# Pentacel<sup>®</sup> (DTaP-IPV-HIB) vs. Adacel<sup>®</sup> Polio/Boostrix<sup>®</sup> Polio (Tdap-IPV) Decision Tool

# Catch-up schedule Children under 7 years old

**DTaP-IPV-Hib** is indicated for the primary immunization of children up to 6 years old (prior to 7<sup>th</sup> birthday). It has higher antigen content for diphtheria ("D"), and pertussis ("aP") compared to Tdap-IPV (indicated by lowercase "d" and "ap"). Tdap-IPV is indicated as a booster for children 4 years old and older.

Children <7 years old require a minimum of 3 doses of DTaP-IPV-Hib towards their primary series followed by booster doses for full protection.

**Tdap-IPV/Tdap** is used towards the primary immunization and boosters of children 7 years old and over.

This tool was developed in accordance with the Publicly Funded Immunization Schedules for Ontario found at: <u>ontario.ca/page/vaccine-resources-professionals</u>

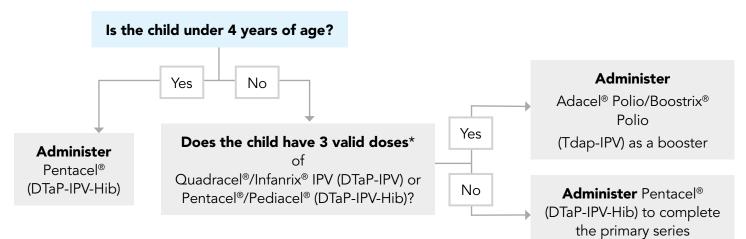
# Step 1

Assess if the child (<7 years old) has received the age-appropriate doses with the minimum required intervals.

	Vaccine	Minimum interval and age
Dose 1	DTaP-IPV-Hib	Dose at $\geq$ 6 weeks of age
Dose 2	DTaP-IPV-Hib	4 weeks after Dose 1
Dose 3	DTaP-IPV-Hib	4 weeks after Dose 2
Dose 4	<b>DTaP-IPV-Hib</b> If Dose 4 is given at ≥4 years and ≥ 24 weeks after Dose 3, Tdap-IPV should be given.	24 weeks after Dose 3 and over ≥ 1 year of age
Dose 5	<b>Tdap-IPV</b> Dose 5 is not required if Dose 4 is given $\ge$ 4 years of age and $\ge$ 24 weeks after Dose 3.	24 weeks after Dose 4 and over ≥ 4 year of age

# Step 2

If doses are needed, follow the algorithm to determine the appropriate vaccine.



\*International products with equivalent antigen levels are also valid

### **Case Scenarios**

# 1. A 5-year-old patient born January 7, 2020 presents at your office with an immunization record indicating the following:

- Pediacel® (DTaP-IPV-Hib): March 9, 2020
- Pediacel® (DTaP-IPV-Hib): April 4, 2021
- Pediacel® (DTaP-IPV-Hib): November 1, 2021

#### Assessment

- The minimum spacing of 4 weeks was met for dose 1, 2 and 3.
- 3 valid DTaP-IPV-Hib (higher dosing) were previously given.
- Child is over 4 years of age.

#### Answer

- Tdap-IPV (Adacel<sup>®</sup> Polio/Boostrix<sup>®</sup> Polio) would be given now as dose 4.
- Dose 5 is not needed as the child is 4 years of age and more than 24 weeks will have passed since the previous dose.

# 2. A 4-year-old patient born March 3, 2021 presents for the first the time at your office with an international immunization record indicating the following:

- Pentavac<sup>®</sup> (DTaP-HB-Hib) + Poliovac<sup>®</sup> (IPV): May 30, 2021
- Pentavac<sup>®</sup> (DTaP-HB-Hib) + Poliovac<sup>®</sup> (IPV): August 5, 2021

#### Assessment

- International vaccine equivalency to DTaP-IPV-Hib for dose 1 and 2.
- The minimum spacing of 4 weeks was met for dose 1 and 2.
- Only 2 valid DTaP-IPV-Hib (higher dosing) were previously given.
- Child is over 4 years of age.

#### Answer

• As the child has an incomplete primary series, DTaP-IPV-Hib (Pentacel®) would be given now as dose 3.

#### Next steps to complete series

- Dose 4 as Tdap-IPV (Adacel® Polio/Boostrix® Polio) in a minimum of 24 weeks.
- Doses 5 will not be needed if there was 24 weeks between dose 3 and 4.

Note: Patient may be eligible to complete HB series under the children <7 years old whose families have immigrated from countries of high prevalence for HBV and who may be exposed to HBV carriers through their extended families program or complete the series in grade 7.

For more information visit peelregion.ca



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