

Your Guide to TAVR

Transcatheter Aortic Valve Replacement



Heart & Vascular Services

More than **5 million Americans** are diagnosed with heart valve disease each year.



Without an aortic valve replacement, as many as **50% of patients** with severe aortic stenosis will not survive more than an average of two years after the onset of symptoms.



The predicted survival of inoperable patients with severe aortic stenosis who are treated with standard non-surgical therapy is **lower** than with certain metastatic cancers.



For many years, the only way to treat a heart valve condition was through open heart surgery. But now, Mercy Health Heart & Vascular regularly performs transcatheter aortic valve replacement (TAVR) procedures. This minimally invasive procedure allows the heart valve to be replaced without the need for open chest surgery.

Patients who undergo TAVR often have greater stamina, are able to be more physically active and enjoy improved cardiovascular health. What's more, patients typically leave the hospital within 2 to 3 days and their recovery after TAVR takes just a few weeks, rather than the months associated with traditional heart surgery.

What is Aortic Valve Disease?

The aortic valve is one of four valves which must open and close with each heart beat to keep blood moving in one direction through the heart. When the aortic valve opens, it allows blood to leave the heart and enter the aorta on its way to the rest of the body.

The aortic valve can malfunction in two ways:

Stenosis

A buildup of scar tissue and calcium can develop which prevents the valve from opening adequately. When this occurs, it prevents blood from leaving the heart normally. Aortic stenosis is a common problem associated with increasing age, scarring from previous infections or congenitally malformed valve leaflets.

Aortic Regurgitation

Recently pumped blood flows backward from the aorta into the heart, forcing the heart to re-pump the same blood over again. When aortic regurgitation occurs, it puts excessive strain on the heart. This problem can occur along with aortic stenosis and is caused by many of the same disease processes.

These valvular diseases can cause symptoms such as shortness of breath, unusual tiredness and fluid build-up in the lungs and legs. If left untreated, these valvular diseases can result in heart failure, permanent heart damage, a reduced quality of life and an increased risk of early death.

Signs of Aortic Valve Disease

Signs may include:

- Shortness of breath
- Chest pain
- Excessive fatigue
- Fainting
- Palpitations
- Decreased ability to exercise

Risk Factors

Risk factors of aortic valve disease include:

- Older age
- Certain heart conditions present at birth (congenital heart disease)
- History of infections that can affect the heart
- Chronic kidney disease
- History of radiation therapy to the chest

Complications

Aortic valve disease can cause complications, including:

- Heart failure
- Stroke
- Blood clots
- Heart rhythm abnormalities
- Death

What is TAVR?

TAVR (Transcatheter Aortic Valve Replacement) is a minimally invasive procedure through which the damaged aortic valve can be replaced using a balloon catheter technique. By utilizing this technique, a new valve can be delivered without the need for a chest incision or stopping the heart.

Who should be considered for TAVR?

Some people with aortic valve disease may have other medical problems making it very difficult for them to safely undergo standard open surgical valve replacement. Anyone with severe aortic valve stenosis can be considered for TAVR, especially those individuals with other medical issues making it difficult for them to undergo standard open surgical valve replacement.

Benefits of TAVR

The TAVR procedure allows patients to undergo replacement of a malfunctioning aortic valve using a catheter based method. Patients who undergo a TAVR avoid a chest incision, experience a shorter hospital stay and can recover more rapidly, allowing a quicker return to daily life.

Am I a candidate for TAVR?

TAVR is approved for patients with severe aortic valve stenosis. Whether or not a patient is a candidate for the procedure is determined through a comprehensive evaluation of the heart, followed with a thorough assessment by a multi-specialty team of physicians from our cardiology and cardiac surgery services.

Meet Our Team

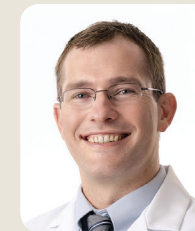
We provide a distinct level of quality care that follows you along each step of your medical journey — from initial diagnosis to post-surgery rehabilitation. Mercy Health is known for creating outstanding relationships with our patients, and our heart and vascular team makes your comfort and well-being its first priority.



Richard Downey, MD
Cardiothoracic Surgeon



Kristopher J. Selke, DO, FACC, FSCAI
Interventional Structural Cardiologist



Noah Thormeier, DO
Interventional Structural Cardiologist



Jennifer Gole, FNP-BC
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Call us today at 616-685-7800 to
learn more about your treatment options
or to schedule an appointment.

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