



STAFF REPORT

Title: City Provision of Automated External Defibrillators (AEDs)

Meeting Date: September 19, 2023

Executive Summary:

As part of its commitment to health and safety, the City of Cold Lake maintains eight (8) Automated External Defibrillators (AEDs) that may be used in an emergency situation to help improve the chances of survival from sudden cardiac arrest. At this time, the City provides AEDs in the following locations:

- FCSS Facility (front lobby);
- Energy Centre, specifically:
 - At Player's Bench
 - Adjacent to the Ice Plant Doors
 - Wellness Centre
- Grandstand at the Thomas Varughese Artificial Turf Field;
- Cold Lake Golf and Winter Club (front lobby);
- North Arena; and
- Water Treatment Plant.

Currently, employers are not required to provide AEDs, but a growing number of AEDs can often be found in public locations such as community centres, libraries, arenas, parks, exercise facilities, and other facilities where people gather, especially for recreational activities. From an employer perspective, while Alberta Health and Safety legislation does not require AEDs in the workplace, it does require that employers, "*do what is reasonably practicable to ensure the health and safety of workers and other persons at or in the vicinity of the work site.*" The decision if this includes providing AEDs on-site remains the sole discretion of the employer.

Administration is seeking feedback and direction on the service levels of the City in relation to AEDs, including the current provision of AEDs, if additional AEDs should be located at City facilities, and the principles behind the provision of AEDs.

Background:

AEDs and Regulations

A sudden cardiac arrest can occur when the heart has abnormal or irregular heart rhythms causing the individual to lose oxygen and blood flow to the brain and vital organs (www.ccohs.ca). Automated External Defibrillators – more commonly known as AEDs –



are portable, electronic medical devices that are used to help those experiencing cardiac arrest. AEDs automatically diagnose life-threatening cardiac arrhythmias and treat them through the delivery of an electrical shock, or defibrillation to the heart. This defibrillation stops the arrhythmia and allows the heart to re-establish an effective rhythm. This has the potential to save the life of someone experiencing cardiac arrest.

“According to the Heart and Stroke Foundation of Canada, the immediate use of an AED along with cardiopulmonary resuscitation (CPR) can increase the chance of survival by 75% or more” (www.ccohs.ca).

There has been a growing trend in Canada towards increasing access to AEDs in public places. For example, we understand that BC, Manitoba and Ontario have legislation in place that requires employers who are owners of designated public places to have AEDs installed. There are specific requirements around installation of the AEDs and registration of their locations. In 2020, the Ontario Government passed the *Defibrillator Registration and Public Access Act*, 2019, S.O. 2020, c. 8 - Bill 141 which requires owners of designated public places to have AEDs installed. However, the regulations to establish the designated places have yet to be passed.

There are no regulations or requirements for AEDs in the province of Alberta at this time. However; Alberta Health and Safety legislation does require that employers, *“do what is reasonably practicable to ensure the health and safety of workers and other persons at or in the vicinity of the work site.”* It is the employer’s decision if this includes providing and maintaining AEDs in their facilities.

The City currently has AEDs in the following locations:

- FCSS front lobby;
- Energy Centre, specifically:
 - At Player’s Bench
 - By the plant room doors
 - Behind the counter in the Wellness Centre
- Grandstand at the Thomas Varughese Artificial Turf Field;
- Cold Lake Golf and Winter Club front lobby;
- North Arena; and
- Water Treatment Plant.

Excluding the Water Treatment Plant, all AEDs are located in a facility that is frequented by members of the public. The AED located at the Thomas Varughese Artificial Turf Field is contained in a special, temperature-controlled case that has two heating elements and thermostatic controls to keep the AED within operating temperatures and maintain its operating viability through the freezing temperatures experienced during the winter months.



Usage Guidelines and Training

While there is no legislated obligations related to AED installation or use in Alberta, the Canadian Centre for Occupational Health and Safety states that when an employer voluntarily chooses to install AEDs at a worksite, the following applies:

- **OBLIGATION TO:** Operate, inspect and maintain the device according to the manufacturer's instructions.
- **RECOMMENDED:** Have a training program to ensure employees are trained in the proper use of the AED. And, that employees who are trained in first aid and CPR are the most appropriate candidates for operating AEDs.

The AEDs that the City currently has are maintained and inspected on a monthly basis by a third-party contractor. AED inspections confirm expiration of the pads, functionality of the batteries, and overall functionality of the AED. AED maintenance addresses and rectifies any situation compromising the operating viability of the AED (inclusive of pad and battery replacement). The City's Safety Advisor and Human Resources Manager are to be notified immediately if the functionality of an AED is compromised for any reason.

Additionally, although it is not required, the City arranges for a number of employees at each City facility to maintain First Aid CPR "C" Certification. This certification includes AED training and remains valid for a period of three (3) years.

While AEDs are present at some locations, the City does not direct or require staff to use AEDs on either their coworkers or members of the public. The AEDs are made available at certain sites, and may be used at the discretion of the user (who may be a City employee or member of the public). It is not necessary for members of the public to have certain training to use an AED and any citizen may use an AED as long as they are able to follow the directions given by the machine.

Caution must be exhibited by employers when it comes to creating expectations of employees around the use of any medical services or interventions, where the employer is not a medical professional. The only legally authorized individuals who may provide medical direction is those professionals certified, or working under, the College of Physicians and Surgeons. As the City is not a medical professional, it does not direct City employees to deliver medical services, such as the AED to assist someone experiencing sudden cardiac arrest. Instead, the City's approach to date has been to have public access to AEDs at certain locations, which may be used by City staff or members of the public at their own discretion and comfort.

AED Costs

Servicing and maintenance for the City's AEDs is provided by a third-party contractor on a monthly basis in conjunction with inspecting, servicing, and restocking City First Aid kits and eye-wash stations. The City spends approximately \$600.00 on this contract annually.



Monthly AED inspections include checking the active indicator that each machine has, usually a checkmark, to ensure the unit is operational and checking the pads and batteries to ensure that they are current.

There are a number of different models of AEDs that are available on the market for purchase. Depending on the type of AED, the cost ranges from \$1,800.00 to \$2,500.00 per unit (plus installation). The cabinet that AEDs are stored in is purchased separately and is an additional cost of \$200.00 to \$300.00 per cabinet. AED batteries and pads require periodic replacement to maintain the functionality of the unit. The usual lifespan of an AED battery is two (2) to four (4) years, while AED pads have a typical lifespan of two (2) to three (3) years. The costs for replacing AED batteries range from \$150.00 to \$300.00 while costs for pad replacement range from \$100.00 to \$300.00. Battery and pad lifespan and replacement costs are dependent on the model of AED in operation.

Considerations for providing AEDs

AEDs are most commonly located in areas where they will likely be needed to ensure fast delivery of defibrillation, where a rapid medical response is not readily available. When deciding if AEDs should be provided and, if so, where they should be located, Alberta Occupational Health and Safety recommends that the workplace be assessed for hazards to aid the employer in its decision process. Further recommendations for employers to consider regarding provision and location of AEDs include:

- Population;
- Public accessibility;
- Appropriate signage; and
- A location that can accommodate an alarmed and accessible cabinet.

It is also recommended that employers consider how the provision of AEDs will fit with the emergency response plan at each facility being considered for potential AED location.

In addition to the logistical considerations of providing and maintaining AEDs, the Committee may want to identify the principles behind the provision of AEDs at certain City facilities and not others. As such, Administration has contemplated several points for the Committee's discussion and consideration:

- Would the Committee recommend maintaining the current number of AEDs at their noted locations within City facilities or, would the Committee recommend increasing or decreasing the number of AEDs:
 - Should AEDs be provided at some or all City worksites as a safety provision if needed by a staff member?
 - Should AEDs be provided at some or all public access facilities as a safety provision if needed by a member of the public?



- What are the principles for making the decision about where to place AEDs?
- What are the Committee's principles and expectations behind the City's provision of AEDs at worksites, public facilities, or in the community? Specifically:
 - The Committee may consider implementation a Public Access Defibrillator program which would see City owned facilities and public buildings have an AED installed and identified (example: City of Hamilton).
 - Is there an expectation that all AEDs be located in alarmed and accessible cabinets in public spaces?
 - Is there an expectation of staff providing a life-saving service level to the public in facilities that contain AEDs?
- There are examples of select municipalities that have AED Registration Programs in their community to identify the location of AEDs throughout the community (example: City of Hamilton). Should the City consider further public engagement to consider implementation of such a program?
- All AED's come with both capital and operating costs as these units must be inspected on an ongoing basis in accordance with specifications. The City currently contracts these inspections to a certified third party.

The City of Cold Lake receives requests for AED's to be supplied at various locations throughout the City.

- Pickleball Courts at Imperial Park
- Baseball/Softball Diamonds at Imperial Park
- Soccer/Rugby Fields at Imperial Park
- Off Leash Dog Park at Imperial Park
- Skateboard Park at Imperial Park
- Tennis Courts at Ivan Krook Sr. Memorial Park
- Baseball Diamonds at Ivan Krook Sr. Memorial Park
- Brady Height Park and Multi Use Courts
- Cold Lake Marina
- Kinsoo Beach
- Multi Purpose and Volleyball Courts at Kinsoo Beach
- Cold Lake North and South Outdoor Rinks
- Lions Park

It is advisable that the City of Cold Lake establish some "level of service" consistency in regards to the implementation of AED. With that, there are several other parks and



facilities throughout the City of Cold Lake including various worksite. The following are examples but not all inclusive:

- CEN5 Cold Lake Regional Airport
- Lift stations
- City Hall
- Pump houses
- Landfill and Transfer Station
- Community Parks
- Iron Horse Trail – Staging Area

Administration is seeking the Committee's feedback and direction regarding City service levels in relation to the provision of AEDs, inclusive of the number of units to be provided and maintained and their location at specific City facilities, as well as the principles behind the provision of AEDs.

Alternatives:

For the Committee's discussion.

Recommended Action:

For the Committee's discussion.

Budget Implications (Yes or No):

Yes

Submitted by:

Kevin Nagoya, Chief Administrative Officer