

What is systolic heart failure?

Systolic heart failure is a form of heart failure in which the heart's lower chambers (ventricles) have become too weak to contract and pump enough blood to meet the body's needs, resulting in shortness of breath and other [heart failure symptoms](#) . Women with systolic heart failure pump a less-than-normal amount of blood out of the heart with each heartbeat (they have a reduced [ejection fraction](#)).

See also:

[Systolic Heart Failure](#)

[Heart Failure Basics](#)

[Heart Failure Diagnosis](#)

Can heart failure be cured?

Treating certain conditions that cause heart failure may stabilize the heart, and, in some cases, it can return to normal strength and size. You will likely have to continue to take medication even if your heart failure resolves. Even with medications your symptoms can come back, and additional treatment may be needed.

In most cases, heart failure is a disease you will live with for the rest of your life, and requires close follow up with a cardiologist and your primary care doctor. Appropriate treatment can reduce your symptoms and dramatically slow the evolution of the disease, and many women go on to lead long, fulfilling lives after a diagnosis of heart failure.

How is systolic heart failure treated?

The main goals of treating systolic heart failure are to relieve your symptoms, improve your quality of life, and slow down the progression of heart failure by preventing further damage to your heart.

Heart failure is treated with a combination of medications, lifestyle changes and, if necessary, surgical procedures. These therapies are designed to not only improve your symptoms and stop your heart failure from getting worse, but also to treat the underlying causes of your heart failure. Major contributors to heart failure that may require treatment include:

- [High Blood Pressure](#)
- [Coronary Artery Disease](#)
- [Heart Valve Disease](#)
- [Atrial Fibrillation](#)
- [Diabetes](#)
- [Obesity](#)
- [High Cholesterol](#)

Do women receive appropriate treatment for heart failure?

Although few studies have examined this issue, several have found that women are less likely than men to receive some (but not all) proven treatments for heart failure. One study that looked at a registry of 15,381 patients with systolic heart failure (29% were women) found that women were less likely than men to receive several types of guideline-recommended treatment compared with men.

Women were less likely to receive [blood thinners](#) for atrial fibrillation, implantation of a [defibrillator](#) or [pacemaker](#), and education about heart failure.

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Elderly patients were also less likely to receive proper treatment, meaning that elderly women, who make up a large proportion of heart failure patients, were the group least likely to receive appropriate treatments. Other studies have found that women are less likely to be prescribed essential medications (including ACE inhibitors and beta-blockers) on being discharged from the hospital.

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A recent European study that observed 1857 hospital patients indicated that women might receive better care from women doctors. Women treated by male doctors were less likely to receive ACE inhibitors, ARBs, and beta-blockers than male patients and also received lower

doses of essential drugs when they were given. Female doctors, however, treated male and female patients equally.³ Although this was only one study and the results do not necessarily apply to all doctors, it does highlight the importance of ensuring both physicians and patients are aware of the special challenges faced by women with heart failure.

Medications

Basic treatment for systolic heart failure consists of an angiotensin-converting enzyme (ACE) inhibitor, a beta-blocker, and frequently the use of a diuretic.

ACE Inhibitors

ACE inhibitors widen blood vessels and increase the amount of water your kidneys get rid of, lowering blood pressure. They help relieve the symptoms of heart failure, including leg swelling and shortness of breath, improving your ability to perform daily tasks and minimizing the time spent in the hospital. ACE inhibitors also slow the changes in the heart that cause heart failure to get worse, even in women who don't yet have heart failure symptoms. [Learn More](#) .

ACE inhibitors work better in whites than in African Americans, who may need other medications (such as [hydralazine and isosorbide dinitrate](#)) to ensure the best possible control of their heart failure.

Some women cannot tolerate the side effects of ACE inhibitors, and may need to be switched to a similar type of drug called an Angiotensin Receptor Blocker (ARB). [Learn More](#) .

There are special considerations for patients with asthma or lung disease who are being treated with ACE inhibitors. [Click here](#) for more.

Beta-blockers

Beta-blockers work by slowing the heart rate and decreasing the strength of each heartbeat; this lowers your blood pressure and reduces the stress on your heart. They are a cornerstone of heart failure treatment, even in women who do not yet have heart failure symptoms.

Beta-blockers relieve symptoms, improve your ability to perform basic daily tasks, and slow the progression of the disease.⁴ Women who are treated with beta-blockers require fewer hospital stays and live longer.⁵ [Learn More](#) .

There are special considerations for using beta-blockers in women with asthma or lung disease. [Click here](#) for more.

Diuretics

Diuretics, also called water-pills, are a class of medications used to treat high blood pressure, heart failure and other diseases that cause fluid buildup in the body. They reduce the amount of fluid in the body by stimulating your kidneys to get rid of excess water and salt as urine.

Diuretics relieve symptoms caused by fluid buildup, including shortness of breath and swelling in the legs. [Learn more](#) .

Other Medications

In addition to the standard medications listed above, many other drugs may be used in certain kinds of patients. Additional medications may be needed, for example, when a woman has another condition that requires special treatment to prevent heart failure complications, or because standard medications are not enough to control severe heart failure symptoms.

Women who recently had a heart attack may receive [aldosterone antagonists](#) , a class of drugs that is similar to ACE inhibitors and ARBs. Aldosterone antagonists can prevent further changes to the heart's structure in patients who have reduced blood flow to the heart, reducing the need

for hospitalization and improving survival.

Those with other existing heart disease, such as [coronary artery disease](#) , [valve disease](#) , or [atrial fibrillation](#) will take [blood thinning drugs or aspirin](#) to reduce the risk of dangerous blood clots and future heart damage that could make heart failure worse.

[Digitalis](#) , a drug that increases the strength of the heart muscle's contractions and slows the heart's rhythm, is another medication that can relieve heart failure symptoms that have not responded to standard drugs. Digitalis is also used to treat patients with heart failure and atrial fibrillation, a heart rhythm problem. There is some evidence that women with advanced heart failure may benefit from hormone replacement therapy (HRT), but this has not yet been proven in randomized trials and is not currently a recommended treatment. Learn more about HRT and heart failure [here](#) .

African-Americans who have continued symptoms despite treatment with other drugs (such as ACE inhibitors) may benefit from treatment with [hydralazine & isosorbide dinitrate](#) . These medications widen the blood vessels, lowering blood pressure and reducing the strain on the heart. These drugs can also be used in patients who cannot tolerate the effects of ACE inhibitors or who have kidney problems that make it difficult to take the standard drugs.

Some medications used to treat other conditions can actually make heart failure worse, so be sure to see our list of [Medications to Avoid](#) .

Lifestyle Changes

Heart failure is a serious, life-long disease that will require significant changes to your lifestyle. With proper medication and [heart failure rehabilitation](#) , many women with heart failure are able to return to an active life. The more successful you are in making lifestyle changes, the better controlled your heart failure symptoms will be. You may also be able to take lower medication doses and avoid some troublesome side effects.

Lifestyle changes recommended for women with heart failure include:

- Following a diet low in salt (like the [DASH diet](#)). Salt can cause extra fluid to build up in your body, making your heart failure worse.
- Limiting the amount of fluids that you drink to minimize heart failure symptoms caused by fluid buildup (shortness of breath, swelling)
- Weighing yourself often and telling your doctor if you experience sudden weight gain (a sign of excess fluid buildup in your body)
- [Exercise training](#) to help build up your fitness level, relieve symptoms, and improve your quality of life. Your doctor will tell you if you are stable enough for exercise and help you develop a safe exercise plan.
- Losing weight if you are overweight
- [Quitting smoking](#) if you smoke
- Not drinking alcohol excessively (your doctor may recommend that you stop drinking alcohol altogether)

See our article on [Living with Heart Failure](#) for much more information and tips on life after a diagnosis of heart failure.

Procedures

When medication and lifestyle changes are not enough, various medical devices and procedures can relieve symptoms and improve survival in women with heart failure.

Implantable Cardioverter Defibrillator (ICD)

Women with heart failure are prone to have sudden dangerous changes in the rhythm of the heartbeat. An ICD is a device implanted in the chest to monitor and, if necessary, correct episodes of serious abnormal heart rhythms that can cause sudden death. When the device detects an abnormal heart rhythm, it first tries a small, low-energy pulse to try to "reset" the heart (called *cardioversion*). If the rhythm is life threatening, the ICD will deliver an electric

shock, or *defibrillation* (which can be painful or very uncomfortable) to get the heart back to a normal rhythm.

An ICD can prevent dying from sudden abnormal heart rhythms in women who have their heart failure under control with medications, but whose hearts have decreased pumping ability, especially those who also have [coronary artery disease](#) . Women with a history of abnormal heart rhythms may benefit even more from the device.

[Learn More](#) about ICDs to Treat Heart Failure.

Cardiac Resynchronization Therapy

In about one-third of patients with systolic heart failure and moderate to severe symptoms, the two sides of the heart fall out of sync and do not contract at the same time. This is caused by a delay in the electrical signals that control the heartbeat, and reduces the heart's efficiency and makes heart failure symptoms worse.

Getting the two sides of the heart to work together again is accomplished through *cardiac resynchronization therapy* (CRT), in which a special type of pacemaker called a biventricular pacemaker is implanted in the chest. Unlike a normal pacemaker (which is only attached to the right side of the heart), a biventricular pacemaker sends electrical signals to both of the heart's pumping chambers to make sure they are in sync and contracting at a normal rate.

CRT helps the heart work more efficiently, improving your ability to exercise and perform daily tasks, enhancing your quality of life, and helping you live longer.

[Learn More](#) about CRT

Treatment of Advanced Heart Failure

Most women with systolic heart failure respond well to medical treatment and basic procedures and survive for a long time with a good quality of life. In some, however, the heart's pumping ability does not improve with treatment or rapidly gets worse. These women often have severe symptoms that are present even at rest, preventing them from doing basic daily activities and requiring frequent hospitalizations.

In these patients, treatment efforts are directed at the few available therapies that can improve short-term survival and make symptoms more bearable.

Treatment focuses on managing fluid retention to reduce symptoms, often with increasing doses of diuretics and other drugs. They may also receive medication through an IV (*inotropic* drugs) that increases the strengths of the heart's contraction. Supplemental oxygen can help compensate for the heart's inability to distribute oxygen to the body efficiently.

The last treatment option for women with advanced heart failure that has not responded to other treatments is a [heart transplant](#), although this is only available to about 2500 patients in the United States each year. A [left ventricular assist device](#), an implantable device that mechanically helps the heart to pump, can be used while a patient waits for a transplant. These devices have also advanced to the point where some women with advanced heart failure may have them implanted and be well enough to leave the hospital, extending their survival without ever requiring a transplant.

See our article on [Living with Heart Failure](#) for much more information and tips on life after a diagnosis of heart failure.

References

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