Changes to the 4-6 year old booster dose for protection against tetanus, diphtheria, pertussis and polio

Questions and Answers for Health Care Providers

Effective May 2012, Tdap-IPV vaccine will replace DTaP-IPV vaccine for the pre-school booster dose that follows the primary childhood series for immunization against diphtheria, tetanus, pertussis and polio.

Q: Why is DTaP-IPV being replaced with Tdap-IPV?
A: There is currently a shortage of Quadracel® (DTaP-IPV) and Tdap-IPV vaccine is also indicated for active booster immunization for the prevention of tetanus, diphtheria, pertussis and polio in individuals 4 years of age and older. Tdap-IPV has been approved by Health Canada as a safe and effective alternative to the 5<sup>th</sup> dose of DTaP-IPV. Tdap-IPV vaccine is associated with fewer adverse events (large injection site reactions) than DTaP-IPV.

Q: What is the difference between DTaP-IPV and Tdap-IPV?
A: DTaP-IPV and Tdap-IPV both protect against diphtheria, tetanus, pertussis and polio. DTaP-IPV contains higher concentrations of diphtheria toxoid and some pertussis antigens than Tdap-IPV.

In Canada, there are two different brands of DTaP-IPV and Tdap-IPV vaccine.

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>DTaP-IPV brand name</th>
<th>Tdap-IPV brand name</th>
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</thead>
<tbody>
<tr>
<td>Sanofi Pasteur</td>
<td>Quadracel®</td>
<td>Adacel®-Polio</td>
</tr>
<tr>
<td>GlaxoSmithKline</td>
<td>Infanrix®IPV</td>
<td>Boostrix®-Polio</td>
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Q: Given that the Tdap-IPV vaccine has a lower concentration of diphtheria and pertussis antigens compared to DTaP-IPV, is there a concern regarding immunogenicity and/or duration of protection?
A: In the United Kingdom, where Tdap-IPV has been used as a 4-6 year old booster since 2004, there have been no increases in diphtheria or pertussis cases, even though the concentration of diphtheria and pertussis are lower in this vaccine than in DTaP-IPV.

Q: Which brand of Tdap-IPV will be available and when will the switch occur?
A: At this time, Adacel®-Polio will be distributed. The switch is occurring in May 2012.
Q: I have a patient who is 3 years old and will be starting school in the fall. Can I administer this booster dose now?

A: No. Although this booster dose is recommended for children prior to school entry, Tdap-IPV vaccine is indicated for individuals 4 years of age and older. Give the booster dose at the earliest opportunity after the child turns 4 years old.

Q: What product should I administer to children under 7 years of age who require their primary series of vaccine for protection against diphtheria, tetanus, pertussis and polio?

A: As per “Schedule 2” in the *Publicly Funded Immunization Schedules for Ontario*, unimmunized children under 5 years of age who require their primary series should be given DTaP-IPV-Hib (Pediacel®) to provide protection against *Haemophilus influenza* type b (Hib).

For 5- and 6-year old children who are unimmunized and require their primary series, Hib is not required (nor publicly funded) and therefore, DTaP-IPV (Quadracel®) should be given. A small supply of Quadracel® will be available for these children.

Q: How do we order Quadracel® for these children?

A: Quadracel® is available by special order only through your vaccine provider.

Q: What should be done with our existing Quadracel® doses?

A: Any Quadracel® doses in your existing stock should be reserved for children indicated above (i.e., 5- and 6-year olds who are unimmunized and require doses for their primary series).

Q: I would normally give Tdap and IPV separately to unimmunized patients between 7 and 17 years old. Now that a combination product (i.e., Tdap-IPV) is available, can I give this combined product instead?

A: As per “Schedule 3” in the *Publicly Funded Immunization Schedules for Ontario*, unimmunized individuals between 7 and 17 years of age starting a primary immunization series would receive up to 3 doses of Tdap and IPV. These can be given through the combination product (Tdap-IPV) or separate (Tdap and IPV) products.

Q: Where can I get more information on Tdap-IPV vaccine such as dosage, concomitant administration with other vaccines and contraindications?

A: For important information prior to administering the vaccine refer to the product monograph.

- Adacel®-Polio product monograph:
- OR search by product name in Health Canada’s Drug Product Database:
  www.hc-sc.gc.ca/dhp-mps/prodpharma/databasdon/index-eng.php

Contact your local health unit for more information. A list of local public health units can be found at:
www.health.gov.on.ca/english/public/contact/phu/phu_mn.html