Meningococcal vaccination Dr Leanne Jones

Survey results disease awareness

- Good awareness of meningococcal infection 83%
- Only half aware multiple strains
- Only half aware contagious
- Half think difficult to diagnosis
- Half think difficult to treat
- 40% think it is rare

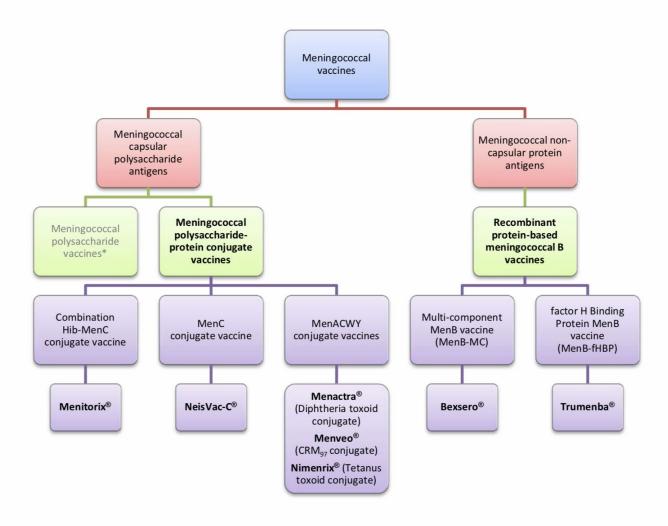


- Two thirds aware there is a vaccine
- Only one third aware require different vaccines for different strains
- One quarter aware that can be vaccinated from 2 months
- Only 1 in 5 aware not covered in routine vaccinations
- Only 1 in 5 aware government does not cover full cost

Meningococcal Vaccines

- Recombinant meningococcal B(men B) vaccines Bexero, Trumenba
- Quadrivalent (A,C,W,Y) meningococcal conjugate vaccines Menactra, Menveo and Nimerix
- Meningococcal C conjugate vaccine NeisVac or in combination with Haemophilus C Menitorix

Figure 1: Classification of meningococcal vaccines available in Australia



^{*} Meningococcal polysaccharide vaccines are no longer supplied or recommended for use in Australia

Table 1: People and age groups strongly recommended to receive meningococcal vaccination

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

^{*} Includes those with a specified medical condition associated with increased risk of meningococcal disease, including inherited defects or deficiency of properdin or complement components, current or future treatment with eculizumab, functional or anatomical asplenia, HIV infection and haematopoetic stem cell transplant.

[†] Includes students living in residential accommodation and new military recruits.

[‡] Includes laboratory personnel who are at occupational risk of exposure to Neisseria meningitidis.

[§] People (age ≥6 weeks) who are travelling to areas where meningococcal disease is more common and there is an increased risk of exposure to meningococcal serogroups A, C, W or Y disease.

Table 2: Meningococcal vaccines available for use in Australia and current access/availability

Trade name	Formulation	Current access/availability as of March 2019				
Recombina	Recombinant meningococcal B (MenB) vaccines* against B serogroup					
Bexsero®	Recombinant multicomponent MenB (MenB-MC)	MenB vaccine available nationally through private prescription (Trumenba can only be used for people aged ≥10 years). In South Australia, Bexsero is available for free for infants aged 6 weeks to 12 months (with catch-up for those aged 12 months to <4 years until December 2019), and free for adolescent aged 15–16 years (catch-up for those aged 16 to <21 years until December 2019).				
Trumenba®	Recombinant bivalent fHBP MenB (MenB-fHbp)					
Quadrivale	Quadrivalent meningococcal (MenACWY) conjugate vaccines [‡] against A, C, W, and Y serogroups					
Menactra®	Quadrivalent diphtheria toxoid conjugate	Nimenrix is NIP-funded for a single dose at age 12 months. NIP funding for those aged 14–19 years from April 2019; Year 10 students will receive the vaccine through a school-based program while eligible non-students can receive a dose from their GP. Some states provide free vaccine to additional age groups. WA funds vaccination for children aged 1–4 years (until December 2019) and Aboriginal and Torres Strait Islander children aged 6 weeks to 4 years. NT and TAS also fund MenACWY vaccine for some infants and children. Please check state health department websites for details. All brands are available through private prescription for other age groups. [Note: Menactra is not licensed for infants aged <9 months.]				
Menveo®	Quadrivalent CRM ₁₉₇ conjugate					
Nimenrix®	Quadrivalent tetanus toxoid conjugate					
Meningococcal C (MenC) conjugate vaccines against C serogroup						
Menitorix®	Haemophilus influenzae type b and MenC conjugate combination	Combination Hib-MenC conjugate vaccine or monovalent MenC vaccine available on the NIP for those requiring catch-up of the previous 12-month childhood MenC dose (if they are not eligible to receive MenACWY vaccine, i.e. aged >12 months on 1 July 2018).				
NeisVac-C®	Monovalent MenC conjugate					

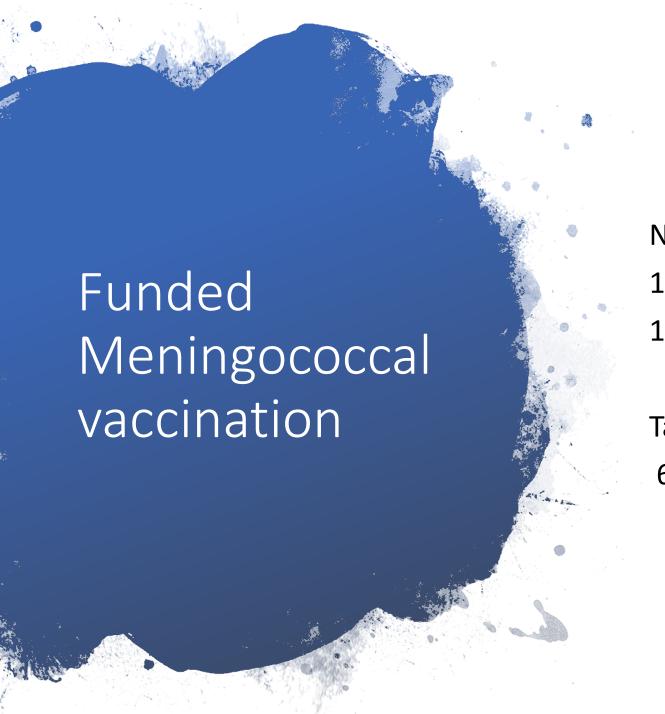
^{*} There are many strains of serogroup B meningococcus. Laboratory tests indicate that both MenB vaccines are likely to protect against a large proportion (>75%) of MenB strains in Australia, but there is as yet inadequate information about the exact proportion or any difference between the two vaccines. Refer to Table 4 for dosing guidelines.

[†] Refer to state and territory health department websites.

[‡] Vaccine brands are registered for use in different age groups (refer to Table 3).

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

Age at commencement of vaccine course	MenACWY vaccine brand	Healthy individuals, including Aboriginal and Torres Strait Islander people, travellers and laboratory personnel	With any specified medical conditions associated with increased risk of meningococcal disease (see footnote Table 1)	
Country 5 months	Menveo*	3 doses	4 doses (8 weeks between doses; 4th dose at 12 months of age or 8 weeks after 3rd dose, whichever is later)	
6 weeks–5 months	Nimenrix	(8 weeks between 1st and 2nd doses; 3rd dose at 12 months of age)		
6–8 months	Menveo*	2 doses	3 doses (8 weeks between 1st and 2nd doses; 3rd dose at 12 months or 8 weeks after 2nd dose, whichever is later)	
0-6 months	Nimenrix	(2nd dose at 12 months of age)		
9–11 months	Menveo	2 doses		
	Nimenrix	(2nd dose at 12 months of age or 8 weeks after 1st dose, whichever is	3 doses (8 weeks between each dose)	
	Menactra#	later)		
12–23 months	Menveo	2 doses (8 weeks between doses)	2 doses (8 weeks between doses)	
	Menactra#	2 doses (8 weeks between doses)		
	Nimenrix	1 dose		
≥2 years [‡]	Menveo		2 doses (8 weeks between doses)	
	Menactra ^{#§}	1 dose		
	Nimenrix			
Booster doses for all ages	Any brand	Required only for travellers and laboratory personnel facing ongoing risks, who completed the primary series at: a) ≤6 years of age: give at 3 years after completion of primary immunisation schedule, then every 5 years thereafter b) ≥7 years of age: give every 5 years after completion of the primary immunisation schedule	For those with ongoing increased risk for IMD who completed the primary series at: a) ≤6 years of age: give at 3 years after completion of primary immunisation schedule, then every 5 years thereafter b) ≥7 years of age: give every 5 years after completion of the primary immunisation schedule	



NIP

12 months Meningococcal ACWY

14-16 years Meningococcal ACWY

Tasmania

6 wks – 21 years Meningococcal ACWY



- Any person from 6 weeks of age who wants to protect themselves against meningococcal disease is recommended to receive Men ACWY vaccine and Men B vaccine
- immunisation handbook.health.gov.au



- https://immunisationhandbook.health.gov.au/vaccine-preventable-diseases/meningococcal-disease
- https://www.immunisationcoalition.org.au/resources/meningococcal-disease/
- http://www.ncirs.org.au/ncirs-fact-sheets-faqs/meningococcal-vaccines-australians