



BEFORE THE VACCINE WAS  
AVAILABLE IN THE U.S.,  
**PNEUMOCOCCAL DISEASE**  
CAUSED ABOUT

**700**

CASES OF MENINGITIS,

**13,000**

CASES OF BACTEREMIA,

AND

**5 MILLION**

MIDDLE EAR INFECTIONS

EACH YEAR AMONG

**CHILDREN YOUNGER THAN 5 YEARS OLD.**

## PNEUMOCOCCAL DISEASE

Pneumococcal disease is caused by bacteria that are present in many children's noses and throats. It is still unknown why it suddenly invades the body and causes disease in some children.

Pneumococcal disease is spread by coughing and sneezing. Serious pneumococcal infections are most common in infants, toddlers and the elderly. Meningitis is the most severe type of invasive pneumococcal disease. Of children younger than 5 years old who get pneumococcal meningitis, about 1 out of 10 dies and others may have long-term problems, such as hearing loss or developmental delay. Bacteremia (bacteria in the bloodstream) is also a type of invasive pneumococcal disease. About 4 out of 100 children with this blood stream infection will die from it. Other types of pneumococcal disease include pneumonia, middle ear infections and sinus infections.

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### SYMPTOMS

Symptoms depend on the type of pneumococcal disease, but generally include fever and/or chills. Additional symptoms may include:

- Cough, shortness of breath and chest pain (pneumonia)
- Stiff neck, headache, confusion and pain when looking at lights (meningitis)
- Poor eating and drinking and vomiting (babies with meningitis)
- Low alertness (bacteremia)
- Ear pain, red/swollen ear drum and sleepiness (middle ear infection)

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### PREVENTION

The pneumococcal vaccine is the best way to prevent pneumococcal disease.

For the most protection against pneumococcal disease, your children need to receive all four recommended doses of the vaccine. To see if your children are up-to-date on their vaccines, look at the **CDC's immunization schedule** and talk to your healthcare provider.