

AUSTRALIAN TECHNICAL ADVISORY GROUP ON IMMUNISATION (ATAGI) | **CLINICAL ADVICE**

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STATEMENT ON THE INTRODUCTION OF MENINGOCOCCAL ACWY VACCINE (NIMENRIX®) FOR ADOLESCENTS THROUGH THE NATIONAL IMMUNISATION PROGRAM (NIP)

It is important to read this statement in conjunction with The Australian Immunisation Handbook available at immunisationhandbook.health.gov.au.

Overview of key points

- From April 2019, adolescents will be offered the quadrivalent meningococcal vaccine (Nimenrix®) protecting against serogroups A, C W and Y as a single dose.
 - Year 10 students (aged approximately 14 to 16 years) will be offered the vaccine through school based immunisation programs.
 - Catch up vaccination will be available for adolescents aged 15 to 19 years through their GP or primary care provider.
- For people who have a condition associated with an increased risk of invasive meningococcal disease (IMD), for example, patients with functional or anatomical asplenia or complement disorder, additional doses of MenACWY vaccine may be required. However, these doses are not currently funded through the National Immunisation Program (NIP).
- The adolescent program complements the MenACWY vaccine program on the NIP for infants aged 12 months.
- Meningococcal B vaccines are also available through private prescription to anyone aged ≥6 weeks who
 wants to reduce their likelihood of becoming ill with meningococcal B disease.

Background

Meningococcal disease is a serious illness caused by meningococcal bacteria that can cause disability and death.

In Australia, the five most common types (or serogroups) of meningococcal bacteria found are A, B, C, W and Y. Septicaemia and/or meningitis are the most common clinical manifestations of IMD.

No single vaccine protects against all serogroups; there are separate vaccines against meningococcal ACWY serogroups and the meniningococcal B serogroup.

The meningococcal subgroups that cause IMD have been changing in the last few years. Since 2013, the occurrence of meningococcal W disease has been increasing rapidly. Many meningococcal W cases are caused by a strain (sequence type ST 11) associated with severe disease and a higher risk of death.

A smaller yet steady rise in the occurrence of meningococcal Y disease has also been seen since 2016. Together, meningococcal W and Y disease cause approximately half of the cases of IMD in Australia.

Meningococcal B, which historically caused the majority of meningococcal disease in Australia, continues to cause around half of all reported cases of IMD.

The highest incidence of IMD is in children aged <2 years and adolescents aged 15–24 years. Older adolescents and young adults most frequently carry the bacteria. Vaccinating populations with higher carriage rates is important to achieve protection of the community more broadly (known as community or herd immunity).

Recommendations for the use of MenACWY vaccine

- Healthy adolescents aged 15–19 years are strongly recommended to receive a single dose of MenACWY vaccine.
- If an adolescent received a dose of MenC vaccine in childhood, they are still recommended to receive the MenACWY vaccine. The MenACWY vaccine provides protection against serogroups A, W, Y types and in addition will boost immunity against serogroup C.
- NIP-eligible adolescents who have previously received a conjugate MenACWY vaccine (Menactra®, Menveo® or Nimenrix®), for example via private prescription can receive another dose of MenACWY vaccine, even if the previous dose was within the past five years. There should be at least a four week interval between doses. Repeat vaccination carries no additional risk of adverse reactions.
- Children are strongly recommended to receive a single dose of MenACWY vaccine at age 12 months. This
 dose is funded under the NIP.

MenACWY vaccines are also recommended in the <u>Australian Immunisation Handbook</u>, but not currently funded on the NIP for:

- all Aboriginal and Torres Strait Islander people aged 6 weeks to 19 years¹ noting this age span includes those covered under the NIP at ages 12 months and 14 to 19 years;
- young adults aged 20–24 years who live in close quarters (such as new military recruits and students living in residential accommodation);
- · current smokers: and
- all people who have a condition associated with an increased risk of IMD, for example, patients with
 functional or anatomical asplenia or complement disorder. If a child or adolescent in this category has
 received a NIP-funded MenACWY vaccine dose, they likely still require additional doses of vaccine. For all
 risk factors and schedules for those at increased risk of IMD, refer to the online <u>Australian Immunisation</u>
 Handbook.

Safety and effectiveness of meningococcal ACWY vaccines

- A single dose of conjugate MenACWY vaccine is very effective in providing protection against the meningococcal serogroups A, C, W and Y.
- MenACWY vaccine safety has been shown in multiple clinical trials and large population studies in people of different ages, from infants to adults.
- The vast majority of reactions after vaccination are mild and resolve on their own. Common adverse reactions include pain, redness and swelling at the injection site, fever, chills and headache.
- It is safe for adolescents to receive the MenACWY vaccine at the same time as other routine vaccines including the human papillomavirus (HPV), diphtheria-tetanus-pertussis and Meningococcal B vaccines, if required, at different injection sites.

Contraindications

The only absolute contraindications to meningococcal vaccines are:

- Anaphylaxis following a previous dose of any meningococcal vaccine.
- Anaphylaxis following any vaccine component.

¹ Note that some Aboriginal and Torres Strait Islander people of these age will have received MenACWY vaccination as a part of state and territory outbreak response programs.

Previous meningococcal disease, regardless of serogroup, is **not** a contraindication to administration of any meningococcal vaccine.

Table 1: Meningococcal vaccines available for use in Australia

Trade name	Formulation	Registered age group	Availability
Quadrivalent meningococcal (MenACWY) conjugate vaccines against A, C, W and Y serogroups			
Menactra®	Quadrivalent diphtheria toxoid conjugate	9 month- 55 years	Nimenrix® is NIP funded for a single dose at age 12 months, and 14-19 years from April 2019.
Menveo®	Quadrivalent CRM conjugate	≥2 months	WA funds MenACWY for children aged 1-4
Nimenrix®	Quadrivalent tetanus toxoid conjugate	≥6 weeks	years (until December 2019) and Aboriginal and Torres Strait Islander children aged 6 weeks to 4 years. NT and TAS also funds MenACWY vaccines for infants and for children. See state and territory websites for information on these programs.
Dagambinant.	maningassas I P (Man	D) vassinas against	All brands available through private prescription for other age groups.
Recombinant meningococcal B (MenB) vaccines against B serogroup			
Bexsero®	Recombinant multicomponent MenB (MenB-MC)	≥2 months	SA funds Bexsero® for children and adolescents.
Trumenba®	Recombinant bivalent fHP MenB (MenB- fHpb)	≥ 10 years	All brands available through private prescription.
Meningococca	al C (MenC) conjugate	vaccines against C s	serogroup
Menitorix®	Haemophilus influenzae type b and MenC conjugate combination	Registered for primary immunisation in infants aged 6 weeks-12 months	NeisVac-C® is NIP funded for 10-19 year old catch up. All brands available through private prescription.
NeisVac-C®	Monovalent MenC conjugate	≥8 weeks	