

# Heart Failure

## What is heart failure?

Heart failure (HF) means the heart is not pumping blood as well as it should. It may pump at a different speed, pump blood out with less force, or pump out less blood with each beat. Blood backs up in the blood vessels. The extra fluid in the blood vessels seeps into the lungs or other parts of the body. When fluid seeps into the lungs, it makes it hard to breathe. This is called congestion and it's why heart failure is sometimes called congestive heart failure. Fluid seeping into other parts of the body causes swelling. When there is too much fluid in the body, it puts even more strain on the heart. Also, when there is less blood flow out of the heart to the body, muscles and other tissues may not get enough oxygen. This can make you feel tired. Heart failure is one of the most common causes of heart-related illness and death in the US.

## How does it occur?

A number of things can cause heart failure, such as:

- coronary artery disease (blockage in the coronary arteries)
- a heart infection
- heart attack
- high blood pressure
- heart valve problems
- genetic problems with the heart muscle
- alcoholism
- diabetes
- lung disease.

The following factors may worsen or trigger heart failure, especially if your heart muscle is weak:

- severe anemia (low levels of red blood cells or hemoglobin, the chemical that carries oxygen in the blood)
- hyperthyroidism (an overactive thyroid gland)
- hypothyroidism (an underactive thyroid gland)
- high fever
- rapid heartbeat
- too much salt in the diet
- drinking too much fluid
- working your body too hard
- emotional stress.

## What are the symptoms?

The main symptoms of heart failure are:

- shortness of breath or trouble breathing, at first during exercise and later with any activity or even when you are resting
- waking up at night with trouble breathing or having a hard time lying flat in bed because of

- shortness of breath
- coughing
- swollen ankles, feet, and legs
- weight gain caused by extra fluid in the body
- feeling tired most of the time and not able to do your usual activities
- lack of appetite and nausea
- fast heartbeat.

You may have just some of these symptoms, or you may have different symptoms at different times.

## How is it diagnosed?

Your healthcare provider will ask about your symptoms and examine you. You may have tests, such as:

- a chest X-ray to look for fluid in the lungs and to see the size of your heart
- an electrocardiogram (ECG), which is a recording of the electrical activity of your heart
- blood or urine tests
- an echocardiogram, which is a sound-wave (ultrasound) test that can show heart size, heart function, and possible heart valve disease.

## How is it treated?

Heart failure can be treated and managed and, depending on the cause, may be cured. The goals of treatment are:

- Reduce the workload on your heart.
- Get rid of extra water in your body.
- Help your heart pump blood better.

Any problems that make your condition worse will be treated. You will probably take a combination of drugs. Medicines your healthcare provider may prescribe for heart failure are:

- ACE (angiotensin-converting enzyme) inhibitor drugs. These drugs help blood vessels relax and open up. This lowers blood pressure by making it easier for blood to flow through the blood vessels. When blood pressure is lower, the heart doesn't have to work as hard. The heart can pump blood more effectively.
- ARB (angiotensin receptor blocker): For most people, an ACE inhibitor is the best choice, but an ARB may be prescribed you cannot take an ACE inhibitor.
- Hydralazine with isosorbide: This combination of medicines may be prescribed if you are unable to take either an ACE inhibitor or ARB or if you need a third type of medicine. It has been found in studies to be especially helpful for African Americans with severe heart failure.

Other medicines that may be prescribed include:

- Beta blockers, which make the heart beat more slowly and with less force. As a result, the heart does not have to work as hard. Your healthcare provider will start you on a small dose and increase your dose slowly over a few weeks.
- Digoxin, which can slow your heart rate and help your heart muscle work better.
- Diuretics (water pills), which control swelling and water buildup by helping your body get rid of extra fluid.

- Other drugs that lower blood pressure so the heart doesn't have to work as hard.
- Medicines that replace the potassium that may be lost in your urine when you are taking water pills and urinating a lot. (Potassium is a mineral that helps maintain normal heart rhythm.)

Ask your healthcare provider about possible side effects of the drugs prescribed for you. Report any side effects to your provider right away. Take all of the medicine prescribed according to your provider's instructions, even when you feel better. You may need to have a low-salt (low-sodium) diet. Too much sodium makes your body keep too much water, which increases the workload on your heart. Be careful about taking nonprescription drugs because some have a lot of sodium. Ask your provider which nonprescription medicines are safe to use. How active you can be depends on how bad the heart failure is. A program of gentle exercise helps most people.

## How long do the effects last?

In some cases, heart failure can get better and even cured. For example, if your cardiomyopathy is caused by an infection, it may be cured with treatment of the infection. Heart failure due to coronary artery disease is generally not cured and most often gets worse over time. However, carefully following your treatment plan can:

- Slow down the worsening of heart failure and help you live longer.
- Help prevent trips to the hospital.
- Help you feel better and do more.

## How can I take care of myself?

Learn to live within the limits of your condition. The following guidelines may help:

- Work as a partner with your provider. This means having regular provider visits and following your treatment plan.
- Take your medicines exactly as your provider tells you to. Don't stop taking prescribed medicines without first asking your provider. Find a way to make sure that you take your medicines on time.
- Weigh yourself and write down your weight every day. Weigh yourself in the morning after you use the bathroom but before you eat or drink anything. Keep track of your weight in a diary or on the calendar. Tell your healthcare provider as soon as possible if you gain 3 or more pounds in 1 day or 5 or more pounds in 1 week, or if you keep gaining weight over weeks to months. Weighing yourself every day helps you know if extra fluid is building up in your body. A buildup of fluid is a sign that your heart failure may be getting worse. Weight gain can let you know about fluid build-up before swelling. (The average person can hold about 8 to 15 extra pounds of fluid before swelling shows.) Letting your provider know about weight gain when it first happens can save you a trip to the emergency room or a stay in the hospital.
- Follow a low-sodium diet. You should have no more than 1500 milligrams (mg) of sodium a day.
- Be careful about adding salt substitutes to your food. Many contain high levels of potassium. Some of the medicines used to treat heart failure raise the levels of potassium in your blood. Salt substitutes may raise the potassium levels too much.
- Be as physically active as you can. Your provider can tell you what level of exercise is right for you. Exercise helps your heart and body get stronger. It also improves your blood flow and energy level. Don't exercise outdoors if it is very hot, cold, or humid. Balance exercise with rest. Make sure that your activities do not make you too tired or short of breath.
- Get enough rest. Take rest breaks during the day. Shorten your working hours if possible and try to lessen the stress in your life. Anxiety and anger can cause a fast heart rate and high blood

pressure. If you need help with this, ask your healthcare provider.

- Avoid the use of NSAIDs (for example, medicines such as Advil, Motrin, ibuprofen, and aspirin other than low doses for heart protection). NSAIDs can make heart failure worse.
- Ask your provider if you should avoid drinking alcohol. Alcohol can weaken your heart or may worsen heart failure. Also, some of your medicines may not work well if you drink alcohol.
- Lose weight if you are overweight.
- Check your pulse and blood pressure every day. Learn how to take your own blood pressure or have a family member learn how to take it.
- Watch for the symptoms that can happen when your body is losing too much potassium. The symptoms include muscle cramps, muscle weakness, irritability, and sometimes irregular heartbeat.
- Follow your healthcare provider's advice about how much liquid you should drink.
- Check your diet plan and list of foods before you prepare snacks or meals for yourself.
- Quit smoking if you are a smoker.
- Avoid getting very hot or cold because it may cause your heart to work harder.
- Get a flu shot every year. When you have heart failure, you should not get the nasal spray vaccine (FluMist).
- Get the pneumonia shot. If you are age 65 or older, you may need a second shot if you had your first shot before age 65 and it has been more than 5 years since the first shot. Ask your healthcare provider.
- Keep all medical appointments even when you are feeling well.

Noticing the early signs of worsening heart failure can save you a trip to the hospital. It is very important to call your healthcare provider if you have symptoms of worsening heart failure. Call your healthcare provider or 911 for emergency care right away if:

- You have chest pain or pressure, or neck or arm pain.
- You feel dizzy or faint or pass out.
- You are having trouble breathing.

Call your provider as soon as possible if you have these less urgent symptoms of worsening heart failure:

- sudden weight gain of 3 pounds in 1 day or 5 pounds in a week
- more shortness of breath than usual
- trouble sleeping (waking up short of breath, using more pillows, need to sleep sitting up)
- frequent cough
- cough that brings up pink, foamy sputum
- much more tiredness than usual
- a feeling that your heart is racing or fluttering

Also call your provider if you have a fever. Check with your provider to see if there are other symptoms you should call about. @ Published by RelayHealth.

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