



## Emotions, Learning, & Physical Activity among Children seen in Heart Clinics

[en français](#)

### **Key point: Children seen in heart clinics can have a good quality of life, but they may need help with emotions or learning.**

The diagnosis and treatment of a heart condition can be both stressful and emotional for your child, as well as for you, the parents. It is important to recognize that children with heart conditions can have a good quality of life, and be fully functioning and healthy individuals.

It is possible that your child's heart condition may affect emotional health, learning or your child's physical activity. The information on the following pages is intended to introduce you to some areas in which your child **MAY** need extra help and support. Although most children with heart conditions will not have these problems, families have suggested that knowing a little bit about the possibilities that **MIGHT** develop would help them to feel more prepared. The most important thing that you can do is to become familiar with your child's interests, thoughts and feelings. Talk to your cardiologist or nurse so that you understand the experiences and treatments that your child has had. Please be aware that experiences vary tremendously amongst children who have heart conditions. Children who have the same diagnosis or who have had the same operation will usually have different experiences and treatments. It is very individual. Your child is unique in every way, including the heart condition. It is best to talk to your child's paediatrician, cardiologist or cardiac nurse should you have any particular concerns.

Keep in mind that although some emotional, learning or physical activity concerns may arise directly from your child's experience of having heart condition, it is also possible that these concerns may result from entirely different circumstances. Ask your paediatrician or consult with a mental health professional when appropriate. **Click on the one of the following to learn more about:**

- [Learning](#)
- [Emotional health](#)
- [Physical activity](#)

The information on the following pages was summarized from the following sources:

- [www.aboutkidshealth.ca](http://www.aboutkidshealth.ca)
- [www.tchin.org](http://www.tchin.org)
- Latal B, Helfricht S, Fischer JE, Bauersfeld U, Landolt MA. [Psychological adjustment and quality of life in children and adolescents following open-heart surgery for congenital heart disease: a systematic review](#). BMC Pediatrics 2009;9(6):10.
- Karsdorp PA, Everaerd W, Kindt M, Mulder BJM. [Psychological and cognitive functioning in children and adolescents with congenital heart disease: A meta-analysis](#). Journal of Pediatric Psychology 2007;32(5):527-41.

### **Learning concerns**

Children with heart conditions are just as smart as children without heart conditions. However, often children with heart conditions need extra help to be successful at school. One research study found that 1 in every 3 children with a complex heart condition needed extra help to succeed in school. A few children may need the specialized help provided in a special education classroom. Research also suggests that some children with heart conditions may need to repeat a grade if they miss a lot of school because of hospital visits or illness.

It is important to pay attention to your child's progress. It is much better to get extra help early if issues seem to be starting. There are lots of ways to help your child to learn more easily. The key is to get connected to the best person, book or learning strategy for your child's needs.

Learning problems may be more common among children with more complex heart conditions. Some research studies have found that children who require surgery with cardiopulmonary bypass are more likely to have problems understanding spoken language or organizing and reacting to what they see. Some children with heart conditions have trouble connecting what they see with the way they move their arms and hands. That makes it difficult to print or write. They may find it challenging to print the same letter that they see written on the blackboard. There are many teaching strategies, such as different learning methods, visual tools or audio books that may be useful for children who find writing difficult.

Some children with heart conditions are more likely to have trouble expressing themselves. It will take them longer to find their words or express their ideas with proper grammar and punctuation. Language delays or deficits are not uncommon, particularly for spoken language. In addition to struggles with expressing their ideas, children may also find it more difficult to understand what is said by others. A consultation with a speech language pathologist may be appropriate.

### **Emotional health concerns**

Most children with heart conditions go through the same emotional stages and development as all children (e.g., "terrible two's", teenage rebellion). However, it is important to monitor your child's emotional health and development so that you can seek support early if you feel that an issue may be

developing.

Some research studies have found that parents of children with heart conditions more frequently say that their child has difficulty adjusting to new situations or behaving appropriately. Children who have had surgery and those who have experienced episodes of decreased oxygen (hypoxia) may be more likely to develop these types of behaviour problems.

Children with some heart conditions also may be more likely to have Attention Deficit/Hyperactivity Disorder (ADHD). Research studies suggest that one third or more of children with heart problems may be prone to being impulsive or can be easily distracted. These symptoms may, in turn, impact their performance at school. If you have concerns speak to your paediatrician to find out more about appropriate treatments for your child.

It appears that older children and teenagers with heart conditions may be more likely to be very worried or sad. Aggression may also be a concern. Some studies suggest that mental health problems are twice as common among children with heart conditions. Although that may sound like a lot, **it is important to remember that most children with heart conditions will not experience mental health problems.**

Your attitude towards, and support for your child's emotional health are very important. Remain willing to learn more about your child's thoughts, feelings and fears, as well as their frustrations and concerns about their heart problem and how it impacts their life. As a parent, it is natural to become overprotective or anxious when you see that your child is starting to struggle. Try to remember that your calm and caring approach will ultimately enable your child to develop in a happier and healthier way.

## Physical activity concerns

Most children with heart conditions can do any physical activity that is of interest. After successful treatment, most children will be able to participate in all types of activity, including very vigorous activity. A few children may need limitations or require special attention during physical activity or physical education class. Ask your cardiologist to provide you with specific information about what activities are appropriate for your child. You can print [this form](#) and take it to your cardiologist to get more information about physical activity specifically for your child.

Some heart conditions make it difficult to do very strenuous activity. If your child has this type of heart problem, your child will be able to participate in physical activities that will allow him/her to rest if needed. Teachers and activity leaders will need to be made aware of your child's permitted physical activity level.

Activities that require a lot of strength or power, such as weight lifting, can be difficult for children with some types of heart problems. If your child should limit strength/pushing/pulling activities because of the heart condition, talk to your child's physical activity leader, coach or instructor to find out whether each activity will require a lot of strength, pushing or pulling.

Children with implanted devices (such as a pacemaker or defibrillator) and children who take blood thinning medication may need to be careful during activities that involve body contact. Talk to your cardiologist to find out what types of activity your child can do. There are lots of activities that are safe for children who must be careful about body contact. Your cardiologist can indicate the body contact activities that are appropriate for your child on this [information page](#).

It is important for you to discuss your child's ability to participate in physical activity with your child's cardiac care team. **Most children who are seen in a heart clinic can enjoy all types of physical activity.** Download this [physical activity form](#) for your cardiologist to complete if you would like more specific information.