

Pneumococcal Pneumonia Vaccine Administration Guidelines

The geriatric population is susceptible to pneumococcal pneumonia, and this monthly resource outlines guidelines with the two main vaccines

Pneumococcal pneumonia continues to cause significant mortality and morbidity in the US. It is estimated that 40,000 deaths annually are attributed to pneumococcal pneumonia, half of which could be prevented with timely vaccination. Geriatric patients are particularly susceptible to the bacteria. There are over 90 serotypes of streptococcal pneumonia alone, the most common 10 of which cause 62% of invasive disease worldwide. A range of 5% to 70% of healthy adults is carriers of the bacteria in the nasopharyngeal area. This is why proper hygiene such as covering the mouth during a sneeze or cough is so important to reduce spread of the bacteria to susceptible patients.

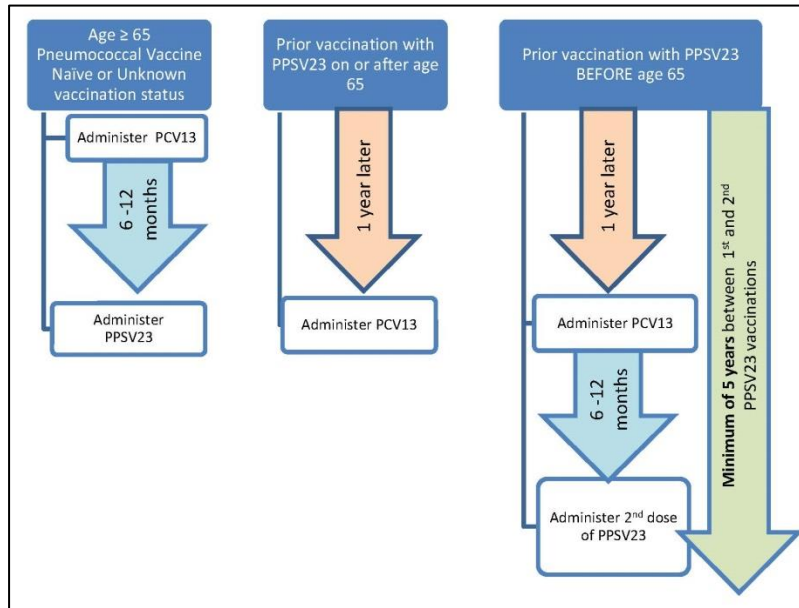
There are currently two main vaccines used in the US that dramatically reduce the incidence of pneumonia and other invasive diseases such as bacteremia and meningitis. They are the Pneumovax 23 (pneumococcal polysaccharide) and Prevnar -13 (pneumococcal conjugate) vaccines. The numbers after their trade names represent the number of different serotypes they provide immunity against. Although Prevnar was originally developed to protect infants < 2 years old for whom the older Pneumovax did not provide good immunity, there is now clear evidence that Prevnar does provide additional immunity to geriatric patients who receive the vaccine. Yes, both vaccines should be given to the elderly population and the attached guidelines contain information including the timing of administration of the vaccines. Please review them and as always, if you have questions, please contact your Remedi Consultant Pharmacist or Nurse for additional information.

Advisory Committee on Immunization Practices: Recommendations for Pneumococcal Vaccination of Adults ≥65 years

Streptococcus pneumoniae (pneumococcus) remains a leading infectious cause of serious illness, including bacteremia, meningitis, and pneumonia, among older adults in the United States. Approximately, 20%–25% of invasive pneumococcal disease cases and 10% of community-acquired pneumonia cases in adults aged ≥65 years are caused by PCV13 serotypes and are potentially preventable with the use of PCV13 in this population.

As of September 2014, ACIP recommends that both PCV13 (Pneumovax-13™) and PPSV23 (Pneumovax-23™) should be administered routinely in series to all adults aged ≥65 years.

Sequential administration and recommended intervals for PCV13 and PPSV23 for adults aged ≥65 years



Pneumovax 23 (PPSV-23)

Indications:

- Adults ≥ 65 who have not previously received PCV-13 within 1 year
- Anyone aged 19 to 64 with one of the following:
 - Heart disease/ Lung disease
 - Diabetes
 - Alcohol and/or tobacco use
 - Immunocompromised/ Functional asplenia

Vaccination Schedule:

- If aged < 65 years when first dose is received, re-vaccinate at least 5 years later and if ≥ 65.
- For those 19 to 64 years of age with compelling indications, a second dose should be given 5 years after the first.

Contraindications:

- Previous hypersensitivity to PPSV-23

Storage: Refrigerate at 2°C - 8°C (36°F - 46°F).

- Do not freeze.
- All vaccine must be discarded after the expiration date.
- Multi-dose vials should be discarded 30 days after opening (per USP guidelines)

Pneumovax 13 (PCV-13)

Indications:

- Adults 19 to 64 who have not received either PCV or PPSV previously and are at high risk:
 - Functional asplenia
 - Immunocompromised
 - Cochlear Implant
 - CSF leaks
- Adults ≥ 65 who have not previously received PPSV-23 within 6 – 12 months

Vaccination Schedule:

- If aged 19 to 64 years one dose, followed with one dose of PPSV-23 at least 8 weeks later.
- If aged ≥ 65 years, adults should receive one dose, followed with one dose of PPSV-23 at least 1 year later.

Contraindications:

- Anaphylaxis to a diphtheria-toxoid containing vaccine
- Previous hypersensitivity to PCV-13

Storage: Refrigerate at 2°C - 8°C (36°F - 46°F).

- Do not freeze.
- All vaccine must be discarded after the expiration date.
- Multi-dose vials should be discarded 30 days after opening (per USP guidelines)