Clinical Guideline

Immunisation of the Neonate

Sites where Clinical Guideline applies	All Newborn Service sites in HNELHD
This Clinical Guideline applies to:	
1. Adults	No
2. Children up to 16 years	No
3. Neonates – less than 29 days	Yes
Target audience	Clinicians in neonatal units in HNELHD
Description	Provides information for clinicians regarding neonatal immunisation management

Go to Guideline

Keywords	Neonate, newborn, immunisation, NICU, SCU, vaccine, consent, premature, immunise, vaccinate
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Replaces existing document?	Yes
Registration number and dates of superseded documents	Immunisation of the Preterm Infant JHCH_NICU_03.03

Related Legislation, Australian Standard, NSW Ministry of Health Policy Directive or Guideline, National Safety and Quality Health Service Standard (NSQHSS) and/or other, HNE Health Document, Professional Guideline, Code of Practice or Ethics:

- NSW Health Policy Directive PD 2020_028 Vaccine Storage and Cold Chain Management
- NSW Health Policy Directive PD 2014_024 Patient Identification Bands
- NSW Health Policy Directive PD2017_013 Infection Prevention and Control Policy
- HNELHD Policy Compliance Procedure PD2019_020:PCP 4 Patient Identification: Medication Prescribing and Administration

Position responsible for Clinical Guideline Governance and authorised by	Dr Paul Craven, Executive Director, Children, Young People and Families Services
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Note: Over time, links in this document may cease working. Where this occurs, please source the document in the PPG Directory at: http://ppg.hne.health.nsw.gov.au/

PURPOSE AND RISKS

This document has been developed to provide support and guidance to the health clinician in providing high quality, safe and timely care for neonates who require immunisation. This practice requires informed consent and consideration of the neonate's gestational age and clinical condition.

The risks are:

- *Potential infection risk to an vulnerable cohort*

The risks are minimised by:

- *Maintenance of the cold chain to ensure integrity of vaccines*
- *Ensuring that parents receive consistent, accurate and reliable information about immunisations*
- *Correctly administering vaccines to optimise the wellbeing of neonates discharged from neonatal units*

Any unplanned event resulting in, or with the potential for injury, damage or other loss to infants/staff/family as a result of this procedure must be reported through the Incident Management System and managed in accordance with the NSW Health Policy Directive PD2020_020: Incident Management Policy. This would include unintended injury that results in disability, death or prolonged hospital stay.

*It is mandatory for staff to follow relevant: "Five moments of hand hygiene", infection control, moving safely/safe manual handling, documentation practices and to use HAIDET for patient/carer communication: **H**and hygiene **A**cknowledge, **I**ntroduce, **D**uration, **E**xplanation, **T**hank you or closing comment.*

Risk Category: *Clinical Care & Patient Safety*

CLINICAL PROCEDURE SAFETY LEVEL

Every clinician involved in the procedure is responsible for ensuring the processes for clinical procedure safety are followed. The following level applies to this procedure (click on the link for more information):

Level 1 procedure

CONTENTS

GUIDELINE

While not requiring mandatory compliance, staff must have sound reasons for not implementing standards or practices set out within guidelines issued by HNE Health, or for measuring consistent variance in practice.

Introduction

In the first few months of life, a baby is protected from most infectious diseases by antibodies transferred during pregnancy. However, these antibodies wear off leaving the baby at greater risk of contracting a disease. Prematurity can increase the baby's risk of vaccine-preventable diseases. Despite their immunological immaturity, preterm infants generally respond well to immunisations. All immunisations available in Australia have been thoroughly tested for safety and effectiveness and are continually monitored by the Therapeutic Goods Administration.

Consent for Immunisation

Top

To ensure informed and valid consent prior to immunisation, clinicians are responsible for providing parents and/or carers with appropriate, consistent and reliable written information regarding potential risks and benefits. The information must be in a language that the parents and/or carers can understand. An interpreter or cultural support person must be engaged if required.

Verbal consent is sufficient for the immunisation to proceed and this verbal consent must be documented in the baby's progress notes.

Declining of Consent

Top

If parent/s or carer/s decline immunisation for their infant they must be counselled by one of the following:

- A Staff Specialist
- A Fellow
- A Neonatal Nurse Practitioner (NNP)
- A Registrar (with neonatal experience)
- An Immunisation provider
- Paediatric Pharmacist

The conversation must then be documented in the medical record. Parent/s or carer/s must be informed that children who are unimmunised may be asked to stay at home if there is an outbreak of a vaccine preventable disease at their childcare centre or school.
Non-immunisation should also be noted in the baby's Personal Health Record (Blue Book).
Parents must be advised that if their infant becomes unwell after discharge they must inform their General Practitioner that the child has not been immunised.

Immunisations must never be given without parental consent

Storage of Vaccines

Top

Effective vaccine storage and cold chain management are essential in maintaining the potency and effectiveness of the vaccine, in line with the '*Strive for 5 Guidelines*', as per the NSW Health Policy Directive PD2020_028 Vaccine Storage and Cold Chain Management.

Therefore each site must comply with the following:

- All vaccines are stored in a purpose-built vaccine refrigerator (bar or domestic fridges must never be used for vaccine storage)
- Vaccines must be transported and stored within the recommended temperature range +2°C to +8°C at all times
- All vaccine refrigerators are continually data logged
- Data log reports are downloaded and reviewed at least weekly
- All refrigerators have an audible alarm with a back to base alarm
- All vaccine refrigerator's current minimum/maximum temperatures are visualised and manually recorded twice daily on the NSW Health vaccine refrigerator temperature chart (see Appendix 5)
- A baseline vaccine storage self-audit is conducted initially and annually in March thereafter.
- Plans are developed in response to cold chain breaches and power failures, including reporting to the local public health unit (PHU) on 1300 066 055 on the same working day
- In event of cold chain breach, vaccines must be quarantined until advice is received from PHU
- Any cold chain breach resulting in vaccine wastage, recall and revaccination of patients must be reported in ims+

Any temperature variance outside the recommended temperatures for greater than 15 minutes must be reported to the unit manager or delegate immediately

Staff Responsibility and Education

Top

Responsibility

- Each unit must nominate a staff member responsible for vaccine storage and cold chain management within their area, and a back-up staff member/s in their absence
- The unit manager or delegate is responsible for the cold chain management of vaccines that are removed from central pharmacy and stored in the ward/unit until they are administered
- The nurse/midwife administering the vaccine is responsible for maintaining the cold chain from the time removed from the refrigerator to administration. It is best practice to check the refrigerator display temperature each time before removing vaccines

Education

- All NSW Health staff involved in vaccine transport, storage and administration must be trained in vaccine management to ensure the vaccines remain effective and potent. 'Vaccine Storage and Cold Chain Management' module is available online at My Health Learning (MHL) for all NSW Health staff
- The nominated delegate complete the online MHL module 'Vaccine Storage and Cold Chain Management'
- Orientation of new staff and staff with new roles who are responsible for cold chain management must be implemented in unit education programs

Routine Vaccines used in Newborn Care

Top

Vaccinations are offered based on the National Immunisation Program (NIP) schedule.
The current immunisation schedule for birth to 12 months for all non-indigenous people can be seen in Figure 1 (for the full schedule see Appendix 2).

Age	Disease	Vaccine Brand
Childhood vaccination (also see influenza vaccine)		
Birth	• Hepatitis B (usually offered in hospital)[a]	H-B-Vax® II Paediatric or Engerix B® Paediatric
2 months Can be given from 6 weeks of age	• Diphtheria, tetanus, pertussis (whooping cough), hepatitis B, polio, *Haemophilus influenzae* type b (Hib) • Rotavirus[b] • Pneumococcal	Infanrix® hexa Rotarix® Prevenar 13®
4 months	• Diphtheria, tetanus, pertussis (whooping cough), hepatitis B, polio, *Haemophilus influenzae* type b (Hib) • Rotavirus[b] • Pneumococcal	Infanrix® hexa Rotarix® Prevenar 13®
6 months	• Diphtheria, tetanus, pertussis (whooping cough), hepatitis B, polio, *Haemophilus influenzae* type b (Hib)	Infanrix® hexa
Additional dose for children with specified medical risk conditions[c]	• Pneumococcal	Prevenar 13®
12 months	• Meningococcal ACWY • Measles, mumps, rubella • Pneumococcal	Nimenrix® M-M-R® II or Priorix® Prevenar 13®

Figure 1: NIP Schedule (birth–12 months for all non-Indigenous people) (*Image from Department of Health 1 July 2020*)

The current immunisation schedule for birth to 12 months for all Aboriginal and Torres Strait Islander people can be seen in Figure 2 (for the full schedule see Appendix 3).

Age	Disease	Vaccine Brand
Indigenous children (also see influenza vaccine)		
Birth	• Hepatitis B (usually offered in hospital)[a]	H-B-Vax® II Paediatric or Engerix B® Paediatric
2 months Can be given from 6 weeks of age	• Diphtheria, tetanus, pertussis (whooping cough), hepatitis B, polio, *Haemophilus influenzae* type b (Hib) • Rotavirus[b] • Pneumococcal • Meningococcal B	Infanrix® hexa Rotarix® Prevenar 13® Bexsero®
4 months	• Diphtheria, tetanus, pertussis (whooping cough), hepatitis B, polio, *Haemophilus influenzae* type b (Hib) • Rotavirus[b] • Pneumococcal • Meningococcal B	Infanrix® hexa Rotarix® Prevenar 13® Bexsero®
6 months	• Diphtheria, tetanus, pertussis (whooping cough), hepatitis B, polio, *Haemophilus influenzae* type b (Hib)	Infanrix® hexa
Additional dose for children in WA, NT, SA, Qld and children with specified medical risk conditions[c]	• Pneumococcal	Prevenar 13®
Additional dose for children with specified medical risk conditions[c]	• Meningococcal B	Bexsero®
12 months	• Meningococcal ACWY • Measles, mumps, rubella • Pneumococcal • Meningococcal B	Nimenrix® M-M-R® II or Priorix® Prevenar 13® Bexsero®

Figure 2: NIP Schedule (birth-12 months for all Indigenous people) (*Image from Department of Health 1 July 2020*)

Any previous anaphylaxis or known hypersensitivity to a vaccine or active substance of any vaccine should be discussed with the medical team prior to administration of vaccinations.

Hepatitis B vaccine

Top

Hepatitis B vaccine (H-B-Vax II Paediatric, 5 microgram in 0.5 mL or Engerix-B, 10 microgram in 0.5 mL) is given to all infants by intramuscular injection as soon as possible after birth or within 7 days of birth.

Low-birthweight preterm infants do not respond as well to Hepatitis B-containing vaccines as full term infants. Low-birthweight infants (< 2000 g) and/or infants born at < 32 weeks gestation (irrespective of weight) are recommended to receive:

- Hepatitis B vaccine at birth
- 3 doses of a Hepatitis B-containing vaccine at 2, 4 and 6 months of age
- A booster dose at 12 months of age

Preparation
Hepatitis B vaccine is pre-prepared and ready for use.

Hepatitis B Immunoglobulin (HBIG)

Top

Given to infants of mothers positive with Hepatitis B or unscreened mothers. Please refer to the HNELHD Maternity & Newborn – Neonatal Hepatitis B Prevention and Vaccination Program Policy Compliance Procedure.

Rotavirus vaccine

Top

Rotavirus vaccine (Rotarix) is a live, attenuated, oral vaccine. The rotavirus vaccine is presented in a 1.5 mL single-dose, pre-filled, oral applicator for oral administration only. First dose can be given between 6 and 14 weeks (must be given before 14 weeks) and second dose must be completed before 24 weeks gestational age. The interval between the two doses should not be less than 4 weeks.

Preparation
Rotavirus vaccine is pre-prepared and ready for use. It absorbed by the mucous membrane of the mouth. It must be administered slowly into the mouth to optimise absorption. If the baby is not having sucking feeds, rotavirus vaccine may be administered via a gastric tube however this is not the preferred route.

Precautions
Rotavirus is excreted in the stool for up to one week after the oral administration. Eighty percent sheds in the first dose, 20% in the second dose. Staff must wear gloves when attending nappy changes to avoid cross infection to other infants.

If an infant spits out or vomits only a small part of an oral rotavirus vaccine dose, there is no need to repeat the dose. However if an infant spits out or vomits most of an oral rotavirus vaccine dose within minutes of administration, they can receive a single repeat dose during the immunisation encounter.

Combined diphtheria, tetanus, acellular pertussis, hepatitis B, poliovirus and *Haemophilus influenzae* type b Vaccine Top

Combined diphtheria, tetanus, acellular pertussis, hepatitis B, poliovirus and *Haemophilus influenzae* type b vaccine (Infanrix Hexa) consists of a 0.5 mL single-dose, pre-filled syringe (a turbid white suspension) and a vial containing a lyophilised pellet. Given via intramuscular injection.

Preparation
Reconstitute the vaccine by adding the contents of the pre-filled syringe to the powder immediately before administration. Use only the suspension supplied. Ensure that the vaccine and suspension are completely mixed. Always administer the reconstituted vaccine immediately.

Precautions
Administrations should be postponed in babies suffering acute severe febrile illness.

Pneumococcal Conjugate Vaccine Top

Pneumococcal conjugate vaccine (Prevenar 13) is a vaccine used for the prevention of *Streptococcus pneumoniae* infections, for example meningitis, pneumonia and otitis media. Given via intramuscular injection.

Infants ≤ 28 weeks will require an extra dose of pneumococcal conjugate vaccine at 6 months of age and meningococcal group B vaccine is strongly recommended for young children (from 6 months of age) when not already included in the NIP schedule. Note: Prevenar 13 is included on the schedule for indigenous children.

Preparation
Pneumococcal conjugate vaccine is a single-dose, pre-filled syringe, sterile and ready to use. Use the vaccine immediately after removal from the fridge and agitate the syringe prior to administration to ensure contents are evenly mixed.

Precautions
Pneumococcal conjugate vaccine can cause fever, so it should not be given to infants with fever of unknown etiology.

Pain Management Top

Immunisation via injection is a painful procedure and pain reduction and management strategies should be employed to support the infant prior, during and after the procedure.

Non-pharmacological strategies include:

- Swaddling and/or other containment methods
- Breastfeeding
- Sucking on pacifier (*verbal parental consent required for use of pacifier*)

Pharmacological strategies include:

- Sucrose 24% (where applicable, see note* below)
    - *Oral sucrose works synergistically with sucking and should be provided a minimum of 2 minutes prior to the injection/s as per sucrose protocol*

***NOTE:** Sucrose is not required when rotavirus vaccine is due to be administered as sucrose is an ingredient within the Rotarix preparation. If administering concurrently with other vaccines, rotavirus vaccine must be administered first**.**
In the event that rotavirus immunisation is contraindicated (due to history of gastrointestinal problems e.g. NEC, omphalocele) sucrose 24% should be given.

Injection Site

Top

The preferred site for injection is the anterolateral aspect of the thigh for all infants less than 12 months of age (see Figure 3).

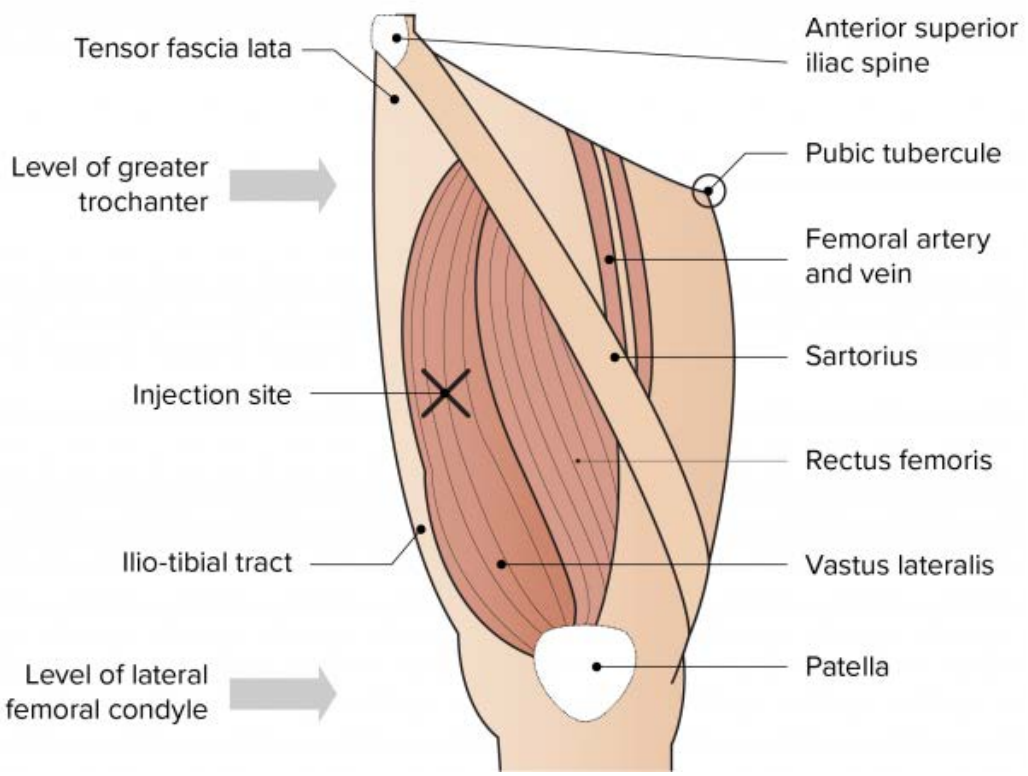

Figure 3: Anterolateral injection site (*Image from the Australian Immmunisation Handbook*)

Equipment

Top

The equipment needed will depend on whether the vaccine is:

- a reconstituted vaccine
- a vaccine from an ampoule or vial
- a vaccine in a pre-filled syringe

Use a new, sterile, disposable syringe and needle for each injection, unless the vaccine is in a pre-filled syringe. Gloves and protective eyewear are not routinely recommended for immunisation providers. However, the person administering the vaccine should wear gloves and eyewear if they are at risk of coming into contact with body fluids or if they have open lesions on their hands.

Equipment may include:

- Medical waste (sharps) container
- Vaccine, plus diluent if the vaccine needs reconstitution
- 1 or 2 mL syringe (unless the vaccine is in a pre-filled syringe)
- Drawing-up needle
- 25G injecting needle
- Cotton wool (to apply gentle pressure to site following the injection)

Monitoring

Top

Neonates admitted to a neonatal unit should be monitored on a cardiorespiratory monitor during and after immunisation, unless not medically indicated by managing clinical team.
Monitoring recommendations are:

- Neonatal inpatients for 48 hours post-procedure
- Babies requiring re-admission for immunisation for 24 hours post-procedure

Administration of IM Injections

Top

Considerations

Being prepared for the immunisation encounter by having appropriate equipment ready, donning personal protective wear and safely disposing of sharps is essential to minimise the risk of needle-stick injury and decreases stress to the infant and parent. Correct patient information, dose, route, date and time must be checked at the bedside by two registered nurses. Products must be checked for expiry date, damage or contamination. Resuscitation equipment must also be available, checked and ready for use in the event it is required.

Procedure

Top

- Ensure skin is visibly clean. Do not swab the leg with an alcohol wipe prior to injection, however it is suitable to clean the site with water if required or if the baby has not been previously bathed
- Undo the baby's nappy to expose the injection site and allow the anatomical markers to be easily identified by sight and palpation
- Position the leg so the muscle is relaxed (this may help alleviate some pain associated with the injection)
- Prepare the vaccine (where required)
- Attach a 25G needle to the syringe/s of vaccine
- Where applicable, expel the air bubble taking care not to prime the needle as this can increase the risk of reaction at the site
- When administering, the 25G needle should be angled at 90 degrees when penetrating the skin. The vaccine is then administered into the muscle as this decreases localised reaction and enhances immunogenicity
- It is not necessary to draw back on the syringe plunger when piercing the skin as risk of entering a vein at this site is low. However, if a flash of blood appears in the needle hub, withdraw the needle and select a new site for injection
- Ensure the vaccine is injected slowly over a count of 5 seconds to reduce pain and injury to the muscle
- Dispose of the sharps safely as per WH&S requirements

Infanrix Hexa and Prevenar 13 must be given in separate legs and recorded so that if a local adverse reaction occurs, the implicated vaccine can be identified. Identify Prevenar 13 (left leg) and Infanrix Hexa (right leg) in both the Personal Health Record (Blue Book) and medical record.

Documentation

Top

Accurate documentation must be attended at the time of immunisation.

Prescribing Immunisations

All immunisations must be charted as per the recommended National Immunisation Program (NIP) Schedule on the Paediatric Medication Chart on the 'Once Only Medicines' section by either a Medical Officer or Endorsed Nurse Practitioner.

Documentation of the Immunisation episode includes the following:

- Completion of administration requirements on the medication chart (including batch number)
- Document in the infant's notes (both consent and administration)
- Complete the infant's Personal Health Record(Blue Book) (including batch number)
- Complete the Australian Immunisation Register (AIR) Immunisation Encounter Form (see Appendix 4) *complete online via link*
- Record the administration date and time in the NICUS database

Adverse effects

Top

Often babies experience minor adverse effects following immunisation, which are considered normal. These include:

- Low-grade temperatures
- Irritability
- Localised erythema and swelling at the injection site

Routine use of paracetamol is no longer recommended following vaccination.

Babies born prematurely have an increased incidence of apnoeas and bradycardias. Any baby admitted to a Neonatal Unit should be monitored on a cardiorespiratory monitor for 48 hours after immunisation.
Intussusception is a rare risk following administration of the rotavirus vaccine. Intussusception is a telescoping of one segment of the bowel into itself. Initially this causes pain, crying and pallor followed by vomiting. Obstruction in the bowel leads to abdominal distention and possible "red currant jelly stool". Any of these symptoms should be reported to a NNP or Medical Officer immediately.

Special Considerations

Top

The preterm infant may be at increased risk of vaccine preventable diseases. Despite their immunological immaturity, preterm infants generally respond well to vaccines.
Provided they are medically stable and there are no contraindications, preterm infants should be immunised according to the recommended schedule at their chronological age, without correction for prematurity. Infants born ≤ 29 weeks should be offered the first group of vaccinations at 8 weeks of postnatal age, unless being transferred or discharged home before.

Immunisation and Readmission Criteria
Infants who require re-admission for an overnight inpatient stay and monitoring for their immunisation encounter include:

- Discharged infants ≤ 31^{+6} weeks at birth (first immunisation only)
- Any infant who has had apnoeic episodes after their first immunisation
- Other infants for whom the Neonatologist or Paediatrician determines admission for immunisation is required

Re-admission Procedure

- Prior to discharge the family must be informed about the planned re-admission for immunisation

- Advise families that their baby will be monitored for 24 hours following immunisation
- Parents are required to bring in their Medicare card and Personal Health Record (Blue Book) on re-admission
- A pre-completed ‘Children’s Planned Procedure Booklet’ is given to the admission office
- The neonatal staff member booking the re-admission episode must advise both the Neonatal Unit and the parents of the planned date and time of admission
- Prior to re-admission date, neonatal administration staff should be informed of upcoming planned admission to prepare necessary admission paperwork
- On the day of re-admission, the parents will visit the admission office collect their admission documentation and then present to the Neonatal Unit reception
- The family and baby should be orientated to the unit and bed space
- A baseline set of observations including a bare weight should attended and documented
- The admitting nurse should explain the possible side effects of immunisation to the parents, gain informed consent and document this in the progress notes
- An examination will be carried out by the Medical Officer and the immunisation order prescribed

Adverse Events

Top

Any severe adverse reaction must be reported to the Hunter New England Population Health on (02) 49246477. The adverse event report should also be reported online to VAERS (Vaccine Adverse Event Reporting System).

IMPLEMENTATION PLAN

The clinical guideline will be:

- Circulated to General Managers and Sector Managers.
- Circulated to the clinicians via Tiered Neonatal Network/Newborn Services and the Children Young People and Families Services and the Women's Health and Maternity Network.
- Made available on the intranet (PPG) and HNEKidshealth website.
- Presented at facility units meetings and tabled for staff to action.

MONITORING AND AUDITING PLAN

- The person or leadership team who has approved the clinical guideline is responsible for ensuring timely and effective review of the guideline.
- Evaluation will require a review of the most current evidence as well as consideration of the experience of HNELHD staff in the implementation of the clinical guideline.
- Data derived from monitoring and evaluation should inform the review of the clinical guideline either as required or scheduled.
- Implementation, education support and monitoring compliance be completed by local Clinical Educators and Managers.
- Amendments to the guideline will be ratified by the Manager and Head of Newborn Services and WHaM Networks prior to final sign off by the Children Young People and Families Services.

CONSULTATION WITH KEY STAKEHOLDERS

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OTHER USEFUL LINKS

1. Australian Government Department of Health; Australian Immunisation Handbook
2. Maternity and Newborn – Neonatal Hepatitis B Prevention and Vaccination Program
3. Australian Immunisation Register (AIR) – immunisation encounter form (IM018)
4. National Immunisation Program (NIP) Schedule

APPENDICES

1. Glossary & Abbreviations
2. National Immunisation Program Schedule (For all non-Indigenous people)
3. National Immunisation Program Schedule (For all Indigenous people)
4. Immunisation Encounter Form
5. NSW Health Vaccine Refrigerator Temperature Chart

REFERENCES

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2. National Immunisation Program (NIP) Schedule. Published by the Australian Government Department of health, available <https://www.health.gov.au/health-topics/immunisation/immunisation-throughout-life/national-immunisation-program-schedule>
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FEEDBACK

Any feedback on this document should be sent to the Contact Officer listed on the front page.

APPENDIX 1

GLOSSARY & ABBREVIATIONS

Acronym or Term	Definition
AIR	Australian Immunisation Register
HBIG	Hepatitis B Immunoglobulin
HNELHD	Hunter New England Local Health District
IMS+	Incident Management System +
MHL	My Health Learning
NEC	Necrotising enterocolitis
NICU	Neonatal Intensive Care Unit
NICUS	Neonatal Intensive Care Units Database
NIP	National Immunisation Program
NNP	Neonatal Nurse Practitioner
PHU	Public Health Unit
SCU	Special Care Unit
VAERS	Vaccine Adverse Event Reporting Service
WH&S	Work Health & Safety

APPENDIX 2

NATIONAL IMMUNISATION PROGRAM SCHEDULE – FOR ALL NON-INDIGENOUS PEOPLE

National Immunisation Program Schedule 1 July 2020 For all non-Indigenous people

Australian Government Department of Health | National Immunisation Program

A joint Australian, State and Territory Government initiative

Age	Disease	Vaccine Brand
Childhood vaccination (also see influenza vaccine)		
Birth	• Hepatitis B (usually offered in hospital)[a]	H-B-Vax® II Paediatric or Engerix B® Paediatric
2 months Can be given from 6 weeks of age	• Diphtheria, tetanus, pertussis (whooping cough), hepatitis B, polio, *Haemophilus influenzae* type b (Hib) • Rotavirus[b] • Pneumococcal	Infanrix® hexa Rotarix® Prevenar 13®
4 months	• Diphtheria, tetanus, pertussis (whooping cough), hepatitis B, polio, *Haemophilus influenzae* type b (Hib) • Rotavirus[b] • Pneumococcal	Infanrix® hexa Rotarix® Prevenar 13®
6 months	• Diphtheria, tetanus, pertussis (whooping cough), hepatitis B, polio, *Haemophilus influenzae* type b (Hib)	Infanrix® hexa
Additional dose for children with specified medical risk conditions[c]	• Pneumococcal	Prevenar 13®
12 months	• Meningococcal ACWY • Measles, mumps, rubella • Pneumococcal	Nimenrix® M-M-R® II or Priorix® Prevenar 13®
18 months	• *Haemophilus influenzae* type b (Hib) • Measles, mumps, rubella, varicella (chickenpox) • Diphtheria, tetanus, pertussis (whooping cough)	ActHIB® Priorix-Tetra® or ProQuad® Infanrix® or Tripacel®
4 years	• Diphtheria, tetanus, pertussis (whooping cough), polio	Infanrix® IPV or Quadracel®
Additional dose for children with specified medical risk conditions[c]	• Pneumococcal[d]	Pneumovax 23®
Adolescent vaccination (also see influenza vaccine)		
12–13 years (school programs)[e]	• Human papillomavirus (HPV)[f] • Diphtheria, tetanus, pertussis (whooping cough)	Gardasil®9 Boostrix®
14–16 years (school programs)[e]	• Meningococcal ACWY	Nimenrix®

APPENDIX 3

NATIONAL IMMUNISATION PROGRAM SCHEDULE – FOR ALL INDIGENOUS PEOPLE

National Immunisation Program Schedule 1 July 2020
For all Indigenous people

Australian Government Department of Health | National Immunisation Program

A joint Australian, State and Territory Government initiative

Age	Disease	Vaccine Brand
Indigenous children (also see influenza vaccine)		
Birth	• Hepatitis B (usually offered in hospital)[a]	H-B-Vax® II Paediatric or Engerix B® Paediatric
2 months Can be given from 6 weeks of age	• Diphtheria, tetanus, pertussis (whooping cough), hepatitis B, polio, *Haemophilus influenzae* type b (Hib) • Rotavirus[b] • Pneumococcal • Meningococcal B	Infanrix® hexa Rotarix® Prevenar 13® Bexsero®
4 months	• Diphtheria, tetanus, pertussis (whooping cough), hepatitis B, polio, *Haemophilus influenzae* type b (Hib) • Rotavirus[b] • Pneumococcal • Meningococcal B	Infanrix® hexa Rotarix® Prevenar 13® Bexsero®
6 months	• Diphtheria, tetanus, pertussis (whooping cough), hepatitis B, polio, *Haemophilus influenzae* type b (Hib)	Infanrix® hexa
Additional dose for children in WA, NT, SA, Qld and children with specified medical risk conditions[c]	• Pneumococcal	Prevenar 13®
Additional dose for children with specified medical risk conditions[c]	• Meningococcal B	Bexsero®
12 months	• Meningococcal ACWY • Measles, mumps, rubella • Pneumococcal • Meningococcal B	Nimenrix® M-M-R® II or Priorix® Prevenar 13® Bexsero®
18 months	• *Haemophilus influenzae* type b (Hib) • Measles, mumps, rubella, varicella (chickenpox) • Diphtheria, tetanus, pertussis (whooping cough)	ActHIB® Priorix-Tetra® or ProQuad® Infanrix® or Tripacel®
Additional vaccine for children in WA, NT, SA, Qld[d]	• Hepatitis A	Vaqta® Paediatric
4 years	• Diphtheria, tetanus, pertussis (whooping cough), polio	Infanrix® IPV or Quadracel®
Additional dose for children in WA, NT, SA, Qld and children with specified medical risk conditions[c]	• Pneumococcal[e]	Pneumovax 23®
Additional vaccine for children in WA, NT, SA, Qld[f]	• Hepatitis A	Vaqta® Paediatric

APPENDIX 4

IMMUNISATION ENCOUNTER FORM

Australian Government
Department of Human Services
medicare

Australian Immunisation Register
Immunisation encounter

When to use this form

Only use this form if you cannot record the immunisation encounter on the Australian Immunisation Register (AIR) through one of the following:

- your practice management software (PMS), **or**
- the AIR site.

Make sure you have the latest version of your PMS and internet browser so that you can access the latest AIR site functionality. Contact your software vendor if you are having difficulties with PMS.

Who can use this form

Only AIR recognised vaccination providers can complete and sign this form (e.g. GP, Council etc.).

When not to use this form

Do not use this form to record an immunisation given overseas or by another vaccination provider. You can record this on the AIR through your PMS or the AIR site. If you can't send this type of information electronically please use the ***Australian Immunisation Register immunisation history*** form (**IM013**).

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 the box at question 9.

A follow up is required to make sure 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 serological testing for natural immunity or if additional vaccines need to be ordered.

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.

For more information

Go to **humanservices.gov.au/hpair** or call **1800 653 809** Monday to Friday, 8 am to 5 pm, local time.

Note: Call charges may apply.

Filling in this form

- **Please use black or blue pen.**
- Print in BLOCK LETTERS.

Individual's details

1 Medicare card number ☐☐☐☐☐–☐☐☐☐☐–☐ Ref no. ☐

2 Family name

First given name

Second given name

3 Date of birth ☐☐ / ☐☐ / ☐☐☐☐

4 Gender
Male ☐
Female ☐

5 Address

Postcode

6 Is the individual of Aboriginal or Torres Strait Islander Australian descent?
If the individual is of both Aboriginal and Torres Strait Islander Australian descent, please tick both 'Yes' boxes.
No ☐
Yes – Aboriginal Australian ☐
Yes – Torres Strait Islander Australian ☐

7 If immunising the individual for the first time and you have sighted documentation that the birth dose of hepatitis B has been given, provide the date.
HepB birth dose date ☐☐ / ☐☐ / ☐☐☐☐

Vaccine brand
Engerix B ☐ HBVax II ☐

CLK0IM018 1811

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APPENDIX 4 (cont)

IMMUNISATION ENCOUNTER FORM (cont)

Immunisation encounter

8 Immunisation service date

/ /

Mark the vaccine dose with an 'X'

Recommended age	2mth	4mth	6mth	12mth	18mth	4yr
Infanrix Hexa	1	2	3			
Prevenar 13	1	2		3		
Rotarix	1	2				
Nimenrix				1		
Priorix				1		
M-M-R II				1		
Priorix-Tetra					2	
ProQuad					2	
ActHIB					3	
Hiberix					3	
Infanrix					3	
Infanrix IPV						3
Quadracel						4

Other vaccine (specify)	Dose

Planned catch up for overdue vaccines

Read information about **Planned catch up for overdue vaccines** on page 1 before completing this question.

9 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. ☐

Privacy notice

10 Your personal information is protected by law (including the *Privacy Act 1988*) and is collected by the Australian Government Department of Human Services for the assessment and administration of payments and services. This information is required to process your application or claim.

Your information may be used by the department, or given to other parties where you have agreed to that, or where it is required or authorised by law (including for the purpose of research or conducting investigations).

You can get more information about the way in which the department will manage your personal information, including our privacy policy, at **humanservices.gov.au/privacy**

Vaccination provider's details and declaration

A recognised vaccination provider must complete and sign this section (e.g. GP, Council, etc.).

11 **I declare that**:

- the information I have provided in this form is complete and correct.

I understand that:

- giving false or misleading information is a serious offence.

Medicare Provider/AIR Registration number

Provider's full name

Provider's signature

On completion, print and sign by hand.

Date

/ /

Reset form Print form

Returning your form

Check that all required questions are answered and that the form is signed and dated.

You can return this form:

- **By mail to**:

  Department of Human Services
  Australian Immunisation Register
  PO Box 7852
  CANBERRA BC ACT 2616

- **By fax**: **08 9254 4810**

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APPENDIX 5

VACCINE REFRIGERATOR TEMPERATURE CHART

NH700227 150716 ○ Holes Punched as per AS2828.1: 2012 ○

BINDING MARGIN - NO WRITING

VACCINE REFRIGERATOR TEMPERATURE CHART - FORTNIGHTLY

Date range: ____/____/____ to ____/____/____

Facility: _____ Location: _____

Fridge ID/name: _____

Instructions for use

Record and plot maximum, minimum and current temperatures on chart TWICE daily.
RESET temperature monitoring device after recording temperatures.
TAKE CORRECTIVE ACTION if temperatures out of range (+2-+8ºC) excluding fluctuations up to +12ºC for ≤15 minutes.
Refer to cold chain breach steps below.

NSW GOVERNMENT Health

	Date	__/__ AM	PM	__/__ AM	PM	__/__ AM	PM	__/__ AM	PM	__/__ AM	PM	__/__ AM	PM	__/__ AM	PM	__/__ AM	PM	__/__ AM	PM	__/__ AM	PM	__/__ AM	PM	__/__ AM	PM	__/__ AM	PM	__/__ AM	PM
	Exact Time																												
	Record Max Temp ºC																												
TOO WARM	+12																												
	+11																												
	+10																												
	+9																												
ACCEPTABLE TEMPERATURE STRIVE FOR 5ºC	+8																												
	+7																												
	+6																												
	+5																												
	+4																												
	+3																												
	+2																												
TOO COLD	+1																												
	0																												
	-1																												
	-2																												
	Record Current Temp ºC																												
	Record Min Temp ºC																												
Temperature RESET ☑																													
	Staff Signature																												

Danger! Temperatures ABOVE 8 DEGREES are TOO WARM. TAKE IMMEDIATE CORRECTIVE ACTION

Danger! Temperatures BELOW 2 DEGREES are TOO COLD. TAKE IMMEDIATE CORRECTIVE ACTION

Results reviewed and appropriate action taken by person responsible — Date: ____ Designation: ____ Signature: ____ Name: ____

Document actions taken when temperatures outside +2ºC to +8ºC *(excludes fluctuations up to +12ºC ≤15 mins e.g. vaccine delivery)*

Date & Time	Temperature Current/Min/Max	Actions taken	Name *(please print)*	Staff Signature

COLD CHAIN BREACH STEPS (refer to Appendix 3 in 'Strive for 5')

1. Take corrective action where possible. Ensure fridge door is closed, fridge is plugged in/turned on. Contact engineer if broken
2. Immediately isolate the vaccines, keep refrigerated between +2ºC and +8ºC (move stock to another fridge) and label 'QUARANTINED STOCK - DO NOT USE'
3. Label affected fridge 'OUT OF ORDER - DO NOT USE'
4. Determine breach temperature and duration. Download data logging(s)
5. Contact the local public health unit (PHU) on 1300 066 055 for advice. Do not discard any vaccines until advice is provided by the PHU (next working day if out of hours)
6. Notify manager/delegate (next working day if out of hours)
7. Report fridge temperature issues and actions on this chart
8. Determine if anyone has received compromised vaccine. Discuss revaccination requirements with PHU as necessary
9. Report the incident on IIMS (excludes breaches due to power outages)

Refer to the current edition of the National Vaccine Storage Guidelines 'Strive for 5' for detailed advice on vaccine cold chain management and storage

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