

# AEDs in the Workplace Compliance Game Plan



Sudden cardiac arrest (SCA) is the second leading cause of death in Canada, taking more lives than motor vehicle accidents, diabetes, breast cancer, and colon cancer **combined**. It happens to somebody in this country every 12 minutes, sometimes at workplaces. The victim's chances of surviving the experience improve dramatically if there's a first aid device capable of restarting the heart called an automated external defibrillator (AED) at the site. Consider these numbers:

- **1% to 5%**: The general odds of surviving SCA outside a hospital setting.
- **40%**: The odds of survival when SCA occurs at a site where's easy access to an AED.
- **60%**: The odds of survival when an AED is used in the first 3-4 minutes of SCA.

Here's a 12-step game plan for implementing an AEDs program and policy at your workplace.

## What an AED Is

An AED is an electronic device that can monitor whether a person's heart has stopped beating and deliver an electric shock to get it restarted. The beauty of the AED is that they enable even non-medical personnel to save lives. While AEDs come in different models, they operate the same basic way. There are 3 simple steps:

- **Step 1:** Turn the power on by either opening the lid or pressing the power button, depending on the type of AED.
- **Step 2:** Attach the AED pads to the victim's bare chest, look at the picture on the AED pads to determine whether to administer a shock.
- **Step 3:** Press the flashing button to deliver a shock if the machine says it's necessary.

Most of the time, this shock will restart the heart. While CPR can also be effective, it has a low survival rate for SCA.

## AEDs in the Workplace

In addition to their life savings potential, AEDs are inexpensive (and often even free), easy to use, and simple to maintain. So, why don't more companies use them? Part of the answer is that while AEDs are recommended for just about all workplaces, they're not legally required the way other kinds of first aid equipment is.

But that's beginning to change. A decade ago, Manitoba became the first province to pass legislation requiring AEDs at certain kinds of publicly accessible sites like public fitness, sports and athletic facilities, community centres, public health and government buildings, airports, train and bus stations, schools, colleges, universities, and casinos. Several provinces including BC and Nova Scotia have proposed bills that would require private sector employers to have AEDs in the workplace.

Ontario will soon become the first province to actually pass such legislation. Bill 30, the *Working for Workers Seven Act*, requires the contractor (referred to as the "constructor") in charge of multi-employer construction projects where 20 or more workers work and that are expected to last at least 3 months to install and maintain AEDs at the site. Barring something unforeseeable, the Bill will pass in the fall and take effect in early 2026. The Ontario Ministry of Labour has already published regulations implementing the law.

## How to Create a Workplace AEDs Program

Even if it's not currently required, having AEDs at your workplace may save lives. But you need to implement a proper program to ensure effective use of AEDs.

### Step 1. Designate On-Site AEDs Coordinator

Appoint a qualified and properly trained person to serve as the workplace AED response coordinator with responsibility for:

- Performing the AEDs assessment explained in Step 2.
- Selecting workplace locations to place AEDs.
- Ensuring that AEDs and parts are in ample supply, properly mounted, fully equipped, and in proper operating order.
- Ensuring that signs are in place.
- Ensuring that all required inspections, battery, and maintenance checks of each device are performed.
- Contacting the distributor for replacement parts.
- Monitoring recall notices and ensuring they're followed.
- Maintaining required AED records and logs.

### Step 2. Perform an AEDs Assessment

While implementing an AED program is generally recommended for all workplaces, the imperative depends on the risks of SCA occurring at your particular site. Have the program coordinator or other competent person do an AEDs assessment based on the same risk factors as your general first aid assessment, including:

- How many people are at your workplace.
- How old those people are—thus, a workplace with 2,000 people and an average of 40 years of age can expect at least one incident of SCA to occur, according to the Heart and Stroke Association.
- The work performed at the site—the more physically strenuous, the greater the SCA risks.
- How far you are from the nearest hospital or healthcare facility.
- How quickly rescue personnel can reach you.

### Step 3. Select the Right AED Equipment

Although there are many different types of AEDs, most cost about \$1,500 to \$2,000, without the accessories. You also need to factor in:

- AED pads, which cost between \$50 to \$200 per set and have to be replaced every 2 to 5 years.
- Batteries, which cost between \$125 to \$350 and have to be replaced every 2 to 7 years.
- The means of mounting the AED, including brackets (about \$100) or cabinets (about \$350).
- Signs pointing out the location of the AED, which are typically 3D and cost about \$50.

The device should also be safe and easy to use and be capable of analyzing heart rhythm and providing clear step-by-step (visual and/or verbal) instructions guiding the user to deliver a shock, when it's necessary, and advising when CPR is needed. Other factors to consider:

- Whether the distributor is in good standing with the Heart and Stroke Foundation of Canada (HSFC) or your province.
- The distributor's warranty and post-sales support services.
- The battery life and whether batteries are warranted.
- How often pads must be replaced.
- The product's maintenance requirements and expected life.

#### **Step 4. Buy the Right Number of AEDs**

You may need multiple AEDs, depending on the size and configuration of your facility. Time is of the essence when dealing with SCA. Chances of survival decrease by 7% to 10% with each minute that the victim doesn't receive CPR or AED treatment. As emergency responders take 8 to 12 minutes to arrive, having an AED can mean life or death. **Rule of thumb:** The HSFC recommends getting and placing enough AEDs so that they can be within 3 minutes reach of anyone in the facility. In other words, it should take no longer than 3 minutes for a user who recognizes the need for using an AED to:

- Get to the AED.
- Bring it to the victim.
- Get the AED pads on the victim.
- Determine if a shock is necessary.
- Deliver the shock.

#### **Step 5. Purchase the Necessary AED Supplies**

In addition to the AED device, you need certain equipment and supplies. Rule of thumb: Each AED kit should contain:

- 2 pairs of nitrile gloves.
- 1 disposable razor.
- 1 pocket mask.
- 1 resuscitation face shield.
- Trauma scissors.
- Defibrillator pads.

#### **Step 6. Install AEDs in Suitable Locations**

The new Ontario regulations require AEDs and supplies to be stored in a "suitable place" that:

- Allows for the AED and required supplies to be kept together.
- Protects the AED and supplies from dust, moisture, and other substances present

- at the site that could damage or affect its functionality.
- Is clearly labelled with a proper sign in accordance with Step 7 below.
- Is unobstructed and allows for easy and immediate access to the AED and supplies.
- If outdoors, protects the AED and supplies from extreme temperatures, moisture, and direct sunlight.

## **Step 7. Post AED Signs**

Post signs displaying graphic symbol depicting a heart containing a lightning bolt and containing the words “Automated External Defibrillator” or “AED” at the main entrance, next to each device, and at other locations so that people in the workplace know the location of the AEDs. If French is the predominate language of the workplace, the signs should say “Défibrillateur externe automatisé” or list the acronym “DEA.”



Also mark AED locations on your public facility maps or displays.

## **Step 8. Maintain, Test & Inspect AEDs**

Maintain and test AEDs in accordance with the manufacturer’s instructions to ensure it’s in working order 24/7/365. While maintenance requirements vary by product, you should inspect each device, including batteries, electrodes, cabinets, mountings, and other supplies at least once a month. Departments should also do a daily inspection to ensure that the device in their area is fully charged and working.

You should be able to get any spare or replacement parts you need from the distributor, unless they come as part of the original package. The manufacturer is required to notify you of any software or other product changes affecting the operation of their device. Be sure to track any Health Canada (or US FDA) recalls affecting your device. Last but not least, keep inspection records, including an inspection tag attached to each device that lists:

- The AED’s location, serial number and registration number (which you’ll get from the registry).
- The inspection date.
- The name and signature of the person who did the inspection.
- The device distributor’s name and contact information.

## **Step 9. Register Your AEDs**

Most provinces (Newfoundland is the lone exception) keep public registries for building owners to register their AEDs. Registries serve as a database enabling health officials and EMS to keep track of locations with AEDs across the province thus facilitating emergency response. As part of registration, you must indicate where in the facility your AEDs are located; so, you’ll have to revise your registry entry if you later move or remove those AEDs.

## **Step 10. Train Staff to Use AEDs**

While it doesn’t require special medical training, using an AED can still be very intimidating, especially for someone who’s never done it before. So, it’s important to show people how the device works and let them try it out in case they ever need to use it in a life-saving situation. Incorporate AED use into your basic first aid and emergency response training and hold drills to simulate real incidents.

## **Step 11. Take Proper Steps After AED Use**

There are certain important things you must do any time you actually have to use any of your AEDs, including:

- Replace the pads and other equipment, clean the unit and return the device to a "ready state" as soon as possible.
- Download the information relating to the emergency event that's stored in the device's software and make it available to the victim's medical team and health officials.
- Debrief staff who used the AED or was otherwise involved in the response to determine what happened and how to improve future response actions.

## **Step 12. Maintain Records of AED Incidents**

Keep records of AED use incidents you would with other serious workplace incidents. Require the worker who used the AED to fill out an incident report listing:

- The date, time and place of the incident.
- Whether first responders were called and if they arrived.
- A description of other first aid and response measures provided, such as CPR.
- How many shocks were administered.
- The outcome—whether the victim survived, etc.