

# Immunisation Toolkit for Immunisation Providers

2024



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SHPN (HP NSW) 240089 ISBN: 978-1-76023-786-8

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May 2024

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### What the kit contains

This Toolkit has been developed to support immunisation providers to implement the NSW Immunisation Program. The Toolkit includes information about:

- the NSW Immunisation Program
- the NSW Immunisation schedule and recent changes
- reporting to the Australian Immunisation Register (AIR)
- · vaccine recommendations
- · cold chain management
- · vaccine safety and adverse event reporting
- vaccine ordering and management.

While over 90% of all childhood vaccinations in NSW are given in general practices, all health care professionals should take every opportunity to vaccinate children, adolescents and adults on time and at the recommended intervals to ensure they are protected against serious vaccine preventable diseases. Health workers play a critical role in shaping attitudes towards immunisation and maintaining high vaccination coverage. It is essential that immunisation providers stay up to date with current issues in immunisation to provide accurate information to patients and discuss the risks and benefits of vaccination during the consent process.



# 1 The NSW Immunisation Program

The NSW Immunisation Program provides the community with protection against vaccine preventable diseases through initiatives targeting infants, adolescents, adults, and at-risk persons in line with the National Immunisation Program.

### 1.1 Roles and Responsibilities

Organisation/s	Responsibilities
NSW Ministry of Health	Manages the NSW Immunisation Program, develops strategy and policy and provides surveillance and analysis of vaccine preventable diseases.
	Website: www.health.nsw.gov.au/immunisation
Public Health Units	Assists with state and National Immunisation Program (NIP) funded vaccine management queries including breaches in cold chain, adverse events following immunisation, the school-based vaccination program, and requests for immunisation related information and advice.
	Phone: 1300 066 055 Website: www.health.nsw.gov.au/Infectious/Pages/phus.aspx
National Centre for Immunisation Research and Surveillance	Provides policy and planning advice, supports initiatives including disease surveillance, vaccine coverage and immunisation adverse events. NCIRS also conducts an extensive program of clinical trials and epidemiologic research funded by diverse sources.
(NCIRS)	Website: www.ncirs.org.au
State Vaccine Centre	Stores and distributes vaccines available under the National Immunisation Program (NIP) to immunisation providers in NSW.
	Phone: 1300 656 132 Website: https://nsw.tollhealthcare.com
Primary Health Networks (NSW)	Not for profit organisation funded by the Australian Government that provides direct support to general practices and allied health providers in NSW across a range of issues including to support the quality of vaccination services in general practice.
	If you are not sure which Primary Health Network, you belong to:
	Email: phn@health.gov.au Website: https://www.health.gov.au/resources/publications/primary-health-networks-phns-national-map-of-phn-boundaries?language=en

### 1.2 Key Immunisation Resources

Resource	Description
NSW Health Immunisation	Up to date immunisation information and resources, alerts and advice about the NSW Immunisation Program.
webpage	Website: www.health.nsw.gov.au/immunisation
The NSW Immunisation Strategy 2024–2028	The NSW Immunisation Strategy 2024 – 2028 provides a framework for NSW Health and its partners to improve vaccine access and uptake and reduce the impact of vaccine preventable diseases (VPDs) on individuals and communities in NSW.
	Website: https://www.health.nsw.gov.au/immunisation/Pages/strategy.aspx
The Australian Immunisation Handbook	A comprehensive guide developed by the Australian Technical Advisory Group on Immunisation (ATAGI) providing clinical advice for health professionals on the safest and most effective use of vaccines in their practice.
(digital version or phone app)	Website: <a href="https://immunisationhandbook.health.gov.au">https://immunisationhandbook.health.gov.au</a> Handbook App: The mobile application is known as the Australian Immunisation Handbook App (or the Handbook App for short) and can be downloaded from the Apple App Store or Google Play Store.
National Vaccine Storage Guidelines	Outlines the basic principles for safe and effective vaccine management within cold chain (+2° to +8° C).
'Strive for 5' (3rd edition)	<b>Website:</b> https://www.health.gov.au/resources/publications/national-vaccinestorage-guidelines-strive-for-5
NSW Cold Chain	Practical guidance on mandatory vaccine storage and cold chain requirements in NSW.
Toolkit	<b>Website:</b> https://www.health.nsw.gov.au/immunisation/Pages/cold-chain-management.aspx
Childhood vaccinations	Website: www.health.nsw.gov.au/immunisation/app/pages/default.aspx

### 1.3 Useful Links

Resource	Description and contact details	
Australian	Phone: 1800 653 809	
Immunisation Register (AIR)	Website: https://www.servicesaustralia.gov.au/australian-immunisation-register	
Better Health Centre (for ordering publications)	Immunisation resources including the NSW Health cold chain labels can be ordered from the Better Health Centre (BHC) via email. A list of resources that can be ordered from the BHC can be found at the website below.	
	Phone: (02) 9816 0452 Website: https://www.health.nsw.gov.au/publications/Pages/order-a-pub.aspx Email: nslhd-bhc@health.nsw.gov.au	
National Immunisation Catch-up	The National Immunisation Catch-up Calculator (NICC V1.0) developed by the Australian Government Department of Health assists in the development of a vaccination catch-up schedule when vaccine doses are delayed or missed.	
Calculator (NICC)	Website: https://immunisationhandbook.health.gov.au/catch-up-calculator/how-to-use-the-national-immunisation-catch-up-calculator-nicc	
Document translation	Free document translation service from the Department of Home Affairs	
Services	Phone: 1800 962 100 Website: https://translating.homeaffairs.gov.au/en	

Resource	Description and contact details
National Adverse Events Following Immunisation (AEFI)	All AEFI notifications are required to be reported to the Therapeutic Goods Administration (TGA). In NSW, suspected AEFIs should be reported to your local public health unit using the national AEFI reporting form.
reporting form	Website: the form is available at the following link www.health.nsw.gov.au/immunisation/Pages/aefi.aspx
National Centre for Immunisation Research and Surveillance (NCIRS) MMR Catch-Up Decision tool	Website: http://ncirs.org.au/measles-vaccination-catch-up-guide

Resource	Contact Details
NSW Immunisation Schedule	<b>Website:</b> https://www.health.nsw.gov.au/immunisation/Publications/nsw-immunisation-schedule.pdf
NSW Immunisation Specialist Service (NSWISS)	This service provides specialised immunisation advice to clinicians and families which includes an email enquiry service, a drop-in immunisation clinic at Westmead Children's Hospital, an immunisation specialist clinic and telehealth consultations.
	Email (for immunisation providers only): <u>SCHN-NSWISS@health.nsw.gov.au</u>
NSW Vaccine Centre	Stores and distributes vaccines available under the National Immunisation Program (NIP) to immunisation providers in NSW.
	Phone: 1300 656 132 Fax: 1800 041 528 Website: https://nsw.tollhealthcare.com
PHN Immunisation Support Program	Website: www.phnimmunise.org.au
Pneumococcal Vaccination Decision Tool	Website: www.immunisationcoalition.org.au/resources/pneumococcal-vaccination-tool
Sharing Knowledge	Credible resources for parents and providers about immunisations.
About Immunisation (SKAI)	<b>Website:</b> https://www.ncirs.org.au/health-professionals/skai-supporting-health-professionals
SKAI Online Education Module	Provides information and resources to assist healthcare professionals in responding to parents/carers concerns and questions about immunisation.
	Website: https://skai.org.au/healthcare-professionals
Spleen Australia Vaccine Decision Tool	Provides information and resources to assist healthcare professionals in responding to parents/carers concerns and questions about immunisation.  Website: https://spleen.org.au/clinicians/
	Website. https://spicedi.org.au/ctimicians/

### 2 The NSW Immunisation Schedule

The National Immunisation Program¹ (NIP), underpinned by the National Immunisation Strategy (2019–2024)² is funded by the Australian Government and implemented by state and territory departments of health. The National Immunisation Program funds many of the vaccines recommended in childhood and throughout the life course for medically at-risk groups. State and territory health departments also fund some additional vaccines.

The National Immunisation Program (NIP) Schedule is a series of recommended vaccines by age group and/or medical risk. The schedule is developed by the Australian Government Department of Health and Aged Care in consultation with the Australian Technical Advisory Group on Immunisation (ATAGI).

The NIP Schedule covers 18 diseases for infants, children, young adults, vulnerable adults (such as Aboriginal and Torres Strait Islander people, and pregnant women) and older people. Vaccines on the NIP schedule are made available free of charge to Australians in those age groups and risk groups.

The <u>NSW Immunisation Schedule</u><sup>3</sup> is a schedule of vaccines provided free under the National Immunisation Program. Providers in NSW should refer to the <u>NSW Immunisation Schedule</u> to ensure any additional vaccines funded in NSW are administered to eligible patients.

Other vaccines are also recommended but they are not funded through the national, state or territory immunisation programs. For example, vaccines for people who have an occupational risk of a disease, travellers or people with medical conditions that puts them at increased risk of contracting a vaccine preventable disease. These vaccines are available for purchase privately on prescription if required.

Immunisation providers should refer to the <u>Australian Immunisation Handbook</u><sup>4</sup> (digital version or phone app) for comprehensive information about all vaccines approved for use in Australia, including routine vaccination of infants, young children, adolescents and older people; vaccination for special-risk groups (e.g. Aboriginal and Torres Strait Islander people); vaccination for international travellers; and groups with special vaccination requirements (e.g. pregnant women and people who are immunocompromised).

### 2.1 Additional Vaccination for People with Medical Risk Conditions

Immunisation providers are encouraged to refer to the Australian Immunisation Handbook (digital version or phone app) for the most up to date vaccine recommendation particularly for medically at risk groups. For further information refer to the immunisation history tables at www.ncirs.org.au/health-professionals/history-immunisation-australia<sup>5</sup>

Vaccine	Group	Recommendations
Haemophilus influenzae type b (Hib): Act-HIB	All people ≥ 5 years of age with asplenia or hyposplenia	All people greater than 5 years with asplenia or hyposplenia that were incompletely vaccinated or not vaccinated during childhood are recommended and funded to receive one dose of Act-HIB.
Influenza	All children 6 months <5 years	Discuss influenza vaccination with other present family members. For vaccine brands and eligibility see: Annual seasonal influenza vaccination information for
Vaccine	Aboriginal people ≥ 6 months	
	People with at risk conditions ≥6 months immunisation providers: https://wau/immunisation/Pages/flu.aspx	immunisation providers: https://www.health.nsw.gov.au/immunisation/Pages/flu.aspx
All Adults ≥65 years		
	All Pregnant women	

Vaccine	Group	Recommendations
Meningococcal ACWY: Nimenrix and MenQuadfi	People with specified risk conditions including:  • asplenia and hyposplenia  • complement deficiency	The Nimenrix vaccine is funded for children 12 months of age and people with specified risk conditions. The MedQuadfi vaccine is funded for adolescents aged 14 to 16 years (school vaccination program) and adolescents aged 15 to 19 years who require ongoing catch up.
<b>~</b>	treatment with Eculizumab	The number of doses required is based on age. Refer to the online <u>Australian Immunisation Handbook</u> <sup>6</sup> for dosing requirements.
Meningococcal B: Bexsero	All Aboriginal children < 2 years of age	Recommended and funded to receive three doses of Bexsero at 6 weeks, 4 months and 12 months of age.
		The number of doses required is based on age. Refer to the online Australian Immunisation Handbook.
		An additional dose for Aboriginal children < 2 years of age with certain at-risk conditions may be required. Refer to the online Australian Immunisation Handbook. <sup>6</sup>
Pneumococcal: Prevenar 13 (13vPCV) and	All ages	The list of conditions associated with an increased risk of invasive pneumococcal disease has been consolidated into one list, i.e. there are no longer category A and category B lists. The list of conditions vaccination is recommended for is available in the
Pneumovax 23 (23vPPV)		online Australian Immunisation Handbook. <sup>7</sup> The number of lifetime doses of 23vPPV is limited to 2 doses.
		In addition to the standard childhood schedule, children with an at-risk condition are recommended to receive additional pneumococcal vaccines:
		<ul> <li>an additional dose of 13vPCV at 6 Months (or at diagnosis if diagnosed 6–11 months)</li> </ul>
		<ul><li>23vPPV at 4 years</li><li>23vPPV at least 5 years later.</li></ul>
	Adults diagnosed with an at-risk condition > 12 months of age	People diagnosed with an at-risk condition are recommended to receive:
		<ul><li>13vPCV: at diagnosis</li><li>23vPPV, 12 months after a 13vPCV</li><li>23vPPV, at least 5 years later.</li></ul>
	Aboriginal people aged ≥ 50 years without an at-risk condition	Recommended and funded to receive:  • 13vPCV ≥ 50 years of age  • 23vPPV 2-12 months later  • 23vPPV at least 5 years later.  If someone has previously received a dose of 23vPPV,
		wait 12 months before giving 13vPCV.  Give an additional dose of 23vPPV: 12 months after Prevenar 13 or 5 years after the previous dose of 23vPPV — whichever is later.
		The number of doses of 23vPPV required should be calculated with consideration that 23vPPV is now limited to 2 lifetime doses.

Vaccine	Group	Recommendations
	Non-Aboriginal adults aged >70 years without an at-risk condition	Recommended and funded to receive a single dose of 13vPCV >70 years of age.
		This is an ongoing program with no time limited catch-up.
		If someone has received a 23vPPV in the last 12 months, allow 12 months before a 13vPCV is administered.
Pertussis vaccine	Pregnant women	Single dose recommended each pregnancy. Usually given to pregnant women at 28 weeks (can be given
Boostrix® or Adacel®		anytime between 20-32 weeks) of each pregnancy. The Pertussis vaccine should be given as early as possible (from 20 weeks) to women who have been identified as being at high risk of early delivery.
Zoster (herpes zoster) vaccine	People aged 65 years and over	Two doses given by intramuscular injection, 2 to 6 months apart.
Shingrix	Aboriginal people aged 50 years and over	For most people the Shingrix vaccine is given 2 to 6
vaccine®	Immunocompromised people aged 18 years and over with certain medical conditions:	months apart. For immunocompromised people, the two doses are given 1 to 2 months apart.
	<ul> <li>haemopoietic stem cell transplant</li> </ul>	
	• solid organ transplant	
	<ul> <li>haematological malignancy</li> </ul>	
	• advanced or untreated HIV.	

# 3 Recording Vaccinations

### 3.1 The Blue Book

NSW Health provides the parents of each newborn with a Personal Health Record ("The Blue Book") that includes background information on immunisation and a table to record the vaccinations given to the child.

The Blue Book is a useful reference for immunisation providers to confirm that children are up to date with their vaccinations or to arrange a catch-up vaccination schedule, if needed. The person's immunisation history should also be checked on the Australian Immunisation Register (AIR) to ensure all vaccinations have been provided to AIR.

Additional copies of The Blue Book are available from the Better Health Centre on 9887 5450 or nslhd-bhc@health.nsw.gov.au

# 3.2 The Australian Immunisation Register

The Australian Immunisation Register (AIR) is a national register for recording vaccines given to people of all ages who live in Australia. The AIR commenced on 1 January 1996 under its previous name of Australian Childhood Immunisation Register (ACIR). The Services Australia platform was expanded to a whole-of-life register in 2016 and the upload of vaccinations administered became mandatory for all immunisation providers. The AIR provides detailed reports on immunisation coverage, overdue immunisations, and personal immunisation history statements.

The AIR can be used as a tool to track immunisation uptake levels, identify low coverage areas, and follow up overdue children. The accuracy of the register is dependent upon immunisation providers reporting data to the AIR in a timely manner.

An eLearning module on using AIR is available for vaccination providers at: <a href="https://hpe.servicesaustralia.gov.au/elearning\_AIR.html">https://hpe.servicesaustralia.gov.au/elearning\_AIR.html</a>

### 3.3 Accessing the AIR

Medical practitioners, midwives and nurse practitioners with a Medicare provider number are automatically recognised as an immunisation provider and authorised to record or access immunisation data on the AIR.

You can find further information on obtaining access to AIR at <u>Australian Immunisation Register for</u> health professionals.<sup>8</sup>

Providers must obtain electronic access to AIR to review their patient's immunisation histories, record immunisations given overseas and record immunisation encounters for immunisations provided in Australia.

### 3.4 Registering Patients on the AIR

People who are enroled in Medicare are automatically registered on the AIR. People who are not eligible to enrol in Medicare are registered on the AIR when a recognised vaccination provider records immunisation details for them.

To learn how to record overseas immunisations on the AIR refer to the following education module: AIRM05-Overseas immunisations

# 3.5 Reporting Immunisation Encounters to the AIR

AIR relies on immunisation providers to submit accurate and timely data to monitor vaccine coverage in Australia and inform public health management and research of vaccine preventable diseases. Patients also rely on immunisation providers to report accurate and timely data to the AIR to access personal immunisation records, enrol in childcare and school and receive family assistance payments on time.

Reporting COVID-19 and National Immunisation Program (NIP) vaccines to the AIR is mandatory under the Australian Immunisation Register Act. All vaccines should be reported within 24 hours, and no more than 10 working days after the vaccination encounter.

There are two ways to record information on the AIR:

- 1. Use your practice management software (PMS) or pharmacy software. The details you enter will be transferred from your software to the AIR.
- Make sure you are using the latest version of your software, so you have up to date vaccine codes (contact your software vendor for further information or your primary health network for advice).
- Ensure you select the correct vaccine and dose number that has been given to the patient.
- 2. Use the AIR site to manually record immunisation encounters by using the Identify Individual and Record Encounter functions.
- Refer to the Australian Immunisation Register (AIR) education resources to help you access and record information on the AIR at: <u>Australian</u> Immunisation Register (AIR)<sup>9</sup>

The PHN Support Program has developed a resource 'Enhancing data quality of vaccination encounters recorded in practice software and on AIR – tips and tricks'<sup>10</sup> to help immunisation providers minimise and identify errors in vaccination recording to ensure the information held on patients' records and on the Australian Immunisation Register (AIR) is accurate.

### 3.6 AIR History Statements

An immunisation history statement issued by the AIR is required by childcare services and schools as evidence of immunisation status for enrolment under the NSW Public Health Act 2010.<sup>11</sup>

Parents can obtain an Immunisation History Statement for children aged less than 14 years by:

- using their Medicare online account through "myGov"<sup>11</sup>
- using the "Medicare Express Plus App"<sup>13</sup>
- asking their vaccination provider to print it (including non-Medicare eligible patients with an immunisation history in AIR)
- calling the AIR General Enquiries Line on 1800 653 809
- for non-Medicare eligible patients, visiting a Medicare office.

For privacy reasons, anyone aged over 14 years can access their own immunisation history statement. Parents with children over 14 years, must obtain consent from the child before the Immunisation History Statement can be released to the parent. Consent must be obtained each time a request for an Immunisation History Statement is made.

# 3.7 AIR Immunisation Coverage Rates

Australian Immunisation Register (AIR) coverage rates are provided to the NSW Ministry of Health quarterly. The data (by Local Health District) are available on the NSW Health website <a href="www.health.nsw.gov.au/immunisation">www.health.nsw.gov.au/immunisation</a>

### Did you know?

The AIR has reports that can help you identify children who are overdue for immunisations. Contact your local Primary Health Network if you need assistance to access these reports.

### 3.8 Childcare Enrolment

All children presenting for enrolment with a childcare provider are required to provide proof of vaccination status on enrolment.

Documentation that can be provided by the parents/ carers are:

- AIR Immunisation History Statement<sup>14</sup> demonstrating that they are fully immunised.
- AIR Immunisation Medical Exemption Form<sup>15</sup>
   noting that the child has a medical reason not to
   be vaccinated including natural immunity.
- <u>AIR Immunisation History Form</u><sup>16</sup> noting that the child is on a recognised catch-up schedule.

Please note that children unvaccinated due to parental conscientious objection to vaccination cannot be enrolled in childcare.

The meningococcal B vaccine is not included in the assessment of family assistance payments. Children should not be excluded from childcare if the meningococcal B vaccine has not been received.

More information regarding the requirements for enrolment in childcare can be found on the NSW Health website:

https://www.health.nsw.gov.au/immunisation/Pages/childcare\_qa.aspx

# 3.9 Primary and Secondary School Enrolment

Since April 2018 <u>Immunisation requirements</u><sup>17</sup> for enrolment have been extended to primary and secondary schools and require that school principals:

- seek an Immunisation History Statement for each enroled child prior to enrolment. If the parent of a school child cannot produce the immunisation record, the student may still be enroled but should be recorded as unvaccinated in the school's immunisation register.
- record each child's immunisation status in a register and retain copies of approved immunisation certificates for a period of 3 years after the child has ceased to attend the school.
- provide a copy of a child's immunisation certificate to another school that the child has transferred to (upon request).
- notify the public health unit if an enroled child has a vaccine preventable disease, or if they reasonably believe that an unimmunised enroled child has come into contact with someone who has a vaccine preventable disease.
- exclude unimmunised children at risk of contracting a disease from attending school on the direction of a public health officer.

# 3.10 Recording Immunisation Encounters

Immunisation encounters will be recorded in the patient's medical record and then the information is transferred to AIR (refer to Section 3.5 Reporting Immunisation Encounters to the AIR).

For children the encounter is also recorded in the child's blue book (refer to section 3.1) including vaccine brand name, batch number, dose number, date and time of vaccination, site of administration, name of the person who provided the vaccination and the date the next vaccination is due.

Health care worker immunisations should be recorded on the AIR and additionally on the NSW Health Vaccination Record Card for Health Care Workers and Students (if requested).

Vaccination Record Card for Health Care Workers and Students and a Vaccine Administration Record Card for Adults – available from the Better Health Centre publications warehouse (refer to Section 1.2. Useful Links).

Parents of children from overseas should consult their local doctor to have their child's immunisation status reviewed. The doctor can also administer any vaccinations that are required and transfer the information to the AIR (refer to Section 3.4 Registering Patients on the AIR).

# 4 Vaccination Programs

### 4.1 Childhood Vaccines

Childhood vaccines are administered as per the schedule of vaccines recommended by the NSW Immunisation Schedule.<sup>3</sup>

### 4.2 Adolescent Vaccines

NSW Health works in partnership with education authorities to offer the vaccines recommended and funded for adolescents under the National Immunisation Program in a school-based vaccination program.

The program is implemented in two settings:

- in secondary schools<sup>18</sup> students are offered:
  - diphtheria-tetanus-pertussis (dTpa) in Year 7
  - human papillomavirus (HPV) in Year 7
  - Meningococcal ACWY in Year 10
- in Intensive English Centres (IECs)<sup>19</sup> where catch-up vaccination is offered to newly-arrived migrants transitioning to mainstream schooling, including human papillomavirus, hepatitis B, varicella, polio, diphtheria-tetanus-pertussis, meningococcal ACWY and measles-mumpsrubella.

Students who miss vaccine doses in the school-based vaccination program are offered these vaccines as catch-up doses at subsequent visits or are referred to their local doctor or pharmacist immuniser if they miss the school clinics.

Students who are home schooled or attend distance education should complete their immunisations with their doctor, pharmacist immuniser or other immunisation provider.

Records for vaccines given in schools are uploaded to the AIR and linked to existing childhood records to provide a complete vaccination history.

GPs and pharmacists are encouraged to opportunistically check the vaccination status of adolescents as part of routine clinical practice.

Before administering any school-based vaccinations to adolescents presenting to your practice/pharmacy, check their AIR record for previously administered doses.

### Tip

Check the AIR before giving any vaccines offered in the school-based program to avoid double dosing. If it is not on AIR and you suspect the dose is missing, contact your local public health unit on 1300 066 055.

### 4.3 Catch-up Program

The National Immunisation Program provides free catch-up vaccines for eligible individuals:

- · under 20 years of age
- people aged 25 years and under who have missed human papillomavirus (HPV) vaccination
- · refugees and humanitarian entrants of any age.

For further information about free catch-up immunisations visit the Australian Government Department of Health <u>Catch-up immunisations</u> webpage.<sup>20</sup>

### 4.4 Influenza Vaccination Program

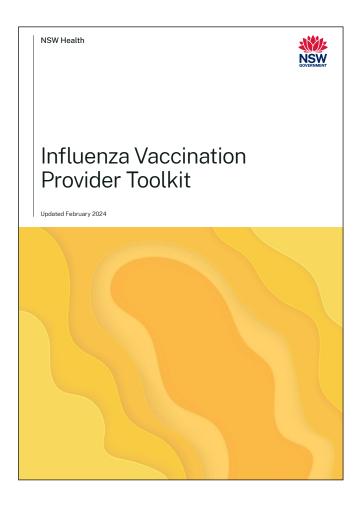
Annual seasonal influenza vaccination is recommended for any person aged 6 months and over who wishes to reduce the likelihood of becoming ill with influenza.

The annual influenza vaccine is available free of charge under the National Immunisation Program from April/May each year to:

- all children aged 6 months to less than 5 years
- pregnant women can be given at any stage of pregnancy
- · Aboriginal people 6 months and older
- people aged 65 years and over should receive the enhanced vaccine specially formulated to produce a higher immune response in this group
- persons who have identified medical risk conditions including:
  - cardiac disease, including cyanotic congenital heart disease, coronary artery disease and congestive heart failure
  - chronic respiratory conditions, including suppurative lung disease, chronic obstructive pulmonary disease and severe asthma, other chronic illnesses requiring regular medical follow up or hospitalisation in the previous year, including diabetes mellitus, chronic metabolic diseases, chronic renal failure, and haemoglobinopathies
  - chronic neurological conditions that impact on respiratory function, including multiple sclerosis, spinal cord injuries, and seizure disorders
  - impaired immunity, including HIV, malignancy and chronic steroid use
  - children aged 6 months to 10 years on long term aspirin therapy.

A number of resources are available on the NSW Health website — including an <u>influenza vaccination</u> <u>provider toolkit</u>.<sup>21</sup> This kit is updated each influenza season with advice to assist immunisation providers to manage roll-out and implementation of their flu vaccination program. The toolkit contains advice about influenza vaccine composition, vaccine ordering and delivery timeframes.

To assist in program planning, refer to: https://www.health.nsw.gov.au/immunisation/Pages/flu.aspx



# 5 Vaccines for Specific Groups

The Australian Government funds free vaccines for a range of specific groups at high risk from vaccine preventable diseases, including Aboriginal and Torres Strait Islander populations, children, adolescents, young adults, and older Australians. This is to protect the most vulnerable from vaccine preventable diseases.

# 5.1 Aboriginal and Torres Strait Islander Populations

Aboriginal and Torres Strait Islander people have a higher burden of disease overall compared to non-Aboriginal and Torres Strait Islander people, including vaccine preventable diseases. Data from the Australian Immunisation Register (AIR) indicate that Aboriginal children have historically been vaccinated at lower rates, and experienced greater delays in vaccination, than non-Aboriginal children. As a result, Aboriginal children are at increased risk of morbidity and mortality associated with vaccine preventable diseases.

### Did you know?

Due to the success of the AIHW program in NSW, vaccination coverage at 5 years of age in 2023 was higher in Aboriginal children (96.4%) compared to non-Aboriginal children (93.8%). Let's keep working together to ensure the gap remains closed.

The impacts of these gaps in vaccine uptake and timeliness are seen in notifiable diseases data where Aboriginal children have higher rates of vaccine preventable conditions such as *Haemophilus influenzae* type b, invasive meningococcal disease, whooping cough, invasive pneumococcal disease, and rotavirus infection.

Note: The meningococcal B vaccine is not included in the assessment of family assistance payments. Children should not be excluded from childcare if the meningococcal B vaccine has not been received.

NSW Health has implemented a number of strategies to improve immunisation coverage for Aboriginal and Torres Strait Islander people following the introduction of the NSW Aboriginal Immunisation Health Worker (AIHW) Program.

GPs are encouraged to ask all patients "Are you of Aboriginal or Torres Strait Islander origin?" as part of routine clinical practice to ensure they receive appropriate primary health care services. The RACGP has a range of resources (refer to useful links below) to ensure your service provides culturally safe primary health care.

### Useful links:

- RACGP Guidelines: Identification of Aboriginal and Torres Strait Islander people in Australian general practice <a href="https://www.racgp.org.au/">https://www.racgp.org.au/</a> the-racgp/faculties/aboriginal-and-torres-straitislander-health/guides<sup>22</sup>
- RACGP webinar series: Providing effective, culturally safe primary health care. www.racgp.org.au/cultural-safety

Please refer to the digital version of the <u>Australian</u> <u>Immunisation Handbook</u><sup>23</sup> for specific requirements for patients in these at-risk groups.

### 5.2 Asplenic Patients

Patients who have been identified as being asplenic or who may be scheduled to have a splenectomy have specific requirements for vaccination. People with functional or anatomical asplenia should be up to date with all routinely recommended vaccines and are also recommended to receive the following vaccines which are funded under the National Immunisation Program:

- Haemophilus influenzae type b (Hib) vaccine
- influenza vaccine
- meningococcal vaccine
- · pneumococcal vaccine

Specific vaccine recommendations for people with elective or unplanned asplenia are available in the Australian Immunisation Handbook<sup>24</sup> (digital version). Spleen Australia<sup>25</sup> has also developed 'medical recommendations for vaccines recommended for adults and children with asplenia' that take into consideration an individual's previous vaccination history. The recommendations can be accessed at the Spleen Australia webpage.

Vaccines recommended for people with asplenia in the Australian Immunisation Handbook are funded under the National Immunisation Program.

# 5.3 Individuals with Medical Risk Factors and/or Immunocompromised

Individuals with certain medical conditions and/or immunocompromising conditions that place them at increased risk of contracting disease or who are more likely to experience severe morbidity or mortality may have additional immunisation requirements.

Refer to the digital version of the Australian Immunisation Handbook for specific advice on Vaccination for people who are immunocompromised.<sup>26</sup>

### 5.4 People at Occupational Risk

Certain occupations place individuals at greater risk of exposure to vaccine preventable diseases. You should consider the work activities, rather than the job title, for each person to ensure that they are appropriately protected. You should consider the occupational needs of people employed in the following roles:

- healthcare workers
- people who work in childhood education and care
- carers
- emergency and essential services workers
- · laboratory workers
- · people who work with animals
- other.

Refer to the digital version of the Australian Immunisation Handbook for specific advice on Vaccination for people at occupational risk.<sup>27</sup>

### 5.5 Preterm Infants

Preterm (premature) infants (according to The Australian Immunisation Handbook) are those babies born at less than 37 weeks gestation. Extremely preterm infants are those born at less than 28 weeks gestation.<sup>28</sup>

Prematurity can increase the child's risk of vaccine-preventable diseases. Infants identified as preterm should receive vaccines according to the recommended schedule at their chronological age, without correction for prematurity. Consideration should be given to the child's birth weight, the precise gestational age, and the presence of any chronic medical condition(s) before giving vaccines.

Specific requirements for hepatitis B and pneumococcal vaccines may be necessary.

Refer to the digital version of the Australian Immunisation Handbook for specific advice on Vaccination for preterm infants.<sup>28</sup>

# 5.6 Women Who are Planning Pregnancy and Pregnant Women

Women planning pregnancy should have their vaccination needs assessed as part of any preconception health check. Consideration should be given for the following:

- hepatitis B
- measles, mumps, rubella
- varicella

It is also important to ask women of child-bearing age who present for vaccination about the possibility of pregnancy as part of routine prevaccination screening. This is so that they are not given any vaccines that are not recommended in pregnancy. Advise women who receive live vaccines to avoid falling pregnant pregnancy within 28 days of vaccination.

Pregnant women are routinely recommended to receive free (NIP/government funded):

- influenza vaccine: can be administered at any time during pregnancy
- pertussis-containing vaccine: usually given to pregnant women at 28 weeks but can be given anytime between 20–32 weeks of each pregnancy. The vaccine should be given as early as possible (from 20 weeks) to women who are identified as being at high risk of preterm birth, or who are unlikely to attend a 28-week antenatal appointment.

Refer to the digital version of the Australian Immunisation Handbook for specific advice on Vaccination for women who are planning pregnancy, pregnant or breastfeeding.<sup>29</sup>

# 5.7 Vaccination for People with a Disability

Some people require additional support to be vaccinated. Adjustments should be made where necessary to ensure everyone has access to vaccination. For people with disability, this could include:

- providing a low sensory or private space, such as a private room or location away from the general vaccination area
- offering a longer appointment to ensure adequate time to provide information and care
- identifying if communication aids and supports are needed and use these.

A helpful link to more resources is available on the NCIRS webpage: <u>Immunisation for individuals with additional needs</u>—Practical guide.<sup>30</sup>

# 6 Specific Vaccines

### 6.1 COVID-19 Vaccine

Clinical recommendations for COVID-19 vaccines are provided by the Australian Technical Advisory Group on Immunisation (ATAGI), this information includes:

- primary schedules, including mixed schedules
- booster doses
- considerations for special populations
- · co-administration with other vaccines
- minimum valid dose schedules.

Refer to the digital version of the <u>Australian</u> <u>Immunisation Handbook</u> for specific advice on COVID-19.<sup>31</sup>

# 6.2 Diphtheria, Tetanus and Pertussis Vaccine (DTPa/ dTpa)

The routine schedule for pertussis vaccination is 6 weeks, 4 months, 6 months, 18 months, and 4 years of age. Booster doses are offered in Year 7 (12 years of age) and recommended at 50 years of age (not funded at 50 years).

Pregnant women are advised to receive a free booster dose of pertussis containing vaccine. This is usually given to pregnant women at 28 weeks but can be given anytime between 20–32 weeks of each pregnancy. The vaccine should be given as early as possible (from 20 weeks) to women who are identified as being at high risk of preterm birth, or who are unlikely to attend a 28-week antenatal appointment.

Pertussis containing vaccine is also recommended (but not funded) for all people who will care for or have close contact with a baby in the first weeks of life.

For more information and resources refer to the NSW Health web page Pregnant Women – Protect your newborn from whooping cough and section 5.6 of this toolkit.

# Pneumococcal Vaccine (Prevenar 13 and Pneumovax 23)

Information related to those people with at risk conditions which require additional pneumococcal vaccinations can be found in the Australian Immunisation Handbook (digital version): <a href="https://immunisationhandbook.health.gov.au/contents/vaccination-for-special-risk-groups23">https://immunisationhandbook.health.gov.au/contents/vaccination-for-special-risk-groups23</a>

A useful pneumococcal vaccination tool is also available on the Immunisation Coalition webpage: <a href="https://www.immunisationcoalition.org.au/resources/pneumococcal-vaccination-tool/32">https://www.immunisationcoalition.org.au/resources/pneumococcal-vaccination-tool/32</a>

For more information refer to the <u>Australian</u> Immunisation Handbook<sup>23</sup> (digital or app version).

### 6.3 Measles, Mumps Rubella (MMR)

The measles, mumps rubella vaccine (MMR) is routinely provided to children at 12 months of age and measles, mumps, rubella and varicella (MMRV) combination vaccine is provided at 18 months of age.

 Children as young as 6 months of age can receive MMR vaccine in certain circumstances, including travel to highly endemic areas and during outbreaks.

If an infant receives MMR vaccine at <11 months of age, they still need to receive the 2 recommended vaccine doses at >12 months of age, usually received at 12 and 18 months.

NSW Health also funds doses for:

- people who are born during or after 1966 and have not received 2 doses of the MMR vaccine are eligible for 2 free doses of the vaccine, 4 weeks apart.
- post-natal women who are seronegative for rubella.

An MMR Catch-Up Decision tool 33 has been developed by the National Centre for Immunisation Research and Surveillance (NCIRS) and is available for providers.

### 6.4 Zoster (shingles) Vaccine

A 2-dose course of Shingrix® is available under the NIP for:

- people aged 65 years and over
- Aboriginal and Torres Strait Islander people aged 50 years and over
- immunocompromised people aged 18 years and over with the following medical conditions:
  - haematopoietic stem cell transplant
  - solid organ transplant
  - haematological malignancy
  - advanced or untreated HIV.

For most people the Shingrix® vaccine is given 2 to 6 months apart. For immunocompromised people, the two doses are given 1 to 2 months apart.

Shingrix® vaccination is recommended for those who have had shingles infection at least one year following the most recent episode of shingles. As the risk of further infection is higher in immunocompromised people, vaccination with Shingrix vaccine can be given from 3 months after illness.

People who have previously received Zostavax®, under the National Immunisation Program are not eligible for a free Shingrix® vaccine for at least 5 years.

Shingrix® can be given at the same time as most other vaccines, including influenza and pneumococcal. However, it is best to have it by itself if possible. This can reduce the reactions experienced from having multiple vaccines.

Refer to the digital version of the Australian Immunisation Handbook for specific advice on Zoster (herpes zoster).<sup>34</sup>

### 6.5 Hepatitis B

Hepatitis B vaccine is routinely funded for children under the childhood vaccination program at birth, 6 weeks, 4 and 6 months. Post vaccination serology should be performed on babies born to mothers with a high viral load >200,000IU/ml. It is also funded by NSW Health for additional groups who are at increased risk of contracting this disease.

A course of hepatitis B vaccination is available for:

- 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.

Refer to the digital version of the Australian Immunisation Handbook for specific advice on hepatitis B.<sup>35</sup>

### 7 Other vaccines

### 7.1 Q Fever

Q fever vaccination is contraindicated in people who have been previously infected with the Q fever organism. People who have previously been infected with Q fever are likely to have adverse reactions to the vaccine and should not be vaccinated.

Immunisation providers are responsible for conducting appropriate pre-vaccination screening to identify patients who may not be aware that they have been previously infected with Q fever. Authorised nurse immunisers in NSW, are not authorised to administer Q Fever vaccine without a doctor's order.

Pharmacist immunisers are not authorised to administer Q fever vaccination.

The manufacturer (Seqirus) and the Australian College of Rural and Remote Medicine (ACCRM) both provide online education on Q fever vaccination and skin testing.

- Seqirus has developed the <u>www.qfeverfacts.</u>
   <u>com.au</u> website. Health professionals can log in
   to access educational resources. Please contact
   Seqirus Pty Ltd on 1800 008 275 for log-in
   details to access these resources.
- ACRRM has developed an accredited 'Q fever early diagnosis and vaccination'<sup>36</sup> education module (worth 2 CPD points, link below). The module is a two-hour course that includes advice on testing, diagnosis and management of Q fever and guidance on vaccination and pre-vaccination skin testing. It is available for free for ACRRM members. NSW GPs can access the course at no cost using the code NSWGP18 (places are limited).

From April 2024, vaccination providers can report Q fever (Q-VAX) vaccines and natural immunity information to the Australian Immunisation Register (AIR). This will support the closure of the Australian Q Fever Register (Q Fever Register).

The Q Fever Register is owned and funded by the Australian Meat Processor Corporation and administered by AUS-MEAT. For historical Q fever records visit <a href="https://www.qfever.org/">https://www.qfever.org/</a>

Vaccination providers will no longer be able to report Q fever vaccine information to the Q Fever Register. Instead, providers should report this information to the AIR.

Further information about the management of persons with Q fever and their contacts is available in the Q fever control guidelines or by contacting your local public health unit on 1300 066 055.

### Useful links:

- Seqirus Q fever facts website www.qfeverfacts.com.au
- ACCRM Q fever module
   Q fever: early diagnosis and vaccination online learning course
- Australian Q Fever Register www.qfever.org
- NSW Health Q fever control guidelines: <u>https://www.health.nsw.gov.au/Infectious/</u> controlguideline/Pages/qfever.aspx

### 7.2 Japanese Encephalitis

In NSW, a free Japanese encephalitis virus vaccination is available for people aged 2 months or older who live or routinely work in local government areas at risk and

- regularly spend time outdoors placing them at risk of mosquito bites, or
- · are experiencing homelessness, or
- are living in conditions with limited mosquito protection (e.g. tents, caravans, dwellings with no insect screens), or
- are engaging in outdoor flood recovery (cleanup) efforts, including repeated professional or volunteer deployments.

Further information regarding Japanese encephalitis vaccination is available on the NSW Health website: https://www.health.nsw.gov.au/jevaccine

### 7.3 Yellow Fever

The yellow fever vaccine can only be administered by accredited providers at an approved Yellow Fever Vaccination Centre. Immunisation providers seeking to become an approved yellow fever vaccination clinic must complete the Yellow Fever Vaccination Centre application package<sup>37</sup> and contact their local Public Health Unit on 1300 066 055.

Further information regarding Yellow Fever vaccination including a list of accredited yellow fever vaccination centres in NSW is available on the NSW Health website:

https://www.health.nsw.gov.au/immunisation/Pages/yellow\_fever.aspx.<sup>37</sup>

Information on who is eligible to receive the vaccine and contraindications to administering the vaccine can be found in the digital version of the Australian Immunisation Handbook

https://immunisationhandbook.health.gov.au/contents/vaccine-preventable-diseases/yellow-fever)<sup>38</sup>

The Centre for Disease Control and Prevention website has further information on countries with a risk of yellow fever transmission.

https://www.cdc.gov/yellow-fever/index.html39

# 8 Pharmacist, Authorised Registered Nurses and Midwives Vaccination, and Authorised Aboriginal Health Practitioners

# 8.1 Vaccinations Provided by Pharmacists

Appropriately trained NSW pharmacists can provide a range of state, NIP and privately funded vaccines to a range of groups. Advice on which vaccines pharmacist immunisers can administer is available on the NSW Health webpage:

https://www.health.nsw.gov.au/immunisation/Pages/pharmacist-vaccination-expansion.aspx

Pharmacist immunisers who initiate and administer a vaccine must comply with the <u>NSW Pharmacist</u> <u>Vaccine Authority</u><sup>40</sup> and the <u>NSW Pharmacist</u> <u>Vaccination Standards.</u><sup>41</sup>

Information regarding pharmacist vaccination including the process for pharmacies to register as a vaccination provider with the AIR can be found on the NSW Health website:

https://www.health.nsw.gov.au/immunisation/Pages/application-air-provider.aspx

# 8.2 Vaccinations Provided by Authorised Registered Nurses and Midwives Immunisers

Authorised registered nurses and midwives immunisers in NSW who initiate and administer a vaccine must comply with the NSW Authorised Registered Nurse/Midwife Vaccination Authority and the Authorised Registered Nurse/Midwife Vaccination Standards.<sup>42</sup>

# 8.3 Vaccinations Provided by Authorised Aboriginal health practitioners

Authorised Aboriginal Health Practitioners in NSW who initiate and administer influenza vaccines must comply with the <u>NSW Aboriginal Health</u> Practitioners Vaccination Authority and Standards.<sup>43</sup>

# 9 NSW Occupational Assessment, Screening & Vaccination Policy (Health Care Worker Policy)

NSW Health Policy Directive (PD) <u>Occupational</u>
Assessment Screening and Vaccination Against
Specified Infectious <u>Diseases</u><sup>44</sup> provides a
framework for the assessment, screening and vaccination of health care workers employed in NSW Health facilities.

Health care workers, including students, are required to provide evidence of protection against the specified diseases listed in the policy. The Vaccination Record Card for Health Care Workers and Students can be used to record these vaccinations in addition to the AIR history statement and is available from the Better Health Centre on 9887 5450 or nslhd-bhc@health.nsw.gov.au

For more information and Frequently Asked Questions (FAQs) please visit the NSW Health Immunisation website at <a href="https://www.health.nsw.gov.au/immunisation/Pages/oasv-FAQ.aspx">https://www.health.nsw.gov.au/immunisation/Pages/oasv-FAQ.aspx</a> and go to the Health care worker vaccination section

A learning module that provides training on the requirements of this policy is available from: https://www.health.nsw.gov.au/immunisation/OASV/index.html



# 10 Vaccine Storage and Cold Chain Management

Vaccines are sensitive to temperature and light and must be stored in their original cardboard packaging, between the recommended temperature range of +2°C to +8°C. This section provides an overview of resources available to support vaccine storage and cold chain management and outlines mandatory requirements for NSW immunisation providers. More detailed information is available in the NSW Cold Chain Toolkit for Immunisation Providers (Refer to Section 10.2).

# 10.1 National Vaccine Storage Guidelines 'Strive for 5'

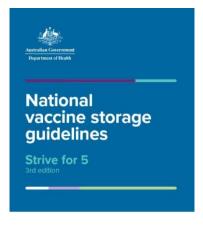
All immunisation providers should have access to the online edition of the National Vaccine Storage Guidelines 'Strive for 5' (3rd edition).<sup>45</sup> These guidelines provide best practice guidelines for storing vaccines and managing the cold chain. The guidelines include additional cold chain resources such as:

- minimum/maximum vaccine refrigerator temperature chart
- posters e.g. cold chain breach protocol and stickers
- self-audit tool

Copies and additional resources are available to be downloaded from the Australian Government's Department of Health and Aged Care webpage. These resources include the ordering ID required to order hard copies.

Hardcopies can be ordered by contacting National Mailing and Marketing by:

- Email: health@nationalmailing.com.au
- Phone: 02 6269 1080
- Website: <a href="https://www.health.gov.au/resources/publications/national-vaccine-storage-guidelines-strive-for-5">https://www.health.gov.au/resources/publications/national-vaccine-storage-guidelines-strive-for-5</a>



### 10.2 NSW Health Cold Chain Toolkit

NSW Health has also developed a Cold Chain Toolkit for Immunisation Providers (link below) and Safe Vaccine Storage Checklist (link below) to support immunisation providers. The Cold Chain Toolkit includes additional information about vaccine storage and cold chain requirements in NSW including mandatory training requirements and random audits conducted by NSW Health.

### Useful links:

NSW Health Cold Chain Toolkit for Immunisation Providers: <a href="https://www.health.nsw.gov.au/">https://www.health.nsw.gov.au/</a> immunisation/Pages/cold-chain-management.aspx 46

Safe Vaccine Storage Checklist: <a href="https://www.health.nsw.gov.au/immunisation/Documents/safe-vaccine-storage-checklist.pdf">https://www.health.nsw.gov.au/immunisation/Documents/safe-vaccine-storage-checklist.pdf</a>



Immunisation providers must retain evidence of meeting the above requirements.

NSW Health will be conducting random audits of practice/pharmacy compliance.

This will include checking that all vaccine doses administered in the practice are notified to the Australian Immunisation Register, as well as verification of the vaccine.

### 10.3 Private Vaccine Scripts

When providing patients with a script to purchase a vaccine from a pharmacy the patient should be advised on the process for cold chain management of the vaccine, including:

- purchasing the vaccine immediately before attending the GP practice for administration of the vaccine
- advising practice staff on arrival to the practice that they have a vaccine and request that it be refrigerated in a cold chain monitored fridge.

Immunisation providers should not administer vaccines if there are concerns that the cold chain has not been maintained.

### 10.4 Requirements

All immunisation providers in NSW must comply with the National Vaccine Storage Guidelines 'Strive for 5' (3rd edition) and mandatory NSW Health vaccine storage and cold chain requirements before accessing government funded vaccines.

### Providers must:

- store vaccines in a purpose-built vaccine specific refrigerator. Domestic fridges and bar fridges are NOT to be used for vaccine storage.
- continuously monitor vaccine refrigerator temperatures using a data logger, set at 5-minute intervals, and downloaded and reviewed at least weekly.
- manually measure and record the current, minimum, and maximum temperatures twice daily when the facility is open on the minimum/maximum vaccine refrigerator temperature chart.
- ensure your practice/pharmacy has a person responsible for vaccine management, and a back-up staff member to take responsibility in their absence.
- ensure at least one staff member and ideally all staff have successfully completed the NSW Health Vaccine Storage and Cold Chain Management online learning module. The Cold Chain Learning module is available from: https://www.heti.nsw.gov.au/education-and-training 48
- complete a vaccine storage self-audit every 12 months or more frequently if there have been problems with equipment or following a cold chain breach.

### 10.5 Managing Cold Chain Breaches

A cold chain breach occurs when vaccine storage temperatures have been:

- outside of the recommended range of +2°C to +8°C during storage or transport.
- excursions of >8°C to up to 12°C for no longer than 15 minutes e.g. during restocking are acceptable.
- any deviation below +2°C must be reported.

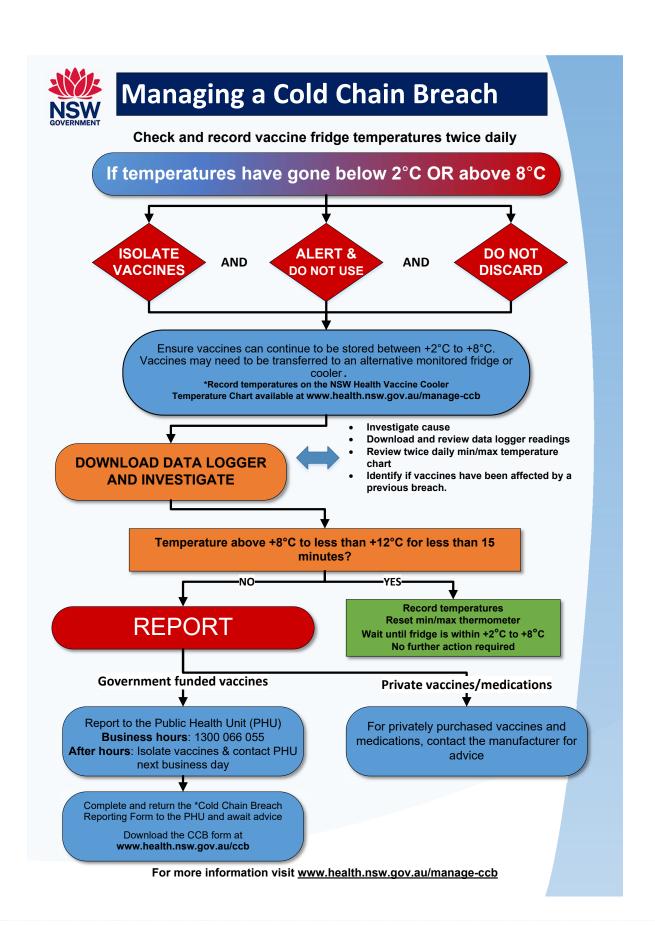
Immunisation providers must follow the NSW Cold Chain Breach Protocol (Figure 2) and report all cold chain breaches to their local public health unit 1300 066 055.

Please refer to the NSW Health <u>Cold Chain</u> <u>Toolkit for Immunisation Providers</u> for more detailed information including advice on managing power failures.

### 10.6 NSW Cold Chain Breach Protocol

When managing a power failure or refrigerator malfunction, if there is no suitable alternative monitored storage option, isolate the vaccines and leave them in the refrigerator with the door closed for the duration of the power outage/malfunction and follow the NSW Cold Chain Breach Protocol.

Figure 2 — NSW Cold Chain Breach Protocol



### 11 NSW State Vaccine Centre

The NSW State Vaccine Centre is responsible for the storage and delivery of vaccines in NSW. Immunisation providers in NSW must order vaccines on the NSW Vaccine Centre vaccine online ordering system at <a href="https://nsw.tollhealthcare.com/">https://nsw.tollhealthcare.com/</a>

Alerts and messages regarding changes to vaccine stock availability, particularly during the flu season, and any ordering restrictions will be regularly posted on the online vaccine ordering webpage alerts page when you log on.

### Did you know?

Contact details registered with the NSW State Vaccine Centre are used by NSW Health to communicate important immunisation program alerts and updates to immunisation providers. It is important that you keep your contact information up to date.

### 11.1 Applying for a Vaccine Account

To be able to order funded vaccines from the NSW State Vaccine Centre you will need to obtain a Vaccine Account Number (or VAN). This can be done by following the link below based on health care provider type:

To register for online ordering:

Please contact your local Public Health Unit on 1300 066 055 for information regarding cold chain storage requirements and if required to arrange a time to visit your practice or clinic and ensure that you meet the necessary requirements for vaccine storage.

### 11.2 Stock Control

It is important to have an adequate supply of vaccines in the practice fridge, but it is also important not to over stock the fridge. This can lead to wastage because vaccines that reach their expiry date must be discarded and reported to NSW Health. It may also lead to cold chain problems, as an over full fridge will not allow air to circulate freely around the vaccines, allowing warm or cold areas to develop.

When placing stock in the fridge, check expiry dates and put new stock behind stock already in the fridge, so that vaccines with an earlier expiry date are used first. Vaccines must not be removed from their original cardboard packaging to save space in the fridge as light can affect vaccine potency and cause the vaccine to be ineffective.

# 11.3 How to Calculate Monthly Vaccine Ordering Requirements

There is a simple formula that can help you assess how much vaccine you order from month to month:

Quantity to be ordered = Quantity used since last delivery – Quantity left over since last delivery + 10% of Quantity used since last delivery

For example, if you had 40 doses of DTPa delivered one month ago and only 35 were used, (that is, there are 5 left in the fridge):

Quantity to be ordered = 35 used – 5 left over + 10% of used (3.5)

=35-5+3.5

= 33.5 doses

You should therefore order 34 doses (or the nearest number if ordering multiple packs).

This formula is based on international best practice. The additional 10% is a buffer, which allows for unexpected variation in demand.

Additional points to consider:

- If special immunisation campaigns are underway, you may need to order additional supplies on top of the number given in the formula
- During the influenza vaccination season use the influenza vaccine ordering worksheet<sup>50</sup> available in the influenza vaccination provider toolkit<sup>21</sup> and NSW Health webpage.

### 11.4 Authorised Provider Declaration

In order to access government funded vaccines, immunisation providers are required to electronically sign a declaration on the online vaccine ordering system. Pharmacists are required to follow pharmacist specific advice please refer to the NSW PHARMACIST VACCINATION STANDARDS<sup>41</sup>

It is important to ensure that the person ordering the vaccines and signing the declaration on behalf of the authorised AHPRA practitioner understands that they are responsible for ensuring that the practice complies with the requirements of the 'authorised practice providers declaration'.

The declaration contains a number of criteria including:

- compliance with cold chain recommendations in the 'National Vaccine Storage Guidelines: Strive for 5' (3rd edition)
- that the vaccine fridge temperature has been maintained within the required temperature range of 2°C to 8°C and,
- that staff have undertaken <u>Vaccine storage and</u> cold chain management online training module.<sup>48</sup>

More information can be found on the NSW Health site: <a href="https://www.health.nsw.gov.au/immunisation/">https://www.health.nsw.gov.au/immunisation/</a> Pages/cold-chain-management.aspx

### 11.5 Vaccine Deliveries

Routine vaccine orders are delivered within 2 to 3 business days of placing an order (Refer to the NSW Health Influenza Vaccination Provider Toolkit for advice regarding timelines for the delivery of influenza vaccines):

https://www.health.nsw.gov.au/immunisation/Pages/flu-provider-toolkit.aspx

When receiving a vaccine delivery, it is important to confirm that the cold chain has been maintained during transport and the integrity of the vaccines has not been compromised.

Before accepting the delivery and transferring the vaccines to a dedicated vaccine refrigerator, check the cold chain monitors and record the check on the back of the vaccine minimum/maximum temperature chart.

Please refer to the NSW Health Cold Chain Toolkit for Immunisation Providers for more detailed information:

Cold Chain Toolkit for Immunisation Providers<sup>49</sup>

If the cold chain monitor(s) has activated or if there is damage to the cooler contact the NSW Vaccine Centre immediately on 1300 656 132.

While awaiting advice, the vaccines MUST be:

- placed in the refrigerator
- · isolated and
- · labelled 'DO NOT USE'
- record the breach on the back of the vaccine temperature chart.

For privately purchased vaccines, any concerns identified during transport including damage to the cooler should be directed to the manufacturer.

### 11.6 Change of Address

Any change of details or address must be updated on the online vaccine ordering system. Please note: You will be required to submit 24 hours stable data logging to your local public health unit following a change of address to continue to order vaccines. For further advice on this process contact your public health unit on 1300 066 055.

Refer to The National Vaccine Storage Guidelines: Strive for 5 (Appendix 8), checklist for emergency storage of vaccines, to ensure your vaccines are transported within the recommended temperature range.

### 11.7 Ordering Rabies Vaccine for Post-Exposure Prophylaxis

Information regarding rabies immunisation and post exposure prophylaxis for both Australian Bat Lyssavirus and Rabies can be found on the NSW Health site:

https://www.health.nsw.gov.au/Infectious/controlguideline/Pages/rabies.aspx

If you have a patient who has been exposed to these viruses — either in Australia or overseas contact your local public health unit on 1300 066 055 for further information and to order rabies vaccines and rabies immunoglobulin.

Pharmacist immunisers must immediately refer these patients to a medical practitioner for post exposure prophylaxis treatment.

### 12 Vaccine Safety

All vaccines registered for use in Australia and included in the NIP are thoroughly tested before they are approved and are continuously monitored for safety. Parents who have concerns about vaccine safety may be reluctant to have their children vaccinated. In the age of social media parents have unprecedented access to vaccine misinformation. Healthcare providers play a critical role in shaping attitudes towards immunisation and are consistently identified as the most trusted source of vaccine information by parents and patients. Immunisation providers should be prepared to discuss the benefits and risks of vaccines using credible sources of information.

The Australian Government Department of Health and Aged Care has developed a range of resources including the resource 'Questions about Vaccination' and a fact sheet series 'Are vaccines safe?' including:

- Vaccine testing
- · Vaccine ingredients
- Vaccine side effects
- Vaccine safety monitoring
- Mercury and vaccines
- · Vaccines and autism

The resources can be accessed at the following links and should be used when discussing vaccine safety concerns with parents:

- Questions about vaccination <a href="https://www.health.gov.au/resources/">https://www.health.gov.au/resources/</a> publications/questions-about-vaccination<sup>51</sup>
- How vaccines are developed, tested, and monitored for safety in Australia <a href="https://www.health.gov.au/topics/immunisation/about-immunisation/vaccine-safety">https://www.health.gov.au/topics/immunisation/about-immunisation/vaccine-safety</a>

# 12.1 Talking to Patients About Vaccine Safety

Effective communication is key to discussing vaccine safety with concerned parents.

The Sharing Knowledge About Immunisation (SKAI)<sup>52</sup> website is a useful tool for parents and healthcare providers. The website for parents provides credible information about vaccination including common reactions and vaccine safety. The website for healthcare professionals is designed to help clinicians adapt their clinical communication skills to meet the needs of all parents at any point of their vaccination journey.

### **Website for parents:**

- Information about vaccination for children up to 5 years of age<sup>53</sup>
- How do I know the vaccines are safe?<sup>54</sup>
- Webpage for healthcare professionals <u>Talking</u> with parents who have questions about vaccination<sup>55</sup>

### 12.2 Vaccine Safety Surveillance

Vaccine safety surveillance in Australia aims to monitor vaccine and immunisation program safety and to detect potential serious adverse events that may not be identified in pre-licensure vaccine trials.

Immunisation providers play an important role in vaccine safety surveillance by reporting serious adverse events to the local public health unit (passive surveillance) and participating in active surveillance systems such as AusVaxSafety.

AusVaxSafety uses two software programs <u>Smartvax</u> and <u>Vaxtracker</u> to monitor the safety of vaccines. These programs are run by general practitioners and immunisation clinics that send an SMS or email to patients or parents following a vaccination. De-identified information from SmartVax and Vaxtracker are combined and monitored by AusVaxSafety to detect possible safety signals for vaccines.

AusVaxSafety data relating to a range of vaccines on the National immunisation Program, including influenza, COVID-19, pertussis (including pertussis in pregnancy), HPV and zoster vaccine is available through the AusVaxSafety vaccine safety surveillance system at the following link https://ausvaxsafety.org.au/safety-data

Annual reports on surveillance of AEFIs in NSW are published and available on the NSW Health webpage at: <a href="https://www.health.nsw.gov.au/">https://www.health.nsw.gov.au/</a> immunisation/Pages/aefi.aspx

# 12.3 What is an Adverse Event Following Immunisation (AEFI)?

An adverse event following immunisation (AEFI) is an unwanted or unexpected event following the administration of vaccine(s) and which does not necessarily have a causal relationship with the use of the vaccine. Most vaccines cause minor adverse events such as low-grade fever, pain or redness at the injection site, and these should be expected.

The Australian Immunisation Handbook (digital version) has useful information about common side effects following immunisation which should be discussed with patient's during the consent process, including:

- Common side effects following immunisation for vaccines used in the National Immunisation Program schedule<sup>56</sup> and
- Comparison of the effects of diseases and the side effects of vaccines on the National Immunisation Program<sup>57</sup>

To ensure patients are aware of what to expect following vaccination, immunisation providers should provide patients with the information sheet 'Following vaccination – what to expect and what to do' after vaccinating a patient.

The information sheet was developed by the Australian Government Department of Health and Aged care. Pads of these free sheets are available for order by emailing:

### **National Mailing and Marketing**

Email: <u>health@nationalmailing.com.au</u>, quote order ID IT0258, include quantity and delivery address.

https://www.health.gov.au/resources/publications/following-vaccination-what-to-expect-and-what-to-do<sup>58</sup>

# 12.4 How to Minimise the Risk of an

Immunisation providers can minimise the risk of serious AEFIs by performing the pre-vaccination screening checklist for all patients prior to vaccination. The checklist identifies any person with a condition which increases the risk of an adverse event or is a contraindication to vaccination. Previous AEFI which are reported at the time of the pre-vaccination screening should be investigated. It is also important for immunisation providers:

- to use the correct injection technique to minimize the risk of serious adverse events such as Shoulder Injury Related to Vaccine Administration (SIRVA) and,
- review disease specific chapters in the Australian Immunisation Handbook for specific advice.

Advice for avoiding shoulder injury related to vaccine administration<sup>59</sup> and a pre-vaccination screening checklist<sup>60</sup> are available in the Australian Immunisation Handbook.

### 12.5 Reporting an AEFI

AEFI are notifiable conditions under the NSW Public Health Act 2010 and must be notified to your local Public Health Unit.

All AEFI notifications are required to be reported to the Therapeutic Goods Administration (TGA) via your local Public Health Unit. To report a suspected AEFI:

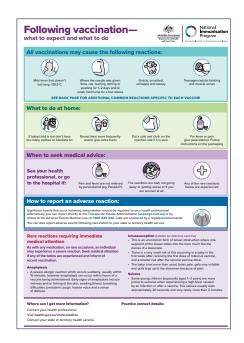
1. Please download and complete the National Adverse Events Following Immunisation (AEFI) Reporting Form available from:

https://www.tga.gov.au/resources/resource/forms/national-adverse-events-following-immunisationaefi-reporting-form#aefi-form

- 2. Contact your local Public Health Unit (PHU) on 1300 066 055.
- 3. Following a report of a suspected AEFI, immunisation providers may obtain advice from the NSW Immunisation Specialist Service (NSWISS) at Westmead Children's Hospital for complex cases or future immunisation advice. If necessary, children can attend the Specialist Immunisation Clinic (GP referral required) or for those in more remote areas tele-consultations are available (refer to Section 12.6).

NSW Health forwards AEFI notifications to the Therapeutics Goods Administration (TGA) safety monitoring surveillance program. TGA Reports are available from the publicly accessible Database of Adverse Event Notifications — medicines<sup>61</sup> 90 days after they have been reported to the TGA.

Further information on reporting an AEFI is available on the NSW Health website at <a href="https://www.health.">https://www.health.</a> nsw.gov.au/immunisation/Pages/aefi.aspx



# 12.6 Specialist Immunisation Services NSW

The New South Wales Immunisation Specialist Service (NSWISS) located within the Children's Hospital at Westmead provides specialised immunisation care and advice to clinicians and families.

Immunisation providers can contact the NSW Immunisation Specialist Service (NSWISS) via email on <u>SCHN-NSWISS@health.nsw.gov.au</u> for support and clinical advice for patients with complex medical conditions, or who have had an adverse event following immunisation.

Responses will be provided via email or return phone call as appropriate within 1 business day. The NSWISS email inbox is monitored Monday to Friday 9 am – 5 pm.

Children aged up to 16 years of age can be referred to the <u>NSW Immunisation Specialist Service at The Children's Hospital at Westmead</u>

- General immunisation queries should be referred to your local Public Health Unit first on 1300 066 055. The advice line is open between 9:00 am and 5:00 pm, Monday to Friday.
- Specialist Immunisation Clinic including telehealth for in-depth consultations and vaccination under observation for children 16 years and under who have had an adverse event following immunisation or who have complex medical needs. The clinic is free of charge for Medicare cardholders with a referral letter from a general practitioner. To arrange an appointment, please contact the Specialist Immunisation Clinic via fax to (02) 9845 1418 or email to SCHNNSWISS@health.nsw.gov.au
- The clinic is located on Level 1 of The Children's Hospital at Westmead next to the Book Bunker, Monday to Friday, 8.30 am to 3.30 pm.

The Australian Society of Clinical Immunology and Allergy (ASCIA) has useful information for adults who have had an adverse event following immunisation and require specialist consultation including guidelines for the vaccination of the egg allergic individual.

### Useful links:

- ASCIA: www.allergy.org.au/patients
- Guidelines for the Vaccination of the Egg Allergic Individual: https://www.allergy.org.au/ hp/papers/vaccination-of-the-egg-allergicindividual<sup>62</sup>

### 12.7 Vaccination Administration Errors

Vaccination administration errors can occur during vaccine preparation, handling, storage or administration. Vaccination errors that may pose a safety risk to the patient or have resulted in an adverse event should be reported to your public health unit on 1300 066 055 or by using the National Adverse Event Following Immunisation reporting form, 63 particularly:

- Inadvertent administration of a vaccine contraindicated in pregnancy or giving a live attenuated viral vaccine during pregnancy or shortly before pregnancy, and
- Inadvertent administration of any live vaccine to an immunocompromised patient, and
- · Administration of expired vaccines:
  - For NIP funded vaccines contact your local public health unit with the patient's deidentified details i.e. initials and birth date, vaccine name, batch number, expiry date.
  - For private vaccines please contact the manufacturer for advice.

Further information on vaccination administration errors is available on the NSW Health webpage for the AEFI Control Guideline at https://www.health.nsw.gov.au/Infectious/controlguideline/Pages/adverse.aspx

### 12.8 Vaccine Safety Resources

The National Centre for Immunisation Research and Surveillance has developed a range of vaccine safety fact sheets and clinical resources to support immunisation providers including:

- Influenza vaccination post GBS guidelines<sup>64</sup>
- Injection site reactions<sup>65</sup>

The resources are available on the NCIRS webpage: <a href="https://www.ncirs.org.au/health-professionals/ncirs-fact-sheets-fags">https://www.ncirs.org.au/health-professionals/ncirs-fact-sheets-fags</a>

### 13 Other resources

### 13.1 Public Health Units

Public Health Units are available to support immunisation providers with clinical immunisation queries, school vaccination program enquiries and cold chain management. In NSW calling 1300 066 055 will direct you to your local public health unit.

### 13.2 Resource Order Form

There are several pamphlets and posters which you can order for no cost to promote immunisation in your facility. A list of these is available on the NSW Immunisation Resource Order Form available from <a href="https://www.health.nsw.gov.au/immunisation/">https://www.health.nsw.gov.au/immunisation/</a> Documents/resource-order-form.pdf

Commonwealth Department of Health and Aged Care Immunisation Resources available from www.health.gov.au/resources

### 13.3 Translating Overseas Immunisation Records

The Centre for Disease Control and Prevention (CDC) has developed the 'Foreign Language Terms: Aids to Translating Foreign Immunisation Records' to assist immunisation providers assessing overseas vaccination records when developing vaccination catch-up plans. The guide is available at: <a href="Foreign Language Terms">Foreign Language Terms</a>.

# 13.4 National Centre for Immunisation Research and Surveillance (NCIRS) fact sheets

A range of fact sheets and resources are available on the NCIRS webpage at https://ncirs.org.au/

### 13.5 Travel Vaccination

For travel vaccination advice please contact a travel clinic or refer to travel health resources for advice. Public health units cannot provide routine travel vaccination advice.

For individual travel vaccine <u>recommendations</u><sup>65</sup> you can review the Australian Immunisation Handbook online.

### 13.6 Endnotes

- 1 <a href="https://www.health.gov.au/health-topics/immunisation/immunisation-throughout-life/national-immunisation-program-schedule">https://www.health.gov.au/health-topics/immunisation/immunisation-throughout-life/national-immunisation-program-schedule</a>
- 2 <a href="https://www.health.gov.au/sites/default/files/national-immunisation-strategy-for-australia-2019-2024\_0">https://www.health.gov.au/sites/default/files/national-immunisation-strategy-for-australia-2019-2024\_0</a>.

  pdf
- 3 https://www.health.nsw.gov.au/immunisation/Publications/nsw-immunisation-schedule.pdf
- 4 https://immunisationhandbook.health.gov.au/contents
- 5 www.ncirs.org.au/health-professionals/history-immunisation-australia
- 6 <a href="https://immunisationhandbook.health.gov.au/contents/vaccine-preventable-diseases/meningococcal-disease">https://immunisationhandbook.health.gov.au/contents/vaccine-preventable-diseases/meningococcal-disease</a>
- 7 <a href="https://immunisationhandbook.health.gov.au/contents/vaccine-preventable-diseases/meningococcal-disease">https://immunisationhandbook.health.gov.au/contents/vaccine-preventable-diseases/meningococcal-disease</a>
- 8 https://www.servicesaustralia.gov.au/australian-immunisation-register-for-health-professionals
- 9 https://hpe.servicesaustralia.gov.au/australian-immunisation-register.html
- 10 <a href="https://ncirs.org.au/fact-sheets-faqs/enhancing-data-quality-of-vaccination-encounter-records?utm\_source=NCIRS%2BMaster%2Blist&utm\_campaign=75898dedff-EMAIL\_CAMPAIGN\_2020\_06\_17\_05\_18&utm\_medium=email&utm\_term=0\_bc54525c32-75898dedff-86221419
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- 12 https://my.gov.au/LoginServices/main/login?execution=e1s1
- 13 https://www.servicesaustralia.gov.au/individuals/services/medicare/express-plus-medicare-mobile-app
- 14 https://www.servicesaustralia.gov.au/how-to-get-immunisation-history-statements?context=22436
- 15 https://www.servicesaustralia.gov.au/organisations/health-professionals/forms/im011
- 16 https://www.servicesaustralia.gov.au/organisations/health-professionals/forms/im013
- 17 https://www.health.nsw.gov.au/immunisation/Pages/childcare\_qa.aspx
- 18 https://www.health.nsw.gov.au/immunisation/Pages/schoolvaccination.aspx
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