



**SUBJECT: Auto-Injector Pilot Program at City facilities**

**TO: Committee of the Whole**

**FROM: Parks & Recreation Department**

Report Number: PR-04-17

Wards Affected: All

File Numbers: 925-01

Date to Committee: May 1, 2017

Date to Council: May 15, 2017

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**Recommendation:**

Approve Option #1 regarding Auto-Injectors in City recreation facilities as outlined in parks and recreation department report PR-04-17.

**Purpose:**

A Healthy and Greener City

- Healthy Lifestyles

This report is in response to the staff directions shown below:

- “Direct the Director of Parks and Recreation to provide a recommendation on implementing a program where Auto-Injectors would be available in City facilities as a one year trial program”; and
- “Direct the Director of Parks and Recreation to provide information on the cost of making a bulk purchase of Auto-Injectors funded on a one-time basis from the Tax Stabilization Fund.”

\*For the purposes of this report, the term “Auto-Injector” will be used as “EpiPen” would be considered a brand trademark.

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**Background and Discussion:**

To help illustrate the different ways anaphylaxis treatment may occur, below is a brief overview from a basic symptom assist level to a full public access environment:

<b>Symptom ASSIST</b>	<b>Symptom RELIEF</b>	<b>Public ACCESS</b>
↓	↓	↓
In this scenario, someone (staff or a member of the public) who is trained in the identification and treatment of anaphylaxis communicates with the individual who is having an allergic reaction and supports them through the administration of epinephrine by verbally assisting them to inject themselves with their own auto-injector. This is typically done by providing a hand-over-hand application.	In this scenario, someone (staff or a member of the public) who is trained in the identification and treatment of anaphylaxis communicates with the person who is having a reaction, and supports them through the direct administration of epinephrine by use of the persons own auto-injector.	In this scenario, generic non-prescribed epinephrine is available to the public, by a member of the public asking a trained staff member for the auto-injector, or by having non-prescribed epinephrine placed in public access cases in public areas of facilities like lobby areas.
<b>Currently in place in P&amp;R</b>	<b>Currently in place in P&amp;R</b>	<b>Not in place at this time.</b>

At the present time, designated City staff who are trained will provide both system assist and symptom relief, if required.

Below is an overview of our current practices within Parks & Recreation (P&R).

**Parks & Recreation Facilities:**

All facilities within Parks & Recreation have designated first aid providers who are trained in Standard First Aid. Standard First Aid is a certification that is provided through organizations like the Life Saving Society, Red Cross, or St. John Ambulance. These organizations are officially recognized provincially through WSIB (Workplace Safety & Insurance Board). Standards are set through WSIB and are initiated through various organizations as mentioned.

Standard First Aid certification includes, Automated External Defibrillation (AED), Cardio Pulmonary Resuscitation (CPR) and the identification and treatment of Anaphylaxis

which includes the administration of epinephrine that is to be “prescribed” to someone experiencing an allergic reaction.

The role of the designated first aid responder is to provide emergency first aid response in emergencies, within the scope of their training and certification. Emergency response is just one of staff’s overall responsibilities. Some of the positions that are designated as first aid responders in Parks & Recreation are Facility Operators, Lifeguards, and Camp Staff, as examples.

### **Recreation Programs:**

During the intake application process for members of the public registering for City-delivered programs, known medical conditions are asked to be disclosed. The information collected is then shared with the program instructor should a medical emergency arise.

In specific program areas like day-camps, where participants are at a location for an extended period of time, added protocols and systems have been put in place. These include educating parents on food allergies and what to pack and not pack for lunches. For those who suffer from anaphylaxis, individual participant systems are put in place which includes the expectation that participants who suffer from severe allergies must carry with them at all times their own auto-injector. In the event of an anaphylaxis emergency, staff are trained to provide an assisted injection (symptom assist), and if required, will also administer the prescribed epinephrine directly (symptom relief) to the individual if they are unable. In this scenario, the epinephrine must be prescribed to the individual as per standards stated within the certification of Standard First Aid which is recognized through WSIB.

### **Options Considered:**

At the present time, there are three options before Council for consideration:

1. Continue with the current emergency response systems in place including both symptom assist and symptom relief in Parks & Recreation locations. In addition, enhance on-site awareness of allergies and emergency response through signage and added promotional material. Promotions like “Don’t leave home without it (auto-injector)” or “See your doctor if you experience any of these systems” are all types of messaging that could be added to various education campaigns. **Staff is recommending this option at this time.**
2. Implement an auto-injector treatment centre that is controlled and administered by staff. In this option, auto-injectors would be stored in staff-only access first aid

kits and cabinets. In this option, the epinephrine is fully controlled by staff and only trained staff would administer the injection to someone suffering from anaphylaxis. The availability of trained staff to support a person in need varies for each type of facility (e.g. arena, pool, community centre) and by the time of day. For instance, many locations like arenas or smaller community centres, response time by staff during an incident may be significantly delayed as staff could be attending to other duties (e.g. flooding, snow removal, room set-ups, etc.), off-site, or a good distance away from the incident. Implementation of Option 2 may also require changes to staff responsibilities, which could result in added human resource implications. **Based on risks and potential issues identified as well as the impractical response time by staff at some locations, this option is not recommended by staff at this time.**

3. Implement a full public access auto-injector system with generic auto-injectors (i.e. non-prescribed adult & child doses) available by all. These auto-injectors would be mounted in Parks & Recreation facilities in areas such as main lobbies. In this option, anyone from the public, could access and use the auto-injector. **Based on the risks identified, this option is not recommend by staff at this time.**

Details of these risks are highlighted in confidential legal department report L-7-17.

## **Strategy/process**

Early in 2016, staff was directed to assess the feasibility of a public access auto-injector system in Parks & Recreation facilities.

Staff in Parks & Recreation are not experts in the medical or public health fields and have therefore consulted with a number of departments such as Legal, Fire and Human Resources and with Public Health. Other municipalities were also contacted and research found that a few municipalities have gone forward with a pilot program (e.g. City of Hamilton), while others have not (e.g. City of Mississauga) however, a vast majority of municipalities neither have this matter on their radar nor have a position on the topic. In some municipalities that have implemented a pilot public access auto-injector program, the city was either a 1-tier municipality and/or, were given directives lead through their Public Health departments. Municipalities that have implemented a program have also discovered various operational and implementation issues including staff acceptance/resistance and also theft/vandalism to the public access units.

Consultations were also made with various Medical Officers of Health (MOH). As this type of initiative has not been provincially rolled out, various answers and insights differed from one MOH to the other.

Staff also consulted with the City's first aid provider, Life Saving Society to help better understand the expected standards of first aid and to clarify the need to have epinephrine prescribed to a person in order to provide treatment.

### **Outcome - Recommendation**

The recommendation provided to Council from staff is founded on two factors: Likelihood and Risk. Other considerations like costs are also explained in this report but are more secondary to the recommendation provided by staff at this time.

### **Likelihood of Need:**

In consultation with Public Health for the Region of Halton, expertise on likelihood was provided through their Senior Epidemiologist. Their conclusion was sourced and is cited: [Xu et al., 2014](#). The article contains the most up to date death data available, as the Vital Statistics database only goes up to 2011. The data was extracted from the Canadian Coroner's and Medical Examiner database.

- In Ontario, between 1986 and 2011, 92 people died of anaphylaxis. However, the rates have decreased significantly since the 1980's and 1990's, with about 3 deaths per year (on average) in the province since 2000. This decrease in anaphylactic deaths occurred despite a growing population and an increase in self-reported food allergy and is due to an increase in allergy awareness, education and strengthened legislation. Overall in Ontario, the most common cause of allergy related death is to food (43%), followed by insect venom (33%), then medical treatment (17%), and 7% of cases where the cause is unclear.
- With 3 deaths each year in Ontario, anaphylaxis resulting in death is quite rare. If we apply these rates to the population of the City of Burlington, it equates to a probability of 1 death every 26 years. If we further apply this rate to the probability of a death occurring in a foodservice establishment in Burlington, it would equate to a 1 death every 150 years. Given there are significantly fewer City-run facilities compared to foodservice establishments in Burlington, the likelihood of a death due to anaphylaxis occurring in a City-run facility is so extremely low that it cannot be calculated.

### **Risk:**

As highlighted in confidential legal department report L-7-17, a variety of risks have been identified. Based on the identified risks, staff believes recommending Option 2 or 3 is premature and have therefore recommended Option 1. However, if Council chooses to accept the risks noted staff within Parks & Recreation would work towards the

implementation of a new program based on the option approved by Council. Implementation of any of the options noted in this report would commence in the Fall of 2017.

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### **Financial Matters:**

All options shown within this report have associated costs. Costs include information/signage costs, staff training costs, and equipment costs. There would be 16 locations identified for implementation including pools, recreation centres and arenas. Locations that are not considered in any of the options at this time are outdoor sports fields, parks, and other facilities that the City does not operate (e.g. Joint Venture facilities or other tenant locations).

Option 1 would incur minor costs for proper signage and to develop information/awareness campaigns. It would be estimated this one-time cost would be approximately \$6,500 (approximately \$400 per location). This option would be a relatively simple option as staff would link with the Public Health Department to obtain information and obtain/design new signage and education campaigns.

Option 2 would include information campaigns as shown in Option 1, with the addition of annual costs related to staff training and the purchase of auto-injectors. As previously noted, staff are already trained in anaphylaxis emergencies as part of their Standard First Aid certification. An additional 1 hour of annual training would be required to refresh skills, review the new program, and understand storage and use of the new equipment. It is anticipated that 200 staff would require this annual training, both full-time and part-time. Total annual cost for this added 1 hour training would be approximately \$5,000.

In addition, each of the 16 locations would be required to have auto-injectors on-site. One set of auto-injectors (adult & child dosage) is approximately \$200. It would be suggested that each location have a spare set on site as well, for a total of two sets at each location (\$400). As auto-injectors have a shelf life, they would need to be replaced every 12-18 months. Total annual expense for the auto-injectors would be approximately \$6,400.

Total annual cost for Option 2 including awareness campaign/signage, staff training and two sets of auto-injectors would be approximately \$17,900.

Option 3 would add onto the provision of auto-injectors in staff first aid kits and provide full public access with the addition of one mounted wall box in all 16 locations. These

boxes are approximately \$300 each and vary with security features. Some boxes are alarmed and some have glass fronts that would have to be broken to access the auto-injector. Total cost for these boxes with auto-injectors for all 16 sites would be approximately \$4,800.

Total cost for Option 3 would be \$22,700 which includes both one-time costs and annual operating costs.

**Total Financial Impact**

	<b>Option 1</b>	<b>Option 2</b>	<b>Option 3</b>
Awareness Campaign/Signage	\$6,500*	\$6,500*	\$6,500*
Staff Training (200 x \$25)	-	\$5,000**	\$5,000**
Auto-Injectors First Aid Kits (16 x \$400)	-	\$6,400**	\$6,400**
Auto-Injectors Wall Mounted (16 x \$300)	-	-	\$4,800**
<b>Total</b>	<b>\$6,500</b>	<b>\$17,900</b>	<b>\$22,700</b>

<b>Total Cost per Location</b>	<b>\$406</b>	<b>\$1,119</b>	<b>\$1,419</b>
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\* One -Time Cost

\*\* Anticipated Annual Operating Cost

**Source of Funding**

The one-time funding costs shown above would be drawn from the corporate Master Signage Strategy account. While option 2 and 3 are not recommended by staff at this time, the annual operating costs noted in this report would need to be reflected as part of the annual operating budget process should they be considered in future.

As reported through various media outlets in the last few months, it should also be noted, the cost of epinephrine has increased. At the time of writing this report, costs in the marketplace were captured and shown above. Escalation of these costs may occur once implemented.

**Conclusion:**

While the interest to implement a public access auto-injector program may appear to be relatively easy to implement, bare low costs, and be publically accepted, it is staff's opinion that protections are not currently in place to implement such a program. Once

appropriate levels of protection are in place, other options for implementation could be further explored and potentially considered. If this occurs in the future, staff would reconsider options and bring forth new information to Council at that time.

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Respectfully submitted,

Rob Axiak

Manager of Recreation Services

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**Report Approval:**

All reports are reviewed and/or approved by Department Director, Director of Finance and Director of Legal. Final approval is by the City Manager.