STANDING ORDERS FOR Administering Pneumococcal Vaccines (PCV13 and PPSV23) to Adults

Purpose

To reduce morbidity and mortality from pneumococcal disease by vaccinating all adults who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices.

Policy

Where allowed by state law, standing orders enable eligible nurses and other health care professionals (e.g., pharmacists) to assess the need for vaccination and to vaccinate adults who meet any of the criteria below.

Procedure

1 Assess Adults for Need of Vaccination against *Streptococcus pneumoniae* (pneumococcus) infection according to the following criteria:

Routine pneumococcal vaccination – Assess adults age 65 years or older for need of pneumococcal vaccination. Pneumococcal conjugate vaccine (PCV13) should be administered routinely to all previously unvaccinated adults age 65 years and older. Pneumococcal polysaccharide vaccine (PPSV23) is recommended for all adults ages 65 years or older. For complete details, see section 5 (page 2).

Risk-based pneumococcal vaccination – Age 19 through 64 years with an underlying medical condition or other risk factor as described in the following table:

CATEGORY OF UNDERLYING MEDICAL CONDITION	RECOMMENDED VACCINES ARE MARKED "X" BELOW		
OR OTHER RISK FACTOR	PCV13	PPSV23	PPSV23 booster*
Chronic heart disease,1 chronic lung disease2		х	
Diabetes mellitus		х	
Chronic liver disease, cirrhosis		х	
Cigarette smoking		х	
Alcoholism		х	
Cochlear implant, cerebrospinal fluid leak	х	Х	
Sickle cell disease, other hemoglobinopathy	х	х	х
Congenital or acquired asplenia	х	х	х
Congenital or acquired immunodeficiency, ³ HIV	х	х	х
Chronic renal failure, nephrotic syndrome	х	х	х
Leukemia, lymphoma	х	х	Х
Generalized malignancy, Hodgkin disease	х	х	х
latrogenic immunosuppression ⁴	х	х	х
Solid organ transplant, multiple myeloma	х	х	х

^{*} a second dose 5 years after the first dose of PPSV23

2 Screen for Contraindications and Precautions

Contraindications – Do not give pneumococcal vaccine (PCV13 or PPSV23) to a person who has experienced a serious systemic or anaphylactic reaction to a prior dose of the vaccine or to any of its components. For a list of vaccine components, refer to the manufacturer's package insert (www.immunize.org/packageinserts) or go to www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/B/excipient-table-2.pdf.

Precautions – Moderate or severe acute illness with or without fever

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¹ Excluding hypertension 2 Including asthma

³ Including B- (humoral) or T-lymphocyte deficiency, complement deficiencies (particularly C1, C2, C3, and C4 deficiencies), and phagocytic disorders (excluding chronic granulomatous disease)

⁴ Diseases requiring treatment with immunosuppressive drugs, including long-term systemic corticosteroids and radiation therapy

3 Provide Vaccine Information Statements

Provide all patients with a copy of the most current federal Vaccine Information Statement (VIS). Provide non-English speaking patients with a copy of the VIS in their native language, if one is available and desired; these can be found at www.immunize.org/vis. (For information about how to document that the VIS was given, see section 6 titled "Document Vaccination.")

4 Prepare to Administer Vaccine

PCV13 must be given intramuscularly (IM). PPSV23 may be administered either IM or subcutaneously (Subcut).

For vaccine that is to be administered IM, choose the needle gauge, needle length, and injection site according to the following chart:

GENDER AND WEIGHT OF PATIENT	NEEDLE GAUGE	NEEDLE LENGTH	INJECTION SITE
Female or male less than 130 lbs	22–25	5/8"*-1"	Deltoid muscle of arm
Female or male 130-152 lbs	22–25	1"	Deltoid muscle of arm
Female 153–200 lbs	22–25	1-11/2"	Deltoid muscle of arm
Male 153–260 lbs	22–25	1–11/2"	Deltoid muscle of arm
Female 200+ lbs	22–25	11/2"	Deltoid muscle of arm
Male 260+ lbs	22–25	11/2"	Deltoid muscle of arm

^{*} A 5/8" needle may be used in patients weighing less than 130 lbs (<60 kg) for IM injection in the deltoid muscle only if the skin is stretched tight, the subcutaneous tissue is not bunched, and the injection is made at a 90° angle to the skin.

If you prefer Subcut injection of PPSV23, choose a 23–25 gauge, ⁵/₈" needle for injection into the fatty tissue overlying the triceps muscle.

- **5** Administer PCV13 or PPSV23, 0.5 mL, according to the following dosing information and schedule:
 - PCV13 must be administered by the IM route.
 - PPSV23 may be administered either IM or Subcut.

Routine vaccination for all adults ages 65 years and older

AGE OF PATIENT	VACCINE(S) INDICATED (SEE TABLE ON PAGE 1)	HISTORY OF PRIOR VACCINATION	SCHEDULE FOR ADMINISTRATION OF PCV13 AND PPSV23
		None or unknown	Administer PCV13 followed in 1 year* by PPSV23.
		PPSV23 when younger than age 65 years; 0 or unknown PCV13	Administer PCV13 at least 1 year* after previous PPSV23. Administer another PPSV23 at least 5 years* after previous dose of PPSV23.
65 yrs or older	PPSV23 and 1-time dose of PCV13	PPSV23 when younger than age 65 years; PCV13	Administer another PPSV23 at least 5 years after previous dose of PPSV23 and at least 1 year* after previous dose of PCV13.
		PPSV23 when age 65 years or older; 0 or unknown PCV13	Administer PCV13 at least 1 year* after PPSV23
		0 or unknown PPSV23; PCV13	Administer PPSV23 at least 1 year* after PCV13.

^{*} For adults age 65 years and older with immunocompromising conditions, functional or anatomic asplenia, cerebrospinal fluid leaks, or cochlear implants, the interval between PCV13 and PPSV23 should be shortened to 8 weeks.

Risk-based vaccination for adults ages 19–64 years (See next page.)

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Risk-based vaccination for adults ages 19–64 years

AGE OF PATIENT	VACCINE(S) INDICATED (SEE TABLE ON PAGE 1)	HISTORY OF PRIOR VACCINATION	SCHEDULE FOR ADMINISTRATION OF PCV13 AND PPSV23	
	For medical conditions in which only PPSV23 is indicated			
	1 dose PPSV23	None or unknown	Administer PPSV23.	
	For medical conditions in which both PCV13 and PPSV23 (1 or 2 doses) are recommended			
	1 dose PCV13 and 1 dose PPSV23 (i.e., cochlear implant; CSF leak)	None or unknown	Administer PCV13 followed in 8 weeks by PPSV23.	
19–64 years		0 or unknown PPSV23; 1 dose PCV13	Administer PPSV23 at least 8 weeks after PCV13.	
		1 dose PPSV23; 0 or unknown PCV13	Administer PCV13 at least 1 year after PPSV23.	
	1 dose PCV13 and 2 doses PPSV23 (e.g., immunocom- promised)	None or unknown	Administer PCV13 followed in 8 weeks by PPSV23 #1. Administer PPSV23 #2 at least 5 years after PPSV23 #1.	
		1 dose PPSV23; 0 or unknown PCV13	Administer PCV13 at least 1 year after PPSV23 #1. Administer PPSV23 #2 at least 5 years after PPSV23 #1 and at least 8 weeks after PCV13.	
		0 or unknown PPSV23; 1 dose PCV13	Administer PPSV23 #1 at least 8 weeks after PCV13. Administer PPSV23 #2 at least 5 years after PPSV23 #1.	
		1 dose PPSV23; 1 dose PCV13	Administer PPSV23 #2 at least 5 years after PPSV23 #1 and at least 8 weeks after PCV13.	
		2 doses PPSV23; 0 or unknown PCV13	Administer PCV13 at least 1 year after PPSV23 #2.	

6 Document Vaccination

Document each patient's vaccine administration information and follow up in the following places:

Medical record: Document the date the vaccine was administered, the manufacturer and lot number, the vaccination site and route, and the name and title of the person administering the vaccine. You must also document, in the patient's medical record or office log, the publication date of the VIS and the date it was given to the patient. If vaccine was not administered, record the reason(s) for non-receipt of the vaccine (e.g., medical contraindication, patient refusal).

Personal immunization record card: Record the date of vaccination and the name/location of the administering clinic.

Immunization Information System (IIS) or "registry": Report the vaccination to the appropriate state/local IIS, if available.

7 Be Prepared to Manage Medical Emergencies

Be prepared for management of a medical emergency related to the administration of vaccine by having a written emergency medical protocol available, as well as equipment and medications. For IAC's "Medical Management of Vaccine Reactions in Adults," go to www.immunize.org/catg.d/p3082.pdf. To prevent syncope, vaccinate patients while they are seated or lying down and consider observing them for 15 minutes after receipt of the vaccine.

8 Report All Adverse Events to VAERS

Report all adverse events following the administration of pneumococcal vaccine to the federal Vaccine Adverse Event Reporting System (VAERS) at www.vaers.hhs.gov. Forms are available on the website or by calling (800) 822-7967.

Standing Orders Authorization

This policy and procedure shall remain in effect for all	patients of the	
1 / 1	NAME OF PRACTICE OR	CLINIC
until rescinded or until $_{\overline{\text{DATE}}}$.		
Medical Director's signature	Signature date	Effective date

Adult aged 19-64 years Pneumococcal Vaccine Algorithm

HIGHER RISK HIGHEST RISK HIGH RISK CSF leaks Immunocompromised Smoker Cochlear implants Chronic renal failure **Chronic medical condition Nephrotic syndrome** heart disease (excluding hypertension) Asplenia (including Sickle Cell Disease) lung disease (including asthma) liver disease (including cirrhosis) diabetes alcoholism PCV13 PCV13 Minimum Minimum 8 week interval 8 week interval PPSV23 PPSV23 PPSV23 Minimum interval 5 vears** ** If patient received PPSV23 in the past: -WAIT 1 year after last PPSV23 dose to administer PCV13

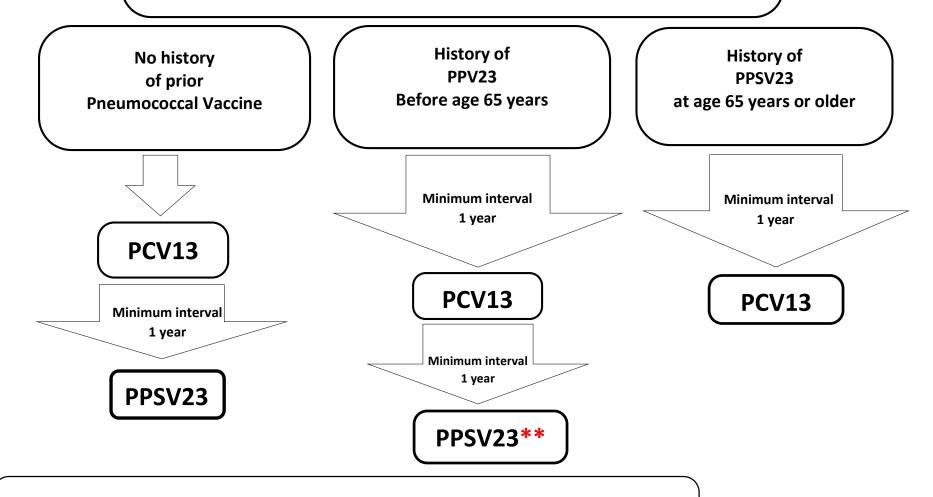
PCV13 and PPSV 23 should not be administered during same visit.

-WAIT 5 years after first PPSV23 dose to administer second PPSV23

• When pneumococcal vaccination history is incomplete or unknown, it is acceptable to rely on the patient's verbal history to determine prior vaccination status. Providers should NOT delay immunization due to a lack of an immunization record.

PPSV23

Adult aged 65 years or older Pneumococcal Vaccine Algorithm



IF PCV 13 was given before age 65 years no further doses of PCV13 are needed

** If patient received PPSV23 in the past:

-WAIT 5 years after first PPSV23 dose to administer second PPSV23

- PCV13 and PPSV 23 should not be administered during same visit.
- If a dose of PPSV23 is given earlier than the recommended interval, the dose does not need to be repeated.
- When pneumococcal vaccination history is incomplete or unknown, it is acceptable to rely on the patient's verbal history to determine prior vaccination status. Providers should NOT delay immunization due to a lack of an immunization record.