



AED IMPLEMENTATION GUIDE

This guide answers common questions for launching an Automated External Defibrillation (AED) Program in your organization. The guide explores:

- Benefits
- Laws & Liability in Newfoundland and Labrador
- Budgeting
- Implementation

Contact the Lifesaving Society to learn more about starting an AED program in your facility.

The Society is an independent, charitable organization educating Canadian lifesavers since the first Society Bronze Medallion Award was earned in 1896. Annually, over half a million Canadians participate in its swimming, lifesaving, lifeguarding, and first aid training programs. The Society certifies all of Canada's National Lifeguards.



LIFESAVING SOCIETY®

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BENEFITS OF AN AED

An Automated External Defibrillator (AED) is a small portable device that analyzes the heart's rhythm and prompts the user to deliver a shock if needed. AEDs are specially designed for easy use by "first responders", those who typically arrive first on the scene of a medical emergency.

- Sudden Cardiac Arrest can happen anywhere, anytime to people of all ages. A lifesaving shock of electricity must be delivered quickly to restore the heart's normal rhythm and pump blood throughout the body. Defibrillation is the only effective treatment for Sudden Cardiac Arrest caused by ventricular fibrillation.
- In Canada 35,000 to 40,000 people die each year from Sudden Cardiac Arrest. Two of every three Sudden Cardiac Arrest deaths occur outside the hospital.
- The Heart and Stroke Foundation of Canada says the use of an AED within the first 8 minutes of collapse increases survival rates. AED programs have shown that survival rates can rise to 30 percent or more when an AED program is in place. Each minute of defibrillation delay reduces survival by 10%
- The best results for defibrillation occur in the first three minutes, measured from the moment the victim collapses to when the defibrillation shock is delivered. On average it takes EMS teams an average of 6 to 12 minutes to arrive. That's why having an AED readily accessible wherever groups of people gather makes good preventative sense. Unfortunately not every emergency vehicle carries a defibrillator, the only device that can treat Sudden Cardiac Arrest. This almost requires that an AED unit be on-site anywhere groups of people gather and that trained responders are available.
- Office towers, golf courses, high-rise buildings, community centers, airports, casinos, manufacturing plants, schools, and shopping malls are all being equipped with AEDs.
- The Canadian Association of Emergency Physicians is calling for widespread public access to AEDs, which has the potential to be the greatest signal advance in the treatment for Sudden Cardiac Arrest since the development of CPR.

Laws and Liability

AED units are a relatively new category of lifesaving equipment. Laws governing the use of AED units are evolving and vary from province to province, but the general trend is towards making AED units more readily available to the general public. The Lifesaving Society recommends rescuers be certified, trained, and equipped to operate an AED safely and effectively.

There is no legislation in the Province of Newfoundland and Labrador specific to AEDs;

[Emergency Medical Aid Act](#) Newfoundland and Labrador

This Act protects medical professionals and laypersons alike, absent gross negligence.

As a layperson, the main criterion for protection is that you render aid to an individual who is ill, injured or unconscious as the result of an accident or other emergency.

As long as you render the first aid emergency assistance voluntarily and at the immediate scene of the accident or emergency, you will be protected from liability.

Good Samaritan Act

In Canada the principles of the Good Samaritan Act protects you if you choose to help someone in need voluntarily. Once you begin to give assistance, you are obligated to use reasonable skill and care based on your level of training. However those who use an AED should be properly trained to perform electrical defibrillation. The Good Samaritan law does not apply to lifeguards and other employees who are paid to respond to emergencies.

Keep in mind a victim who has suffered a cardiac arrest from a heart attack will die without defibrillation. There is no alternative but rapid and quick defibrillation for someone with no pulse. To date no organization or individual has been the target of legal action as a result of using an AED or having an AED Program.

Laws and Liability

Medical Oversight of Automated External Defibrillators

On January 22, 2010 the Heart and Stroke Foundation of Newfoundland and Labrador hosted a meeting of key stakeholders who either have a direct involvement and/or interest in the use of Automated External Defibrillators (AEDs) in **public settings** to discuss the question of medical oversight of such installations. Public Access to Defibrillation (PAD) Programs are becoming popular because of improved technology, making it easier for a willing person to use the AED with only a few hours of instruction thereby greatly improving the survival rates of victims of cardiac arrest. The discussion did not deal with AED use in health care settings, by EMS responders or in workplaces but rather in public settings such as sport complexes, airports, shopping malls, etc..

Attending the meeting were representatives from the College of Physicians and Surgeons of NL, Association of Registered Nurses of NL, NL Medical Association, Dept. of Health and Community Services, Private Ambulances, Hospital Based Ambulances, Emergency Room Physicians, HSF - BLS Instructor/Trainers, Workplace Health, Safety and Compensation Commission, Recreation NL, Red Cross, St. John Ambulance and last but not least, Heart and Stroke of NL.

The conclusions from the discussions were:

- Automated External Defibrillators are important pieces of life saving technology that should be widely available in the public settings;
- While AEDs are very easy to operate, it is important that potential users be trained in Basic Life Support Skills;
- **Despite the previously held belief that Public Access to Defibrillator (PAD) Programs throughout Newfoundland and Labrador required oversight by a physician there is no legislative requirement for same in this Province which is consistent with the majority of other Provinces across the country;**
- AED installations should have a designated oversight coordinator, but not necessarily a physician. This person would ensure that the AED remains accessible in the event of an emergency, remains operational (batteries charged, pads current), and that potential users are trained in CPR, including the use of an AED;
- In terms of aftershock evaluation, it was noted that AEDs do have memory storage capacity to allow for this, however providing for such post assessments was not explored in depth by the participants.

Source: [Heart & Stroke NL](#)

BUDGETING FOR AN AED PROGRAM

All AED Programs require an initial start up budget involving purchasing equipment and training responders. Ongoing costs are also required to maintain your equipment and ensure staff is prepared to respond to emergencies when they occur. Use the following checklist to help prepare your budget in launching an AED Program.

Equipment: AED units and software varies among manufacture's (Philips Technologies, Medtronic Physio-Control, Cardiac Science, Zoll, etc.). They typically cost \$2,000 to \$5,000 per unit.

AED simulators: The ACTAR AED Training System (with cables, reusable electrode pads, audio training CD, booklet, and nylon carry bag) provides realistic AED sequencing including electrode pads placement and use of "Power-on", "Analyze" and "Shock" buttons. Learners practice AED scenarios following a single set of AED voice prompts from your CD player. Scenarios include obstructed airways, puddle of water, transdermal patch, weak connection, and more.

The system is versatile and allows you to use voice prompts from any AED unit to practice AED sequences. AED Instructors appreciate the benefits of overseeing students as they perform the scenarios together allowing for larger classroom teaching.

AED manikins: The ACTAR D-fib manikin can be used for both child and adult compressions. No pistons, no elastics. ACTAR D-fib features a closeable airway and is designed to facilitate jaw thrust. With ACTAR D-fib you save time and hassle: no bleach soaking required and disinfection between users isn't necessary. ACTAR D-fib's disposable lung doubles as a face shield / barrier.

Automated External Defibrillator (AED) Companies

The Lifesaving Society does not recommend or endorse specific products of any single manufacturer or distributor. The Society encourages you to contact suppliers to describe your needs, obtain product information and find out how they can help you establish your AED program.

The ACTAR AED Training System and ACTAR D-fib manikins are available from the Lifesaving Society, www.lifesavingnl.ca, email lifeguard@nl.rogers.com or by phone 709-576-1953.

Certification training: The Lifesaving Society offers AED certification as well as AED Instructor and Trainer courses for your organization. AED certification builds on CPR and first aid and provides knowledge of how the heart works and what goes wrong when defibrillation is required. Candidates learn when and how to operate an automated external defibrillator including basic maintenance, data management, and reporting protocols required following an incident. CPR, Emergency First Aid and Standard First Aid courses include how to use and operate and AED unit.

HOW TO IMPLEMENT AN AED PROGRAM

No two facilities or organization will implement an AED program in exactly the same way. Assign an AED co-coordinator to manage and tailor a program that works for your situation. The following checklist can help you launch your program.

Identify your response team: Determining who is likely to respond in an emergency will affect how and where AEDs are mounted or stored. The size and layout of your facilities also determine how many people you will want trained to respond.

Train response team and plan for refresher training: All responders who might use the AED should take a course. Classes give responders the skill and confidence to use AEDs.

Keep records of who was trained and when they need refresher courses. Some Affiliate Members have adopted the “train the trainer” approach, where staff becomes certified to instruct the training course.

Assess how many AEDs you will need and where to place them: The recommended defibrillation time window is less than 4 to 5 minutes. Consider highly visible locations, near expected responders, close to where the largest numbers of people spend their time, where people may be subject to strenuous activity.

Design policies and procedures: If you already have an emergency response plan, integrate your AED program into it. This should include who manages the AED Program, when the AED should be used and required training to use it, types and locations of AEDs and other equipment (gloves, masks, etc.), training and refresher training policy, process and schedule for checking and maintaining equipment, records that must be kept each time an AED is used, how to handle data recorded by the AED during use, what to do after an event such as downloading and transferring of data from the AED.

Promote your AED program: An internal communication campaign will help people become familiar with your program and inform them how to alert trained responders if they witness a cardiac emergency.

Contact your local EMS: Notifying your local EMS is good practice when implementing an AED program. This allows for coordinating protocols when responding to emergencies.