Pneumococcal Disease in Adults and the Vaccines to Prevent It

Accessible link: http://www.cdc.gov/pneumococcal/resources/prevent-pneumococcal-factsheet.html

Pneumococcal disease in adults can range from mild to serious, and can sometimes be deadly. Two types of vaccines provide protection against this disease. Talk to your doctor to see if they recommend these or any other vaccines for you.

What is pneumococcal disease?

Pneumococcal disease is a term used for a wide range of infections caused by bacteria called *Streptococcus pneumoniae* (pneumococcus), including:

- Ear infections
- Sinus infections
- Pneumonia (lung infection)
- Bacteremia (bloodstream infection)
- Meningitis (infection of the lining of the brain and spinal cord)
- Sepsis (the body's extreme response to an infection)

What are the symptoms of pneumococcal disease?

Symptoms depend on the part of the body the bacteria are affecting.

For **sinus and ear infections**, symptoms are usually relatively mild, such as:

- Cough
- Ear pain
- Fever
- Sore throat

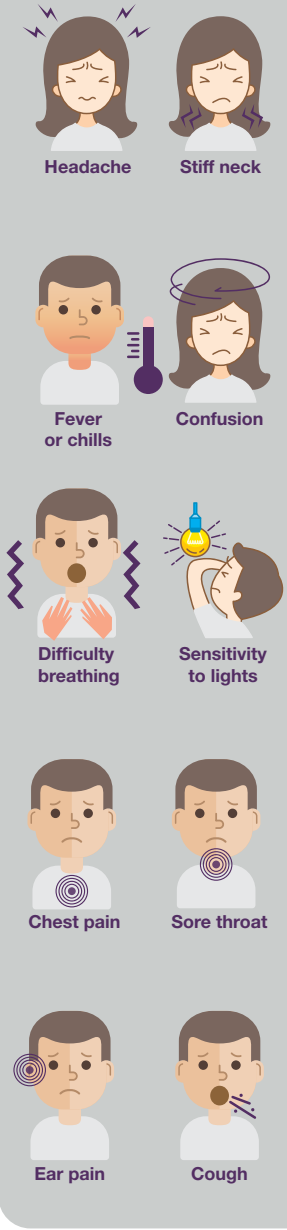
For **pneumonia, bloodstream infections, meningitis, and sepsis**, you can also have more severe symptoms, including:

- Fever or chills
- Cough
- Rapid or difficult breathing
- Chest pain
- Headache
- Stiff neck
- Increased pain when looking at bright lights
- Confusion or low alertness

How do doctors diagnose and treat pneumococcal disease?

Early diagnosis and treatment are very important for serious pneumococcal infections. Diagnosis depends on which type of infection a doctor thinks a patient may have. For meningitis or bloodstream infections, doctors will collect samples of cerebrospinal fluid or blood and send them to a laboratory for testing. Doctors can also use a urine test to diagnose some cases of pneumonia. For illnesses like ear and sinus infections, doctors usually diagnose them based on history, symptoms, and a physical exam. Doctors can treat pneumococcal disease with antibiotics.

Symptoms



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Is pneumococcal disease serious?

Pneumococcal disease is most often mild. However, it can cause serious disease and lifelong disabilities such as hearing loss and brain damage. Pneumococcal disease can also be life threatening:

1 in 20
Pneumococcal pneumonia kills about 1 in 20 older adults who get it

1 in 6
Pneumococcal bloodstream infections kills about 1 in 6 older adults who get it

1 in 6
Pneumococcal meningitis kills about 1 in 6 older adults who get it

How do the bacteria that cause pneumococcal disease spread?

Pneumococcal bacteria spread from person to person through coughing, sneezing, and close contact. People can carry the bacteria in their nose and throat without being sick and spread the bacteria to others.

Which adults are at increased risk for pneumococcal disease?

Adults 65 years or older are at increased risk for pneumococcal disease.

Adults of **all ages** are also at increased risk for pneumococcal disease if they have:

- Alcoholism
- Cerebrospinal fluid leak (a health problem where fluid surrounding and protecting the brain and spinal cord leaks)
- Chronic heart, lung, kidney, or liver disease
- Cochlear implant (a small electronic device that is surgically implanted to help people with severe hearing loss be able to hear)
- Diabetes
- HIV infection, cancer, solid organ transplant, or another condition or taking medicine that weakens the immune system
- Nephrotic syndrome
- Sickle cell disease, a damaged spleen, or no spleen

Adults who **smoke cigarettes** are also at increased risk for pneumococcal disease.

Chronic lung illnesses that increase an adult's risk for pneumococcal disease include chronic obstructive lung disease, emphysema, and asthma.

Which vaccines help prevent pneumococcal disease in adults?

There are two types of vaccines used in the United States to help prevent pneumococcal disease in adults: conjugate and polysaccharide vaccines. **CDC recommends pneumococcal conjugate vaccination (PCV15 or PCV20) for all adults 65 years or older and adults 19 through 64 years old at increased risk for pneumococcal disease if they have never received a pneumococcal conjugate vaccine before.** If PCV15 is used, this should be followed by a dose of polysaccharide vaccine (PPSV23).

Adults who received an earlier pneumococcal conjugate vaccine (PCV13 or PCV7) should talk with a vaccine provider to learn about available options to complete their pneumococcal vaccine series.

Adults 65 years or older have the option to get PCV20 if they have already received

- PCV13 (but not PCV15 or PCV20) at any age

and

- PPSV23 at or after the age of 65 years old

These adults can talk with their doctor and decide, together, whether to get PCV20.

In addition, getting an influenza (flu) vaccine every year can help because having flu can increase your chances of getting pneumococcal disease.

What are the risks of pneumococcal vaccination?

Pneumococcal vaccines are safe, but side effects can occur. Adults receiving pneumococcal conjugate and polysaccharide vaccines have reported mild side effects such as redness, pain, and swelling at the injection site. Mild fever, fatigue, headache, chills, or muscle pain have also been reported. Life-threatening allergic reactions from either type of vaccine are rare.

www.cdc.gov/pneumococcal