



Frequently Asked Questions about

# The Pneumococcal Conjugate Vaccine

## Why is the pneumococcal conjugate vaccine now being added to the list of recommended vaccines for infants and children?

- The vaccine prevents serious, often deadly, invasive diseases caused by the *Streptococcus pneumoniae* (also known as pneumococcus) bacteria, including meningitis (an infection of the lining of the brain or spinal cord), pneumonia, and bacteremia (an infection of the bloodstream).

## How long has this vaccine been available?

- After over a decade of extensive research and testing in clinical trials in the United States and around the world, the vaccine was approved by the FDA in February 2000.

## How common is pneumococcal disease in children?

- With the decline of Hib meningitis (as a result of the Hib vaccine), pneumococcus has become the leading cause of bacterial meningitis among U.S. children ages five and under. In fact, children ages two and under have far higher rates of pneumococcal disease than any other age group.<sup>1</sup> For those children who do become infected and develop these complications, the death rates from these diseases are high, ranging between 5-30%. Of those children who survive the disease, between 25-35% will suffer hearing loss, seizures, or other forms of brain damage.

## Will the vaccine prevent ear infections?

- There are many causes of ear infections. This vaccine will prevent many of the ear infections caused by *Streptococcus pneumoniae*. Children who receive the vaccine can be expected to have on average 8% fewer visits to the doctor for ear infections (otitis media), and should be about 20% less likely to need tubes (called tympanostomy tubes) inserted in their ears as a result of chronic ear infections.<sup>1,2</sup>

## How is this vaccine different from the existing pneumococcal (polysaccharide) vaccine?

- The pneumococcal *conjugate* vaccine was developed specifically to prevent forms of serious pneumococcal disease that harm many young children (age 5 and younger). The pneumococcal *polysaccharide vaccine*, which has been available in the United States since 1977, is routinely recommended only for older adults (age 65 and older), for younger adults who have immune system problems, and for children ages 2 and older who have certain long-term illnesses (such as sickle cell disease). It is not effective in children under age two.

Because the existing (polysaccharide) vaccine could not create a strong protective immune response in children less than two years of age, the new pneumococcal *conjugate* vaccine was developed to protect infants and children less than two years of age who are at risk of the more severe forms of this infection.

## Source

<sup>1</sup> Atkinson W, Wolfe C, Humiston S, Nelson R, eds. Epidemiology and Prevention of Vaccine-Preventable Diseases. 6th ed. (The Pink Book.) Atlanta: Centers for Disease Control and Prevention; 2000.

<sup>2</sup> Shinefield HR, Black S. Efficacy of pneumococcal conjugate vaccines in large scale field trials. *Pediatr Infect Dis J* 2000 Apr; 19(4): 394-7.