Rationale for Update:
- Due to the limited supply of IPV vaccine, dTap-IPV is the vaccine of choice for adults who require polio immunization only.

Please consult the Product Monograph\(^1,2\) for further information about the vaccine.

<table>
<thead>
<tr>
<th>ADACEL®-POLIO</th>
<th>BOOSTRIX®-POLIO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturer</td>
<td></td>
</tr>
<tr>
<td>Sanofi Pasteur Limited</td>
<td>GlaxoSmithKline Inc.</td>
</tr>
<tr>
<td>Licensed use</td>
<td></td>
</tr>
<tr>
<td>Booster immunization for individuals four years of age and older.(^1,2)</td>
<td></td>
</tr>
<tr>
<td>Off-license use</td>
<td></td>
</tr>
<tr>
<td>Primary immunization for individuals seven years and older who need diphtheria, tetanus, acellular pertussis and polio vaccines.(^3)</td>
<td></td>
</tr>
</tbody>
</table>

Indications for use of provincially funded vaccine
- **Children 4 years up to including 6 years of age:**
  - Reinforcing dose of diphtheria, tetanus, acellular pertussis and polio (preschool booster) – routine immunization program.

Children 7 years up to and including 17 years of age including:
- Those initiating a primary vaccine series (unknown/uncertain or no history of a primary series) or completing a vaccine series (diphtheria, tetanus, acellular pertussis and polio).\(^3\)
- Those who sustain a wound injury and have not received the age-appropriate number of tetanus and polio vaccine dose See [Tetanus Post-exposure Prophylaxis in Injury/Wound Management](#).

**Adults 18 years of age and older:**
- When immunization for diphtheria, tetanus, acellular pertussis and polio antigens is indicated. See Biological Products [Polio Vaccine](#) for indications. (Due to the limited supply of IPV vaccine, dTap-IPV is the vaccine of choice for adults who require polio immunization only).

Notes:
- Children who have received hematopoietic stem cell transplantation. See [Immunization for Child Hematopoietic Stem Cell Transplant Recipients](#).
- Immunization (one dose) for some select adult populations if diphtheria, tetanus, acellular pertussis and polio antigens are indicated including:
  - Candidates and recipients of solid organ transplants (SOT).
  - Other select adult populations as deemed appropriate by the Medical Officer of Health.
<table>
<thead>
<tr>
<th><strong>Use in children younger than 4 years of age</strong></th>
<th>Not recommended for children younger than four years of age.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dose</strong></td>
<td>0.5mL</td>
</tr>
<tr>
<td><strong>Route</strong></td>
<td>Intramuscular injection</td>
</tr>
</tbody>
</table>
| **Schedule** | **Series:**  
*Children 7 years up to and including 17 years of age:*  
- Dose 1: day 0  
- Dose 2: 4 – 8 weeks after dose 1  
- Dose 3: 6 – 12 months after dose 2  
**Reinforcing dose:**  
- Children four years of age.  
- Other individuals when a dose of diphtheria, tetanus, acellular pertussis and polio vaccine is indicated. |
| **Contraindications** |  
- Known severe hypersensitivity to any component of the vaccine.\(^{1,2}\)  
- Anaphylactic or other allergic reaction to a previous dose of vaccine containing tetanus, diphtheria, pertussis or polio.\(^{1,2}\)  
- Encephalopathy (e. g., coma, decreased level of consciousness, prolonged seizures) within seven days of a previous dose of a pertussis-containing vaccine not attributable to another identifiable cause is a contraindication to immunization with any pertussis-containing vaccine.\(^{1,2,4}\) |
| **Precautions** | Frequent booster doses of tetanus and diphtheria toxoids may lead to severe local and systemic reactions and may be associated with high levels of circulating antitoxin.\(^3\) |
| **Possible reactions** | **Common:**  
- Pain, redness and swelling at the injection site.\(^{1,2}\) In children injection site bruising, pruritus and dermatitis\(^2\) and injection site mass and hematoma in adolescents and adults.\(^1\)  
- Headache (adolescents and adults) and fever,\(^{1,2}\) tiredness/fatigue.\(^1\)  
- Sore and swollen joints, generalized body ache, and chills.\(^2\)  
- Irritability and somnolence,\(^1\) and rash.\(^2\)  
- GI disorders including nausea\(^1\), vomiting and diarrhea,\(^2\) anorexia.  
- Severe local reactions occur rarely and may be associated with high levels of circulating tetanus antitoxin.\(^2\)  
**Uncommon:**  
- Individuals 10 years and older: oral herpes, lymphadenopathy, decreased appetite, paresthesia, somnolence, dizziness, asthma, pruritus, arthralgia, and myalgia.\(^1\)  
- Children 4 to 9 years of age: sleep disorder, apathy, dry throat, nausea, abdominal pain.\(^1\)  
**Rare:**  
- Anaphylaxis. |
| Note: DAT/TAT level testing may be recommended for some. See [Adverse Events Following Immunization Policy for Alberta Immunization Providers](https://open.alberta.ca/publications/aefi-policy-for-alberta-immunization-providers) - Interpretation of Diphtheria Antitoxin Levels (DAT) and Tetanus Antitoxin Levels (TAT).¹

| Pregnancy | May be administered to pregnant women 26 weeks of gestation or greater when there is significant risk of exposure to both pertussis and polio.² Consultation with the Medical Officer of Health is required. Immunization during pregnancy requires careful consideration. The effect upon embryonic and fetal development has not been assessed.¹,² However, inactivated vaccines and toxoids are generally considered safe in pregnancy.²

| Lactation | May be administered to breastfeeding women if indicated.²

| Program Notes | • 2012 September – Introduced into program for routine booster for 4-6 year olds replacing DTaP-IPV.
• 2022 April 20 - Due to the limited supply of IPV vaccine, dTap-IPV is the vaccine of choice for adults who require polio immunization only.

**References**

¹ GlaxoSmithKline Inc (2018 March 5). Boostrix®-Polio: Combined diphtheria, tetanus, acellular pertussis (adsorbed) and inactivated poliomyelitis vaccine. *Product Monograph*.


