

Pneumococcal Vaccine Pocket Guide

Who Should Be Vaccinated and When?

Vaccination with pneumococcal conjugate vaccine (PCV13) is recommended for **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.

Vaccination with pneumococcal polysaccharide vaccine (PPSV23) is recommended for **all** people who meet any of the criteria below:

- All adults age 65 yrs and older
- 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, cardiomyopathies)
 - 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., HIV infection, leukemia, congenital immunodeficiency, Hodgkin's disease, lymphoma, multiple myeloma, generalized malignancy) or on immunosuppressive therapy
 - i. solid organ transplantation; for bone marrow transplantation, see www.cdc.gov/vaccines/pubs/hemato-cell-transplts.htm
 - j. chronic renal failure or nephrotic syndrome

Vaccination with pneumococcal conjugate vaccine (PCV13) is recommended for **all** children and adults ages 6 yrs and older who meet any of the criteria in categories e–j above.

Who Needs an Additional Dose of PPSV23?

An additional dose of PPSV23 is indicated for people who are

- Age 65 yrs and older and previously vaccinated with PPSV before age 65 yrs if 5 yrs (or more) have elapsed since previous PPSV dose; if previous PCV13 dose, wait at least 8 wks after PCV13
- 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)

Vaccine Dosing and Administration

- Administer 0.5 mL PPSV23 or PCV13 intramuscularly (22–25g; needle length according to the patient's age/body mass [1–1½"]); PPSV23 may also be given subcutaneously (23–25g, 5/8" needle).
- Children 2 yrs and older who previously received pneumococcal conjugate vaccine (PCV13), and who need a first dose of PPSV23, should wait at least 8 wks following the last dose of PCV13 before receiving PPSV23.
- People age 2 yrs and older in need of a second PPSV23 should wait at least 5 yrs following their first PPSV dose.
- For older children, teens, and adults who need PCV13 and PPSV23, give PCV13 first, followed by PPSV23 at least 8 wks later. If previously vaccinated with PPSV, give children PCV13 at least 8 wks after the most recent dose of PPSV23. Give adults PCV13 12 mos after the most recent dose of PPSV23.

Contraindications and Precautions

- Do not give PPSV23 or PCV13 to patients who have a history of a serious reaction (e.g., anaphylaxis) after a previous dose of PCV13, PPSV, or one of their components.
- Do not give PPSV23 and PCV13 simultaneously; see “Vaccine Dosing and Administration” section above.

Side Effects

Most common side effects from either PPSV23 or PCV13 are soreness and redness at the injection site, lasting 1–2 days.

Talking Points with Patients

- *Streptococcus pneumoniae* bacteria (i.e., pneumococci) are usually found in the upper respiratory tract of most people.
- 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 40,000 cases and 4,250 deaths.
- Pneumococcal disease most often occurs in older people, as well as in people with a predisposing condition (e.g., immunosuppression, pulmonary disease, heart disease, diabetes).
- PPSV23 is 60–70% effective in preventing serious pneumococcal disease; it does not provide substantial protection against all types of pneumonia (viral and bacterial). It is not a “pneumonia” vaccine.
- Patients recommended to receive PPSV23 who can't remember ever having received it should be vaccinated now.