

<b>Section 7:</b>	<b>Biological Product Information</b>	<b>Standard #: 07.340</b>
<b>Created by:</b>	Province-wide Immunization Program Standards and Quality	
<b>Approved by:</b>	Province-wide Immunization Program, Standards and Quality	
<b>Approval Date:</b>	March 1, 2013	<b>Revised:</b> February 15, 2018

	<b>Typherix®</b>	<b>Typhim Vi®</b>
<b>Manufacturer</b>	GlaxoSmithKline Inc.	Sanofi Pasteur Limited
<b>Biological Classification</b>	Inactivated: Polysaccharide	
<b>Indications for Provincially Funded Vaccine</b>	<b>Individuals 2 years of age and older who are:</b> <ul style="list-style-type: none"> <li>household or intimate contacts of typhoid carriers</li> <li>laboratory workers who regularly manipulate <i>Salmonella typhi</i> organism</li> </ul>	
<b>Schedule</b>	<b>Primary series for eligible individuals</b> <ul style="list-style-type: none"> <li>One dose of 0.5 mL</li> </ul> <b>Reinforcing dose</b> <ul style="list-style-type: none"> <li>0.5 mL every 3 years for those at continued risk of exposure</li> </ul>	
<b>Preferred Use</b>	There will be no preference indicated for the use of typhoid vaccine in specific age groups or risk groups. <ul style="list-style-type: none"> <li>Both vaccines are safe and immunogenic in individuals 2 years of age and older</li> <li>Individuals with medical contraindications to one product should be offered the alternate product if supply is available.</li> </ul>	
<b>Dose</b>	0.5 mL	
<b>Route</b>	IM	
<b>Contraindications/Precautions</b>	<b>Contraindications:</b> <ul style="list-style-type: none"> <li>Known severe hypersensitivity to any component of the vaccine or to a previous dose of this vaccine.</li> <li>Anaphylaxis to any component of the vaccine or to a previous dose of this vaccine.</li> <li>Acute, severe febrile illness.</li> </ul> <b>Precautions:</b> <ul style="list-style-type: none"> <li>None identified.</li> </ul>	
<b>Possible Reactions</b>	<b>Common</b> <ul style="list-style-type: none"> <li>Redness, swelling and pain at the injection site</li> <li>Fever, headache, general aches, malaise, nausea, vomiting, diarrhea, itching</li> </ul> <b>Rare</b> <ul style="list-style-type: none"> <li>Anaphylaxis, allergic reactions</li> <li>As with any immunization, unexpected or unusual side effects can occur. Refer to the product monograph for more detailed information.</li> </ul>	
<b>Pregnancy</b>	Adequate data is not available for the use of typhoid 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/designate based on the individual's risk of disease versus benefit of the vaccine.	
<b>Lactation</b>	Typhoid vaccine may be considered in consultation with your MOH/designate based on the individual's risk of disease versus benefit of the vaccine	

	<b>Typherix®</b>	<b>Typhim Vi®</b>
<b>Composition</b>	Each 0.5mL dose contains: <ul style="list-style-type: none"> <li>• 25mcg of the Vi polysaccharide of <i>Salmonella typhi</i></li> <li>• Sodium chloride</li> <li>• Sodium phosphate dihydrate</li> <li>• Disodium phosphate dihydrate</li> <li>• Phenol</li> <li>• Water for injection</li> </ul>	Each 0.5 mL dose contains: <ul style="list-style-type: none"> <li>• 25mcg of the Vi polysaccharide of <i>Salmonella typhi</i></li> <li>• Phenol</li> <li>• Isotonic buffer solution</li> </ul>
<b>Blood/Blood Products</b>	Does not contain any human blood/blood products.	
<b>Bovine/Porcine Products</b>	Bovine-derived materials are components in the production of this vaccine. While bovine cells are removed during purification of the vaccine, trace amounts may remain in the final product.	
<b>Latex</b>	Does not contain latex.	
<b>Interchangeability</b>	Typhoid vaccines can be used interchangeably provided the appropriate dose and schedule recommended by the manufacturer are used.	
<b>Administration with Other Products</b>	<ul style="list-style-type: none"> <li>• May be given at the same time as other inactivated and live vaccine using a separate needle and syringe for each vaccine.</li> <li>• The same limb may be used if necessary, but different sites on the limb must be chosen.</li> </ul>	
<b>Appearance</b>	Clear colourless liquid	Clear colourless liquid
<b>Storage</b>	<ul style="list-style-type: none"> <li>• Store at +2° to +8°C</li> <li>• Do not freeze</li> <li>• Do not use beyond the labeled expiry date</li> <li>• Store in original packaging when possible to protect from light</li> </ul>	
<b>Vaccine Code</b>	TYVI	
<b>Antigen Code</b>	TY	
<b>Licensed for</b>	Persons two years of age and older.	
<b>Notes:</b>	<ul style="list-style-type: none"> <li>• Injectable typhoid vaccine became available in Alberta in January 2004.</li> </ul>	
<b>Related Resources:</b>	Typhoid Vaccine Information Sheet (October 29, 2014)	
<b>References:</b>	<ol style="list-style-type: none"> <li>1. Alberta Health, Family and Population Health Division, Alberta Immunization Policy (2015 February 10). <i>Typhoid Vaccine: Typherix®</i></li> <li>2. Alberta Health, Family and Population Health Division, Alberta Immunization Policy (2015 February 10). <i>Typhoid Vaccine: Typhim Vi®</i></li> <li>3. Alberta Health Acute Care and Population Health Division. (January 2014). <i>Adverse Events Following Immunization (AEFI) Policy for Alberta Health Services Public Health.</i></li> <li>4. 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. 635-639.</li> <li>5. 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</i>, 60(2).</li> <li>6. Centers for Disease Control and Prevention. (2011, April). <i>Epidemiology and Prevention of Vaccine-Preventable Diseases 12<sup>th</sup> Edition (Pink Book)</i>.</li> <li>7. GlaxoSmithKline Inc. (2014, February 10). TYPHERIX®: <i>Salmonella typhi</i> Vi Capsular Polysaccharide Vaccine. <i>Product monograph</i>.</li> <li>8. Sanofi Pasteur Limited (2013, November). TYPHIM Vi®: <i>Salmonella typhi</i> Vi Capsular Polysaccharide Vaccine. <i>Product monograph</i>.</li> </ol>	

	Typherix®	Typhim Vi®
9.	GlaxoSmithKlineInc. (2012, September 10). Personal communication from manufacturer.	
10.	National Advisory Committee on Immunization. (2012). <i>Canadian immunization guide (Evergreen Edition)</i> . Ottawa, ON: Public Health Agency of Canada. <a href="http://www.phac-aspc.gc.ca/publicat/cig-gci/">http://www.phac-aspc.gc.ca/publicat/cig-gci/</a>	