



# CONGENITAL HEART DISEASE FACTS

Congenital heart disease (CHD) is a general term for a range of conditions that affect the normal workings of the heart. Congenital heart disease can be present at birth (congenital) or acquired during childhood.

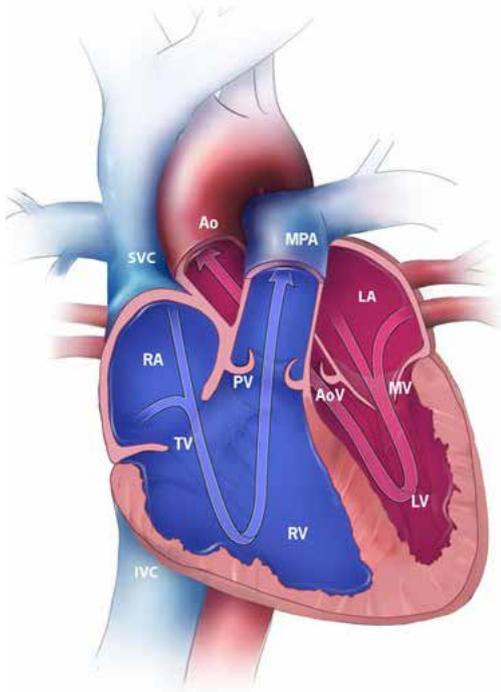
A normal heart has two upper/collecting chambers and two lower/pumping chambers. The collecting chambers, the right and left atriums, receive blood from veins from the body and the lungs. The pumping chambers are the right and left ventricles, and these pump blood into the lungs and around your body. There are four heart valves, and these ensure blood flows in the right direction, and does not move backwards in the heart.

The right side of the heart receives deoxygenated blood from the body, (coloured blue on the diagram below), and pumps it into the lungs where it gets oxygen. Oxygenated (pink) blood from the lungs returns to the left side of the heart which pumps it around the body.

**The image shows the path of the blood as it travels through a normal heart**

**Congenital heart disease is the most common birth abnormality, affecting 1 in every 100 babies**

**Normal Heart**



## Congenital heart defects

A congenital heart defect is a structural heart problem that you are born with. A defect occurs when the heart and blood vessels don't develop properly before birth. The passage of blood inside the heart or vessels may be blocked, the blood may travel abnormally through the heart, parts of the heart itself may be underdeveloped, or there may be one or more holes between the left and right heart chambers.

Congenital heart defects are the most common types of birth defects, affecting 1 in 100 babies. In Australia, 8 babies are born each week with some form of congenital heart defect. Some defects are mild and cause no significant disturbance to the way the heart functions. However, more than half of all children with a heart condition will require treatment at some stage of life.

The causes of congenital heart disease are largely unknown. In fact, in 8 out of 10 children the cause is unknown.

### Some common congenital heart defects include:

- Atrial septal defect
- Ventricular septal defect
- Atrioventricular septal defect
- Transposition of the great vessels
- Coarctation of the aorta
- Tetralogy of Fallot

## Acquired Heart Defects

An acquired heart defect occurs when a person's heart is normal to start with but develops a problem sometime after birth. Illnesses that can lead to a heart problem include myocarditis (inflammation of the heart muscle), cardiomyopathy (disease of the heart muscle), rheumatic heart disease (a disease that may follow streptococcal bacterial infection) and Kawasaki disease (a disease with fever, rash and swollen lymph glands that may affect the heart).

## Aboriginal and Torres Strait Islander People

Congenital heart disease is more common among Aboriginal and Torres Strait Islander people compared with non-Indigenous Australians, and Indigenous Australians can sometimes have worse outcomes than non-Indigenous Australians.

Many Aboriginal and Torres Strait Islander children who have rheumatic fever are not diagnosed or treated. Without treatment, rheumatic fever can lead to serious complications such as rheumatic heart disease. This is why acquired heart disease is more common among Aboriginal and Torres Strait Islander Australians compared with non-Indigenous Australians.

### Facts: Congenital heart disease

- There is no known way to prevent congenital heart disease; the causes of heart defects are complex and largely unknown
- There is not currently a cure for all forms of congenital heart disease, however excellent treatment is available for most forms of congenital heart disease when it is necessary.
- The treatment of congenital/childhood heart disease is improving. About 90% of children with congenital heart disease will survive into adulthood

### Around 64,000 children, young people and adults are currently living with a childhood heart condition

People with congenital heart disease face unique challenges, treatment and often repeated surgeries for their entire lives, and support is critical at every stage of the journey – from when congenital heart disease is diagnosed through childhood, the teenage years and into adulthood.

## Where can I go for further help?

People with congenital heart disease face unique challenges, treatment and often repeated surgeries for their entire lives, and support is critical at every stage of the journey – from when congenital heart disease is diagnosed through childhood, the teenage years and into adulthood.

HeartKids is the only national charity dedicated to supporting Australians of all ages impacted by congenital heart disease, the leading cause of infant death in Australia and a complex chronic disease requiring lifelong treatment.

For over forty years, HeartKids has provided timely support to infants, young people and adults living with congenital heart disease all across Australia. We also fund life-saving research, provide reliable and evidence-based information and advocate for the needs of impacted families.

Our support is a commitment for life.



## References for further reading

- **Chambers and valves of the heart.** (2017). Mayo Clinic. Retrieved 7 September 2017, from <http://www.mayoclinic.org/chambers-and-valves-of-the-heart/img-20007497>
- **Heart abnormality birth defects.** (2017). Betterhealth.vic.gov.au. Retrieved 7 September 2017, from <https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/heart-abnormality-birth-defects>
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