

# Angina

Understanding chest pain  
and discomfort



## What is angina?

Angina is a temporary chest discomfort or pain that usually happens during physical activity or extreme emotion and goes away after a few minutes of rest. The pain or discomfort associated with angina usually feels tight, gripping or squeezing, and can vary from mild to severe.

You usually feel angina in the centre of your chest, but it may spread to either or both of your shoulders, your back, neck, jaw or arm. You can even feel it in your hands. Sometimes you feel angina in the other areas of your body without feeling it in your chest. Many people do not even feel pain – just an unpleasant sensation or discomfort in their chest. You may also experience angina as shortness of breath, rather than pain.

## Is angina the same as a heart attack?

Angina is not the same as a heart attack.

Angina is associated with only a temporary reduction in your heart's blood supply while a heart attack is caused by a complete loss of blood flow to part of your heart muscle, generally due to a blood clot suddenly and completely blocking an already narrowed artery carrying blood to the heart.

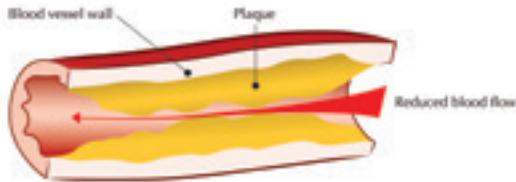
*Angina is a temporary chest discomfort or pain that usually happens during physical activity or extreme emotion and goes away after a few minutes of rest.*

	Angina	Heart attack
<b>Symptoms and pain</b>	Temporary chest discomfort or pain that usually happens during physical activity or extreme emotion and goes away after a few minutes of rest	A heart attack can happen at any time of the day or night, at rest or during physical activity  More common to feel nauseous or vomit
<b>Effect of medication</b>	Effectively relieved within a couple of minutes by resting and putting a dose of your angina medicine (nitrate spray or tablet prescribed by your doctor) under your tongue	Not completely relieved within 10 minutes of onset by rest and angina medicine, or if it is severe or gets worse quickly
<b>Damage to heart muscle</b>	Heart muscle may not be damaged	Heart muscle is permanently damaged

## What causes angina?

Angina is caused when the arteries that supply blood to your heart muscle become clogged with fatty material called 'plaque'. Plaque slowly builds up on the inner wall of the arteries, causing them to become narrow. If your arteries become too narrow, the blood supply to your heart muscle is reduced. Angina occurs when your heart has to work harder than usual, such as during physical activity or extreme emotion, but it can't get enough blood to meet its needs because of the reduced blood supply.

Angina does not happen all of the time because the blood supply to your heart muscle, although reduced, is usually able to keep up with your heart's demands.



## How do you know if you have angina?

Talk to your doctor to find out if you have angina. Your doctor will ask you about your symptoms, if you smoke, what you eat, how much physical activity you do and your family's medical history. Your doctor will measure your blood pressure and weight, listen to your heart and chest, and order blood tests to measure your cholesterol and glucose levels. You may have some other tests too, including an ECG (electrocardiogram), a chest X-ray and an exercise stress test.

You may also be referred to another doctor to have a coronary angiogram – a procedure involving an X-ray of your arteries carrying blood to the heart – to see if they are narrowed or blocked. If you have angina, this test will also help your doctor to decide the best treatment for you.



## What to do when you have angina

1. As soon as you have an episode of angina, immediately stop and rest.
2. If rest alone does not bring rapid or effective relief, take a dose of your angina medicine. Wait 5 minutes. Make sure that you are sitting or lying down before using your spray or tablet, because it can make you feel dizzy. It is best to find the smallest dose that usually works for you (e.g. a full, a half or even a quarter of a tablet).
  - Spray: one spray under the tongue will relieve angina quickly in most people.
  - Tablets: place the tablet under your tongue – do not swallow it. When your angina symptoms stop, spit out what is left of the tablet.
3. If the angina is not relieved within 5 minutes, take another dose of your angina medicine. Wait another 5 minutes.
4. If the angina:
  - is not completely relieved within 10 minutes or
  - is severe or
  - gets worse quickly

**Call Triple Zero (000)\* now! Ask for an ambulance. Don't hang up. Wait for advice from the operator.**

If you are having a heart attack, getting to hospital quickly can reduce the damage to your heart and increase your chance of survival. Don't ignore the warning signs! Get help fast. Every minute counts.

It is always better to go to hospital and be told it's not a heart attack than to stay at home until it is too late.

\*If calling Triple Zero (000) doesn't work from your mobile phone, try 112.

## How is angina treated?

Angina can be treated and managed with medicines and surgery, and by making healthier lifestyle choices.

Work closely with your doctor to find the best treatment for you. Agree on a suitable management plan and follow it to help to reduce your angina symptoms and your risk of more heart problems.

*You should take your medicines as prescribed by your doctor to help prevent, treat and manage angina and your risk of further heart problems.*

### Medicines

Taking medicines as prescribed by your doctor can help to prevent, treat and manage angina and your risk of further heart problems.

These medicines work in different ways and you may need to use a combination of them. However, taking more than one medicine can be confusing and difficult, so talk to your doctor or pharmacist if you have any questions.

### Angina medicines

Angina (or 'nitrate') medicines work by making the blood vessels in your body bigger ('dilated') to increase blood flow to your heart.

There are two types of nitrate medicines.

**Short-acting nitrate medicines** are absorbed through the lining of your mouth into your bloodstream to relieve angina symptoms within a few minutes. This is why they are called 'short-acting'.

Short-acting nitrate medicines can be a spray or a tablet that goes under your tongue. The most common is glyceryl trinitrate (sometimes called 'GTN').

If your doctor prescribes this type of nitrate medicine, make sure that you carry it with you all the time.

**Long-acting nitrate medicines** are different from short-acting nitrate medicines because they are used to reduce angina symptoms over time rather than relieve an angina episode within a few minutes.

Long-acting nitrate medicines often come as tablets that you swallow (not put under your tongue like short-acting nitrate medicines). You may need to take several doses a day to get the best effect, but always follow your doctor's directions.

This type of nitrate also comes as patches that let the medicine absorb through your skin gradually. Patches should only be worn for 10–12 hours every day (during the day or night, whenever you are most likely to get angina), so your body doesn't build up resistance to it. You can put the patches anywhere on your body, but change their position regularly so that you don't get a skin irritation.

## Side effects

You may feel a tingling or burning feeling in your mouth when you take short-acting nitrate medicines. You may also get a headache, a heavy feeling in your head, or a hot and flushed feeling. These are normal reactions and will usually go away.

If your headache is severe, try taking a smaller dose of medicine next time and spit out any undissolved part of the tablet once your angina symptoms go away.

Nitrate medicines temporarily lower your blood pressure so you may feel a bit faint. The best thing to do is to sit or lie down before you take it. If you feel faint, you may need to take a smaller dose next time.

Even if you experience side effects, it is still safe to take several sprays or tablets in a day, if you need to, to relieve the symptoms of angina.

## Storing medicine

Angina tablets can lose their effect if they aren't stored properly.

- Store tablets in their original glass container and protect them from moisture, light and heat.
- Don't throw out the cotton wool-like substance in the top of the container because it stops the tablets deteriorating.
- Don't carry tablets close to your body because the heat of your body will make them deteriorate. Instead, carry them in their container in a bag or put them in a special container that will help to protect them against heat. You can buy one of these special containers from a chemist.
- Throw away tablets three months after you open the bottle. Spray angina medicines must be 'primed' when they are opened and if they haven't been used for some time. To prime a spray, press the nozzle five times and spray it into the air. If you don't use the spray regularly, prime it once a week.

## Other medicines

### Aspirin

Small doses of aspirin are commonly prescribed if you have narrowed arteries carrying blood to the heart because aspirin can help to prevent clots forming in a narrowed artery.

Aspirin is generally very safe, but like all medicines, it can have side effects. For example, it can make stomach or duodenal ulcers worse. In a small number of people, aspirin can be dangerous. Therefore you should only take aspirin to reduce your risk of blood clots if your doctor tells you to.

If you can't take aspirin, your doctor might prescribe another anti-clotting (anti-coagulant) medicine.

## Cholesterol-lowering medicines

If you have angina, ask your doctor to regularly check your cholesterol.

Your doctor is likely to prescribe a cholesterol-lowering medicine, such as a statin, even if your cholesterol is in the 'normal' range.

## Beta-blockers

Beta-blockers lower your heart rate and blood pressure, and can be used to treat irregular heartbeats.

Like all medicines, beta-blockers can have side effects, such as making you feel more tired when you are doing physical activity, so you need to weigh up the risks and benefits of taking them.

## Calcium channel blockers

Calcium channel blockers work on your heart and blood vessels to lower your blood pressure.

## Remember

If you have any concerns about side effects, tell your doctor.

It is important that you work closely with your doctor to find the medicine (or medicines) that work best for you.

## Surgical treatments

Some people with angina may need to have surgery to help to relieve their angina symptoms.

### Coronary angioplasty

Coronary angioplasty is a medical procedure used to treat the arteries carrying blood to your heart (coronary arteries) that have narrowed due to the build-up of fatty tissue. During coronary angioplasty, a small balloon is inflated inside one or more of your coronary arteries to open up the narrowed area. This improves blood flow to your heart.

After angioplasty is performed to open a narrowed artery, a special expandable metal tube (a 'stent') is usually put into your artery, expanded and left in place to keep your artery open.

Many people won't have angina again after successful coronary angioplasty. However, some people's coronary artery might narrow again in the section where their angioplasty was done, often within 3–6 months. Other people might develop narrowing in a different section or in another coronary artery.

Either situation can lead to a return of angina symptoms.

Usually this can be treated successfully with another coronary angioplasty and stent procedure.

### Bypass surgery

Coronary artery bypass graft surgery (often shortened to 'CABG' and pronounced 'cabbage') is an operation that involves grafting a blood vessel from your chest, leg or forearm to your coronary artery to redirect blood flow around the most narrowed part of the artery. Bypass surgery improves blood flow to your heart muscle and reduces angina.

## Lifestyle changes

As well as taking your medicines as prescribed and having surgery, you can help to prevent angina and reduce your risk of further heart problems by:

- taking your medicines as directed by your doctor
- being smoke free
- achieving and maintaining a healthy body weight
- being physically active.



## Sex

Most people with angina can still have sex without any problems. This is particularly true if your angina is well managed by medicines and a healthy lifestyle. However, having sex can put strain on your heart, so if you have angina during sex, talk to your partner about finding a way to make sex less strenuous for you.

Remember to stop any activity, including sex, if you have any pain or discomfort in your chest.

If you have any questions, talk to your doctor.

## Working

Usually there is no medical reason for you to stop working if you have angina, if your angina is well managed by medicines and a healthy lifestyle. If you have angina at work, talk to your doctor and employer.

Your job might need to be adjusted to reduce physical and emotional strain.

## Alcohol

You are likely to be able to drink some alcohol if you have angina, but check with your doctor first. Overall, drinking too much alcohol is harmful and can interfere with how well some medicines work. If you are taking medicine to treat high blood pressure, have no more than one standard drink (for women) or two standard drinks (for men) a day. If you have chronic heart failure, you shouldn't drink at all, but if you do, have no more than 1–2 standard drinks a day. The important thing is that you talk to your doctor to find out what is right for you.

## What do I do if my angina gets worse?

Talk to your doctor if your angina:

- becomes more severe
- happens more often
- lasts longer
- doesn't respond as well to medicine
- happens with less exertion
- happens at night or when you are resting.

Also talk to your doctor about any other changing or new symptoms, such as increasing breathlessness, swollen feet or cold limbs.

If your symptoms don't go away within 10 minutes of rest and using your angina medicine, you may be having a heart attack. Call Triple Zero (000)\* immediately and ask for an ambulance.

\*If calling Triple Zero (000) does not work on your mobile phone, try 112.

### Want to know more?

For more information, call our Health Information Service on 1300 36 27 87 (local call cost) and talk to one of our trained health professionals. You can also visit [www.heartfoundation.org.au](http://www.heartfoundation.org.au)

## Will you recognise your heart attack?

Do you feel any

pain    pressure    heaviness    tightness

In one or more of your

chest    neck    jaw

arm/s    back    shoulder/s

You may also feel

nauseus    a cold sweat    dizzy    short breath

Yes

### 1. STOP

Rest now

### 2. TALK

Tell someone how you feel

#### If you take angina medicine

- Take a dose of your medicine.
- Wait 5 minutes. Still have symptoms? Take another dose of your medicine.
- Wait 5 minutes. Symptoms won't go away?

Are your symptoms severe or getting worse?

or

Have your symptoms lasted 10 minutes?

Yes

### 3. CALL 000\*

Triple Zero

- Ask for an ambulance.
- Don't hang up.
- Wait for the operator's instructions.

\*If calling Triple Zero (000) doesn't work on your mobile phone, try 112.



For heart health information,  
please contact us

1300 36 27 87

[heartfoundation.org.au](http://heartfoundation.org.au)

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