

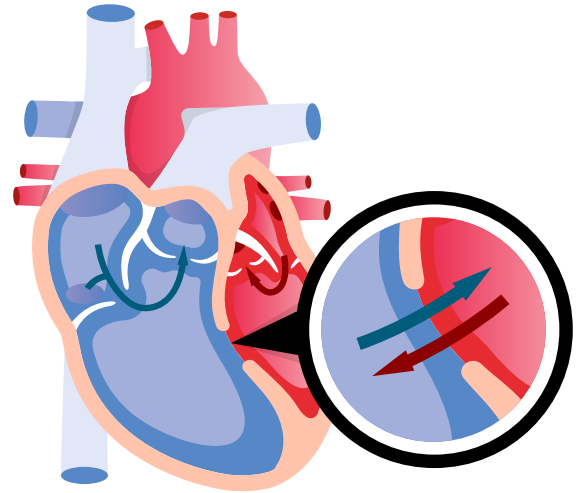
Ventricular septal defect

A ventricular septal defect (VSD) is a hole in the wall between your heart's lower chambers. A VSD is a type of congenital heart disease, meaning you are born with it. The cause of VSD is not known, but it happens when a baby's heart is developing during pregnancy.

If you have a VSD you have a hole between the wall in your heart's lower chambers. This means when your heart beats, blood can flow through the hole.

Blood from the left ventricle (high in oxygen from the lungs) can flow into the right ventricle. Blood from the right ventricle (low in oxygen) can flow into the left ventricle.

A VSD can cause other conditions like heart failure, irregular heart rhythms or stroke.



Types

There are two common types of VSD:

1. Muscular VSD, in the lower part of the wall between your heart chambers (ventricles).
2. Perimembranous VSD, near your heart valves.

You may also hear about less common types of VSD, such as inlet or outlet VSD. A VSD is sometimes described by its size, for example a small or large VSD.

Diagnosis

Most people will be diagnosed shortly after birth. You may find out as an adult when having checks for other conditions or if you've been experiencing symptoms. Diagnosis tests include ECG, echocardiogram, chest X-ray, CT scan, MRI or a stress test.

Symptoms

A VSD usually causes no signs or symptoms, but blood flowing through the hole can create a swishing noise, called a heart murmur.

In rare cases, a VSD may cause signs and symptoms in children, such as:

- shortness of breath, especially when exercising
- being very tired
- being underweight and growing slowly
- irregular or extra heart beats, called arrhythmias.

Adults with a VSD may also have signs and symptoms, such as:

- shortness of breath, especially when exercising
- you may not be able to exercise for long
- feeling very tired
- irregular or extra heart beats, called arrhythmias
- fainting.

Treatment

Small VSDs can close by themselves and do not need treatment.

If you have a small VSD that's not closed by itself, you'll have regular appointments to check how your heart is working.

There are two types of procedures used to repair VSDs. They're both usually done under general anaesthetic, which means you'll be asleep and looked after by healthcare professionals throughout. If you have a large VSD or have symptoms, your doctor will likely recommend that the hole be closed.

Transcatheter closure

- A long thin tube (called a catheter) is put into a vein at the top of your leg. It's guided to your heart to close the hole. A patch or plug repair may be done.
- Patch repair is a patch made of special material that's used to cover and close the hole. Over time your own tissue will grow over the patch.
- Plug repair is a device that's inserted through the VSD to fill (or plug) the hole and stays in place for your lifetime.

Open heart surgery

- You're put onto a bypass machine, which helps pump blood around your body during the surgery.
- Your breastbone is cut to get to your heart, the VSD is closed and you're taken off the bypass machine.

Once your surgery or procedure is finished, you'll be taken to a recovery area or intensive care unit. When you're well enough you'll be moved to a ward where you'll recover.

Living with a VSD

If you're living with a VSD, you may have questions about your day-to-day life and future. Things like:



Get answers to your questions, as well as more information and support, by going to: bhf.org.uk/VSD

Or scan the QR code here with the camera on your phone...

