

# VENTRICULAR SEPTAL DEFECT (VSD)

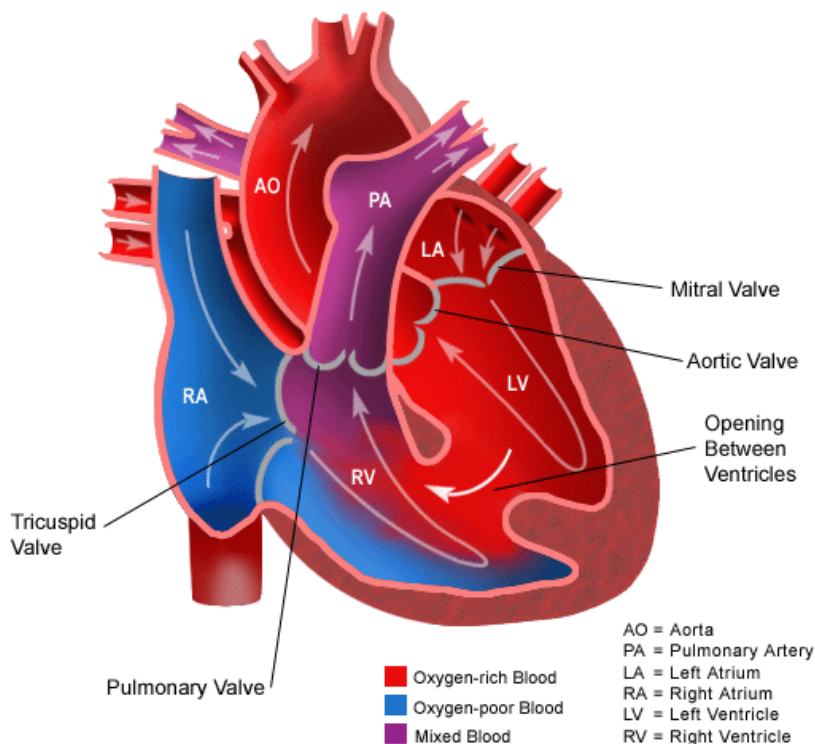
## What are an atria and a ventricle?

There are four chambers in the heart. The two small chambers are called atria and the two large chambers are called ventricles. The right atrium receives deoxygenated blood from the body where it drains in to the right ventricle which pumps the blood to the lungs to be oxygenated. The left atrium receives oxygenated blood from the lungs where it drains in to the left ventricle which pumps the oxygenated blood to the body.

## What is a septal defect?

A septal defect is a hole in the membrane separating the two ventricles.

Ventricular Septal Defect (VSD)



<http://www.rush.edu/rumc/page-1098987358085.html>

## Do they occur commonly?

A VSD is the most common type of congenital heart problem. They occur in about 2 in every 1,000 babies born.

## Can there be other problems with my baby's heart?

A VSD may be associated with other abnormalities of the heart. If this is the case the medical officers will talk to you about any other findings.

fact sheet

**How will this affect my baby?**

The size of the hole and whether there is more than one will determine what needs to be done for your baby.

Small VSDs in the muscular part of the membrane rarely cause any problems, and the majority close by themselves over time.

Large VSDs or multiple holes can result in extra work for the heart and the heart may begin to fail. Some of the blood from the left side of the heart, instead of going to the body will go through the VSD and then on to the lungs. This can result in too much blood flow to the lungs and if this is severe enough the baby will show signs of the heart beginning to fail.

**How is a VSD diagnosed?**

When medical or nursing staff listen to your baby's heart they may hear a murmur. A murmur is a noise. Like water flowing in a river, when it comes to a bend the water then makes noise. Blood is similar. When blood flows along smooth surfaces it makes little noise, but if it then flows through an opening it will make sound. If a murmur is heard an echocardiogram (ultrasound of the heart) will be performed which will show the hole.

**How are VSDs treated?**

Small VSDs will often close on their own, and as such require no treatment. Your child will be reviewed by a cardiologist until the VSD has closed.

Larger VSDs require close observation. Signs of heart failure include a fast heart rate, fast breathing and poor weight gain. Your baby may be treated with medications that improve the function of the heart until the baby grows and the hole gets smaller.

Sometimes the defects are so large that they cause significant heart failure which cannot be controlled with medications. In these cases early surgery may be required to close the hole. This will be discussed with you by the medical staff. Surgery to close VSDs is performed in Sydney.

Until the hole is closed there is a slight risk of infected blood clots attaching to the edges of the hole (bacterial endocarditis). This can make a baby or child very unwell. These infected clots are usually associated with dental or other surgical procedures. You should inform your dentist or surgeon of the VSD and should be given antibiotics at the time of the procedure. When the VSD has closed, either on its own or following surgery, antibiotics are no longer required.

If you have any further questions please ask the medical and nursing staff.