

HEART FAILURE



This Essential Guide is about heart failure.

It explains:

- What heart failure is, its causes and its symptoms.
- How heart failure can be treated and managed.
- How to manage heart failure in your day-to-day life.

This booklet **does not cover acute heart failure** (rapid onset of new or worsening symptoms of heart failure).

If you have acute heart failure, contact your GP or heart specialist nurse, or call 999 if you are concerned.

What is heart failure?

Heart failure is a condition in which your heart is unable to pump blood around the body properly. This might be because of muscle weakness, stiffness, or something else.

Heart failure is a long-term condition which may get worse over time. It can start at any time, but is most common in older people, and is more often seen in men than women.

Heart failure may also be called "reduced heart function" or "cardiomyopathy".

There is no reliable cure for heart failure, but you can treat the causes and manage the symptoms to improve your quality of life.

Heart failure is not as scary as it might sound, but it can cause symptoms that affect your life, and it is important to get it treated as soon as you can.

What causes heart failure?

It is not always clear what has caused heart failure

However, in many cases, heart failure is caused by an underlying heart condition or health event. If this can be identified, addressing the cause can sometimes help to treat heart failure.

The most common cause is a **heart attack**. This occurs when the blood vessels that supply the heart are blocked, either by fatty build-up or by a blood clot. This prevents oxygen from getting to the heart muscles, which can cause lasting damage.

According to Public Health Scotland, around **one in every thousand** Scots has heart failure

Heart failure can also be caused by other conditions, such as:

- Coronary heart disease the build-up of fatty deposits in the blood vessels).
- **High blood pressure** ("hypertension").
- Cardiomyopathy a disease of the heart muscle, which can be inherited or can develop during the course of your life.
- Diseases, damages, or defects in the heart, such as aortic stenosis, "hole in the heart", or an injury.
- o Infection of the heart valves or muscle (endocarditis or myocarditis).
- Severe anaemia, or iron deficiency.
- An uncontrolled or irregular heartbeat, which occurs in conditions like atrial fibrillation
- Misuse of alcohol or certain recreational drugs.
- Uncontrolled thyroid problems.

Symptoms of heart failure

Heart failure symptoms can come on suddenly, particularly after an event like a heart attack. However, it is more common for the symptoms to build up over weeks, months, or even years.

At first, you may only notice symptoms when you are active, but if your heart continues to weaken, you are likely to experience symptoms even when you are resting.

The most common symptoms are:

Breathlessness. You may find that you are short of breath when you have been exercising, or even when you are at rest. Many people with heart failure find that their breathlessness is worse when they are lying flat. If you are having issues with fluid retention, you may wake in the night needing to sit up to catch your breath.

Swelling in your ankles and/or legs. This condition, called oedema (ee-dee-ma), is caused by fluid building up in the lower parts of your body. Oedema can be helped by lifting your feet up higher than your hips while sitting or lying down.

Severe tiredness and fatigue. You might feel lethargic, tired, or otherwise lack energy.

Other, less common symptoms can also occur, such as:

- Loss of appetite.
- Dizziness, light-headedness, or fainting.
- A persistent cough, usually at the same time as breathlessness.
- Depression or mental health issues.

All of these symptoms can also be caused by other conditions, so you will need to be tested to see whether heart failure is the cause.



How is heart failure diagnosed?

If your doctor suspects you may have heart failure, they will do some medical tests to confirm whether this is the case.

What tests you are given will depend on a range of factors such as: laboratory services, how clear your results are, and whether you have additional health conditions.

The most common initial tests are:

- o Checking your pulse.
- Measuring your blood pressure.
- Blood tests and a urine sample to check your kidney, liver and thyroid function and check for diabetes and anaemia.
- A chest x-ray to identify any signs of heart failure and other possible causes of your symptoms.

If these tests still suggest heart failure, you might be given one or more of the following tests to find out for sure:

Electrocardiogram (ECG)

An ECG measures the electrical activity and rhythm of your heart, using electrodes stuck to your chest. It can show whether you have had a heart attack, or whether there is an irregularity in your heartbeat.

B-type natriuretic peptides (BNP) tests

These blood tests measure a hormone which is released when heart muscle is damaged, including in heart failure, so a high BNP level suggests heart failure.

Echocardiogram

An echocardiogram uses an ultrasound wand to image the inside of your heart in real time. This can provide information on the size of your heart, the structure of your heart while it is working, and how well the muscle and valves are working.

Heart failure severity

Heart failure is given a class from 1-4 based on the severity of your symptoms, using the **New York Heart Association (NYHA) Scale.**

Your rating on this scale is used to assess how much support and treatment you need, what is normal for you, and what will help you most going forwards. It also helps your medical team to track changes in your condition.

You may move up or down the scale as your symptoms change over time.



		Limitations	Symptoms
	1	No limitation of physical activity.	Ordinary physical exercise does not cause unusual tiredness, breathing difficulties or palpitations.
	2	Slight limitation of physical activity.	Comfortable at rest. Ordinary physical activity causes fatigue, palpitations or breathing difficulties.
	3	Marked limitation of physical activity.	Comfortable at rest but less than ordinary activity causes symptoms.
	4	Unable to carry out any physical activity without discomfort.	Symptoms are present even at rest; discomfort increases with any physical activity.

How is heart failure treated?

Treatment for heart failure focuses on managing your symptoms and making your heart stronger, which can be very effective. This can be done using one or more of:

- Medication;
- Implantable devices;
- Surgery.

Medication

There are many different medications for heart failure. What medicine and dose you are prescribed will depend on the causes and severity of your heart failure.

It may take time to find the best medication for you. It is normal for people with heart failure to try many different medications before finding what works. You may be on several different medicines. It may help to keep a note of when you started each one and what dose you are on. Using a pill organiser or dosette box can help to keep track of what medication you take and when.

Some medications used for heart failure are:

- Sacubitril/valsartan.
- Diuretics (also known as water tablets).
- Angiotensin-converting enzyme (ACE) inhibitors.
- Angiotensin receptor blockers (ARBs).
- o Beta-blockers (e.g. bisoprolol, carvedilol).
- **SGLT2 inhibitors** (if you have type 2 diabetes).
- Mineralocorticoid receptor antagonists (e.g. spironolactone, eplerenone).
- Ivabradine
- o Digoxin.
- Hydralazine/isosorbide dinitrate.

Implanted devices

There are four main types of device used to treat heart failure:

Pacemakers

A pacemaker is a small device fitted into your chest which uses small electrical pulses to keep your heartbeat regular. Getting a pacemaker implanted is a common procedure, and most people can leave the hospital within 24 hours of the procedure.

Cardiac resynchronisation therapy (CRT)

CRT is a special type of pacemaker which affects the left and right sides of your heart separately. There are two types of CRT:

CRT-P (P is for Pacing) works as a normal pacemaker while also delivering small pulses to the left and right side of the heart.

CRT-D (D is for Defibrillator) works similarly to a CRT-P, but can also deliver a larger shock to "reset" your heart if your heartbeat is unstable

Implantable cardiac defibrillator (ICD)

An ICD is a small device implanted in your chest, which monitors your heart rate and responds to unstable heartbeats with either a series of small electrical pulses or a larger electrical shock.

Left ventricular assistive device (LVAD)

An LVAD is a mechanical pump that helps the left ventricle pump blood around the body. An LVAD is used for people with severe heart failure and in some cases for those waiting for a heart transplant.

Open heart surgery is required to implant an LVAD, so it requires a more major procedure than the other devices, and you will probably be in hospital for a few days.

Surgery

If you have severe heart failure (Class 4) and other treatments are not controlling your condition, you may be referred to a specialist who will decide whether or not you need a heart transplant.

In a heart transplant, the heart of someone who has recently died will be used to replace your own heart. This is only appropriate in certain cases where the cause of your heart failure is damage to the heart itself.

After a heart transplant, you will have to stay in hospital for 2-4 weeks, and have regular follow-up appointments with your team.

You will also have to take medicines called **immunosuppressants** for the rest of your life.



These medicines stop your body from recognising the donated heart as something from outside your body and **rejecting** the organ.

Who will be involved in my care?

To make sure you receive the right treatment for your heart failure, you will be supported by your GP and a specialist team (sometimes called a multidisciplinary team or MDT).

Your MDT will discuss your treatment options with you.

You will be involved in any decision-making regarding your treatment.

The team may include some or all of:

- a cardiologist (heart doctor);
- a heart failure specialist nurse;
- a pharmacist;
- a physiotherapist;
- a psychologist;
- a physiologist;
- a palliative care specialist.



Managing your own health

Track your symptoms. It is important to know what symptoms are normal for you, how to recognise when things are getting worse, and when to go to a doctor.

Watch for:

- Sudden weight gain.
- Swelling of your legs or ankles.
- More breathlessness/coughing/wheezing.
- Feeling more tired than usual.

You can use the **Heart Failure Traffic Lights** booklet to support you. Speak to a specialist on what to do if your symptoms get worse.

Medication. It is important to take your medication regularly as prescribed.

Physical activity. Being physically active (in a safe, careful way) can help to strengthen your heart and improve your symptoms.

Diet. Eating a healthy, balanced diet is important to managing your symptoms. It is also important to keep your salt intake down. Aim to eat less than 6g of salt per day.

Monitor your weight. Weighing yourself daily can be a good way to see when your body is holding on to too much fluid. Let your GP or nurse know if your weight increases by more than 3 to 4lbs (1.5 to 2kg) over 2 days.

Fluid intake. Some people with heart failure will benefit from limiting the amount of fluid they take in each day. If you are not sure whether you should reduce your fluid intake, ask your doctor or heart failure nurse.

Alcohol and smoking. Both alcohol and smoking can cause or worsen heart failure, so any action you can take to limit your use of alcohol and tobacco can help.

Keep vaccines up to date. Heart failure can make you more vulnerable to infection, so it is important to keep your vaccinations current.

Life with heart failure

Relationships. Heart failure can affect your close relationships. It is important to be open and honest with friends and family. Many people with reduced heart function have difficulties with sex. Most people regain the ability to have sex after some time in recovery.

Mental wellbeing. Heart failure and the stress around it can affect your mental health. It is important to speak to someone if you feel low, depressed, or anxious.

Work. As long as you feel well enough, it is okay for you to return to work. If you need support or help to make work more manageable, you have the right to ask your employer to support you.

Driving. Most people are still able to drive after a diagnosis of heart failure. If your condition is severe or unstable, you will be required to report your condition to the DVLA.

Travel. Unless your medical team have told you otherwise, you should be safe to travel. However, avoid extreme climates (very hot, humid, cold, or high altitudes) as these can make your heart failure worse.

Managing your symptoms

CHSS has a range of booklets online at **chss.org.uk/resources-hub** which can help you to manage your symptoms and life with heart failure. Topics include:

Breathlessness

Fatigue and Tiredness

Mental Wellbeing

Driving with a Medical Condition

Financial Support

Holiday Information

Travel and Motor Insurance

Health and Life Insurance

Educational Support

Employment Rights

Advice and support

Besides your health team, you can find advice and support through:

- Support groups, in person or online.
- Friends and family.
- The organisations below.

Chest Heart and Stroke Scotland

Call **0808 801 0899** to speak to one of our trained Advice Line practitioners.

CHSS also has heart support groups all over Scotland. To find a support group near you, speak to the Advice Line or look on our website

www.chss.org.uk Email: adviceline@chss.org.uk Text NURSE to 66777

We also have information about heart failure and other related concerns on our Resources Hub: www.chss.org.uk/resources-hub

Heart Failure Hub Scotland

A clinical network which leads medical best practice for heart failure. A great source of information for professionals and patients.

www.heartfailurehubscotland.co.uk Email: info@heartfailurehubscotland.co.uk

Heart Failure Matters

An online resource from the European Society of Cardiology, providing in-depth information on heart failure.

www.heartfailurematters.org

British Society for Heart Failure

A UK-wide charity which pushes for better education and support for heart failure.

www.bsh.org.uk Tel: 0203 606 0798

British Heart Foundation

A UK-wide research and support organisation covering a range of heart conditions, and can offer personalised help.

www.bhf.org.uk Tel: 0808 802 1234 Our publications are available for free to anyone in Scotland who needs them. Go to **www.chss.org.uk/resources-hub** for all our resources, including other Essential Guides in this series.

For free, confidential advice and support from our **Advice Line nurses**, call: 0808 801 0899 (Mon-Fri 9.30am-4pm), text: NURSE to 66777 or email: adviceline@chss.org.uk.

Across Scotland, over one million people – that's one in five of us – are living with the effects of a chest, heart or stroke condition. We are here to help everyone who needs us. But we need your support to do this. Go to www.chss.org.uk/supportus to find out how you can help more people in Scotland.

If you would like this resource in an alternative format, please contact our Advice Line nurses.

Chest Heart & Stroke Scotland

NO LIFE HALF LIVED