

Schools and Education

# AED IMPLEMENTATION GUIDE



Works like you work.™



## YOUR GUIDE TO PUTTING A HEART SAFE AED PROGRAM IN PLACE

Sudden death at any age is a tragedy. When the victim is a child, the tragedy is compounded, with many years of life lost and dreams unfulfilled. And every day nearly 1000 men, women and children die from sudden cardiac arrest (SCA).<sup>1</sup>

It doesn't have to be this way. Equipping schools with automated external defibrillators (AEDs) and teaching school nurses, athletic trainers and others to use them can give anyone struck down by SCA another chance at life.\* AEDs deliver a pulse of electricity, the single most effective way to restore the normal rhythm of a heart quivering in ventricular fibrillation. VF is the most common cause of sudden cardiac arrest.

We've all seen the heartbreaking headlines:

- A ball strikes a 14-year-old lacrosse player, Louis, in the chest, sending his heart into a deadly irregular rhythm. Although he receives CPR and a hospital is less than a mile away, it takes 12 minutes for the boy to receive defibrillation. He dies.
- A 14-year-old student athlete, Sean, nicknamed "iron man," is running in gym class when he suffers sudden cardiac arrest. More than 10 minutes pass before the first defibrillation shock. He survives with severe brain injury.
- After being cleared with a basic physical, Ken, a star football player, suffers SCA during football practice. A defibrillator arrives too late to save him. An autopsy discovers an undiagnosed heart condition.

The story had a different ending in the following cases, where the school was equipped with an AED that was used to deliver a lifesaving shock:

- A 15-year-old girl collapses during basketball practice. The high school trainer uses an AED kept near the court to resuscitate her.
- A school janitor suffers cardiac arrest and is shocked back to life with an AED installed near the gym thanks to a New York state law.
- A man suffers cardiac arrest while watching his granddaughter play basketball. The principal retrieves and applies the school AED, saving his life.

As you can see, it could be a matter of life and death to have AEDs within easy reach of coaches, school nurses, school administrators, custodial staff and students who are trained to use them. Every minute counts. Typically, only about five percent of people struck down by SCA survive. But if people in VF receive CPR and the lifesaving AED shock within three minutes of collapse, the survival rate can increase up to 74 percent.<sup>2</sup> Reducing response time by even one or two minutes from collapse to shock can mean the difference between death and survival.<sup>3</sup>

\* Not everyone can be saved from sudden cardiac arrest, but studies show early defibrillation can dramatically improve survival rates.

*"Nobody can tell a family who has lost a child or lives with a brain-injured survivor from cardiac arrest that AEDs aren't necessary in schools."*

*Chris Shipler, father of a 14-year-old struck down by sudden cardiac arrest while running in gym class. Sean survived with severe brain injury.*



Because early defibrillation is becoming the standard of care in many communities, the public will increasingly expect to find AEDs included in a school's disaster-response supplies. No two school districts or facilities will implement an AED program in exactly the same way. This guide outlines steps to help you tailor a program that works for your situation.

To help ensure success, put someone in charge of coordinating your efforts. Be sure to cover these bases:



#### **Get Ready:**

- Assign a project coordinator
- Champion the idea and raise awareness
- Review laws and regulations or consult your organization's legal counsel and risk manager
- Coordinate with local emergency medical services (EMS)



#### **Get Set:**

- Arrange for medical direction
- Identify your response team
- Choose your equipment and vendor
- Design policies and procedures
- Assess how many AEDs you'll need and where they'll do the most good
- Estimate costs for equipment, training and PR (public relations)
- Fund your budget
- Train your responders and plan for refresher training



#### **Go:**

- Acquire and deploy AEDs and other supplies
- Promote your program to raise support
- Build quality assurance into your operation

## CHAMPION THE IDEA AND RAISE AWARENESS



To implement a successful early defibrillation program, you'll need support throughout your school community. Backing from school board members, district administrators, your legal counsel and risk manager will help the program move forward. From the beginning you'll want to involve teachers, staff, PTA and older students.

A school nurse or athletic trainer is often the logical choice to head the effort. Arrange a meeting so people can air their concerns and you can build support from those who will be touched by the program, including custodial and security staff, administrators, teachers, students, parents and volunteers. It helps to have a strong champion for your program and to use a small task force for planning and implementation.

Resistance may come from people who don't realize how easy and essentially foolproof AEDs are. If their understanding is limited to TV shows where doctors manually defibrillate patients with "paddles", it will help to show an automatic external defibrillator. An AED talks the user through the simple steps of defibrillation, and is designed to analyze the heart's rhythm and advise whether a shock is needed.

People may find it hard to believe that healthy youngsters can fall victim to sudden cardiac arrest. While rare, SCA does strike children and teenagers.<sup>2</sup> Unfortunately, sudden death may be the first symptom of a heart defect or other condition that increases a youngster's risk of SCA.

In making your case for an AED program, point out that schools not only educate our children, they employ adults and often serve as community centers, hosting meetings, evening classes and events that draw people of all ages. It's impossible to predict when SCA might strike, even in children and adults who have diagnosed heart disease.

For your convenience, presentation materials are available to help you spread the word about AEDs and how they can help save lives throughout our communities.

### CAUSES OF SCA IN YOUTHS

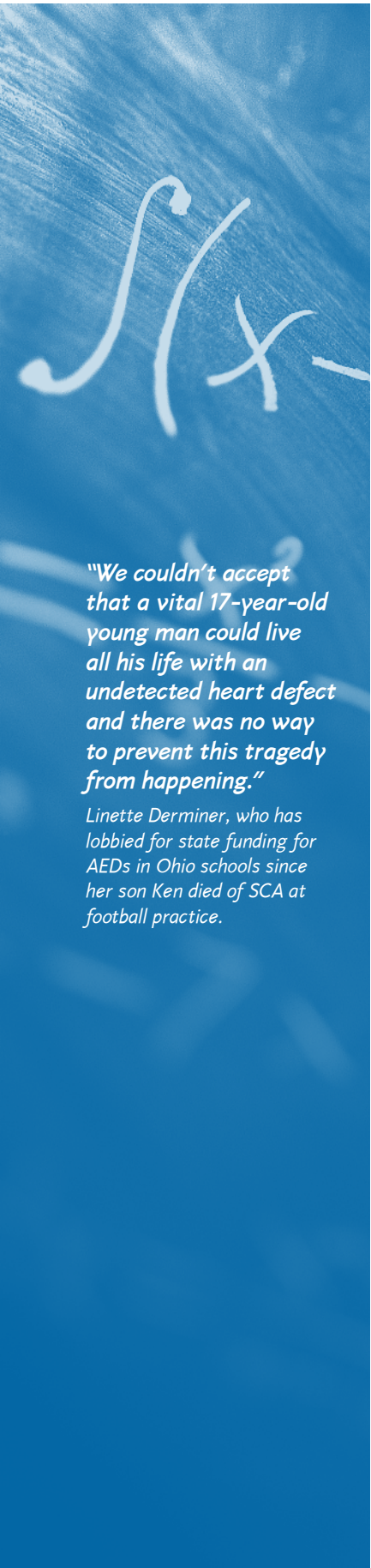
Although rare, sudden cardiac death does strike children and teenagers, often without any prior symptoms. Causes include:

#### Undetected heart conditions

- Hypertrophic cardiomyopathy, abnormalities in muscle fibers that make the heart muscle thicken, usually caused by an inherited disorder
- Arrhythmogenic right ventricular dysplasia (ARVD), damaged muscle in the lower right chamber of the heart, which makes the heart more susceptible to abnormal heart rhythms

*"We both feel that the minimal expense of an AED unit and staff training pales in comparison to the loss of a child."*

*Michael and Suzy McCarthy, parents of a five year old that suffered a sudden cardiac arrest while attending her kindergarten class.*



*"We couldn't accept that a vital 17-year-old young man could live all his life with an undetected heart defect and there was no way to prevent this tragedy from happening."*

*Linette Derminer, who has lobbied for state funding for AEDs in Ohio schools since her son Ken died of SCA at football practice.*

- Congenital coronary artery defects, defects of the heart's own blood vessels

#### **Undiagnosed heart disease**

- Long QT syndrome, an inherited disorder affecting the heart's electrical system, which can lead to life-threatening changes in heart rhythm
- Wolff-Parkinson-White syndrome, an electrical malfunction of the heart in which the electrical signal reaches the heart's lower chambers (ventricles) too soon, disturbing the healthy beating of the heart
- Primary ventricular tachycardia, an extremely fast abnormal heart rhythm that affects pumping function of the heart
- Primary pulmonary hypertension, increased resistance to blood flow through the lungs, leading to abnormally high blood pressure in the arteries that supply blood to the lungs

#### **Previously diagnosed heart conditions**

- Dilated cardiomyopathy, abnormal heart muscle, causing the walls of the heart to stretch under pressure, weakening the heart's pumping capacity
- Marfan syndrome, an inherited disorder of the connective tissue, often resulting in abnormalities in the heart or aorta, the main blood vessel leading away from the heart

#### **Accidents and risky behaviors**

- Commotio cordis, caused by a blunt blow to the chest at a critical time in the cardiac cycle, which can cause a deadly irregular heartbeat
- Cocaine or other stimulant abuse
- Electrolyte imbalances caused by eating disorders, rapid weight loss or dehydration

## **REVIEW LAWS AND REGULATIONS**

It may reassure school staff concerned about liability to know that manufacturers design AEDs so they are easy and safe for anyone with minimal training to use. Because the AED is designed to analyze the heart's rhythm and advise whether a shock is needed, it requires very little decision-making on the part of the rescuer. If SCA is untreated the victim will almost certainly die and defibrillation is the only treatment for a fatal rhythm.

Even so, some members of your school community may worry about liability related to AEDs. Let them know AED use is increasingly becoming the standard of care, with state law in New York requiring schools to have AEDs, Pennsylvania providing state funding for AEDs in schools, and other states are considering similar measures. As standards of care evolve, it may actually be more of a liability *not* to have AEDs than to have them.



The U.S. Cardiac Arrest Survival Act (CASA) of 2000 offers federal liability protection for those who acquire or use an AED. Good Samaritan laws in all 50 states grant immunity from civil liability to many people who use an AED in an emergency. Because court decisions, laws and regulations regarding AED use vary depending on your locale, consult state and local regulations. Review your program with your legal and risk management staff. They can help you design a program that meets legal requirements and help you weigh any concerns about school AEDs against the risk of liability for *failing* to have them on site.

Rather than simply buying an AED, you'll want to have a comprehensive program that meets the requirements of typical AED laws and regulations:

- Training to operate an AED
- Coordination with the emergency medical service in your community
- Medical direction
- Record-keeping for each use of an AED
- Regular maintenance of the equipment

#### **COORDINATE WITH LOCAL EMERGENCY MEDICAL SERVICES (EMS)**



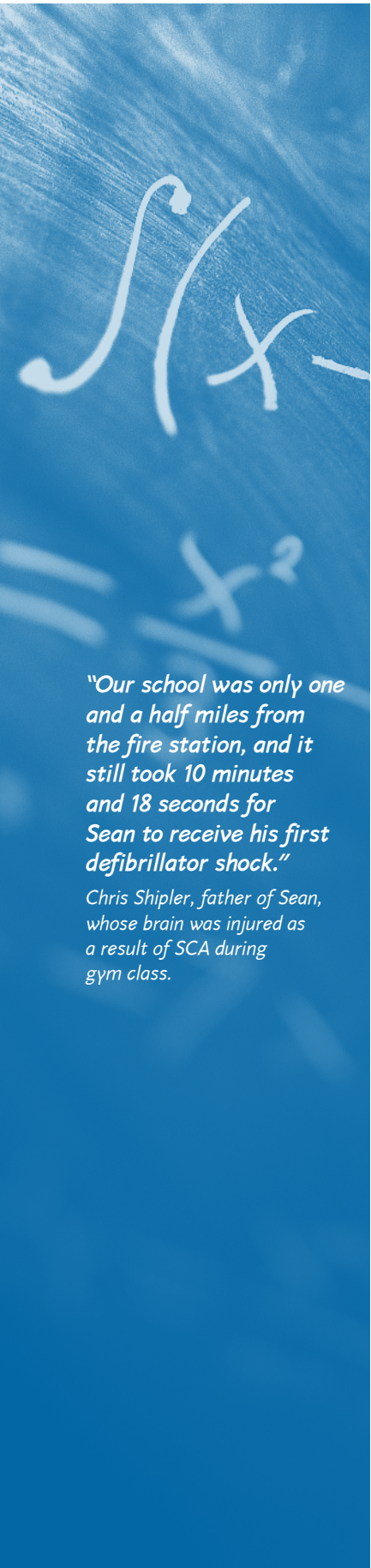
Work closely with your local EMS to assure your school AEDs are integrated into the public access defibrillation (PAD) program in your community. In many locations, notifying the local EMS system you have AEDs is a requirement when you implement an AED program. EMS can provide guidance on equipment choice and placement, training and medical direction, and may check your equipment each year as part of the school's annual fire inspection. To help ensure the best care for a cardiac arrest victim, it's essential to have clear procedures for smooth hand-off to EMS when the ambulance arrives.

Early defibrillation by a first responder at a school or sports field is just one link in the "Chain of Survival" defined by the American Heart Association, which requires:

1. Early recognition and reporting of emergencies like cardiac arrest
2. CPR initiated quickly by bystanders
3. Early defibrillation by the rescuers at the scene, such as school staff
4. Advanced cardiac life support by medical professionals to stabilize the victim



*Close coordination with local EMS assures that your school AEDs are integrated into the public access defibrillation program in your community.*



*"Our school was only one and a half miles from the fire station, and it still took 10 minutes and 18 seconds for Sean to receive his first defibrillator shock."*

*Chris Shipler, father of Sean, whose brain was injured as a result of SCA during gym class.*

If your community uses an enhanced 9-1-1 system, you may be able to add the locations of school AEDs to the computer-assisted dispatch system. Should someone without knowledge of your school's AED program call for help, the dispatcher can let the caller know the location of the nearest AED. To download a sample form for notifying EMS, go to [www.aedhelp.com](http://www.aedhelp.com).

### ARRANGE FOR MEDICAL DIRECTION

Although AEDs are designed for use by anyone with minimal training, the U.S. Food and Drug Administration classifies them as medical devices and most AEDs require a prescription from a doctor. This physician often also serves as the "medical director" of an AED program. He or she provides ongoing medical oversight but is not expected to be at the scene of AED use.



The medical director approves the "standing orders" rescuers should follow when using an AED in a medical emergency. The physician may sign off on training plans and policies and procedures, update them to take into account new treatment recommendations, evaluate data recorded on an AED during a medical emergency, and help assess each use of an AED to suggest any improvements. Many states require medical authorization and documentation in order to comply with "Good Samaritan" laws that apply to an AED program.

If you have a good working relationship with your local EMS, they can be very helpful in this area. In fact, the EMS medical director may be able to provide your program with medical direction. Other options include:

- An interested physician in the community or local hospital
- LIFEPAK Heart Safe Solutions, a complete AED program from Physio-Control
- A physician employed by your district

### IDENTIFY YOUR RESPONSE TEAM



The size and layout of your school and its operating hours will determine how many people you'll want to train to use an AED. Consider training staff members who already provide medical services, such as school nurses or health aides, and those present when students are exercising, such as coaches, trainers, lifeguards and physical education teachers. Also take into account people who can respond immediately (unlike teachers, who may not be able to leave a classroom right away). Be sure to account for staff turnover—lack of a stable rescuer pool can weaken your program.

You'll want some rescuers who will be present even after school hours, such as administrators, custodial, office or security staff, coaches, choir directors and drama teachers who



are on site during games, practices, meetings, concerts and plays. Don't overlook high school students as part of your rescuer pool. Students and others who are trained to use the AED will take this lifesaving skill with them into the community, thus strengthening the "Chain of Survival."

Your rescuer pool will affect procedures such as how to notify trained responders, where to place AEDs and how to bring them to a victim.

### CHOOSE YOUR EQUIPMENT AND VENDOR

Because of their experience and knowledge, your local EMS and program medical director can be very valuable in advising you about the type of AEDs to buy. Additionally, make sure you ask about the reputation of the vendor for reliability, durability and ongoing support. Selecting a single brand of AED will greatly simplify training and maintenance.

By choosing a vendor early in the process, you can tap the company's expertise about training, site assessment, policies and procedures. Important considerations include:

- Reputation of the AED manufacturer for product quality, reliability and customer service
- Compatibility with the equipment of local EMS
- Very easy operation, with clear voice prompts
- Semi-and fully-automatic models
- Biphasic technology, with energy escalating to 360 Joules, that enables the AED to adjust shocks and energy levels to match the victim's needs
- Defibrillation electrodes that are pre-connected to the AED to save precious seconds
- Maintenance-free batteries
- Direct field service team for on-site download of AED data
- Validated computer-based refresher training
- Availability of Infant/Child Reduced Energy Defibrillation Electrodes if your school serves children younger than age eight
- Vendor can provide a complete implementation solution



LIFEPAK® AEDs from Physio-Control are ideal for infrequent users because they are very easy to use. Voice and visual prompts guide users through operation, step-by-step. An independent review ranked the LIFEPAK CR® Plus AED the easiest-to-use AED on the market.<sup>4</sup> Automatic self-testing and an always-visible readiness display help assure the device is ready to go.

LIFEPAK models can be outfitted with Infant/Child Reduced Energy Defibrillation Electrodes, allowing you to treat children less than eight years of age or 55 pounds (25 kg). For schools that prefer not to implement an AED program inhouse, LIFEPAK Heart Safe Solutions from Physio-Control is a complete program that integrates all of the needed components.

*Seek the advice of your local EMS regarding the type of AEDs to buy.*

## DESIGN POLICIES AND PROCEDURES—AND KEEP IMPROVING THEM



The groundwork you laid earlier will pay off as you develop policies and procedures that mesh smoothly with any existing emergency response plans and your local EMS system. If you already have a written plan for responding to medical emergencies, update it to include AEDs. If not, now is the time to put it in writing. Often a school will have separate procedures for incidents that occur during school hours and after school.

Be sure to cover these points in your procedures for responding to a possible sudden cardiac arrest:

- Actions by those who witness a possible cardiac emergency should take, such as one person starting CPR while others dash for the AED, notify the main office, and make sure local EMS is called
- How to notify internal trained responders (using walkie-talkies, cell phones, radios or the building public address system, for example)
- Who is responsible for bringing the AED to a victim
- Who will notify the community's EMS team (such as using a phone near the AED or alerting the main office to call 9-1-1)
- How EMS will be directed to the exact location within the school (perhaps having someone meet paramedics at the front door and escort them to the victim)
- Standing orders stating when the AED should be used (only on victims who are not breathing)
- Procedures to follow if an AED is moved from the building to a playing field, such as notifying the main office or school nurse about its location, and how to contact the person who has it (via cell phone or radio, for example)
- How to handle data the AED records during use (patient's heart rhythm, AED analysis and any shock delivered)
- What to do after an event, such as downloading and transferring data from the AED, notifying the medical director, reviewing the event to determine how procedures might be improved, replenishing supplies, returning the AED to service, and stress debriefing to help responders handle their emotions after a rescue effort

Policies and procedures also should include:

- Locations of AEDs and related rescue equipment (such as gloves and face mask for CPR)
- A process, schedule and checklist for inspecting and maintaining equipment
- Records that must be kept each time an AED is used to satisfy any district or state reporting requirements
- Training and refresher training requirements
- Who manages the AED program at the district and school levels

- Who provides medical direction
- A process to periodically review and update the policies and procedures

Be sure to have your medical director as well as your legal and risk management staff members review your policies and procedures. Your AED program records should also include: operating instructions, contact information for your vendor, supply ordering information, training roster, and pertinent state laws and local regulations.

As with other policies and procedures, those relating to AEDs will require periodic updating as laws and regulations change, as best medical practices evolve, and as you learn from your own experience using AEDs.

A sample policy and procedure is available at [www.aedhelp.com](http://www.aedhelp.com).

### ASSESS HOW MANY AEDs YOU'LL NEED AND WHERE THEY'LL DO THE MOST GOOD



To achieve a good response time, you'll want enough AEDs in the right places, a clear communications pipeline, and sufficient people trained to respond quickly. You will want to provide defibrillation in less than four to five minutes - ideally in less than three minutes to achieve higher success rates.<sup>5</sup> Every additional minute of delay lowers the rate of successful resuscitation by seven to 10 percent.<sup>6</sup>

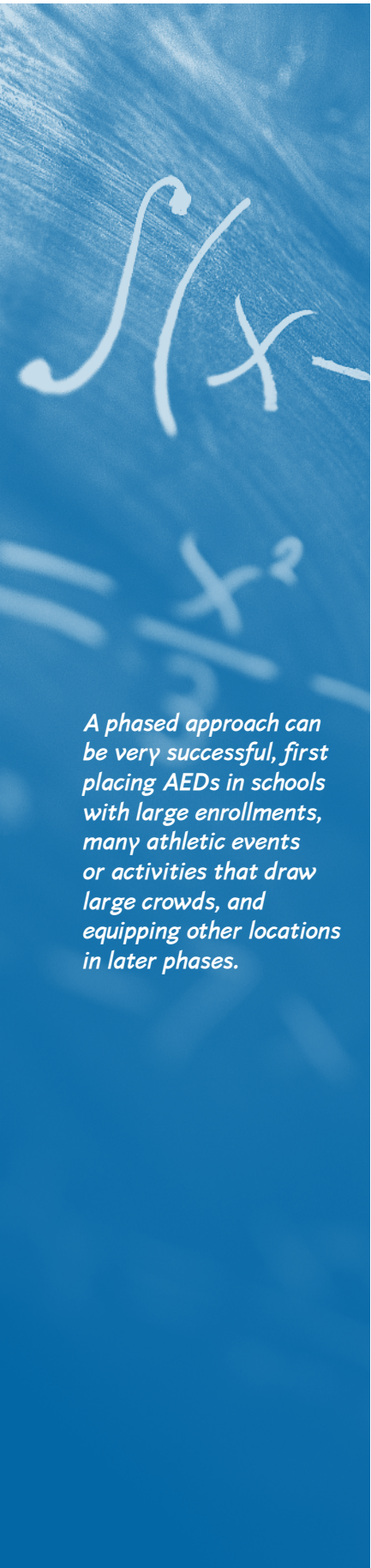
Ideally, you want AEDs placed within a brisk one-minute walk of any location in the school. Give first priority to areas of higher risk, such as:

- Where children or adults exercise, including gymnasiums, sports fields and pools
- Where many people gather, such as auditoriums, cafeterias or large meeting rooms
- Areas that are harder for EMS teams to reach (such as deep inside a facility, high in a tall building, and in remote or locked locations)

Having a defibrillator does no good unless people know where it is, can retrieve it easily, and quickly summon trained responders. Locating AEDs near a phone makes it easier to quickly activate your internal response team and local EMS. You can save precious seconds with automatic notification systems, such as wiring a monitored wall cabinet containing an AED so that opening the door triggers an alert to the main office or calls 9-1-1.

Place AEDs where people can retrieve them after normal school hours. If vandalism is a concern, consider using wall cabinets equipped with lights that flash or alarms that sound when opened. Post signs alerting visitors to the locations of AEDs. To cover athletic events, some schools carry an AED to practices and games along with the first aid kit.

*Be sure to update policies and procedures as laws and regulations change, as best medical practices evolve, and as you learn from your own experience using AEDs.*



*A phased approach can be very successful, first placing AEDs in schools with large enrollments, many athletic events or activities that draw large crowds, and equipping other locations in later phases.*

There is no one simple formula that applies to all schools. Your local EMS or vendor may be able to help you determine the number of AEDs and where to place them. Walking the building, carrying a stopwatch and floor plans, is often the best way to determine the number of AEDs needed and specific locations. Ideally, you want a 'drop to shock' time no longer than three to five minutes. Walking at a brisk pace, you can cover about 300 feet per minute.

Don't let lack of funding to place AEDs in all schools at once deter you. A phased approach can be very successful, first placing AEDs in schools with large enrollments, many athletic events or activities that draw large crowds, such as concerts, plays and meetings. Lower risk locations can be equipped with AEDs in later phases.

### **ESTIMATE COSTS FOR EQUIPMENT, TRAINING AND PR**

After selecting a vendor, estimate your program budget. You'll need to calculate both start-up costs and ongoing expenses, such as refresher training and maintenance.

ITEM	NUMBER NEEDED	COST
<i>AEDs</i>		
Extra defibrillation electrodes		
Infant/Child Reduced Energy Electrodes for children less than eight years old		
Alarmed wall cabinets or carrying cases		
Supplies such as non-latex gloves, pocket mask, scissors, razor (to shave chest hair if necessary) and towel (to dry chest area)		
Medical direction		
Initial staff/student training		
Training supplies (AED training devices, extra training electrodes and manikins)		
Data management system, which may include a computer, modem and software		
Refresher drills and recertification training		
Replacement of electrodes and batteries as needed		
Device maintenance or service agreement		
Amortized fund to pay for future units and replacement AEDs		
<b>TOTAL</b>		

## FUND YOUR BUDGET



Although adequate budget and staffing are constant concerns for schools, you can build a strong case for early defibrillation. With proper information, you can convince school administrators and private donors of the wisdom of spending money on lifesaving early defibrillation. Keep in mind that as AEDs become the standard of care, a school may face liability for not having an early defibrillation program in place.

Publicity about student athletes who have died from SCA and those saved with a shock from an AED can help drive your efforts. Newspapers and radio and TV stations can help you publicize the need for AEDs in schools and promote your fundraising events. Parents, alumni and other donors may be eager to contribute once they understand the need.

Think in terms of lowering costs rather than just raising money. To keep costs down, consider leasing or volume purchasing programs. Seek in-kind contributions, such as training donated by nursing associations, doctors, EMTs or firefighters. Make your dollars go farther by asking individual donors if their employers can provide matching contributions. Rolling your program out in phases can help distribute costs over time, especially in larger districts.

### **Possible sources of funding include:**

- The school district budget
- Booster Clubs, PTA and PTSA
- Student groups or community service classes
- Local businesses that partner with schools
- Alumni
- Special events, such as bake sales, auctions, benefit concerts, raffles, car washes and passing a donation box at sporting events

### **Look beyond the school community to:**

- Government grants for AEDs in the community or for emergency preparedness in general
- Health plans, local hospitals and hospital guilds
- Civic organizations, such as Rotary, Masons, Elks, Kiwanis, Eagles, Lions, American Legion and VFW clubs
- Religious groups
- Insurance companies
- Private foundations
- HeartRescue grants from Medtronic

In writing grant proposals, target organizations that provide funding to schools, health, sports and emergency preparedness, related to student health and safety. Your proposal has a better chance of success if you explain the need and how AEDs benefit the school community. Concisely describe your program, estimate your budget and include letters of support or other information to bolster your case.



*Training will show that AEDs are easy to use, and in fact difficult to misuse, especially in devices with few steps to operate and simple voice prompts to guide rescuers.*

## TRAIN YOUR RESPONSE TEAM AND PLAN FOR REFRESHER TRAINING

Strengthening the Chain of Survival requires more than training people to use an AED. They should know how to quickly recognize signs of sudden cardiac arrest, start CPR right away, locate and use the defibrillator, and care for a victim until the EMS team arrives. Training should cover how to activate the building's emergency response plan and notify external EMS without delay.



Training shows that AEDs are easy to use, and in fact difficult to misuse, especially if devices have few steps to operate and simple voice prompts to guide rescuers. It may reassure people concerned about liability to learn that AEDs are intended for use on people who will almost certainly die if untreated. They are designed to analyze a patient's heart rhythm and deliver a shock only if needed.

Training options include having courses taught on-site by an independent training company, or at a convenient location in the community through the EMS, fire department, local hospital or community college. Many schools adopt a "train the trainer" approach, which lets them become self-sufficient in training responders. If your school already teaches first aid or CPR to students or staff, add AED training to help instill the culture of bystander response throughout your community. Training may also be available in the form of web-based training or CD-ROM. Your sales representative can also help locate appropriate training.

Training classes should meet the guidelines of a nationally recognized program, such as the American Heart Association, the American Red Cross or the National Safety Council. Training classes give people both the skills and confidence to intervene in a cardiac emergency. Review your school's emergency response plan during the training class, and include scenarios likely to happen at school in your training. Be sure your training complies with state and local regulations. Often, immunity from civil liability applies only to people trained in AED use.

Keep good records of the people trained, and when they need refresher courses. You can add AED practice to school drills for fire, earthquake, tornado or other emergencies. EMS may want to play a role in drills simulating emergencies so your school responders can practice each step of the emergency response plan.

Retraining should occur at least every two years—sooner if your equipment, policies or procedures change. Computer-based refresher training (CBT) is a useful tool to keep skills sharp. This type of training can be readily available 24/7 to those who want more practice. As an incentive to keep skills fresh, consider posting the name of the person with the current highest score. Choose a CBT program that is validated as an effective learning tool.<sup>7</sup>

A demo download of AED Challenge<sup>®</sup>, a refresher training program, is available on [www.aedchallenge.com](http://www.aedchallenge.com).

## ACQUIRE AND DEPLOY THE AEDs AND OTHER SUPPLIES



Upon delivery, inspect and install your AEDs according to the operating instructions from the manufacturer. To help ensure AEDs are ready when you need them, check the readiness indicator routinely and follow the maintenance guidelines provided in the operating instructions. This includes keeping records of the expiration dates of consumables such as the battery and electrodes, and replacing them as needed.

Because many visitors frequent school buildings, which can be leased for after-hours activities, post signs to mark the AED locations. Some schools post an AED symbol and map so the devices are easy to find in an emergency.

## PROMOTE YOUR PROGRAM TO RAISE SUPPORT

Publicizing your early defibrillation program to the larger community helps promote your school's commitment to the safety of students, staff and visitors. Publicity also can help raise funds to buy more AEDs or to train more rescuers. A communications campaign within the school should highlight the location of AEDs and inform students and staff how to alert trained responders in the event of a cardiac emergency.

### Ways to publicize your program include:

- News media coverage when AEDs are put into service
- Media coverage when a life is saved with an AED
- Announcements at meetings of faculty, staff, Booster Clubs, PTA, PTSA, student council and school board
- A special student assembly
- Posters and brochures
- Decals on doors of facilities
- Articles in PTA, school, employee and union newsletters
- Notice on your intranet and public Web site
- E-mail or voice mail notification to employees, or print notices mailed with paychecks

Such publicity strengthens the "Chain of Survival." The larger community will be reminded of the need to immediately call for help in a cardiac emergency, and may be encouraged to take CPR and AED training themselves.

*Publicizing your early defibrillation program highlights your school's commitment to the safety and health of students, staff and visitors.*

*Data collection and case review enables you to document how cases are handled, track the number of people helped, and identify how to change procedures to help improve survival rates.*

*"We must do the responsible thing and be prepared to treat cardiac arrest with AEDs. This is the only tool we have to save our children right now."*

*Linette Derminer, who started KEN (Kids Endangered Now) Heart Foundation after her son Ken died of SCA at football practice.*

## **BUILD QUALITY ASSURANCE INTO YOUR OPERATION**

Once you're up and running, follow the policies and procedures developed to keep the equipment, supplies and trained responders at the ready to handle a cardiac emergency. A school nurse or other trained responder should be identified as responsible for maintaining the equipment, particularly replacing electrodes and other supplies that have expiration dates.

On schedule, the AED coordinator should go through the checklist for devices and supplies, order new supplies as needed, and determine that responders receive refresher training on schedule. This enables them to refresh skills, renew certifications, and learn about changes in equipment, policies and procedures.

Record keeping is a vital part of the education system, and AED use is no exception. Data collection and case review enables you to document how rescuers handle cases, track the number of people helped, justify money spent on early defibrillation, and provide data for analysis—to determine trends and identify how to modify procedures to help improve survival rates. Revise your policies and procedures as you learn from any experience using the AEDs, or with updates in best medical practices or equipment.

## **THERE'S NO TIME TO LOSE!**

As you can see, schools equipped with AEDs and staffed with trained responders can mean the difference between life and death for students, employees and the larger school community. Although there are many steps involved in setting up and managing a successful AED program, the rewards are great. Get started now on saving more lives.





## USE THIS CHECKLIST TO HELP LAUNCH YOUR PROGRAM

- Assign a project coordinator
- Champion the idea and raise awareness
- Review laws and regulations and consult your legal counsel or risk manager
- Coordinate with local EMS
- Arrange for medical direction
- Identify your response team
- Choose your equipment and vendor
- Design policies and procedures
- Assess how many AEDs you'll need and where they'll do the most good
- Estimate costs for equipment, training and PR
- Fund your budget
- Train responders and plan for refresher training
- Acquire and deploy AEDs and other supplies
- Promote your program to raise awareness and support
- Build quality assurance into your operation





Physio-Control is the world's largest provider of external defibrillators. We've already helped thousands of schools implement AED programs. A team of AED specialists is available for consultation as needed. Call your sales consultant at 1.800.442.1142 or visit [www.aedhelp.com](http://www.aedhelp.com).

LIFEPAK Heart Safe Solutions from Physio-Control is a complete program that integrates the components needed to implement an AED program. Some of the services provided are: medical prescription, medical direction and oversight, training, post-event data review and a standards development tool that documents how you assessed your site to determine the number and placement of AEDs. Additional services are available, including data download and post-event rescuer support such as stress debriefing. For more information visit: <http://physiocontrol.com/products/heartsafe.cfm>.

### **National Training Organizations**

American Heart Association, [www.americanheart.org](http://www.americanheart.org)

American Red Cross, [www.redcross.org](http://www.redcross.org)

National Safety Council, [www.nsc.org](http://www.nsc.org)

### **Other Resources**

AED help, [www.aedhelp.com](http://www.aedhelp.com)

Medtronic HeartRescue grants, [www.medtronic.com/foundation/programs\\_hr.html.html](http://www.medtronic.com/foundation/programs_hr.html.html)

The Foundation Center, [www.fdncenter.org](http://www.fdncenter.org)

K.E.N. (Kids Endangered Now Heart Foundation), [www.kenheart.org](http://www.kenheart.org)

Louis J. Acompora Memorial Foundation, [www.la12.org](http://www.la12.org)

Gregory W. Moyer Defibrillator Fund, [www.gregaed.org](http://www.gregaed.org)

Project ADAM, [www.chw.org](http://www.chw.org) (Community programs)

Guidelines for Public Access Defibrillation Programs in Federal Facilities. Department of Health and Human Services General Services Administration. Federal Register, 66FR 28495, Notice, May 23, 2001

Cardiac Arrest and Automated External Defibrillators (AEDs). Technical Information Bulletin. December 17, 2001.

U.S. Dept. of Labor Occupational Safety and Health Administration (OSHA), [www.osha.gov/dts/tib/index.html](http://www.osha.gov/dts/tib/index.html)

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### **Physio-Control**

More than 50 years ago Physio-Control pioneered the defibrillation technology that offers hope for the hundreds of thousands of people who experience sudden cardiac arrest each year. Because of the LIFEPAK reputation for quality and reliability, more physicians, hospitals and emergency medical services teams rely on LIFEPAK defibrillators than any other brand. As more people become aware of the importance of early defibrillation, more law enforcement agencies, businesses, schools, airports and stadiums (wherever people live, work and play) are setting up AED programs in the effort to save more lives.

For more information call 1.800.442.1142 or visit [www.aedhelp.com](http://www.aedhelp.com).



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