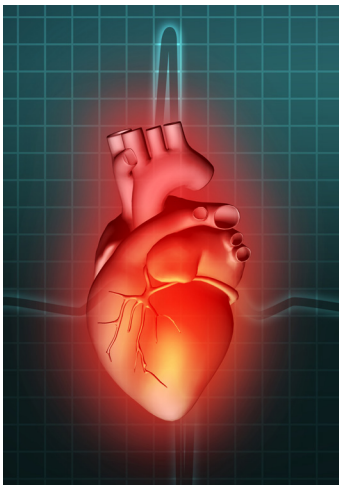
Heart failure

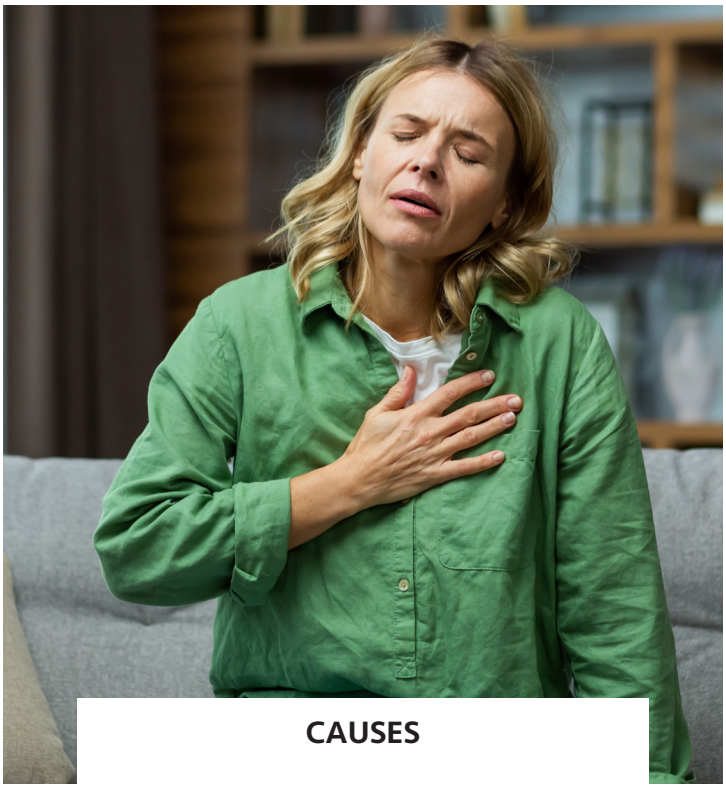
The heart is the body's pump. When it can't pump well enough to meet the body's needs, it is called heart failure (HF).

The heart itself doesn't fail, but "fails" to supply the body with enough blood and oxygen. The pumping action of the heart decreases. Blood flow slows down. This causes excess fluid (edema) in tissues throughout the body. Heart failure is due to the excess fluid or congestion. Heart failure needs a doctor's diagnosis and care!



SIGNS & SYMPTOMS

- Shortness of breath. Feeling very tired or weak.
- Cough
- Swelling of the abdomen, lower legs, ankles, and feet. Your shoes can suddenly feel too tight.
- Decreased appetite and nausea
- Bluish color of fingers and lips
- Rapid weight gain over several days or weeks without an increase in food intake
- A fast heartbeat. Sometimes the heartbeat is irregular.
- Feeling anxious or restless. Trouble concentrating.
- A feeling of suffocation. This is caused by fluid that collects in the lungs. It can be difficult to lie flat. You may need to sleep on 2 or more pillows. You may wake up suddenly from sleep feeling short of breath.



CAUSES

Anything that damages the heart muscle or makes it work too hard can cause heart failure. This includes:

- One or more heart attacks. This is the number 1 cause.
- Advanced coronary artery disease
- High blood pressure that is not controlled
- High blood pressure in the lungs (pulmonary hypertension)
- Alcohol and/or drug misuse
- Severe or chronic lung disease (e.g., emphysema)
- Diabetes, especially if it is poorly controlled
- Pericarditis. This is a swelling or thickening of the lining that surrounds the heart. This can restrict the heart's pumping action.
- Abnormal heart valves. Causes include rheumatic heart disease and heart defects present at birth.
- Abnormal heart rhythm (arrhythmia)
- A viral infection. This is rare and happens only if the infection affects the heart and causes cardiomyopathy, a muscle disease of the heart.
- Kidney disease
- Anemia

Heart failure

DIAGNOSIS

- A medical history and physical exam. Blood and urine tests.
- A chest X-ray to see if the heart is enlarged and if the lungs are congested.
- An electrocardiogram (EKG) to look for an enlarged heart, heart muscle damage, and abnormal heart rhythms.
- A Holter or event monitor is worn for 2 days to 2 weeks while you go about your normal activities to check the heart's electrical activity.
- An echocardiogram. This test uses sound waves to show the heart's size, shape, and how well the heart pumps blood.
- An exercise stress test
- A cardiac catheterization. This test diagnoses coronary artery disease and checks for past heart attacks.

PREVENTION

Some causes of heart failure can be prevented. These include heart attacks, coronary artery disease, high blood pressure, rheumatic fever, and substance use disorder (SUD).

Prevent heart attacks and coronary artery disease:

- Don't smoke. If you smoke, keep trying to quit.
- Have regular medical checkups. Get your blood pressure checked at each office visit. Get your blood cholesterol tested as advised by your doctor.
- Take all medicines as prescribed.
- Ask your provider about taking a low dose of aspirin (e.g., 1 baby aspirin) daily.
- Get to or stay at a healthy body weight.
- Strictly limit or avoid alcohol.
- Do regular physical activity. {**Note:** Talk to your health care provider before you start an exercise program.}
- Get a diabetes screening test.
- Manage stress.
- Eat less total fat, especially saturated and trans fats, which raise LDL ("bad") cholesterol in the blood.
- Eat at least 5 servings of fruits and vegetables a day.
- Choose bran and whole-grain cereals and breads over enriched products.
- Use nonfat and low-fat dairy.
- Choose healthy fats, such as nuts, seeds, avocados, salmon, and olive oil.
- Get 20 to 35 grams of dietary fiber a day.
- Eat lentils and beans.
- Drink at least 8 to 10 glasses of water a day. {**Note:** If you already have heart failure, discuss your daily fluid intake with your doctor.}
- Ask your doctor about limiting dietary cholesterol.
- Limit your salt and sodium intake to 2,300 mg per day or amount advised.
- Limit added sugars in sweetened drinks, cakes, cookies, and other sweets.

Prevent rheumatic fever: Consult your health care provider for diagnosis and treatment of sore throats. Rheumatic fever can result if strep throat is left untreated.

Prevent alcohol & drug SUD:

- Know your "why" and how you will plan to drink less.
- When you drink, do so responsibly.
- Find ways to calm yourself other than with alcohol or drugs. Listen to calm music. Do deep-breathing exercises.
- Talk to someone who will listen without putting you down. You will be less likely to turn to drugs or alcohol to manage your distress.
- Stay out of situations where drugs are available.
- Seek help for mental health problems, such as depression or anxiety, before they lead to alcohol or drug problems.
- After surgery or an injury, stop the use of prescribed pain pills as soon as you can. Don't use more than you need.

TREATMENT

Most cases of heart failure can be treated with success. The goals are to:

- Strengthen the heart's pumping action.
- Get rid of excess fluids.
- Create a physical activity level within your limits.

Medical care:

- Implanted devices that help regulate heartbeats or heart pumping action. These are only used when medicines and lifestyle changes don't work.
- Surgery to replace a damaged heart valve may be needed. A heart transplant is reserved for the most severe cases of heart failure. The person needs to be a good candidate for surgery, too.
- Common medications are:
  - Diuretics. These help your body retain less salt and water by increasing urine output.
  - Vasodilators. These open blood vessels to reduce the force the heart must pump against. Ones called ACE inhibitors can help persons with CHF live longer and feel better.
  - Digoxin. This strengthens the pumping action of the heart muscle.
  - Hydralazine. This drug widens blood vessels to help ease blood flow.
  - Nitrates. These relax smooth muscles and widen blood vessels.
  - Beta-blockers. These help stop over-stimulation of the heart and improve heart muscle cell function.

SELF-CARE

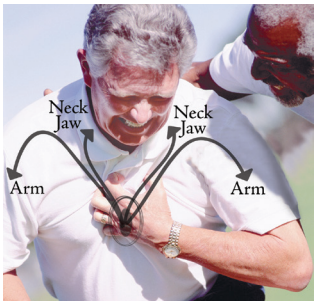
- Weigh yourself daily to check for excess fluid weight gain. Keep a record of what you weigh. Take it with you when you visit your health care provider. Call your provider, though, if your weight increases suddenly (3 or more pounds in 1 day).
- Limit fluids as advised by your health care provider.
- Have 5 to 6 small (instead of 3 large) meals a day.
- Do not have more than one alcoholic drink a day, if at all.
- Stay as active as you can. Modify your activities as needed so you don't place too heavy a demand on your heart. Alternate activity with periods of rest.
- Sit up when you rest, if this makes breathing easier. Sleep on 2 or more pillows and/or raise the head of your bed 6 inches when you sleep.
- Follow a heart healthy diet that is low in saturated fat, sodium and added sugars and avoid trans fats.
- Ways to limit sodium to 2,300 mg or less per day:
  - Take the salt shaker off the table. Cut back on or don't use any salt when you cook.
  - Choose fresh foods over processed ones.
  - Limit high sodium foods (e.g., canned soups, sauces, packaged dinners, etc.)
  - Limit ketchup, mustard, soy sauce, steak sauce, and prepared salad dressings or use ones low in sodium.
  - Reduce salt and sodium-containing ingredients in recipes. Use more herbs and spices for extra flavor.
  - When you eat out, ask that items be prepared without salt. Ask for sauces "on the side" so you can use just a small amount.
- Don't smoke. If you do, keep trying to quit.
- Lose weight if you are overweight.
- Follow your health care provider's treatment program. Take your medication(s) as prescribed.
- Monitor your blood pressure and heart rate.
- If you take "water pills," follow your doctor's advice to keep your potassium level up. You may be told to have good food sources of potassium every day (e.g., oranges, bananas, etc.). You may need to take a prescribed potassium supplement.
- Seek support from friends and family to help manage emotions that may be associated with having this condition.
- Join a support network

CALL HEALTH CARE PROVIDER FOR:

- A new onset of shortness of breath or fatigue when you do your normal activities or lie down
- A new onset of swelling in the ankles and feet and it is harder to breathe when you lie down flat
- Coughing up pink or frothy mucus with mild shortness of breath
- Trouble sleeping
- An unexplained weight gain of 3 to 5 pounds
- Loss of appetite
- Having heart failure and you have symptoms of a cold or flu. These may add stress to your heart.
- Having heart failure and your symptoms get worse

GET EMERGENCY MEDICAL CARE FOR:

- Severe shortness of breath (you are too short of breath to say a few words) with or without wheezing (a high pitched whistling sound)
- Sudden, severe shortness of breath and coughing up white or pink, foamy mucus
- Signs or symptoms of a heart attack
- Rapid or irregular heartbeat with shortness of breath, chest pain, or fainting



HEART ATTACK WARNING SIGNS

- Chest discomfort. Most heart attacks involve discomfort in the center of the chest that lasts for more than a few minutes or goes away and comes back. The discomfort feels like pressure, fullness, squeezing or pain.
- Discomfort in other areas of the upper body. This can include pain or discomfort in one or both arms or in the back, neck, jaw, or stomach.
- Shortness of breath often with chest discomfort. But it can also come before the chest discomfort.
- Other symptoms: breaking out in a cold sweat, nausea, vomiting, anxiety, rapid or irregular heartbeat, feeling unusually tired, and anxiety.

The most common heart attack symptom for both men and women is chest pain or discomfort. But women are more likely than men to have some of the other common signs, especially shortness of breath, nausea, or vomiting, and back or jaw pain.