

PUBLIC HEALTH FACT SHEET

Pneumococcal Disease

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What is pneumococcal disease?

Pneumococcal disease is an illness caused by bacteria (germs) that can infect the lungs (pneumonia), the blood (bacteremia), and the membrane that covers the brain (meningitis). The disease is most likely to strike in the winter and spring, but there are cases year round. The most common symptoms are chills, fever, chest pain, shortness of breath, and a severe cough. Some people vomit or have seizures. Pneumococcal disease kills thousands of older people in the United States each year.

How is pneumococcal disease spread?

The germ is in many people's noses and throats, and is spread by coughing, sneezing, or contact with respiratory secretions. The germs that cause the disease can live in the nose and throat of healthy children and adults without causing disease.

Who gets pneumococcal disease?

Anyone can get pneumococcal disease. People at highest risk are very young children, people 65 years and older, people of any age who have certain chronic medical problems, and people with weakened immune systems.

Is pneumococcal disease dangerous?

Yes. It can be. Pneumococcal disease is one of the most common causes of vaccine-preventable death in this country. Every year thousands of people need hospital treatment and more than 4,400 people die because of pneumococcal disease. Pneumococcal infection is the most common cause of bacterial pneumonia. It is also a leading cause of meningitis, blood infection and ear infection in children.

How is pneumococcal disease treated?

Pneumococcal disease is treated with antibiotics. However, some pneumococcal infections are resistant to some antibiotics, making treatment more difficult. People with more severe cases may need to be treated in the hospital, sometimes in intensive care.

Can pneumococcal disease be prevented?

Yes. There are two vaccines to prevent it. Pneumococcal polysaccharide vaccine (PPV23) protects against the 23 pneumococcal types most likely to cause disease in older children and adults, but is only approved for people 2 years of age and older. A new pneumococcal conjugate vaccine (PCV13), protects against the 13 types of pneumococcal bacteria most likely to cause infection in young children, and is approved for infants and children younger than 5 years of age. (An earlier pneumococcal conjugate vaccine, PCV7, was used before 2010 and protects against 7 common types of pneumococcal bacteria.)

Who should get pneumococcal vaccine (PPV23)?

There are many reasons why someone could be at increased risk for getting pneumococcal disease and should receive pneumococcal vaccine. Adults should review their need for vaccination at every visit with their health care provider, especially at 50 and 65 years of age.

PPV23 is recommended for:

- Everyone 65 years of age and older.
- People who live in nursing homes or other long-term care facilities.
- People 19 – 64 years of age with asthma.

- People 19 – 64 years of age who smoke cigarettes.
- People 2 – 64 years of age with the following medical conditions:
 - Chronic heart or lung problems, diabetes, liver problems, cochlear implants or cerebrospinal fluid (CSF) leaks.
 - Weakened immune systems caused by conditions such as sickle cell disease, having the spleen removed, kidney failure, cancer, organ transplants, drugs that weaken the immune systems, and HIV infection or AIDS.

Most people need only one dose of pneumococcal (PPV23) vaccine. If you are 65 years of age or older, or if you have a chronic health problem, talk to your doctor or nurse to find out if you need a booster. It is a good idea to keep careful records of the vaccines you receive so you will know when you need another. If you are 65 years of age or older and you are not sure if you have ever received the pneumococcal vaccination, you should be vaccinated.

Who should get pneumococcal conjugate vaccine (PCV13)?

- **All infants and children younger than 2 years of age.**
- **Older children and adolescents:**
 - Healthy children 2 through 5 years of age who have not completed the PCV series
 - Children 2 through 5 years of age with underlying medical conditions (including cochlear implants) who have not completed the PCV series
 - Healthy children 2 through 4 years of age who have received only PCV7
 - Children 5 through 6 years of age with underlying medical conditions who have received only PCV7
 - Children 6 through 18 years of age who have functional or anatomic asplenia; HIV infection or other immunocompromising condition; cochlear implant; or cerebral spinal fluid leak

Ask your doctor if your child needs another dose of this vaccine.

How safe are the pneumococcal vaccines?

Any vaccine can cause side effects in some people. Some people who get pneumococcal vaccine have a little swelling and pain in the arm where the shot was given. This usually lasts for less than 2 days. Some children getting PCV13 may have a fever that lasts a few days. Other side effects like aching muscles and severe side effects like allergic reactions are rare.

PPV23 and PCV13 can be given at the same time as all other vaccines, but should not be given with each other.

Where can I get more information?

- Your doctor, nurse or clinic, or your local board of health (listed in the phone book under local government).
- The Massachusetts Department of Public Health, Immunization Program (617) 983-6800 or toll-free at (888) 658-2850, or on the MDPH website at www.mass.gov/dph/.
- Boston providers and residents may also call the Boston Public Health Commission at (617) 534-5611.
- CDC National Immunization Information Hotline:
 CDC-INFO 1-800-CDC-INFO (800-232-4636) 1-888-232-6348 TTY 24 Hours/Day
 E-mail Address: cdcinfo@cdc.gov