



## **Administrative Report**

### **Office of the Chief, Essex-Windsor EMS**

**To:** Warden MacDonald and Members of Essex County Council

**From:** Justin Lammers  
Chief, Essex-Windsor Emergency Medical Services

**Date:** Wednesday, April 17, 2024

**Subject:** Public Access Defibrillator (PAD) Mapping

**Report #:** 2024-0417-EMS-R06-JL

---

#### **Purpose**

The purpose of this report is to provide members of County Council with information surrounding the mapping of public access defibrillators within the region.

#### **Background**

Heart and Stroke Canada tells us that approximately 60,000 out-of-hospital cardiac arrests are happening in Canada, each year. This equates to one every nine minutes. Their data shows that only one in ten people that experience cardiac arrest, survive. Additionally, almost half of cardiac arrests happen to people under the age of 65.

Cardiac arrest means that the heart has stopped beating. Out-of-hospital cardiac arrests are sudden, often unexpected medical emergencies that can happen to anyone, anywhere, at any age. We know that fast action saves lives. Immediate Cardiopulmonary Resuscitation (CPR) keeps the blood pumping to help preserve the brain and other organs and delivering a shock to the heart with an Automated External Defibrillator (AED) will help to restart the heart. Survival of cardiac arrest drops significantly every minute without these life-saving measures and chances of survival doubles if these measures are started.

Nationally, bystander CPR rates are roughly 13% in public places. AED availability in public places varies and they can be inaccessible, not properly maintained, and not registered in a database.

Ontario has passed legislation, (*Bill 141, The Defibrillator Registration and Public Access Act 2020*) although not yet in effect, that not only requires AEDs in both work and public spaces (also known as Public Access Defibrillator – PAD) but also the requirement to maintain the PAD. While we anticipate the Act to come into effect at some point, we can't wait for legislation to catch up to do the right thing.

In 2023, Essex Windsor EMS Paramedics responded to 675 patients who were at some point vital signs absent (VSA). This can occur as reported by an Ambulance Communications Officer (ACO) while assigning the call, or, in the presence of Paramedics during a response. It's important to recognize that not every patient is a candidate for CPR and defibrillation.

Of those 675 patients, Paramedics performed CPR and other advanced life support treatments on 344 patients, with 283 defibrillator shocks delivered, and 103 patients experiencing a Return of Spontaneous Circulation (ROSC). Although a ROSC can be achieved by Paramedics, we consider a "save" as someone who was in cardiac arrest, subsequently treated and transported by Paramedics, and eventually discharged from the hospital. In 2023, there were 28 saves, which equates to an 8% out-of-hospital cardiac arrest survival rate in our region. For clarity, this number is calculated by dividing the total number of saves, by the total number of patients who received CPR at any point.

Digging deeper into that data, we know that in 2023, bystander CPR occurred in 161 cases, and a Public Access Defibrillator (PAD) was used in 11 cases. It is important to note that of the 344 patients that were resuscitated by Paramedics, we don't currently track those that occurred in a public space, but we have implemented this metric in our reporting moving forward. However, it is safe to say that the majority of cardiac arrests responded to by Paramedics occur in private residences.

## **Discussion**

In 2024, Essex Windsor EMS became the administrator in our region for a PAD tracking and monitoring program called PulsePoint. This program allows members of the public to easily identify and upload PADs in their community or workplace from their mobile devices. The uploads are then authenticated by the PulsePoint administrator and shared with the Ambulance Communication Center so that when members of the public call to report a cardiac arrest, they can be directed to the closest PAD if applicable. The intent is to improve the amount of times a PAD is used in out-of-hospital cardiac arrest cases.

---

Additionally, by uploading the PAD location and details, including who the most appropriate contact for ongoing maintenance of the PAD is, we can help to make sure that it is in a state of readiness when needed. It's important to note that during authentication, the owners of the PAD can choose if the PAD is publicly accessible and if so, during what hours. This is important to maintain security in the workplace.

Realistically, there is a process that must occur from the point of someone calling 911 during a cardiac arrest, to requesting Paramedics, the ACOs assigning an ambulance, and Paramedic travel time. This all takes time. Members of the public must be aware of how they can help and have access to these life-saving devices as these are precious minutes that could save a life with early intervention.

Essex Windsor EMS will be promoting PulsePoint publicly with a call to action for all members of the public and workplaces in our region who are willing and able to support the uploading of PADs in the region to PulsePoint. In addition, these communications will also share the importance of knowing how to perform CPR. In 2024, Essex Windsor EMS began hosting CPR and PAD awareness sessions for staff, friends, and family of the County of Essex at The Safety Village in Windsor, with great success. The intent is to eventually formalize this program and offer it to the public at large.

## **Financial Implications**

There are no financial implications with this report. EWEMS is currently leveraging the expertise of an existing team member to perform the administrative duties associated with the PulsePoint project. Administration continues to monitor the need for public relations and education services related to emergency medical services. A dedicated Public Relations and Education Coordinator role may be proposed in the future. This role does exist in other EMS services across the province.

## **Consultations**

- Deputy Chief Ryan Lemay, Essex Windsor Emergency Medical Services
- Heart and Stroke Canada

## **Recommendation**

That Essex County Council receive report number 2024-0417-EMS-R06-JL Public Access Defibrillator (PAD) Mapping, for information purposes.

---

## Approvals

Respectfully Submitted,

*Justin Lammers*

Justin Lammers, Chief, Essex-Windsor Emergency Medical Services

Concurred With,

*Sandra Zwiers*

Sandra Zwiers, MAcc, CPA, CA, Chief Administrative Officer

<b>Appendix</b>	<b>Title</b>
N/A	N/A