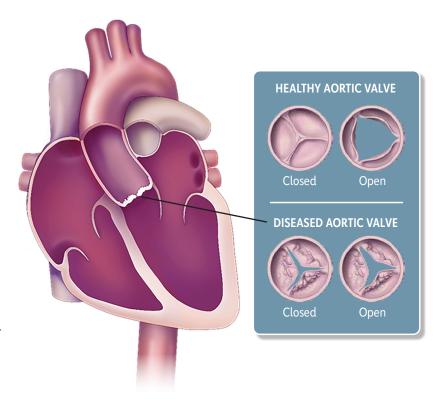


# What Is Aortic Valve Stenosis?

Aortic stenosis is one of the most common and serious valve disease problems. It is a progressive disease causing a narrowing of the aortic valve which reduces its ability to fully open and close. The aortic valve is one of the four main valves in the heart. It is located between the left ventricle and the aorta, the largest artery in the body.

Aortic stenosis, or AS, restricts the blood flowing out of the left ventricle. A narrowed heart valve causes the heart to work harder to pump blood through a smaller opening.



#### Who's at risk for aortic stenosis?

- Aortic stenosis mainly affects people 65 and older due to scarring and calcium buildup on the valve leaflets. Although age-related AS usually begins after age 60, symptoms may not develop for years.
- Across the world, AS may result from having rheumatic fever during childhood.
- The most common cause of AS in young people is a birth defect called a "bicuspid aortic valve." The normal aortic valve has three equal-sized leaflets or cusps. A bicuspid aortic valve has two leaflets.

### What are the symptoms of AS?

Many people with aortic stenosis do not have noticeable symptoms until the amount of blood flow becomes greatly reduced. Those who develop aortic stenosis due to a birth defect may not have symptoms until adulthood.

Symptoms of aortic stenosis may include:

- Chest pain caused by exertion and relieved by rest
- · Rapid, fluttering heartbeat

- · Trouble breathing or feeling short of breath
- Feeling dizzy or light-headed, even fainting
- · Increased difficulty tolerating exercise
- Swollen ankles or feet
- Difficulty sleeping or needing to sleep sitting up
- Decline in activity level or reduced ability to do normal activities

Infants and children who have AS due to a birth defect may display symptoms such as:

- Fatigue upon exertion in children
- Fussiness in infants
- Failure to gain weight
- · Poor or inadequate feeding
- Breathing problems, including rapid breathing

Some people suffering from AS may not complain of symptoms. However, if you or your family members notice a decline in routine physical activities, shortness of breath,

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major fatigue or other symptoms, you should see your health care professional for evaluation.

#### How is it diagnosed?

The first step in diagnosing aortic stenosis is a physical exam. Your health care professional will listen to your heart with a stethoscope for any unusual sounds or murmurs.

Then you'll have an echocardiogram (echo). This is the best procedure for assessing how severe your AS is and how well the left ventricle is functioning.

If the echo doesn't provide enough information, you may need further tests. These may include chest X-rays, CT scan, a cardiac catheterization, blood tests or an exercise stress test.

#### How does it progress?

Over time the wall of the left ventricle may enlarge and get thick because the heart must work harder to pump blood through the narrow valve opening.

The thickened wall may cause the heart to weaken, reducing the amount of blood supplied to the body. In time, this may lead to heart failure. Proper diagnosis and treatment can help improve symptoms and slow the progress of this disease.



#### What are the treatment options?

If there are no symptoms or symptoms are mild, the best course of action is regular follow-up and monitoring to see if any symptoms develop or worsen.

However, anyone with aortic stenosis should be routinely monitored with an echocardiogram to determine the best treatment options.

Possible treatments may include medications and valve repair or replacement. It's important to discuss treatment options with your health care professional.

#### **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 the doctor or nurse?

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

For example:

Po I need valve repair or replacement?

What are my treatment options?

## MY QUESTIONS:

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