Large study finds Prevnar 13 effective at protecting seniors against pneumonia

By ACSH Staff — March 19, 2015

found that the 13-valent polysaccharide conjugate vaccine (Pfizer’s Prevnar 13/PCV13) was effective in protecting seniors from the strains of pneumococcus (a bacterium that causes infections ranging from ear infections to pneumonia and bloodstream infections) contained in the vaccine. The vaccine was particularly effective in protecting against dangerous invasive infections in the blood stream.

The study, led by Marc Bonten, MD, PhD, of the University Medical Center Utrecht in the Netherlands, included over 84,000 adults aged 65 and older. Half of the participants were randomly assigned to receive the vaccine, while the other half received a placebo.

In the analysis, the authors found:

- In the placebo group, there were 90 cases of community-acquired pneumonia attributable to those strains contained in the vaccine, compared to 49 cases in the vaccine group, for a vaccine efficacy of 45.6 percent.
- In the placebo group, there were 60 cases of non-bacteremic/noninvasive pneumonia (without detectable spread to the bloodstream), compared with 33 in the vaccine group, for a vaccine efficacy of 45 percent.
- In the placebo group, there were 28 cases of invasive pneumococcal disease, compared with 7 in the vaccine group, for an efficacy of 75 percent.

However, for community-acquired pneumonia from all causes (including cases caused by non-pneumococcal agents such as influenza A), there were 747 cases in the vaccine group, and 787 cases in the placebo group, for a low vaccine efficacy of 5.1 percent.

The authors conclude, Among older adults, PCV13 was effective in preventing vaccine-type pneumococcal, bacteremic, and nonbacteremic community-acquired pneumonia and vaccine-type invasive pneumococcal disease but not in preventing community-acquired pneumonia from any cause.
The vaccine is currently recommended for all children younger than 5 years old, and for all adults 65 years of age or older.

ACSH’s Dr. Gil Ross added this: The goal and function of a pneumococcal vaccine is to protect against *Streptococcus pneumoniae*, a dangerous bug among the very young and very old, especially. This study clearly shows that Prevnar-13 does its job quite well, protecting against those 13 strains. The fact that it doesn’t seem to reduce overall pneumonia is unpleasant, but hey—nothing is perfect. This vaccine should be used widely and will save lives.