COUNCIL REPORT



MEDICAL SERVICES PROVIDED BY THE EDMONTON FIRE RESCUE SERVICE

Recommendation

That the March 18, 2024, Office of the City Manager report OCM02143, be received for information.

Requested Action		Information only	
ConnectEdmonton's Guiding Principle		ConnectEdmonton Strategic Goals	
CONNECTED This unifies our work to achieve our strategic goals.		Healthy City	
City Plan Values	N/A		
City Plan Big City Move(s)	N/A	Relationship to Council's Strategic Priorities	Conditions of service success
Corporate Business Plan	Serving Edmontonians		
Council Policy, Program or Project Relationships	Operating Budget Adjustment 12		
Related Council Discussions	• N/A		

Previous Council/Committee Action

At the October 24/25, 2023, City Council meeting, the following motion was passed:

That Administration provide a report on the following:

1. A jurisdictional scan on the nature of medical services provided by the Edmonton Fire Rescue Service-equivalents of other medium to large Canadian municipalities and their related funding sources.

- 2. An analysis of Edmonton Fire Rescue Service calls for service, categorised by calls that are medical in nature, both immediately life-threatening and time critical and not immediately life-threatening as defined by Alberta Health Services, as well as, calls that relate to a drug poisoning response.
- 3. An approach for how the City of Edmonton could refocus Edmonton Fire Rescue Services to respond to medical, immediately life-threatening or time-critical events as defined by Alberta Health Services, with part of this approach exploring the feasibility and cost of using a light fleet truck and crew to respond to medical calls on top of the existing minimum staffing while City of Edmonton works with Alberta Health Services to collaboratively amend their medical first response plan.

Executive Summary

- Edmonton Fire Rescue Service (EFRS) is responding to a significantly higher proportion of medical calls relative to its national peers.
- According to Alberta Health Services (AHS) data, approximately 30 per cent of medical calls responded to by EFRS are events that are not immediately life-threatening or time-critical.
- Medical calls related to overdose and drug poisoning amounted to 15 per cent of all medical calls responded to by EFRS in 2023.
- In partnership with the AHS Medical First Response program, EFRS initiated a four-point action plan that will better align the types and volume of medical calls that EFRS supports. As EFRS and AHS are both amenable to updating the Medical First Response Plan to focus EFRS resources on life-threatening and time-critical events starting on May 1, 2024, the implementation of a medical response unit into the EFRS fleet is not required.
- The changes resulting from the four-point action plan will have ongoing evaluation for service level sustainability within current resourcing.

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EFRS responds to medical calls as one of the 314 agencies registered under Alberta Health Services' (AHS) Medical First Response program. These voluntary agreements support a collaborative first responder approach. Adopted by AHS in January 2022, the EMS Response Prioritization System (Attachment 1) categorizes all medical calls into one of five levels of urgency:

Category	Proportion of EFRS Medical Calls
Immediately life-threatening (e.g., choking, cardiac or respiratory arrest)	9.9%
Immediately life-threatening or time-critical (e.g., chest pain, overdose)	54.1%
Urgent / potentially serious but not immediately life-threatening	26.8%
Non-urgent (not serious or life-threatening)	9.1%

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Non-urgent (not serious or life-threatening) - evaluation of a non-EMS response when available	0.1%

Jurisdictional Scan

Four Canadian fire services were surveyed on their response to medical calls: Calgary Fire Department, Vancouver Fire Rescue Services, Ottawa Fire Service and Toronto Fire Service.

As discussed in Attachment 2, all of the surveyed fire services use firefighters to respond to medical calls, as they are all trained in Advanced First Aid; however, different municipalities respond to different types of medical calls. Toronto and Ottawa fire services are dispatched to immediately life-threatening calls such as cardiac or respiratory arrest, as well as other secondary calls when requested by their local Emergency Medical Service (EMS). Calgary and Vancouver respond almost exclusively to immediately life-threatening and time-critical calls.

EFRS currently responds to immediately life-threatening and time-critical calls as well as other secondary medical calls. These include urgent but not immediately life-threatening calls such as assisting patients with mobility issues. EFRS attendance at calls that are not life-threatening or time-critical is presently guided by the medical response plan submitted to AHS EMS.

The reported call volumes for the fire services were Toronto at 61 per cent, Vancouver at 48 per cent, Ottawa at 20 per cent, Calgary at 62 per cent and Edmonton led with 69 per cent of its total call volume being medical responses (65,695) at the end of 2023. Additionally, Vancouver and Calgary have successfully deployed light fleet vehicles specifically for medical emergencies, a practice not currently adopted by Ottawa or Toronto.

Governance and Funding

In Toronto and Ottawa, both Fire Rescue and EMS Services are governed, operated and funded at the municipal level with a portion from the provincial government for EMS services only. In Vancouver and Calgary, the municipality governs, operates and funds the fire services while EMS is governed, operated and funded by the province.

Vancouver Fire Rescue Services did not report receiving funding for medical calls. For Calgary and Edmonton, the Government of Alberta announced a new two stream multi-year reimbursement for municipalities.

- 1. The first stream builds on the successes from previous years of the Medical First Responder Program and will be provided for various supplies and services, including purchasing modern automated external defibrillators (AED), medical kits, CPR mannequins, instructor development and front-line responder training courses. Edmonton and Calgary will also be able to apply for up to \$82,000 for training and supplies.
- 2. The second stream of funding provides \$2.5 million across the province and will directly support Medical First Responder agencies to offset some of the growing costs involved with providing Medical First Response, including increased event volumes, population growth and general inflation of equipment and fuel. Between 2023 and 2026, both Edmonton and Calgary

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will receive \$313,000 per year from the second stream for its participation in the Medical First Response program based on this announcement.

EFRS Medical Service Calls

In 2023, medical calls accounted for nearly 70 per cent of the 95,496 calls to EFRS for service, with volumes increasing by 82 per cent between 2018 and 2023. EFRS projects up to 80,000 medical calls per year by the end of 2024, assuming current trends continue (Attachment 3). This increasing trend reflects a province-wide rise in demand for emergency medical services.

In 2023, EFRS attended 49 per cent of all AHS EMS medical events in the City of Edmonton. AHS data also showed that EFRS attended 23,937 medical calls that were not determined to be immediately life-threatening or time-critical which equates to approximately 31 per cent of the EFRS total medical call volume.

In 2023, EFRS was dispatched to 10,081 events categorized as overdose and poisoning and/or involved naloxone administration (Attachment 4). Drug overdose and poisoning calls account for 15 per cent of the EFRS total medical call volume and have increased by 790 per cent since 2018 and 47 per cent since 2022 alone. EFRS started administering naloxone in 2017 and saw a sharp increase in use during 2020 and beyond.

Approach to Refocus EFRS Response to Medical Calls

EFRS worked collaboratively with the provincial Medical First Response program and identified a four-point action plan to both reduce and refocus EFRS medical call response.

- Action #1: Modification of Pre-Alert Processes between Dispatch Centres
 - EFRS will align with Calgary and revise the initial response procedures to remove the pre-alert notification on events other than those that are deemed to be immediately life-threatening to match the priority determination by AHS dispatch.
 - Impact: This should reduce call volume by auto-dispatching EFRS only on events once they are determined to be immediately life-threatening and avoid multiple enroute cancellations per day.
 - o *Implementation date:* May 1, 2024
- Action #2: Co-development of Response Strategies for High-Frequency Locations
 - AHS has helped to identify the top 33 high-call-volume locations that are already equipped with proficient medical teams on-site and may not require immediate assistance from EFRS.
 - Impact: This should reduce call volume in these targeted areas by reducing the need for immediate EFRS medical response prior to the arrival of EMS because there are proficient medical staff and equipment on site.
 - o *Implementation date*: June 30, 2024
- Action #3: Revised Lift Assist Protocol
 - EFRS lift assist protocol will be revised to align with the Calgary Fire Department protocol as to when units assist on-scene EMS crews in non-emergency situations with patient lifting and mobility support.

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- Impact: This will create additional capacity for EFRS by limiting responses for lift assists
 in support of on-scene EMS units to when paramedics need time-critical assistance and,
 in non-urgent situations, to when all other EMS resources are tasked.
- o *Implementation date:* March 31, 2024
- Action #4: Amend the Medical First Response Plan with AHS
 - EFRS has collaboratively worked with AHS and can reduce the types of medical calls it responds to, aligning closer to the service levels of the Vancouver Fire Rescue Services and Calgary Fire Department. This will reduce the medical call volume to EFRS by 31 per cent to keep the volume just below 2023 levels.
 - Impact: This action will maintain the average response time of a fire truck arriving on scene to life-threatening or time-critical emergency calls by reducing the responses to medical calls that are classified as not immediately life-threatening. This ultimately enables EFRS to refocus and enhance service delivery toward residents experiencing critical medical events where seconds count.
 - o *Implementation date*: May 1, 2024

EFRS is implementing the four-point plan with no additional funding. While EFRS is confident that the adoption of the four-point action plan will bring capacity into the fire service, it is important to note that the jurisdictional scan (Attachment 2) demonstrates that medical calls to EMS continue to rise nationally. EFRS will evaluate the impact of the four-point plan on the capacity of the fire service to assess if additional resources to support a medical response unit should be reconsidered.

There are no direct operational savings because medical calls are expected to increase by 22 per cent by the end of 2024. By refocusing on the calls where seconds count, EFRS is anticipating that this will maintain the medical call volume to just below 2023 levels using existing resourcing. It should also be noted that as a result of increased volume between 2020 to 2023 EFRS has experienced increased costs for maintenance (32.2 per cent or \$850,000), fuel usage (45.6 per cent or 152,857 litres) and fuel costs (100.8 per cent or \$327,000). These costs have been absorbed within the existing operating budgets.

Medical Response Unit: Light Fleet Truck and Crew

Based on response volumes from Calgary¹, it is estimated that a dedicated medical response unit could respond to 5,000 calls annually. If this was required, each light duty vehicle would utilise a crew of two firefighters and one captain on a 24-hour schedule. This is a similar staffing model used by Vancouver Fire Rescue Services to service their downtown neighbourhoods. For each light duty vehicle and 24/7 operational crew, the cost is estimated at \$100,000 in one-time capital expenditure and \$2.4 million in annual operating expenditure. This is detailed in Attachment 5.

EFRS and AHS are updating the Medical First Response Plan to clarify the types of medical calls assigned to EFRS. The focus will be on directing EFRS resources towards life-threatening and

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¹ Calgary Fire Department expands unit dedicated to helping those suffering from medical emergencies - Retrieved from:

https://calgary.ctvnews.ca/calgary-fire-department-expands-unit-dedicated-to-helping-those-suffering-from-medical-emergencies-1.6767145#:~:text=Medical%20response%20units%20are%20smaller,in%20the%202023%2D2026%20budget

time-critical events by May 1, 2024. Therefore, integrating a medical response unit into the EFRS fleet is not necessary to bridge the gap between now and the implementation date.

Community Insight

EFRS completed multiple in-person engagement sessions with a variety of internal and external stakeholders including the EFRS Medical Director, AHS Medical First Response Team and EFRS employees representing multiple roles and supporting functions. More than 360 frontline firefighters provided their feedback during station visits. There was overwhelming support from frontline firefighters to amend what medical calls EFRS responds to with a focus on life-threatening emergencies. The impact of the rapid multi-year increase on the mental and physical health of frontline personnel was identified consistently.

GBA+

Residents accessing emergency medical services will continue to receive an ambulance or an alternative resource as determined by AHS and this will not result in increased risk. EFRS will continue to serve those experiencing immediate life-threatening or time-critical events as determined by AHS dispatch. EFRS is working closely with high-volume locations, specifically in central Edmonton, to continue to ensure all residents receive the best possible emergency care when required from EFRS. In line with ensuring inclusivity and equity, the project team is committed to consistently reviewing GBA+ with the EFRS Equity Advisor throughout the project's development and evaluation.

Attachments

- 1. EMS Response Prioritization System
- 2. Jurisdictional Scan
- 3. Medical Calls for Service Provided by EFRS
- 4. Count of Calls for Service EFRS has Been Dispatched to Involving Overdose, Poisoning, and Naloxone Administration
- 5. Estimated Capital and Operating of a Medical Response Unit

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