About Congenital Heart Defects

What are congenital heart defects?

A congenital heart defect (CHD) is a structural problem (or defect) in the heart that is present at birth. They were once considered a childhood disease, when the life expectancy was limited to a few weeks, months, and in a few cases, several years.

The amazing progress over the last 50 years in diagnosis, surgery, and in the newer interventional catheter-based procedures have vastly improved survival, such that now more than 50% of people living with CHD are adults.1

More and more patients with CHD are surviving into adulthood. For example, overall, 85% of patient with tetralogy of Fallot who underwent surgical repair will survive to adulthood.2 The proportion of adults with CHD will continue to increase because currently about 90% of children born with heart defects will survive to adulthood.3

CHD can involve the walls of the heart, the valves of the heart, and the arteries and veins near the heart. CHD can disrupt the normal flow of blood through the heart. The blood flow can:

- Slow down
- Go in the wrong direction or to the wrong place
- Be blocked completely

CHD is the most common type of major birth defect affecting 1 in 80-100 Canadian newborns.4 CHD patients have a wide variety of heart defects, each type requiring different levels of intervention and monitoring. There are many types of congenital heart defects. They include:

- Abnormal passages in the heart or between blood vessels
- Problems with the heart valves
- Problems with the placement or development of blood vessels near the heart
- Problems with development of the heart itself

There is a lot of very good information about childhood and adult CHD on the aboutkidshealth 'heart learning hub' website. Please click HERE for more information.

To learn about how the heart works, please click HERE.

1. Marelli AJ, et al. Congenital Heart Disease in the General Population Changing Prevalence and Age Distribution. Circulation 2007;115:163-172.
2. Hickey, EJ, et al. Late risk of outcomes for adults with repaired tetralogy of Fallot from an inception cohort spanning four decades. E J cardiothoracic Surg 2009; 35(1), 156-64; discussion 164.
3. Moons P, et al. Temporal Trends in Survival to Adulthood Among Patients Born With Congenital Heart Disease From 1970 to 1992 in Belgium. Circulation 2010;122:2264-2272.
4. Health Canada Report 2002 Congenital Anomalies.