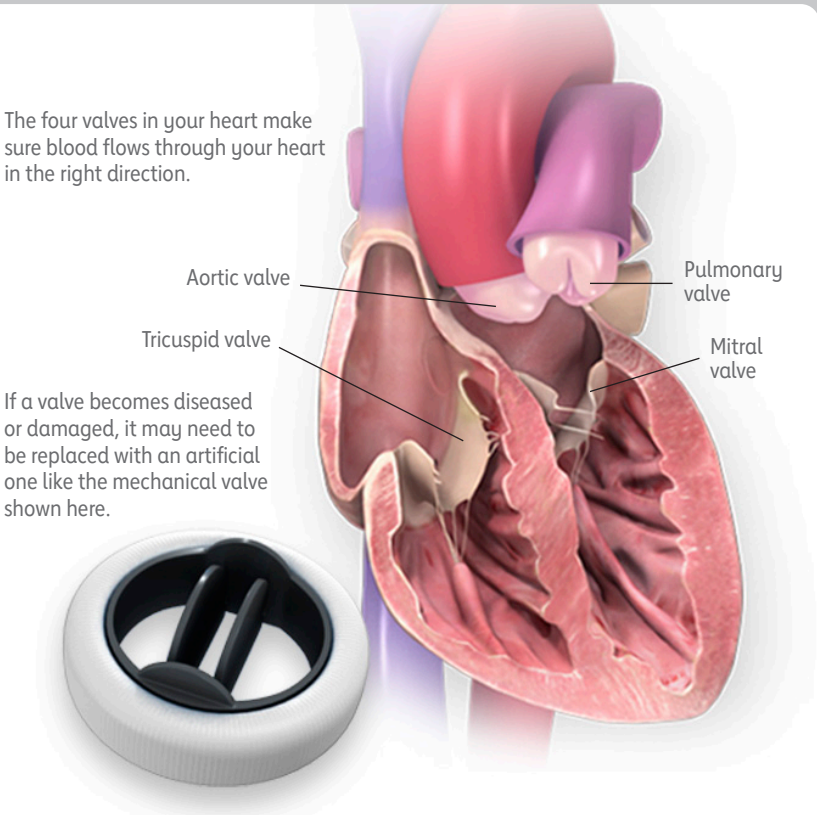
Why Do I Need Heart Valve Surgery?

Heart valve surgery is done to replace or repair heart valves that aren't working correctly. Most valve replacements involve the aortic and mitral valves. The aortic valve separates the left ventricle (your heart's main pumping chamber) and the aorta (the major artery that carries blood to your body from the heart). The mitral valve separates the left atrium from the left ventricle.



What do heart valves do?

The four valves in your heart are made of thin flaps of tissue that open and close as your heart pumps. They make sure blood flows forward through your heart. Heart valve problems make the heart work harder. Over time, this can lead to heart failure.

What are the types of valve problems?

Many heart valve problems are identified by hearing a murmur. Some murmurs are harmless. Others can indicate a valve problem.

Valve problems include:

- **Stenosis** — a narrowing or stiffening of the valve that prevents enough blood from flowing through.
- **Regurgitation** — valves don't close properly and allow blood to flow backward where it shouldn't.
- **Prolapse** — the valve leaflets (or flaps) don't close properly, causing a small leak.
- **Atresia** — the valve is not formed correctly or is missing from birth.

What causes heart valve problems?

- **Congenital defects.** A heart defect present at birth that's not repaired may get worse later in life and cause problems.
- **Aging and age-related valve disease.** Heart valves can weaken or harden with age. Childhood cancer survivors who had chemotherapy or radiation therapy are at greater risk of valve disease later in life.
- **Illnesses and conditions.** Certain heart conditions, including infective endocarditis, rheumatic fever, heart attack, poorly controlled high blood pressure and heart failure, can scar or damage a valve.
- **Family history** of heart valve defects.

What can be done?

- Yearly check-ups with your health care professional and living a healthy lifestyle may be all that's needed. In some cases, medication may be recommended.
- In some cases, surgery may be needed to repair a damaged valve.
- Sometimes, the valve must be removed and replaced with a new one. Your heart doctor can help you understand the best option for you.

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What are the options for valve repair or replacement?

Many things must be considered when choosing the best option for heart valve repair or replacement. It's generally best to repair a valve and keep a person's own heart tissue when possible. Repair options can be minimally invasive or more extensive. However, when the tissue is too damaged to repair, a replacement valve may come from a human or animal heart or be a mechanical valve. Factors include your age, extent of the valve disease, the size of the valve and willingness to take certain medications. Talk to your health care professional about the best option for you.

- **Tissue valves** come from human or animal donor tissue and can last 10 to 20 years.
- **Mechanical valves** are made of durable, long-lasting materials. Most people with mechanical valves must take blood-thinning medications to prevent blood clots for the rest of their lives.
- **The Ross Procedure** uses your pulmonary valve to "swap out" for your damaged aortic valve. Then, the pulmonary is replaced with a donor valve.
- **TAVI (or TAVR)** stands for transcatheter aortic valve implantation/replacement. It is a minimally invasive procedure. A catheter (a thin tube) is threaded through an artery to place a new valve inside the old valve. Once the new valve is expanded, it pushes the old valve leaflets out of the way and begins managing blood flow.
- Newer surgery options include other minimally invasive surgeries such as video-assisted surgery, robotic-assisted surgery or surgeries performed with an endoscope.

What about recovery and follow-up?

The normal recovery time is usually four to eight weeks. It may be shorter after minimally invasive procedures.

Your successful, long-term recovery depends on several things. You should:

- Be physically active
- Follow a healthy eating plan
- Take prescribed medications
- Not smoke
- Get regular medical checkups
- Follow your health care professional's advice

Your valve repair or replacement, coupled with these things, can improve the quality of and lengthen your life.

HOW CAN I LEARN MORE?

1. Call **1-800-AHA-USA1** (1-800-242-8721) or visit **heart.org** to learn more about heart disease and stroke.
2. Sign up for our monthly *Heart Insight* e-news for heart patients and their families at **HeartInsight.org**.
3. Connect with others sharing similar journeys with heart disease and stroke by joining our Support Network at **heart.org/SupportNetwork**.

Do you have questions for your doctor or nurse?

Take a few minutes to write down questions for the next time you see your health care professional.

For example:

Will my artificial valve cause problems?

When can I go back to work?

MY QUESTIONS:

We have many other fact sheets to help you make healthier choices to reduce your risk of heart disease, manage your condition or care for a loved one. Visit **heart.org/AnswersByHeart** to learn more.