



## National Meningococcal C Vaccination Program

Fact sheet for Immunisation Providers

# PROGRAM DELIVERY, ELIGIBILITY AND INTERIM GUIDELINES FOR

## MENINGOCOCCAL C CONJUGATE VACCINE

(UPDATED MARCH 2003)



Commonwealth Department of  
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## About the National Meningococcal C Vaccination Program

Over the next four years, as part of a comprehensive Commonwealth Government response to reducing the impact of meningococcal C disease on the community, the National Meningococcal C Vaccination Program will provide free meningococcal C vaccine to children and young adults who turned one to 19 years of age in 2003. This will be one of the largest vaccination programs ever seen in Australia.

## Program delivery and eligibility

In 2003:

- Pre-school aged children (turning 1 to 5 years of age in 2003) will be able to access free meningococcal C vaccine through general practitioners and other immunisation providers as appropriate; and
- Senior high-school students (turning 15 to 19 years of age in 2003) will have access to free meningococcal C vaccine through school-based programs.

Vaccination of the remaining primary and secondary school students (turning 6 to 14 in 2003) will commence in late 2003 and 2004, depending on the State or Territory.

### A summary of eligibility for the Program is as follows:

Stage	Target Group	Significant dates	Setting
Early 2003	Infants at 12 months as part of routine schedule vaccinations	Children born on or after 1/1/02	GP or other immunisation provider
	Pre-school children turning 1 to 5 years in 2003	Children born from 1/1/98 to 31/12/01 are eligible in 2003	GP or other immunisation provider
2003	Senior high school students	Turning 15 to 19 years in 2003	School based immunisation program
2004-2005	Primary and secondary school students	Turning 6 to 14 years in 2003	School based immunisation program

Commencing in late 2005, the free meningococcal C vaccine will be available through GPs for all remaining eligible children and adolescents (turning 6 to 19 years of age in 2003) who were not vaccinated through school-based programs.

## Further information

There will be minor differences in the way the National Meningococcal C Vaccination Program is rolled out in States and Territories and you should have received information on this from your State/Territory Health Department.

If you require further information on the Program you should contact your State or Territory Health Department. Contact details are:

State/Territory	Contact number
Australian Capital Territory	(02) 6205 2300
New South Wales	Public Health Unit (look under 'Health' in the White Pages)
Northern Territory	(08) 8922 8044
Queensland	(07) 3234 1500
South Australia	(08) 8226 7177
Tasmania	(03) 6233 3762 or 1800 671 738 (Tasmania only)
Victoria	(03) 9637 4144
Western Australia	(08) 9321 1312

## GUIDELINES FOR PROVIDERS ABOUT ADMINISTRATION OF MENINGOCOCCAL C CONJUGATE VACCINE

It is important to remind patients (and their parents where appropriate) that the meningococcal C vaccine only provides protection against meningococcal serogroup C disease, and that they should continue to be alert for signs of meningococcal disease caused by other serogroups.

This information is an updated version of the [Guidelines for providers about the administration of meningococcal C conjugate vaccine](#) that were distributed to GPs and other immunisation providers in January 2003.

These guidelines are only intended to address issues which may be new or where recommendations differ from the product information (PI). The guidelines are based

on updated recommendations that the Australian Technical Advisory Group on Immunisation (ATAGI) have made for meningococcal disease which will appear in the 8th Edition of the Australian Immunisation Handbook. The 8th edition of the Handbook is expected to be endorsed shortly by the National Health and Medical Research Council (NHMRC) and will be available in the second half of 2003. These guidelines have been prepared in consultation with the National Centre for Immunisation Research and Surveillance (NCIRS).

Meningococcal C vaccine has been endorsed by the NHMRC and added to the Australian Standard Vaccination Schedule (ASVS) for children at 12 months of age.

## Meningococcal C conjugate vaccine (MenCCV):

There are three MenCCV licensed for use in Australia:

- Meningitec – Wyeth (each 0.5 mL dose contains 10µg *N. meningitidis* group C oligosaccharide conjugated to approximately 15 µg of a non-toxic *Corynebacterium diphtheriae* CRM<sub>197</sub> protein + aluminium phosphate adjuvant). Presented as a single dose (0.5 mL) suspension in a vial.
- Menjugate – CSL Vaccines/Chiron Vaccines (each 0.5 mL dose contains 10 µg *N. meningitidis* group C polysaccharide conjugated to 12.5-25 µg of a non-toxic *Corynebacterium diphtheriae* CRM<sub>197</sub> protein). Presented as a single dose (0.5mL) lyophilised powder in a vial; the supplied diluent contains a suspension of aluminium hydroxide as the adjuvant and this must not be frozen.
- NeisVac-C – Baxter Healthcare (each 0.5 mL dose contains 10 µg *N. meningitidis* group C polysaccharide conjugated to 10-20 µg of tetanus toxoid protein + aluminium hydroxide adjuvant). Presented as a single dose (0.5 mL) suspension in a pre-filled syringe.

## Administration

Doses are given by intramuscular injection. Do not mix vaccine with other vaccines in the same syringe.

## Multiple injections at 12 months of age

ATAGI has advised that it is safe and appropriate practice to administer three vaccines during the one visit, using the injection sites outlined below.

Parents/guardians should be advised that it is safe and effective to give three injections at the same visit and that there is no evidence that administration of multiple vaccines at the same visit overloads a child's immune system.<sup>1</sup>



Figure 1

## Children under 12 months of age

When three injectable vaccines are to be given at the same visit, two injections can be administered in the same anterolateral thigh but the injection sites should be separated by at least 25 mm (2.5cm), so that local reactions will not overlap (see Figure 1). The third injection (preferably those vaccines which may cause slightly more swelling or redness than others such as MenCCV) should be administered in the opposite thigh. The location of each injection should be recorded so that the vaccine associated with a local reaction can be differentiated.

### **Children 12 months of age and older**

When three injectable vaccines are to be given at the same visit for a child aged 12 months and older, it is recommended that both deltoid muscles be used (a single injection into each muscle). The site of the third injection (deltoid or anterolateral thigh) should be determined as follows.

In children over 18 months, there may be sufficient muscle mass to deliver 2 intramuscular injections into one deltoid, spaced by 25mm (2.5cm) and a third into the other deltoid. This will ordinarily be the case in older children and adults and will require the judgement of the provider. If, in the opinion of the provider, there is insufficient muscle mass for this technique, then one injection should be given in each deltoid and the anterolateral thigh used for the third injection. If using the thigh, the vaccine least likely to cause redness and swelling should be selected for this site and the vaccine should be injected slowly so as to reduce the risk of local reactions and pain.

### **If a parent does not give consent**

If an immunisation provider offers three injections at 12 months of age, and the parent/guardian does not give consent for all three injections, it is important that the offer and refusal are well documented. Where a parent does not give consent for three injections, priority should be determined by the provider based on clinical information obtained from the parent/guardian. If only two vaccinations are given, arrangements should be made to administer the third vaccine at a subsequent visit.

### **Administration of meningococcal C vaccine with other vaccines**

The Meningitec product information states that the vaccine should not be administered with either the other infant vaccines in the ASVS at 2, 4 and 6 months of age 'on a routine basis'. The NeisVac-C product information states that the vaccine should not be administered with IPV-containing vaccines 'on a routine basis'. However, ATAGI states that the vaccine may be administered simultaneously with other vaccines in the ASVS and with IPV-containing vaccines and varicella vaccine.

The administration of the meningococcal C vaccine at 12 months of age will mean that children will be due for MMR, Hib or combined Hib-hepB, and MenCCV at the same time. On occasion, the administration of a non-ASVS vaccine (such as Hepatitis A) may be contemplated at the time of administration of MenCCV.

Studies in the United Kingdom have shown that meningococcal C vaccine can be safely given with routine childhood vaccines and does not affect the seroconversion rate of other vaccines administered at the same time.

There are limited data on the co-administration of MenCCV and non-ASVS vaccines. The ATAGI recommends that MenCCV may be given at the same time as, or at any time before or after other live and/or inactivated vaccines, provided that the ages that the vaccines were being given were consistent with those in the NHMRC Guidelines.

See the next section for a caveat.

### **Administration of both conjugate and polysaccharide meningococcal vaccines**

On occasion both meningococcal C conjugate vaccine and meningococcal polysaccharide vaccine are recommended (eg. persons with asplenia and certain laboratory personnel).

If the conjugate vaccine is given first, a period of at least 2 weeks should lapse before the polysaccharide vaccine is given.

There are limited data available on the length of time that should lapse before administration of the conjugate vaccine after giving a polysaccharide vaccine. The ATAGI recommends a period of 6 months should lapse before the conjugate vaccine is given.

### Conflicts with product information

The product information for all 3 conjugate vaccines states that under the age of 12 months, 3 doses of vaccine are required. The ATAGI recommends that, for infants aged between 4 and 11 months at the commencement of vaccination, 2 doses are sufficient.

The product information for all 3 conjugate vaccines state that there are no data on the use of meningococcal C conjugate vaccines in lactating women, whereas the ATAGI does not consider breast feeding in a healthy woman a reason for not immunising.

The Meningitec product information states that an allergic reaction following a prior dose is a contraindication to further doses whereas the ATAGI states that only an anaphylactic reaction following a prior dose is a contraindication.

### Vaccine side effects

Common ( $\geq 10\%$ ) adverse events caused by meningococcal C conjugate vaccines are pain, redness and swelling at the site of injection, fever, irritability, transient anorexia and headaches. There are some age-related differences in the type of adverse event following vaccination, with systemic adverse events tending to decrease with increasing age, and local adverse events tending to increase with increasing age.

Headache is more likely to be reported in the adolescent age group. Serious general adverse events are rare.

### Other issues

Although no clinical study data are available on the use of the vaccine in pregnant women, it is unlikely that it would have any deleterious effect on the pregnancy. Routine pregnancy testing prior to vaccination is not justifiable.

The vaccine is recommended for any children, adolescents or young adults who have had previous meningococcal disease. These persons should receive the vaccine regardless of infecting serogroup. This is because young children may not have mounted an optimal immune response to the infection and older persons may have an unrecognised risk factor for meningococcal disease.

As with other vaccines, administration should be postponed in subjects presenting with an acute febrile illness.

### Notification to the Australian Childhood Immunisation Register (ACIR)

Information on the National Meningococcal C Vaccination Program was distributed to providers by the Health Insurance Commission in February 2003. Included in the information were details on payments for meningococcal C vaccination.

Further information is also available from the Immunise Australia web site [www.immunise.health.gov.au](http://www.immunise.health.gov.au).

The information contained in these guidelines is correct as at 24 March 2003.

### Reference:

1. Offit PA, Quarles J, Gerber MA, *et al.* Addressing parents' concerns: do multiple vaccines overwhelm or weaken the infant's immune system? *Pediatrics* 2002;109:124-9.