IMMUNIZATION PROTOCOL FOR PHARMACISTS

ENHANCED-POTENCY INACTIVATED POLIOVIRUS VACCINE [IPV]

I. ORDER:

1. Screen for contraindications.
2. Provide the current Vaccine Information Statement (VIS), answering any questions.
3. Obtain a signed Vaccine Administration Record (VAR).
4. Give polio vaccine; IPV dose is 0.5 ml given **subcutaneously** or **intramuscularly**.
   a. Simultaneous vaccination may be given with all routine adolescent and adult vaccines.

II. LICENSED POLIO VACCINES[1]

Product Name	Vaccine components	Acceptable Age Range	Thimerosal
IPOL®[2] Sanofi Pasteur	Inactivated polio virus (IPV) serotypes 1,2 and 3	≥ 6 weeks of age	None

[1] Oral polio vaccine (OPV) is no longer manufactured or available in the United States.
[2] Less than 5 ng of neomycin, 200 ng of streptomycin, and 25 ng of polymyxin B per dose are present in vaccine.

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Pharmacist Signature Date

Original provided courtesy of the Oregon State Public Health Division
mmunization Program

November 2007

III. VACCINE SCHEDULE

A. Inactivated Poliovirus Vaccine (IPV) Adult Schedule[1.2,]

DOSE[3]	RECOMMENDED SPACING	MINIMUM SPACING[4]
1	----------	————————
2	1–2 Months	4 weeks
3	6–12 months	4 weeks

[1] Routine vaccination of adults (18 years or older) who reside in the US is not necessary or recommended because most adults are immune and have very little risk of exposure in the US.

[2]Unvaccinated adults at increased risk include travelers to endemic or epidemic polio areas (South Asia, the eastern Mediterranean, and Africa), lab workers handling poliovirus specimens, and certain populations in outbreak situations.

[3]High-risk adults who have previously completed a primary series of 3 or more doses, should be given only one supplemental dose of IPV.

[4]The preferred interval between the 2nd and 3rd dose of IPV is 6-12 months. However, if 8 weeks or more are available before protection is needed, three doses of IPV should be given at least 4 weeks apart.

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 streptomycin, neomycin, or polymyxin B.

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 immediate protection against poliomyelitis is needed, IPV may be administered. Otherwise, vaccination of pregnant women should be avoided.

C. 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. GENERALLY, PERSONS 19 YEARS AND OLDER LIVING IN THE UNITED STATES SHOULD NOT BE GIVEN POLIO VACCINE, unless they are at an INCREASED RISK OF EXPOSURE TO POLIO (e.g., **international travelers, laboratory workers, or healthcare workers**).

B. For Unvaccinated or Under-Vaccinated Adults at increased risk:
   - Unvaccinated adults should receive two doses of IPV at intervals of 4-8 weeks with 3rd dose 6-12 months after 2nd. (For accelerated schedule, see MMWR, Vol.46/No.RR-3, p. 17).
   - Adults who have had a primary series of ≥3 doses of OPV or IPV may receive one supplementary dose of IPV. It is not necessary to administer additional doses for subsequent travel to a polio-endemic country.
   - Adults with less than a full primary course of OPV or IPV should be given the remaining doses of IPV, regardless of the interval since last dose and type of vaccine received.

C. Post-Polio Syndrome

   After an interval of 30-40 years, 25%-40% of persons who contract paralytic poliomyelitis in childhood may experience muscle pain and exacerbation of existing weakness or develop new weakness or paralysis. This disease entity, which is referred to as post-polio syndrome, has been reported only in persons infected during the era of wild poliovirus circulation. This is not an infectious process, and persons experiencing the syndrome do not shed poliovirus. Risk factors for post-polio syndrome include a) increasing length of time since acute poliovirus infection, b) presence of permanent residual impairment after recovery from the acute illness, and c) female sex. For further information contact:
   - International Polio Network; 5100 Oakland Avenue, #206; St. Louis, MO 63110-1406; (314) 534-0475.
   - March of Dimes; Birth Defects Foundation; Community Services Department; 1275 Mamaroneck Avenue; White Plains, NY 10605; (914) 428-7100.
   - Paul E. Peach, MD.; Roosevelt Warm Springs Institute; P.O. Box 1000; Warm Springs, Ga. 31830; (706) 655-5301.

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

Other Considerations continued:

E. Vaccination of Internationally Adopted Children:

- The recommended approach is to revaccinate adopted children with IPV according to the US schedule.
- Alternative approaches are to order serologic testing for neutralizing antibody to poliovirus types 1,2,and 3 or to administer a single dose of IPV, followed by serologic testing,
- Children with protective titers against all three types do not need revaccination.

VIII. ADVERSE EVENT REPORTING

Adverse events following immunization should be reported by public providers to the Immunization Program, Health Services, using a Vaccine Adverse Events Reporting System form (VAERS), according to state guidelines. Private providers report all adverse events directly to VAERS.
VAERS phone number: (800) 822-7967, and the website address is http://www.vaers.hhs.gov

Table 1. Adverse Events To Be Reported To VAERS

Vaccine	Event	Time Period
OPV	Paralytic polio in a vaccine-associated community case	No limit
	Vaccine-strain Polio viral infection in a vaccine-associated community case	No limit
IPV	Anaphylaxis or anaphylactic shock	4 hours
	Any sequela, including death, of the above events	No limit
	Events described in the manufacturer's package insert as contraindications to additional doses of vaccine	See package insert

POLIO CASE INVESTIGATION: Notify ODPE immediately, day or night.

IX. REFERENCES

1. Poliomyelitis. In: *Epidemiology and Prevention of Vaccine-Preventable Diseases (*"Pink Book"). Atkinson W, Hamborsky J, Wolfe S, eds10th ed. Washington, DC: Public Health Foundation, 2007: 101-113.
2. General Recommendations on Immunization, MMWR, Vol. 51, No. RR-2, 2/8/02.
3. Poliomyelitis Prevention in the United States: Introduction of a Sequential Vaccination Schedule of Inactivated Poliovirus Vaccine Followed by Oral Poliovirus Vaccine*;* MMWR, Vol. 46, No. RR-3, 1/24/97.
4. Polio-containing-vaccine package inserts

Electronic copy of this protocol available at:
http://www.oregon.gov/dhs/ph/imm/provider/pharmpro.shtml
To request this material in an alternate format (e.g., Braille),
Please call (971) 673-0300.