

## **Patient information: Heart failure (The Basics)**

Written by the doctors and editors at UpToDate

**What is heart failure?** — Heart failure is a condition in which the heart does not pump well. This causes the heart to lag behind in its job of moving blood throughout the body. As a result, fluid backs up in the body, and the organs in the body do not get as much blood as they need. This can lead to symptoms, such as swelling, trouble breathing, and feeling tired.

If you have heart failure, your heart has not actually "failed" or stopped beating. It just isn't working as well as it should.

**What are the symptoms of heart failure?** — If your heart does not pump well, at first you might have no symptoms. But as the condition gets worse, it can cause:

- Tiredness or weakness, or make you feel lightheaded or dizzy
- Trouble breathing, which might lead you to be less active or to need extra pillows at night to sleep
- A racing heartbeat, even while resting
- Swelling in your feet, ankles, and legs ([picture 1](#)) or in your belly

**Is there a test for heart failure?** — Yes. If your doctor or nurse thinks you might have heart failure, he or she will do an exam, and might order some of the following tests:

- **An electrocardiogram (ECG or EKG)** — This test measures the electrical activity in your heart. It can show whether you have an abnormal heartbeat or had a heart attack in the past. These are some of the things that can cause heart failure.
- **A blood test known as "brain natriuretic peptide" (BNP) or "N-terminal pro-BNP" (NT-proBNP)** — The BNP or NT-proBNP level is high in people with heart failure.
- **A chest X-ray** — A chest X-ray shows if there is fluid in the lungs. It also shows the general shape of the heart and large blood vessels in the chest.
- **An echocardiogram** — This test uses sound waves to create a picture of your heart as it beats. It shows the size of the heart chambers, how well the heart is pumping, and how well the heart valves are working.
- **A stress test** — During a stress test, you might be asked to run or walk on a treadmill while you have an ECG or other heart tests. Physical activity makes the heart pump harder and increases the heart's need for blood. This test helps doctors see if the heart is getting enough blood when it is under stress. If you cannot walk or run, you might instead get a medicine to stress your heart.
- **Cardiac catheterization (also called "cardiac cath")** — During this test, the doctor puts a thin tube into a blood vessel in your leg or arm. Then he or she moves the tube up to your heart. When the tube is in your heart or blood vessels, he or she will take measurements. The doctor might also put a dye that shows up on an X-ray into the tube. This can show if any arteries in your heart are narrowed or blocked. This part of the test is called "coronary angiography."

**What can I do on my own to protect my heart?** — If you do the following things, you will feel better and reduce the chances that you will need to go to the hospital:

-

**Take your medicines, even if you feel well** – The medicines your doctor prescribes can help you feel better and live longer. But they will work only if you take them as your doctor tells you to.

- **Watch for changes in your symptoms and follow an action plan** – An action plan is a list of instructions on what to do if your symptoms change. To use an action plan, you must watch your symptoms closely and weigh yourself every day (see next bullet). If your symptoms get worse or if you gain weight suddenly, you must take action ([figure 1](#) and [figure 2](#)). Keep your action plan somewhere handy, such as on your refrigerator, so that you can always check it to see what you should do.
- **Call your doctor or nurse if you gain weight suddenly** – Weigh yourself every morning after you urinate but before you eat breakfast. Wear roughly the same amount of clothing every time. And make sure to write down your weight every day on a calendar. Call your doctor or nurse if your weight goes up by 2 or more pounds (1 kilogram) in 1 day, or 4 or more pounds (2 kilograms) in 1 week. When you have heart failure, sudden weight gain is a sign that your body could be holding on to too much fluid. You might need a change in your medicines.
- **Cut down on salt** – Try not to add salt at the table or when you cook. Also, avoid foods that come in boxes and cans, unless their labels say they are low in sodium. The best choices for food are fresh or fresh frozen foods, and foods you prepare yourself ([table 1](#)). Ask your doctor how much salt you should have. Your doctor might also tell you to limit the amount of fluids you drink.
- **Lose weight, if you are overweight** – If you are overweight, your heart has to work extra hard to keep up with your body's needs.
- **Stop smoking** – Smoking worsens heart failure and increases the chance that you will have a heart attack or die.
- **Limit alcohol** – If you are a woman, do not have more than 1 drink a day. If you are a man, do not have more than 2.
- **Be active** – Ask your doctor what activities are safe for you. Your doctor will let you know if activities such as walking or biking on most days of the week can help reduce your symptoms. But do not exercise if your symptoms are bothering you a lot.
- **Check with your doctor before taking any new medicines or supplements** – Some over-the-counter and prescription medicines, "natural" remedies, and supplements are not good for people with heart failure. For example, medicines such as ibuprofen (sample brand names: Advil, Motrin) and naproxen (sample brand name: Aleve) can make heart failure worse.

**How is heart failure treated?** — There are many treatments for heart failure, but medicines are a key part of controlling the condition.

- Take your medicines every day as directed. They can reduce the chances that you will need to go to the hospital, have a heart attack, or die. They can also reduce or get rid of your symptoms. That's why they are so important.
- Tell your doctor if you can't afford your medicines. He or she might have ways to reduce the cost of your medicines.
- Tell your doctor if your medicines cause side effects or other problems. Your doctor might be able to switch to another medicine or lower your dose so that you do not have that problem.

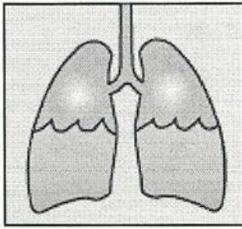
Other treatments for heart failure include devices to help the heart pump with more force or to beat at the right rhythm, and surgery to improve blood flow to the heart or replace the heart.

## Ways to cut down on salt (sodium)

Avoid these foods	Try these foods instead
Cured and smoked foods such as bacon, sausage, hot dogs, ham, lunch meats, and corn beef	Fresh turkey, chicken, and lean beef
Canned fish (such as sardines)	Unsalted tuna
Canned meats	Fresh unprocessed meats, vegetable protein, and fish; or frozen and canned meats, vegetable protein, and fish that are labeled "low sodium"
Salted pretzels, crackers, potato chips, and nuts	Low-sodium and unsalted versions of these foods
Most cheeses	Low-sodium cheeses
Sauces (tomato and cream etc), tomato juices	Low-sodium versions of these foods, such as low-sodium tomato juice
Processed, instant, and convenience foods such as frozen dinners, packaged meals, canned soups, and boxed pasta blends	Cook and freeze your own low-sodium meals, soups, and broths
	<ul style="list-style-type: none"> <li>▪ If you must use convenience or processed foods, read the labels and choose items with 140-200 mg of sodium per serving per food, or</li> </ul>
	<ul style="list-style-type: none"> <li>▪ For an entire convenience meal (frozen dinner), try to stay under 500-600 mg sodium.</li> <li>▪ If you do use canned foods, use "sodium free" varieties or rinse the canned food under water. This reduces the sodium content by about 40 percent.</li> </ul>

## Heart failure action plan - page 1

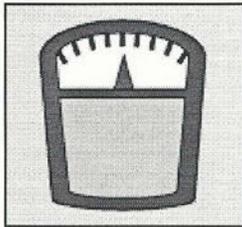
Every morning, when you get up, check how you are doing. Look for:



### Changes in breathing

Ask yourself:

- Can I breathe as well as I usually can?
- Am I getting out of breath doing things I can normally do without a problem?
- Am I coughing more than usual?
- Did I use more pillows than usual to sleep last night?

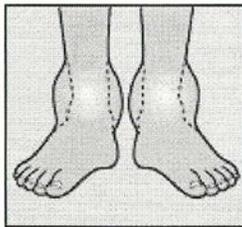


### Changes in weight

Weigh yourself every morning after urinating but before eating.

Write down your weight on a calendar. Then ask yourself:

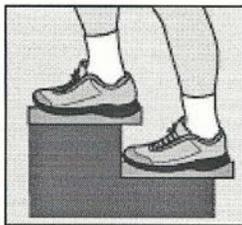
- Has my weight gone up or gone down compared to yesterday?  
If so, by how many pounds?
- Has my weight gone up or gone down compared to a week ago?  
If so, by how many pounds?



### New or worse swelling

Ask yourself:

- Are my ankles more swollen than usual?
- Do my socks or shoes feel tighter?
- Do my clothes feel tighter at the waist?
- Do my rings fit more snugly?



### Changes in your ability to do everyday things

Ask yourself:

- Can I do all the things I normally do, such as get dressed on my own, make meals, or go for walks?
- Do I feel dizzy or more tired than usual?
- Do I have any new symptoms, like pressure or pain in my chest?
- Does my heartbeat feel strange or irregular?
- Do I feel like I might pass out?

See the next page to find out what you should do if any of these changes occur.

## Heart failure action plan - page 2

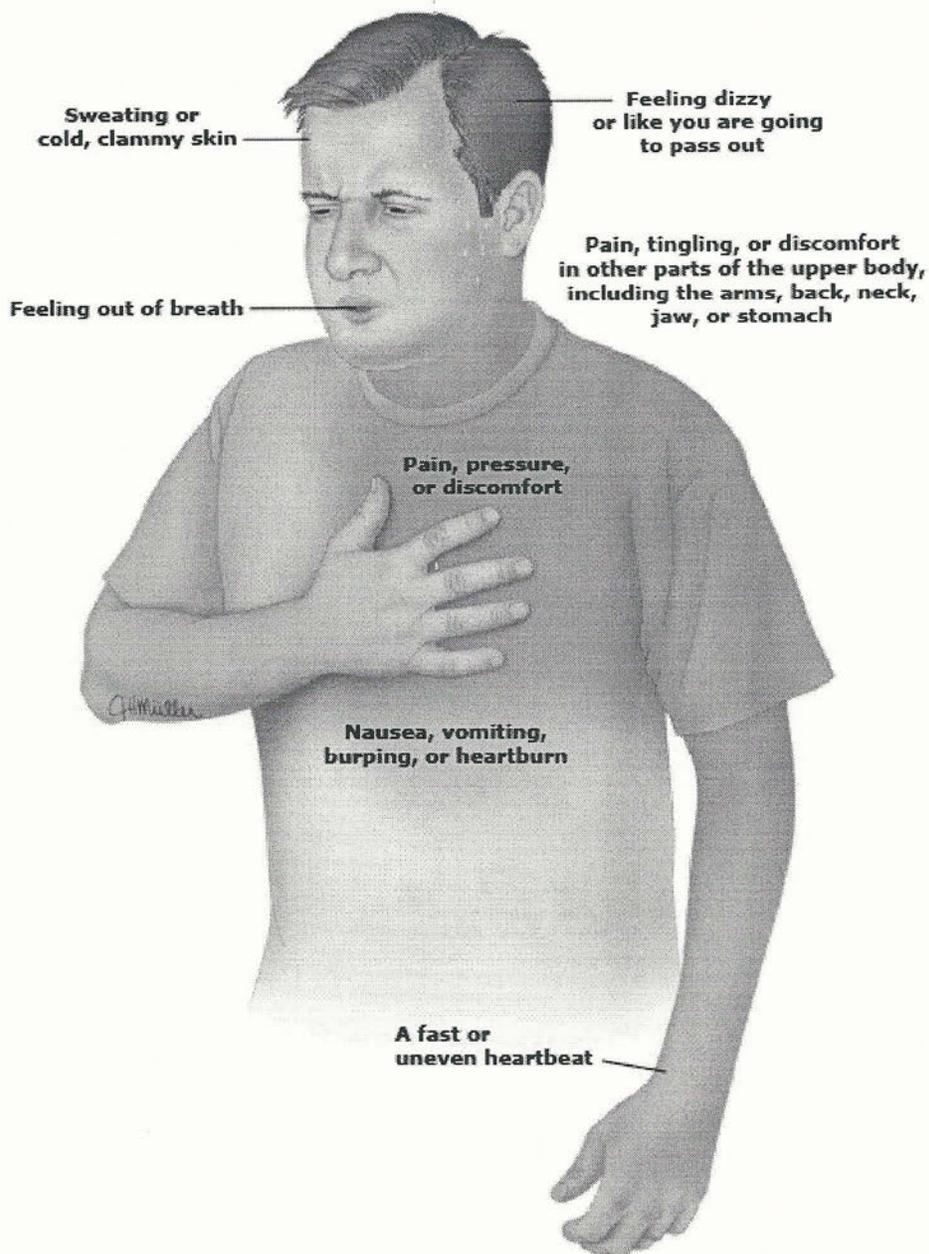
Symptom	Action
<p style="text-align: right;">Best weight: <input style="width: 60px; height: 20px;" type="text"/></p> <p>If you have:</p> <ul style="list-style-type: none"> <li>▪ No trouble breathing</li> <li>▪ No chest pain</li> <li>▪ No weight change overnight or over the last week</li> <li>▪ The usual amount of ankle swelling</li> <li>▪ No change in ability to be active</li> </ul>	<p>Your symptoms are under control.</p> <ul style="list-style-type: none"> <li>▪ Keep taking your medications every day, as ordered</li> <li>▪ Keep weighing yourself every day and writing down your weight</li> <li>▪ Follow a low-salt diet</li> <li>▪ Keep all your medical appointments</li> </ul>
<p>If you:</p> <ul style="list-style-type: none"> <li>▪ Need more pillows than usual to sleep</li> <li>▪ Have more trouble breathing when you are active</li> <li>▪ Have more coughing than usual</li> <li>▪ Increased shortness of breath with activity</li> <li>▪ Gain 2 to 3 pounds overnight, or 5 pounds in one week</li> <li>▪ Have more swelling than usual</li> </ul>	<p>You might need to take extra medicine.</p> <p>Call your doctor's office to find out what you should do.</p> <p>Doctor name: _____</p> <p>Phone #: _____</p>
<p>If you:</p> <ul style="list-style-type: none"> <li>▪ Have trouble breathing when you are resting, or you can't stop coughing</li> <li>▪ Wheeze or feel chest tightness when you are resting</li> <li>▪ Wake up at night because you can't breathe well</li> <li>▪ Feel dizzy, very tired, or like you might fall</li> <li>▪ Gain or lose more than 5 pounds compared to your normal weight</li> </ul>	<p>You probably need to <b>see</b> a doctor right away.</p> <p>Call your doctor <b>now</b>.</p> <p>Doctor name: _____</p> <p>Phone #: _____</p>
<p>If you:</p> <ul style="list-style-type: none"> <li>▪ Have trouble breathing that does not get better no matter what you do</li> <li>▪ Feel like you can't breathe, or start to turn blue</li> <li>▪ Cough up frothy or pink saliva</li> <li>▪ Have pain or pressure in your chest, or you have other signs of a heart attack</li> <li>▪ Have a fast or uneven heartbeat that will not go away or makes you feel dizzy or lightheaded</li> <li>▪ Feel very confused</li> <li>▪ Faint</li> </ul>	<div style="text-align: center;">  </div> <p>Call 9-1-1 for an ambulance <b>right away</b></p>

Based on the Heart Failure Action Plan provided by Access III of the Lower Cape Fear, Inc.

Graphic 75501 Version 3.0

## Heart attack symptoms

---



---

This picture shows the main symptoms of a heart attack. People who are having a heart attack often have only some of these symptoms. The pain, pressure, and discomfort caused by a heart attack mostly affect the left side of the body (shown in darker red) but can also affect the right. If you think you are having a heart attack, call 9-1-1 for an ambulance. Do not try to get yourself to the hospital.