Diagnosed With Heart Failure?
Learn About the Types, Stages, and Treatments

CardioSmart
AMERICAN COLLEGE of CARDIOLOGY

Heart Failure | Info Sheet

Understanding the types and stages of heart failure – and what treatment might involve – can help you take a more active role in your care.

Your heart is a pump. Its job is to move blood, oxygen, and nutrients through your body.

If you have heart failure, your heart is still working, just not as well as it should. As a result, your body might not be getting what it needs. That's why people with more advanced stages of the disease feel tired, lightheaded and short of breath, even after seemingly simple tasks like climbing a flight of stairs or carrying groceries. Fluid may also build up in the lungs, belly or legs.

Heart failure is becoming more common, in part, because people are living longer. Generally speaking, the heart muscle can become weaker and stiffer with age. Rising cases of heart failure are also driven by conditions like diabetes, excess weight, high blood pressure, and other conditions that place added strain on the heart.

There is a lot you can do to feel better and improve your heart function. Learning more about your heart failure can help you understand what steps you can take.

Learning about your heart failure

It's important to know about the cause(s) of your heart failure, and how it affects your health, and be ready to ask questions.

Your health care team might mention things like:

- Whether your heart has a pumping/squeezing or relaxing problem
- What might be causing your specific type of heart failure
- How bad or severe it is (heart failure is grouped by stage, from A to D, A being the least severe)

This information will help you understand what's happening with your heart and can guide your treatment choices.

Types of heart failure

There are many different ways that your heart team thinks about heart failure.

Heart failure is typically diagnosed when someone has 1) signs and symptoms of heart failure like shortness of breath, fatigue, and leg/abdominal swelling and 2) evidence that the heart isn't pumping blood well enough to meet the body's needs. Fluid may start backing up in the lungs, heart and other organs.

Generally speaking, heart failure is grouped based on:

- **Ejection fraction (EF)**, a measure of how well the heart is working to squeeze blood out of the heart with each beat (a normal EF is over 50%)

In some cases, it's also helpful to look at:

- **How well the heart is relaxing,** when the heart doesn't relax fully, it can't fill with enough blood with every heartbeat, which leads to higher pressures inside the heart

There are **four main types of heart failure** based on your ejection fraction:

Heart failure with **reduced** ejection fraction	Heart failure with **improved** ejection fraction	Heart failure with **mildly reduced** ejection fraction	Heart failure with **preserved** ejection fraction
HFrEF	**HFimpEF**	**HFmrEF**	**HFpEF**
EF is 40% or lower The heart can't squeeze enough blood out to the body. Over time the heart becomes weaker. Treatment includes taking medicines from four different classes. They work together to help the heart recover and also improve survival. **Ask about the four pillars of HFrEF treatment.**	EF had been 40% or lower, but improved to over 40% as seen on follow-up testing. Treatment is often with similar medications used for HFrEF. **It's important to continue taking any medications your care team recommends, even if your EF improves.**	EF is between 41% and 49% Treatment with some medications similar to those used for HFrEF. **Medications and follow-up testing will be guided by your care team.**	EF is normal (50% or more), but the heart can't fill with enough blood because it has a hard time relaxing and may be stiff. Medications can help, as can managing other health conditions **Maintaining normal weight, blood sugar and blood pressure is important for HFpEF and others.**

More on ejection fraction

Ejection fraction (EF) is a health measure similar to blood pressure or heart rate. It can tell you and your health care team how well your heart is working. EF estimates how much blood your heart (specifically the left ventricle, the main pumping chamber of the heart) is able to squeeze out to your body with each heartbeat. EF is given as a percentage.

If the squeezing is weak, not enough blood will be pumped to the body with each beat. This type of heart failure is with "reduced" EF. But not everyone has a low EF. In some cases, EF is normal, but not enough blood is pumped to the body because the heart cannot fill with enough blood with each beat. This is called heart failure with "preserved" EF.

The most commonly used tests to measure EF include:

- Echocardiograms
- Cardiac MRI

Stages of heart failure

Your care team may talk with you about the "stage" of your heart failure. Heart failure generally gets worse with time. There are four stages of heart failure – Stages A, B, C and D.

In general, here's what each stage means:

	Stage A	Stage B	Stage C	Stage D
Applies to people:	At risk of developing heart failure	With "pre-heart failure"	Who are having symptoms of heart failure	Advanced heart failure
What it means, what it might feel like	• No clear changes to how the heart works • No symptoms, no limits to your activity • Conditions or risk factors make it likely for the heart muscle not to function properly	• Some changes to the heart structure and function • Rise in the amount of natriuretic peptides (hormones released by the heart) in the blood • Still no symptoms, but a greater likelihood of developing heart failure	• Clear changes to the heart • Symptoms such as shortness of breath, feeling tired, swelling in legs or feet • Symptoms without treatment can interfere with daily life and result in hospitalizations	• Very severe symptoms most of the time • Repeat hospital stays due to heart failure

Stages of heart failure (continued)

	Stage A	Stage B	Stage C	Stage D
Focus of treatment	• Treat possible causes, such as high blood pressure and diabetes.	• Very early changes to the heart may be seen on imaging, so medications that ease the stress on the heart may be needed.	• Keep a close eye on your daily weight, lower salt (sodium), exercise based on your health team's advice. • Take medicines as directed to reduce the workload on your heart.	• You will have symptoms most of the time. • Your care team will talk about strategies to help. This may include a left ventricular assist device (LVAD), heart transplant, palliative or end-of-life care.

What treatment might look like

Lifestyle changes and heart healthy choices

Treatment at each stage involves lifestyle changes, changes to medications (this could be adding another medicine or adjusting the amount or dose you need to take) and devices, in some cases. The goal is to slow the disease and keep you from moving to the next stage for as long as possible.

TIP: It's important to remember that you can move between heart failure types and stages. That's why close monitoring, reporting of symptoms and carefully following your treatment plan is important. Even if you start feeling better – for example, if your EF improves, which is great news – you will still need to take your medications.

Be sure to tell your care team if there are things that make it difficult to get to or keep follow-up visits or access your medicines.

Key steps in managing heart failure

Having a good relationship with your health care team and making sure everyone is on the same page.

Paying close attention to how you feel and if symptoms limit what you're able to do, and sharing this information with your care team.

Taking all your medicines as prescribed.

Weighing yourself every day.

Limiting salt (sodium) for some.

Being physically active.

Managing any other health conditions that can make heart failure worse.

Your treatment plan will depend on your type of heart failure and how severe it is, as well as your goals and preferences. Treatment can help you feel better, live longer and prevent hospital stays.

Possibly needing a device – to help treat or monitor your heart – at some point. For some, advanced therapies (LVAD, transplant) may be needed.

Assessing fluid buildup

Your care team will want you to keep a close eye on your weight and watch for any visible signs that you are retaining fluid. For example, if your ankles or legs are swollen. But excess fluid can be sneaky. Specific blood and imaging tests may be ordered to see if you are holding on to extra fluid.

Visit *CardioSmart.org/HeartFailure* or scan the QR code for more information and to access tools to help you manage heart failure.