

*Attachment #1*

*Emergency Medical Responder (EMR) Report  
from Fire Department*

## **MEMO**

### ***Fire & Rescue Services***

**To:** Lisa Spitale  
Chief Administrative Officer

**Date:** February 7, 2023

**From:** Erin Williams  
Acting Fire Chief

**File:**

**Item #:** [Report Number]

**Subject: Emergency Medical Responder Budget Enhancement for 2023**

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#### **RECOMMENDATION**

**THAT** this enhancement request be approved to:

- provide increased capacity and resiliency during extreme weather events,
  - improve the quality of care provided to the community during emergency medical incidents,
  - reduce the Fire Department's need to rely on neighboring fire departments during extreme weather events where assistance may not be available
  - increase the scope of services offered during emergency medical incidents, and
  - reduce the financial burden of maintaining firefighter medical responder licenses within the City of New Westminster
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#### **PURPOSE**

This report is to provide the rationale for a 2023 budget enhancement request for Fire and Emergency Management Office services, to improve Extreme Weather Responses, to improve the quality of care, to reduce the risk of service gaps, to reduce the dependence on neighboring fire departments for assistance and to reduce the long term financial burden of maintaining medical responder licenses for firefighters.

#### **BACKGROUND**

At the January 30, 2023 Budget Workshop, Council asked that the Fire Department provide a rationale for the Emergency Medical Responder (EMR) service enhancement rationale. This report is written in response to this request.

The climate is changing and the result is more frequent and more severe extreme weather events. The City of New Westminster has experienced and responded to these events and their associated impacts to our community. The 'Heat Dome' event that occurred in the summer of 2021 resulted in 28 deaths of vulnerable persons within the city. During this event, City resources were overwhelmed, and hospital emergency rooms, the British Columbia Ambulance Service (BCAS) and the New Westminster Fire and Rescue Services (NWFRS) experienced an overwhelming number medical aid emergencies. This resulted in many 911 calls for service being significantly delayed or left unanswered altogether resulting in many deaths where medical aid services were unavailable to attend nor provide lifesaving interventions.

### **EXISTING POLICY AND PRACTICE**

Currently in an extreme weather event, the EMO engages in preparatory and preventative measures. Despite their efforts, an overwhelming number of vulnerable people across the City and the region can experience weather related life threatening medical emergencies. When this happens, first responders are called to mitigate the condition and evacuate the victims to medical aid; however, during these events, there is a significant risk that too many people can become affected by medical emergencies. In this case, the first responders can quickly find themselves overwhelmed and significantly under-resourced resulting in many of these victims dying without access to normally available lifesaving services.

It has become common place for NWFRS to rely on assistance from fire departments from other municipalities when it is overwhelmed or beyond its capacity. This occurs with even medium sized incidents such as a large house fire or a small multifamily residential complex fire. National Fire Protection Association, the accepted organization for creating Fire Service standards, cites that a fire department the size of NWFRS is at capacity with a medium sized house fire. For extreme weather events - where there are multiple concurrent emergencies - NWFRS can be quickly beyond its capacity. Since these events cross municipal boundaries, the neighbouring departments we rely upon may not be able to provide assistance. In recent years, this has happened with windstorms, heat and snow events.

To improve the Fire Department's capacity and resiliency during similar events, the EMO, NWFRS, Parks & Recreation, Information Technology Department (IT) and Fraser Health Authority (FHA) are finalizing the process for activating and operating an Emergency Monitoring Centre (EMC) to monitor the status of people who have mild to moderate heat exhaustion that have called 911 during extreme heat events. The program is designed to prioritize those at greatest risk of death while safely centralizing and monitoring those at lower risk. This will allow first responders tied up with patients with a lower risk of death to accurately evaluate and safely evacuate the patient to the EMC and make themselves available to attend other awaiting medical aid emergencies.

## **NEXT STEPS**

### **Fire - EMR Training**

In recent years, during extreme climate events and busy periods with increased medical emergencies, the Emergency Departments and BC Ambulance Service (BCAS) have had prolonged delays in service provision. This has resulted in delayed support for Fire personnel on scene at emergency incidents and rendered the emergency responders unavailable for other emergencies for prolonged periods. When the delays are significant enough, multiple and even all NWFRS apparatus and resources have been preoccupied simultaneously at separate emergencies, leaving the city without adequate emergency response. Similar concerns on a provincial level have resulted in the BC Minister of Health directing the Emergency Medical Assistants Licensing Board (EMALB) to provide recommendations about expansion of medical responder's scope of practice.

Currently, NWFRS operates at the First Responder Level III scope of practice. Changing to the Emergency Medical Responder scope of practice will improve patient assessment skills, patient treatment scope of practice, and support the EMC initiative when BCAS delays are prolonged.

Patient Assessment skills: NWFRS personnel will be equipped with the ability to assess and interpret blood pressure, oxygen saturation level, patient glucose levels, and auscultate the chest and lungs. These increased patient assessment skills are more objective and precise in evaluating a patient's status and can more accurately help identify patients at high-risk of death which can be reasonably missed without these skill sets. Identifying these risk factors sooner can permit the firefighter to upgrade the BCAS response and potentially identify treatable conditions in time to prevent death. Likewise, these skillsets can permit the medical responder to more effectively determine which patients are appropriate to be evacuated to and be monitored in the EMC versus those requiring urgent transport to hospital during times of crisis where pre-hospital care services are overwhelmed.

Expanded treatment scope of practice: Time is of the essence for many medical emergencies. When BCAS is delayed, the opportunity to properly treat some medical emergencies in the timeliness they require may be lost. Increasing the scope of practice of NWFRS personnel will allow some of these treatments to be performed when BCAS is unable to attend the medical emergency in time. Some of these conditions include acute coronary syndrome, myocardial infarction, anaphylaxis, severe hypoglycemia, reactive airway disease, severe asthma, obstructive airways and others. Preparing Fire personnel to initiate proper treatment for these potentially imminently life-threatening illnesses when BCAS is delayed can be lifesaving and significantly reduce the long-term morbidity of these illnesses. Expanded treatment practices include administration of glucagon, ASA (aspirin), epinephrine, procoagulants, nitroglycerin, Entonox and salbutamol.

**Evacuation:**

Current licensing of firefighters in NWFRS requires firefighters to 'treat patients in the place found' and does not permit firefighters to evacuate patients from their position to another location. Firefighters will require Emergency Medical Responder Licenses to evacuate patients to the EMC to be monitored in a centralized location and release the EMRs to attend other pending medical emergencies.

**Support the EMC:** The City, Parks & Recreation, NWFRS, IT and FHA have collaborated on an initiative to be activated during extreme heat events where BCAS, and emergency departments are beyond their capacity to address the demand of medical emergencies in an acceptable and timely fashion. The initiative is intended to reduce strain on the emergency department, and BCAS while increasing the call volume capacity of NWFRS. NWFRS personnel trained to the Emergency Medical Responder level with the increased patient assessment skills will be more equipped to properly screen which patients are suitable for the EMC and which need to be prioritized for hospital care. Also, if a patient deteriorates while being monitored in the EMC, the emergency responders will be better prepared to treat the patient.

**Initial Expense:**

There is a one-time initial expense for this program to train and certify NWFRS staff and to purchase the required equipment for assessing and treating patients.

**Change in Ongoing Operating Expenses:**

The current First Responder License requires a four day recertification course and fifth day for a practical exam every three years. A switch to the Emergency Medical Responder program removes the requirement for the four day course and practical exam. In its place, the Emergency Medical Assistant Licensing Board requires the EMR to record 20 patient contacts and to record participation in qualified training events, which are currently standard practice in NWFRS. The annualized licensing fees for both programs are identical. After the initial course and one recertification course for the First Responder Program, the number of training days and hence, operating expense for both programs is the same (beginning of the 4<sup>th</sup> year). At the start of the second recertification program (beginning of the 7<sup>th</sup> year) the EMR program results in cost savings to the department of approximately \$30,000 per year based on the elimination of future recertification costs.

**FINANCIAL IMPLICATIONS**

EMR budget enhancement is associated with a one-time 2023 expense which will not be ongoing; the majority of this expense will be associated with training and testing the firefighters to the Emergency Medical Responder expanded scope level. There will be a small expense for purchasing the training equipment and diagnostic equipment for use during medical emergencies.

Equipment for training to the EMR level:	\$7,000
Equipment to be placed into service:	\$23,300
Training to the EMR level:	\$253,098

**APPROVALS**

This report was prepared by:  
Brad Davie, Acting Deputy Fire Chief

This report was approved by:  
Erin Williams, Acting Fire Chief