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Chest Infection

A chest infection is an infection that affects your lower large airways (bronchi) and your lungs. Pneumonia and bronchitis are the most common chest infections. **Bronchitis** is usually caused by a viral infection, with between 1% and 10% of cases being caused by bacteria. **Pneumonia** is usually due to bacterial infection. Pneumonia may be serious and need hospital admission.



Chest infection symptoms

The main chest infection symptoms are:

- A chesty cough.
- Breathing difficulties (including shortness of breath and wheezing).
- Chest pain or tightness.
- High temperature.
- Headache.
- Muscle aches and pains.
- Feeling very tired.
- A rapid heartbeat.

A cold - often called an **upper respiratory tract infection (URTI)** - usually starts with a combination of blocked and/or runny nose and sneezing, sometimes with a mild high temperature (fever). You will usually get a cough, which is often dry and harsh but it can also sound like you have a lot of phlegm (sputum), which you may bring up. You may also feel tired and achy, but with the help of over-the-counter medications you'll be able to keep going with everyday activities.

Chest infections can start with these symptoms too, but you don't need to see a doctor if these are the only symptoms you have. The only exceptions are people with long-term health conditions affecting the lungs, like **chronic obstructive pulmonary disease (COPD)** and **bronchiectasis**. People with these conditions are more likely to develop serious complications.

How to treat a chest infection

Although most chest infections are mild and improve on their own, some cases can be very serious, even life-threatening. A bout of infection of the large airways (bronchi) in the lungs (acute bronchitis) usually **gets better on its own within 7-10 days without any medicines**. If you suspect that you have a severe infection of the lung (**pneumonia**), you should see a GP.

Antibiotics for a chest infection

Antibiotics are medicines used for infections caused by **germs (bacteria)** and don't work on viruses. Unless you have a long-term condition affecting your chest, your doctor is unlikely to prescribe antibiotics unless your symptoms and examination suggest you may have pneumonia.

How to treat a chest infection at home

If you have a chest infection, you should:

- Have plenty of rest.
- **Drink lots** to prevent your body becoming lacking in fluids (dehydrated) and to help loosen the mucus in your lungs and make it easier to cough up.
- Inhale steam vapour, perhaps with added menthol. Breathe in steam from a bowl of hot water - this can help to clear the mucus from your chest. Never use a bowl of hot water for a child's cough, in case they get scalded by accident; however, you could run a very hot bath to make the bathroom steamy and sit in the room with the child, safely away from the hot water.
- Sleeping with an extra pillow to avoid lying flat at night to help keep your chest clear of mucus and make it easier to breathe.
- Take [paracetamol](#), [ibuprofen](#) or [aspirin](#) to reduce high temperature and to ease any aches, pains and headaches. (**Note:** children aged less than 16 years should not take aspirin.)
- You should try to [stop smoking](#) for good if you smoke. Bronchitis, chest infections and serious lung diseases are more common in smokers as well as the long-term consequences such as lung disease, heart disease and cancer.
- If your throat is sore from coughing, you can relieve the discomfort with a warm drink of honey and lemon.

What about cold and cough medicines for a chest infection?

You can buy many cold and flu remedies and [cough medicines](#) at pharmacies. These will help to make you feel better and help you to carry on with normal activities, but won't make the infection go away more quickly.

What is the outlook?

Infection of the large airways (bronchi) in the lungs (acute bronchitis) usually clears without any complications. Occasionally, the infection travels to the lung tissue to cause a serious lung infection (pneumonia).

If you have pneumonia and are well enough to be looked after at home, your outlook is very good. If you need to be looked after in hospital, the outlook is still usually good - but not quite as good. The outlook is also not as good for people who also have long-term illnesses such as lung disease, heart failure or diabetes.

Do I need to see a doctor for a chest infection?

Infection of the large airways (bronchi) in the lungs ([acute bronchitis](#)) usually gets better by itself, so there is often no need to see a GP. If you have [asthma](#) or [COPD](#) you should take your doctor's advice. They may have given you recommendations about increasing your inhaler medication or taking a 'rescue pack' of antibiotics and steroid tablets at the first sign of an infection (much more common for those with COPD than asthma). If not, speak with them for advice if you develop chest infection symptoms.

There are a number of chest infection symptoms that mean you should see a GP even if you do not have any other lung problems. If your symptoms get worse, you should look out for these warning signs. They include:

- If a fever, wheezing or headache **becomes worse or severe**.
- If you **develop fast breathing, shortness of breath, or chest pains**.
- If you cough up blood or if your **phlegm becomes dark or rusty-coloured**.
- If you **become drowsy or confused**.
- If a cough **lasts for longer than 3-4 weeks**.
- If you have repeated bouts of acute bronchitis.
- If any other symptom develops that you are concerned about.

How is a chest infection diagnosed?

Your doctor will be able to make a diagnosis of a chest infection by listening to your story and examining you. They will ask about your symptoms and how you are feeling. They may also ask about your medical history and that of your family. They will be interested in whether you smoke, how much and for how long.

The examination may include checking your temperature. Sometimes your doctor will check how much oxygen is circulating around your body. This is done with a small device that sits on the end of your finger. The doctor will listen to your chest, so they may want you to lift or take off your top. If you want a chaperone during the examination, the doctor will arrange one. If you have asthma, they may ask you to check your peak flow measurement.

Often no tests are needed if you have infection of the large airways (bronchi) in the lungs (acute bronchitis) and your symptoms are mild. If your chest infection symptoms are more severe and you need to go to hospital then you may need to have the following tests:

- A [chest X-ray](#) may be taken to be sure of the diagnosis and to see how bad the infection is.
- Blood tests and phlegm (sputum) tests may be taken to find which germ (bacterium) is causing the serious lung infection ([pneumonia](#)). This helps to decide which antibiotic medicine is best to use. Sometimes the germ (bacterium) that is causing the pneumonia is resistant to the first antibiotic. A switch to another antibiotic is sometimes needed.

How to prevent a chest infection

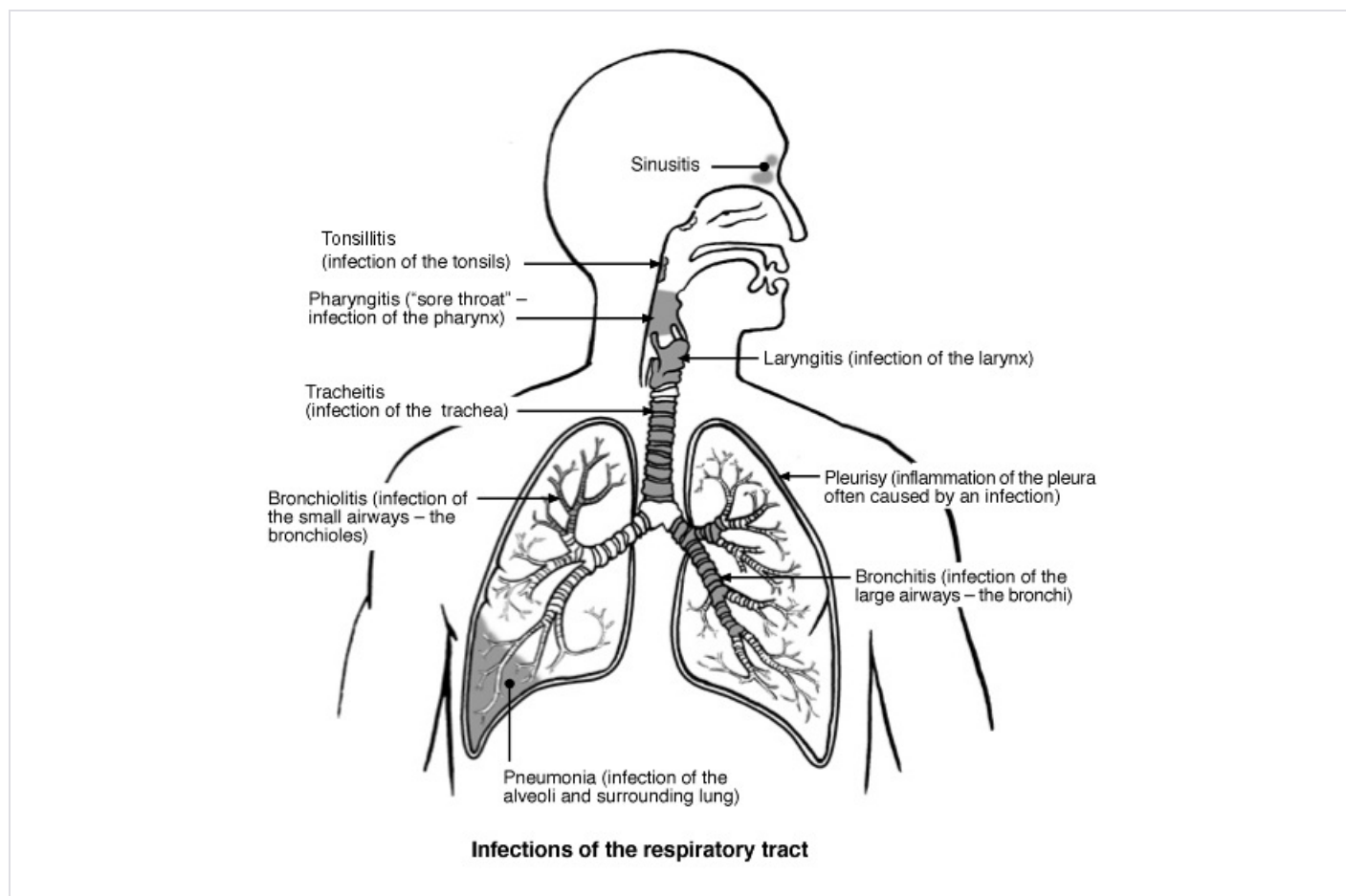
There are measures you can take to help prevent chest infections and to stop the spread of it to others. For instance, washing your hands regularly reduces the chance of germs getting into your system.

Are chest infections contagious?

You can pass a chest infection on to others through coughing and sneezing. So if you have a chest infection, it's important to cover your mouth when you cough or sneeze and to wash your hands regularly. You should throw away used tissues immediately.

What causes a chest infection?

The vast majority of URTIs are caused by viral infections. Your immune system will fight these off without any help within a few days. Because URTIs are caused by viruses rather than bacteria, antibiotics won't help in any way. [See the separate leaflet called Antibiotics.](#)



Sometimes an infection in the upper airways can spread deeper, causing a chest infection. Sometimes germs (bacteria) already living in your lungs can multiply, with the same result.

There are two main types of chest infection - acute bronchitis and pneumonia.

Acute bronchitis

Bronchitis is inflammation due to infection of the bronchi. '-itis' is the medical term for inflammation. It can be acute or chronic. Acute means lasting a short time and chronic means lasting a long time. Acute bronchitis is common and is often due to a viral infection. Infection with a germ (bacterium) is a less common cause. [See the separate leaflet called Acute Bronchitis for more details.](#)

Pneumonia

This is usually a bacterial infection of the lung (bacterial chest infection) and may be serious. Treatment with antibiotics is usually needed. [See the separate leaflet called Pneumonia for more details.](#)

Are chest infections common?

Chest infections are very common, especially during the autumn and winter. They often occur after a [cold](#) or [flu](#). Anyone can get a chest infection but they are more common in:

- Young children and the elderly.

- People who [smoke](#).
- Pregnant women.
- People with long-term chest problems such as [asthma](#), [COPD](#), [cystic fibrosis](#), [heart disease](#), [diabetes](#), [kidney disease](#) or [liver disease](#).
- People with an immune system that's weakened either by conditions such as some cancers (including [lymphoma](#), [myeloma](#) and [leukaemia](#)) or [AIDS](#); or by treatments such as high-dose [steroids](#), [chemotherapy](#) or other medicines that can suppress your immune system.

Further reading & references

- [Antibiotic awareness resources: key messages on antibiotic use](#); Public Health England (now UK Health Security Agency)
- [Chest infections - adult](#); NICE CKS, June 2021 (UK access only)

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Authored by: Dr Colin Tidy	Last updated by: Dr Toni Hazell	Peer reviewed by: Dr Colin Tidy	
Originally published: 07/05/2013	Last updated: 18/01/2023	Next review date: 17/01/2028	Document ID: 28459 (v5)

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