

PROTECTING STUDENTS' HEARTS

Preventing sudden cardiac death

SUDDEN CARDIAC ARREST: AT A GLANCE

- The sudden stopping of the heartbeat and blood flow, typically due to electrical abnormalities (arrhythmia), is a sudden cardiac arrest (SCA).
- About 360,000 people per year have SCA outside of a hospital.
- SCA can occur at any age – including children.
- Conditions that increase risk for SCA may be present from birth or develop later.
- A number of factors can increase the likelihood of SCA in people who are at risk, such as intensive exercise or using certain medications/drugs.
- If a person is known to have a condition that causes risk of SCA, a cardiologist can work with him or her to identify medications, monitoring devices and possibly activity recommendations to help prevent SCA.
- A “heart attack” can cause SCA but these terms are not the same thing.

Talk to your pediatrician about any questions or concerns related to your child's heart health and risk for sudden cardiac arrest.

The **Congenital Heart Center** at University of Michigan C.S. Mott Children's Hospital is consistently ranked among the top ten children's heart programs in the nation. With children's heart specialists available to see patients in 12 locations across Michigan, our pediatric heart experts are committed to being your partner in protecting the heart health of children throughout the state.

www.mottchildren.org/congenital

1-877-475-MOTT (6688)

M | C.S. MOTT CHILDREN'S HOSPITAL
MICHIGAN MEDICINE

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 the teen'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.

WHAT DOES YOUR DOCTOR NEED TO KNOW?

Key points your child's physician will want to know to help evaluate 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

IS YOUR SCHOOL PREPARED FOR A SUDDEN CARDIAC EMERGENCY?

Preparing for sudden cardiac arrest



The most crucial components for saving a life in the event of a sudden cardiac arrest are the presence of someone who can perform CPR, access to an automatic external defibrillator (AED), and established plans for how to respond to medical emergencies in schools and public buildings. Well-implemented sudden cardiac arrest preparedness programs ensure the best chance of survival.

Project ADAM (Automated Defibrillators in Adam's Memory) Michigan is a program administered by the University of Michigan C.S. Mott Children's Hospital to help prepare schools for sudden cardiac emergencies.

Project ADAM is designed to:

- provide education and support to schools on sudden cardiac arrest and proactive preparedness strategies
- advocate for CPR and AED training for school personnel and age-appropriate students
- collaborate with Michigan Department of Health and Human Services, community partners and foundations to help schools achieve the MI HeartSafe School designation
- raise awareness about cardiac arrest in the young
- advocate for best practices for cardiac risk assessment in children and youth
- partner with physicians and other health care professionals to promote sudden cardiac arrest preparedness work in Michigan communities

Project ADAM Michigan's goal is have all schools in Michigan establish effective sudden cardiac arrest preparedness procedures to help prevent the tragedy of sudden cardiac death.

M | C.S. MOTT CHILDREN'S HOSPITAL
MICHIGAN MEDICINE

MICHIGAN
Project ADAM[®]
SAVES LIVES

For more information on **Project ADAM Michigan**, visit mottchildren.org/ProjectADAM, email projectadam@umich.edu or call 877-475-MOTT (6688)

C.S. Mott Children's Hospital is an affiliate of Project ADAM, a national program of Children's Hospital of Wisconsin.