



# Pneumonia

## What is pneumonia?

Pneumonia is a type of chest infection. It affects the tiny air sacs in your lungs, called alveoli. When you have pneumonia, these air sacs get inflamed and fill with fluid. This makes it harder for you to breathe.

More people get pneumonia in winter. This is because respiratory viral infections that spread easily from person to person, such as flu, are more common in the winter, and these increase your risk of developing pneumonia.

If you have a long-term lung condition, or care for someone who does, it's a good idea to have a flu jab every year. Flu can be very serious, and cause complications such as pneumonia.

The flu vaccine is usually free for people at risk and is available from your GP and many high street chemists. It's best to have your vaccine before the flu virus starts to circulate, which is usually mid-December.

Most people with pneumonia can be completely cured. But it can be life-threatening, and you should take it seriously even if you're young and fit.

## What causes pneumonia?

Many kinds of bacteria and viruses can cause pneumonia. The most common type of pneumonia is community-acquired pneumonia, which is when pneumonia affects somebody who is not already in hospital. The most common cause of community-acquired pneumonia is a bacterium called *Streptococcus pneumoniae* but there are many other causes. Community-acquired pneumonia is much less contagious than flu or a cold, because most people's immune systems can kill the bacteria that causes it before they can cause an infection. Most people with community-acquired pneumonia are unlikely to give the disease to another person.

As well as community-acquired pneumonia, other types include:

### **hospital-acquired pneumonia**

this is when pneumonia develops while you're in hospital being treated for another condition or having an operation. People in intensive care on breathing machines are at most risk.

## **viral pneumonia**

common causes include the flu in adults and respiratory syncytial virus, particularly in children; this form of pneumonia is often contagious and can spread to affect others

## **aspiration pneumonia**

this is when pneumonia is caused by food going down the wrong way, or inhaling vomit, a foreign object or harmful substance. It's fairly common in the elderly, or people who have conditions that cause swallowing difficulties or reduced level of consciousness

## **fungal pneumonia**

this is when pneumonia is caused by fungi. It's rare in the UK and more likely to affect people with a weakened immune system

You might also hear the term 'double pneumonia'. This means when you get pneumonia in both lungs. It's a term used in America.

## **Can you catch pneumonia more than once?**

Yes. Pneumonia is caused by many different microbes, and so getting it once does not protect you from getting it again. If you get pneumonia more than once you may need to have more investigations to understand why this has happened. It could be due to a problem in your chest or your immune system, and you may be referred to a specialist.

## What are the symptoms of pneumonia?

Yes. Pneumonia is caused by many different microbes, and so getting it once does not protect you from getting it again. If you get pneumonia more than once you may need to have more investigations to understand why this has happened. It could be due to a problem in your chest or your immune system, and you may be referred to a specialist.

If you have pneumonia, you'll have symptoms that are similar to having flu or a chest infection. Symptoms may develop gradually over a few days but can progress much faster.

The main symptom is coughing. You may feel generally unwell, weak and tired, and you'll probably have at least one of these symptoms too:

- coughing up mucus that may become yellow or green
- a high temperature – you might also sweat and shiver
- difficulty breathing or getting out of breath quicker than normal
- chest pain or discomfort
- loss of appetite

Even if you have pneumonia, you may not have all these symptoms. More severe cases may also cause:

- quick breathing
- confusion
- low blood pressure
- coughing up blood
- rapid heartbeat
- nausea and vomiting

Some people get a sharp pain in their chest when they breathe in and out. This may be because the thin lining between the lung and ribcage, called the pleura, is infected and inflamed. This inflammation, called pleurisy, stops your lungs moving smoothly as you breathe.

The symptoms of pneumonia are often very similar to those of other chest infections, such as bronchitis, COPD flare-ups or bronchiectasis flare-ups. To get a proper diagnosis you'll need to visit your GP.

If you feel unwell with these symptoms, see your GP or call 111. If you have chest pain, a rapid heartbeat, quick breathing, shivers or confusion, get urgent advice from your GP or call 999. Take extra care if you're over 65.

## What is most at risk of pneumonia?

You can get pneumonia at any age. Each year in the UK, about 5-11 adults out of every 1,000 get pneumonia.

Some groups of people are at higher risk from pneumonia. If you're in one of these groups, you should take extra care to reduce your chances of catching pneumonia.

People in these at-risk groups include:

- babies and young children
- people over 65
- people with long-term heart, lung, brain, liver or kidney diseases, or diabetes
- people with cancer, especially those having chemotherapy
- people who smoke or drink alcohol to excess
- people on drugs that suppress the immune system, and those with HIV

People in hospital for other problems sometimes develop pneumonia while they're there. This can be for several reasons including the use of mechanical ventilators, recent antibiotic use or because their resistance to infection has been weakened by other medical problems.

# How do you prevent pneumonia?

There are some things you can do to reduce your risk of pneumonia. These are important to follow if you have previously had pneumonia, to prevent developing it again.

## **Don't smoke**

Smokers have an increased risk of developing pneumonia as well as other chest infections – and so do children whose parents smoke.

## **Practise good hygiene**

Common winter viral infections increase the risk of pneumonia, so practise good hygiene to reduce the spread of germs. Use a tissue when you cough or sneeze and throw it in the bin straight away.

## **Avoid alcohol misuse**

Excessive alcohol misuse weakens your immune system, making you more susceptible to infections, including pneumonia.

## **Get vaccinated**

There are two types of vaccine available for pneumonia. They protect against the most common cause of pneumonia, the bacterium *Streptococcus pneumoniae*. They aim to protect people who are at a higher risk from pneumonia, including older people and babies.

- the pneumococcal polysaccharide vaccine (PPV) is for people over 65 and anyone over the age of two who's in a high-risk group. Most adults will only need to have this vaccination once in their life.
- the pneumococcal conjugate vaccine (PCV) is given to all infants by the NHS. Babies get their first dose when they're 2 months old.

If you're in a high-risk group, it's also a good idea to have a flu jab every year. [2] [21] It's usually free for people at risk and is available from your GP and many high street chemists.

To find out more about getting a pneumonia or flu jab, talk to your GP or call our helpline on **03000 030 555**.

# How is pneumonia diagnosed?

A doctor can often diagnose pneumonia based on the symptoms and by examining your chest. But you may need to have a chest X-ray to confirm that you have it.

Sometimes it can be difficult to tell whether you have pneumonia or another kind of chest infection. If it's not clear, your GP may do a blood test or take a sputum sample to help decide if you need antibiotics.

# How is pneumonia treated?

Pneumonia can be serious so it's important to get treatment quickly. The main treatment for pneumonia is **antibiotics**, along with **rest** and drinking **plenty of water**. If you have chest pain, you can take pain killers such as paracetamol.

Treatment depends on how severe your pneumonia is. Treatment with antibiotics should be started as soon as possible after diagnosis. If you're admitted to hospital, this should be within 4 hours of admission.

## Mild pneumonia

If you have mild pneumonia, you may be able to manage it at home with treatment from your GP, especially if you have support from family and friends. Your GP will prescribe a 5-day course of antibiotics, which you'll probably take as tablets. If you don't start to feel better after 3 days, tell your GP – you may need a longer course of antibiotics. [23]

## More severe pneumonia

Some people are too ill to be treated at home and need to go to hospital.

If you're too ill to drink and take tablets, you can have fluids and antibiotics through a drip in your arm. You'll also be given oxygen if you need it, and the hospital staff can regularly check your temperature and breathing.

You'll usually be given 2 different kinds of antibiotics at the same time, usually for 5 to 7 days but possibly up to 10 days. But you won't necessarily have to stay in hospital that long.

People who are in hospital for other medical problems and then develop pneumonia have a high risk of becoming very ill. They may need different, more powerful antibiotics.

It's very important to finish your full course of antibiotics – don't stop taking your antibiotics before the end of the course, even if you start to feel better.

# Complications caused by pneumonia

Pneumonia can sometimes have complications. They include:

- **pleurisy** – where the pleura, the thin linings between your lungs and ribcage, become inflamed, leading to chest pain. If you have pleurisy, you are more likely to develop fluid on the lungs.
- **fluid on the lungs** - about 1 in 10 people with pneumonia develop fluid around the lung, called a pleural effusion which can become infected. This may require a sample of the fluid to be taken by inserting a needle between the ribs under local anaesthetic, and if infected is likely to need a longer course of antibiotics. Occasionally, a tube is inserted into the lung to remove fluid as well.
- **a lung abscess** – a rare complication that's mostly seen in people with a serious pre-existing illness or history of alcohol misuse.
- **blood poisoning**, also called septicaemia - this is where infection spreads from the lungs to the blood stream. This can cause low blood pressure and a severe illness that might need intensive care treatment.
- **respiratory failure** – this is where pneumonia causes low levels of oxygen in the blood even in people given oxygen. This might also require intensive care treatment.

The vast majority of people recover from pneumonia and return to good health. However, pneumonia can be very serious and some people with severe pneumonia don't survive, despite the best available care. Those who are elderly or have other health problems are most at risk of severe or fatal pneumonia.

# Recovering from pneumonia

Pneumonia can be a serious illness that takes weeks or months to recover from.

Once you start taking antibiotics, your symptoms should begin to improve. Recovery times vary a lot from person to person and depend on your general health, age and how severe your pneumonia is. If you are diagnosed with pneumonia and your symptoms don't improve in 48 hours, or if they get any worse, call 111 or 999 for a reassessment.

It's impossible to say exactly how quickly you'll recover, but here's an idea of what to expect:

<b>1 week</b>	your fever should be gone
<b>4 weeks</b>	your chest will feel better and you'll produce less mucus
<b>6 weeks</b>	you'll cough less and find it easier to breathe
<b>3 months</b>	most of your symptoms should be gone, though you may still feel tired
<b>6 months</b>	you should feel back to normal

You'll recover gradually. You can help by eating well and doing some exercise including deep breathing exercises.

At first, you'll need plenty of rest. As you begin to feel better, you can start to be a bit more active, but don't push yourself too hard. Start off by getting out of bed and moving around for a few minutes each day. As your symptoms improve and you have more energy, you can increase your activity. Speak to your doctor about how much exercise you should do as you recover.

Exercising your lungs may also help. You can do this by taking long slow deep breaths or blowing through a straw into a glass of water. Deep breathing is also good for clearing the mucus from your lungs: breathe deeply 5 to 10 times and then cough or huff strongly a couple of times to move the mucus. Ask your doctor if breathing exercises could help you.

You can find out more about using breathing exercises to clear your lungs from the Association of Chartered Physiotherapists in Respiratory Care ([www.acprc.org.uk](http://www.acprc.org.uk)). They've produced an information leaflet about the Active cycle of breathing techniques that you can read.

If your symptoms are slow to disappear, if you're over 60 or you smoke, you should have a chest X-ray 6 weeks after you started your antibiotics. This is to check that the infection has gone from your lungs.

Get in touch with us to find support near you.

Helpline: 03000 030 555

Monday to Friday, 9am-5pm

Ringing our helpline will cost the same as a local call.

[helpline@blf.org.uk](mailto:helpline@blf.org.uk)

[blf.org.uk](https://blf.org.uk)

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We value feedback on our information. To let us know your views, and for the most up to date version of this information and references, call the helpline or visit **[blf.org.uk](https://blf.org.uk)**