Understanding Heart Failure

The Ohio State Richard M. Ross Heart Hospital
Offering the most advanced treatments for heart failure in the region
What is Heart Failure?

Heart failure is a condition in which the heart cannot pump enough oxygen-rich blood to meet the needs of the body’s other organs. It’s also called congestive heart failure (CHF), referring to fluid that builds up in the body.

Heart failure does not mean that your heart has stopped or is about to stop working, but it is a serious condition that is most effectively treated in its early stages.

The condition may affect one or both sides of your heart. The heart muscle itself may be weak, making it difficult to pump blood, or it may become stiff and scarred, preventing the chambers from filling up with blood.

Symptoms of Heart Failure

When the heart is not pumping enough blood, every part of the body is affected. Symptoms of heart failure include:

- Shortness of breath
- Chronic coughing or wheezing
- Buildup of fluid (edema) in the feet, ankles, legs or abdomen
- Rapid weight gain due to fluid buildup
- Fatigue or feeling lightheaded
- Nausea or lack of appetite
- Confusion or impaired thinking
- High heart rate or abnormal heartbeats

Common Causes of Heart Failure

Heart failure is more common in men, people age 65 and older, African Americans, people who are overweight, people who have had a heart attack and people with poorly controlled hypertension.

A number of conditions may lead to heart failure:

- Heart problems such as valve disease, infection, enlarged heart, coronary artery disease, abnormal rhythms or hereditary heart conditions
- High blood pressure
- Diabetes
- Chronic lung disease or clots in the lungs
- Anemia
- Too much sodium in your system
- Reaction to certain medications
When to Seek Treatment or a Second Opinion

If you are having mild symptoms, see your doctor to determine whether you have heart failure or another condition. Your doctor can examine you and order tests that are helpful in determining the underlying cause of your symptoms. For severe symptoms, seek medical attention immediately.

If heart failure is affecting your quality of life and you have not been able to find help elsewhere, our heart failure specialists are experienced in diagnosing and treating even the most complex heart failure problems. We routinely see patients to offer a second opinion on their treatment options.

TREATMENT

Ohio State has a dedicated team of heart failure physicians who specialize in treating advanced heart failure. We have access to medications and treatment options that may not be available elsewhere. And, as an academic medical center, our researchers offer a variety of clinical trials that give you access to some of the latest technologies and medicines available for heart failure. Our physicians welcome the chance to offer you a second opinion and explore new options for treatment.

Medications

Healthy lifestyle choices and medicines to treat underlying causes of heart failure are the first line of treatment. Categories of medications include:

- **Diuretics** (water or fluid pills) to reduce fluid buildup in your lungs and swelling in your feet and ankles.
- **ACE (angiotensin converting enzyme) inhibitors** to lower blood pressure, reduce strain on your heart and lower your risk for a heart attack.
- **Aldosterone antagonists** to help you rid your body of salt and water through urine. This lowers the volume of blood your heart pumps.
- **Angiotensin receptor blockers (ARB)** to relax your blood vessels and lower blood pressure to decrease your heart's workload.
- **Beta blockers** to slow your heart rate and lower your blood pressure to decrease your heart’s workload.
- **Isosorbide dinitrate/hydralazine hydrochloride** to help relax your blood vessels so your heart doesn’t work as hard to pump blood. Studies have shown that this medicine can reduce the risk of death in African Americans with symptoms of heart failure. More studies are needed to find out whether this medicine will benefit other racial groups.
- **Digoxin** to make the heart beat stronger and pump more blood.
- **Ivabradine (Corlanor)** to lower heart rate. (This medicine was recently approved by the FDA.)
- **Sacubitril/valsartan (Entresto)** to relax blood vessels, and is used to replace ACE inhibitor or ARB. (This combination medicine was recently approved by the FDA.)
Heart Procedures
If your heart failure progresses, you may need a procedure or device to assist your heart. At Ohio State, our advanced heart failure specialists offer the most wide-ranging treatments available today. Options include:

• **Biventricular pacemaker** to deliver cardiac resynchronization therapy (CRT) to improve the heart’s pumping efficiency. The pacemaker gives signals to the lower chambers of the heart called ventricles to contract at the same time.

• **Implantable cardioverter defibrillator (ICD)** implanted near your heart to help shock your heart out of a dangerous rhythm in the ventricles.

• **Coronary artery bypass surgery and valve repair/replacement** to improve circulation to the heart and efficient pumping action.

• **Ultrafiltration treatment** to remove excess fluid from blood. Ohio State has the only Columbus clinic offering both inpatient and outpatient ultrafiltration for heart failure patients who do not respond to diuretics.

• **Ventricular assist devices (VAD)** to assist one or both ventricles (lower heart chambers). As one of the larger VAD programs in the country, Ohio State has specialists who implant long-term and temporary devices to help pump blood from the heart to the rest of the body.

• **Heart transplant** to replace your heart with a healthy heart from a donor. With more than 400 heart transplants over three decades, the Heart Transplant Program at Ohio State remains central Ohio’s only adult heart transplant program.
Why Choose Ohio State?

**All in One Place.** Ohio State has the largest heart failure program in central Ohio, serving more than 2,000 patients and offering all treatment options available. For those requiring advanced treatment, Ohio State is the only center in central Ohio implanting artificial heart pumps and ventricular assist devices and performing heart transplants. You can receive all of your care at Ohio State without leaving Columbus.

**Specialized Expertise.** Heart failure specialists and nurse practitioners work together with nurses, pharmacists, social workers, dietitians and surgeons—all specialists in heart failure treatment—to provide both routine and urgent care. We also have an entire floor at the Richard M. Ross Heart Hospital dedicated to the care of patients with heart failure.

**Access to Clinical Trials.** A national leader in clinical trials enrollment, Ohio State both leads and participates in dozens of clinical trials for cardiovascular research. This research allows you to receive treatments long before they are available to the public.

Ohio State’s Richard M. Ross Heart Hospital

The Ross Heart Hospital is central Ohio’s only hospital to earn a spot on the U.S. News & World Report list of the nation’s best hospitals for cardiology and heart surgery.

The Ross Heart Hospital opened in 2004 as the nation’s first comprehensive academic hospital dedicated to cardiovascular care. The 150-bed facility combines the latest technology with patient-focused care to create the best possible healing environment. Each floor is dedicated to a specific service, including heart failure. Our universal patient rooms adapt to changing medical needs so a patient can remain in the same private room for the entire hospitalization.

The Ross Heart Hospital is recognized as a Magnet Hospital for nursing excellence by the American Nurses Credentialing Center. It was awarded the Beacon Award for Excellence also, recognized as having one of the best critical care units in the nation by the American Association of Critical-Care Nurses.

Contact Us

To learn more about Ohio State’s heart failure services, call 614-293-ROSS (7677) or visit wexnermedical.osu.edu/heart.