AEDs in schools

Cardiac arrest can affect all adults and children without warning – so it may occur at your school or during an offsite school event. In a cardiac arrest, the heart suddenly and unexpectedly stops beating. This poses an immediate threat to a person’s life. How would your school respond? How would your staff and students respond in an emergency?

The first aid treatment for cardiac arrest is an easy three steps:

1. Call 111 for an ambulance
2. Start cardiopulmonary resuscitation (CPR)
3. Use an automated external defibrillator (AED) as soon as possible.

An AED, also known as a defibrillator, delivers a safe electric shock to try and restart the heart. AEDs are very easy to use and increase the chance of a person surviving a cardiac arrest from around 15% to around 40%. CPR temporarily maintains circulation of blood and oxygen until a defibrillating shock can be delivered from an AED.

In a cardiac arrest, a person’s chance of survival decreases by approximately 10 percent for every minute that the person goes without CPR and a defibrillating shock. The sooner they receive CPR and a defibrillating shock, the more likely they are to survive.

Considerations for schools:
1. Should my school purchase an AED? Have this discussion with your board and health and safety committee.
2. If there is an emergency do my staff and students know first aid including how to do CPR and how to use an AED, if we have one onsite?
3. Do we have a clear and simple plan to access the AED?
4. Is first aid, including CPR and using an AED, being taught in my school to students? Is adequate training around first aid provided to my teaching staff and volunteers?
5. Does my school plan ahead for EOTC activities and emergencies that could happen?
6. Have we recently invited the local ambulance crew to visit our school and to engage with students?
Should my school purchase an AED?

A child or an adult may have a sudden cardiac arrest at any time while at school. An AED is a life-saving device that can be used by anyone, even by untrained people. All that is required is to turn it on and follow the voice prompts. For those that are hearing impaired a step by step user guide is included with all AED devices.

Some schools have already taken steps to purchase or start fundraising efforts to purchase an AED. The decision to purchase an AED is the responsibility of the Board of Trustees and should be considered by reviewing the schools health and safety policies and relevant workplace regulations.

Many schools provide additional services to the community, such as facilities for meetings, sports, and support for people during natural disasters and civil emergencies. As part of your school planning for these services and events you should consider the benefits of your school holding an AED.

Do my staff know how to do CPR and use an AED?

All schools have staff trained in first aid including how to perform CPR and use an AED. Formative, practical training is best, but other training (such as video-based training and e-learning) can facilitate basic training, ensuring that staff are trained without the need to necessarily attend face to face training.

Schools should have a clear and simple plan to access their AED.

Your school’s AED should be in a known place that is central and easily accessible in an emergency. The physical location of the AED in your school should be clearly marked with standard AED signage. There also needs to be a known process for getting the AED if someone collapses.

In New Zealand, apps such as AED Locations are now being used to map the location of AEDs nationwide. We recommend that AEDs be registered here. These apps are freely available to anyone with a smartphone.

First aid, including CPR and defibrillation, should be taught to students as part of health education.

Training in first aid including CPR is known to increase bystander CPR rates and to improve the outcomes of people who have a cardiac arrest. CPR is a very easy skill and children readily share their knowledge and enthusiasm with others, and can be taught at age-appropriate stages.

Is first aid, including CPR and using an AED, being taught in my school to students and is adequate first aid training provided to my teaching staff and volunteers?

The policy statement Kids Save Lives has been endorsed by the World Health Organisation (WHO) and supported by resuscitation councils worldwide, including the New Zealand Resuscitation Council. “By introducing just two hours of CPR teaching per year for all children over 12, the WHO believe that cardiac arrest survival rates would improve and in turn lead to improved global health.” (Kids Save Lives, 2015).

There are more than 2,000 out-of-hospital cardiac arrests in New Zealand every year, of which only approximately 15 percent will survive (St John, 2016). Training in first aid including CPR is an essential life skill because it saves lives. The New Zealand Resuscitation Council, Red Cross, St John and Ministry of Education and Ministry of Health encourage all teachers, caregivers, and boards of trustees to support initiatives to include age appropriate first aid, including CPR, training in their school’s curriculum.
Does my school plan ahead for EOTC activities and emergencies that could happen?

Taking students outside the classroom to learn has been part of schooling in New Zealand for generations. Education Outside the Classroom (EOTC) continues to be a key component of school life in New Zealand. EOTC can range from a museum or marae visit to a sports trip or a school camp.

Schools are expected to have policies in place about a range of events including all major issues such as traumatic incidents. As part of this planning process schools are also expected to have undertaken a risk assessment of all EOTC events before actually taking students to any event.

A traumatic incident during an EOTC activity can be a stressful experience for a school and its community because it is usually sudden and unexpected. A planned response with procedural steps to follow can do much to lessen the impact and accelerate recovery.

When finalising your procedures for off-site EOTC events, the Person In Charge of the EOTC activity should check with the EOTC provider what their emergency processes are, ask if staff are trained in first aid and inquire if there will be an AED readily available.

When school staff, volunteers and students arrive onsite they should be given a health and safety induction which should include emergency processes and where any first aid supplies (including AED) are kept.

For further information about safety management planning for EOTC events is available on http://eotc.tki.org.nz/EOTC-home/EOTC-Guidelines

Have we recently invited the local ambulance crew to visit our school and to engage with students?

You may like to consider inviting your local ambulance crew, and other emergency service personnel, to visit your school or speak at assembly. Many schools use such visits as a method to engage students and the community in their local curriculum. The emergency services could provide engaging contexts for learning areas like health and physical education, social studies and science as well as the development of key competencies. Students could be empowered to act in an emergency.

Community stations and AED Locations

Across New Zealand there are thousands of AEDs that are available for use. Some of these are located at private businesses, schools or at defibrillator stations in community hubs. Community AEDs may be installed in an outdoor secured cabinet with secured access. They may be registered with 111 or an ambulance service, who ensure the AED is able to be used when needed. When 111 is called, the operator can alert the caller that there is an AED located nearby.

AEDs are placed in areas where members of the community gather such as around libraries, schools, shops and sports grounds. Providing 24/7 AED access in public places increases the chances of survival for people who have a cardiac arrest. For every minute defibrillation is delayed, the chances of survival drops by around 10%.

What does the Health and Safety at Work (General Risk and Workplace management) Regulations 2016 say?

The Regulations place a duty on a Person Conducting a Business or Undertaking (PCBU/Board of Trustees) to provide first aid. This duty is set out in Regulation 13 and covers the provision of adequate first aid facilities, first aid equipment and trained first aiders.

It is the responsibility of the Board, as PCBU, to assess the circumstances and risks arising from their work and school, and decide what is appropriate.

To find your nearest AED visit: www.aedlocations.co.nz
Basic Life Support

D
Dangers?

R
Responsive?

S
Send for help

A
Open Airway

B
Normal Breathing?

C
Start CPR
  30 compressions : 2 breaths

D
Attach Defibrillator (AED)
  as soon as available, follow prompts

Continue CPR until responsiveness or normal breathing return

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