

# Pneumonia in adults: diagnosis and management

Information for the public

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## About this information

NICE guidelines provide advice on the care and support that should be offered to people who use health and care services.

This information explains the advice about pneumonia in adults that is set out in NICE guideline CG191.

In September 2019 we withdrew some of the advice on antibiotics because it was replaced by advice in the [NICE guideline on pneumonia \(community-acquired\): antimicrobial prescribing](#) and the [NICE guideline on pneumonia \(hospital-acquired\): antimicrobial prescribing](#).

## Does this information apply to me?

Yes, if you have symptoms of pneumonia or have been diagnosed with pneumonia.

This information may also be useful if you are a family member or carer of a person who has or may have pneumonia.

It does not cover pneumonia that develops in people who:

- have a tube placed in their airway to help them breathe (called intubation) or
- are in an intensive care unit or
- have a weakened immune system (because of an immune system disease or caused by conditions such as HIV or cancer, or caused by drug treatment such as chemotherapy) or
- also have a lung condition called bronchiectasis or
- are nearing the end of their life.

## Pneumonia

Pneumonia is a type of chest infection. There are several different types of chest infection (including bronchitis), which can vary in severity. Pneumonia is caused by an infection of tiny air sacs in the lungs. When you have pneumonia these air sacs become inflamed (swollen) and filled with fluid. This makes it hard for your lungs to work properly.

The main symptom of pneumonia is usually a new cough along with at least 1 other symptom, such as:

- bringing up phlegm
- fever
- breathlessness or difficulty breathing
- chest discomfort or pain.

Doctors usually diagnose pneumonia by asking about your symptoms and examining your chest. If you are in hospital a chest X-ray is usually carried out to confirm the diagnosis.

Most pneumonia develops outside hospital, in the community (sometimes described as community-acquired pneumonia). However, sometimes people develop pneumonia while

they are in hospital with another problem (called hospital-acquired pneumonia). Most of the information here is for people who develop pneumonia outside hospital, although there is some information about treating pneumonia that starts in hospital (see [pneumonia that develops in hospital](#)).

## Your care team

A range of professionals who specialise in different areas of treatment or support may be involved in your care. These could include your GP, nurses and hospital doctors.

## Working with you

Your care team should talk with you about pneumonia. They should explain any tests, treatments or support you should be offered so that you can decide together what is best for you. Your family or carer can be involved in helping to make decisions, but only if you agree. There is a [list of questions](#) you can use to help you talk with your care team.

You may also like to read [NICE's information for the public on patient experience in adult NHS services](#). This sets out what adults should be able to expect when they use the NHS. We also have more information on the NICE website about [using health and social care services](#).

Some treatments or care described here may not be suitable for you. If you think that your treatment does not match this advice, talk to your care team.

## If you go to your GP with a chest infection

Symptoms of pneumonia are often very similar to those of other chest infections. If you go to your GP with symptoms of a chest infection it might not be clear whether you have pneumonia, even after your doctor has asked about your symptoms and examined your chest. If it's not clear whether you have pneumonia or another chest infection, you may be offered a blood test (called a C-reactive protein or CRP test) to help decide whether you need antibiotics. This test can be carried out quickly in the GP's surgery and only needs a few drops of blood.

## Treating pneumonia

If you have pneumonia, your doctor should assess how serious it is using your age, the symptoms you have and your blood pressure. This will help your doctor to decide whether you should be looked after at home or in hospital (although your doctor should also take into account other things that might affect where you should be cared for, such as any other health problems you have and whether you have support at home). It will also help your doctor to decide what treatment you should have.

## More severe pneumonia

If your pneumonia is more severe (called moderate or high severity), you may need to go into hospital for treatment. You should be offered blood and sputum (phlegm) tests, and possibly a urine test, to help find out what is causing your infection.

If you are being treated in hospital, one of the tests that you may be offered when you are first admitted is a blood test called a C-reactive protein (or CRP test). Your doctor should repeat this test if you are not getting better or your symptoms are worse after 2 or 3 days of antibiotics.

You shouldn't usually be offered treatment with a drug called a glucocorticosteroid (more often known as a steroid) unless you need it for another condition.

## What to expect after starting your antibiotics

Your doctor should explain to you that your symptoms should start to improve after taking antibiotics, but that some people get better quicker than others and this may depend on how severe your pneumonia is.

You should expect that after:

- 1 week your fever should be gone
- 4 weeks your chest will feel better and you will produce less phlegm
- 6 weeks you will be coughing less and finding it easier to breathe
- 3 months most of your symptoms will be gone, but you may still feel tired.

By 6 months you should feel back to normal.

Tell your doctor if you think your symptoms are getting worse or if they're not improving as expected.

## Before you leave hospital

If you are being cared for in hospital, your doctor or nurse should carry out some checks to help decide when you can go home.

You shouldn't usually be discharged if you have had 2 or more of the following problems in the past 24 hours:

- a high temperature
- a fast heart or breathing rate
- a low amount of oxygen in your blood
- low blood pressure
- confusion
- difficulty eating without help.

You might also have to stay longer in hospital if you have a temperature over 37.5°C.

## If you develop pneumonia while in hospital

If you develop pneumonia while you're in hospital or just after you're discharged, your treatment may be slightly different. This is because the types of infection that develop in hospitals are often different from those that develop outside hospitals.

# Questions to ask about pneumonia

These questions may help you when you are talking about your pneumonia and your treatment with your doctor or nurse.

## Finding out what's wrong (diagnosis)

- Can you tell me more about the tests or investigations you've offered me?
- What do these tests involve?
- Where will these be carried out? Will I need to have them in hospital?
- How long will it take to get the results of these tests?

## About your condition

- Can you tell me more about pneumonia?
- Is pneumonia infectious and if so what can I do to stop other people catching it from me? Can I go to work or carry on with my usual activities?
- Are there any support organisations in my local area?
- Can you provide any information for my family or carers?

## Treatment

- Can you tell me why you have decided to offer me this particular type of antibiotic?
- What are the pros and cons of this treatment?
- How long will I have to take it?
- How will it help me? What sort of improvements might I expect?
- How long will it take for me to feel better?
- Will these antibiotics cause any side effects?

- Are there any other treatments that I could have?
- Is there some other information about my treatment that I can have (like a leaflet, DVD or a website I can go to)?

## For family members, friends or carers

- What can I/we do to help and support the person with pneumonia?
- Do I need to take any precautions to avoid catching pneumonia from my family member or friend?
- Is there any additional support that I/we as carer(s) might benefit from or be entitled to?

## Following up on your treatment

- When should I start to feel better and what should I do if I don't start to feel better by then?
- Are there different treatments that I could try?
- If I've finished my course of antibiotics and don't feel better should I take them for longer?
- Am I likely to get pneumonia again?
- Can anything be done to stop it coming back?

## Sources of advice and support

- [The British Lung Foundation](#), 03000 030 555

You can also go to the [NHS website](#) for more information.

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## Accreditation

