

Pneumococcal Vaccine

Pneumococcus is a type of bacteria that can attack different parts of the body and cause many serious infections. Pneumococcal bacteria live naturally in humans in the back of the nose. Many people carry the bacteria and never get sick. In fact, being a carrier helps boost one's natural immunity to the disease. Others are not immune and can get very sick from the infections caused by the bacteria.

Pneumococcal infections occur most often during the winter months. They spread from person to person the same way a cold or the flu spreads by droplets passed through the air from coughing or sneezing, and through direct contact such as touching unwashed hands or kissing. The disease may spread quickly, especially in places where there are a lot of children, like child care centers and preschools.

Very young children do not have fully developed immune systems. This makes them more at risk from bacterial infections like pneumococcus.

The following infections can be caused by *Pneumococcus*

- **Bacteremia and meningitis.** Bacteremia is the presence of bacteria in the blood. Meningitis is an infection of the thin lining and blood vessels that cover the brain and spinal cord.
- **Pneumonia.** Chest infection in which the lungs become filled with fluid.
- **Sinusitis.** Sinusitis occurs when the membranes lining the air filled pockets in the bones of the face (sinuses) swell. The sinus cavities may fill with fluid.
- **Otitis media.** Infection of the middle ear. Young children commonly develop middle ear infections when they have colds, the flu, or other viral respiratory infections.

Diagnosis and treatment of pneumococcal infections

We will be able to tell if your child has a pneumococcal infection by your child's symptoms, a physical examination, and looking at your child's medical history. X rays, blood tests, and sometimes a spinal tap also may be done to confirm pneumococcal infection in your child.

Prompt treatment with antibiotics is usually effective. In addition, your child may need bed rest and a lot of fluids. In some cases, your child may need to be hospitalized.

Unfortunately, some strains of the pneumococcal bacteria are developing resistance to the antibiotics usually used to kill them. This means that other antibiotics must be used. We will let you know which antibiotic is best for your child.

Prevention of pneumococcal infections

- Wash your hands regularly with soap and water. This helps prevent the spread of infection.
- Avoid dust, tobacco smoke, and other substances that may interfere with breathing and make children more likely to get sick.

Pneumococcal vaccine

A vaccine now offers infants and young children protection against pneumococcal infections. It is most effective against the major pneumococcal diseases – bacteremia, meningitis, and pneumonia. The vaccine is minimally effective in preventing otitis media and sinusitis. Pneumococcal vaccine is safe and can be given as a separate injection at the same time as other immunizations.

Immunization Schedule

The American Academy of Pediatrics (AAP) recommends that your child receive two or three doses of the pneumococcal vaccine between 2 to 6 months of age and a booster dose at 12 to 15 months.

Side effects to pneumococcal vaccines

Most children have no side effects with pneumococcal vaccines. Those side effects that do occur are mild and temporary. The possible side effects include

- Soreness, swelling, and redness where the shot was given
- A mild-to-moderate fever
- Fussiness

These symptoms may begin within 24 hours after the shot and usually go away within 48 to 72 hours.

If you suspect there is a serious problem with your child following this immunization, please call our office. Your child will be examined and treated if necessary.