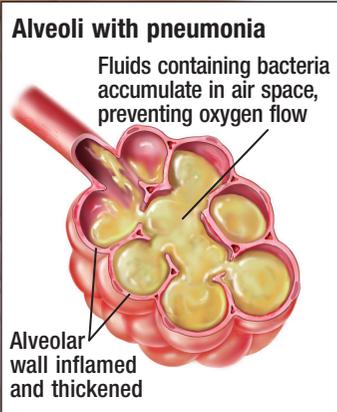
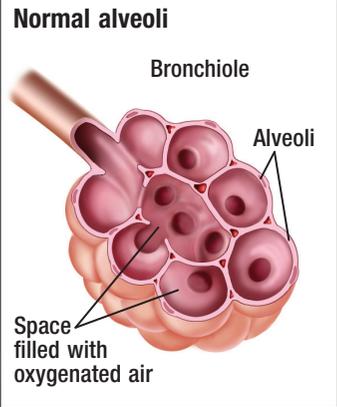
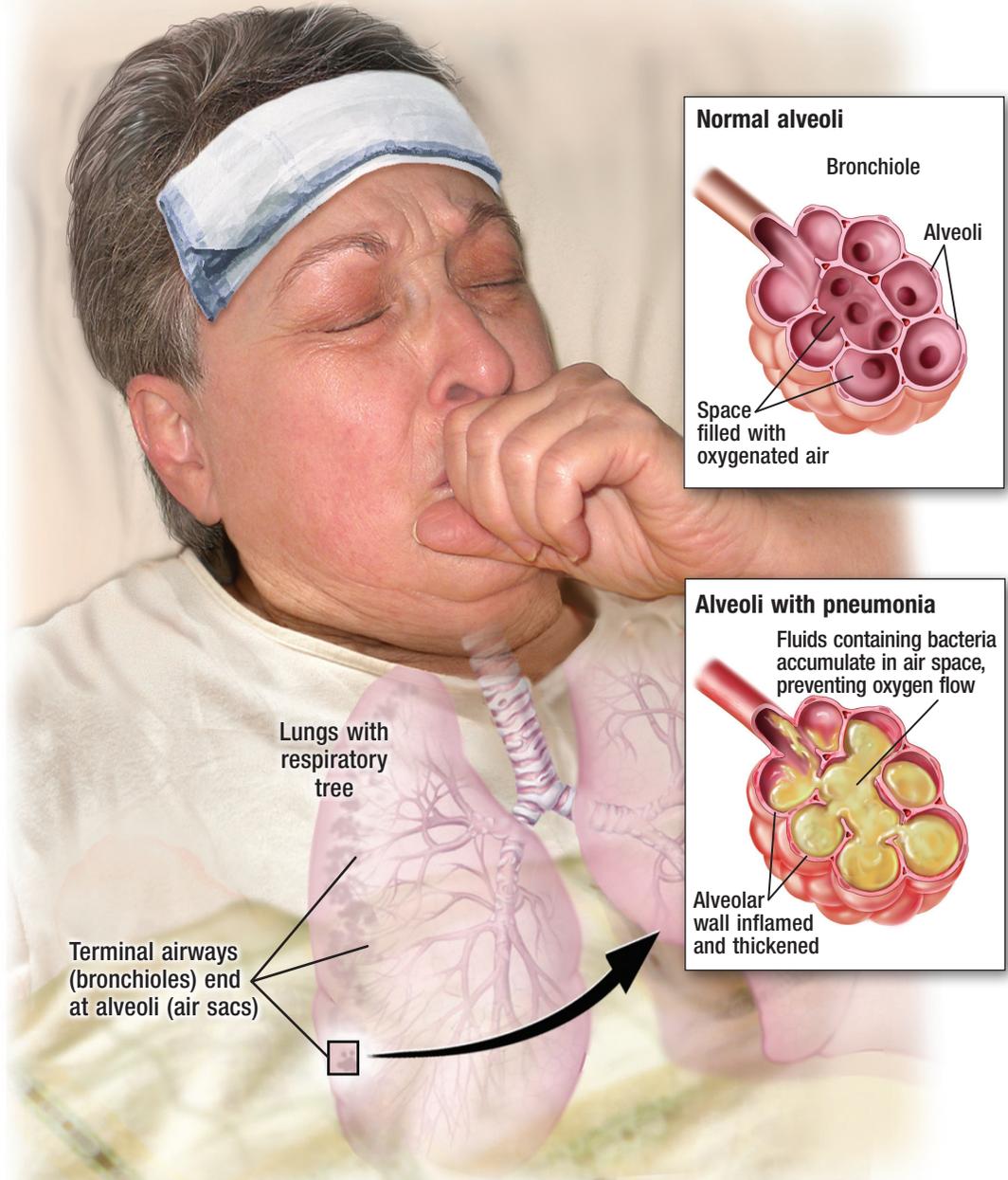


Pneumonia



Serious Lung Infection

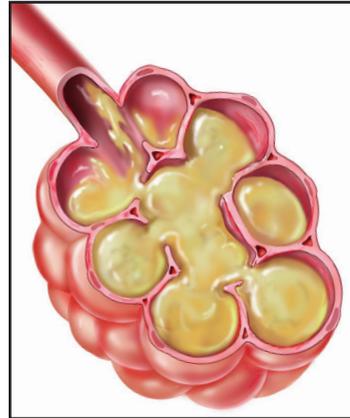
Pneumonia is an infection of the lungs usually caused by a bacterium or virus. These germs can be breathed into the lungs when spread through the air. They can also spread to the lungs in a person with an upper respiratory tract infection. The wet cough of pneumonia results from inflammation of the lung tissue, which produces mucus.

Pneumonia can be mild or serious, depending on the cause and a person's ability to fight the infection. Most people with pneumonia can be treated at home with rest, oral fluids, and prescribed drugs. More serious cases of pneumonia are best treated in a hospital, where the patient can receive IV medications and fluids.

Vaccines Are Available to Prevent Bacterial Pneumonia

Pneumonia is very common in the United States, affecting several million people annually. About 1 million people are hospitalized and 50,000 die each year. Those most likely to develop pneumonia are under age 5 years or over age 65 years. Smokers and people with lung disease, heart disease, diabetes, or poor immunity also have a higher risk of pneumonia.

People can catch pneumonia in their community or in a healthcare facility such as a hospital or nursing home. Pneumonias can also be classified by the cause of the infection—either bacterial (most commonly *Streptococcus pneumoniae*) or viral (usually influenza or the respiratory syncytial virus).



In pneumonia, air sacs (alveoli) in the lungs are filled with pus and fluid, which makes breathing painful.

Symptoms and Diagnosis

The symptoms of pneumonia include a cough, often with thick mucus, chest pain, fever, chills, exhaustion, and shortness of breath. Not every patient will have all of these symptoms. Elderly people may be confused and disoriented. Babies may be irritable and vomit. Anyone with symptoms of pneumonia after an upper respiratory infection (a cold, sinus infection, or the flu) should see a doctor, who can listen to the lungs with a stethoscope, take a chest x-ray, and order a blood test to look for infection. Other tests, such as a CT scan of the chest or a sputum culture, may be needed to confirm the type of pneumonia in more serious cases.

Treatment Options

The treatment for pneumonia depends on the cause and the condition of the patient. Most people who develop pneumonia can be treated at home, but those with severe symptoms or who are at high risk should be treated in a hospital for several days until their condition is stable. In the hospital, a patient can receive medicines and fluids through an IV, and oxygen therapy is available as well.

If pneumonia is caused by a virus, antibiotics will not help. A doctor can prescribe an antiviral medicine, if appropriate, to speed up recovery. Rest and plenty of fluids are important as well. It may take 2 or 3 weeks for a person with viral pneumonia to feel better, and a month or longer to recover completely.

If pneumonia is caused by bacteria, an antibiotic will be prescribed along with rest and plenty of fluids. Although symptoms should improve within a few days, it is important to finish the entire course of antibiotic to prevent the infection from returning. Full recovery from bacterial pneumonia can take several weeks to a month or more.

Prevention With Vaccines

Prevention begins with measures to stop the spread of germs that cause pneumonia. This includes frequent hand washing and covering coughs and sneezes.

There are two pneumococcal pneumonia vaccines (Pneumovax, Prevnar) available to prevent pneumonia from *S pneumoniae* bacteria. Prevnar is recommended for all children younger than 5 years and for adults with certain risk factors. Pneumovax is approved for people over age 50 years and children 2 years or older at increased risk for pneumococcal disease. The *Haemophilus influenzae* type B (Hib) vaccine is given to children under age 5 years to prevent meningitis and pneumonia. There is no vaccine to prevent viral pneumonia, but the annual flu vaccine can help by preventing the spread of influenza.