

Guidance on Using Pentacel

(Combination DTaP – IPV – Hib Product)

Indications for Use and Schedule

Approved for:

- Children ages 6 weeks through 4 years
- Not approved for persons 5 years of age and older

Routine schedule:

- Primary series: 2 months, 4 months, & 6 months
- Booster dose: 15-18 months of age

Hib shortage: Defer the routine booster dose until the Hib supply improves.

Minimum Age and Minimum Intervals:

- Minimum age for dose 1 is 6 weeks
- Minimum age for dose 2 is 10 weeks
- Minimum age for dose 3 is 14 weeks
- Minimum age for dose 4 is 12 months
- Minimum intervals:
 - 4 weeks between dose 1 & 2
 - 4 weeks between dose 2 & 3
 - 6 months between dose 3 & 4 (remember minimum age for dose 4 is 12 months)



Reconstitution

- Use the DTaP-IPV liquid to reconstitute the Hib powder.
- Use **only** the DTaP-IPV in the Pentacel package as the diluent.
- Shake well before using.

Storage and Handling

- Store the DTaP-IPV vial and the Hib vial in the original box in the refrigerator at 35°-46° F (2°-8°C).
- Protect from light.
- Do not freeze!

Vaccine Administration

- Intramuscular (IM) injection in the anterolateral thigh or deltoid of the arm
- 1 inch needle; 22-25 gauge
- Professional judgment is appropriate when selecting needle length and site
- Can be given with other vaccines, at the same visit (use separate sites; space at least 1 inch apart)
- The combined DTaP-IPV-Hib vaccine may be used when any component of the vaccine is indicated, and if the other components are not contraindicated

Contraindications

- An anaphylactic reaction to a prior dose of Pentacel, DTaP, IPV or Hib vaccines
- An anaphylactic reaction to a component of DTaP-IPV-Hib (Pentacel) including neomycin or polymyxin B
- Encephalopathy not due to another cause occurring within 7 days after vaccination with a pertussis-containing vaccine
- Progressive neurologic disorder (such as infantile spasms, uncontrolled epilepsy or progressive encephalopathy)

Precautions

- Moderate to severe acute illness
- Guillain-Barré syndrome within 6 weeks of receiving vaccine containing tetanus toxoid
- Temperature greater than or equal to 105°F within 48 hours of vaccination with no other identifiable cause
- Collapse or shock-like state within 48 hours of vaccination
- Persistent inconsolable crying lasting more than 3 hours within 48 hours of vaccination
- Convulsions with or without a fever within 3 days of vaccination

Other considerations:

- Document in MIIC both the DTaP and Hib lot numbers.
- Pentacel does not contain thimerosal or any other type of preservative.
- In the medical record, document Pentacel for each vaccine component: DTaP, IPV, and Hib.
- When giving Pentacel, use the VISs for DTaP, IPV, and Hib.
- In general ACIP recommends the same brand of DTaP be used for all doses of the series. However, different brands can be used if the provider does not know or have available the brand used for prior doses.
- If Pentacel is administered at 12 through 15 months for the purpose of catch-up, a dose of DTaP at age 15 through 18 months is not needed and a final IPV dose needs to be given after age 4 years.

Source: Michigan Department of Health

Suggested schedules when switching to Pentacel or using Pentacel exclusively

The schedules below do not include Pneumococcal conjugate or rotavirus vaccines

Suggested timing of hepatitis B vaccination when using Pentacel exclusively:

Birth	2 months	4 months	6 months	12-15 months
Hep B	Hep B		Hep B	
	Pentacel (DTaP-IPV-Hib)	Pentacel (DTaP-IPV-Hib)	Pentacel (DTaP-IPV-Hib)	DTaP
				IPV

Switching from Pediarix to Pentacel at age 4 months:

Birth	2 months	4 months	6 months	12-15 months
Hep B			Hep B	
	Pediarix (DTaP-IPV-hep B) ActHib	Pentacel (DTaP-IPV-Hib)	Pentacel (DTaP-IPV-Hib)	DTaP
				IPV

Switching from Pediarix to Pentacel at age 6 months:

Birth	2 months	4 months	6 months	12-15 months
Hep B			Hep B	
	Pediarix (DTaP-IPV-hep B) ActHib	Pediarix (DTaP-IPV-hep B) ActHib	Pentacel (DTaP-IPV-Hib)	DTaP
				IPV

Switching from non-combination products to Pentacel at 4 months:

Birth	2 months	4 months	6 months	12-15 months
Hep B	Hep B		Hep B	
	DTaP	Pentacel (DTaP-IPV-Hib)	Pentacel (DTaP-IPV-Hib)	DTaP
	ActHib			
	IPV			IPV

Switching from non-combination products to Pentacel at 6 months:

Birth	2 months	4 months	6 months	12-15 months
Hep B	Hep B		Hep B	
	DTaP	DTaP	Pentacel (DTaP-IPV-Hib)	DTaP
	ActHib	ActHib		
	IPV	IPV		IPV

Source: Centers for Disease Prevention and Control (CDC)