

Make Sure Your Patients Are Protected from Pneumococcal Disease!

Handouts for HCP

These one-page charts help identify which vaccine is needed by risk factor and age

Pneumococcal Vaccines: CDC Answers Your Questions

Experts from the National Center for Immunization and Respiratory Diseases at the Centers for Disease Control and Prevention answer your questions about pneumococcal polysaccharide (PPSV23) and pneumococcal conjugate (PCV13) vaccines.

How serious is pneumococcal disease?

Pneumococcal disease is a serious disease that causes much sickness and death.

An estimated 36,850 cases and 4,250 deaths from invasive pneumococcal diseases (IPD) bacteria and meningitis occurred in the United States in 2011. In 2013 an estimated 15,500 cases of IPD occurred among adults age 65 years and older. Children younger than age 5 and adults older than 65 have the highest incidence of serious disease.

Case-fatality rates are highest for pneumococcal meningitis and bacteremia, and the highest mortality occurs among the elderly and patients who have underlying medical conditions. Despite appropriate antimicrobial therapy and intensive medical care, the overall case-fatality rate for pneumococcal bacteremia is about 20% among adults. Among elderly patients, the rate may be as high as 60%.

Who is recommended to receive pneumococcal polysaccharide vaccine (PPSV23)?

PPSV23 (Pneumovax, Merck) is recommended for anyone who meets any of the criteria below:

• Age 65 years and older

• Age 2 through 64 years with any of the following conditions:

1. cigarette smokers age 19 years and older

2. alcoholism

3. chronic liver disease, cirrhosis

4. chronic cardiovascular disease, excluding hypertension (e.g., congestive heart failure, cardiomyopathy)

5. chronic pulmonary disease (including COPD and emphysema, and for adults age 19 years and older, asthma)

6. diabetes mellitus

7. candidate for or recipient of cochlear implant

8. cerebrospinal fluid (CSF) leak

9. functional or anatomic asplenia (e.g., sickle cell disease, splenectomy)

10. immunocompromising conditions (e.g., HIV infection, leukemia, congenital immunodeficiency, Hodgkin's disease, lymphoma, multiple myeloma, generalized malignancy, immunosuppressive therapy)

11. solid organ transplantation, for bone marrow transplantation, see www.cdc.gov/vaccines/pubs/hemato-cell-transplants.htm

12. chronic renal failure or nephrotic syndrome

Could you briefly summarize the vaccination recommendations for PPSV23?

Children and adults younger than age 65 who are at highest risk for serious pneumococcal infection or likely to have a rapid decline in antibody levels (see categories 9 through 12 in previous answer) should get 2 doses of PPSV23 5 years apart, with a third dose after they turn age 65 (if at least 5 years have passed since the last dose). Patients with no risk factors should get 1 dose at age 65. Thus, depending on risk and age at vaccination, a person age 65 or older may receive 1, 2, or 3 doses of PPSV23.

What are the recommendations for routinely administering PCV13 to children?

Give infants a primary series of pneumococcal conjugate vaccine (PCV13, Prevnar 13, Pfizer) at age 2, 4, and 6 months, boost at age 12 through 15 months. For catch-up vaccination, give PCV13 to healthy children through age 19 months and give PCV13 to children through age 71 months who have certain underlying medical conditions. For information on underlying medical conditions, see next question and answer.

Which underlying medical conditions indicate that an older child or teen should receive PCV13?

PCV13 vaccination is recommended for immunocompromised children age 2 through 71 months (6 years) who are in categories 4-12 in the numbered list to the left and for PCV13-naïve children age 6 through 18 years who are in categories 7-12.

Pneumococcal Vaccination Recommendations for Children* and Adults by Age and/or Risk Factor

For complete CDC's recommendations, go to www.immunize.org

For children age 2 months and older

Administer PCV13 series to all children beginning at age 2 months, followed by doses at 4 months, 6 months, and 12-15 months (booster dose).

For adults age 65 years and older

Administer 1 time dose to PCV13-naïve adults at age 65 years, followed by a dose of PPSV23 5-12 months later.

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Recommendations for Pneumococcal Vaccine Use in Children and Teens

For administering Pneumococcal Conjugate Vaccine (PCV)

Initial history of PCV7 and/or PCV13

Recommended PCV13 Schedule (for minimum interval between for catch-up vaccination, see *)

1 dose, 12 weeks* after 4th dose at age 12-15 months

2 doses, 12 weeks* apart; 4th dose at age 12-15 months

1 dose, 12 weeks* after 4th dose at age 12-15 months

2 doses, 12 weeks* apart; 3rd dose at age 12-15 months

1 dose at age 7-11 months; 2nd dose at age 12-15 months, at least 8 weeks after the most recent dose

2 doses, at least 8 weeks apart

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