

Northern Territory Refugee Vaccination Policy

Centre for Disease Control

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Immunisation for newly arrived refugees in the Northern Territory

Background, aims and features

Vaccination while protecting individuals also protects others in the community by increasing the general level of immunity and minimising the spread of infection.¹ Newly arriving refugees* comprise an important group of the population in this context. They often have no vaccination records or give an incomplete history of vaccination. Parental or self-recall of immunisations received in the absence of written records may be inaccurate.² Presence of a BCG scar is evidence of BCG vaccination against tuberculosis (TB). Vaccination schedules of the refugees' countries of origin may also not match the Australian immunisation schedule and such scenarios may necessitate offering vaccines that differ from those vaccines that are currently funded by the Australian Government under the National Immunisation Program (NIP). The *Australian Immunisation Handbook*¹ provides clinical guidelines for health professionals on the safest and most effective use of vaccines. The Northern Territory (NT) and other jurisdictions have adapted the national guidelines and immunisation schedules.³⁻⁶ Some jurisdictions have also implemented specific immunisation activities to cover newly arriving refugees and humanitarian entrants.⁴⁻⁶ A comprehensive analysis and recommendations for a catch-up schedule of immunisation for newly arriving refugees has been developed by the Australasian Society for Infectious Diseases.²

Taking the above into account, the NT refugee immunisation protocol aims to provide a coordinated approach to the assessment and delivery of immunisations for newly arrived refugees to the NT. The protocol aims to provide clarity around the roles and responsibilities of the NT Centre for Disease Control (CDC), the Darwin Refugee Health Service and where utilised to Primary Health Clinics or other General Practices (GP) providing refugee immunisation. Additionally it aims to outline a clear schedule for catch up immunisation for this target group, document and maintain record keeping while providing immunisation data on a regular basis (monthly) to the NT Immunisation Register at the NT Department of Health (DoH).

* Refugees are defined as people who are subject to persecution in their home country, who are typically outside their home country, and are in need of resettlement. The majority of applicants who are considered under this category are identified and referred by the UNHCR to Australia for resettlement. The refugee category includes the Refugee, In-country Special Humanitarian, Emergency Rescue and Woman at Risk visa subclasses.

Roles and responsibilities

NT Immunisation Unit – Centre for Disease Control

The NT Department of Health via the Centre for Disease Control (CDC):

- Provides education and advice on immunisation recommendations, vaccine storage and policies
- Coordinates and distributes vaccines on the national immunisation program to providers
- Records vaccine information on the Northern Territory Immunisation Register (NTIR) and facilitates transfer of data to AIR (Australian Immunisation Register) and National Human Papillomavirus Register (HPV) if required
- Monitors vaccine safety and reports adverse events following immunisation.

Refugee Health Service (RHS)

The role of the refugee immunisation provider at the Darwin RHS is to coordinate refugee immunisation services to:

- Promote vaccination to the target group
- Use an interpreter during consultations as appropriate
- Coordinate their own clinic vaccine ordering and delivery
- Review the current immunisation status of new arrivals and develop a catch-up schedule according to the recommendations of the current *Australian Immunisation Handbook* and the tables included in this guideline
- Administer all vaccines in a safe manner and in accordance with the recommendations of the current immunisation handbook
- Maintain vaccines in accordance with the National Storage Guidelines⁷
- *Strive for 5* [Immunise - National Vaccine Storage Guidelines - Strive for 5 - 2nd edition](#)
- Provide documentation to the patient about the vaccines given and advice on when the immunisations are next due
- Document that vaccines are given according to clinic protocols, enter relevant data in the refugee immunisation database maintained at the clinic and transfer all data to the NTIR for recording on the DoH database
- Make appointments for individuals and family groups for follow up vaccination
- Report any adverse event either to CDC and / or the Therapeutic Goods Administration (TGA) and refer those requiring treatment to a GP or Emergency Department (ED).

Immunisation catch-up schedules

The recommended catch-up immunisation schedules for newly arrived refugees in the NT facilities are summarised in Tables 1 - 4. They were developed by adapting schedules suggested by the Australasian Society for Infectious Diseases,² the 10th Edition *Australian Immunisation Handbook*,¹ NT immunisation schedules³ and with expert input from the NT Immunisation Unit at the CDC. They are also structured in line with those produced in other states.⁴⁻⁶

Summary key points

- Always use the current *Australian Immunisation Handbook (AIH)* for current recommendations and advice.
- Use every available opportunity to vaccinate children and adults.
- For new arrivals, complete a 'primary course of immunisation' that matches the immunisation schedule of the NT. For information on NT immunisation please visit http://www.health.nt.gov.au/Centre_for_Disease_Control/Immunisation/index.aspx. A catch-up schedule will need to be created in many cases and guidance for spacing of booster doses can be obtained from the 10th edition AIH pp45-64 or by contacting CDC for advice. Where feasible always follow age appropriate immunisation according to the standard NT vaccination schedule. For instance if a child is born to a refugee family after arriving in Australia, hepatitis B vaccine can be given at birth and the rest of the vaccinations can be given according to the standard schedule without having to create a catch-up schedule.
- The immunisation catch-up schedules in Tables 1 - 4 are for newly arrived refugees who have no documented vaccinations or provide a patchy history of vaccination. They are arranged according to the age of the individual as a practical way of creating a catch-up schedule.
- A very important requirement for assessment of vaccination status is written documentation of vaccination. Verbal history may be unreliable.
- Please refer to the relevant chapters in the 10th edition AIH for contraindications to vaccination, specific vaccines and for dosing instructions. Adverse reactions are very rare with additional doses in individuals already immune for hepatitis B, varicella, polio and mumps/measles/rubella (MMR) vaccines. Diphtheria and tetanus containing vaccines may be associated with an increase in local and systemic reactions; if such reactions occur, review prior to giving further doses.
- Extra vaccine protection may be required in children with medical conditions such as those with anatomic or functional asplenia, HIV infection, chronic illnesses and haemoglobinopathies. Consult the Australian Immunisation handbook (online) or CDC in the NT for guidance on the vaccines required in such conditions.
- Some vaccines are routinely administered as part of a school based program. These include HPV vaccine for all students aged 12 years (Year 7) and Varicella (for those who have had neither disease nor prior vaccination) and diphtheria, tetanus, pertussis for students in Year 7 or 8.
- Criteria for funded vaccines for refugees and humanitarian entrants are given in Annex 3.
- A worksheet for catch-up appointments (Annex 4) can be used to record and/or remind the provider as well as the recipient on the proposed schedule and the next dose/s to be given.
- A vaccine order form (Annex 5) should be used to order vaccines for the Refugee health service, this should be faxed to Pharmacy at RDH, and a copy faxed to CDC Darwin.

Additional information for vaccine providers

The tables in this document are presented in age groups for quick decision making on creating a catch-up immunisation. They are based on the age of the individual when first presented at the immunisation clinic.

The 1st visit refers to the day the first vaccinations are given.

Any reference to 1 month in the tables equates to 28 days.

Combination vaccines such as Infanrix[®]Hexa or Infanrix[®]IPV can be used for the primary course of catch-up immunisation in children less than 10 years of age. If the recommended intervals between doses are exceeded there is no need to recommence the schedule or give additional doses because the immune response is not impaired by such delay. Some vaccines require extra doses in addition to the National Immunisation Program schedule or vaccine doses given earlier than required depending on the medical risk factor for an individual. Please see the 10th Edition *Australian Immunisation Handbook*, 'Groups with special vaccination requirements Part 3.3' for further information.

Table 1. A catch up schedule for children <12 months at 1st visit with NO documentation of prior vaccination*

Vaccine required	Age of the individual at presentation	Number of doses	Minimum interval*	Note
Rotavirus (Rotarix®)	6 weeks, 4 months	2	1 month*	1 st dose must be given by 14 wks + 6 days 2 nd dose must be given by 24 weeks + 6 days NO CATCH UP
Diphtheria, Tetanus, Pertussis, Hepatitis B, Polio and <i>Haemophilus influenzae</i> type B (Infanrix® Hexa)	6 weeks	3	1 month* between dose 1 and 2 2 months# between dose 2 and 3	3 rd dose should not be given before 24 weeks
Pneumococcal vaccine Prevenar 13® (13vPCV)	6 weeks – 6 months	3 doses	1 month*	People with medical risk factors require extra doses (Please refer 10 th edition AIH)
	7 - 11 months	2 doses	1 month* Must be 2 months apart if children >12 months	

* = 1 month is equal to 28 days.

If there is documentation of previous vaccination, there is no need to start all over again. Start from where it has stopped.

Influenza vaccine may be required for children 6 months and older with chronic medical conditions.

Table 2. A catch up schedule for children 1 – 5 years at 1st visit with NO documentation of prior vaccination

Vaccine required	Age of the individual at presentation	Number of doses	Minimum interval	Note
Diphtheria, Tetanus, Pertussis, Hepatitis B, Polio and <i>Haemophilus influenzae</i> Type B (Infanrix® Hexa)	≤5 years	3	1 month* between dose 1 and 2 2 months# between dose 2 and 3	
Diphtheria, tetanus, pertussis, (Infanrix)	≤3.5 years	1	6 months* after the last DTPa and at least 6/12 months prior to the next DTPa	
Mumps Measles and Rubella (Priorix®) Or M-M-RII®)	≥1 year	1^	1 month* between MMR and MMRV (see below) Or 1 month* between any 2 doses of MMR	Must be used for the 1 st dose of a MMR containing vaccine. Give MMR (dose 1) if any measles vaccine has been given overseas before 12 months of age. If an MMR containing vaccine has previously been given and the child is ≥18 months give MMRV as the 2 nd dose (see below)
Mumps – Measles – Rubella – Varicella MMRV (Priorix® Tetra) Or ProQuad®	≥18 months	1	1 month* between MMR and MMRV (see above)	Only give MMRV if a prior MMR vaccine has been given If MMRV is not available give MMR and Varicella as separate vaccines
Meningococcal C- <i>Haemophilus Influenzae</i> type b (Menitorix®)	≥1 year	1		
Pneumococcal vaccine Prevenar13® (13vPCV)	12 – 59 months	1 dose		People with medical risk factors require extra doses (Please refer 10 th edition AIH)
Diphtheria, Tetanus, Pertussis, Polio Infanrix® IPV	4 years	1 dose	6 months after last DTP containing vaccine	

* = 1 month is equal to 28 days.

the minimum interval between dose 1 and 3 is 4 months

^ = children require 2 documented doses of a MMR containing vaccine from 12 months to 4 years of age

Table 3. A catch up schedule for children 5 - <10 years at 1st visit with NO documentation of prior vaccination

Vaccine required	Age of the individual	Number of doses	Minimum interval*	Note
Diphtheria, Tetanus and Pertussis with Polio (Infanrix® IPV)	5 - <10years	4	1 month* between each of doses 1, 2 and 3 6 months between dose 3 and 4	
Mumps Measles and Rubella (Priorix® Or M-M-RII®)	5 - <10 years	2	1 month*	If any measles vaccine has been given overseas before 12 months of age, give MMR (dose 1) and then give a 2 nd dose of either MMR or MMRV a month later
Meningococcal C (Neisvac-C®)	5 - <10 years	1		
Hepatitis B paediatric (Engerix-B™)	5 - <10 years	3	1 month* between dose 1 and 2 2 months# between dose 2 and 3	Use paediatric vaccine
Varicella (Varilrix® Or Varivax®) MMRV (Priorix Tetra® or ProQuad®) can be used if no history of chickenpox disease or vaccination and there is history of only 1 previous dose of MMR containing vaccine.	5 - <10 years	1		

* = 1 month is equal to 28 days.

the minimum interval between dose 1 and dose 3 is 4 months

Table 4. A catch up schedule ≥10 years-19 years at 1st visit with NO documentation of prior vaccination

Vaccine required	Age of the individual	Number of doses	Minimum interval*	Note
Diphtheria and Tetanus (ADT[®]) or Diphtheria, Tetanus and Pertussis (dTpa) (Boostrix[®])	>10 years	3 doses	1 month* between all doses	Give dTpa-IPV if polio vaccine also needed. Primary course can be 1 dose of dTpa followed by 2 doses of ADT
Mumps Measles and Rubella (Priorix[®]) or (M-M-RII[®])	>10 years	2 doses	1 month* apart	Some people may have only received a measles vaccine prior to entry to Australia. They should receive 2 doses of MMR.
Meningococcal C (Neisvac-C[®])	>10 years	1		
Hepatitis B paediatric (Engerix-B[®])	<20 years	3 doses	1 month* between dose 1 and 2 2 months [#] between dose 2 and 3	
Chickenpox/Varicella (Varilrix[®] or Varivax[®])	13 years	1	-	
	≥14 years	2 doses if ≥14 years [†]	1 month*	
Polio (IPOL[®])	>10 years	3	1 month* between each dose	dTpa-IPV can be used for a single dose when dTpa vaccine is also required
Human Papillomavirus (Gardasil[®])	12 years all students	3	2 months between dose 1 and 2 4 months between dose 2 and 3	Usually given as part of a school based program, can catch up until 18 years.

* = 1 month is equal to 28 days

† = 2nd dose of varicella vaccine is not funded by national or NT vaccine program

the minimum interval between dose 1 and dose 3 is 4 months

Table 5. A catch up schedule ≥ 20 years at 1st visit with NO documentation of prior vaccination

Vaccine required	Age of the individual	Number of doses	Minimum interval*	Note
Diphtheria and Tetanus (ADT[®]) or Diphtheria, Tetanus and Pertussis (dTpa) (Boostrix[®])	>10 years	3 doses	1 month* between all doses	Give dTpa-IPV if polio vaccine also needed. Primary course can be 1 dose of dTpa followed by 2 doses of ADT
Mumps Measles and Rubella (Priorix[®]) or (M-M-RII[®])	>10 years	2 doses	1 month* apart	Some people may have only received a measles vaccine prior to entry to Australia. They should receive 2 doses of MMR.
Hepatitis B Engerix B[®] or H-B Vax II[®]	≥ 20 years	3 doses	1 month* between dose 1 and 2 2 months between dose 2 and 3	
Polio (IPOL[®])	>10 years	3	1 month* between each dose	dTpa-IPV can be used for a single dose when dTpa vaccine is also required

People with chronic medical conditions may require additional vaccines such as influenza and pneumococcal vaccine.

References:

1. National Health and Medical Research Council. Department of Health and Ageing. The Australian Immunisation Handbook. 10th edition. Australian Government. Canberra, 2013.
2. Australasian Society for Infectious Diseases. Diagnosis, management and prevention of infections in recently arrived refugees. 2009. Dreamweaver Publishing Pty Ltd, Sydney NSW 2000.
3. Centre for Disease Control. Department of Health – Northern Territory Government. NT Immunisation Schedules.
http://www.health.nt.gov.au/Centre_for_Disease_Control/Immunisation/index.aspx (Accessed 27th August 2015).
4. Department of Health – State Government of Victoria. Catch-up immunisation for Victoria for people with no documentation of previous vaccines
<http://www.nmml.org.au/content/Document/Quick%20guide%20Catch-up%20immunisation%20Jan%202013.pdf> (Accessed 27th August 2015).
5. Department of Health - Government of South Australia. New arrival refugee immunisation program.
<http://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/health+topics/health+conditions+prevention+and+treatment/immunisation/immunisation+programs/eb87aa80413e700190a3be6e3bdc556a/new+arrival+refugee+immunisation+program+nari> (Accessed 27th August 2015).
6. Department of Health - Government of Queensland. Refugee Health Service Plan
http://www.health.qld.gov.au/multicultural/health_workers/QRHS_exe_summ.pdf (Accessed 27th August 2015).
7. Department of Health – Australian Government, National Vaccine Storage Guidelines- Strive for 5 – 2nd Edition
<http://www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/IMM77-cnt>

Annex 1: Northern Territory Childhood Vaccination Schedule

[http://www.health.nt.gov.au/library/scripts/objectifyMedia.aspx?file=pdf/10/78.pdf&siteID=1&str_title=Childhood Vaccination Schedule.pdf](http://www.health.nt.gov.au/library/scripts/objectifyMedia.aspx?file=pdf/10/78.pdf&siteID=1&str_title=Childhood%20Vaccination%20Schedule.pdf)

Annex2: Northern Territory Adult and Special Groups vaccination schedule

[http://www.health.nt.gov.au/library/scripts/objectifyMedia.aspx?file=pdf/63/90.pdf&siteID=1&str_title=Adult and Special Groups Vaccination Schedule.pdf](http://www.health.nt.gov.au/library/scripts/objectifyMedia.aspx?file=pdf/63/90.pdf&siteID=1&str_title=Adult%20and%20Special%20Groups%20Vaccination%20Schedule.pdf)

Annex 3 NT Pneumococcal vaccination and revaccination guideline

[http://www.health.nt.gov.au/library/scripts/objectifyMedia.aspx?file=pdf/85/87.pdf&siteID=1&str_title=Pneumococcal vaccination and revaccination guideline NT.pdf](http://www.health.nt.gov.au/library/scripts/objectifyMedia.aspx?file=pdf/85/87.pdf&siteID=1&str_title=Pneumococcal%20vaccination%20and%20revaccination%20guideline%20NT.pdf)

Annex 3

Criteria for use of funded vaccines for refugees and humanitarian entrants

The vaccinee resides in Australia and meets at least one of the following criteria:

1. Holds a Medicare card or is eligible to hold a Medicare card
2. Holds Australian citizenship
3. Holds a permanent visa or has applied for a permanent visa

If an eligible person attends without their Medicare card vaccines can still be administered at this time.

The vaccines listed below are funded under the National Immunisation Program or by the NT government except those denoted by an asterisk (*). These vaccines are included in this table but require funding by the clinical service provider or client.

Any vaccines given outside the guidelines in this table should be funded by the clinical service provider or patient. (i.e. travel vaccines, vaccines given for some medical risk groups)

Vaccine brand	Eligibility criteria
ADT Booster[®]	From 10 years of age for a primary course Adults at 65 years of age if no tetanus -containing vaccine in the previous 10 years*
Boostrix[®]	From 10 years of age as a single dose in a primary course 12-13 years as part of school program New parent program for those caring for infants <7 months Adults at 50 years of age if no pertussis -containing vaccine in the previous 10 years*
Infanrix[®] Hexa	≤10 years of age to complete a primary course of vaccine Consider using Infanrix [®] IPV if Hep B or Hib vaccination is not required
Infanrix[®] IPV	4 years of age ≤10 years of age to complete a primary course of vaccine Consider using Infanrix [®] Hexa if additional Hep B or Hib vaccination is required
Infanrix[®]	From 18 months of age at least 6 months after previous DTPa containing vaccine (Infanrix Hexa [®]), and at least 6 months prior to the next scheduled DTPa containing vaccine (Infanrix IPV [®]). Some children will not require this dose as they have commenced vaccination at an older age.
Menitorix[®]	Routinely at 12 months of age <i>Catch-up</i> single dose from 13 months to ≤ 5 years of age if no previous meningococcal vaccine given and still requires Hib vaccine
Neisvacc[®]	Single dose if born after 1 Jan 2002 if no previous meningococcal C vaccine
Adult Engerix B[®] / HBVaxII[®]	3 doses (0,1 and 6 month intervals) for household contacts of a person living with hepatitis B who are ≥20 years of age or who has high risk medical condition (see AIH pp 220-2)
Paediatric Engerix B[®]	Infants at birth or within 7 days of birth 12 months of age booster dose if child born less than 32 weeks gestation or less than 2000 g birth weight Adolescents born on or after 1/8/1990 and are ≤19 years of age 3 doses (0,1 and 6 month intervals) for household contacts of a person living with hepatitis B who are <20 years of age
Gardasil[®]	3 doses for all students in Year 7 or age equivalent – 12 years of age
FluQuadri[®] Junior ≥6months - < 3 years Fluarix Tetra[®] 3 years of age and over.	≥6 months of age and over with conditions predisposing to severe illness as per 10 th edition AIH pp252-4 Pregnant women during any stage of pregnancy All people 65 years of age and older Yearly vaccine

IPOL[®]	Up to 3 doses to complete a primary course if not previously vaccinated
Priorix[®] or M-M-RII[®]	12 months of age Women planning pregnancy and post -partum with low or negative rubella antibody <i>Catch-up:</i> people from 12 months of age who have not received 2 doses of a MMR- containing vaccine (MMRV can be used in children <14 years as the 2 nd dose of MMR containing vaccine)
Priorix Tetra[®] (MMRV) Or ProQuad[®]	Single dose at 18 months of age if a MMR vaccine has already been given <i>Catch-up-</i> MMRV combination vaccine can be given if no varicella-containing vaccine has already been given or 2 nd dose MMR vaccine has not been given and child is <14 years
Prevenar 13[®]	3 doses for children <2 years may require a reduced number of doses depending on age at 1 st dose. See 10 th edition AIH *Additional doses may be required for medically at risk - See AIH pp327-330.
Pneumovax 23[®]	4 to 5 years of age with medical risk factors as per AIH pp327-330 ≥65 years of age ≤65 years with risk factors as per NT pneumococcal vaccination and revaccination guidelines for adults
Rotarix[®]	2 doses at 2 and 4 months of age (see current childhood vaccination schedule) NO catch-up
Varilrix[®] or Varivax[®]	All students in Year 7 at school or age equivalent 13 years

*Vaccines not funded under National Immunisation Program (NIP)

Vaccines required for travel purposes are not supplied. Refer to the 10th edition AIH for detailed schedule and medical recommendations.

Annex 4

Worksheet for catch-up appointments

Worksheet for catch-up appointments							
Name:							
DOB:							
Age:							
Vaccine	Last dose given (dose number and date)	Number of doses required at current age and intervals	Dates of further doses				Comments

Annex 5: Refugee vaccine order form

TO: PHARMACY RDH
CDC DARWIN (ATTN JANINE)

FAX NO: 89228499 (RDH)
89228310 (CDC)

FROM:

FAX NO:

PHONE NO:

RE: REFUGEE NON - NIP VACCINE ORDER

DATE: **PAGES:** (including cover sheet)

PLEASE FORWARD THE FOLLOWING VACCINES

Item	Brand	No of doses	Pharmacy Charge Code
Adult Hepatitis B	HBVAXII		REFV
Inactivated Polio Vaccine	IPOL		REFV
Tuberculin 5 TU (Human)	Tubersol		TUBE

SIGNED
