

Pneumococcal vaccines

Infection with *Streptococcus pneumoniae* bacteria can cause serious illness and death. Invasive pneumococcal disease is responsible for about 200 deaths each year among children under 5 years old. It is the leading cause of bacterial meningitis in the United States. Before a vaccine was available, each year pneumococcal infection caused:

- over 700 cases of meningitis
- 13,000 blood infections
- about 5 million ear infections

It can also lead to other health problems, including:

- pneumonia
- deafness
- brain damage

Older children and adults with certain health conditions such as sickle cell anemia, the loss of their spleen, or chronic heart disease are at increased risk for serious pneumococcal disease and should be immunized. Adults 65 years and older should also be vaccinated.

Pneumococcal infections can be hard to treat because the bacteria have become resistant to some of the drugs that have been used to treat them. This makes *prevention* of pneumococcal infections even more important. Pneumococcal vaccine can help prevent serious pneumococcal disease, such as meningitis and blood infections. It can also prevent some ear infections. But ear infections have many causes, and pneumococcal vaccine is effective against only some of them.

Children from the age of 6 weeks to 5 years should be immunized with the PCV7 vaccine. For high-risk children over the age of 5 years, and adults at risk for pneumococcal disease, the PPV23 vaccine is used.

The PCV7 vaccine can be given starting at 6 weeks of age. The number of doses recommended to achieve full immunization varies depending on the age of the child.