

Risk Factors for Children with Cardiomyopathy

Approximately 1 in every 100,000 children under the age of 18 is diagnosed with cardiomyopathy (CM). It is a highly variable disease with multiple types, symptoms, causes and presentations.

Symptoms: Some affected children may have no symptoms while others may have a heart murmur, show evidence of heart enlargement, and experience shortness of breath, rapid breathing, fainting, irregular or rapid heartbeat, chest pain or extreme fatigue. Infants may exhibit poor weight gain, lethargy, difficulty feeding or excessive sweating. Occasionally, symptoms can be mistaken as a cold, flu, asthma or stomachache.

Causes: The cause of CM in children is poorly understood, and many cases do not have a known cause. When a cause is identified, myocarditis (viral infection) and familial inheritance are primary causes. Other causes include congenital heart defects, infectious/inflammatory diseases, immunologic diseases, toxin reactions (drugs, alcohol, radiation), and autoimmune and endocrine diseases.

Risk Factors: Children with cardiomyopathy can be at risk of dangerous forms of an irregular heartbeat and sudden cardiac death. Due to the variability of cardiomyopathy, it is important to be aware of the risk factors associated with the disease. CCF recommends following the American Heart Association's 14-step screening process to reduce sudden cardiac arrest in youth.

Family Cardiac Health History

Are there family members who have experienced the following?

- Died of heart disease (suddenly/unexpectedly or otherwise) before age 50
- Are under age 50 with disability from heart disease
- Have been diagnosed with CM, long QT syndrome, Marfan syndrome, or experience arrhythmias or other heart rhythm issues

Presence of Symptoms through Personal History or Exam

Does the child demonstrate or report any of the following?

- Chest pain/discomfort upon exertion
- Unexplained fainting/near fainting
- Excessive and unexplained fatigue associated with exercise
- Heart murmur
- High blood pressure
- Physical appearance of Marfan syndrome
- Absence of a femoral pulse that indicates narrowing (coarctation) of the aorta
- Asymmetrical brachial blood pressures (in sitting position)
- Being restricted from sports in the past
- Prior testing for the heart, ordered by a healthcare professional

According to the American Heart Association, if a child demonstrates any of the above risk factors, they should be referred to a pediatric cardiologist for a more extensive cardiac evaluation. For families needing assistance locating care providers, CCF can provide information on hospitals and physicians with expertise in cardiomyopathy.