

Pneumococcal Disease: Hard to say it; easy to get vaccinated



Saving Lives:
Integrating
Vaccines for
Adults Into
Routine Care

Facts About Pneumococcal Disease and Prevention in Adults

Pneumococcal Disease Epidemiology and Disease Burden

- Pneumococcal disease is caused by *Streptococcus pneumoniae*, which is transmitted through respiratory droplets.
- Its most serious clinical manifestations are pneumonia and invasive disease (bacteremia and meningitis). Eighty five percent of invasive pneumococcal disease occurs in adults.

Pneumococcal Disease Burden in the US

Clinical Presentation	US Incidence	Death Rate (%)
Bacteremia	50,000	15-20
Meningitis	3,000-6,000	16-37
Pneumonia	1.6-2 million	5-7

- Pneumococcal disease has high associated morbidity.
 - Pneumococcal meningitis can cause hearing loss, seizures, blindness, and paralysis. Concurrent cardiac events are common among patients hospitalized with pneumococcal pneumonia.
- Symptoms develop suddenly and vary by clinical presentation:
 - Pneumonia: fever, shaking chills, cough, shortness of breath, chest pain.
 - Meningitis: stiff neck, fever, disorientation, sensitivity to light.
 - Bacteremia: similar to meningitis and pneumonia, with muscle and joint pain.
 - In the elderly, symptoms may be atypical and might include weakness or confusion without the presence of a fever or other more common symptoms.

Pneumococcal Vaccination

Two pneumococcal vaccines are approved by the US Food and Drug Administration for use in adults: a 23-valent pneumococcal polysaccharide vaccine (PPSV23) indicated for all adults and a 13-valent pneumococcal conjugate vaccine (PCV13) indicated for adults age 50 years and older. The Centers for Disease Control and Prevention (CDC) recommends one or both of these vaccines for adults with pneumococcal risk factors.

■ CDC recommends only PPSV23 for the following adults:

- Age 65 years and older
- Age 19-64 years of age with: asthma, diabetes, lung, heart, or liver disease, or alcoholism
- Cigarette smokers
- Residents of long-term or chronic care facilities (eg, nursing homes)
- Alaska Native and American Indian adults age 50-64 years if recommended by local public health authorities in areas where risk of invasive disease is increased

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PPSV23 Revaccination: Those who received one dose of PPSV23 before age 65 years for any indication should receive another dose at age 65 years, or later if at least five years has elapsed.

■ **CDC recommends both PCV13 and PPSV23 for adults age 19 years and older with:**

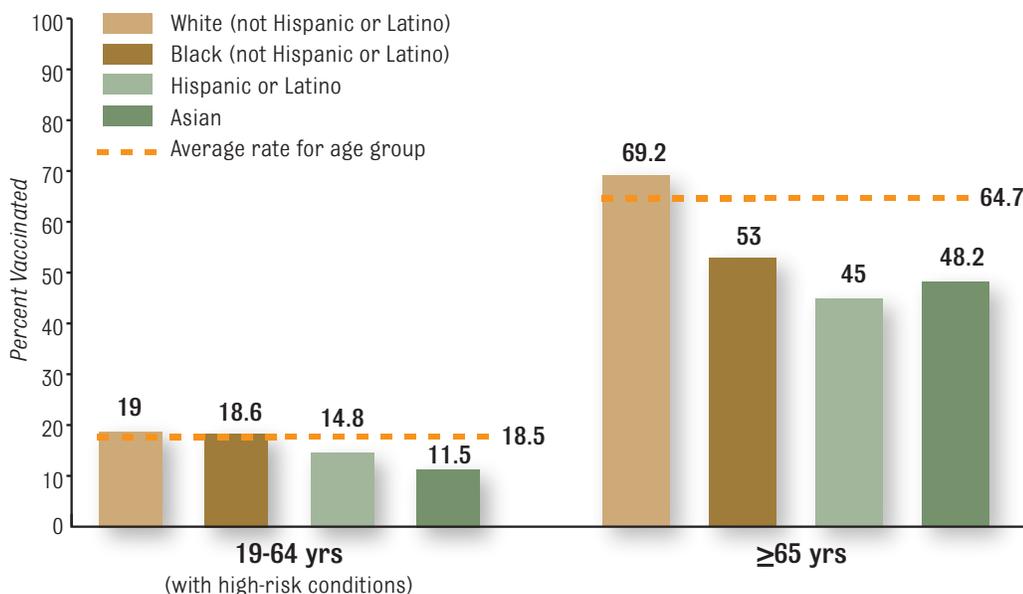
- Immunocompromising conditions (such as: HIV, lymphoma, leukemia, or Hodgkin disease, chronic kidney disease)
- Functional or anatomic asplenia
- Cochlear implants or cerebrospinal fluid leaks

The number and timing of doses for these adults varies. For more information, refer to the Pneumococcal Vaccination Guide for Adults or visit: www.cdc.gov/vaccines/vpd-vac/pneumo/.

Vaccination Rates and Ethnic and Racial Disparities

- Approximately 73 million US adults have an indication for pneumococcal vaccination, but have not been vaccinated.
- African American, Hispanic, American Indian, Alaska Native, and Asian populations have higher rates of pneumococcal disease risk conditions and lower vaccination rates:

Pneumococcal Vaccination Rates in US Adults



DATA SOURCES: CDC/NCHS, National Health Interview Survey, 2010 & 2011. Estimates are based on household interviews of a sample of the civilian non-institutionalized population. Data available at: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6104a2.htm?s_cid=mm6104a2_w and <http://www.cdc.gov/nchs/nhis/released201112.htm>.