Pneumococcal Vaccination

Pneumococcal vaccination can prevent severe illness and death from pneumococcal disease.

Why Vaccinate for Pneumococcal Disease?
Pneumococcal disease refers to any infection caused by a type of bacteria called *Streptococcus pneumoniae*. These bacteria commonly affect the lungs, causing pneumonia, and can also affect the sinuses, ears, and other parts of the airway, causing sinusitis, ear infections, or upper respiratory tract infections. These infections are generally not life threatening.

However, in some people, pneumococcal disease can be severe and life threatening. These are usually cases that affect the brain, causing meningitis, or spread through the bloodstream, causing sepsis. These cases of severe pneumococcal disease, also referred to as invasive pneumococcal disease, can be decreased by getting vaccinated.

Who Should Be Vaccinated for Pneumococcal Disease?
Children and adults older than 65 years have a higher chance of getting pneumococcal disease. Therefore, vaccination efforts are focused on these 2 groups of people.

Two types of pneumococcal vaccines are currently recommended in the United States. One is the 23-valent pneumococcal polysaccharide vaccine (PPSV23; Pneumovax 23) and the other is the 13-valent pneumococcal conjugate vaccine (PCV13; Prevnar 13). As of September 2014, the Advisory Committee on Immunization Practices (ACIP) recommends that:

- All children younger than 5 years should get the PCV13 vaccine.
- All adults aged 65 years or older should get both the PCV13 and the PPSV23 vaccines (but not at the same time).
- Healthy adults between ages 19 and 65 years do not need to be vaccinated for pneumococcal disease.
- Some adults between ages 19 and 65 years who have long-term health problems should be vaccinated for pneumococcal disease. Some examples include people with heart disease, lung disease, diabetes, HIV infection, or certain cancers or those who have had surgery on their spleen. Depending on the specific condition, either one or both vaccines should be given. Depending on the person’s age at vaccination, revaccination may be needed after age 65 years.

A doctor can help determine whether you should be vaccinated for pneumococcal disease and which vaccine you should receive. The February 17, 2015, issue of JAMA includes an article with more information on the latest ACIP guidelines for pneumococcal vaccination.

Types of infections that may be caused by *Streptococcus pneumoniae*

- Noninvasive pneumococcal disease
- Sinus infection
- Ear infection
- Meningitis
- Invasive pneumococcal disease
- Pneumonia without spread to the bloodstream
- Bloodstream infection
- Pneumonia with spread to the bloodstream
- Noninvasive and invasive pneumococcal disease may occur in infants, children, and adults.

FOR MORE INFORMATION
Centers for Disease Control and Prevention
www.cdc.gov/vaccines/vpd-vac/pneumo/default.htm?s_cid=cs_797

To find this and previous JAMA Patient Pages, go to the Patient Page link on JAMA’s website at jama.com. Many are available in English and Spanish. A Patient Page on pneumococcal diseases was published in the April 12, 2006, issue of JAMA.

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