

Meningococcal Conjugate (Group C) Vaccine Biological Page

Section 7:	Biological Product Information	Standard #: 07.280
Created by:	Province-wide Immunization Program Standards and Quality	
Approved by:	Province-wide Immunization Program, Standards and Quality	
Approval Date:	March 29, 2012	Revised: September 5, 2018

	NeisVac-C®	Menjugate®
Manufacturer	Pfizer Canada Inc	GlaxoSmithKline Inc.
Biological Classification	Inactivated Conjugate	
Indications for use of provincially funded vaccine	<p>Pre-exposure: Infants and children 2 months up to and including 59 months of age Notes:</p> <ul style="list-style-type: none"> • Infants and children at high risk due to underlying medical conditions as defined below should receive meningococcal quadrivalent conjugate vaccine groups A,C,Y and W-135 (MenC-ACYW) rather than meningococcal conjugate group C vaccine (MenconC). Vaccine product used is dependent on age. See Meningococcal Conjugate (Groups A, C, Y and W-135) Vaccine Biological Page #07.281. <p>Underlying medical conditions (use MenC-ACYW rather than MenconC):</p> <ul style="list-style-type: none"> ○ Anatomical or functional asplenia (including sickle-cell disease). ○ Complement, properdin, factor D or primary antibody deficiency or hypogammaglobulinemia ○ Acquired complement deficiency (e.g., due to receipt of the terminal complement inhibitor eculizumab [Soliris®]) ○ Hematopoietic stem cell transplant (HSCT) recipients ○ Solid organ transplant (SOT) candidates and recipients ○ HIV positive with no contraindication to immunization. <ul style="list-style-type: none"> • For individuals who have previously received Meningococcal Conjugate (Groups A, C, Y and W-135) Vaccine, the dose(s) can be counted toward the routine meningococcal C conjugate vaccine series. • Meningococcal conjugate C vaccine (MenconC) is not recommended in addition to Menveo™ for infants and children at high risk of invasive meningococcal disease. <p>Post-exposure:</p> <ul style="list-style-type: none"> • Immunization or re-immunization of close contacts of laboratory-confirmed cases of serogroup C invasive meningococcal disease (IMD). See scheduling information for further details. <ul style="list-style-type: none"> ○ Results of index case serogrouping should be known (generally within 2 to 5 days) before proceeding with immunization. • Outbreak control of laboratory-confirmed serogroup C invasive meningococcal disease in consultation with zone Medical Officers of Health <p>For disease information, contact assessment and reporting guidelines refer to Public Health Notifiable Disease Management Guidelines – Meningococcal Disease, Invasive.</p>	
Schedule	<p>Pre-Exposure:</p> <ul style="list-style-type: none"> • Dose 1 – 4 months of age • Dose 2 – 12 months of age or older and at least 4 weeks after dose 1 <p>Spacing Considerations:</p> <ul style="list-style-type: none"> ○ Children beginning immunization at 12 months of age or older require only 1 dose before the 5th birthday. ○ Children who receive 1 dose prior to 12 months of age require 1 dose at 12 months of age or older and at least 4 weeks after the first dose. ○ Reinforcing doses of MenconC vaccine are not considered necessary at 	

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	<p>present.</p> <ul style="list-style-type: none"> For individuals who have previously received the meningococcal polysaccharide vaccine there should be at least a 6 month interval before administering MenconC. <p>Post-exposure for contact of confirmed serogroup C meningococcal disease cases:</p> <ul style="list-style-type: none"> 2 months up to and including 11 months of age: <ul style="list-style-type: none"> Unimmunized: administer 1 dose Previous immunization: administer 1 dose if at least 4 weeks since previous dose. 12 months of age and older: <ul style="list-style-type: none"> Unimmunized: administer 1 dose. Previously immunized at younger than 12 months of age or at high risk due to an underlying medical condition: administer 1 dose if at least 4 weeks since the last dose. Previously immunized at 12 months of age or older: administer 1 dose if at least 1 year since the last dose. <p>Note: Use MenC-ACYW post-exposure for meningococcal C if the individual is eligible for the MenC-ACYW vaccine (e.g. a student in Grades 9, 10, 11 or 12 who has not already received their adolescent dose of MenC-ACYW vaccine).</p>	
Preferred Use	<p>There will be no preference indicated for the use of meningococcal conjugate group C vaccine in specific age or risk groups.</p> <ul style="list-style-type: none"> Both vaccines are safe and immunogenic in individuals two months of age and older. Persons with medical contraindications to one product should be offered the alternate product if supply is available. 	
Dose	0.5 mL	
Route	Intramuscular	
Contraindications/Precautions	<p>Contraindications</p> <ul style="list-style-type: none"> Known severe hypersensitivity to any component of the vaccine Anaphylactic or other allergic reactions to a previous dose of vaccine containing meningococcal conjugate C antigen <p>Precautions</p> <ul style="list-style-type: none"> Premature and very low birthweight infants (i.e., 1500 g) still hospitalized at the time of immunization may experience a transient increase or recurrence of apnea and bradycardia following immunization. This subsides within 48 hours and does not alter the overall clinical progress of the child. The risk of these events is greater among infants with ongoing cardiorespiratory issues at the time of immunization, but such events can also occur in those who are clinically stable. Given these findings, it is recommended that hospitalized premature infants have continuous cardiac and respiratory monitoring for 48 hours after their first immunization. 	
Possible Reactions	<p>Common:</p> <ul style="list-style-type: none"> Redness, swelling, induration and/or pain at injection site. Headache and fever, drowsiness and somnolence or impaired sleeping, myalgia in the arms or legs. Anorexia, vomiting, nausea or diarrhea; crying and irritability (infants and/or toddlers) <p>Rare:</p> <ul style="list-style-type: none"> Relapse of nephrotic syndrome has been reported to present within a few months following immunization. Anaphylaxis, allergic reaction. Lymphadenopathy, idiopathic thrombocytopenic purpura, dizziness, convulsions including febrile, faints, rash, urticaria, pruritus, erythema multiforme, Stevens-Johnson Syndrome, arthralgia, hypoaesthesia, paraesthesia and hypotonia in infants. As with any immunization, unexpected or unusual side effects can occur. Refer to the product monograph for more detailed information. 	

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Pregnancy	Adequate data is not available for the use of meningococcal C conjugate vaccine during pregnancy and therefore will not routinely be recommended in Alberta for pregnant women. However, use of this vaccine during pregnancy may be considered in consultation with your MOH based on the individual's risk of disease (e.g., post exposure) versus benefit of the vaccine.	
Lactation	Can be administered to eligible breastfeeding women.	
Composition	Each 0.5 mL dose of vaccine contains: <ul style="list-style-type: none"> • 10 mcg of <i>Neisseria meningitidis</i> group C polysaccharide • 10 to 20 mcg tetanus toxoid adsorbed • 0.5 mg aluminum hydroxide • 4.1 mg sodium chloride 	Each 0.5 mL dose of vaccine contains: 10 mcg of <i>Neisseria meningitidis</i> group C (strain C11) oligosaccharide <ul style="list-style-type: none"> • 12.5 to 25 mcg <i>Corynebacterium diphtheriae</i> CRM-197 protein • 1 mg Aluminum hydroxide • 0.776 mg histidine • 4.5 mg sodium chloride • up to 0.5 mL Water for injection
	For a detailed list of ingredients see the link below to the Canadian Immunization Guide: http://www.phac-aspc.gc.ca/publicat/cig-gci/p01-14-eng.php	
Blood/Blood Products	Does not contain human blood/blood products	
Bovine/Porcine Products	<ul style="list-style-type: none"> • Casein hydrosylate and antibiotics are used in the beef broth containing agar used in the production of tetanus toxoid. There are no traces of casein or antibiotics in the finished vaccine. Beef broth is used in the production of tetanus toxoid but not in the production of the polysaccharide. • Contains no porcine products 	<ul style="list-style-type: none"> • Bacto casamino acids, which are derived from casein (a milk derived protein of bovine origin), are used in the very early stages of the manufacturing process. • Contains no porcine products
Latex	There is no latex in the vaccine or vaccine packaging.	
Interchangeability	Meningococcal conjugate group C vaccines can be used interchangeably provided the appropriate dose and schedule recommended by the manufacturer are used. However, it is recommended that the infant series be completed with the same vaccine whenever possible.	
Administration with Other Products	<ul style="list-style-type: none"> • May be given at the same time as other inactivated and live vaccines using a separate needle and syringe for each vaccine. • The same limb may be used if necessary, but different sites on the limb must be chosen. 	
Appearance	Semi-opaque white to off-white suspension	White opalescent suspension
Storage	<ul style="list-style-type: none"> • Store at +2°C to +8°C • Do not freeze • Do not use beyond the labeled expiry date • Store in original packaging when possible to protect from light 	
Vaccine Code	MenconC	
Antigen Code	MENING-C	
Licensed for	<ul style="list-style-type: none"> • Persons 2 months of age and older. • 2 dose schedule for those starting immunization at less than 12 months of age has been approved off license by Alberta Health. 	
Notes:	<ul style="list-style-type: none"> • Starting January 1, 2015 the schedule went from 3 doses given at 2, 4 and 12 months of age to 2 doses given at 4 and 12 months of age. In addition, the use of this vaccine in high risk populations stopped as they became eligible for meningococcal quadrivalent conjugate vaccine. 	

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	<ul style="list-style-type: none"> From February 2000 to February 2002 various meningococcal polysaccharide vaccines were offered as part of a mass immunization campaign in Alberta. Health regions at that time offered vaccine at different periods over the two years. Universal infant program started in October 2001: <ul style="list-style-type: none"> Children born October 1, 2001 to August 1, 2007 received three doses of vaccine at 2, 4 and 6 months. Children presenting with this immunization history would be considered to be complete. Children born August 1, 2007 and later received vaccine at 2, 4 and 12 months of age 	
	Related Documents: <ul style="list-style-type: none"> Meningococcal Conjugate (Group C) Vaccine Information Sheet (104501). (January 1, 2015) 	
	References: <ol style="list-style-type: none"> Alberta Health, Health System Accountability and Performance Division, Alberta Immunization Policy (2014, August 7). <i>Meningococcal Conjugate C Vaccine: MENJUGATE®</i>. Alberta Health, Health System Accountability and Performance Division, Alberta Immunization Policy (2014, August 7). <i>Meningococcal Conjugate C Vaccine: NeisVac-C®</i>. Alberta Health. (2014). <i>Adverse Events Following Immunization (SEFI), Policy for Alberta Health Services Public Health</i> American Academy of Pediatrics. Summaries of Infectious Diseases. In: Pickering LK, Baker CJ, Kimberlin DW, Long SS, eds. <i>Red Book: 2012 Report of the Committee on Infectious Diseases</i>. 28th ed. Elk Grove Village, IL: American Academy of Pediatrics: pp. 500-509 Centers for Disease Control and Prevention. (2011, January). General Recommendations on Immunization: Recommendations of the Advisory Committee on Immunization Practices (ACIP). <i>Morbidity and Mortality Weekly Report, 60(2)</i>. Centers for Disease Control and Prevention. (2011, April). <i>Epidemiology and Prevention of Vaccine-Preventable Diseases 12th Edition (Pink Book)</i>. GlaxoSmithKline Inc. (December 2015). Menjugate® Liquid Vaccine: Meningococcal Group C Conjugate Vaccine Suspension for injection. Product Monograph. GlaxoSmithKline Inc. (June 2010). NeisVac-C® Vaccine: Meningococcal Group C-TT Conjugate Vaccine, Adsorbed. Product Monograph. National Advisory Committee on Immunization, (2001, October 15). Statement on recommended use of meningococcal vaccines. <i>Canada Communicable Disease Report, 27</i>. National Advisory Committee on Immunization, (2003, September 1). Supplementary statement on conjugate meningococcal vaccine. <i>Canada Communicable Disease Report, 29</i>. National Advisory Committee on Immunization, (2007, November). Meningococcal C conjugate vaccination recommendations for infants. <i>Canada Communicable Disease Report, 33</i>. National Advisory Committee on Immunization, (2009, April). Update on the Invasive Meningococcal Disease and Meningococcal Vaccine Conjugate Recommendations. <i>Canada Communicable Disease Report, 35</i>. National Advisory Committee on Immunization. (2012). <i>Canadian immunization guide (Evergreen Edition)</i>. Ottawa, ON: Public Health Agency of Canada. http://www.phac-aspc.gc.ca/publicat/cig-gci/ Novartis Vaccines and Diagnostics Inc. (February 21, 2013). Menjugate®: Meningococcal Group C-CRM197 Conjugate Vaccine. Product Monograph. Alberta Advisory Committee on Immunization (2013, October 30) Record of Decisions (unpublished). Poellabauer, E., Pavlova, B.G., Fritsch, S., et al. (2013). Single priming dose of meningococcal group C conjugate vaccine (NeisVac-C®) in infants. <i>Vaccine (31)</i>. 	