

Heart Failure

What is it?

Heart failure is a condition in which **your heart can't pump enough blood to meet your body's needs.**

Usually, this is because your heart muscle is too weak to “squeeze” out enough blood with each beat. But heart failure can also happen when your heart gets stiff and can't fill up with enough blood between each beat.

Heart failure is **found most often in older people**, but it can happen to anyone at any age. It's a serious condition — and also quite common. Many people with heart failure continue to have a full and active life for many years after their diagnosis.

What are the symptoms?

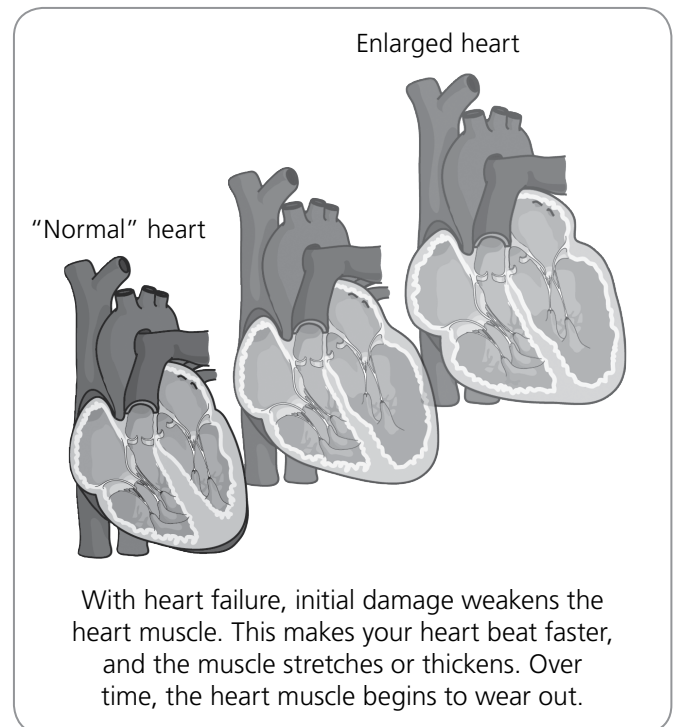
Symptoms of heart failure vary based on the type of heart failure you have. Common symptoms include:

- Shortness of breath
- Cough
- Feeling very tired and weak
- Weight gain (from fluid buildup)
- Swollen ankles, feet, belly, lower back, and fingers
- Puffiness or swelling around the eyes
- Trouble concentrating or remembering

The main cause of heart failure (heart muscle damage and weakness) cannot be cured, but symptoms can be managed. Good treatment and self-care can help keep your symptoms from getting worse.

What causes it?

Heart failure can be caused by anything that damages and weakens the heart muscle. But for 4 out of every 10 people, there is no known cause. Smoking, kidney disease, diabetes, and sleep apnea are all causes of heart failure. Here are the most common known causes of heart muscle damage:



- **Atherosclerosis (coronary artery disease).** Atherosclerosis is when the arteries that supply your heart with blood become narrowed by fatty plaque buildup. This restricts the amount of oxygen your heart gets and weakens the muscle. It can also cause a heart attack, which can damage your heart even more.
- **High blood pressure (hypertension).** Poorly controlled blood pressure makes your heart work harder to pump blood throughout your body. Over time, this extra work can wear out your heart and lead to heart failure.
- **Heart valve problems.** Heart valves control the one-way flow of blood through your heart. If valves are damaged or abnormal, your heart has to work harder to move blood throughout your body.
- **Alcohol or drug abuse.** Long-term use and abuse of alcohol or drugs can severely weaken your heart.

How is it diagnosed?

Your healthcare team will look at your symptoms, any other medical conditions you might have, and how those conditions are treated. Your team will also ask you about your daily life. They will also want to know if any other members of your family have had heart problems. Finally, they will order several tests that will help them figure out what's causing your symptoms. Some of those tests are:

- **Blood tests**, to count your red blood cells (RBC), check your electrolytes (minerals such as calcium, magnesium, and potassium in your blood), and to see if your kidneys, liver, and thyroid are working well.
- **Urine tests**, to see if problems with your kidneys or bladder may be adding to your heart failure.
- **Chest x-rays**, to check the size of your heart and see if you have fluid buildup in your lungs.
- **Electrocardiogram (EKG)**, to check the electrical activity of your heart.
- **Stress tests**, to see how your heart responds to stress. Exercise or certain medicines may be used to stress your heart.
- **Echocardiogram (echo)**, or ultrasound, to create images of your heart. An echo can tell your provider how well your heart is pumping, if your heart valves are working well, and how much your heart is enlarged. Echos are often used to measure your **ejection fraction (EF)**. EF is a measure of how much blood is pumped with each heart beat.
- **Angiogram**, to see how blood flows through your heart. An angiogram is done in a cardiac catheterization (cath) lab. During the test, a long, thin tube called a catheter is inserted through a blood vessel and guided into the heart. Dye is injected through the catheter, and special x-rays track how blood flows to and through your heart. This test is also used to diagnose coronary artery disease, or atherosclerosis, which is a cause of heart failure.

How is it treated?

You and your care team will create a plan to help keep your heart failure from getting worse. You get to help decide how much you can do. However, there are 5 important steps you can take that will help you live your healthiest life possible. We call this the **MAWDS-HF** plan:

- Take your **MEDICINES** as prescribed. Water pills can help you manage fluid build-up. Other medicines will help improve your condition.
- Be **ACTIVE** in some way, every day.
- Check your **WEIGHT** every day, and write it down. Do this at the same time each day, wearing the same clothes, to better see how your body is changing from day to day.
- Change your **DIET** by eating less than 2,000 milligrams (1 teaspoon) of sodium (salt) in all foods combined and drinking or eating less than 64 ounces (½ gallon) of liquid each day.
- Know your **SYMPTOMS** and when to call your provider for advice.

Besides these 5 steps, your care team will help you manage any other medical conditions that may make your heart failure worse. Your providers may also recommend certain procedures to treat your heart failure.

Managing your heart failure

To manage your heart failure well, you will need to make changes to your daily routines and learn new ways to manage your health. These changes will be written out for you in your heart failure action plan. Together, you and your care team will decide what those changes need to be and how you can work them into your life.

Ask a member of your care team for a copy of the *MAWDS Heart Failure Self-Care Diary* as well as the *Living with Heart Failure* booklet and DVD. These tools — along with your heart failure action plan — will answer many of your questions and show you how to live your healthiest life possible.