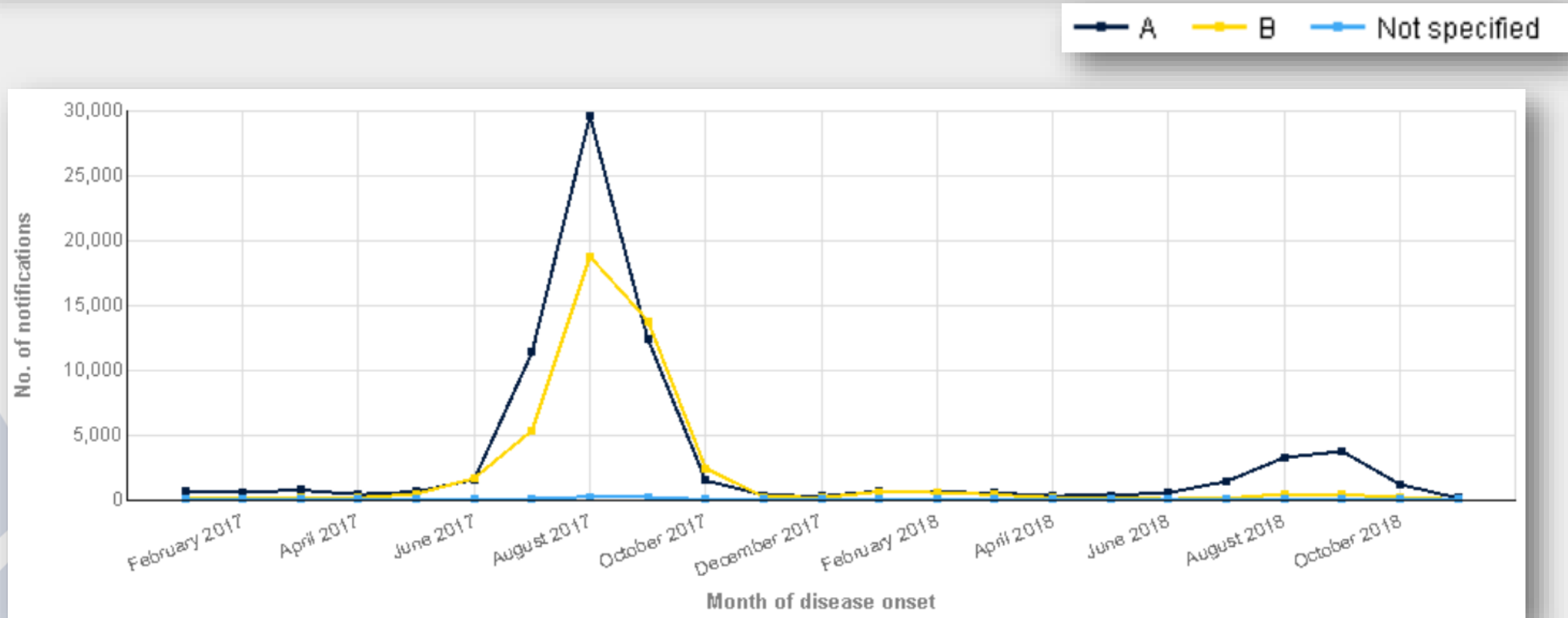


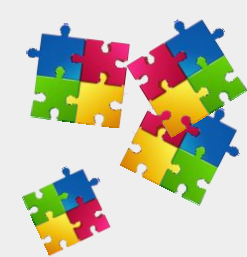
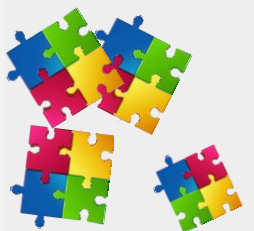
Influenza (A, B, Not specified) notifications in Illawarra Shoalhaven residents, by month of disease onset. January 2017 to November 2018



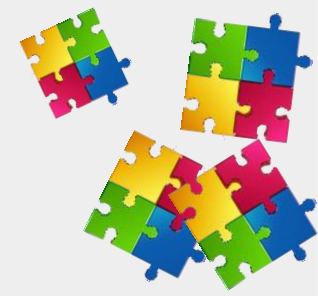
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Influenza (A, B, Not specified) notifications in NSW residents, by month of disease onset. January 2017 to November 2018







Australian Immunisation Handbook





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



Health
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Handbook quicklinks



[About the Handbook](#)



[Fundamentals of
immunisation](#)



[Vaccination procedures](#)



[Catch-up vaccination](#)



[Vaccination for special
risk groups](#)



[Vaccine preventable
diseases](#)



[Handbook tables](#)



[Vaccines](#)



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Navigation



- Front page quicklinks
- Vaccine entry point



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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 (polyribosyl-ribitol-phosphate) conjugated to approximately 25 µg tetanus toxoid (PRP-T)

The product information and consumer medicine information for [Hiberix](#) have more details.



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Enter your search

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Vaccines

List of vaccines available in the Handbook



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Navigation



- Front page quicklinks
- Vaccine entry point
- Recommendations entry point



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[Home](#) > Recommendations

Recommendations



Recommendations

Filter results

You can narrow down the results using the filters

Disease

- ☒ Haemophilus influenzae type b (Hib)
- ☐ Cholera (1)
- ☐ Diphtheria (9)
- ☐ Hepatitis A (13)
- ☐ Hepatitis B (28)
- ☐ Human papillomavirus (HPV) (5)
- ☐ Influenza (flu) (22)
- ☐ Japanese encephalitis (3)
- ☐ Measles (8)
- ☐ Meningococcal disease (12)

3 results



Filters applied:

Haemophilus influenzae type b (Hib)



[Clear all](#)

[**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



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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



What's changed	▼
Summary	▼
Recommendations	▼
Vaccines, dosage and administration	▼
Contraindications and precautions	▼
Adverse events	▼
Nature of the disease	▼
Clinical features	▼
Epidemiology	▼
Vaccine information	▼
Transporting, storing and handling vaccines	▼
Public health management	▼
Variations from product information	▼
References	▼



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	▼

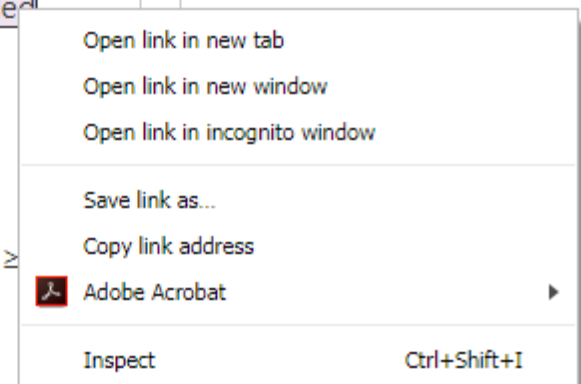


- Hyperlinks
 - some jump you to another section within the chapter
 - others take you away from the chapter
 - links to other chapters
 - tables/figures
- Some words in the body text are hyperlinked to a glossary
- “View recommendation detail”
 - no additional information to what is within the chapter 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 ≥ 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



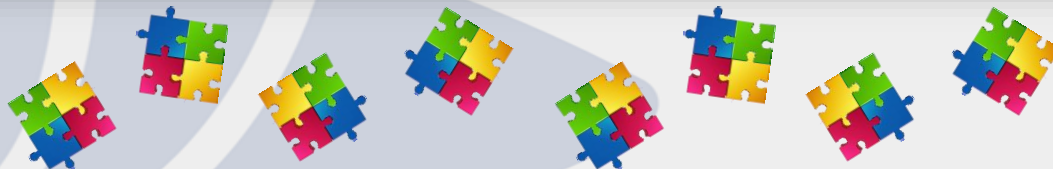
Handbook tables

List of tables used in the Handbook



Handbook figures

List of figures used in the Handbook



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Meningococcal vaccination for people in special risk group

Meningococcal disease is a rare but serious disease that can cause significant illness and death. Some people are at increased risk of meningococcal disease. Vaccination is recommended for these people, but is not funded under the National Immunisation Program.

No single vaccine protects against all serogroups

3 vaccines protect against serogroups A, C, W and Y

2 vaccines protect against

Australian Immunisation Handbook

Preparing an anaphylaxis response kit

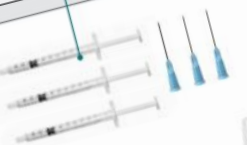
Before each vaccination session, check that you have the protocols, equipment and medicines to manage anaphylaxis.

Your anaphylaxis response kit should contain:

1 **Adrenaline 1:1000** (at least 3 ampoules – check expiry dates)

2 **At least 3 x 1 mL syringes and 25 mm needles** (for intramuscular injection)

3 **Cotton wool**



4 **Pen and paper** to record the time the adrenaline was administered

5 **Laminated copy of 'Doses of intramuscular 1:1000 adrenaline for anaphylaxis'**

6 **Laminated copy of 'Recognition and treatment of anaphylaxis'**

Breastfeeding

Breastfeeding women can safely receive most vaccines.



Give seasonal influenza vaccine if not already given this year.
Give other vaccines as needed.

During pregnancy

Recommended vaccinations during pregnancy protect both the mother and the baby.



Give seasonal influenza vaccine at any time during influenza season, if not already received.
Give pertussis-containing vaccine early in the 3rd trimester (ideally 28–32 weeks).

Planning pregnancy

Make sure women who are planning pregnancy are protected against vaccine-preventable diseases.



Check immunisation history and give any missed vaccines.
If uncertain history of vaccination or disease, check serology for these diseases and vaccinate if needed:
hepatitis B
measles
varicella (if the person has not had an age-appropriate vaccine course)
rubella
Give seasonal influenza vaccine if available and if not already given this year.

Vaccination for women who are pregnant, pregnant or breastfeeding

Australian Government
Department of Health

Australian Immunisation Handbook



Catch-up vaccination for children <10 years of age

Catch-up vaccination aims to provide the best protection against disease as quickly as possible by completing a child's recommended vaccination schedule.

1 Confirm the child's vaccination history



- ☒ Review the child's vaccination history to determine whether they are up to date.
- ☒ If you cannot confirm previous vaccination, assume the child has not been vaccinated. Children can safely receive most vaccines as additional doses.
- ☒ If you are not sure how to plan the catch-up schedule, or if the child has a medical condition, seek further advice from your state or territory.

2 Plan



Vaccination for people who care for others

Vaccinating people who care for those at increased risk of disease protects themselves and the people they are working with.



People working in health care or handling human tissue, blood or bodily fluids

- ▶ Hepatitis A (if providing health care in Aboriginal and Torres Strait Islander communities, and in some jurisdictions)
- ▶ Hepatitis B
- ▶ Influenza
- ▶ MMR (if non-immune)
- ▶ Pertussis (as dTpa)
- ▶ Varicella (if non-immune)
- ▶ BCG (if working with drug-resistant cases of tuberculosis)



Carers

- ▶ Hepatitis A (if caring for people with developmental disabilities)
- ▶ Hepatitis B (if caring for people with developmental disabilities)
- ▶ Influenza
- ▶ Pertussis (as dTpa, if caring for infants <6 months of age)



People working with children

- ▶ Hepatitis A (if working in early childhood education and care)
- ▶ Influenza
- ▶ MMR (if non-immune)
- ▶ Pertussis (as dTpa)
- ▶ Varicella (if non-immune)



People working in nursing homes or long-term residential facilities

- ▶ Influenza
- ▶ MMR (if non-immune)
- ▶ Varicella (if non-immune)

Pneumococcal vaccination for children >5 years and adults with medical conditions that increase their risk of invasive pneumococcal disease



See the Australian Immunisation Handbook for a list of medical conditions in each category and details about dosing intervals.
Check the person's vaccination history to make sure they are up to date with their recommended childhood pneumococcal vaccines.



Category A medical conditions

Conditions associated with the **highest increased risk** of invasive pneumococcal disease

23vPPV from age 15 years.

23vPPV

At least 1 dose of 23vPPV should be given at age ≥50 (for Aboriginal and Torres Strait Islander adults) or age ≥65 (for non-Indigenous adults).

Conditions associated with an **increased risk** of invasive pneumococcal disease

At least 1 dose of 23vPPV should be given at age ≥50 (for Aboriginal and Torres Strait Islander adults) or age ≥65 (for non-Indigenous adults).

Program for people aged 15 and over with medical conditions:
Aboriginal and Torres Strait Islander people



School Vaccination Program

NSW School Vaccination Program

Parent/Guardian to complete all fields in CAPITAL letters using a black or blue pen.

Student's Details

Surname _____

Given name/s _____

Date of Birth _____ / _____ / 2 0 0 _____

Gender ☐ M ☐ F

Name of School _____

Medicare Number _____

Number beside your child's name on the Medicare card _____

Indigenous Status

☐ No ☐ Yes, Aboriginal ☐ Yes, Torres Strait Islander

Your Details - Parent or Legal Guardian

Name of Parent/Guardian (e.g. JACK SMITH) _____

Home Address (e.g. 5 SMITH LANE) _____

Suburb _____

Mobile Number _____

Postcode _____

Best Alternate Number _____

Consent

I have read and understood the information provided regarding the benefits and possible side effects of the HPV vaccine and dTpa vaccine and note that I can withdraw consent at any time.

I have been provided with a copy of the Privacy Statement and I understand that my and/or my child's personal information (including health information) may be disclosed in certain circumstances as set out in that Statement.

I declare to the best of my knowledge that my child:

- Has not had an anaphylactic reaction following any vaccine.
- Does not have an anaphylactic sensitivity to any of the vaccine components listed in the Parent Information Sheet.
- Is not pregnant.

I, on (today's date) _____ / _____ / 2 0 1 _____, sign below for each vaccine I wish my child to receive.

HPV Vaccine. I hereby give consent for my named child to receive a 2 dose course.

Diphtheria-Tetanus-Pertussis (dTpa) Vaccine. I hereby give consent for my named child to receive a single dose.

Signature of Parent/Guardian _____

Consent for Meningococcal ACWY Vaccination

Parent/Guardian to complete. Please print in CAPITAL letters using a black or blue pen.

1. Student's Details

Surname _____

Given Name/s _____

Date of Birth _____ / _____ / _____

Gender ☐ M ☐ F

Name of School _____

Medicare Number _____

Number beside your child's name on the Medicare card _____

2. Indigenous Status

☐ Yes, Aboriginal ☐ Yes, Torres Strait Islander ☐ Yes, both Aboriginal and Torres Strait Islander

3. Your Details - Parent or Legal Guardian

I have read and understood the information provided regarding the benefits and the possible side effects of the Meningococcal ACWY vaccine. I hereby give consent for my child, named above, to receive a single dose of Meningococcal ACWY vaccine.

I declare, to the best of my knowledge, that my child:

- Has not had an anaphylactic reaction following any vaccine.
- Does not have an anaphylactic sensitivity to any of the vaccine components listed in the enclosed Parent Information sheet.
- Is not pregnant.

Name of Parent/Guardian (e.g. JOHN SMITH) _____

Address (e.g. 5 SMITH LANE) _____

Postcode _____

Best Alternate Number (include area code e.g. 02) _____

Date _____ / _____ / _____

Meningococcal ACWY Record of Vaccination

Parent/Guardian to complete

Name of Student (e.g. JANE SMITH) _____

OFFICE USE ONLY

Arm ☐ Left ☐ Right

Time of Vaccination (day) _____

Vaccine Batch Number _____

Nurse's Signature _____

Date _____

Nurse's notes

Reason not vaccinated

☐ Absent

☐ Refused

☐ Unwell

☐ No signature

☐ Consent withdrawn

☐ Other _____

What to do after the vaccination

- Keep this record, as you may be required to provide this information later.
- Advise your local doctor of the date of this vaccination so that your child's records are kept up to date.

What to do if a reaction occurs

- Put a cold damp cloth on the injection site to relieve tenderness.
- Take paracetamol for pain.
- Drink extra fluids.

If your child suffers a reaction that you are concerned about please contact your local doctor.

NSW GOVERNMENT

Parent/Guardian Meningococcal ACWY Record of Vaccination

Parent/Guardian to complete

Name of Student (e.g. JANE SMITH) _____

OFFICE USE ONLY

Arm ☐ Left ☐ Right

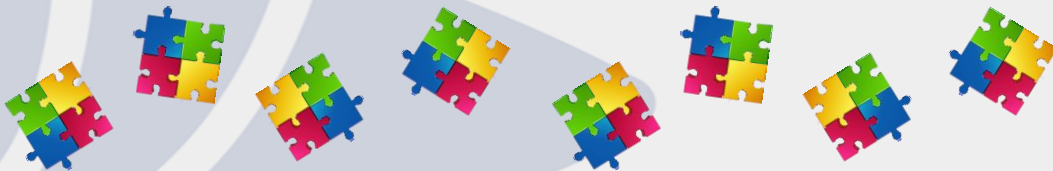
Time of Vaccination (day) _____

Vaccine Batch Number _____

Nurse's Signature _____

Date _____

- 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



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Recap of 2018



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



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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



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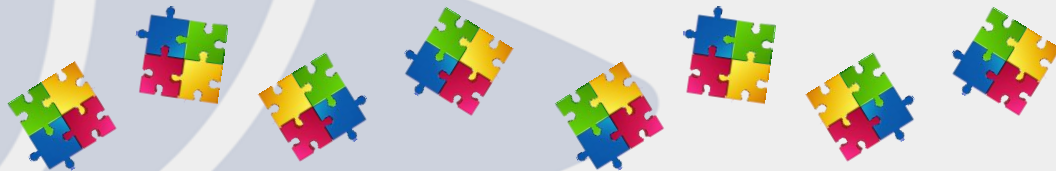


2018 IEC Schedule

AGE	VACCINE	SCHEDULE
All (refugees & non-refugees)	Measles-Mumps-Rubella (MMR)	2 doses, at least 1 month apart
	Hepatitis B	2 doses at 0 and 4-6 months apart ²
	Diphtheria-Tetanus-Pertussis (dTpa)	Single dose
12 year olds (non-refugees)	Human Papillomavirus (HPV)	2-dose HPV vaccine course with at least 6 calendar months between dose 1 and 2 ³
12-26 year olds (refugees only)		
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 ⁴

Records of School Vaccinations

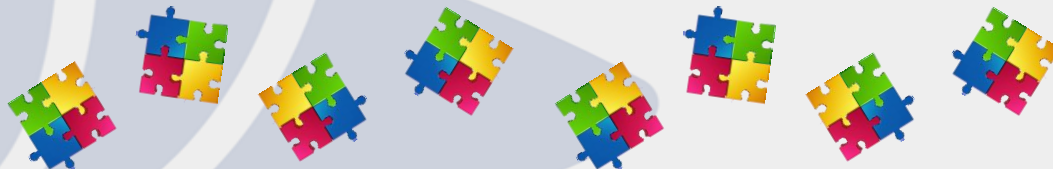
- Record of vaccinations given to students on day of vaccination
- Students are encouraged to give this record to their parents - we know this does not always happen
- All records scanned into our local database - RECFIND
- HPV records now being uploaded to AIR - dTpa and Meningococcal not currently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






Vaccination Record

Parent/Guardian Record of Vaccination															
Name of Student															
Vaccine	Dose	Arm	Vaccine Batch Number										Time of Vaccination (24hr)		Nurse's Signature
HPV	<input type="checkbox"/>	<input type="checkbox"/> L <input type="checkbox"/> R	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
dTpa	<input type="checkbox"/>	<input type="checkbox"/> L <input type="checkbox"/> R	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Dose Date (DD/MM/YY)			<input type="text"/>	<input type="text"/>	/	<input type="text"/>	<input type="text"/>	/	<input type="text"/>	<input type="text"/>					

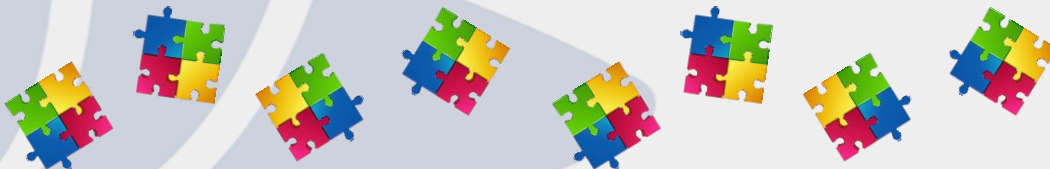
November 2017



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- 
- 
- 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 what ever 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!!!



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What General Practices Need To Do??



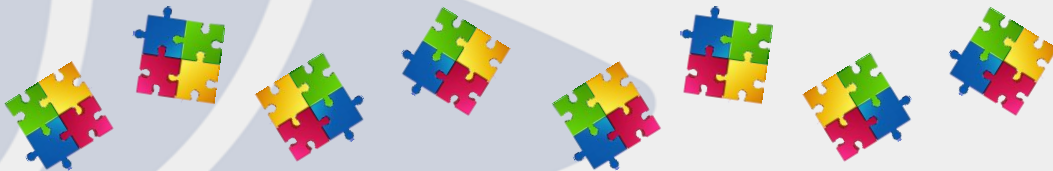
- If any concerns about what vaccines are due - contact PHU to find out what has been given/what is due
- Parents do not need to provide a letter for the child to receive the vaccinations
- Please also check AIR prior to vaccinating - HPV doses now on AIR (1st Nov no more HPV register!)
- If parents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



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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



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- 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>

**Human papillomavirus
vaccines: WHO position
paper, May 2017**

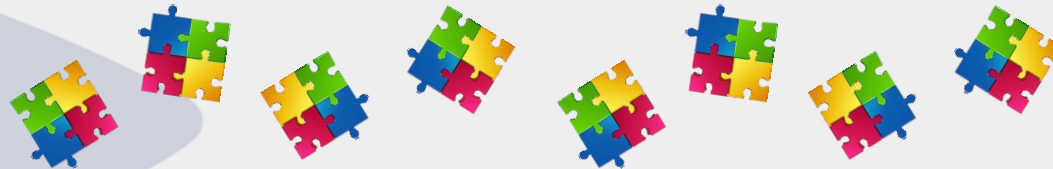


**World Health
Organization**

Organisation mondiale de la Santé

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)



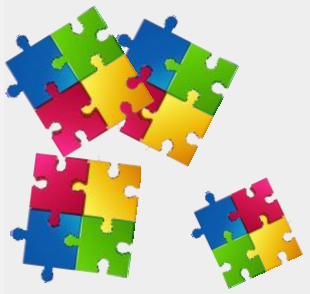
Take Home Notes...



- 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



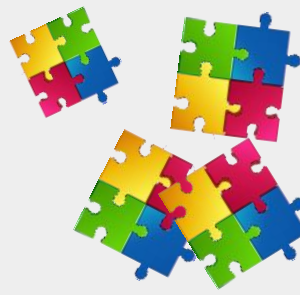
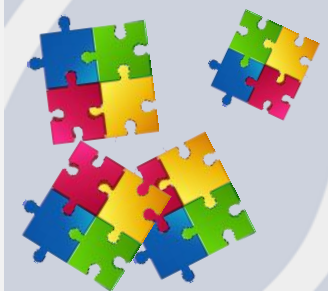
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Australian Immunisation Register (AIR)



- 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
www.humanservices.gov.au/organisations/health-professionals/services/medicare/hpos
- 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

Health Professional Online Services (HPOS) is a fast and secure way for health professionals and administrators to do business with us.

on this page

[Log on](#)

[Register](#)

[Services](#)

[Resources](#)



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MENU

Health Professional
Online Services

Main > Identify Individual > Individual Details

Australian Immunisation Register

Claims

Identify Individual

Identify Individual

Individual Details

Record Encounter

Update Encounter

Provider

Reports

Secure Email

Lockup

(DOB: 23 Dec 2010)

Medicare No

Address

Current Indigenous Status

Neither Aboriginal nor Torres Strait Island origin



If any of the personal details that appear for this individual are incorrect, please request that the appropriate person contacts the Department of Human Services on 132 011.

Planned Catch up

Planned Catch up for Overdue Vaccines ☐

If you have organised to commence the individual on a catch up schedule for any overdue vaccines you were unable to administer today, tick this box. Please follow up to ensure they return for the planned vaccination as only one catch up schedule can ever be recorded per individual. This section may be used to support testing of natural immunity or when ordering in additional required vaccines.

You should **not** tick the box if:

- you have vaccinated the individual and they are no longer overdue for any vaccines, **or**
- you feel the parent/guardian does not intend to vaccinate the individual

Save

Cancel

Due Details



Disease	Dose	Due Date ^
Diphtheria	1	23 Feb 2011
Hepatitis B	1	
Pertussis	1	
Polio	1	
Tetanus	1	

naven
istrict

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...

The screenshot shows the 'Record Encounter' form. On the left is a sidebar with navigation links: 'Record Encounter' (selected), 'Update Encounter', 'Provider', 'Reports', 'Secure Email', and 'Lockup'. The main form area is titled 'Record Encounter' and contains a 'New Encounter' section. This section includes fields for 'Who performed this Immunisation Encounter' (a dropdown menu), 'Schedule' (a dropdown menu with 'Other' selected), and 'Date of Service' (a date picker). Below these is an 'Episode Details' section with fields for 'Vaccine/Brand' (a text input), 'Batch Number' (a text input), and 'Dose' (a dropdown menu). There are 'Add' and 'Cancel' buttons at the bottom right of the form.

The screenshot shows the 'Inbox' and 'Current email' view. The 'Inbox' section at the top shows a list of emails with columns for 'From' and 'Date'. The selected email is from 'AIRHELP' dated '28.08.2018' with the subject 'Re: In error'. Below the inbox is the 'Current email' section, which displays the email content. The email is from 'AIRHELP' and is about a 'dose change'. The text of the email is: 'Hi, Can you please change the dose of DTPa given on 13/11/2001 from dose 3 to dose 4 for [redacted]'.

Dose numbers

- 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

06 Apr 2012	Generic HIB	3	Has been clarified by provider	100
06 Apr 2012	Generic Pneumococcal	1	Accepted	
06 Apr 2012	Oral Polio	4	Accepted	
05 May 2012	Generic Pneumococcal	2	Accepted	
05 May 2012	Generic Rotavirus	2	Accepted	
23 Jun 2012	Generic Hepatitis B	2	Accepted	
23 Jun 2012	Generic Pneumococcal	3	Accepted	
27 Dec 2012	Generic Hepatitis A	1	Accepted	
27 Dec 2012	Generic MMR	1	Accepted	
27 Dec 2012	Generic Varicella-Zoster	1	Duplicate antigen dose	
14 Jun 2013	Generic DTPa	3	Has been clarified by provider	102
14 Jun 2013	Generic HIB	4	Accepted	
14 Jun 2013	Generic Pneumococcal	4	Accepted	
14 Jun 2013	Oral Polio	4	Has been clarified by provider	102
02 Oct 2013	Generic Meningococcal C	1	Accepted	
02 Oct 2013	H-B-Vax II	3	Accepted	
01 Apr 2016	Generic DTPa	5	Accepted	
01 Apr 2016	MMR II	2	Accepted	

10

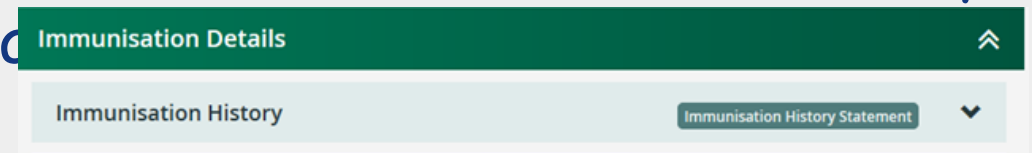
25

50

100

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 a [myGov](#) account through [myGov](#)
- Up to date if received all vaccines required (on the NIP) up to 5 years of age



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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
- Document Translator Interpreter Service - offer document translation to recent arrivals in Australia <https://translating.dss.gov.au/en>
- 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

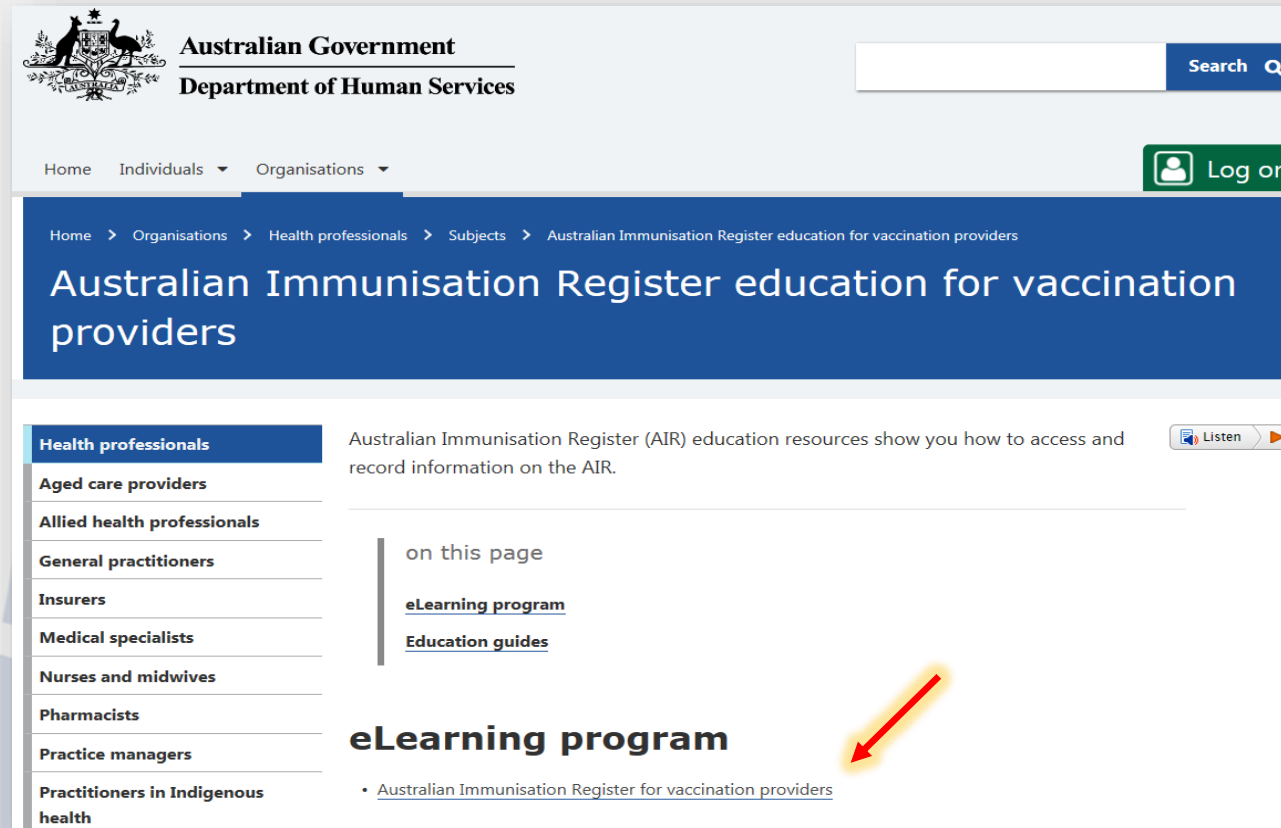


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Further information/education

<https://www.humanservices.gov.au/organisations/health-professionals/subjects/australian-immunisation-register-education-vaccination-providers>



The screenshot displays the Australian Government Department of Human Services website. The header includes the Australian Government logo, the Department of Human Services name, a search bar, and a 'Log on' button. The breadcrumb trail reads: Home > Organisations > Health professionals > Subjects > Australian Immunisation Register education for vaccination providers. The main heading is 'Australian Immunisation Register education for vaccination providers'. A sidebar on the left lists various health professional categories, with 'Health professionals' selected. The main content area features a description of the Australian Immunisation Register (AIR) education resources, a 'Listen' button, and a section titled 'on this page' containing links to the 'eLearning program' and 'Education guides'. The 'eLearning program' section lists a resource titled 'Australian Immunisation Register for vaccination providers', which is highlighted by a red arrow.

Australian Government
Department of Human Services

Search

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Australian Immunisation Register education for vaccination providers

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Australian Immunisation Register (AIR) education resources show you how to access and record information on the AIR.

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