

Your Guide To Mitral Valve Surgery

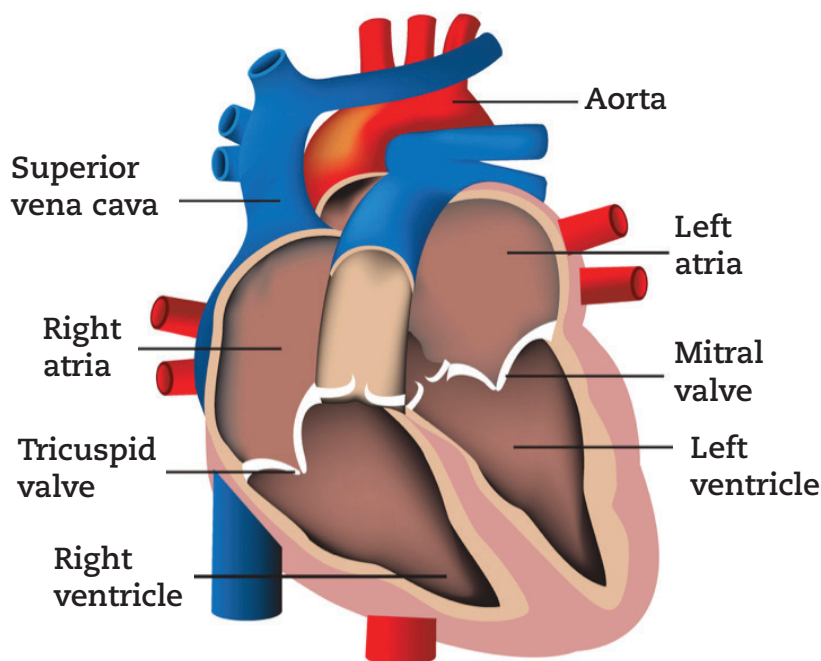


The older you get, the more likely you'll have a heart-valve problem. More than half of Americans age 70 and older have a detectable heart-valve disease.

The mitral valve, which regulates blood flow between the two chambers in the left side of your heart (left atrium and left ventricle), often becomes diseased and requires repair or replacement.

Hartford HealthCare's Heart & Vascular Institute tries to repair your living valve whenever possible. Experience counts: The repair rate for patients with leaking mitral valves at the Heart & Vascular Institute is close to 100 percent.

Parts of the Human Heart

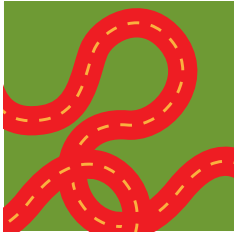


If you have mitral valve disease and would like to speak with one of our experts, **REQUEST AN APPOINTMENT NOW.**

HartfordHealthCare.org/HeartConsult3

You will hear back from our team within 2 business days.

If You Have A Mitral Valve Repair Procedure



A repair procedure is typically recommended for patients with mitral valve regurgitation, the most common heart-valve disorder. It's a “leaky” valve, when blood leaks backward through the mitral valve and into the left atrium (the heart's upper chamber) each time the left ventricle contracts. Blood, in effect, is moving in two directions because it's also flowing from the ventricle through the aortic valve — the heart's normal function that helps replenish the body with oxygen-rich blood.

In this case, however, it's not enough.

A healthy mitral valve, with two flaps of tissue (leaflets), opens as blood flows from the left atrium to the left ventricle before closing to prevent backflow. Regurgitation occurs when a mitral valve that doesn't close tightly allows blood to flow backward each time the heart beats.

Your doctor may remove a valve-tissue abnormality, reconnect leaflets, create new chords to correct anterior leaflet dysfunction, close holes in the valve or reinforce the ring surrounding the valve (annuloplasty).

Incisions are as small as three inches in a mitral-valve repair procedure, even smaller for a robotics-assisted procedure.

Here are three options:

- **Anterior Thoracotomy Incision:** The anterior thoracotomy approach avoids cutting the sternal bone and instead utilizes a 2-inch horizontal incision lateral to the nipple. The chest is entered between the ribs in the fourth intercostal space. The use of long-shafted instruments and a magnifying camera allow for precise work on the mitral valve. Robotics-assisted surgery is also available, using the same incisions.
- **The Mini Lower Sternotomy Incision:** The mini lower sternotomy incision is a 3-inch vertical incision over the lower part of the sternum. This incision avoids the upper sternum and provides the patient in recovery with greater flexibility in movement of the upper chest, enabling for early return to driving.
- **Submammary Incision:** The submammary approach, developed for female patients by a Heart and Vascular Institute surgeon, provides the same inside access as the mini lower sternotomy, but uses a 2-inch curvilinear skin incision located within the bra line. This technique provides female patients who require a lower sternotomy incision with optimal aesthetic results.

MitraClip: A Nonsurgical Option For Mitral Valve Regurgitation



People with mitral valve regurgitation who are considered too ill for valve repair or replacement now have a nonsurgical option.

MitraClip therapy allows doctors to reach the heart through a thin tube called a catheter inserted into a vein in your leg.

The MitraClip, as the name suggests, is a mesh clip no taller than a dime that attaches to your mitral valve, allowing the valve to close more securely and prevent the back-flow of blood into the atrium from the ventricle. In most cases, patients are released from the hospital within three days.

If You Have A Mitral Valve Replacement Procedure

If your doctor determines your mitral valve can't be repaired, replacement surgery may be necessary. You will be placed on a heart-lung machine during valve-replacement surgery, allowing blood to circulate (and oxygenate) outside the body, while your doctor replaces your valve with a man-made or biological-tissue valve. This procedure requires a large incision in your chest.

How Mitral Valve Disease Is Diagnosed

Your doctor, using a stethoscope, might detect a problem with a heart valve during a routine physical examination. Several tests can help a cardiologist diagnose coronary heart disease:

- **Electrocardiogram:** A device that measures the heart's electrical activity, its rate and regularity.
- **Echocardiogram:** An ultrasound test that uses a transducer to send out high-frequency sound waves toward the heart. The device in a traditional echocardiogram, when moved over the chest and abdomen, turns the echoes of sound waves redirected from various parts of the heart into detailed images of organs, blood flow and tissues. A transesophageal echocardiogram, using a device inserted into your esophagus, gives a more detailed picture of your heart.

- **Stress Test:** A measure of your heart rate as you walk on a treadmill that tells doctors if your heart works properly when required to pump more blood.
- **Chest X-ray:** A picture of the chest area, including the heart and lungs, captured by X-rays.
- **Cardiac Catheterization:** Diagnostic tests and imaging using a flexible tube (catheter) your doctor threads to your heart from a blood vessel in your arm, upper thigh or neck.
- **Holter Monitor:** A portable device worn for two days that records the heart's electrical activity, including heartbeats. A patient who feels symptoms while wearing the device can press a button that records heart rhythms at that time.

How To Choose A Mitral Valve Surgeon

Because mitral-valve surgery is a highly specialized procedure, the quality of the result depends more on the operating surgeon than the disease of the patient.

The American Heart Association and the American College of Cardiology both recommend referral of mitral valve patients to a surgeon with at least a 90 percent repair (vs. replace) rate. Your surgeon should tell you, before your surgery, whether your valve will be repaired.



Heart & Vascular Institute



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Or **call 833.444.0014** to find a Heart & Vascular Institute specialist near you.