IMMUNIZATION PROTOCOL FOR PHARMACISTS

MENINGOCOCCAL VACCINE

I. ORDER:

1. Screen for contraindications.
2. Provide a current Vaccine Information Sheet (VIS), answering any questions.
3. Obtain a signed consent.
4. Give 0.5 ml Meningococcal vaccine **subcutaneously (SC)** as a single dose.
   a. Give according to age-appropriate schedule and situation. The vaccine can be administered at the same time as other vaccines but at a different anatomic site.

Pharmacist signature Date

Visit our website at
http://www.healthoregon.org/imm/provider/pharmpro.cfm
To request this material in an alternate format (e.g., Braille),
Please call (503) 731-4020

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II. LICENSED MENINGOCOCCAL POLYSACCHARIDE VACCINE			
Product Name	**Vaccine Components**	**Acceptable Age Range**	**Thimerosal**
Menomune®[1,2,3] (Aventis)	Each dose consists of 50µg of each of 4 purified bacterial capsular polysaccharides, A, C, Y, and W-135.	≥2 years of age	No (single-dose vials)
			Yes (in diluent of multi-dose vial), 0.01%
[1]Should not be given at the same time as whole-cell typhoid vaccine due to combined endotoxin content (per package insert). However, oral Vivotif Berna™ manufactured by Berna, and Typhim Vi™, manufactured by Aventis for IM use do not interfere with Menomune®. [2]Single-dose vials should be used within 30 minutes after reconstitution, and multi-dose vials should be discarded within 35 days after reconstitution. [3] If Menomune® is administered to immunosuppressed persons, an adequate immunologic response may not be obtained.			

III. RECOMMENDATIONS FOR USE

1. Routine vaccination is **recommended for certain high-risk persons**:
   a. Persons with terminal complement component deficiencies;
   b. Persons with anatomic or functional asplenia; or
   c. Travelers to the Sub-Saharan African "Meningitis Belt," during December to June; particularly if contact with the local population will be prolonged.
2. Vaccination should also be considered for:
   a. Research, industrial, and clinical laboratory personnel who routinely are exposed to *N. meningitidis* in solutions that may be aerosolized.
   b. Persons traveling to, and U.S. citizens residing in, countries in which *N. meningitidis* is hyper-endemic or epidemic. Contact an international travel clinic, local health department, Health Services, or the Centers for Disease Control and Prevention's (CDC) travel line: (404) 332-4559 or website address: www.cdc.gov/travel/diseases/menin.htm for high-risk countries.
3. College freshmen, particularly those living in dormitories, are at modestly increased risk of meningococcal disease relative to other persons their age. Vaccination with the currently available quadri valent meningococcal polysaccharide vaccine will decrease their risk for some types of meningococcal disease, but not the type (serogroup B) most commonly found in Oregon. Vaccination should be made available to those freshmen who wish to reduce their risk of disease. Consultation on the use of these recommendations is available from the Immunization Program, (503) 731-4020.
   For further information, see the ACIP statement on this topic at: http://www.cdc.gov/mmwr/PDF/rr/rr4907.pdf
4. Outbreak Control: This vaccine is recommended for use in control of meningococcal outbreaks. An outbreak is defined as the occurrence of three or more confirmed or probable cases of meningococcal disease during a period of <3 months, with a resulting primary attack rate of ≥10 cases per 100,000 population. While these recommendations are based upon experience with serogroup C meningococcal outbreaks, these principles may be applicable to outbreaks caused by the other vaccine-preventable meningococcal serogroups, i.e., Y, W-135, and A.

IV. VACCINE SCHEDULE

A. Meningococcal schedule for adolescents and adults[1]
Dose: 0.5 ml
Route: subcutaneously (SC) in outer arm

Number of Doses	Minimum age	Recommendation for revaccination[2]
1	18 years	Revaccination may be considered 3-5 years following first dose if indications still exist for immunization.[3]

[1]Protective level of antibody is usually achieved within 7-10 days of vaccination.
[2]Antibody levels decline rapidly over 2-3 years; revaccination may be indicated as outlined.
[3]High-risk conditions and persons considered for revaccination are: those with terminal complement deficiency, those with functional or anatomic asplenia, certain laboratory workers, travelers to countries in which N. meningitidis is hyperendemic or epidemic (e.g., African "meningitis belt").

V. CONTRAINDICATIONS

A severe allergic (anaphylactic) reaction to thimerosal or any other vaccine component, or following a prior dose of meningococcal polysaccharide vaccine.

- Menomune® stopper to vial contains dry natural latex rubber

VI. PRECAUTIONS

1. Immunization should be deferred during the course of any acute illness.

2. Pregnancy, breastfeeding and immunosuppression are not contraindications to vaccination.

VII. SIDE EFFECTS AND ADVERSE EVENTS

A. Reactions to Vaccination:
Adverse reactions to Meningococcal vaccine are mild and consist principally of pain and redness at the injections site, for 1-2 days.

B. Table below: Adverse Events Following Vaccination of 150 Adults with Menomune7 - A/C/Y/W-135 [Adapted from package insert]:

Reactions	**Mild**	**Moderate**
Local:		
Pain	2.6%	2%
Tenderness	36%	9%
Induration	4.4%	1.2%
Diameter of induration	<2 inches	≥2 inches
Erythema	3.8%	1.2%
Systemic:		
Headache	5.2%	1.8%
Malaise	2.5%	0%
Chills	2.5%	0%
Oral temp (ºF)	2.6% (100ºF-101ºF)	0.6% (>101ºF)

VIII. OTHER CONSIDERATIONS

A. This vaccine will only stimulate protection against infections caused by organisms from serogroups A, C, Y and W-135 meningococci. It is not protective against Serogroup B meningococci.

B. If the vaccine is used in persons receiving immunosuppressive therapy, the expected immune response may not be obtained.

C. Antimicrobial chemoprophylaxis: Antimicrobial postexposure chemoprophylaxis of close contacts of sporadic cases of meningococcal disease is the primary means for prevention of meningococcal disease in the United States. Close contacts include
   a) household members,
   b) daycare-center contacts, and
   c) anyone directly exposed to the patient's oral secretions.

   Contacts of cases should be referred to their primary healthcare provider and local health department for treatment and follow-up.

D. Protective levels of antibodies are usually achieved within 7-10 days after vaccination.

E. For someone with a history of fainting with injections, a 15-minute observational period is recommended post immunization.

IX. ADVERSE EVENT REPORTING

Adverse events following immunization must be reported to the Vaccine Adverse Events Reporting System (VAERS) by calling 1-800-822-7967. Forms and procedures can be found at the VAERS website: www.vaers.org. In addition, a copy of the reporting form should be reported to the patient's primary provider, per ORS 855-041-0510.

X. REFERENCES

1. Control and Prevention of Meningococcal Disease and Control and Prevention of Serogroup C Meningococcal Disease, MMWR Vol. 46 RR-5, 2/14/97.
2. Meningococcal Disease. In: *Epidemiology and Prevention of Vaccine-Preventable Diseases* ("Pink Book"). Atkinson W, Hamborsky J, Wolfe S, eds. 8th ed. Washington, DC: Public Health Foundation, 2004: 247-55. Available at http://www.cdc.gov/nip/publications/pink/mening.pdf.
3. Prevention and Control of Meningococcal Disease and Meningococcal Disease and College Students, MMWR Vol. 49 RR-7, 6/30/2000.
4. Menomune® package insert.

For more information or to clarify any part of the above order, consult with your vaccine recipient's primary care provider, or contact Health Services, Immunization Program at (503) 731-4020.