

CONGESTIVE HEART FAILURE (CHF)

Definition

Heart failure affects nearly five million Americans. Roughly 550,000 people are diagnosed with heart failure each year. Heart failure does not mean the heart has stopped working. Rather, it means that the heart's pumping power is weaker than normal. With heart failure, blood moves through the heart and body at a slower rate, and pressure in the heart increases. As a result, the heart cannot pump enough oxygen and nutrients to meet the body's needs. If fluid builds up in the arms, legs, ankles, feet, lungs, or other organs, the body becomes congested, and congestive heart failure is the term used to describe this condition. CHF is the leading cause of hospitalization in people older than 65.

Diagnosis

The diagnosis of congestive heart failure is based on your medical history, a careful physical examination and selected laboratory tests.

Your history may disclose the presence of symptoms of congestive heart failure, and the physical examination is focused on detecting the presence of extra fluid in the body. The following diagnostic tests may be performed.

- Stress test
- Blood tests
- Chest X-ray
- Echocardiogram
- Ejection fraction (EF)
- Cardiac catheterization
- Electrocardiogram (EKG or ECG)
- Magnetic resonance imaging (MRI)
- Other tests may be ordered, depending on your condition



Signs and Symptoms

If you have heart failure, you may have one or all of these symptoms or you may have none of them. People with congestive heart failure sometimes do not suspect a problem with their heart or have symptoms that may not obviously be from the heart.

- Congested lungs
- Exercise intolerance
- Dizziness and weakness
- Fluid and water retention

- Rapid or irregular heartbeats
- Need to sleep sitting upright
- Increased urination, particularly at night
- Swelling of ankles, feet, legs or abdomen
- Unusual fatigue that is not relieved with rest
- Nausea, abdominal pain, and decreased appetite
- A dry cough that will not go away or seems otherwise unusual
- Feeling of not being able to get a deep breath, especially when lying down
- Shortness of breath that seems to be getting worse or causes difficulty sleeping

Risk Factors/Causes

Heart failure is caused by many conditions that damage the heart muscle. One in every five people will develop heart failure in his or her lifetime. In the United States, the most common causes and common risk factors of congestive heart failure are:

- Age
- Diabetes
- Infections
- Hypertension
- Heart attack
- Kidney disease
- Thyroid disease
- Cardiomyopathy
- Damaged heart valves
- Coronary artery disease
- Congenital heart disease
- Family history of heart failure
- Enlargement of the left ventricle
- High cholesterol and triglycerides



Congestive heart failure may be exacerbated by the following lifestyle habits:

- Obesity and lack of exercise
- Smoking and excessive use of alcohol
- Noncompliance with medications and other therapies
- High salt intake, which may cause more fluid retention

Treatment

The treatment of heart failure depends on the exact cause, but it can usually be treated effectively. The overall goals are to correct underlying causes, to relieve symptoms, and to prevent worsening of the condition.

After congestive heart failure is diagnosed, treatment should be started immediately. One of the most important aspects of treatment involves lifestyle changes.

- Exercise regularly
- Reduce emotional stress
- Restrict alcohol consumption
- Take medications as prescribed
- Stop smoking or chewing tobacco
- Restrict salt and eat a healthy diet
- Schedule regular doctor appointments
- Regulate the total amount of fluid consumed
- Monitor your weight and lose weight if needed

Medications help control both the underlying causes of heart failure and the symptoms. Medications are the most critical part of therapy. Usually, several types of medications are required.

- Digoxin
- Nitrates
- Inotropes
- Beta-blockers
- ACE inhibitors
- Diuretics (water pills)
- Angiotensin II receptor blockers
- Calcium channel blockers (CCBs)



To make the best use of medications, follow these steps:

- Keep a diary of daily weight
- Be informed about the side effects of medications
- Take medication as directed by the health care provider
- Always bring a current list of medications and any other supplements or nonprescription drugs with you every time they visit a doctor
- Follow the recommendations of the doctor about diet, exercise, and other lifestyle issues
- Develop an action plan with the doctor so you and your family know what to do promptly if symptoms worsen

Other treatment or interventions may be offered, depending on the underlying cause of the heart failure.

- Angioplasty
- Pacemaker
- Total Artificial Heart (TAH)
- Temporary cardiac support
- Left Ventricle Assist Device (LVAD)
- Cardiac Resynchronization Therapy (CRT)
- Implantable Cardioverter Defibrillator (ICD)

Prognosis

Congestive heart failure is generally a progressive disease with periods of stability punctuated by episodes of exacerbations. The course of the disease is extremely variable and the prognosis is very closely associated with the functional class.

Two major groups have established various stages of congestive heart failure.



The American College of Cardiology/American Heart Association stages patients according to the progression of their heart failure.

- Stage A:** High risk for developing heart failure
Patient has one or more risk factors for developing heart failure.
- Stage B:** Asymptomatic heart failure
Patient has an enlarged or dysfunctional left ventricle from any cause, but is asymptomatic.
- Stage C:** Symptomatic heart failure
Patient experiences heart failure symptoms -- shortness of breath, fatigue, inability to exercise, etc.
- Stage D:** Refractory end-stage heart failure
Patient has heart failure symptoms at rest in spite of medical treatment. Cardiac transplantation, mechanical devices, more aggressive medical therapy, or end-of-life care may be necessary.

The New York Heart Association classifies patients based on their physical limitations.

- Class I:** No limitations of physical activity, no symptoms with ordinary activities
- Class II:** Slight limitation, symptoms with ordinary activities
- Class III:** Marked limitation, symptoms with less than ordinary activities
- Class IV:** Severe limitation, symptoms of heart failure at rest

Support Groups and Counseling

Having the support of health care providers, family, and friends is essential to effectively coordinate all of your needs. People with severe heart failure have special needs beyond standard medical care. **Loving Arms Elder Care** provides excellent caregivers that can provide support to those with CHF.

With the right care, heart failure will not stop you from doing the things you enjoy. Your outlook for the future will depend on how well your heart muscle is functioning, your symptoms, and how well you respond to and follow your treatment plan.