



Heart Attack



Heart
Research
Australia

What is a heart attack?

A heart attack usually occurs when an artery that supplies blood to the muscle of your heart becomes narrowed or blocked, starving the heart muscle of oxygen.

A heart attack is sometimes also called a myocardial infarction (MI), coronary occlusion or coronary thrombosis.

Heart attacks are caused when a build up of plaque (fatty, cholesterol-rich tissue) on the artery wall breaks.

A blood clot then forms to try and repair the damaged artery wall, and the clot creates a blockage in the artery, causing part of the heart muscle to be starved of blood and oxygen.

The longer the artery is left blocked, the more the heart muscle is damaged, and the more likely death becomes.

There are around 50,000 admissions to hospital each year due to heart attack¹.

More than 8,400 Australians die each year due to heart attacks – this equates to a staggering 23 deaths a day or one life lost every hour².

1. Australian Institute of Health and Welfare 2015. Australian hospital statistics 2014–15. Health services series no. 54. Cat. no. HSE 145. Canberra: AIHW.

2. Australian Bureau of Statistics. Causes of death 2016 (3303.0). September 2016.

What are the symptoms of a heart attack?

Heart attack symptoms differ from person to person, and can also be different for men and women.

Women may experience vaguer or 'non-specific' symptoms like shortness of breath, vomiting, sudden profuse sweating, and back or jaw pain.

Heart attack symptoms include:

- ♥ Dull pain, tightness or heaviness in the centre of your chest that becomes more severe and does not go away
- ♥ A squeezing or choking sensation
- ♥ Severe pain that is often described as 'crushing'
- ♥ Pain in the shoulders and/or arms
- ♥ Jaw and/or neck pain
- ♥ Shortness of breath
- ♥ Sick in the stomach, nausea or vomiting
- ♥ Sweating
- ♥ Dizziness or fainting
- ♥ Pain from the chest to the back
- ♥ Similar sensations to heartburn
- ♥ Sudden difficulty breathing
- ♥ Sudden overwhelming fatigue or weakness

If you experience any combination of these symptoms for more than a few minutes, immediately call 000 for an ambulance.

How is a heart attack diagnosed and treated?

Time is absolutely crucial when it comes to diagnosing and treating a heart attack.

Tests used to diagnose a heart attack include:

- ♥ Electrocardiogram (ECG)
- ♥ Troponin - a blood test that measures heart muscle damage
- ♥ Coronary angiogram
- ♥ Echocardiogram

The sooner the artery is unblocked, the better the outcome for the heart muscle, and for the long-term survival of the patient.

Treatment or procedures for a heart attack can include:

- ♥ Coronary angioplasty (a balloon to open a blockage and a stent to keep it open)
- ♥ Clot-busting medication
- ♥ Coronary bypass surgery

Having a heart attack can be a frightening, confusing and stressful experience, but with rapid hospital presentation and state-of-the-art treatment, many patients will have minimal or no complications after their heart attack, and will go on to make a full recovery.

What is the difference between a heart attack and cardiac arrest?

It is not uncommon for people to use the terms 'heart attack' and 'cardiac arrest' interchangeably, however they are not the same thing.

A **heart attack** is usually due to a circulatory problem where part of the heart suddenly becomes deprived of blood supply and therefore oxygen. The heart is still beating, and the person remains conscious and breathing. A person having a heart attack is at risk of experiencing a cardiac arrest.

Cardiac arrest is a severe malfunction in the heart rhythm caused by ventricular fibrillation (a very fast, quivering motion of the heart) or asystole (when the heart really does stop beating). It can occur in a person who may or may not have been previously diagnosed with heart disease.

A person experiencing a cardiac arrest will suddenly lose consciousness and their breathing will stop. Unless CPR is immediately performed, a person in cardiac arrest could die within minutes.

If you witness a cardiac arrest, you can increase the person's chances of survival by phoning 000 immediately, giving CPR and using a defibrillator if one is available.



For more information about heart conditions,
treatment and healthy living, please visit:

heartresearch.com.au/heart-hub

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