Routine Vaccination with PCV13 and PPSV

**Children:** Administer pneumococcal conjugate vaccine (PCV13) to all infants and children at ages 2, 4, and 6 mos with a booster at age 12–15 mos. For incomplete or unvaccinated children, catch-up vaccination should occur through age 59 mos.

**Adults age 65 years (or older):**
- Administer a 1-time dose of PCV13 (if not previously received).
- Administer a dose of pneumococcal polysaccharide vaccine (PPSV) at least 1 yr after PCV13.

Risk-Based Vaccination with PCV13 and PPSV

A **dose of PPSV** is recommended for all people age 2 through 64 yrs with any of the following conditions:

a. Cigarette smokers age 19 yrs and older
b. Chronic cardiovascular disease (e.g., congestive heart failure, cardiomyopathy)
c. Chronic pulmonary disease (including asthma in people age 19 yrs and older)
d. Diabetes mellitus, alcoholism, or chronic liver disease
e. Candidate for or recipient of cochlear implant
f. Cerebrospinal fluid leak
g. Functional or anatomic asplenia (e.g., sickle cell disease, splenectomy)
h. Immunocompromising conditions (e.g., congenital or acquired immunodeficiency, HIV infection, leukemia, lymphoma, Hodgkin disease, generalized malignancy, iatrogenic immunosuppression, multiple myeloma, or on immunosuppressive therapy, including long-term systemic corticosteroids, radiation therapy)
i. Solid organ transplantation; for bone marrow transplantation patients, see www.cdc.gov/vaccines/pubs/hemato-cell-transplts.htm
j. Chronic renal failure or nephrotic syndrome

A **second dose of PPSV** is recommended for children and adults through age 64 yrs who are at highest risk of serious pneumococcal disease or likely to have a rapid decline in pneumococcal antibody levels (categories g–j above) at least 5 yrs after dose #1.

**Note:** Administer an **additional dose of PPSV** to all adults at age 65 yrs (or older). Give it at least 5 yrs after any previous PPSV.

A **1-time dose of PCV13** is recommended for previously unvaccinated people age 6 through 64 yrs who meet any of the criteria in categories e–j above.
Vaccine Dosing and Administration

- Administer 0.5 mL PCV13 or PPSV intramuscularly (22–25g; needle length according to the patient’s age/body mass [1–1½”]); PPSV may also be administered subcutaneously (23–25g, ⅝” needle).

Intervals for Sequential Use of PCV13 and PPSV

- Adults age 65 years (or older):
  - Administer a 1-time dose of PCV13 (if not previously received).
  - Administer a dose of PPSV 1 yr after PCV13. For those with conditions e–j listed on side 1, administer 8 wks later.
- Children 2 through 18 yrs who previously received PCV13 and who need dose #1 of PPSV, should wait at least 8 wks after the dose of PCV13 before receiving PPSV.
- People age 7 yrs and older who need PPSV dose #2 should receive it at least 5 yrs after PPSV dose #1.
- For children and adults through age 64 yrs who need PCV13 and PPSV, give PCV13 first, followed by PPSV at least 8 wks later. If previously vaccinated with PPSV, give children through age 18 yrs PCV13 at least 8 wks after the most recent dose of PPSV; give adults age 19 through 64 yrs PCV13 1 yr after the most recent PPSV.
- For more details, see www.cdc.gov/mmwr/preview/mmwrhtml/mm6434a4.htm.

Contraindications and Precautions

- Do not give PPSV or PCV13 to patients with a history of an anaphylactic reaction after a previous dose of PCV13, PPSV, or one of their components.
- Do not give PPSV and PCV13 at the same visit; see “Intervals for Sequential Use of PCV13 and PPSV” section above.

Side Effects

Most common side effects from PPSV (in all) and PCV13 (in adults) are soreness/redness at the injection site for 1–2 days. For PCV13 in young children, most common side effects are decreased appetite and irritability.

Talking Points with Patients

- Pneumococcal disease most commonly presents as a serious infection in the lungs (pneumonia), blood (bacteremia), or brain (meningitis).
- The annual U.S. case estimate for invasive pneumococcal disease (bacteremia and/or meningitis) is nearly 35,000 cases and 4,200 deaths.
- Pneumococcal disease most often occurs in older people, as well as in people with a predisposing condition (e.g., immunosuppression, pulmonary or cardiac disease, diabetes).
- Patients age 65 and older who can’t remember receiving pneumococcal vaccines should be vaccinated.
- Both pneumococcal vaccines are covered under Medicare Part B for people 65 yrs and older when given at least 1 yr apart.