Standing Order for Administering Pneumococcal Vaccines (Adult)

Purpose: To reduce morbidity and mortality from pneumococcal disease by vaccinating all persons who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP), the Food and Drug Administration (FDA) product labeling, and the Department of Defense (DoD).

Policy: Under these standing orders, eligible nurses and other health care professionals working within their scope of practice may vaccinate patients who meet the criteria below.

Procedure:

1. Identify persons in need of vaccination with pneumococcal conjugate vaccine (PCV13) based on the following criteria:
    - Age 19-64 years with no or unknown history of prior receipt of PCV13 and any of the following underlying conditions (see Table 1):
        - Candidate for or recipient of cochlear implant; cerebrospinal fluid leak
        - Sickle cell disease, hemoglobinopathies, functional or anatomic asplenia (e.g., splenic dysfunction, splenectomy)
        - Immunocompromising condition (e.g., congenital immunodeficiency, HIV infection, hematologic cancers, malignant neoplasms)
        - Immunosuppressive therapy (e.g., chemotherapy, antimetabolites, biologics, high-dose corticosteroids, radiation therapy, etc.)
        - Chronic renal failure or nephrotic syndrome; organ or bone marrow transplantation

2. Identify persons in need of vaccination with pneumococcal polysaccharide vaccine (PPSV23) based on the following criteria:
    - Age 65 years or older with no or unknown history of prior receipt of PPSV23
    - age 65 years or older and received PPSV23 before age 65 years
    - Age 19 - 64 years with no or unknown history of prior receipt of PPSV23 and any of the following underlying conditions (see Table 1):
        - Any of the conditions in #1
        - Chronic cardiovascular disease (particularly cyanotic congenital heart disease and cardiac failure)
        - Chronic pulmonary disease (asthma is excluded unless treated with high-dose corticosteroid therapy)
        - Diabetes mellitus
        - Chronic liver disease (cirrhosis), or alcoholism (patients 6 - 18 years of age only)
        - Candidate for or recipient of cochlear implant; cerebrospinal fluid leak
        - Sickle cell disease, hemoglobinopathies, anatomic or functional asplenia (splenectomy, splenic dysfunction)
        - Immunocompromising condition (e.g., congenital immunodeficiency, HIV infection, hematologic cancers, malignant neoplasms)
        - Immunosuppressive therapy (e.g., antineoplastic agents, antimetabolites, biologics, high-dose corticosteroids, radiation therapy)

- Chronic renal failure or nephrotic syndrome; organ or bone marrow transplantation
- Environments or settings with increased risk (e.g., long-term care facility)

Table 1. Risk-based Vaccination for Adults age 19 years and older

Category of underlying medical condition or other risk factor		Recommended vaccines are marked "x" below		
		PCV13: 1 dose[1]	PPSV23: 1 dose[2]	PPSV23 booster[2,3]
Non-immunocompromising	Chronic heart disease[4], chronic lung disease[5]		x	
	Diabetes mellitus		x	
	Chronic liver disease, cirrhosis		x	
	Cigarette smoking		x	
	Alcoholism		x	
	Cochlear implant, cerebrospinal fluid (CSF) leak	x	x	
Immunocompromising	Sickle cell disease, other hemoglobinopathy	x	x	x
	Congenital or acquired asplenia	x	x	x
	Congenital or acquired immunodeficiency,[6] HIV	x	x	x
	Chronic renal failure, nephrotic syndrome	x	x	x
	Leukemia, lymphoma	x	x	x
	Generalized malignancy, Hodgkin disease	x	x	x
	Iatrogenic immunosuppression[7]	x	x	x
	Solid organ transplant, multiple myeloma	x	x	x

Footnotes

1. PCV13 is recommended as a one-time dose among persons in a risk group not previously vaccinated with PCV13.
2. Administer PPSV23 unless PCV13 is also needed. In that case, give PCV13 first followed by PPSV23 at least 8 weeks later. If PPSV23 was previously given, administer PCV13 at least 1 year after PPSV23.
3. Give a second PPSV 23 at least 5 years after the first PPSV23 and at least 8 weeks after PCV13. However, for adults age 65 years and older, give only one dose of PPSV23.
4. Chronic heart disease includes congestive heart failure and cardiomyopathies; excludes hypertension.
5. Chronic lung disease includes chronic obstructive pulmonary disease, emphysema, and asthma.
6. Congenital or acquired immunodeficiency includes B- (humoral) or T-lymphocyte deficiency, complement deficiencies (particularly C1, C2, C3, and C4 deficiencies), and phagocytic disorders (excluding chronic granulomatous disease).
7. Iatrogenic immunosuppression includes diseases requiring treatment with immunosuppressive drugs, including long-term systemic corticosteroids, and radiation therapy.

Do not give PCV13 and PPSV23 at the same visit

3. Screen all patients for contraindications and precautions to PCV13 or PPSV23 vaccine:

Contraindications:

- A history of a serious reaction (e.g., anaphylaxis) after a previous dose of PCV13 or PPSV23 vaccine, or to a vaccine component. Yeast is now acknowledged as a component of PCV13.
- For information on vaccine components, refer to the manufacturer's package insert or go to http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/b/excipient-table-2.pdf

Precautions:

- Moderate or severe acute illness with or without fever
- Syncope (fainting) can occur in association with administration of injectable vaccines.

Procedures should be in place to avoid a falling injury (e.g. 15 minute observation after administration) and to restore cerebral perfusion following syncope
for questions or concerns, consider consulting the DHA Immunization Healthcare Division at (877) 438-8222, Option 1

4. Provide all patients (or their parent/legal representative) with a copy of the most current federal Vaccine Information Statement (VIS). You must document, in the patient's medical record, the publication date of the VIS and the date it was given to the patient (parent/legal representative). Provide non-English speaking patients with a copy of the VIS in their native language, if available and preferred; these can be found at www.immunize.org/vis.

5. Provide vaccines as follows:
   - Follow the dosing schedules in Tables 2 & 3
   - Administer 0.5mL of the appropriate pneumococcal vaccine: both PCV13 and PPSV23 may be given intramuscularly (IM) in the deltoid muscle for adults

Needle Length and Injection Site of IM Injections for Adults		
Use a 22 – 25 gauge needle. Choose needle gauge and length appropriate to administration route and the patient's age and body mass.		
Age Group	**Needle Length**	**Injection Site**
Men and Women (<130 lbs)	1 inch†	Deltoid Muscle of Arm
Men and Women (130-152 lbs)	1 inch	
Men (152-260 lbs)	1-1.5 inches	
Women (152-200 lbs)		
Men (> 260 lbs)	1.5 inches	
Women (>200 lbs)		

Adapted from General Best Practice Guidelines for Immunization: Vaccine Administration
https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html
† Some experts recommend a 5/8 inch needle for men and women who weigh <130 lbs, skin must be stretched tightly (do not bunch subcutaneous tissue)

Note: As of November 2019, PCV13 vaccine is no longer routinely recommended for all persons > 65 years. The decision to vaccinate should be based upon shared clinical decision making, and is not covered under these standing orders. Patients must obtain a written order from a privileged provider for this situation

Note: In persons with anatomic or functional asplenia and/or HIV infection, MenACWY-D, (Menactra®) and pneumococcal conjugate vaccine (PCV13 (Prevnar13) should not be administered simultaneously PCV13 should be administered first and MenACWY-D should be administered 4 weeks later.

Table 2. Routine Vaccination for all Adults ages 65 years and older

Age of patient	Vaccine(s) indicated	History of prior vaccination	Schedule for administration of PCV13 & PPSV23
65 yrs or older	PPSV23 PCV13 can be considered for a 1-time dose based on shared clinical decision-making (SCDM)	None or unknown	Administer PPSV23. If PCV13 is also needed based on SCDM, give PCV13 first followed by PPSV23 1 year later
		PPSV23 when younger than age 65 years; 0 or unknown PCV13	Administer another PPSV23 after at least 5 years after previous PPSV23. If PCV13 is also needed based on SCDM, administer PCV13 first, followed by PPSV23 1 year later
		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, if needed based on SCDM, at least 1 year after PPSV23
		0 or unknown PPSV23; PCV13	Administer PPSV23 at least 1 year after PCV13

Table 3. Risk-based Vaccination schedule for Adults ages 19 years and older

Age of patient	Vaccine(s) indicated	History of prior vaccination	Schedule for administration of PCV13 & PPSV23
19–64 years	*For medical conditions and other risk factors for which only PPSV23 is indicated (see Table 1)*		
	1 dose PPSV23	None or unknown	Administer PPSV23
	For non-immunocompromising medical conditions for which both PCV13 and PPSV23 are indicated (see Table 1)		
	1 dose PCV13 and 1 dose PPSV23	0 or unknown	Administer PCV13 followed in 8 weeks by PPSV23
		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
	For immunocompromising medical conditions for which both PCV13 and PPSV23 are indicated (see Table 1)		
	1 dose PCV13 and 2 doses PPSV23	0 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

65 years and older	*For medical conditions and other risk factors for which only PPSV23 is indicated (see Table 1)*		
	1 dose PPSV23	None or unknown	Administer PPSV23. If PCV13 is also needed based on SCDM, administer PCV13 first, followed by PPSV23 at least 1 year later
		1 dose PPSV23 given before age 65	Administer PPSV23 at least 5 years after previous PPSV23. If PCV13 is needed based on SCDM, administer PCV13 first at least 1 year after previous PPSV23; give PPSV23 at least 1 year after PCV13
	For non-immunocompromising medical conditions for which both PCV13 and PPSV23 are indicated (see Table 1)		
	1 dose PPSV23 and 1 dose PCV13	0 or unknown PPSV23; 0 or unknown PCV13	Administer PCV13 followed in at least 8 weeks by PPSV23
		1 PPSV23 before age 65; 0 or unknown PCV13	Administer PCV13 at least 1 year after previous PPSV23; administer PPSV23 #2 at least 8 weeks after PCV13 and 5 years after previous PPSV23.
		0 or unknown PPSV23; 1 dose PCV13	Administer PPSV23 at least 8 weeks after PCV13
		1 dose PPSV23 at/after 65; 0 or unknown PCV13	Administer PCV13 at least 1 year after PPSV23
	For immunocompromising medical conditions for which both PCV13 and PPSV23 are indicated (see Table 1)		
	1 dose PPSV23 and 1 dose PCV13	0 or unknown PPSV23; 0 or unknown PCV13	Administer PCV13 followed in 8 weeks by PPSV23
		0 or unknown PPSV23; 1 dose PCV13	Administer PPSV23 at least 8 weeks after PCV13
		1 or 2 doses PPSV23 before age 65; 0 or unknown PCV13	Administer PCV13 at least 1 year after prior PPSV23; administer PPSV23 at least 5 years after prior PPSV23 and at least 8 weeks after PCV13
		1 dose PPSV23 at/after 65; 0 or unknown PCV13	Administer PCV13 at least 1 year after PPSV23

All tables adapted with permission from www.immunize.org/catg.d/p3075.pdf • Item #P3075 (2/20)

6. Document all immunizations administered in the patient's electronic health record and the appropriate immunization tracking system. Include date, immunization given, dose, anatomical location of administration, lot number, manufacturer, Vaccine Information Sheet (VIS) date, and the identification of the person administering the vaccine. If vaccine was not given, record the reason for non-receipt.

7. Be prepared to manage a medical emergency related to the administration of vaccines by having a written emergency medical protocol available, as well as equipment and medications.

8. Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS). Reports can be submitted to VAERS online, by fax, or by mail. Additional information about VAERS is available by telephone (800-822-7967) or online at https://vaers.hhs.gov.

9. This policy and procedure shall remain in effect for all patients of the _____ until rescinded and/or upon a change in the Medical Director, whichever is earlier.

_____ _____

Medical Director's Signature Date