



## PATIENT EDUCATION HANDOUTS

### Heart Murmur

#### Topic Overview

#### What is a heart murmur?

A heart murmur is an extra sound that the blood makes as it flows through the heart. Your doctor uses a stethoscope to listen to your heartbeat. When you have a heart murmur, your doctor can hear an extra whooshing or swishing noise along with your heartbeat.

It can be scary to learn that you or your child has a heart murmur. But heart murmurs are very common, especially in children, and are usually harmless. These normal murmurs are called "innocent" heart murmurs. There is nothing wrong with your heart when you have an innocent murmur. Up to half of all children have innocent murmurs.<sup>1</sup> They usually go away as children grow.

Adults can have innocent murmurs too. They can happen when your blood flows harder and faster than usual—during pregnancy, for example, or a temporary illness, such as a fever. They usually go away on their own.

Sometimes, though, a heart murmur is a sign of a serious heart problem. This is called an abnormal heart murmur.

#### What causes an abnormal heart murmur?

Abnormal murmurs are signs of a heart problem. In children, abnormal heart murmurs are usually caused by problems they are born with, such as a heart valve that doesn't work right or a hole in the wall between two heart chambers.

In adults, abnormal murmurs are most often caused by damaged heart valves. Heart valves operate like [one-way gates](#) , helping blood flow in one direction between heart chambers as well as into and out of the heart. When disease or an infection damages a heart valve, it can cause scarring and affect how well the valve works. The valve may not be able to close properly, allowing blood to leak through. Or the valve may become too narrow or stiff to let enough blood through. When a damaged heart valve cannot close properly, the problem is called [regurgitation](#). When the valve can't let enough blood through, the problem is called [stenosis](#).

Heart valves can be damaged by heart disease or by infections like [rheumatic fever](#) or [endocarditis](#). The normal wear and tear that comes with aging can also cause some damage.

Some heart murmurs are caused by an enlarged heart. When the heart muscle grows too large, it can get in the way of normal blood flow and cause a murmur.

## How is a heart murmur diagnosed?

Most heart murmurs are found during regular doctor visits. During exams, doctors listen to each part of the heartbeat, including any extra sounds, or murmurs, that may be there.

If a doctor hears a murmur, he or she can often tell whether it is innocent by how loud the noise is, what part of the heart it is coming from, and what kind of sound it is. He or she will also look for signs of a heart problem—for example, shortness of breath when the person is active, lightheadedness, a fast or irregular heartbeat, or a buildup of fluid in the legs or lungs. If your doctor thinks your murmur may be a sign of a problem, you will have tests to check your heart. You may also be sent to a heart specialist, called a [cardiologist](#), for more tests.

- An [echocardiogram](#) is a type of ultrasound test. It turns sound waves into pictures that show how well your heart is working.
- An [electrocardiogram](#), also called an EKG or ECG, checks the electrical activity of your heart. It translates your heart's electrical activity into line tracings on paper. The spikes and dips in the line tracings are called waves.
- A chest [X-ray](#) shows the size and shape of your heart and the position and shape of your large arteries.
- Cardiac catheterization can check for defects in the heart. A thin tube is inserted into an artery in your leg or arm. The tube, called a catheter, is slowly pushed up to your heart. A small amount of dye is injected, and the pictures show the heart chambers and valves as the dye moves through them.

## How is it treated?

If you have an innocent murmur, you do not need treatment, because your heart is normal.

If you have an abnormal murmur, treatment depends on the heart problem that is causing the murmur and may include medicines or surgery. Not all abnormal murmurs need to be treated. If you have an abnormal murmur and have no other symptoms, your doctor may only monitor your condition with an echocardiogram.

If you have symptoms, you may need to take medicine to lower your blood pressure and reduce your heart's workload. You may need surgery to replace a valve or repair a heart defect.

You may need to take antibiotics before any medical procedure that could let bacteria into your bloodstream. This includes getting your teeth cleaned, having certain kinds of surgery, or having a baby. If these bacteria get into your bloodstream and land on an abnormal valve, they could cause a heart infection called endocarditis.

## Can you prevent a heart murmur?

Most heart murmurs are normal, and there is nothing you can do to prevent them or cause them. They just happen.

Most abnormal murmurs cannot be prevented, either. They are often caused by infections or by problems that run in families.

What you **can** do is take good care of your heart by eating healthy food and getting regular exercise. Work with your doctor to control your blood pressure and your cholesterol. And if you smoke, quit. Your doctor can help you quit your smoking habit.

---

Author: [Cynthia Tank](#)

Last Updated: [August 1, 2006](#)

Medical Review: [Caroline S. Rhoads, MD - Internal Medicine](#)  
[George Philippides, MD - Cardiology](#)



---

Reviewed 9 June 2008