OREGON HEALTH AUTHORITY

IMMUNIZATION PROTOCOL FOR PHARMACISTS

**INTERIM ENHANCED-POTENCY INACTIVATED POLIOVIRUS VACCINE [IPV] FOR TRAVELERS**

Update as of 07-18-2014: recommendations for travel to and from countries affected by wild poliovirus¹.

- Applies to US residents ≥6 weeks of age who will travel or reside in affected countries for >4 weeks.
- Travelers require evidence of administration of polio vaccine (IPV or OPV) within 12 months of travel to or from an affected country.
- Exit requirements include proof of polio vaccination when leaving the country across borders or through airports, i.e. Pakistan
- All polio vaccine administration should be documented on an International Certificate of Vaccination or Prophylaxis (W.H.O. Yellow Card)²
- Appendix: Map of affected areas June 30, 2014.

---

**I. Order:**

1. Check the ALERT Immunization Information System to determine whether the patient needs this vaccine and any other vaccines.
2. Screen clients ≥11 years for contraindications.
3. Provide an Adolescent Well Visit Flyer to those 11—18 years of age.
4. Provide a current Vaccine Information Sheet (VIS) answering any questions.
5. Obtain a signed Vaccination Administration Record (VAR)
6. Give Inactivated Polio Vaccine (IPV): 0.5mL subcutaneously (SC) or intramuscularly (IM). May be given with all routine adolescent and adult vaccines.

---

Immunizing Pharmacist Signature  
Date

For multiple signatures see: [http://1.usa.gov/PharmacyImmunizationProtocols](http://1.usa.gov/PharmacyImmunizationProtocols)

---

¹ CDC. Interim CDC guidance for polio vaccination for travel to and from countries affected by wild poliovirus. MMWR 2014; 63 (27): 591–94. Available at: [http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6327a4.htm?s_cid=mm6327a4_w](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6327a4.htm?s_cid=mm6327a4_w)

II. LICENSED INACTIVATED POLIO VACCINE (IPV)\textsuperscript{1,2}

<table>
<thead>
<tr>
<th>PRODUCT NAME</th>
<th>VACCINE COMPONENTS</th>
<th>ACCEPTABLE AGE RANGE</th>
<th>Preservatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPOL\textsuperscript{3}</td>
<td>Inactivated polio virus (IPV) serotypes 1, 2 and 3</td>
<td>≥ 6 weeks\textsuperscript{4} of age</td>
<td>None</td>
</tr>
<tr>
<td>Sanofi Pasteur</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\textsuperscript{1} Oral polio vaccine (OPV) has been unavailable in the United States Since 1999.

\textsuperscript{2} OPV is recommended for additional doses administered outside of the United States unless the individual is immunocompromised.

\textsuperscript{3} Less than 5 ng of neomycin, 200 ng of streptomycin, and 25 ng of polymyxin B per dose are present in vaccine.

\textsuperscript{4} Accelerated schedule only. Recommended age is 2 months.

III. RECOMMENDATIONS FOR USE

III.A IPV VACCINE SCHEDULE FOR UNVACCINATED INFANTS AND CHILDREN—18 YEARS OF AGE\textsuperscript{1}

<table>
<thead>
<tr>
<th>Dose 0.5 ml</th>
<th>Recommended Age</th>
<th>Minimum interval to next dose\textsuperscript{2}</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2 months</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>4 months</td>
<td>4 weeks</td>
</tr>
<tr>
<td>3</td>
<td>6—18 months</td>
<td>4 weeks</td>
</tr>
<tr>
<td>4\textsuperscript{3}</td>
<td>4—6 years</td>
<td>≥6 months after the previous dose</td>
</tr>
</tbody>
</table>

\textsuperscript{1}The final dose should be administered at ≥4 years, regardless of the number of previous doses, and should be given ≥6 months after the previous dose.

\textsuperscript{2} A fourth dose in the routine IPV series is not necessary if the third dose was administered at age ≥4 years and ≥6 months after the previous dose.

\textsuperscript{3} For retrospective checking, doses that violate the minimum spacing or age by 4 or fewer days do not need to be repeated. Doses administered 5 days or earlier than the minimum interval or age should be repeated as appropriate for age.
III.B IPV ACCELERATED VACCINE SCHEDULE FOR UNVACCINATED INFANTS AND CHILDREN TRAVELING

<table>
<thead>
<tr>
<th>Dose</th>
<th>Recommended Age</th>
<th>Minimum interval to next dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5 ml</td>
<td>≥6 weeks</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>≥4 weeks after the previous dose</td>
<td></td>
</tr>
<tr>
<td>4^4</td>
<td>≥6 months after dose 3</td>
<td></td>
</tr>
</tbody>
</table>

1 If the age-appropriate series is not completed before departure, the remaining IPV doses to complete a full series should be administered when feasible, at the intervals recommended for the accelerated schedule.

2 If doses are needed while residing in the affected country, the polio vaccine that is available (IPV or OPV) may be administered.

III.C. RECOMMENDATIONS FOR ADULT TRAVELERS OF UNKNOWN VACCINE STATUS

<table>
<thead>
<tr>
<th>DOSE</th>
<th>PRIMARY 3-DOSE SCHEDULE</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5 ml</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>6–12 months from dose 2 to 3</td>
</tr>
</tbody>
</table>
III.D. ACCELERATED SCHEDULE FOR ADULTS, UNVACCINATED, INCOMPLETELY VACCINATED OR WITH UNKNOWN VACCINE STATUS

<table>
<thead>
<tr>
<th>Time Interval to Travel</th>
<th>Number of Doses</th>
<th>Interval Spacing</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;8 weeks</td>
<td>3 doses</td>
<td>≥4 weeks apart</td>
</tr>
<tr>
<td>&lt;8 weeks but &gt;4 weeks</td>
<td>2 doses</td>
<td>≥4 weeks apart</td>
</tr>
<tr>
<td>&lt;4 weeks</td>
<td>1 dose</td>
<td></td>
</tr>
</tbody>
</table>

If <3 doses are administered, the remaining IPV doses to complete the 3-dose series should be administered when feasible, at appropriate intervals, if the person remains at increased risk for poliovirus exposure. If doses are needed while residing in the affected country, the polio vaccine that is available (IPV or OPV) may be administered.

III. E. RECOMMENDATIONS FOR FULLY VACCINATED TRAVELERS: Children, Adolescents, and Adults

<table>
<thead>
<tr>
<th>DOSE</th>
<th>Additional Dose of IPV</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5 ml</td>
<td></td>
</tr>
</tbody>
</table>
| 1     | • Administer to persons who are traveling to areas where with documented wild polio virus (WPV) circulation within the last 12 months; staying >4 weeks; have documented a complete series; and last dose was administered >12 months before the date of departure.  
• Children who receive this additional dose as a fourth dose between ages 18 months and 4 years will still require an IPV booster dose at age ≥4 years  
• If the time residing in the polio-exporting or polio-infected country is anticipated to be >12 months, available polio vaccine (IPV or OPV) may be administered within the affected country 4 weeks to 12 months before departing that country |

Clinicians performing overseas evaluations of immigrants and refugees migrating to the US from polio-exporting or polio-infected countries should consult the 2014 Addendum to Technical Instructions for Panel Physicians for Vaccinations. Available at http://www.cdc.gov/immigrantrefugeehealth/exams/ti/panel/technical-instructions-panel-physicians.html
## IV. CONTRAINDICATIONS

A. Serious allergic or anaphylactic reaction (hives, swelling of the mouth and throat, difficulty breathing, hypotension, and shock) to a previous dose of IPV or its components, including formaldehyde, streptomycin, neomycin, or polymyxin B.

B. People who have primary B-cell immunodeficiencies should not be given OPV and should avoid contact with excreted OPV virus (such as exposure to a child vaccinated with OPV in the previous 6 weeks).

## V. PRECAUTIONS

A. Vaccination with IPV should be deferred during a moderate or severe illness (with or without fever) until symptoms have resolved.

B. Pregnancy: If a pregnant woman is unvaccinated or incompletely vaccinated and requires immediate protection against polio because of planned travel to a country or area where polio cases are occurring, IPV can be administered as recommended for adults.

C. Breastfeeding is not a contraindication to administration of polio vaccine to an infant or mother.

D. Immunodeficient persons may receive IPV vaccine, though due to their immune status, only partial protection may be conferred.

## VI. SIDE EFFECTS AND ADVERSE REACTIONS

A. Minor local reactions (pain, redness) may occur following IPV.

B. No serious side effects have been documented.
VII. OTHER CONSIDERATIONS

A. Cameroon, Equatorial Guinea, Pakistan and Syria: **exporting WPV countries.** These countries should ‘**ensure**’ recent (4—52 weeks before travel) polio boosters among departing residents and long-term travelers (of >4 weeks).

B. Afghanistan, Ethiopia, Iraq, Israel, Nigeria, and Somalia are **WPV-infected countries.** These countries should ‘**encourage**’ recent polio vaccination boosters among departing residents and long-term travelers.

C. Healthcare workers in refugee camps and other humanitarian aid settings might be at particular risk for exposure to WPV.

D. Unvaccinated travelers may contract polio when exposed to vaccine-derived type 2 polio virus from the trivalent oral polio vaccine (OPV).

E. Rare cases of vaccine-associated paralytic poliomyelitis can occur among immunologically normal OPV recipients, their contacts, and persons who have primary, B-cell immunodeficiencies.¹

F. For someone with a history of fainting with injections, a 15-minute post-immunization observational period is recommended.

VIII. STORAGE AND HANDLING

1. Parenteral drug products should be inspected visually for either particulate matter or discoloration prior to administration. If either of these is seen, the vaccine should not be administered.
2. The vaccine is a clear, colorless solution.
3. Store at 2-8°C (36-46°F) Do not freeze.

IX. ADVERSE EVENTS REPORTING

Adverse events following immunization must be reported to the Vaccine Adverse Events Reporting System (VAERS) at 1-800-822-7967. Forms and procedures can be found at the VAERS website: www.vaers.hhs.gov. In addition, a copy of the reporting form should be reported to the patient’s primary provider, per Oregon Revised Statute (ORS) 855-019-0280(4).

Table 1. ADVERSE EVENTS TO BE REPORTED TO VAERS

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Event</th>
<th>Time Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPV</td>
<td>Paralytic polio in a vaccine-associated community case</td>
<td>No limit</td>
</tr>
<tr>
<td></td>
<td>Vaccine-strain polio viral infection in a vaccine-associated community case</td>
<td>No limit</td>
</tr>
<tr>
<td>IPV</td>
<td>Anaphylaxis or anaphylactic shock</td>
<td>4 hours</td>
</tr>
<tr>
<td></td>
<td>Any sequelae, including death, of the above events</td>
<td>No limit</td>
</tr>
<tr>
<td></td>
<td>Events described in the manufacturer’s package insert as contraindications to additional doses of vaccine</td>
<td>See package insert</td>
</tr>
</tbody>
</table>
REFERENCES

1. CDC. Interim CDC guidance for polio vaccination for travel to and from countries affected by wild poliovirus. MMWR 2014; 63 (27): 591–594. Available at: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6327a4.htm?s_cid=mm6327a4_w


To request this material in an alternative format (e.g., Braille) or to clarify any part of the above order, contact the Oregon Health Authority Immunization Program at 971.673.0300. For other questions, consult with the vaccine recipient’s primary health care provider or a consulting physician.

Electronic copy of this protocol available at: http://1.usa.gov/PharmacyImmunizationProtocols
APPENDIX:

FIGURE. Countries identified by the World Health Organization as exporting wild poliovirus and those currently wild poliovirus–infected—worldwide, 2014*

* As of June 30, 2014.

Alternate Text: The figure above shows countries identified by the World Health Organization (WHO) as exporting wild poliovirus and those currently wild poliovirus-infected worldwide during 2014. U.S. clinicians should be aware of possible new vaccination requirements for patients planning travel for more than four weeks to the 10 countries identified by WHO as polio-infected.

http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6327a4.htm?s_cid=mm6327a4_w