Yukon Immunization Program Manual

Section 8 - Biological Products

Meningococcal Vaccines

SECTION 8 – BIOLOGICAL PRODUCTS

Contents

2019 August

Meningococcal B Vaccine (four component recombinant, adsorbed vaccine) BEXSERO®

Supplier: GlaxoSmithKline Inc.

INDICATIONS	INITIAL SERIES❶
Provided free to: **(1)** Close contacts 8 weeks to 55 years of age of a case of serogroup B invasive meningococcal disease who meet the public health criteria for chemoprophylaxis.❶	**(1)(2)** Infants 8 weeks to 20 weeks of age: **3 doses** given as 0.5 mL IM, given at least 4 weeks apart with a **4th dose** after 12 months of age. Infants 24 weeks to 44 weeks of age: **2 doses** given as 0.5 mL IM, given at least 8 weeks apart, with a **3rd dose** after 12 months of age and at least 8 weeks after dose 2. Children 12 months to 10 years of age: **2 doses** given as 0.5 mL IM, given at least 8 weeks apart. Individuals 11 years to 55 years of age: **2 doses** given as 0.5 mL IM, given at least 4 weeks apart.
(2) In consultation with CMOH, individuals 8 weeks to 55 years of age at risk during IMD outbreaks caused by N. meningitidis serogroup B or the emergence of hyperendemic and/or hypervirulent N. meningitidis strains that are predicted to be susceptible to vaccine.❶	

ADMINISTRATION	0.5 mL IM (supplied as a 0.5 mL suspension in a pre-filled syringe)
REINFORCEMENTS	The need for further doses has not been established.
SEROLOGICAL TESTING	Serological testing is not recommended before or after immunization.
CONTRAINDICATIONS	History of anaphylactic reaction to a previous dose of meningococcal B containing vaccine, or to any component of Bexsero®, or to latex.
PRODUCT COMPONENTS	Potential allergens: kanamycin, latex. Other components: aluminum hydroxide, histidine, sucrose.
PRECAUTIONS	Safety of this vaccine in pregnant or lactating women, or in adults over 55 years of age has not been established however vaccination should not be withheld when there is a clear risk of exposure to meningococcal disease.
SPECIAL CONSIDERATIONS	Acetaminophen may be given for the reduction of fever in infants and children up to two years of age. Give one dose at the time of vaccination, followed by two more doses four to six hours apart. The recommended dosage is 10-15mg/kg per dose. The use of acetaminophen to control fever associated with Bexsero® has not been found to reduce the immunogenicity of the vaccine.

	2019 August
Meningococcal B Vaccine (four component recombinant, adsorbed vaccine) BEXSERO® **Supplier: GlaxoSmithKline Inc.**	
ADVERSE EVENTS	**Infants and children** **Local**: Tenderness, erythema, induration, swelling. **Systemic**: fever, sleepiness, irritability, unusual crying. Higher proportion of systemic reactions, including temperature >38 ° C, when given together with other routine vaccines. **Adolescents and adults** **Local**: pain, erythema, induration, swelling. **Systemic**: malaise, headache, myalgia. **Other: Kawasaki Disease** – At the time of approval, 7 cases of Kawasaki Disease were reported in phase 2 & 3 clinical studies, 6 of which were in vaccine recipients. This is higher than normal background levels however no causal relationship has been determined.
❶ In Canada, Bexsero® vaccine has been authorized for use in individuals 8 weeks to 17 years of age. However, data reported in clinical trials indicates that Bexsero® vaccine is immunogenic and safe when given to adults up to 55 years of age using a two dose schedule with an interval of at least one month between doses.	

	2019 August
Meningococcal C Conjugate (MCC) Vaccine NEISVAC-C®; **Supplier: Pfizer Canada Inc., NEISVAC-C®**	
INDICATIONS	**INITIAL SERIES❶**
(1) Two-dose program for infants <12 months of age.	**Dose 1:** 0.5 ml **IM** at 8 weeks of age **or** age at presentation. (If age of presentation is ≥12 months, only one dose is required.) **Dose 2:** 0.5 ml **IM** at ≥ 12 months of age (at least 8 weeks after 1st dose)❷❸
(2) Children who received their last dose of any MCC vaccine when they were < 12 months of age	**(1) One dose:** 0.5 ml **IM.** at ≥ 12 months of age ❷
(3) Medically high risk children ≥ 8 weeks to < 12 months of age❻	**(3)** See p.42 Meningococcal Quadrivalent.
(4) Close contacts of a case of invasive meningococcal group C disease that meet the criteria for chemoprophylaxis❹❺ who have NOT been previously vaccinated with MCC vaccine as directed by YCDC	**(4) Age at presentation:** **≥ 8 weeks to < 12 months of age:** **Dose 1:** 0.5 ml **IM** **Dose 2:** 0.5 ml **IM** at least 8 weeks after 1st dose **Dose 3:** 0.5 ml **IM** at ≥ 12 months of age (at least 8 weeks after 2nd dose) **≥ 12 months of age**: **One dose**: 0.5 ml **IM** ❷
(5) Children who have not received a dose of Men-C-C vaccine after 12 months of age and who are born in 2004 and later.	**(5) One dose:** 0.5 ml **IM** ❷
(6) Adolescents and adults up to 24 years of age inclusive, who have not received a dose of Men-C-C containing vaccine ❼	**(6) One dose:** 0.5 ml **IM** ❷
ADMINISTRATION	No reconstitution required
CONTRAINDICATIONS	History of anaphylactic reaction to a previous dose of any meningococcal vaccine or to any component of Neis Vac-C

	2019 August
Meningococcal C Conjugate (MCC) Vaccine NEISVAC-C® **Supplier: Pfizer Canada Inc., NEISVAC-C®**	
SEROLOGICAL TESTING	Serological testing is not recommended before or after immunization.
VACCINE COMPONENTS	**Potential allergens:** tetanus toxoid protein **Other components:** Aluminum hydroxide.
ADVERSE EVENTS	**All:** redness, swelling and pain at injection site; headache, fever **Infants and toddlers:** crying, irritability, drowsiness, somnolence/impaired sleeping **Infants:** vomiting/nausea/diarrhea/loss of appetite.
SPECIAL CONSIDERATIONS	Upon storage, a white deposit and clear supernatant can be observed. Shake the vaccine well in order to obtain a homogenous suspension.

❶ There must be an interval of at least 24 weeks since the prior administration of a meningococcal polysaccharide vaccine and the administration of Neis Vac-C.
❷ Meningococcal C conjugate vaccines are interchangeable for those ≥ 12 months of age.
❸ If an infant has a history of receiving their last dose before 12 months of age, give an additional dose at ≥ 12 months of age.
❹ Administer concurrently with chemoprophylaxis or as soon as possible.
❺ A MCC vaccine is preferred in this situation as it provides longer duration of protection and induction of immunologic memory than does a meningococcal C-containing polysaccharide vaccine.
❻ See Meningococcal Quadrivalent Conjugate Vaccine for list of medical indications.
❼ These individuals are eligible up to 24 years of age (inclusive)

2020 September

Meningococcal Quadrivalent Conjugate Vaccine (Groups A, C, Y, W-135) MENACTRA®

Supplier: Sanofi Pasteur Limited., MENACTRA®

INDICATIONS❶	INITIAL SERIES
(1) Provided free to medically high risk individuals 8 weeks of age and older❶: • Functional or anatomic asplenia • Congenital immunodeficiency states (complement, properdin, factor D deficiency or primary antibody deficiencies). • Hematopoietic Stem Cell Transplant (adult and pediatric). • Solid organ or islet cell transplant (candidate or recipient). • Acquired complement deficiency due to receipt of the terminal complement inhibitor eculizumab (Soliris®) Refer to Yukon Immunization Program Manual, Section 5, for more information on specific medical conditions. **(2)** Close contacts (2 months of age and older) of a case of invasive meningococcal disease (serogroups A, Y, or W-135) who meet the public health criteria for immunoprophylaxis ❷ **(3)** Beginning school year 2016-2017, Adolescents born on or after January 1, 2002 and up to and including age 18.❹ **(4)** Recommended, but NOT provided free to: • research, industrial, and clinical laboratory personnel who are routinely exposed to *N. meningitidis* • military recruits • travellers for whom meningococcal vaccine is indicated • Post-Secondary Students over the age of 18.	**DOSES AND SCHEDULE:** 2 years of age and older: 1 dose given as 0.5 mL IM. (A dose of meningococcal C conjugate or a second dose of Menigococcal quadrivalent conjugate vaccine may also be indicated for high risk individuals. Refer to Yukon Immunization Program Manual, Section 5, for more information on specific medical conditions)

ADMINISTRATION	No additional requirements.
REINFORCEMENTS	**Booster Doses:** For medically high risk clients ❸: • Vaccination initiated at ≤ 6 years of age: provide a booster dose 3 years later, and then every 5 years. • Vaccination initiated at ≥ 7 years of age: provide a booster dose every 5 years.

	2020 September
Meningococcal Quadrivalent Conjugate Vaccine (Groups A, C, Y, W-135) MENACTRA® **Supplier; Sanofi Pasteur Limited., MENACTRA®**	
SERIOLOGICAL TESTING	• Serological testing is not recommended before or after immunization.
CONTRAINDICATIONS	• History of anaphylactic reaction to a previous dose of any meningococcal or diphtheria-containing vaccine, or any component of Menactra® or Menveo™.
SPECIAL CONSIDERATIONS	• The recommended interval between any meningococcal C conjugate vaccine and meningococcal quadrivalent conjugate vaccine is 4 weeks (regardless of which vaccine is given first). • Eligible individuals previously vaccinated with a polysaccharide meningococcal vaccine should be given meningococcal quadrivalent conjugate; this should be offered at least 6 months after vaccination with polysaccharide meningococcal vaccine.
PRODUCT COMPONENTS	**Potential allergens**: diphtheria toxoid protein. **Other components**: Sodium phosphate dibasic anhydrous; sodium phosphate, monobasic.
ADVERSE EVENTS	**Local**: pain, redness, swelling, **Systemic**: headache, malaise, chills, fever, nausea, muscle soreness, fatigue, irritability and loss of appetite.

❶ For medically high risk individuals as listed above, Men-C-ACYW-135 should be given in place of Men-C-C as part of the routine schedule and administered according to age at presentation.

❷ If client is a close contact meeting public health criteria for Immunoprophylaxis this dose should be given as soon as serotype information is available. For immunization of contacts who have received prior meningococcal vaccine doses, see: http://www.hss.gov.yk.ca/pdf/ycdc_meningococcal.pdf. Vaccine may be administered concurrently with chemoprophylaxis.

❸ Booster dose should be offered as long as medical condition persists. As needed, a clinical opinion as to the persistence of the condition may be sought from the physician most responsible for the client's care.

❹ A dose of Men-C-ACYW-135 received in Grade 7 or later (i.e., min age of 11 years and 8 months) is considered a valid adolescent dose; however these children are still eligible for an additional adolescent dose in grade 9 or up to and including age 18.