

# Pneumococcal Disease Fact Sheet

**Pneumococcal pneumonia and pneumococcal disease are caused by the bacterium *Streptococcus pneumoniae*.**

Pneumococci can cause ear infections and severe infections of the lungs (pneumonia), blood (bacteremia), and covering of the brain and spinal cord (meningitis). Increases in cases of pneumococcal pneumonia may occur during outbreaks of influenza. Pneumococcal disease can be very serious. Infants, young children, persons 65 and older, and persons with underlying medical conditions are at increased risk of getting pneumococcal disease. Persons are more likely to get very sick or die from pneumococcal disease if they have problems such as alcoholism, heart or lung disease, kidney failure, diabetes, cancer, a weakened immune system, or sickle cell disease. The high risk of death occurs even with treatment.

**Pneumococcal disease is spread from person-to-person by airborne droplets and direct contact with infected respiratory secretions.**

Pneumococcal disease is spread by direct contact with respiratory droplets from the nose or mouth of an infected person or by a person who is carrying the bacteria. The length of time that a person may spread pneumococcal disease is unknown, but is probably as long as the bacteria are present in the respiratory tract.

**Symptoms to look for generally include:**

- Fever and chills
- Headache
- Ear pain
- Cough
- Chest pain
- Shortness of breath
- Disorientation
- Occasionally a stiff neck

Symptoms occur generally within 1 to 3 days, but this time period is not definite.

**Laboratory testing is available to confirm a pneumococcal infection.**

People who think they have a pneumococcal infection should see a doctor or their local health department **immediately** to be tested. Pneumococcal disease is diagnosed by testing the blood, spinal fluid, middle ear, lungs, or other bodily fluids.

**See a doctor immediately for treatment.**

Pneumococcal disease may be treated with a variety of antibiotics such as penicillin. However penicillin-resistant strains of pneumococcal infections are occurring more frequently. These strains may be successfully treated with another type of antibiotic.

**Pneumococcal disease can be prevented with a pneumococcal vaccine.**

Two types of vaccine are available to prevent pneumococcal disease. One type of pneumococcal vaccine, Pneumococcal Polysaccharide Vaccine (PPV23) is recommended for all persons aged 65 and older, and for persons of any age (over 2 years old) who have heart or lung disease, kidney failure, diabetes, alcoholism, cirrhosis, sickle cell disease, and for Alaskan natives and certain American Indian groups. This vaccine is also recommended for those with a weakened immune system or who are taking drugs that weaken the immune system (including persons with cancer, organ transplant, infection with human immunodeficiency virus [HIV or AIDS], or who have had their spleen removed). A second type of pneumococcal vaccine called Pneumococcal Conjugate Vaccine (PCV7) is recommended for use in infants and young children. This vaccine is recommended for all children less than 2 years old. For additional information about pneumococcal vaccine, please visit: <http://www.cdc.gov/vaccines/vpd-vac/pneumo/default.htm>.