

Storing your medication

- Check the expiry date on all medications
- Store spray in a cool place
- If you keep a spare spray in the car it should be replaced after three years
- GTN tablets must be changed three months after opening
- GTN tablets lose their effect if they are too old which may be indicated by the absence of tingling in the mouth
- Keep GTN tablets stored in the refrigerator and in the bottle they were dispensed
- GTN tablets should not be exposed to warmth, light or air
- Do not throw out the specially-treated cotton wool packing in the bottle of GTN tablets
- For daily use, a few GTN tablets can be carried in a small airtight container. These GTN tablets should be thrown away after one week
- Carry your GTN spray or tablets at all times
- Always have a sufficient supply of medication on hand.

Looking after yourself

Dealing with angina is not just a matter of dealing with the symptoms.

- Look at all the risk factors for coronary heart disease, including: raised blood pressure, cigarette smoking, raised blood cholesterol, diabetes, excess weight and lack of physical activity
- Lifestyle changes will improve your heart health. These include seeing your doctor or nurse for regular check ups, taking your medications as prescribed, quitting smoking, being active every day, and taking steps to eat more heart healthy foods:
 - Eat plenty of fruit and vegetables
 - If choosing meat, make it lean; include fish as an alternative
 - Choose low fat milk
 - Replace butter with margarine and healthy oils
 - Reduce salt; check sodium on food labels.



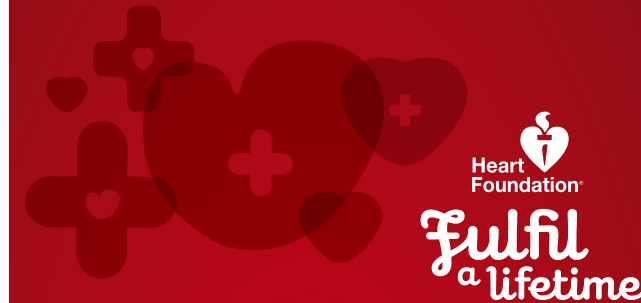
If your pattern of angina alters or worsens, discuss it with your doctor immediately.

What else can be done for angina?

Coronary artery bypass surgery or angioplasty (opening up the arteries with a special balloon) and stenting can also help control angina. An X-ray of the coronary arteries (angiogram) is required to decide whether surgery or angioplasty is necessary or possible.

What is the difference between angina and a heart attack?

- Angina symptoms are associated with a temporary reduction in blood flow to part of the heart muscle, leaving no damage to the muscle. Angina pain is relieved by rest and GTN spray or tablets. Angina that lasts more than 15 minutes will need more treatment.
- A heart attack results from a blockage in a coronary artery and causes permanent damage to the heart muscle. The pain associated with a heart attack usually lasts longer than fifteen minutes and is not relieved by GTN spray or tablets.



At the Heart Foundation we are unwavering in our determination to defeat heart disease – the disease that kills more New Zealanders than any other. But we can't do it alone. All the research we fund, materials we produce and activities we undertake, with the support of people like yourself, enable New Zealanders to learn about heart disease and make lifestyle changes, so that they can live heart healthy lives.

We want you to fulfil a lifetime and look forward to precious moments with those you love. You're not done yet. Neither are we.

With your help we can continue to produce high quality resources for New Zealanders affected by heart disease. To make a donation go to www.heartfoundation.org.nz/donate or contact us at:

Heart Foundation, PO Box 17160, Greenlane,
Auckland 1546
T 09 571 9191 F 09 571 9190
E info@heartfoundation.org.nz
www.heartfoundation.org.nz

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Managing your angina



Fulfil
a lifetime

What is angina?

Angina is a common symptom of heart disease. It is usually described as a discomfort or unpleasant feeling (sometimes like indigestion), tightness, pressure or weight on the chest and sometimes a feeling of breathlessness. Angina usually only lasts a few minutes and can be relieved by rest and/or medication.

Angina can affect people in different ways.

The symptoms may differ at various times, but it is usually felt across the centre of the chest. It may also be felt in either or both shoulders, the neck or jaw, down the inside of one or both arms and in the hands. Some people experience it in only one of these areas and not in the chest at all.

Angina is usually brought on by exertion, emotion, a heavy meal or cold weather. It can also occur at rest and can often be experienced at particular times of the day e.g. first thing in the morning, late afternoon or even during the night.

What causes angina?

In most cases, angina is caused by coronary artery disease. This occurs when fatty deposits build up under the inner lining of the coronary arteries, which supply blood to the heart muscle. As a result, these arteries become narrowed and the blood flow to the heart muscle is reduced. Angina occurs when the blood flow to the heart muscle is insufficient for the extra demands made on it. There is no damage to the heart muscle from an episode of angina.



Angina action plan



| Angina symptoms (occasional) | Action |
|--|---|
| When you get angina, stop what you are doing, sit down and take action. | Take 1 puff of your GTN spray or 1 GTN tablet, under your tongue. If the angina persists, you can repeat the dose safely every 5 minutes. But, if the angina is not relieved after 2 doses in 10 minutes – call an ambulance. DIAL 111 IMMEDIATELY. |
| When the angina is relieved by rest, or by your GTN spray or GTN tablet, you can resume your activities gently. | |
| Angina symptoms (regular pattern) | Action |
| If you get angina as part of your everyday life, for example: <ul style="list-style-type: none"> ■ Cold temperatures ■ Walking up hills ■ Mowing lawns ■ While showering ■ During sexual activity ■ While at work. | Use your GTN spray or GTN tablet a few minutes before attempting the activity that triggers your angina. If you are experiencing angina symptoms every day, consult your doctor so further treatment can be planned. |
| Change in angina symptoms | Action |
| If the pattern of your angina changes significantly in one or more of the following ways: <ul style="list-style-type: none"> ■ Frequency, severity ■ More prolonged ■ Occurs when you are doing very little or resting. | Consult your doctor within 24 hours. In the meantime, continue to use your GTN spray or GTN tablets. But, if the angina is not relieved after 2 doses in 10 minutes, call an ambulance. DIAL 111 IMMEDIATELY. |

Medications

Nitrates are the most common way to manage angina and are prescribed by a doctor. They relax the blood vessels, causing them to dilate and allow the blood to flow more freely.

Nitrates

| Short acting | Long acting |
|--------------|-------------|
| Spray | Tablets |
| Tablets | Patches |

Glyceryl trinitrate (GTN) spray

GTN spray gives a metered dose each time the button is pressed. The spray droplets are absorbed quickly and give an almost immediate effect. When you use your GTN spray, remember:

- Do not shake the canister
- Hold the canister upright
- Spray 1 or 2 puffs on, or under, the tongue
- Close the mouth.

Glyceryl trinitrate (GTN) tablets

GTN tablets are absorbed in the blood stream from the lining of the mouth. They do not work if they are just swallowed whole. ¼ or ½ a tablet may be enough to relieve your angina.

When using GTN tablets, remember:

- Place the tablet under your tongue and let it dissolve
- For a more rapid effect chew the tablet and let the pieces dissolve in your mouth
- Sometimes you may feel tingling in your mouth when taking GTN tablets.



Long-acting medication

Nitrate skin patches

These are the longest acting forms of nitrates and are absorbed through the skin.

- Place the patch on a different part of the skin each time
- Place it on the body trunk (front or back, upper arms or legs). Make sure skin is free of hair, rashes, cuts, scars or callouses
- Do not put the patch in a skin fold such as the elbow or under the breast

- Put on the daily skin patch at the same time each day. After a shower or bath, wait until the skin is completely dry before attaching the patch
- If the patch gets wet when swimming or bathing, it's okay. Water will not stop it working
- Keep skin patches at room temperature. Change as prescribed by the doctor.

Nitrate tablets or capsules

There are a variety of long-acting tablets that your doctor may prescribe. These medications are absorbed through the stomach instead of the mouth and have a longer-lasting effect.

Beta-blockers

Beta-blocker medication reduces the frequency of angina attacks. They slow the heart rate letting the heart pump more efficiently, which results in improved physical activity levels.

Calcium antagonists

These are further options for preventing angina symptoms. Calcium antagonists help to relax the arteries, allowing more blood to flow through, so the heart beats more efficiently.

All of these medications are prescribed by your doctor.

Side effects of medications

GTN tablets and sprays temporarily lower your blood pressure. As a result, you may feel faint, dizzy, flushed, and also get a headache, palpitations, or a feeling of fullness in the head. To avoid this:

- Sit down when taking your GTN tablets or spray
- Take ¼ or ½ a tablet or spit out the tablet once your symptoms are relieved
- Feeling faint can also be caused by taking the spray or a tablet when hot e.g. after a shower
- If you are taking longer-acting medications and experiencing these side effects, discuss them with your doctor
- Despite the side effects that can occur with these medications, they are safe to use and are not addictive
- Alcohol may be consumed while taking these medications. However, alcohol may increase the likelihood of faintness and dizziness
- Discuss any concerns about the side effects of medications with your doctor.