

# “Ya Gotta Have Heart!” Heart Murmurs Explained



Conversation hearts murmuring

When the Tin Man was a child in Oz, I’m sure his pediatrician never told his parents, “Has anyone ever said your child has a heart murmur? I hear one today.”

I know that when I tell parents about a heart murmur in their child, their hearts skip and jump. But not all heart murmurs are bad.

## What is a heart murmur?

A heart murmur is an extra sound that we pediatricians hear

when we listen to a child's heart with a stethoscope. A normal heart beat sounds like this: "lub, dub. lub, dub. lub, dub." A heart murmur adds a whooshing sound. So what we hear instead is "lub, *whoosh*, dub" or "lub, dub, *whoosh*."

The "whoosh" is usually caused by blood flowing through a relatively narrow opening somewhere in or around the heart. Think of your blood vessels and heart like a garden hose. If you run the water (blood) very hard, or put a kink or cut a hole in the hose, the whoosh of the water grows louder in those locations.

## **Heart murmurs signal different issues at different ages.**

In a newborn, some types of heart murmurs are expected. Normal newborn hearts contain extra holes that close up after the first hours or days of birth. One type of murmur occurs as the infant draws in his first breath and holes in the heart, present inside the womb, begin to seal. As the holes get narrower, we sometimes hear the "whoosh" of blood as it flows through the narrowing opening. Then these holes close completely and the murmur goes away.

However, some murmurs in infancy signal "extra holes" in the heart. As pediatricians, we experience our own heart palpitations when moms want to leave the hospital early with their infants who are less than 48 hours old. We worry because many infants who have abnormal hearts may not develop their abnormal heart murmurs and other signs of heart failure until the day or two after birth.

Preschool and early school-age children often develop "innocent" heart murmurs. "Innocent" implies that extra blood flows through their hearts, but the hearts are structurally normal. These murmurs are fairly common and can run in families. However, there are some significant heart problems which do not surface until this age. For this reason, remember

to schedule those yearly well child checkups.

For teens, during the pre-participation sports physical, pediatricians listen carefully for a murmur that may indicate that an over grown heart muscle has developed.

## **What else can cause a heart murmur?**

Holes are not the only culprit behind a murmur. The whoosh sound can also arise when a person is anemic and blood flows faster than normal. In anemic kids, the blood flows faster because it lacks enough oxygen-carrying red blood cells and the heart needs to move blood faster in order to supply oxygen to the body. The most common cause for anemia is a lack of eating enough iron-containing foods. Subsequently, we hear these flow murmurs in children whose diets lack iron, in teenagers who grow rapidly and quickly use up their iron stores, and in girls who bleed too much at each period. Replenishing the iron level makes a heart murmur from anemia go away.

Even a simple fever can cause a heart murmur on physical exam. The murmur goes away when the fever goes away.

Pediatric health care providers can often distinguish between “innocent” heart murmurs and not-so- innocent heart murmurs by the sound of the murmur itself (not all “whooshes” sound alike). If any question exists, your child will be referred for more testing, which could include a chest x-ray, an EKG (electrocardiogram), an ECHO (echocardiogram, or ultrasound of the heart), or evaluation by a pediatric cardiologist.

## **If your child’s pediatrician tells you that your child has a heart murmur, “take heart.”**

Many times a murmur comes and goes or just becomes part of your child’s baseline physical exam. Even if your child has a serious heart problem, most cases respond well to medication, surgery, or both. While not all heart problems cause heart

murmurs, and while not all murmurs signal heart problems, the presence of a heart murmur in a child can signal that your child needs further testing.

Unless, of course, your child is the Tin Man. In this case, extra sounds indicate that your child needs more oil!

Julie Kardos, MD and Naline Lai, MD

©2010, 2018 Two Peds in a Pod®