

DATE OF MEETING November 6, 2023
AUTHORED BY Tim Doyle, Fire Chief
SUBJECT Nanaimo Fire and Rescue Medical Incident Cost Recovery

OVERVIEW

Purpose of Report:

To advise Council on options to charge the province for all medical calls attended by Nanaimo Fire Rescue (NFR).

BACKGROUND

At their Regular Council Meeting on 2023-APR-17, Council passed the following motion:

That Council directed Staff to prepare a report outlining options to charge the province for all pre-hospital care medical incidents attended by NFR, inclusive of costs of maintenance, fuel, and medical equipment.

This report is a response to that motion. |

DISCUSSION

NFR has been providing pre-hospital care response for decades and its participation in the pre-hospital care system is intended to strengthen public safety. Providing pre-hospital care is not unique to NFR, in fact, the greater fire service in both Canada and the United States, commonly provides pre-hospital care in the respective communities to ensure patients receive timely assistance during a medical crisis. NFR's role in pre-hospital care increases the probability of positive patient outcomes, and in some cases, survival.

The provision of pre-hospital care service is a provincial government responsibility under the Emergency Health Act, and participation in the pre-hospital care first responder system by local governments is voluntary. However, since the establishment of the First Responder program in British Columbia by the BC Justice Institute began in the 1990's, Fire Departments in British Columbia, including Nanaimo, have provided pre-hospital care. Municipalities in BC can provide pre-hospital emergency care as per subsection 8 (2) of the Community Charter.

In 2019, Council endorsed NFR to enhance pre-hospital care training for fire department personnel to Emergency Medical Responder (EMR) level over a five-year implementation period to provide better pre-hospital care. In 2020, NFR began implementation of EMR, in 2025, this objective will be completed.

Currently, in terms of pre-hospital care response, NFR responds to high-acuity patient condition incidents - Purple (Immediately life threatening) and Red (Immediately life threatening or time critical) – as outlined in the British Columbia Emergency Health Services Patient Condition Model. However, to ensure patients are cared for, if British Columbia Ambulance Service is delayed when responding to low-acuity incidents, NFR is dispatched accordingly.

In 2022, NFR responded to 9872 incidents. During that period, 5709 (57%) were medical and 4163 (43%) incidents were non-medical. In the period dating January 1 – August 31, 2023, NFR responded to 8060 incidents. During that period, 5388 (68%) were medical incidents, and 2672 (32%) were non-medical incidents. At the current rate, by the conclusion of 2023, NFR is projected to respond to approximately 12,107 total incidents.

In 2022, NFR responded to 792 low-acuity medical incidents. In 2023, between January 1, - August 31, low-acuity medical incidents represented 826 incidents. Low acuity incidents in 2022 totaled 792. Not responding to low acuity incidents would have saved an estimated \$21,354 in 2022, between estimated fleet expenses and first responder supplies excluding wages. Not responding to any medical incidents would have saved an estimated \$153,927 in 2022, between estimated fleet expenses and first responder supplies excluding wages. However, in both cases, there would be a higher probability that patient outcomes would be compromised and a higher probability of patient death.

In 2022, NFR responded to 672 overdoses. In 2023, between January 1 – August 31, NFR has responded to 1243 overdoses. As a result, in terms of how medical responses are represented relative to NFR's total incidents, a significant amount of the growth in medical incidents is a result of an increasing number of overdoses.

According to *Nanaimo's State of the Economy Report*, "Nanaimo's population growth rate was 10.3%, significantly higher than BC at 7.6% and Canada at 5.2%." Moreover, population projections forecasted up to 2046 indicate robust growth. Also, in 2016, a public health emergency was declared in British Columbia due to increases in illicit-drug overdoses and corresponding deaths. Correspondingly, the number of incidents NFR responds to is expected to grow with these factors.

At the moment, there is no mechanism to charge the Province for all pre-hospital care medical incidents attended by NFR, inclusive of costs of maintenance, fuel, and medical equipment. However, at the Union of British Columbia Municipalities (UBCM) in 2023, Prince George had the following resolution endorsed:

Whereas communities across British Columbia are facing a significant increase in calls to respond to emergency medical incidents; And whereas local governments provide for their fire departments to support prehospital patient care in their community by providing emergency medical services that assist the Provincial Government's BC Ambulance Service; And whereas the costs associated with supporting prehospital care by local government fire departments has increased significantly in relation to response hours and increased use of first aid and other medical supplies and that such costs are funded solely through local government property taxation: Therefore be it resolved that UBCM ask the provincial government to develop a funding model to compensate local governments who provide emergency medical services through their fire and rescue services fulfilling the responsibility of the provincial government with consideration given to

community population and the fire department's authorized level of emergency medical response.

Additionally, at UBCM in 2004, Surrey had the following resolution endorsed:

Whereas the majority of local governments in BC deliver Emergency Medical Services EMS through their fire departments under the Emergency Medical Assistant First Responder program; And whereas EMS delivery is the responsibility of the provincial government through the Emergency Health Services Commission and the British Columbia Ambulance Service; And whereas local governments receive no compensation from the Province for their contribution to the EMS system: Therefore be it resolved that the Province provide a mechanism for local governments to recover costs incurred in the fulfillment of this provincial responsibility.

Nanaimo Fire Rescue Medical Incidents 2022 Cost Analysis		
	All Medical Incidents	Low Acuity Medical Incidents
Estimated Expenses per Medical Incident		
- Wages and Benefits ¹	\$ 76.73	\$ 76.73
- Fleet Expenses ²	17.90	17.90
- First Responder Supplies ³	9.06	9.06
Total Estimated Expenses per Medical Incident	103.69	103.69
Total 2022 Medical Incidents	5,709	792
Wages and Benefits¹	438,027	60,767
Direct Medical Incidents Related Costs		
- Fleet Expenses ²	102,186	14,176
- First Responder Supplies ³	51,741	7,178
Total Direct Costs	153,927	21,354
Total Estimated 2022 Costs	\$ 591,954	\$ 82,121

Notes:

- 1. Wage estimate based on 2022 hourly rates and benefits for 1 Captain, 1 Lieutenant and 2 Fire Fighters. Estimate does not include overtime.
- 2. Fleet Expenses only includes operating costs such as insurance, repairs and maintenance and fuel. Does not include cost of replacement.
- 3. First Responder Supplies includes consumables such as gloves, masks, naloxone etc. This is a high-level estimate based on total 2022 costs and incidents.
- 4. Cost analysis only includes the direct costs of responding to a medical incident. The analysis does not include overhead expenses of running a fire department such as management wages, training expenditures, facility operating costs, gear, uniforms etc.

2022 Medical Incidents Stats		2023 Medical Incidents Stats (Jan - Aug)	
2022 Average Response Times		2023 Average Response Times	
Average Response Time	0:05:03	Average Response Time	0:04:43
Average On-Scene Time	0:12:13	Average On-Scene Time	0:10:32
Average Total Time	0:17:16	Average Total Time	0:15:15
2022 Medical Incidents		2023 Medical Incidents	
Total Incidents	9,872	Total Incidents	8,060
Total Medical Incidents	5,709	Total Medical Incidents	5,388
2022 Wages and Benefits			
Average Hourly Rate, 4 Staff Members	\$ 266.61		
2022 Fleet Expenses			
Average Apparatus Cost/KM	\$ 3.58		
Average Total KM's per call	5.00		
2022 First Responder Supplies			
Supplies per Incident	\$ 9.06		

CONCLUSION

Based on the information presented above, Council could consider soliciting the Provincial Government to develop a funding model to compensate fire departments that provide emergency medical pre-hospital care response. As compared to the status quo, if successful, a new provincial funding model to support Fire Services providing pre-hospital care, would offset the cost that the City of Nanaimo is currently bearing for pre-hospital care medical incidents response, and patients would continue to receive the same level of service.

SUMMARY POINTS

- NFR has been responding to pre-hospital medical incidents for decades.
- Attending pre-hospital medical incidents is a value-added service provided by NFR to strengthen public safety.
- NFR is entering phase 4 out of 5 to enhance NFR's medical training to an Emergency Medical Responder level to provide better patient care.
- Prince George and Surrey have put forth resolutions that have been endorsed by UBCM in 2023 and 2004 respectively to recover the cost of pre-hospital care for services rendered by fire departments.

ATTACHMENT: Attachment A - Nanaimo Fire Rescue 2022 and 2023 Responses

Submitted by:

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Concurrence by:

Laura Mercer
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Dale Lindsay
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