

Community-Acquired Pneumonia, Adult

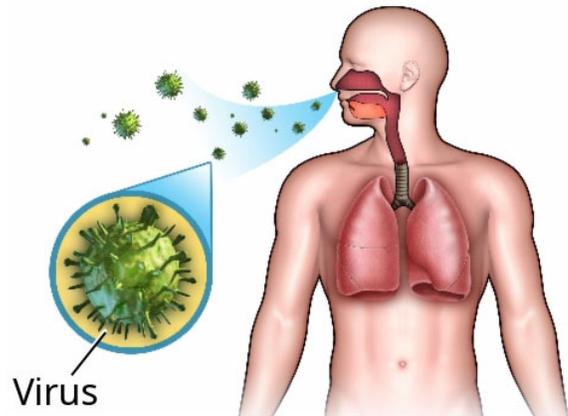
Pneumonia is a type of lung infection that causes swelling in the airways of the lungs. Mucus and fluid may also build up inside the airways. This may cause coughing and difficulty breathing.

There are different types of pneumonia. One type can develop while a person is in a hospital. A different type is called community-acquired pneumonia. It develops in people who are not, and have not recently been, in the hospital or another type of health care facility.

What are the causes?

This condition may be caused by:

- Viruses. This is the most common cause of pneumonia.
- Bacteria. Community-acquired pneumonia is often caused by *Streptococcus pneumoniae* bacteria. These bacteria are often passed from one person to another by breathing in droplets from the cough or sneeze of an infected person.
- Fungi. This is the least common cause of pneumonia.



What increases the risk?

The following factors may make you more likely to develop this condition:

- Having a chronic disease, such as chronic obstructive pulmonary disease (COPD), asthma, congestive heart failure, cystic fibrosis, diabetes, or kidney disease.
- Having early-stage or late-stage HIV.
- Having sickle cell disease.
- Having had your spleen removed (*splenectomy*).
- Having poor dental hygiene.
- Having a medical condition that increases the risk of breathing in (*aspirating*) secretions from your own mouth and nose.
- Having a weakened body defense system (*immune system*).
- Being a smoker.
- Traveling to areas where pneumonia-causing germs commonly exist.
- Being around animal habitats or animals that have pneumonia-causing germs, including birds, bats, rabbits, cats, and farm animals.

What are the signs or symptoms?

Symptoms of this condition include:

- A dry cough.
- A wet (*productive*) cough.
- Fever.
- Sweating.
- Chest pain, especially when breathing deeply or coughing.
- Rapid breathing or difficulty breathing.
- Shortness of breath.

- Shaking chills.
- Fatigue.
- Muscle aches.

How is this diagnosed?

This condition may be diagnosed based on:

- Your medical history.
- A physical exam.

You may also have tests, including:

- Chest X-rays.
- Tests of your blood oxygen level and other blood gases.
- Tests on blood, mucus (*sputum*), fluid around your lungs (*pleural fluid*), and urine.

If your pneumonia is severe, other tests may be done to find the exact cause of your illness.

How is this treated?

Treatment for this condition depends on many factors, such as the cause of your pneumonia, the medicines you take, and other medical conditions that you have.

For most adults, treatment and recovery from pneumonia may occur at home. In some cases, treatment must happen in a hospital. Treatment may include:

- Medicines that are given by mouth or through an IV, including:
 - Antibiotic medicines, if the pneumonia was caused by bacteria.
 - Antiviral medicines, if the pneumonia was caused by a virus.
- Being given extra oxygen.
- Respiratory therapy.

Although rare, treating severe pneumonia may include:

- Using a machine to help you breathe (*mechanical ventilation*). This is done if you are not breathing well on your own and you cannot maintain a safe blood oxygen level.
- Thoracentesis. This is a procedure to remove fluid from around one lung or both lungs to help you breathe better.

Follow these instructions at home:

Medicines

- Take over-the-counter and prescription medicines only as told by your health care provider.
 - Only take cough medicine if you are losing sleep. Be aware that cough medicine can prevent your body's natural ability to remove mucus from your lungs.
- If you were prescribed an antibiotic medicine, take it as told by your health care provider. **Do not** stop taking the antibiotic even if you start to feel better.

General instructions

- Sleep in a semi-upright position at night. Try sleeping in a reclining chair, or place a few pillows under your head.
- Rest as needed and get at least 8 hours of sleep each night.

- Drink enough water to keep your urine pale yellow. This will help to thin out mucus secretions in your lungs.
- Eat a healthy diet that includes plenty of vegetables, fruits, whole grains, low-fat dairy products, and lean protein.
- **Do not** use any products that contain nicotine or tobacco, such as cigarettes, e-cigarettes, and chewing tobacco. If you need help quitting, ask your health care provider.
- Keep all follow-up visits as told by your health care provider. This is important.



How is this prevented?

You can lower your risk of developing community-acquired pneumonia by:

- Getting a pneumococcal vaccine. There are different types and schedules of pneumococcal vaccines. Ask your health care provider which option is best for you. Consider getting the vaccine if:
 - You are older than 65 years of age.
 - You are older than 19 years of age and are undergoing cancer treatment, have chronic lung disease, or have other medical conditions that affect your immune system. Ask your health care provider if this applies to you.
- Getting an influenza vaccine every year. Ask your health care provider which type of vaccine is best for you.
- Getting regular checkups from your dentist.
- Washing your hands often. If soap and water are not available, use hand sanitizer.

Contact a health care provider if:

- You have a fever.
- You are losing sleep because you cannot control your cough with cough medicine.

Get help right away if:

- You have worsening shortness of breath.
- You have increased chest pain.
- Your sickness becomes worse, especially if you are an older adult or have a weakened immune system.
- You cough up blood.

Summary

- Pneumonia is an infection of the lungs.
- Community-acquired pneumonia develops in people who have not been in the hospital. It can be caused by bacteria, viruses, or fungi.
- This condition may be treated with antibiotics or antiviral medicines.
- Severe cases may require hospitalization, mechanical ventilation, and other procedures to drain fluid from the lungs.

This information is not intended to replace advice given to you by your health care provider. Make sure you discuss any questions you have with your health care provider.