

February 2019 | Patients

Spotlight on Health

Heart Failure Prevention, Diagnosis, and Management

Heart failure is when the heart cannot pump enough blood through the body. People with heart failure can become weakened and bed-ridden, because the heart can't do its job well. Diagnosing heart failure early can help your doctor keep it under control. However, symptoms can be easy to miss when the heart first starts to fail. Fortunately, blood tests can help tell if you have heart failure. These tests can also help predict if your heart will fail if you are at risk of developing heart failure (for example, being overweight or high blood pressure can increase the risk of heart failure).

This newsletter will discuss the causes, symptoms, and diagnosis of heart failure. It will also describe important blood tests your doctor may use to help see if you have heart failure or are likely to get it.

What Causes Heart Failure?

Any condition that damages heart muscle can cause heart failure.^{1,2} For example, a heart attack damages a large amount of the heart quickly. But heart failure can also happen slowly over time. Blockage of the arteries that take blood to the heart (coronary artery disease) can slowly damage the heart, causing heart failure.

Other conditions that can cause heart failure include abnormal heart beat, heart tissue that is too stiff to pump blood, problems with the heart at birth, diabetes, high blood pressure, using illegal drugs, using some medications (eg, some drugs used to fight cancer), being very overweight, and smoking.^{1,2}

Symptoms of Heart Failure

The symptoms of heart failure tend to be very general, like shortness of breath and feeling tired (see Sidebar).^{1,2} These types of symptoms might be ignored while heart failure gradually worsens.

Heart Failure Diagnosis and Prevention

To diagnose heart failure, your doctor will ask about your symptoms and may use ultrasound to measure how much blood the heart pumps with each beat. In people with heart failure, the heart pumps less blood than it should. The less blood pumped, the greater the person's symptoms and the worse the heart failure.

Blood tests are also used for diagnosing heart failure, by measuring substances that the heart releases when it is damaged.³ In people with heart failure, levels of these substances are higher than normal. In people without heart failure, an increase in levels of these substances may mean they are more likely to develop heart failure.³ Doctors can use these tests to screen people to see if they are more likely to develop heart failure. This is especially important for people who are at risk of getting heart failure, including people with diabetes or high blood pressure.

Doctors also use these tests to see how bad the heart failure is, or if it's getting better with treatment. For both people at risk of developing heart failure and those that already have it, treatment can prevent further damage to the heart.



Symptoms of Heart Failure^{1,2}

Symptoms of early heart failure are usually very general. However, some are closely associated with heart failure. If you have any of these, you should see your doctor. These signs and symptoms include

- A dry, hacking cough (common when you are lying flat).
- Dizziness, confusion, difficulty concentrating, fainting.
- Feeling bloating in your stomach, loss of appetite, or frequent upset stomach.
- Feeling tired (fatigue) and leg weakness.
- Needing to urinate during the night.
- Rapid or irregular heartbeats (palpitations).
- Shortness of breath or trouble breathing. If you wake up suddenly at night to sit up and catch your breath, the problem may be severe and you need to see your doctor.
- Shortness of breath with only mild exercise can also be a sign of heart failure.
- Swelling in your ankles, legs, and abdomen.
- Weight gain even though you are not eating more than usual.

What You Can Do

Some ways to slow down or prevent heart failure include eating healthy and exercising to keep you from being overweight. If you're a smoker, quit smoking. More information about keeping your heart healthy is available on the Centers for Disease Control and Prevention website [CDC.gov/heartdisease/index.htm](https://www.cdc.gov/heartdisease/index.htm).

If you are at risk of developing heart failure you should see your doctor, especially if you notice any symptoms (see Sidebar on previous page).

How Your Doctor Can Help

If your doctor suspects that you might have heart failure, they will ask you about your symptoms and examine you. They may ask for an ultrasound of your heart. They may also order blood tests to find out if your heart is failing. Even if you do not have heart failure, blood tests can help your doctor tell if you are likely to develop it later on. Your doctor may also recommend certain medications.³

How the Laboratory Can Help

Quest Diagnostics offers tests that can help your doctor tell if you have heart failure. If you have heart failure, tests can help let them know if treatment is working. Some tests can also help check the health of your heart and your risk of developing heart failure. The tests at Quest that are helpful for finding risk for heart failure are found in the group of tests called Cardio IQ®.

Additional Information

For more information, visit Quest Diagnostics at [QuestDiagnostics.com/home/patients/health-test-info/chronic-disease/heart-disease/cardio-iq-testing.html#heart-failure](https://www.questdiagnostics.com/home/patients/health-test-info/chronic-disease/heart-disease/cardio-iq-testing.html#heart-failure) or these helpful websites:

- Medline Plus: [MedlinePlus.gov/heartfailure.html](https://www.nlm.nih.gov/heartfailure.html)
- American Heart Association: [Heart.org/en/health-topics/heart-failure](https://www.heart.org/en/health-topics/heart-failure)

References

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2. Heart failure: understanding heart failure. Cleveland Clinic website. <https://my.clevelandclinic.org/health/diseases/17069-heart-failure-understanding-heart-failure>. Accessed December 3, 2018.
3. Yancy CW, Jessup M, Bozkurt B, et al. 2017 ACC/AHA/HFSA focused update of the 2013 ACCF/AHA guideline for the management of heart failure: a report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines and the Heart Failure Society of America. *Circulation*. 2017;136:e137-e161.

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