



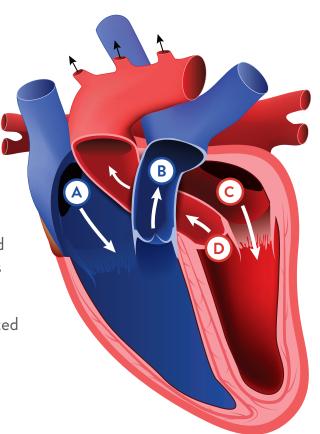


## HOW THE HEART WORKS

The heart is a muscle with four chambers that pumps blood to the whole body.

# Two chambers on the right side:

- A Receive deoxygenated blood from the organs and tissues
- B Pump the deoxygenated blood to the lungs to receive oxygen



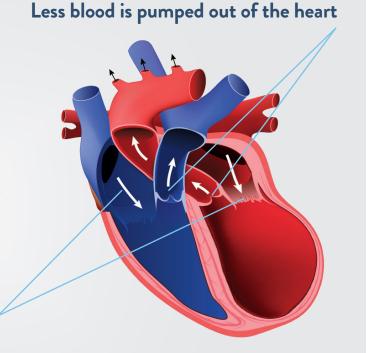
# Two chambers on the left side:

- Receive blood filled with oxygen from the lungs
- D Send oxygenated blood to the whole body

## Example of a damaged heart with heart failure

- Heart is bigger and out of shape
- Heart chambers are weaker
- Heart doesn't pump properly and blood stays in the heart longer
- · Heart might beat faster

Less blood is pumped into the heart



### UNDERSTANDING HEART FAILURE

Heart failure may sound alarming, but it doesn't mean that your heart has 'failed'

Heart failure is the term doctors use when your heart is unable to pump enough blood to the body, or your heart cannot fill properly with blood. Heart failure can affect the left or right side of the heart. The majority of people have left side heart failure and that is what this guide focuses on. Heart failure requires lifelong management and monitoring, but there are many options to help.

#### There are two types of heart failure:

- 1 Heart failure with reduced ejection fraction (HFrEF)
- The heart is weak and does not contract forcefully enough
- This means the heart is not able to pump enough blood around the body
- 2 Heart failure with preserved ejection fraction (HFpEF)
- The heart contracts well but is too stiff
- This means the heart does not relax to fill with enough blood between contractions

#### What is the ejection fraction?

This is the proportion of blood (as a percentage) which is pushed (ejected) from the left side of the heart to the body during each heartbeat. A normal ejection fraction pushes 55% or more of the blood from the chambers out into the body.

#### Normal heart ejection fraction



55% or more of the blood is pumped out of the heart

#### Heart failure ejection fraction



Less than 55% of the blood is pumped out so more blood is left in the heart

You may still be diagnosed with heart failure even if your ejection fraction is normal.

## CAUSES AND TREATMENT OF HEART FAILURE

#### Causes of heart failure include:



High blood pressure (hypertension)



Irregular heartbeat (arrhythmia)



Heart envelope disease (pericardial disease)



Diabetes



Severe lung disease



Heart defect since birth



The heart valves do not open or close properly



Weakened heart muscle from heart attacks



Anaemia, severe infection, hyperthyroidism, etc.



Toxins (e.g. alcohol, chemotherapy, cocaine)



Damage to the heart muscle from a viral or bacterial infection



Fatty deposits in arteries (coronary heart disease)

#### Treatment of heart failure

How heart failure is treated depends on several things, including your ejection fraction percentage, other medical conditions and your overall health.

Treatment options include:

- Medicine(s)
- Heart surgery
- Pacemaker or defibrillator
- Ventricular assist device (mechanical heart)
- Heart transplant

Living a healthy and active life is also important for keeping heart failure under control.



No matter what your treatment, the most important thing you can do if you have heart failure is follow your doctor's advice and keep track of your symptoms.

The symptoms of heart failure can be confused with other health conditions, so it's important to mention all your symptoms to your doctor.

#### 5 signs of possible heart failure:



Needing to sleep propped up on pillows so you can breathe at night

If you have difficulty breathing while lying flat at night it may be due to heart failure which can cause fluid to build up in the lungs.



Finding you are short of breath doing day-to-day activities like walking up stairs

If you find you need to catch your breath doing day-to-day activities this may be due to heart failure which can cause fluid to build up in the lungs.



Having swollen feet or ankles

If you have swollen feet or ankles it may be due to excess fluid building up. This can make your shoes tight and uncomfortable.



Persistent coughing without having a cold (dry and hacking cough)

Coughing is the body's way of clearing the fluid that has built up in the lungs.



Having to say no to hobbies and activities you used to enjoy e.g. gardening, playing with grandchildren or walking the dog

If you feel too tired or exhausted to do day-to-day activities it may be due to heart failure which can make it harder for the body to get the oxygen it needs.



If any of your symptoms are severe, or if you gain more than 2 kg in 2 days, please talk to your doctor as soon as possible.

# WHEN SHOULD YOU TALK TO YOUR DOCTOR?

If you experience any of the following, or you are concerned about any of your symptoms, contact your doctor as soon as possible:

- · New or increasing shortness of breath, especially when lying flat in bed
- · New or increasing cough, especially with pink or bloody phlegm
- New or increasing swelling (oedema) of the ankles, legs or abdomen
- · Weight gain of 2kg in 2 days
- Irregular heart rate, fast heart rate or palpitations
- Appearance or increase in dizziness

#### When should you call 000?

If you experience any of the following, or feel you need to go to hospital, call an ambulance or go to the emergency department of your nearest hospital as soon as possible:

- If you have pain in your chest, arm, jaw or back pain that doesn't go away
- Very severe shortness of breath
- Fast heart rate (palpitations) that doesn't stop when you rest and/or is associated with dizziness
- Loss of consciousness



For more information on living with heart failure speak to your doctor and visit the website heartfailure.com.au

The Heart Foundation also has a wealth of resources, information and support services. These are available at heartfoundation.org.au



