

Heart Valve Disease

A guide for people living with heart valve disease

Read this guide to learn:

- what heart valve disease is
- what the treatments for heart valve disease are
- about the risks and complications of valve surgery
- what you can expect after surgery



What is heart valve disease?

Heart valve disease happens when your heart valves do not work well. Normal heart valves are thin and smooth structures. They direct blood through the heart's chambers. They also prevent the backflow of blood in the heart chambers.

Over time, heart valves can scar and thicken. Two heart problems can occur:

- **Stenosis** happens when the valves do not open as they should.
- **Insufficiency** happens when the valves cannot close all the way.

Heart valves can be changed or damaged by:

- birth defects
- infection
- rheumatic fever or scarlet fever
- aging
- a number of other causes

The **aortic** and **mitral** valves are the ones most often damaged. These valves control blood through the main pumping chamber, the left ventricle.

What happens when my heart valves do not work properly?

When your valves do not open properly, less blood travels through. When your valves do not close properly, your blood backs up. These problems cause your heart to work harder to pump blood to your body.

If your heart is not able to pump harder, you may suffer heart failure. Heart failure means your heart cannot pump well and blood is not emptied out of the heart. Your blood can back up into your lungs and other body parts.

If you have heart failure, you may feel these symptoms:

- shortness of breath
- swelling in your legs and feet
- a dry cough
- extreme tiredness

Over time, if your valves do not work properly, this can cause your heart:

- to not pump the way it should
- to become larger
- to have an irregular heartbeat
- to have blood clots inside

What are the treatments for heart valve disease?

There are 2 types of treatments for heart valve disease. They are:

- medicines
- valve surgery

1. Medicines

Your doctor may prescribe medicines to improve your heart's pumping action. Medicines can also relieve the symptoms of heart failure.

If medicines no longer work to treat valve disease, surgery is often needed. Your doctor can perform surgery to repair or replace the damaged valve.

2. Valve surgery

When possible, your doctor repairs your heart valve. If it cannot be repaired, it must be replaced. In either case, you will have open-heart surgery.

If your heart valve must be replaced, your doctor will use either a **tissue valve** or a **mechanical valve**. Both types of valves have advantages and disadvantages:

| Valve | Material Used | Benefits | Challenges |
|------------|--|--|--|
| Tissue | Specially treated animal or human valves | <ul style="list-style-type: none">• They are silent (no clicking sound).• You do not need to take “blood thinners” (anticoagulants) for a long time | <ul style="list-style-type: none">• Does not last as long as a mechanical valve |
| Mechanical | Very strong metal, carbon or other man-made material | <ul style="list-style-type: none">• Last for a long time | <ul style="list-style-type: none">• Often hear “clicking” sound of the valve (may go away with time)• Patients must take “blood thinners” (anticoagulants) for the rest of their life |

To protect against infection, you will need to take antibiotics before having these types of treatments.

Having your valve replaced increases your risk of infection when:



- you have dental work done
- you have an invasive medical procedure (for example, when a procedure involves needles or cuts to the area)

To protect against infection, you will need to take antibiotics before having these types of treatments.

What are some possible risks?

The risks of heart surgery are not the same for everyone.

They depend on many factors, including:

- your age
- how severe your angina or other symptoms are
- if you have had a heart attack recently
- the condition of your heart muscle
- how many of your heart valves need to be repaired or replaced
- if you have other health problems (for example, kidney disease)

Your surgeon will explain your surgical risks. Your surgeon will help you to compare the risks of surgery with the risks of not having surgery.

What are some possible complications?

Heart surgery is major surgery. Complications can be minor or serious.

These may include:

- bleeding
- irregular heart rhythm
- wound infection
- breathing problems
- problems with your heart rate that may require a permanent pacemaker
- heart attack or stroke
- in severe cases, death

Your surgeon will talk to you about any possible complications.

What can I expect after heart valve surgery?

After the surgery, you will go to an intensive care unit. You may be in this unit for 1 to 2 days. Afterward, you will return to your hospital room. Most patients recover in hospital for 5 to 10 days.

Some people feel their symptoms are relieved right after surgery. But for most people, it may take longer. It may be a few months before you feel the benefits of heart valve surgery. Be patient.

Your heart was working too hard before you had surgery. It will take time for it to recover. For this reason, your doctor may ask you to keep taking your medicines and follow a special diet.

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