



Frequently Asked Question about Automated External Defibrillators (AEDs) and Cardiac Arrest

We would know if a child had a heart condition. We don't need an AED.

- Unfortunately, the first sign of a heart condition can be when cardiac arrest occurs. Without quick treatment they could die.
- What about the teachers, administrators, office staff, cafeteria workers, and parents who frequent the school? AEDs protect them as well as the pupils.

Does Cardiac arrest really happen in schools ?

- Although rarer, sudden death in children does occur. Schools should be prepared to respond if sudden cardiac arrest occurs in order to prevent death. Emergency Services are despatched urgently to the school, but in reality it could take 5 to 10 minutes for them to arrive and locate the casualty. Time is critical and every second counts. The chance of surviving sudden cardiac arrest after 10 minutes with no treatment is less than 5%.
- Think also of the snow fall we had earlier in 2010, accidents and other variants that may delay an emergency service vehicle from getting to you quickly.

The AED needs a lot of maintenance?

- The AED mainly takes care of itself. It conducts a self-test every day or week and signals when the battery is low or if a problem is detected.
- Electrodes (pads placed on the person who has suffered a cardiac arrest) need to be replaced every two years. The expiry date of the electrodes can be seen by looking at an easily identifiable panel on the outside of the AED.
- The AED therefore needs minimum maintenance but needs someone to inspect it regularly for the above.

Putting an AED on school premises may alarm pupils and their parents?

- On the contrary. AEDs are being widely placed in public places, such as shopping malls, railway stations, leisure centres and other places where a lot of people come together in one area. The chances are they are probably already familiar with seeing an AED in one of these places.
- The newspapers are reporting regularly on how lives are saved by a layperson using an AED. Parents will be delighted to know that an AED is on the premises of the school and can be used to help them or their child if needed.

What if we need to use it and the cardiac arrest victim dies anyway?

- From the liability perspective, schools are probably further ahead by having AEDs even if they were not able to save the life whilst using an AED. The person suing would have to prove that the casualty was left in a worse state than if the rescuer had not intervened. If the child was in a dangerous rhythm (and for practical purposes dead), no further harm could result from using an AED. If resuscitation is carried out without an AED it is more likely that the casualty would be left in a worse state.
- Even in cases where a person's life is not saved after an AED is used, the family has a greater sense of closure. They do not spend the rest of their lives wondering whether having an AED on the premises might have saved their loved one's life.

Placing an AED on school premises also allows us the opportunity to teach future generations on how to save a life, the AED will create an increased community awareness in addition to providing a potentially lifesaving resource to the community.

What is Sudden Cardiac Arrest (SCA)

This is when a person suddenly collapses unconscious and unresponsive. It appears that they have just dropped dead. It is one of the leading causes of death. Sudden Cardiac Arrest is not the same as a heart attack. SCA is usually caused by an electrical malfunction in the heart causing ventricular fibrillation (VF). The treatment for VF is defibrillation, which can be administered by anyone using an Automated External Defibrillator. VF is where the heart muscle quivers like a jelly and can no longer pump blood around the body. This chaotic quivering of the heart needs immediate action to convert the heart back into an organized rhythm and pump blood through the body. After 10 minutes in cardiac arrest, a person's chance of survival is less than 5 percent.

What is an Automatic External Defibrillator (AED)?

An AED is a medical device programmed with technology needed to analyze the hearts electrical activity. It will only provide the necessary therapeutic electrical shock to the patient if needed. The AED uses voice prompts to direct the user through each of the easy steps. The AED will administer an electrical shock to the patient through the electrodes (sticky pads) placed on the patients chest only if the device determines it is the appropriate treatment.