Preventing Pneumococcal Disease

Why it’s especially important during influenza season

Pneumococcal disease is an infection that can cause serious illness and death. Although it can occur any time of year, pneumococcal infection is a common complication of influenza. This makes it critical that at-risk individuals are protected against both diseases as influenza season approaches.

Pneumococcal infections can manifest as bacteremia (sepsis), meningitis, and pneumonia. Infants, people with certain chronic health conditions, and adults age 65 years and older are more likely than others to be seriously affected by pneumococcal disease.

Routine vaccination of children in the US with pneumococcal conjugate vaccines since 2000 led to a significant reduction of this disease in children. Adults now bear the burden of pneumococcal disease in the US with 85 percent of cases occurring in persons age 18 and older.¹

A visit to a healthcare professional for a seasonal influenza vaccination provides a good opportunity for at-risk adults to ask about pneumococcal vaccination. Both vaccines can be given during the same visit.

Pneumococcal Prevention in Adults:
- Pneumococcal vaccination is recommended for at-risk adults to help protect them from invasive infection (bacteremia, meningitis).
- Approximately 73 million US adults have an indication for pneumococcal vaccination—such as diabetes, heart disease, or asthma—but have not been vaccinated.²
- Pneumococcal vaccination can be received any time of year.
- Vaccination is associated with improved survival, reduced chances of respiratory failure or other complications, and shorter in-patient stays for adults hospitalized with community-acquired pneumonia, including pneumococcal disease.³
- Vaccination is indicated only once for most adults, but revaccination is needed for adults with certain risk conditions.
- The vaccine is fully reimbursable for adults on Medicare Part B (no co-pay, no deductible).

Adult Pneumococcal Vaccination Recommendations:
- There are two pneumococcal vaccines approved by the FDA for use in adults.
- Pneumococcal polysaccharide vaccine (PPSV23)
  - The vaccine is 60-70 percent effective in preventing invasive disease.⁴
  - CDC recommends PPSV23 for adults age 65 years and older and younger adults who smoke or have certain chronic health conditions (details provided in side bar above).
- Pneumococcal conjugate vaccine (PCV13)
  - FDA recently approved PCV13 for use in adults age 50 years and older.
  - The Advisory Committee on Immunization Practices (ACIP) recently recommended PCV13 in addition to PPSV23 for immunocompromised adults age 19 years or older. The provisional recommendation is currently pending approval from CDC and the US Department of Health and Human Services. The estimated date for the publication of a policy note is October 12, 2012.

**Pneumococcal Prevention in Children and Adolescents:**
- PCV13 is recommended for infants and children as part of the routine childhood immunization series.
- Additionally, PPSV is recommended for children age 2 years and older and adolescents with certain risk factors, such as:
  - Lung, heart, liver, or kidney disease; asthma; diabetes; or sickle cell disease
  - Conditions that weaken the immune system, e.g., HIV/AIDS, cancer, damaged/absent spleen
  - Cochlear implants, cerebro-spinal fluid (CSF) leaks
  - Those who reside in chronic-care or long-term care facilities

**Vaccine Safety:**
- Either vaccine may cause some local reaction or soreness around the site of the injection; however, these reactions are usually minor and subside within a few days.
- In children, PCV may cause mild fever, fussiness, and decreased appetite.

**Antibiotic Treatment:**
- Pneumococcal strains have emerged that are resistant to treatment with penicillin and other commonly used antibiotics.
- Resistance makes treatment more difficult and may result in longer hospitalizations, the need to use alternative antibiotics, and increases risk of death.
- The emergence of treatment-resistant strains further demonstrates the importance of preventing pneumococcal disease through vaccination rather than waiting to treat it.

**References**