

# Protecting Students' Hearts

*Preventing sudden cardiac death*



## Sudden Cardiac Arrest: At a glance

- Sudden Cardiac Arrest (SCA) is a condition in which the heart suddenly and unexpectedly stops beating
- SCA can occur at any age in both athletes and non-athletes
- SCA results in death if not treated within minutes
- Approximately 360,000 SCA events occur annually with a survival rate of less than 7%
- If CPR is performed immediately, survival rates over triple!
- SCA survival rates in schools increase to 71% with AED programs

## Student Heart Screenings

The American Heart Association (AHA) recommends that all children and youth have a personal and family history done by their health care provider. This is best done as a part of a child's regular physical exams, when other aspects of their health are also assessed. If concerns about the heart are found, your physician will arrange for additional cardiac testing (evaluation by a cardiologist, EKG, and/or echocardiogram) as warranted.

## Key points your child's physician will want to know to help evaluate the risk of sudden cardiac arrest include:

### Personal History:

- Chest pain or discomfort with exertion
- Fainting or near-fainting, such as an unexplained episode with a fall and/or possible seizure
- Excessive and unexplained fatigue with exertion
- Heart murmur, either new or required treatment in the past
- High blood pressure
- Restrictions from sports participation in the past
- Prior heart testing ordered by a health care provider

### Family History:

- Relatives who died or were disabled by heart disease, weakened heart muscle, or heart rhythm problems before age 50
- A relative's death due to unexplained accident or drowning
- Family history of heart conditions including cardiomyopathy, long QT syndrome, Marfan syndrome, sudden infant death, or significant arrhythmias (irregular heart beat), with special note of family members who have experienced unexplained fainting, falls, or seizures

### Physical exam should include:

- Blood pressure measurement
- Checking for physical appearance of Marfan syndrome
  - Listening for a significant heart murmur
  - Assessment of femoral (groin) pulses

References: Mozaffarian et al., 2015; American Heart Association – [www.heart.org](http://www.heart.org); American College of Cardiology

# IS YOUR CHILD'S SCHOOL PREPARED FOR A SUDDEN CARDIAC EMERGENCY?

## Preparing for sudden cardiac arrest

**Essential components for a school to be prepared for an emergency are:**

- A cardiac emergency response plan
- recognition of SCA & plan initiation
- Appropriate number of AEDs based on school size (population & campus size)
- CPR and AED-trained staff & students
- Practice drills to prepare

**Project ADAM Minnesota's goal is to have all schools in Minnesota adopt an effective cardiac emergency plan.**

**Project ADAM- Minnesota is designed to:**

- Provide education on SCA to schools and how to respond to a cardiac emergency
- Support proactive preparedness strategies
- Advocate CPR & AED education and training to staff and students
- Collaborate with the Minnesota Resuscitation Consortium and the Minnesota Department of Health

For more information on Project ADAM Minnesota email us at


[projectADAM@childrensmn.org](mailto:projectADAM@childrensmn.org) &  
[terasa.smith@childrensmn.org](mailto:terasa.smith@childrensmn.org)

To learn more about Project Adam scan the QR code or [visit www.projectadam.com](http://www.projectadam.com)



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