# **ADVISORY COMMITTEE ON IMMUNIZATION PRACTICES**

# VACCINES FOR CHILDREN PROGRAM

# POLIO

# VACCINES TO PREVENT POLIOMYELITIS

The purpose of this resolution is to revise the previous resolution to incorporate the use of a pentavalent vaccine: diphtheria and tetanus toxoids, acellular pertussis, hepatitis B, and polio vaccines.

*VFC* resolution 2/00-2 is hereby repealed and replaced by the following:

# **Eligible Groups**

Children who are 6 weeks of age through 18 years.\* \*DTaP-Hep B-IPV (PEDIARIX<sup>™</sup>) combination is approved for children ≥ 6 weeks to < 7 years of age.

### **Recommended Polio Vaccine Schedule**

The routine schedule f	or polio vaccination is:		
	Age	Vaccine	
	2 months	IPV	
	4 months	IPV	
	6-18 months	IPV	
	4-6 years	IPV	
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The first dose of polio vaccine series may be given as early as 6 weeks of age. The fourth dose of IPV is not recommended if the third dose is administered on or after the fourth birthday. The DTaP-HepB-IPV combination vaccine (PEDIARIX<sup>TM</sup>)\* can be used for the 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> doses of IPV if the other components of the combination are not contraindicated.

#### **Catch-Up Vaccination**

The ACIP recommends catch-up vaccination of previously unvaccinated children and adolescents. Administration of Oral Polio Vaccine (OPV)

OPV can be used only for the following circumstances: mass vaccination campaigns to control outbreaks of paralytic polio: unvaccinated children who will be traveling in less than four weeks to areas where polio is endemic; people with life threatening allergic reaction to a dose of IPV; and children of parents who do not accept the recommended number of vaccine injections. These children may receive OPV only for the third or fourth dose or both. *(OPV should be administered only after discussion of the risks of vaccine-associated paralytic poliomyelitis with parents or caregivers.)* 

\* Use of brand name is not meant to preclude the use of other comparable licensed DTaP-HepB-IPV vaccines.

The recommended interval between doses is 8 weeks for IPV and OPV. However, 4 weeks is acceptable for an accelerated immunization schedule.

# **Recommended Dosages**

Refer to product package inserts.

# **Inactivated Polio Vaccine Contraindications and Precautions**

#### The following conditions are contraindications to the administration of IPV vaccine:

#### 1. Allergy to vaccine components

Persons who have had anaphylactic reactions to topically or systemically administered streptomycin, neomycin or polymyxin B should not receive IPV.

2. Moderate or severe illnesses with or without fever

# The following conditions are contraindications to the administration of DTaP-HepB-IPV combination vaccine:

1. The DTaP-HepB-IPV combination (PEDIARIX<sup>TM</sup>), is not indicated for use in infants  $\leq 6$  weeks or >7 years of age.

#### 2. An immediate anaphylactic reaction.

Further vaccination with DTaP-Hep B-IPV (PEDIARIX<sup>TM</sup>) or any of its component (DTaP, Hep B, or IPV) vaccines should be deferred because of uncertainty as to which component of the vaccine might be responsible. However because of the importance of tetanus vaccination, persons who experience anaphylactic reactions maybe referred to an allergist for evaluation and (if specific allergy can be demonstrated) desensitized to tetanus toxoid.

#### 3. Encephalopathy not attributed to another identifiable cause.

An acute, severe central nervous system disorder occurring within 7 days after vaccination and generally consisting of major alterations in consciousness, unresponsiveness, or generalized or focal seizures that persist more than a few hours, without recovery within 24 hours. In such cases, component vaccines must be administered separately and DT vaccine instead of DTaP should be administered for the remaining doses in the vaccination schedule to ensure protection against diphtheria and tetanus.

### 4. Acute, moderate or severe illnesses with or without fever.

# The following conditions are precautions to receipt of DTaP-Hep B-IPV combination vaccine:

If any of the following events occurs within the specified period after administration of DTaP-Hep B-IPV, vaccine providers and parents should evaluate the risks and benefits of administering subsequent doses of a pertussis-containing vaccine:

- 1. Temperature of  $\geq 105^{\circ}$  F ( $\geq 40.5^{\circ}$ C) within 48 hours, not attributable to another identifiable cause.
- 2. Collapse or shock-like state (hypotonic hyporesponsive episode) within 48 hours.
- 3. Persistent crying lasting  $\geq$ 3 hours, occurring within 48 hours.
- 4. Convulsions with or without fever, occurring within 3 days.

# The following condition is a precaution to the administration of inactivated polio vaccine (IPV):

### 1. Pregnancy

It is prudent on theoretical grounds to avoid vaccinating pregnant women with IPV vaccine. However, if immediate protection against poliomyelitis is needed, IPV may be administered.

# **Oral Polio Vaccine Contraindications and Precautions**

#### The following conditions are contraindications to the administration of OPV vaccine:

1. In persons who have experienced an anaphylactic reaction to previous dose of OPV.

#### 2. Moderate or severe illnesses with or without fever

#### 3. Altered immune status

Altered immune status due to: malignant condition (blood dyscrasia, leukemia, lymphoma, or other neoplasms affecting the bone marrow of lymphatic systems); primary or acquired immune deficiency, including acquired immunodeficiency syndrome (AIDS) or other clinical manifestations of HIV infection, cellular immunodeficiencies, hypogammaglobulinemia, and dysgammaglobulinemia; family history of congenital or hereditary immunodeficiency, unless immune competence of possible vaccine recipient is demonstrated; and individuals receiving immunosuppressive therapy.

#### 4. Persons with HIV infection

Although OPV has not been harmful when administered to asymptomatic HIVinfected children, IPV is the vaccine of choice for a child who is known to be HIV infected. Testing for HIV-infection of asymptomatic children is not necessary before decisions regarding immunization with polio vaccine are made.

#### 5. Presence of immunodeficient household contacts

OPV should not be used for immunization of household contacts of immunodeficient patients; IPV is recommended.

#### 6. Steroid therapy

Receiving doses of systemic prednisone or equivalent at a dose of  $\geq 2 \text{ mg/kg}$  of body weight per day or 20 mg/day.

#### The following condition is a precaution to the administration of OPV vaccine:

#### 1. Pregnancy

It is prudent on theoretical grounds to avoid vaccinating pregnant women with IPV vaccine. However, if immediate protection against poliomyelitis is needed, IPV may be administered.

#### Adopted and Effective: February 26, 2003

Note: Vaccines approved by the ACIP for inclusion in the VFC program are not available for use in the program until after the CDC has established a contract for the purchase of the vaccines.