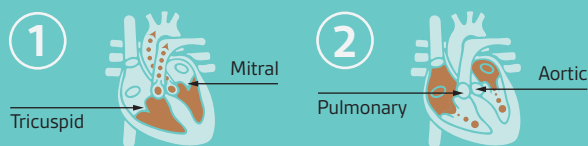


UNDERSTANDING Heart Murmurs

When the normal heart beats, two separate sounds are made, creating a "lub-Dub." These sounds are caused by the valves of the heart closing as blood moves through the heart.

Each beat of the heart is a two-phase process:



During systole the heart contracts and the mitral and tricuspid valves close. This makes the first heart sound: "lub"

During diastole the heart relaxes and the aortic and the pulmonary valves close. This makes second heart sound: "Dub"

A heart murmur is not always an indicator of heart disease

What is a heart murmur?

A murmur is an extra sound that your doctor hears with a stethoscope. A heart murmur can sound like a whooshing or swishing noise. For example: "lub-woosh-Dub."

There are two types of heart murmurs:

1. Innocent

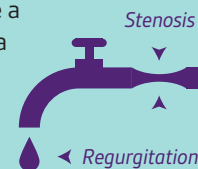


Most heart murmurs heard in children are called "innocent heart murmurs." They are caused by the sound of the blood moving through the normal heart. It is as if you put your ear to a water pipe and heard the water flowing through it. More than 50% of healthy children will have a heart murmur at some point in their lives. **An innocent murmur is not a cause for concern and requires no treatment or change in activity.**

2. Pathological



Murmurs that are caused by a problem in the heart are called "pathological heart murmurs." They are caused by an abnormality in the heart that causes the blood to make a certain noise as it moves through that area of the heart. This can be caused by valvar disease or holes in the heart. Valves can have stenosis, regurgitation or both.



How are murmurs diagnosed?

Doctors can often tell the difference between an "innocent" murmur and a "pathological" murmur just by listening with a stethoscope. Depending on what your doctor hears, they may refer you to a pediatric cardiologist who can recommend additional tests. These tests, explained below, can determine the exact cause of the murmur.

1 Electrocardiogram



Electrocardiograms can detect changes in heart rhythms or chamber sizes.

2 Echocardiogram



Echocardiograms use ultrasounds to create images of the heart and evaluate anatomy and function.

3 Chest X-ray



A chest x-ray screens for an enlarged heart, signs of abnormal circulation or heart muscle failure.