



Pneumonia is an infection of the lungs. Most cases of pneumonia are caused by bacteria (pneumococcal) or viruses (influenza). Rarely, it can be caused by fungi or parasites.

Pneumonia

How is it spread?

Pneumonia-causing germs can be spread the same way colds and the flu are spread: into the air as droplets by sneezing, coughing, talking, or laughing. These droplets can spread to people as they breathe and to surfaces within 6 feet.

The germs can spread to your hands if you touch anything that has the germ on it. If you then touch your eyes, nose, or mouth, you can get infected.

Certain people are at a higher risk for pneumonia, including:

- ◆ Adults 65 and older.
- ◆ Children less than 5 years old.
- ◆ People who smoke.
- ◆ Alcoholics.
- ◆ People with lung diseases.
- ◆ People with a recent cold or the flu.
- ◆ People who are now or were recently in the hospital.
- ◆ People who have just had surgery.
- ◆ People with chronic diseases such as heart disease, liver damage, or diabetes.
- ◆ People with weak immune systems such as people with HIV/AIDS or certain types of cancer.
- ◆ People taking drugs which weaken the immune system.
- ◆ People with problems swallowing, coughing or taking deep breaths.
- ◆ People with renal failure.
- ◆ People with sickle cell disease.

- ◆ People who have had their spleen removed.
- ◆ People who are living in nursing homes.

What are signs of pneumonia?

- ◆ Cough (sometimes with thick, creamy, or bloody mucus).
- ◆ Fever.
- ◆ Chills.
- ◆ Tiredness.
- ◆ Rapid breathing or shortness of breath.
- ◆ Chest pain.
- ◆ Loss of appetite.
- ◆ Headache.
- ◆ Nausea and vomiting.

How do you know you have pneumonia?

A health care provider can examine you for pneumonia by:

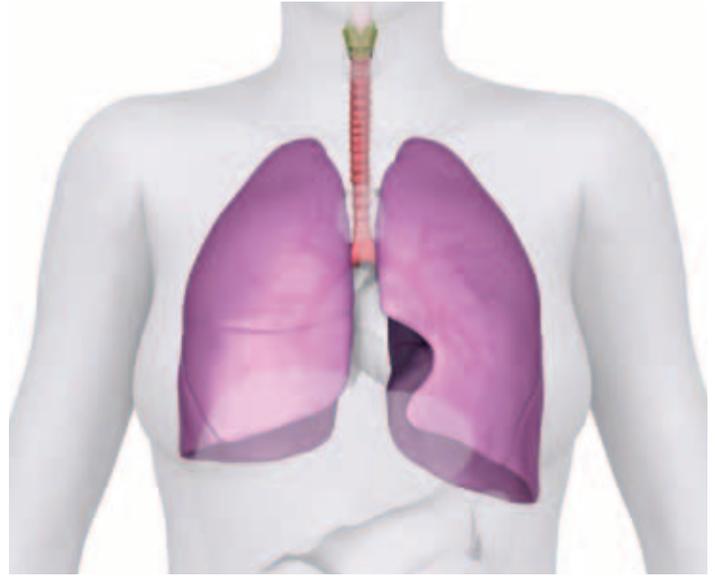
- ◆ Asking questions about your symptoms.
- ◆ Listening to your lungs.
- ◆ Taking a chest X-ray.
- ◆ Taking a blood or mucus sample.

More tests may be done if the pneumonia is severe or if you have other health problems.

How is it treated?

- ◆ **Bacterial pneumonia** is treated with antibiotics.
- ◆ **Viral pneumonia** can be treated with antiviral drugs.

Mild cases of pneumonia can be treated at home with medicine and rest. Most severe cases are treated in a hospital. In addition to medicine, oxygen and other methods are used to support breathing and body functions.



Model of human lungs

What can happen if pneumonia gets worse?

- ◆ The lungs cannot send enough oxygen to the body.
- ◆ Pus pockets and fluid can form around the lung.
- ◆ Infection can spread to other areas of the body.
- ◆ In severe cases, pneumonia can cause death.

There are at least 4 million cases of pneumonia every year in the U.S. One out of four will be sick enough to be admitted to a hospital. Adults 65 and older are more likely to be sicker and admitted to a hospital. One out of every 20 cases of pneumonia will be fatal.

Pneumonia causes more deaths than HIV/AIDS.

If you have pneumonia:

- ◆ Always finish all antibiotic or anti-viral treatment.
- ◆ Clean your hands often with soap and water or alcohol hand rub.
- ◆ Cough or sneeze into a tissue or into your sleeve.
- ◆ Do not share eating or drinking utensils, hand towels, or toothpaste.
- ◆ Clean surfaces often such as countertops, refrigerator and freezer handles, doorknobs, and light switches.
- ◆ Do not smoke.



How can you avoid pneumonia?

- ◆ Get vaccinated – there are several vaccines (like the flu shot) that can help prevent infection that leads to pneumonia. Talk to your health care provider to see if any of these vaccines are right for you.
- ◆ Keep your hands clean with soap and water or alcohol hand rub.
- ◆ Limit or avoid contact with people who are sick.
- ◆ Keep healthy. Eat the right foods and get enough sleep.

What about pregnancy?

Pneumonia can be more severe if you are pregnant. Tell your health care provider if you have signs of pneumonia during pregnancy. If you are pregnant, check with your health care provider before taking any medicine. Ask your provider which vaccinations you need before you get pregnant, or ones that you need during pregnancy.

For more on pneumonia see:

Centers for Disease Control and Prevention (CDC):

Pneumonia Can Be Prevented – Vaccines Can Help

www.cdc.gov/Features/Pneumonia/

Pneumococcal Vaccination

www.cdc.gov/vaccines/vpd-vac/pneumo/default.htm

Podcasts at CDC: Preventing Pneumonia

www2c.cdc.gov/podcasts/player.asp?f=268703

National Institute of Allergy and Infectious Diseases (NIAID/NIH):

Pneumococcal Pneumonia

www.niaid.nih.gov/topics/pneumonia/Pages/Default.aspx

U.S. National Library of Medicine:

Pneumonia

www.nlm.nih.gov/medlineplus/ency/article/000145.htm