

Understanding Heart Failure

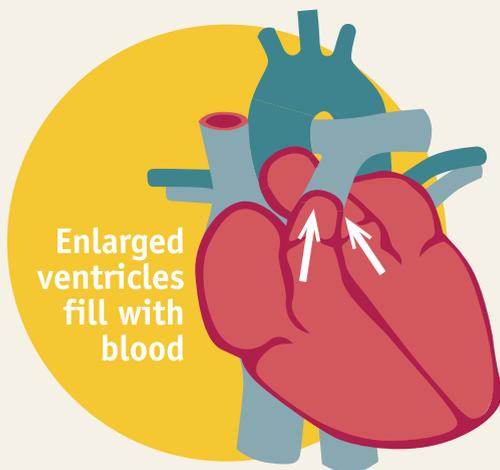


For more information, visit
[CardioSmart.org/HeartFailure](https://www.cardiosmart.org/HeartFailure)

Heart Failure: A problem with how your heart pumps.

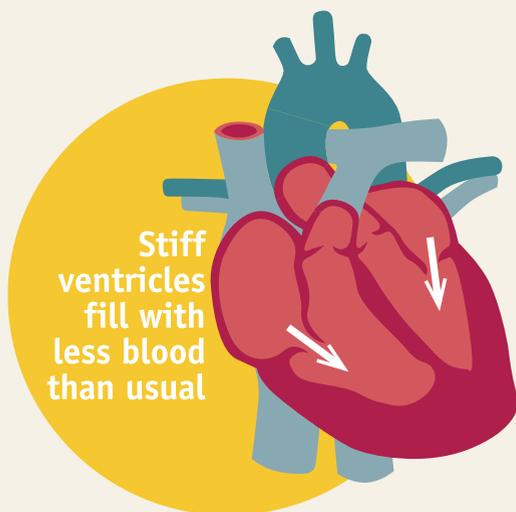
Systolic Heart Failure

The heart can't pump enough blood out to the rest of the body.



Diastolic Heart Failure

The heart can't fill with enough blood.



Your heart is a pump. It moves blood and oxygen-rich nutrients through our bodies.

If you have heart failure, your heart isn't pumping as well as it should. As a result, fluid can build up in the body—most often in the legs and lungs; your heart also isn't able to push enough blood to meet your body's needs for blood and oxygen. It's no wonder then that if you have heart failure, you may tire more easily and feel short of breath.

About heart failure

With heart failure, the heart muscle:

- **Is too weak and cannot pump blood to the rest of the body with enough force (systolic failure)**
- and/or
- **Has trouble relaxing and can't fill with enough blood (diastolic failure)**

If you or a loved one has heart failure, you're not alone. Nearly 6 million Americans have heart failure, and there are another 500,000 new cases diagnosed each year. It's also the leading reason people 65 years of age and older end up in the hospital.

Heart failure is a serious, lifelong condition. But by managing heart failure, people can live normal lives. The hope is to try to avoid emergency or "acute" episodes when someone would need to be in the hospital and to generally improve a patient's quality of life and ability to do the things they usually do.

Almost
**6 million
Americans**
have heart failure

It is the
**leading
cause of
hospitalization**
for people 65+



Who gets it?

Some people are more likely to develop heart failure. For example, because the heart's squeezing ability tends to grow weaker over time, heart failure is more common as we age. Still, heart failure can affect people of all ages.

Other factors or conditions that can put you at risk include:

- **Previous heart attack**
- **High blood pressure**
- **Diabetes**
- **Valve problems**
- **Certain congenital heart defects or other heart conditions that have damaged or place added strain on the heart**
- **Family history**

- **Some treatments for cancer (chemotherapy), certain thyroid conditions, and heavy alcohol or drug use have also been linked to damage to the heart muscle**
- **Being overweight or obese can contribute to diabetes and high blood pressure, which over time can cause heart failure**
- **African Americans are more likely to develop heart failure; women tend to have more severe symptoms**
- **“Broken Heart Syndrome,” also known as takotsubo cardiomyopathy, which is usually brought on by severe stress**

What does it feel like?

Many people who have heart failure will have:

- **Shortness of breath (even when doing simple tasks like dressing or walking a flight of stairs)**
- **Swelling in the ankles, feet, legs, abdomen, or veins in the neck**
- **Extreme tiredness (fatigue)**
- **Feelings of weakness**
- **Rapid or irregular heartbeat**
- **Fast weight gain, or rapid fluctuations**
- **Pressure or heaviness in the chest when lying flat**

Late in the disease people may notice:

- **A lack of appetite or that they feel full more quickly**
- **Weight loss (cardiac cachexia)**

How is it diagnosed?

Heart Failure is usually detected after a review of your full medical history, a physical exam and results from blood and/or cardiac imaging tests. Many patients first learn they have heart failure after going to the emergency room or hospital with symptoms, often shortness of breath with or without swelling.

Blood and/or imaging tests are used to assess any damage to your heart and to check how well it pumps blood. Your doctor may decide to order:

- **B-type natriuretic peptide (BNP)—this is a simple blood test that's a good initial test if someone has symptoms such as shortness of breath, but it is unclear if the heart is the reason**



- **Standard blood tests such as kidney function, electrolytes, and thyroid function**
- **EKG, chest X-ray**
- **Heart imaging—usually an echocardiogram (ultrasound), or possibly a cardiac MRI scan**
- **Cardiac catheterization, if needed**

Many of these tests will be repeated over time to determine if your heart function is the same, better or worse with treatment.

Managing heart failure

Heart failure is a lifelong condition that needs to be managed. There are a number of treatment options, which will ultimately depend on:

- **The underlying reason for the heart failure—for example, if you have a prior heart attack, high blood pressure or valve problem**
- **Your type of heart failure—often based on your ejection fraction or the proportion of blood that is pumped out of the heart with each contraction (55% is considered normal).**
- **How severe your heart failure is—there is a very wide range of severity from very mild to extremely severe.**
- **Other existing conditions such as what your kidney function is.**

Treatment generally includes a combination of lifestyle changes, medications, cardiac rehab, and procedures.

Adopt healthier habits everyday

When you live with heart failure, you must take steps to make your health a priority. Simple lifestyle changes can help support your heart health. That means finding ways to:

- **Eat low salt, low-fat foods**
- **Exercise regularly**
- **Not smoke**
- **Lose weight if you need to**
- **Monitor your fluid intake (ask how much water or fluid you can drink each day)**
- **Keep other conditions in check—many people with heart failure also have other health issues such as high blood pressure, diabetes, chronic obstructive pulmonary disease**



Medications

Medications are an important part of treating heart failure. Your doctor may recommend one or a combination of the following:

- **Diuretics (water or fluid pills) help keep fluid from building up in your body or lungs—they will also make you urinate more frequently**
- **ACE inhibitors/ARB relax your blood vessels to lower blood pressure and reduce strain on your heart and improve blood flow**
- **Aldosterone antagonists help the body to get rid of salt and water through urine—this lowers the volume of blood that the heart must pump**
- **Beta blockers can slow a rapid heart rate and lower your blood pressure**
- **Digoxin can make you feel better and may make the heart pump better**

- **Nitrates and hydralazine, a combination that**
 - **Has shown to improve outcomes in African American persons**
 - **Is often used if someone is allergic to or can't take ACE inhibitors or ARBs**

Cardiac Rehabilitation

Cardiac rehabilitation provides you with a supervised exercise program that's geared toward your fitness level and health needs. It also provides a support system to help you adopt lifelong healthy behaviors and monitor your progress.

Cardiac rehab was recently approved for patients living with heart failure. Participating in this program can help you feel better, make your heart stronger and may reduce your need to go to the hospital.



Devices

Many people with heart failure also have a problem with the way their heart beats (arrhythmia). Many patients with a low ejection fraction—when the amount of blood the heart is able to squeeze out is much less than what it normally would be—may benefit from small electric devices implanted in the chest, just under the skin with wires going to the heart. These devices can be useful to prevent sudden cardiac death or help the heart beat in a more coordinated manner in select patients.

- **Implantable cardioverter defibrillator (ICD)—a battery-powered device that keeps track of your heart rate and releases an electric shock if it detects a dangerously fast heart rate, resetting the heart rhythm**
- **Cardiac resynchronization therapy (CRT)—this small device is implanted just below the collarbone. It sends electric signals to the lower chambers of the heart so that they beat together in a more synchronized way, helping the heart to pump better.**

Studies show that these devices can help improve quality of life and may prolong survival in properly selected patients.

For very late stages of the disease, a person may need a left ventricular assist device—a mechanical heart pump—to help the heart move blood through the body. This is often used in individuals who are awaiting a heart transplant.

Implantable Cardioverter Defibrillator (ICD)



Following your treatment plan is essential

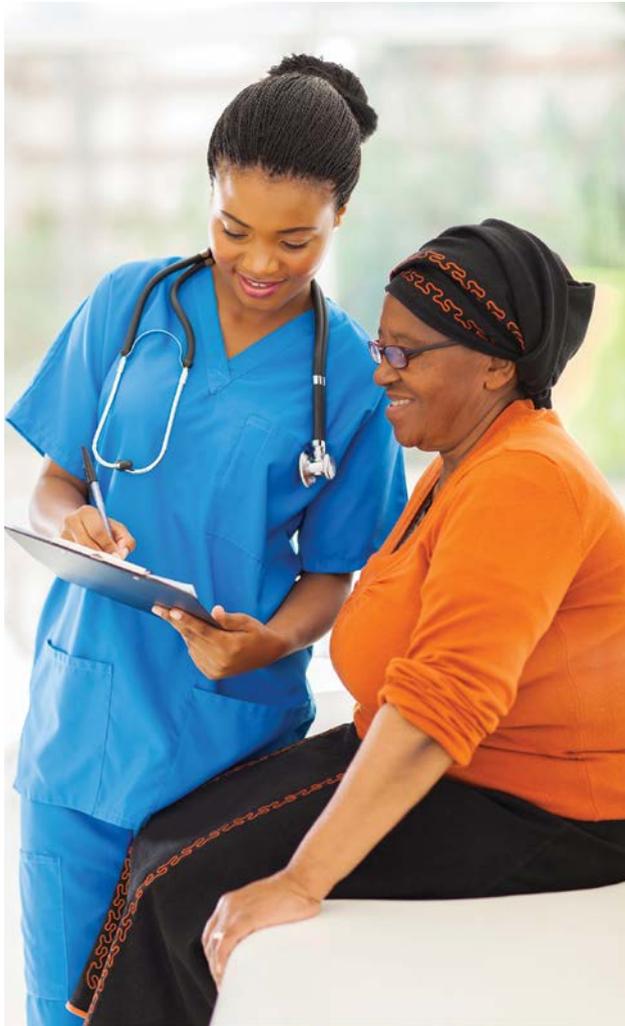
Remember that managing heart failure means ongoing care and monitoring of your health. Be sure to keep any follow up appointments and tests. Following a low-salt diet and taking your medications reliably is very important. It's often helpful to keep a log with your daily weight, blood pressure and physical activity.

Today, there are many life-saving medications and therapies that help people live well with the disease.



Tips for living with heart failure

- Create a support team
- Check and record your weight every day, along with a log of your daily blood pressure and exercise
- Listen to your body and know when the condition might be getting worse. For example, do you notice:
 - Swelling
 - Rapid weight gain
 - Labored breathing, especially when laying down
 - Not being able to concentrate
- Report problems right away—stay connected with your heart failure team and report changes in weight or new symptoms
- Accept your new normal
 - Stay connected to the things you love to do, even if it means you might need to participate in a different way or cut back a bit
 - It's ok if daily tasks seem to take longer
- Share your concerns—for example, many people are scared about over-exerting their heart, but exercise is very important
- Take your medications exactly as directed
- Ask about and take advantage of cardiac rehabilitation
- Bring a trusted friend or family member to your appointments
- Make sure you have a living will and advanced directives in place



Talking to your care team

It is important to talk openly with your health care team about how you are feeling and share any concerns you have related to your condition or treatment. Heart failure can get worse over time, so keep your doctor up to speed on how you're feeling, and if you have trouble doing certain activities.

Questions to ask:

- What type of heart failure do I have?
- What health checks should I be doing and recording on a daily basis (weight, blood pressure, pulse)?
- How will I know if my condition is getting worse? When should I call 9-1-1?
- What is my goal weight?
- If I notice that I am weighing more, at what point should I call you?
- How much exercise can I do and what activities are best? Is it safe for me to exercise on my own?
- Can you review each of the medications I am taking and what they do?
- How much salt can I consume daily?
- How much water/fluids can I drink a day?
- Would I benefit from an ICD?
- Would I benefit from cardiac rehabilitation?
- How often will I need to have my heart checked?

Helpful resources

To learn more about heart failure, visit
CardioSmart.org/HeartFailure

You can also find resources at:

National Heart, Lung, and Blood Institute
nhlbi.nih.gov



CardioSmart[®]
American College of Cardiology

Your Prescription for a Healthy Heart

For more information, visit
CardioSmart.org/HeartFailure

Information provided for educational purposes only. Please consult your health care provider regarding your specific health needs.

©2016, American College of Cardiology