

IMMUNIZATION PROTOCOL FOR PHARMACISTS

PNEUMOCOCCAL POLYSACCHARIDE VACCINE 23-Valent Vaccine

3/09 Update based on recent ACIP revisions to Recommendations for Use (Section II p.2):

- new recommendation for adult cigarette smokers
- new recommendation for adults with asthma
- revision of recommendation for Alaska Natives and American Indians who are otherwise not in high-risk groups: vaccination indicated only for those living in high-risk areas, as recommended by public health officials
- revision of previous recommendations for revaccination of high-risk children at 3–5 years after initial vaccination: now recommended only after a 5-year interval.

I. **ORDER:**

1. Screen for contraindications.
2. Provide a current Vaccine Information Statement (VIS), answering any questions.
3. Obtain a signed Vaccine Administration Record (VAR).
4. Give (0.5 ml) pneumococcal polysaccharide vaccine **intramuscularly (IM), or subcutaneously (SC)**.
5. May be given simultaneously with influenza and all routine adult immunizations.

Pharmacist signature

Date

March 2009

II. RECOMMENDATIONS FOR USE:

Indications for Single Initial Vaccination	Indications for Revaccination ¹
IMMUNOCOMPETENT PERSONS	
Persons aged ≥65 years	2nd dose of vaccine if 1 st dose received ≥5 years previously and patient <65 years at time of 1 st dose
Persons aged 2–64 years with chronic illness, including <ul style="list-style-type: none"> ○ Cardiovascular disease ○ Pulmonary disease (e.g. COPD, emphysema) ○ Cochlear implants ○ Diabetes mellitus ○ Alcoholism, chronic liver disease ○ CSF leaks 	Not recommended until ≥age 65
Persons aged 19–64 years with these issues <ul style="list-style-type: none"> ○ Asthma ○ Cigarette smokers (cessation counseling should be offered along with vaccine) 	Not recommended until age 65
Persons aged 2–64 years living in nursing homes and other long-term care facilities	Not recommended until age 65
Only Alaska Natives or American Indian persons 50–64 years living in areas with high risk for invasive pneumococcal disease ²	Not recommended until age 65
HIGH-RISK PERSONS	
Persons ≥ 2 years of age immunocompromised due to: <ul style="list-style-type: none"> ○ HIV infection³, ○ Hodgkins disease, multiple myeloma, generalized malignancy, leukemia ○ chronic renal failure or nephrotic syndrome ○ organ or bone marrow transplants⁴ ○ immunosuppression⁵ ○ functional or anatomic asplenia (sickle cell disease or splenectomy)⁶ 	A 2nd dose is recommended if ≥5 years have elapsed since receiving 1 st dose.

II. Footnotes to above PPV23 vaccine recommendations for use

- ¹ Because data are insufficient concerning the safety of PPV23 when administered three or more times, revaccination following a second dose is NOT recommended.
- ² Usually routine use of PPV23 is not recommended for American Indian and Alaska natives <60years of age. Routine use of PPV23 after PCV7 is also not usually recommended for Alaska Native or American Indian children 24–59 months. However, in special situations, public health authorities may recommend the use of PPV23 after PCV7 for those children living in areas in which risk of invasive pneumococcal disease is increased.
- ³ Persons with asymptomatic or symptomatic HIV infection should be vaccinated as soon as possible after their diagnosis is confirmed.
- ⁴ Hematopoietic Stem Cell Transplant (HSCT) recipients should receive one dose of PPV23 at 12 months post transplant and a second dose 24 months post transplant.
- ⁵ Interval between vaccination and immunosuppressive therapy should be at least 2 weeks. Vaccination during chemotherapy or radiation should be avoided.
- ⁶ If an elective splenectomy is being planned, vaccine should be administered at least 2 weeks before surgery if possible or as soon as possible following surgery.

III. VACCINE SCHEDULE:

PPV23 Primary Vaccination Route: SC or IM		Revaccination
<u>Age</u>	<u>Dose</u> (0.5 ml)	
18-64	1	Not generally recommended. See Section II for indications for revaccination of specific high-risk groups.
65 or older	1	2nd dose of vaccine if 1 st dose received ≥5 years previously and patient <65 years at time of 1 st dose.

<p>IV. CONTRAINDICATIONS</p> <p>A. Persons who experienced an anaphylactic reaction to a previous dose of pneumococcal vaccine or a vaccine component.</p> <p>B. Defer vaccine in persons with moderate or severe illness, with or without fever, until symptoms have resolved</p>	<p>V. PRECAUTIONS</p> <p>A. Pregnancy: The safety of pneumococcal vaccine for pregnant women has not been studied. Women who are at high risk of pneumococcal disease and who are candidates for PPV23 should be vaccinated before pregnancy, if possible.</p>
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VI. SIDE EFFECTS AND ADVERSE EVENTS:

<u>TYPE OF EVENT</u>	<u>FREQUENCY OF OCCURRENCE</u>
erythema (usually lasts <48 hrs)	30-50%
pain at injection site (usually lasts <48 hrs)	30-50%
fever	≤1%
myalgia	≤1%
severe local reactions	≤1%
anaphylaxis	Rarely reported

NOTE: Local reactions occur more frequently after the second dose of pneumococcal vaccine.

VII. OTHER CONSIDERATIONS

- A. For someone with a history of fainting with injections, a 15 minute observational period is recommended post immunization.
- B. Simultaneous administration of PPV23 and PCV7 is NOT recommended. There should be a minimum of 8 weeks between administration of PCV7 and PPV23.

VIII. ADVERSE EVENT REPORTING:

Adverse events following immunization must be reported to the Vaccine Adverse Events Reporting System (VAERS) by calling 1-800-822-7967. Forms and procedures can be found at the VAERS website: <http://vaers.hhs.gov>. In addition, a copy of the reporting form should be reported to the patient's primary provider, per ORS 855-041-0510.

IX. REFERENCES:

1. CDC. ACIP Provisional Recommendations for Use of Pneumococcal Vaccines; posted 12/8/08 at:
www.cdc.gov/vaccines/recs/provisional/downloads/pneumo-oct-2008-508.pdf
2. Pneumococcal disease. In: *Epidemiology and Prevention of Vaccine-Preventable Diseases* (“Pink Book”), Atkinson W, Hamborsky J, Wolfe S, eds. 10th ed. Washington, DC: Public Health Foundation, 2008: 257-70. Available at:
<http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/pneumo-508.pdf>
3. CDC. Pneumococcal vaccination for cochlear implant candidates and recipients: updated recommendations of the Advisory Committee on Immunization Practices. MMWR 2003; Vol. 52: 739–40. Available at:
www.cdc.gov/mmwr/preview/mmwrhtml/imm5231a5.htm
4. CDC. Prevention of pneumococcal disease: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 1997; 46(RR-8): 1–24, Available at: www.cdc.gov/mmwr/PDF/rr/rr4608.pdf
5. Pneumovax® package insert. Available at:
www.fda.gov/CBER/label/pneumovax23lb.pdf

For more information or to clarify any part of the above order, consult with the vaccine recipients’ primary health-care provider, a consulting physician, or contact the DHS Immunization Program at (971) 673-0300.

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