

OREGON HEALTH AUTHORITY
IMMUNIZATION PROGRAM
ENHANCED-POTENCY INACTIVATED
POLIOVIRUS VACCINE [IPV] ¹ FOR **TRAVELERS**

Date: 07-30-2015

On 07-11-2015 the CDC reaffirmed and updated vaccine recommendations for travelers to countries where Wild Polio Virus (WPV) has circulated during the past 12 months; and for adult workers in bordering countries, where the risk of exposure to imported WPV may be high.²

- Temporary polio vaccine requirements affect the following countries: Afghanistan, Cameroon, Nigeria, Pakistan, and Somalia. See Section VII Other Considerations, pages 9–10.
- The requirements no longer apply to Equatorial Guinea, Ethiopia, Iraq, Israel, or Syria.
- Travelers staying >4 weeks in the polio-infected countries listed above may be required to show proof of polio vaccination when leaving the polio-infected country. To meet World Health Organization (WHO) requirements, such travelers should receive polio vaccine between 4 weeks and 12 months before the date of departure from the polio-infected country.
- Clinicians are encouraged to err on the side of caution by ensuring that patients are properly prepared for any requirements they may face when leaving countries affected by the polio vaccine requirements. Polio vaccine requirements apply to U.S. residents ≥6 weeks of age who will travel or reside in affected countries for >4 weeks.
- Travelers may be required to show evidence of administration of polio vaccine (IPV or Oral Polio Virus [OPV]) within 12 months of travel to or from an affected country.³
- Exit requirements include proof of polio vaccination when leaving the country across borders or through airports.³
- All polio vaccine administration should be documented on an International Certificate of Vaccination or Prophylaxis^{2, 3} (World Health Organization Yellow Card⁴).

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I. Oregon Model Standing Order:

1. Check the ALERT Immunization Information System (IIS) to determine whether the patient needs this vaccine and any other vaccines.
2. Screen clients for contraindications.
3. Provide a current Vaccine Information Sheet (VIS), and answer any questions.
4. Record all required data elements in the client's permanent health record.
5. Give a single 0.5mL dose of IPV either IM or SQ according to recommendations and appropriate schedules.
6. May be given with all ACIP-recommended child and adult vaccinations.
7. Ask client to remain seated on the premises for 15 minutes after vaccination to decrease the risk of injury should they faint.

Health Officer Signature

Date

Health Officer Signature

Date

II. LICENSED INACTIVATED POLIO VACCINE (IPV) *

PRODUCT NAME	VACCINE COMPONENTS	ACCEPTABLE AGE RANGE	Preservatives
<p>IPOL[®] Sanofi Pasteur</p>	<p>Inactivated polio virus (IPV) serotypes 1,2 and 3</p> <p>Less than 5 ng of neomycin, 200 ng of streptomycin, 25 ng of polymyxin B, and 0.5% of 2-phenoxyethanol and up to 0.02% (200 ppm) of formaldehyde as preservatives per dose are present in vaccine.⁶</p>	<p>≥6 weeks</p>	<p>None</p>

* OPV is recommended for additional doses administered outside of the United States unless the individual is immunocompromised.¹

III. RECOMMENDATIONS FOR USE

III.A IPV VACCINE SCHEDULE FOR UNVACCINATED INFANTS AND CHILDREN—18 YEARS OF AGE^{1, 2, 3}

Dose 0.5 mL	Recommended Age	Minimum interval to next dose ^{*◇}
1 [§]	2 months	
2	4 months	4 weeks
3	6–18 months	4 weeks
4 [◇]	4 [§] –6 years	≥6 months after the previous dose

* 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 dose⁶

◇ 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.⁶

§ The final dose should be administered at ≥4 years of age, regardless of the number of previous doses, and should be given ≥6 months after the previous dose⁶

III.B IPV ACCELERATED VACCINE SCHEDULE FOR INFANTS AND CHILDREN TRAVELING WHO ARE UNVACCINATED, INCOMPLETELY VACCINATED, OR HAVE AN UNKNOWN VACCINATION STATUS *[◇]

Dose 0.5 mL	Recommended Age	Minimum interval to next dose
1	≥6 weeks	
2		≥4 weeks after the previous dose
3		≥4 weeks after the previous dose
4	4 years	≥6 months after dose 3

* 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, 3, 7}

[◇]If doses are needed while residing in the affected country, the polio vaccine that is available (IPV or OPV) may be administered.^{2, 3, 7}

III.C. RECOMMENDATIONS FOR ADULT TRAVELERS OF UNKNOWN VACCINE STATUS^{2, 3}

Dose 0.5 mL	Primary 3-Dose Schedule
1	
2	4–8 weeks from dose 1 to 2
3	6–12 months from dose 2 to 3

III.D. ACCELERATED SCHEDULE FOR ADULTS, UNVACCINATED, INCOMPLETELY VACCINATED OR WITH UNKNOWN VACCINE STATUS^{2, 3}

Time Interval to Travel	Number of Doses [*]	Interval Spacing
>8 weeks	3 doses	≥4 weeks apart
<8 weeks but >4 weeks	2 doses	≥4 weeks apart
<4 weeks	1 dose	

^{*} 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.^{2, 7}

III. E. RECOMMENDATIONS FOR FULLY VACCINATED TRAVELERS: Children, Adolescents, and Adults^{2, 3}

Dose 0.5 mL	Additional Dose of IPV
1	<ul style="list-style-type: none"> Administer to persons who are traveling to areas with documented wild polio virus (WPV) circulation within the last 12 months; staying >4 weeks; have documented a complete series; and the most recent dose was administered >12 months before the date of departure. Children who receive this additional dose as a fourth dose before their 4th birthday 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) should 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 U.S. from polio-exporting or polio-infected countries should consult the 2014 *Technical Instructions for Panel Physicians* for vaccinations.⁸

IV. CONTRAINDICATIONS

1. 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 2-phenoxyethanol, formaldehyde, streptomycin, neomycin, or polymyxin B.¹
2. Vaccination of persons with an acute, febrile illness should be deferred until after recovery.¹

V. PRECAUTIONS

1. IPV may be administered to people with diarrhea. Minor upper respiratory illnesses with or without fever, mild to moderate local reactions to a previous dose of IPV, current antimicrobial therapy, and the convalescent phase of acute illness are not contraindications for vaccination.⁷

VI. SIDE EFFECTS AND ADVERSE REACTIONS

Percentage of Children Presenting with Local or Systemic Reactions at 6 and 48 Hours of Immunization with IPOL[®] Vaccine Administered Intramuscularly Concomitantly at Separate Sites with Sanofi Acellular Pertussis Vaccine (Tripedia[®]) at 18 Months of Age.

Number followed for Safety	Adverse Reaction (%) (n = 74)	
	Time after Vaccination	
Local Reaction, Injection site*	6 hours	48 hours
Pain	13.5	0.0
Redness	1.4	0.0
Swelling	2.7	0.0
Systemic Complaints		
Irritability	14.7	8.0
Fever >102.2°F	0.0	4.0
Anorexia	2.7	2.7
Tiredness	9.3	4.0
Vomiting	1.3	0.0
Persistent Crying during the 72 hours after immunization was seen in 0 of recipients after dose one, 1.4% after dose two, and 0 after dose three.		
IPOL [®] package insert. Table 2, page 16 ⁶		

* Data are from the IPOL vaccine administration site, given intramuscularly.

VII. OTHER CONSIDERATIONS

1. Epinephrine hydrochloride solution (1:1,000) and other appropriate agents and equipment must be available for immediate use in case of anaphylactic or acute hypersensitivity reaction.^{1,2}
2. Individuals with altered immunocompetence may have reduced immune responses.^{1,2}
3. 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.⁹
4. Breastfeeding is not a contraindication to administration of polio vaccine to an infant or mother.^{1, 7}
5. IPV may be administered safely to immunocompromised travelers and their household contacts. Although a protective immune response cannot be ensured, IPV might confer some protection to the immunocompromised person. People with certain primary immunodeficiency diseases should not be given live, attenuated OPV and should avoid contact with excreted OPV virus (such as exposure to a child vaccinated with OPV in the previous 6 weeks). Because OPV is no longer given in the United States, this situation would arise only if a child receives OPV overseas.⁷
6. Temporary polio vaccine requirements of the World Health Organization (WHO) affect the following **WPV exporting** countries: Afghanistan, Pakistan:²
 - **Ensure** that all residents and visitors staying >4 weeks receive a dose of polio vaccine between 4 weeks and 12 months before leaving either country.
 - **Ensure** that anyone who has not received a dose of polio vaccine in the previous 4 weeks to 12 months does so before leaving either country.
 - **Ensure** documentation of polio vaccination on an International Certificate of Vaccination or Prophylaxis (ICVP) to serve as proof of vaccination.
7. WHO-defined countries with WPV but **not currently exporting**: Cameroon, Nigeria, and Somalia²:
 - **Encourage** all residents and visitors staying >4 weeks to receive a dose of polio vaccine between 4 weeks and 12 months before leaving any of these countries.
 - **Encourage** anyone who has not received a dose of polio vaccine in the previous 4 weeks to 12 months to do so before departure.

- **Ensure** proper documentation of polio vaccination if it is given to the traveler.
8. The temporary polio vaccine requirements no longer apply to Equatorial Guinea, Ethiopia, Iraq, Israel, or Syria.²
 9. Travelers staying in a polio-infected country longer than 12 months may receive available poliovirus vaccine (IPV or OPV) in the infected country to meet the departure requirement.^{2, 7}
 10. Oral Polio Vaccine is accepted for additional doses administered outside of the United States unless the individual is immunocompromised.^{2, 7}
 - Healthcare workers in refugee camps and other humanitarian aid settings might be at particular risk for exposure to WPV.²
 - Very rarely, unvaccinated travelers may contract polio when exposed to vaccine-derived polio virus.²
 - A history of having recovered from polio disease should not be considered evidence of immunity, as 3 different poliovirus strains can cause polio.⁹

VIII. STORAGE AND HANDLING¹

All clinics and pharmacies enrolled with the VFC program must immediately report any storage and handling deviations to their Oregon Immunization Program health educator. The health educator assignment map is located at: http://bit.ly/HE_Map

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

Public providers are to complete the Vaccine Adverse Events Reporting System (VAERS) report online at <https://vaers.hhs.gov/esub/step1>. Save a copy of the report number for your records, and send copies of the report and VAERS ID number to the Oregon Immunization Program Vaccine Safety Coordinator via confidential email at ORVAERS.Reports@state.or.us or fax (971-673-0278). Private providers are to report events directly to VAERS and can read about options on how to do so at <http://vaers.hhs.gov/index>.

ADVERSE EVENTS TO BE REPORTED TO VAERS*

Vaccine	Event and interval from vaccination
Inactivated Polio: <ul style="list-style-type: none"> •IPV •DTaP-IPV •DTaP-IPV/HIB •DTaP-HepB-IPV 	A. Anaphylaxis or anaphylactic shock (7 days) B. Any acute complication or sequelae (including death) of the above event (interval – not applicable) C. Events described in manufacturer’s package insert as contraindications to additional doses of vaccine (interval- see package insert)

Continued next page

ADVERSE EVENTS TO BE REPORTED TO VAERS (Cont.)*

Vaccine	Event and interval from vaccination
Oral Polio (OPV)	<p>A. Paralytic polio</p> <ul style="list-style-type: none"> • in a non-immunodeficient recipient (30 days) • in an immunodeficient recipient (6 months) • in a vaccine-associated community case (interval not applicable) <p>B. Vaccine-strain polio viral infection</p> <ul style="list-style-type: none"> • in a non-immunodeficient recipient (30 days) • in an immunodeficient recipient (6 months) • in a vaccine-associated community case (interval not applicable) <p>C. Any acute complication or sequelae (including death) of above events (interval not applicable)</p> <p>D. Events described in manufacturer’s package insert as contraindications to additional doses of vaccine (interval: see package insert)</p>

* Effective date: November 10, 2008. The Reportable Events Table (RET) reflects what is reportable by law (42 USC300aa-25) to the Vaccine Adverse Event Reporting System (VAERS) including conditions found in the manufacturers package insert. In addition, healthcare professionals are encouraged to report any clinically significant or unexpected events (even if you are not certain the vaccine caused the event) for any vaccine, whether or not it is listed on the RET.

Manufacturers are also required by regulation (21 CFR 600.80) to report to the VAERS program all adverse events made known to them for any vaccine.

[https://vaers.hhs.gov/resources/VAERS Table of Reportable Events Following Vaccination.pdf](https://vaers.hhs.gov/resources/VAERS_Table_of_Reportable_Events_Following_Vaccination.pdf)

REFERENCES

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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 and 711 for TTY. For other questions, consult with the vaccine recipient's primary health care provider or a consulting physician.

Electronic copy of this standing order is available at:

<http://1.usa.gov/OregonStandingOrders>