

Claire's story

Seconds after hitting a serve over the volleyball net, 17-year-old Claire grabbed her chest and collapsed to the floor in her high school gym. She wasn't breathing, and her heart wasn't beating. Fortunately for Claire, though, her school had worked with Children's Healthcare of Atlanta's Project S.A.V.E. to train members of its staff in the use and maintenance of an automated external defibrillator (AED). Immediately after Claire's sudden cardiac arrest, a teacher grabbed the nearest AED and used it to save her life.

Two and a half minutes after her heart stopped, Claire received a shock from the AED. Eleven minutes after she fell, paramedics arrived to take her to the hospital. There, doctors told her parents that, because of her specific condition, CPR alone would not have revived her. The paramedics would have been too late. Claire's heart needed a shock to get it working and in rhythm again—a shock that only came in time because her school was prepared and had a plan for a cardiac emergency.



Visit choa.org/projectSAVE to learn more about Claire and her sudden cardiac arrest.



Contact

Contact **Richard Lamphier**, Clinical Program Manager of Project S.A.V.E., at **404-785-7201** or **richard.lamphier@choa.org** for more information, or to arrange a free consultation for your school or organization.

Project S.A.V.E. is an affiliate of Project ADAM, a program of Children's Hospital of Wisconsin.





Project S.A.V.E.

Children's Healthcare of Atlanta started Project S.A.V.E. in 2004 with the mission of promoting and facilitating the prevention of sudden cardiac arrest (SCA) in children, adolescents and others in Georgia communities.

Highlights

Since the program's inception, Project S.A.V.E. has:

- Saved more than 100 lives.
- Brought automated external defibrillator (AED) and CPR training to every county in Georgia.
- Awarded more than 1,300 HeartSafe certificates to schools across Georgia.
- Helped one Georgia city become HeartSafe.

Primary prevention and awareness

Warning signs of possible heart risk in a student:

- Fainting, nearly fainting or seizure-like activity during or immediately after exercise, high emotions or being startled
- Excessive, unexpected and unexplained fatigue or shortness of breath with exercise
- Unusual chest, shoulder, back or jaw pain
- Unexplained heart murmur or high blood pressure
- Premature, unexplained death in a close relative younger than 50

 Close relatives with conditions such as hypertrophic cardiomyopathy, dilated cardiomyopathy, Long QT syndrome, Marfan syndrome or clinically important arrhythmias

If any of these signs or family history is present, or if an adult witnesses these symptoms in a student, the student should be further evaluated by his primary care provider, with appropriate referral as indicated.

Project S.A.V.E. supports the use of the standardized preparticipation evaluation endorsed by the Georgia High School Association to identify student athletes at risk for sudden cardiac arrest. Use of other screening techniques such as electrocardiogram (ECG) and echocardiogram should be at the discretion of a student's healthcare provider.

Secondary prevention

The American Heart Association chain of survival

With prompt recognition of the signs of sudden cardiac arrest, children, adolescents or adults who experience a sudden collapse because of ventricular fibrillation can often be successfully treated with early CPR, rapid defibrillation with an AED and early activation of emergency medical services (EMS). All are critical factors for the victim's survival.

An AED is a device that looks for a shockable heart rhythm and delivers a shock only if needed. It is small, portable, automated and easy to operate. Voice prompts give instructions, and the machine will not shock someone who does not need to be shocked. Successful resuscitation depends on treatment with CPR and an AED within three to five minutes. Prompt SCA recognition, a first responder team with CPR skills and an AED in the community are critical to saving a life.

A successful community emergency action plan

Purchasing an AED is only a small part of a successful program. The key elements of a good emergency action plan are:

- An AED coordinator who will ensure up-to-date AED maintenance and training of first-responder teams
- A written plan that includes communication, response team training and practice, and actions to take after the device is used
- A first-responder team of five to 10 people trained in CPR, use of the AED and the emergency action plan
- An AED practice drill at least once a year



Visit choa.org/eap to learn more about creating an emergency action plan.

You can be a Project S.A.V.E. HeartSafe Community

Our Project S.A.V.E. staff will provide a free consultation on prevention of sudden cardiac death in your community. Those that request this assistance will receive up-to-date information on:

- How to train staff, students and citizens to recognize sudden cardiac arrest and be aware of emergency treatments to prevent death
- Implementation of a comprehensive best-practice AED program and emergency action plan

Georgia communities can be recognized as a HeartSafe Community after completing a checklist that demonstrates successful implementation of all program elements.

A comprehensive emergency action plan may save the life of a student, staff member, parent or visitor who experiences sudden cardiac arrest. This plan is also a template that can be used to respond to any medical emergency in the community.



Visit choa.org/projectSAVE to learn more about becoming a HeartSafe Community.