



## **PUBLIC HEALTH FACT SHEET**

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# **Pneumococcal**

### **What is pneumococcal disease?**

Pneumococcal disease is an illness caused by bacteria that can infect the lungs, the blood, and the membrane that covers the brain. The disease is most common in the winter and spring, but can occur year round if the lungs are infected. The most common symptoms are chills, fever, chest pain, shortness of breath, and a severe cough.

Pneumococcal disease is one of the most common causes of vaccine-preventable death in this country. Every year thousands of people are hospitalized and up to 15,000 people die because of pneumococcal disease. It is a common cause of meningitis, infection in the blood and pneumonia in children and adults.

### **How is pneumococcal disease spread?**

It is commonly spread through respiratory droplets from the nose or mouth of a person with pneumococcal infection. These germs can be sprayed into the air when a person coughs, sneezes or talks. The germs that cause the disease can live in the nose and throat of many healthy children and adults without causing disease.

### **Who gets pneumococcal disease?**

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

### **How is pneumococcal disease treated?**

Pneumococcal disease is treated with antibiotics. Some pneumococcal infections are resistant to the antibiotics that are normally used, 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 that are highly effective in preventing disease. One vaccine is used primarily for adults and the other one is used for children. The pneumococcal conjugate vaccine (PCV13) is only used in infants and children under 5 years of age. This vaccine may also protect against 13 strains of pneumococcal bacteria most likely to cause severe infection in very young children. The pneumococcal polysaccharide vaccine (PPV23) is used predominantly in adults, but can be used in children under 2 years of age. It may also protect against 23 strains of pneumococcal bacteria most likely to cause disease in older children and adults.

**Over**

### **Who should get a pneumococcal vaccine (PPV23)?**

PPV-23 is recommended for:

- Everyone 65 years of age and older.
- People who live in nursing homes or other long-term care facilities.
- People 2 – 64 years of age with the following medical conditions:
  - Chronic illness such as diabetes, heart and lung disease
  - Cerebrospinal fluid (CSF) leaks
  - Sickle cell disease
  - Kidney failure or a type of kidney disease called nephritic syndrome
  - Weakened immune systems, caused by conditions such as 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 health care provider to find out if you need a booster. It's a good idea to keep careful records of the vaccines you get so you'll know when you need another.

### **Who should get a pneumococcal conjugate vaccine (PCV13)?**

- All children less than 24 months of age
- Children 24-59 months of age with high risk medical conditions such as:
  - Sickle cell disease
  - Medical conditions that affect the immune system
  - Chronic heart or lung disease
  - Cerebrospinal fluid (CSF) leaks
  - Kidney failure or a type of kidney disease called nephritic syndrome
  - Asplenia or a spleen that does not function appropriately
  - Weakened immune systems caused by cancer, organ transplants, drugs that weaken the immune systems.

PCV-13 can be considered for other children 24 – 59 months of age, particularly children who are known to be at higher risk. If started by 6 months of age, 4 doses are usually needed.

### **How safe are the pneumococcal vaccines?**

Any vaccine can cause side effects in some people. Reactions following vaccination are usually mild and self-limited. Some people who get pneumococcal vaccines have a little swelling and pain in the arm where the shot was given. This usually lasts for less than 2 days. Fever may occur within the first 2 days, particularly after the PCV13 immunization. Severe side effects, such as allergic reactions are rare.

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

**For more information, please contact  
Boston Public Health Commission  
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(617) 534-5611 or [www.bphc.org](http://www.bphc.org)**