

Pneumococcal Vaccine Update in Adults

According to the Centers for Disease Control and Prevention, approximately 400,000 hospitalizations due to pneumococcal pneumonia are estimated to occur annually in the United States. The overall fatality rate for bloodstream infections caused by *Streptococcus pneumoniae* is about 20%, but can be as high as 60% in adults over the age of 65.¹ The most effective way to prevent pneumococcal disease is with pneumococcal vaccines. It is important to administer vaccines according to the updated schedules recommended by the Advisory Committee on Immunization Practices (ACIP).²

There are two FDA approved vaccines to prevent pneumococcal infections: 13-valent pneumococcal conjugate (PCV13, Prevnar 13) and 23-valent pneumococcal polysaccharide (PPSV23, Pneumovax 23).¹ The 2019 ACIP update on pneumococcal vaccines no longer recommends routine use of PCV13 for adults ≥ 65 years of age, unless it is through shared clinical decision making or for specific underlying medical conditions.³ Shared clinical decision making for the administration of PCV13 in adults ≥ 65 years of age should consider the exposure of the individual to PCV13 serotypes. Vaccination with PCV13 may be regularly considered in those residing in nursing homes, long term care facilities, settings of low pediatric PCV13 uptake, or individuals traveling to areas of no pediatric PCV13 uptake.³

PPSV23 and PCV13 are covered by CalOptima for members ≥ 19 years of age. The Vaccines for Children (VFC) program pays for vaccines for members <19 years of age. Recommendations for pneumococcal vaccinations are listed below.

ACIP 2019 Pneumococcal Immunization Schedule for Adults³

Underlying Medical Condition	Recommendations	
	Age 19-64 years	Age ≥ 65 years
None	N/A	1 dose of PPSV23 [†]
Chronic heart, lung, liver disease Alcoholism Diabetes mellitus Cigarette smoker	1 dose of PPSV23	1 dose of PPSV23 [†]
Cerebrospinal fluid leak Cochlear implant	1 dose of PCV13 , followed by PPSV23 ≥ 8 weeks after	1 dose PCV13 if no previous PCV13 vaccination and 1 dose of PPSV23 ≥ 8 weeks after PCV13 and ≥ 5 years after most recent PPSV23
Immunocompromising conditions* Anatomical or functional asplenia	1 dose of PCV13 , followed by PPSV23 ≥ 8 weeks after, then second dose of PPSV23 ≥ 5 years after PPSV23	

*Congenital or acquired immunodeficiencies, chronic renal failure, nephrotic syndrome, leukemia, lymphoma, Hodgkin's disease, generalized malignancy, iatrogenic immunosuppression, solid organ transplant, multiple myeloma.

[†]If PCV13 was given, PPSV23 should be given at least 1 year after PCV13 and at least 5 years after any PPSV23 given prior 65 years of age.

References

- Centers for Disease Control and Prevention (CDC). Pneumococcal Disease. Updated April 2019. <https://www.cdc.gov/vaccines/pubs/pinkbook/pneumo.html>. Accessed April 1, 2020.
- Centers for Disease Control and Prevention (CDC). Table 1. Recommended Adult Immunization Schedule for ages 19 year or older, United States, 2020. Updated February 2020. <https://www.cdc.gov/vaccines/schedules/hcp/imz/adult.html>. Accessed March 26, 2020.
- Matanock A, Lee G, Gierke R, et al. Use of 13-Valent Pneumococcal Conjugate Vaccine and 23-Valent Pneumococcal Polysaccharide Vaccine Among Adults Aged ≥ 65 Years: Updated Recommendations of the Advisory Committee on Immunization Practices. MMWR Morb MortalWkly Rep 2019; 68:1069-1075. DOI: <http://dx.doi.org/10.15585/mmwr.mm6846a5>. Accessed March 26, 2020.

The CalOptima Approved Drug List is available on our website: www.caloptima.org
and for PDA download at www.epocrates.com