

# Atrial septal defect

An atrial septal defect (ASD) is a hole in the atrial septum, which is the wall between the two upper chambers of your heart (atria). It's a type of congenital heart disease, which means it's something you're born with.

## Types

There are three main types of ASD:

- **Secundum ASD.** One of the most common ASDs where the hole is in the middle of your atrial septum.
- **Primum ASD.** This hole is in the lower part of the atrial septum, near your ventricles (the lower chambers of your heart).
- **Sinus venosus ASD.** This hole is close to the major blood vessels which bring blood low in oxygen back to your heart.

## Diagnosis

An ASD can be diagnosed in the womb, soon after birth, or later during adulthood. If a doctor thinks there might be a problem with your heart, they'll send you for tests to find out the cause.

## Symptoms

There are usually no signs of ASD at birth. Sometimes the only sign is an extra, unusual sound in your heartbeat called a murmur.

A murmur is caused by shunting, a condition where blood flows from the left to the right in the top chambers (atria) of your heart through the ASD.

Your doctor can hear this through a stethoscope.

### Adults with ASD may have symptoms, such as:

- shortness of breath
- not being able to exercise for long
- feeling tired
- irregular or extra heart beats
- fainting
- lung infections.

### ASDs can cause other more serious issues, like:

- problems with the blood flow to your lungs
- heart failure
- leaky heart valves
- a stroke.

If you have any of these symptoms, speak to your doctor.

## Treatment

The treatment for an ASD depends on the size of the ASD and where it is. In most cases, ASDs will close by adulthood without treatment. If you have a small ASD and show no symptoms, you might not need treatment to close it.

There are two types of procedures used to repair ASDs. 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 ASD or have symptoms, your doctor will likely recommend that the hole be closed.

### Endovascular ASD closure

- This is a minor surgery to close your ASD without making a large cut into your skin.
- A surgeon puts a tube (catheter) into a vein at the top of your leg and guides it to your heart.
- A patch of special material is put over the ASD to close the hole. Over time, your tissue heals over the patch.

### Open heart surgery

- This is a major surgery to close your ASD by working directly on your heart.
- You're put onto a bypass machine, which helps pump blood around your body during the surgery.
- A surgeon cuts your breastbone to get to your heart, closes the ASD and takes you off the bypass machine.

## Living with an ASD

Usually you'll be offered appointments at a congenital heart disease specialist clinic for the rest of your life. At the clinic, they'll check your heart. Even if you feel well, going to these appointments is important because there may be changes in your heart before you get symptoms.

If you're living with an ASD, 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/ASD](https://bhf.org.uk/ASD)

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

