Understanding Pneumococcal Disease

A common and serious complication of influenza infection

Pneumococcal Disease and Influenza:
- Pneumococcal infection can occur any time of year, but it is a common and serious complication of influenza infection.
- The best way to protect against both infections is through vaccination which can reduce illness and death. Pneumococcal vaccination is recommended for children and adults with certain risks.

About Pneumococcal Disease:
- Pneumococcal disease is caused by bacteria called Streptococcus pneumoniae.
- Pneumococcal bacteria cause different illnesses including:
  - Meningitis — infection in the covering of the spinal cord and brain (invasive disease)
  - Bacteremia (sepsis) — infection in the bloodstream (invasive disease)
  - Pneumonia — infection in the lungs
  - Otitis media — ear infection
- Children younger than age 2, adults age 65 years and older, and younger adults with chronic health conditions—such as smokers, and those with heart disease, diabetes, and asthma—are at greatest risk for the disease.
- In the US, 85 percent of all invasive pneumococcal disease occurs in adults.\(^1\)
- The elderly are the most likely to die from invasive pneumococcal disease (bacteremia and meningitis), but younger adults with certain health conditions are also at risk for severe illness.\(^2\)

Impact of Pneumococcal Disease:
- The Centers for Disease Control and Prevention (CDC) reported 5,000 deaths in the US from pneumococcal meningitis and sepsis in 2009.\(^3\)
- The number of Americans who die from pneumonia is harder to pinpoint. It’s estimated that about 500,000 Americans get pneumococcal pneumonia each year, 5 to 7 percent of whom die.\(^2\)
- Those who survive invasive pneumococcal infection can experience serious complications, including cardiac events, hearing loss, seizures, blindness, and paralysis.
- Pneumococcal infection can lead to hospitalization, long recovery times, and lost work.

Prevention:
- Children receive pneumococcal conjugate vaccination as part of the routine immunization series.
- Pneumococcal vaccination rates in adults who are recommended to receive it are lagging.
  - Data from January–June 2011, show that 64.7 percent of adults age 65 years and older were vaccinated, which is 5.3 percentage points higher than the 2010 estimate.\(^4\) In 2010, 18.5 percent of adults age 19–64 years with high-risk conditions had been vaccinated.\(^5\)
  - Immunization disparities remain among certain racial and ethnic populations. Forty five percent of older Hispanics\(^6\) and 14.8 percent of younger, high-risk Hispanics have been vaccinated.\(^5\) Among older African American adults, 53 percent have been vaccinated.\(^4\)
- For more information, see the fact sheet “Preventing and Treating Pneumococcal Disease.”
Symptoms:
- Pneumococcal disease can strike quickly and without warning, but symptoms are not the same for everyone. Depending on whether the infection causes pneumonia, blood infection, or meningitis, people may have some combination of the following:
  - Abrupt onset of fever, shaking/chills, cough, shortness of breath, chest pain, stiff neck, and disorientation.

References

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