Ministry of Health and Long-Term Care

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Ontario

Investigation Unit file: 09IU-99-086

May 21, 2009

The Honourable Michael Murphy, Q.C.
Minister of Health
Government of New Brunswick
HSBC Place
530 King Street
5th Floor
Fredericton NB E3B 5G8

Sir,

At your request I have completed the situational review of the emergency ambulance response on April 2, 2009 to the residence of Cody Preston Jones, a minor residing in Fredericton Junction, New Brunswick. I have enclosed my Summary Report for your information.

The evidence obtained during my review substantiated that there was a preventable delay in the provision of emergency ambulance service for Mr. Jones. This delay was caused by the impact of numerous factors including:

- Inadequate geographic and map reading training to dispatch and fleet personnel
- Incomplete mapping resources available to dispatch and fleet personnel
- Lack of consistent and up to date maps shared by dispatch and fleet
- Inadequate dispatch policies to ensure that MCMC has adequate command and control of the ambulance system
- Inadequate dispatch policies to provide guidance and direction to MCMC staff when dealing with the assignment, dispatching and monitoring of ambulance response
- Inadequate dispatch policies to provide guidance and direction to MCMC staff on how to deal with response time delays or problems.
- No dispatch or fleet policy that speaks to the use of an ambulance carrying a low priority, medically stable patient as a first response resource
- No fleet policy that speaks to the requirement of paramedics to seek and obtain assistance when responding to locations that they are unfamiliar with prior to any movement of the ambulance commencing
- No dispatch or fleet policy that identifies notification time as opposed to actual en route time

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- Inadequate dispatch policy to guide and direct MCMC staff as to the provision of information when notifying an ambulance as opposed to when paramedics are in the ambulance and ready to proceed on the call
- No dispatch or fleet policy that requires paramedics to keep MCMC informed when they have returned to their normal coverage area
- A lack of data available in the CAD to indicate roads and areas where historically there will be response time issues regarding road usage
- No formal tiered / mutual aid response plans with municipal fire departments
- No dispatch policy that permits the MCMC to initiate response assistance from allied agencies
- No dispatch policy to identify appropriate ambulance resource assignments to inter-facility transfers
- No dispatch policy to identify appropriate ambulance resource assignments for BEC in relation to shift change times
- No dispatch policy to limit the number of ambulances assigned to out of town inter-facility transfers
- Emphasis on the timely completion of low priority inter-facility transfers thereby limiting resources available to service emergency calls
- No criteria to identify when a patient qualifies for ambulance transport or whether they can use an alternative mode of transport

It is requested that consideration be given to the following recommendations:

MCMC / Operations Management Structure – Control and Command

As Ambulance New Brunswick (ANB) has one dispatch centre that dispatches all ambulances throughout the province this centre is uniquely positioned to afford the opportunity for it to act as the overall command and control point for the operations and management of fleet and dispatch decisions and operations.

- That ANB review its management and command structure with the purpose of having the day to day operational management, deployment and coordination of ambulance resources be vested in a management position on the floor of the MCMC and that this management position be staffed 24 hours a day seven days a week.

System management – emergency calls vs. transfer calls

ANB has not achieved full paramedic staffing and is dealing with the provision of timely and efficient service for inter-facility transfer patients while at the same time working to maintain the required 90th percentile response times to emergency calls, both rural and urban.

- That ANB with the assistance and coordination of the Department of Health review the decision making and methods for managing non-emergency, medically necessary inter-facility transfers and determine if alternative methods or deployment options can be utilized.

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- That ANB review the System Status Plan including the placement of ambulances mandated by the plan with a view to reassessing the placement of ambulances in specific locales including conducting appropriate time/distance studies to assess the optimal placement locations to achieve the mandated response times.

Policy and Procedure

- That ANB review, create and / or strengthen the policies and procedures as per the footnoted findings to ensure timely notification and response to emergency ambulance calls.

- That ANB review and strengthen policy for paramedics and dispatchers to ensure that such policies are concise and easily understood and that measures be taken to affirm that policies and procedures are adhered to by both paramedics and MCMC staff.

- That ANB, prior to having any policy and / or procedure take effect, provides timely and appropriate training for all affected staff on said policies to ensure the staff understand the policy and are appropriately tested for their understanding of and ability to implement and follow each policy and procedure.

Resources and tools

- That ANB obtain the most up to date mapping resources (e.g. Elections New Brunswick) and ensure congruence between fleet and CAD mapping information.

- That ANB establishes a protocol for local station paramedics and managers to update mapping resources to reflect real time mapping and access changes that may occur.

- That ANB with the assistance and coordination of the Department of Health research and develop tier response criteria and protocols to allow for the provision of efficient and timely medical first response.

Training

- That ANB review and strengthen the geographic training programs for paramedic and dispatch staff.

- That ANB review and strengthen the training program delivered to MCMC staff to enhance the ability of dispatch staff to be able to gather information, analyze such information, formulate decisions and deal with and manage EMS response issues as well as other crisis situations in a real time environment.

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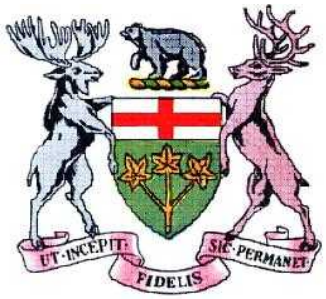
I trust that you find this satisfactory. If you have any further questions, or concerns, please do not hesitate to contact me.

Sincerely,

Rick Brady

Rick Brady
Manager – Investigation Unit

C: Don Ferguson, Deputy Minister
Pamela Mitchell, Assistant Deputy Minister
Malcolm Bates, Director, Emergency Health Services Branch MOH-LTC
Dennis Brown, Sr. Manager, Performance & Quality Management EHSB MOH-LTC



OCCURRENCE NUMBER 09IU-99-086

INQUIRY INTO THE EVENTS AFFECTING AMBULANCE SERVICE ON APRIL 2, 2009 IN FREDERICTON JUNCTION

MINISTRY OF HEALTH AND LONG-TERM CARE
EMERGENCY HEALTH SERVICES BRANCH
INVESTIGATION UNIT
May 2009

THIS REPORT HAS BEEN PREPARED BY THE

INVESTIGATION UNIT EMERGENCY HEALTH SERVICES BRANCH

MINISTRY OF HEALTH AND LONG-TERM CARE

SERVICE:	Ambulance New Brunswick
INCIDENT LOCATION:	Fredericton Junction
DATE OF OCCURRENCE:	April 2, 2009
TYPE OF OCCURRENCE:	Quality of ambulance response

INTRODUCTION

The Minister of Health of the Province of New Brunswick requested that the Investigation Unit of Emergency Health Services Branch, Ontario Ministry of Health and Long-Term Care, conduct a review of the circumstances surrounding the provision of emergency ambulance response to a resident of Fredericton Junction on April 2, 2009.

BACKGROUND

At 18:19:43 hours on April 2, 2009 the Medical Communications Management Centre (MCMC) received a 911 call originating from a residence on Wilsey Road in Fredericton Junction. The young female caller indicated that her 14 year old brother was suffering from severe difficulty breathing.

As the ambulance normally available in Fredericton Junction had been assigned to a non-emergency transfer from Saint John to Fredericton, Ambulance New Brunswick (ANB) ambulance 490, which was stationed at the Oromocto ambulance base and was providing emergency coverage to Fredericton Junction, was assigned to this Code 1 (life threatening) ambulance call at 18:20:02 hours.

At 18:37:01 hours ambulance 490 advised the Dispatcher that the road they were using to access Fredericton Junction was closed which required the ambulance to backtrack and seek another route.

At 18:45:08 hours ambulance 490 was advised by their Dispatcher that the patient was now in cardiac arrest.

At 18:52:35 hours ambulance 490 advised the Dispatcher that the alternate route they were using was also closed and that they were unable to proceed to the residence in Fredericton Junction.

At 18:53:10 hours ambulance 434, the night shift ambulance stationed at the Oromocto ambulance base, was assigned to this call and arrived on scene at 19:16:52 hours.

The patient was found vital signs absent (VSA) and was unable to be resuscitated by the paramedics. The paramedics remained on scene until the arrival of the Coroner.

From the time the 911 call was received at the MCMC until an ambulance arrived on scene fifty-seven (57) minutes and nine (9) seconds had elapsed.

The 90th percentile response time standard for Code 1 calls for rural areas is set at twenty-two (22) minutes, which means nine (9) times out of ten (10) an ambulance will be on scene within this response time.

NOTE: Ambulance New Brunswick (ANB) is a Part 3 Corporation which employs the paramedics and dispatch staff as public servants. New Brunswick EMS is a private corporation that under contract manages ANB. For ease of reference to the reader the term ANB shall be used throughout the report to reference the ambulance service in New Brunswick.

FINDINGS REGARDING AMBULANCE RESPONSE TO FREDERICTON JUNCTION

1) Fredericton Junction has an ambulance base located on Wilsey Road within the village and the paramedics assigned to this base are on duty for a shift duration of twenty-four (24) hours. The ambulance is staffed seven (7) days per week.

2) At 16:18:25 hours the Fredericton Junction ambulance, 474, was assigned to the transfer of a medically stable patient from Saint John Regional Hospital to the Dr. Everett Chalmers Hospital in Fredericton by Medical Transportation Dispatcher (MTD) 194.

3) MTD 194 stated that when the transfer request was received she was dispatching the West area and was sitting beside the South dispatcher, who is responsible for the Saint John area.

4) MTD 194 stated that the South dispatcher could have used a 24 hour truck on duty in the South area but because the West area was not as busy as the south area MTD 194 advised the South dispatcher that she would assign the Fredericton Junction ambulance to this transfer.

5) The MCMC Staff Development Officer said that it was a best practice not to use a Saint John based ambulance to complete a distance transfer because the paramedics assigned to the Saint John area know the area in and around Saint John.

6) There is no MCMC policy that speaks to the choice and assignment of ambulances to complete non-emergency patient transfers.[1],[2],[3]

7) According to Microsoft Streets and Trips the distance from Fredericton Junction to Saint John is just over seventy-seven (77) kilometres with an estimated travel time of fifty-seven (57) minutes; the distance from Saint John to Fredericton is just over one hundred and fourteen (114) kilometres with an estimated travel time of one (1) hour and nineteen (19)

[1] Policy Statement 9.1 of the *Manual of Practice for Ambulance Communications Officers of Central Ambulance Communications Centres and Ambulance Communications Centres* (CACC MOP) used in the Province of Ontario states that non-emergency calls will be assigned in accordance with the deployment plan and in a manner which does not compromise emergency coverage.

[2] Standard Operating Practice (SOP) 9.1 of the Ontario CACC MOP states that non-emergency calls are not assigned unless the minimum number of ambulances required for emergency coverage will be maintained.

[3] SOP 9.4 of the Ontario CACC MOP states that for non-emergency calls the ambulance best equipped to meet the immediate needs of the patient is assigned in accordance with the deployment plan and the ambulance selected does not necessarily have to be the closest in time to the non-emergency call's location.

minutes; and the distance from the hospital in Fredericton to Fredericton Junction is just over thirty-nine (39) kilometres with an estimated travel time of thirty-one (31) minutes.

8) In order to complete the transfer of a medically stable patient from Saint John to Fredericton the Fredericton Junction ambulance would be out of the area for approximately three (3) hours.

9) MTD 194 stated that there is no MCMC policy that directs dispatchers to use an ambulance from Fredericton Junction to service non-emergency transfer calls from Saint John to Fredericton but that this had been the practice in the past.

10) MTD 194 said that there is an unwritten rule that ambulances on duty for twenty-four (24) hour shifts will be used for long distance transfers.

11) The MCMC Staff Development Officer said that it is considered a best practice to use an ambulance on a 24 hour shift for this type of distance transfer later in the day but the decision as to which ambulance to assign is left to the individual dispatcher.

12) The Regional Manager West Region stated that Saint John has a higher call volume than other areas and it is not unusual to send empty ambulances to Saint John to bring patients back to Fredericton.

13) The Regional Manager West Region stated that under the previous ambulance system the Fredericton Junction ambulance would not have been sent to Saint John to have performed this transfer but ANB now uses ambulances on duty 24 hours at this time of the day to allow ambulances on duty for 12 hours to be able to return to base for shift change.

14) The Regional Manager West Region stated that under the previous ambulance system transfers were normally performed by ambulances specifically upstaffed for that purpose.

15) The MCMC Shift Manager said that Saint John ambulances rarely perform repatriation transfers and the use of the Fredericton Junction ambulance to do this call was not unusual; she was unaware of the exact reason as to why this ambulance was assigned to the transfer call as opposed to an ambulance from the South area.

16) MTD 194 said on April 2, 2009 it was not policy to assign another ambulance to Fredericton Junction if the ambulance stationed there was assigned to an ambulance call and that Fredericton Junction was not considered a priority post at that time.

17) The MCMC Staff Development Officer stated that on April 2, 2009 it was not normal to move an ambulance to Fredericton Junction if the ambulance stationed there had been assigned to an ambulance call as Fredericton Junction was not a priority post and the decision to move an ambulance to the area was at the discretion of the dispatcher.

18) The ANB System Status Plan (SSP) in effect on April 2, 2009 indicates that when the ambulance assigned to Fredericton Junction is unavailable ambulance coverage is provided first by an ambulance from Oromocto and secondly by an ambulance from Fredericton. This coverage is known as balanced emergency coverage (BEC) or mutual aid.

19) The MCMC Shift Manager said that at the time of this call there was no thought of or expected need to backfill the Fredericton Junction ambulance base if that ambulance was on a call and that this area would be covered by an ambulance at the Oromocto base.

20) The interim Chief Executive Officer (CEO) of ANB advised that once a location is identified to provide BEC to another area no time trials using an ambulance are conducted. He wrote "*Generally the Ops Managers who are familiar with their areas select balanced emergency coverage points based on their knowledge, and then attempt to find a safe area where the mid point is, in a simple case of balancing the coverage. When it is a close call, we measure it with the odometer of a vehicle (again with Ops Managers); but we do not do timed runs with ambulances. It is expected an ambulance going Code 1 would make slightly better time. After the changes, we monitor performance results to ensure it is a favourable move.*"

21) ANB has a policy that states ambulances travelling Code 1 to or from a scene shall not travel at more than twenty (20) kilometres over the posted speed limit.

22) According to Microsoft Streets and Trips the distance from Oromocto to Fredericton Junction is just over thirty-three (33) kilometres with an approximate travel time (at over the posted speed limit) of twenty-nine (29) minutes.

23) Microsoft Streets and Trips indicates that the distance from the area of the hospital in Fredericton to Fredericton Junction is thirty-nine (39) kilometres with an approximate travel time (at over the posted speed limit) of thirty-one (31) minutes.

24) At 16:24:11 hours MTD 194 assigned the ambulance stationed in Harvey, ambulance 490, to move to Fredericton to provide BEC for Fredericton.

25) At 16:56:09 hours ambulance 490 arrived in the South Post area of Fredericton at which time MTD 194 reassigned the ambulance to the Oromocto ambulance base.

26) At 17:07:36 hours MTD 194 assigned the ambulance stationed at Oromocto, ambulance 434, to move to the Fredericton Junction ambulance base.

27) When ambulance 434 was assigned to move to Fredericton Junction that area had been without an ambulance in the area for more than thirty-seven (37) minutes.

28) The paramedics staffing ambulance 490 were scheduled to remain on duty until 21:00 hours.

29) The paramedics staffing ambulance 434 were scheduled to remain on duty until 18:30 hours.

30) MTD 194 stated that she never considered shift times when she assigned ambulance 434 to go to Fredericton Junction as opposed to ambulance 490 as she was concentrating more on maintaining emergency coverage for her dispatch area.

31) The MCMC does not have a policy providing guidance to MTDs as to the appropriate selection of ambulances, in relation to staffing hours, to be used for BEC.

32) MTD 194 said that she was aware the paramedics staffing ambulance 434 were familiar with the Fredericton Junction area.

33) Ambulance 490 arrived at the Oromocto ambulance base at 17:11:40 hours.

34) Ambulance 434 arrived in Fredericton Junction at 17:40:31 hours.

35) At 17:52:40 hours a paramedic from ambulance 434 contacted the MCMC and asked if they could return to Oromocto for shift change and permission was given to do so. Ambulance 434 was mobile to Oromocto at 17:58:42 hours.

36) From the time ambulance 434 arrived in Fredericton Junction until it departed for shift change approximately eighteen (18) minutes had elapsed.

37) At 18:19:43 hours the 911 call was received by MTD 0212 from the residence on Wilsey Road in Fredericton Junction for a fourteen (14) year old male having difficulty breathing.

38) At 18:19:51 hours, having confirmed the patient's address, MTD 0212 committed the call information as a Code 1 (life threatening request) to the Computer Aided Dispatch (CAD) system which then automatically notified the dispatcher.

39) At 18:20:02 hours MTD 0217 assigned ambulance 490 at the Oromocto ambulance base to this call.

40) MTD 0217 stated that he reviewed the call location and the Automatic Vehicle Locator (AVL) system and determined that ambulance 490 and 434 were at the Oromocto base even though ambulance 434 had not informed him that they had arrived.

41) MTD 0217 stated that he did not consider asking where ambulance 434 was prior to assigning ambulance 490 and that he is not aware of any MCMC policy that directs an MTD to confirm ambulance locations prior to making an assignment although he considers this to be a best practice.

42) The ANB Director Clinical Services said that there is no policy that directs an ambulance crew to notify the MCMC if they are closer to a call location. He said the dispatcher may not have considered using ambulance 434 because it was so close to shift change.[4],[5],[6]

[4] SOP 8.6 of the CACC MOP states that if an unassigned ambulance crew states that they are closer to the scene (in time not distance) than another unit already assigned the ACO assigns the unassigned unit if there is an identified response time advantage in doing so.

[5] SOP 8.3 of the CACC MOP requires an ACO to contact and verify an ambulance's AVL location if the ambulance is mobile.

[5] SOP 8.1 c) of the CACC MOP states in part that an ACO will, after noting the call and ambulance resource locations, give first consideration to any ambulance resource that is mobile and available which could provide a quicker response time than an ambulance resource at base.

43) MTD 0217 said that when an ambulance is being assigned to a call while at a base the paramedics are belt paged and this page includes the patient address, municipality and problem code and type. The dispatcher then radios the paramedics who can answer either by a portable radio or by a radio in the base and the paramedics are provided with the information for the ambulance call.

44) MTD 0217 said that this information is provided to the paramedics prior to their being physically in the ambulance and ready to respond.

45) MTD 0217 provided the following information by radio at 18:20:25 hours to the paramedics staffing ambulance 490: "*490 incoming Code 1 for breathing problems 154 Wilsey Road Fredericton Junction, cross streets Horseman Road and Post Road, stand by for more.*"

46) MTD 0217 said that he usually provides the paramedics with the closest cross streets especially if the paramedics are not from the area of the call; he said he was unaware if there is an MCMC policy to provide cross street information during all call assignments.

47) The MCMC Staff Development Officer stated that when an ambulance is assigned to a call the dispatcher is to provide cross streets and will try and provide as much direction to the scene as possible.

48) ANB Provincial Operational Directive 2008-022, dated February 8, 2008 and directed to paramedics, states that dispatchers will include in the initial radio patch for patient's address the cross street information, and when this information is not provided the paramedic shall ask for that information.[7]

49) The MCMC Shift Manager said that the call location information is normally provided once by pager and radio.

50) At 18:20:34 hours Primary Care Paramedic (PCP) 6424 acknowledged the radio transmission regarding the call in Fredericton Junction and replied: "*Copy that mark us enroute.*"

51) At 18:20:59 hours PCP 6355, who was also assigned to ambulance 490, radioed MTD 0217 and asked if they were being paged for a response to 154 Wilsey Road in Fredericton Junction; MTD 0217 replied that he had just spoken with her partner and PCP 6355 advised at 18:21:33 hours they were en route to the call.

52) PCP 6355 said that the address information is provided to paramedics prior to their being in the ambulance ready to proceed and once mobile they would be provided with patient update information.

[7] SOP 8.2 of the CACC MOP states in part that when assigning an ambulance to a call an Ambulance Communication Officer (ACO) will provide sufficient information to the ambulance crew to begin responding including the response code and location. Once mobile the ACO provides additional information necessary to ensure a prompt accurate response including as a minimum: the Universal Transverse Mercator (UTM) number, detailed call and patient locations and the problem/nature type. For ambulances that are not equipped with mobile locator the ACO shall provide the map book page number in addition to the UTM and the ACO will verify receipt of the information by the ambulance crew.

53) According to the AVL system ambulance 490 was enroute to this call at 18:21:58 hours.

54) From the time PCP 6424 first stated they were enroute until the ambulance was actually enroute one (1) minute and twenty-four (24) seconds had elapsed.

55) ANB Policy OPS 108 states that chute times, being the time from when paramedics are alerted to respond to a call by pager and voice call alert, will be less than one (1) minute for paramedics assigned to shifts less than fourteen (14) hours.

56) MTD 0217 said that if a paramedic states they are enroute then the ambulance is marked enroute, whether the ambulance is actually moving or not.

57) The MCMC Shift Manager stated that when an ambulance crew states they are mobile then they are considered mobile even if they are not; she said it is hard to catch these situations and stated that there is no policy to report delays in ambulances going mobile.

58) PCP 6355 said that being en route means as the paramedics are heading to and getting into the ambulance.

59) PCP 6424 stated that when he says he is en route then 9 times out of 10 this means the ambulance is moving.

60) MTD 0217 said he realized the ambulance 490 was not enroute when PCP 6424 said they were when PCP 6355 radioed in asking for confirmation of the call assignment.[8]

61) PCP 6424 said when the notification from MCMC was received for this call he was inside the ambulance base and his partner, PCP 6355, was outside the base standing beside the ambulance. This information was confirmed by PCP 6355.

62) PCP 6424 said that he was not familiar with the Oromocto area and had never been to an ambulance call in Fredericton Junction.

63) PCP 6424 stated that he knew where Fredericton Junction was in relation to the community of Beaverdam.

64) PCP 6355 said that she had no idea how to get to Fredericton Junction from Oromocto and neither did her partner.

65) PCP 6355 said she was unaware of any policy that stated paramedics should not commence movement of the ambulance until they are satisfied that they know where a call is located and how they should proceed to the patient's location.

66) A Paramedic Coordinator stated that dispatchers never ask responding paramedics if they are familiar with the location they are responding to and he knew of no policy which would require this to be done.

[8] SOP 14.10 of the Ontario CACC MOP requires an ambulance be mobile on a Code 4 (life threatening) call within two (2) minutes of being assigned and the crew will notify the ACO that they are mobile to the call location.

67) A Paramedic Coordinator said that that on April 2, 2009 there was no ANB policy that directs paramedics to notify the MCMC if they are unfamiliar with an area and require assistance to the call location.

68) ANB Policy OPS 101 Procedure 2.0 states that the MCMC is willing to assist with directions to any call location, if requested by the crew. "*Ask for assistance rather than delaying the response due to misdirection.*"

69) At 18:23:19 hours MTD 0217 radioed ambulance 490 and advised the paramedics that they were responding Code 1 for a patient with breathing problems and that the patient was a 14 year old male who was conscious but not completely alert and was changing colour; "*everything else unknown*."

70) At 18:23:38 hours PCP 6424 asked MTD 0217 if they were heading to Wilsey Road which was off the Lincoln Road; MTD 0217 asked if PCP 6424 knew where the Fredericton Junction ambulance base was located and PCP 6424 responded by saying 10-4.

71) According to the CAD ambulance 434 was marked at the Oromocto base at 18:24:54 hours for shift change. This information was confirmed by the AVL data.

72) There is no ANB policy which states that an ambulance crew will notify the dispatcher when they have re-entered their base coverage area.[9]

73) According to the AVL data ambulance 490 was in the area of Highway 7 and Nevers Road at 18:25:08 hours.

74) Microsoft Streets and Trips identified that the fastest route from Oromocto to Fredericton Junction was via Route 660, which is in the opposite direction from Highway 7 and Nevers Road.

75) At 18:25:11 hours PCP 6355 transmitted the following: "*Sorry for the mix up but ah my understanding is that Wilsey Road is off the Vanier Highway going to the Vanier Industrial Park and you have us going to Fredericton junction for the Wilsey Road?*"

76) MTD 0217 did not answer the query from PCP 6355 and at 18:25:35 hours an unknown male transmitted the following: "*Wilsey Junction or Wilsey Road is in Fredericton Junction as well*". PCP 6355 replied: "*…the industrial park off the Vanier Highway and you're telling us there's a Wilsey Road in Fredericton Junction?*" No reply was recorded.

77) PCP 6355 said that because they did not receive a response from MTD 0217 she used her personal cell phone and called an off duty paramedic from the Fredericton Junction area; she said this paramedic called the paramedics staffing the Fredericton Junction truck and he then advised PCP 6355 to take Sunpoke Road to Dewitt to Post Road to Wilsey Road

[9] Subsection (i.1) of the Land Ambulance Certification Standard incorporated under s (3) of Regulation 257/00 made under the *Ambulance Act* of Ontario states that the communication service that normally directs the movement of an ambulance will be kept informed at all times as to the availability and location of each employee or ambulance.

78) According to the AVL data ambulance 490 had been heading for the Wilsey Road located in Fredericton.

79) PCP 6355 stated that when the call was first received she did not see the notation Fredericton Junction on the pager and that a paramedic at the Oromocto base had said Wilsey Road was in Fredericton, which was why ambulance 490 commenced travelling in that direction.

80) PCP 6424 said he had fully intended to drive along Highway 7 to Nevers Road as that was the only way he knew to get to Beaverdam and he was aware where Fredericton Junction was located in relation to that community.

81) PCP 6424 said that he would ask the dispatcher for assistance in reaching a patient location when he did not know where he was going and felt confident that because the dispatcher could see them on AVL then if he was heading in the wrong direction the dispatcher would be able to reroute them.

82) MTD 0217 said that a few minutes after ambulance 490 was mobile he did notice on the AVL system that the ambulance was not travelling in the best possible direction for Fredericton Junction, which would have been using route 660 through Geary, but decided not to turn the ambulance around as to do so would extend the response time.[10]

83) The MCMC Shift Manager said she was notified that ambulance 490 was heading towards Fredericton but was satisfied that the dispatcher was going to direct the ambulance to use the Dewitt and Post Road routes to the call.

84) The MCMC Shift Manager said there was no thought to turn the ambulance around at the Nevers Road exit on the highway as according to the CAD map Post Road would provide faster response. The Shift Manager stated that she had no personal knowledge of that area.

85) The ANB Director Clinical Services stated that as of April 2, 2009 dispatchers normally do not direct ambulances or say anything regarding routes being taken unless the paramedics ask for assistance.

86) PCP 6424 and PCP 6355 stated that the ambulances are provided with a map book identifying city streets for New Brunswick cities as well as a map of rural areas of the province; they both stated that the rural map book does not contain specific routing and road information.

87) MTD 0217 said that MCMC staff have the same city map book available to them and rely on the CAD for rural mapping information.

88) The ANB Director Clinical Services stated that the ambulances carry rural maps provided by the Department of Transport as well as maps of New Brunswick municipalities.

[10] SOP 14.14 (3) a) of the Ontario CACC MOP states that when AVL is available, the ACO will monitor the ambulance's response and offer the ambulance crew travel directions that provide a more direct route to the destination if necessary.

89) The Electoral Map for District 46, produced by New Brunswick Elections, identifies that Post and Dewitt Roads start off as paved roads and then become dirt roads.

90) Electoral maps for all sections of the province are available via the New Brunswick Elections website and these maps appear complete and up to date.

91) PCP 6424 and PCP 6355 stated that ANB does not provide specific geographic and or map training to paramedics.

92) PCP 6424 and PCP 6355 stated that when a paramedic is posted to a station it is normal that a senior paramedic from that station will take the new paramedic out for drives around the station service area to familiarize them with their station area. They both stated there is no ANB policy requiring this orientation process.

93) The ANB Director Clinical Services stated that paramedics are provided with orientation to their base region. He said that ANB does not provide formal orientation training.

94) MTD 0217 said that MCMC does not provide in depth geographic training or map reading training.

95) The MCMC Staff Development Officer said new staff are provided a crash course regarding the use of maps and are tested on locating a call location using maps.

96) MTD 0217 said he had no personal knowledge of the route being taken by ambulance 490 to reach Fredericton Junction and did not believe that flooding would occur in the area the ambulance would be traveling through.

97) MDT 0217 stated that sometimes the Public Service Access Point (PSAP – service which answers 911 calls) will contact the MCMC and advise about road closures but he personally has never received notification from the PSAP concerning rural road closures.

98) Neither MDT 0217 nor PCPs 6424 / 6355 were aware of any road closures heading towards Fredericton Junction.

99) The MCMC Staff Development Officer stated that occasionally the MCMC would receive email notifications of road closures but these emails were not actioned as there was no policy to address these matters.

100) The ANB Director Clinical Services stated that there are historical areas that have roads closed for flooding etc. at specific times of the year and likely the lack of local geographic knowledge by the involved staff would have affected their choice of these routes.

101) At 18:31:59 hours a MDT contacted the Fredericton Junction Fire Department and said "*We were just wondering if you guys respond to medical calls?*" The answer was they did not as they do not have first response capability.

102) The MCMC does not contact fire departments to initiate first response and is not aware of the criteria used by the PSAP to make such notifications.

103) The MCMC has a document providing a 911 Cross Reference Table provided by the PSAP. Under the municipality of Fredericton Junction there is an X in front of the contact information for the fire department. The X equals fire service enhancement, but there is no explanation as to what this means.

104) When the MTD contacted the Fredericton Junction Fire Department he did not advise the person who answered the phone why he was calling, the nature of the medical emergency or that the ambulance would be coming from Oromocto.

105) The MCMC has no policy that provides direction to staff as to when to contact fire departments to request assistance on scene and under what circumstances such notification is made.

106) The Fredericton Junction Fire Chief stated that, as far as the person who answered the fire line knew, the call from MCMC was a routine inquiry as to whether the fire department would provide medical first response and was not for an actual emergency.

107) The Fredericton Junction Fire Chief said that if his department had been asked to provide help and told the nature of the call and that this was an emergency they would have responded to the scene. He said his staff is all trained in first aid and they do have oxygen and are trained to provide CPR as required.[11]

108) At 18:35:50 hours PCP 6355 asked MTD 0217 to use the AVL to confirm their location which she provided as Dewitt Road; she also asked if Dewitt Road would get them to the Wilsey Road for Fredericton Junction; MTD 0217 confirmed that Dewitt Road would lead them to Post Road which in turn would become Wilsey Road.

109) At 18:37:01 hours PCP 6355 advised MTD 0217 that they had come to a road closed sign and that Dewitt Road "*is in pretty rough shape is there another route we can go for this call? Can we go another way turn around through Rusagonis?*"; MTD 0217 advised ambulance 490 to turn around and to head back to Rusagonis.

110) PCP 6355 said that as far as she can recall there was a saw horse type barricade on the roadway and a sign indicating that the road was closed.

111) PCP 6424 could not recall what type of signage there was indicating the road was closed nor does he recall driving past a barricade.

[11] SOP 11.10 of the Ontario CACC MOP identifies in part that fire services will be contacted as requested by an ambulance crew. As well, Ontario CACC/ACS have structured tiered response plans in place with their area fire departments and will request fire assistance dependent on the criteria listed in the tier agreement.

112) The following picture shows a road closed sign on Dewitt Road as of April 29, 2009.

113) When ambulance 490 had to turn around they had been mobile to the scene for fifteen (15) minutes and three (3) seconds.

114) MDT 0217 said that he did not consider assigning the ambulance at the Oromocto base to this call at that time as he believed ambulance 490 was still closer to the scene.[12],[13]

115) The ANB Director Clinical Services said that ANB does not have a policy that provides direction to MCMC to assign a second vehicle to a call if the first ambulance becomes lost.

116) MDT 0217 said that he notified the MCMC Shift Manager at this time and he told her his plan was to have the ambulance double back to Post Road. He said she agreed with his decision.

117) At 18:40:07 hours PCP 6355 advised that they were turned around and heading back to Rusagonis. She said "*I would appreciate it if you could keep us on the AVL and keep us and give us some guidance we are unfamiliar with this territory.*"; MDT 0217 advised that when the ambulance reached the end of Sunpoke Road they were to turn left and proceed along the Post Road.

[12] SOP 14.9 of the Ontario CACC MOP identifies that an ACO will identify and assign the closest available ambulance in time, not distance, to a Code 4 (life threatening) call.
[13] SOP 14.12 of the CACC MOP requires an ACO to estimate a reasonable time frame for the ambulance crew to arrive on scene. If an ambulance does not arrive on scene in the estimated time frame the ACO is to inquire as to their ETA to the scene and if response is longer than reasonable the ACO will assign the next closest available ambulance resource to the call.

118) According to the AVL data at 18:40:58 hours ambulance 490 turned onto Sunpoke Road from Dewitt Road.

119) When ambulance 490 made this turn they were approximately twenty (20) minutes into their response to Fredericton Junction.

120) According to the AVL data ambulance 474, which had been assigned to the non emergency transfer of a medically stable patient from Saint John to Fredericton, was in the area of Highway 7 and Route 101 near Welsford.

121) Microsoft Streets and Trips indicates that ambulance 474 was approximately twenty-six (26) minutes away from Fredericton Junction.

122) MDT 0217 said that he would never have considered asking ambulance 474 to provide a first response to Fredericton Junction because they had a patient on board and therefore were not considered available.

123) The MCMC has no policy that speaks to the reassignment of ambulances carrying patients for a first response.[14]

124) At 18:45:08 hours MDT 0217 advised ambulance 490 that their patient was now in cardiac arrest.

125) When it was learned that the patient was in cardiac arrest ambulance 490 had been en route for more than twenty-five (25) minutes.

126) At 18:45:38 hours MDT 0217 notified ambulance 490 that they had turned in the wrong direction at the intersection of the Rusagonis and Wilsey / Post Roads and were now heading away from Fredericton Junction and advised them to turn around.

[14] SOP 8.1 d) of the CACC MOP states that an ACO will consider as first response the use of an ambulance that is transporting or attending to a non-emergency patient and on consultation with the ambulance crew to ensure that reassignment will not jeopardize the well-being of the on board patient.

127) The following picture shows the signage at the intersection of the above noted roads:

128) PCP 6355 stated that they turned right at this location as they believed they were on the correct road until the dispatcher advised them to turn around.

129) According to the AVL data ambulance 490 was proceeding south on Post Road at 18:47:08 hours.

130) As of 18:47:08 hours ambulance 490 had been enroute to Fredericton Junction for slightly more than twenty-five (25) minutes.

131) At 18:48:06 hours ambulance 490 asked if they were still heading in the correct direction and they were advised that they were.

132) At 18:52:35 hours PCP 6355 advised that Post Road was also marked as closed, that the road was filled with water and large holes but they were going to attempt to carry on.

133) PCP 6355 recalled there was a saw horse type barrier across the road and 4 wheel drive tracks were visible on the road.

134) The following picture shows a road closed sign on the edge of Post Road as of April 29, 2009.

135) At 18:52:51 hours an unknown male advised that he would not advise ambulance 490 to carry on as the roads "*can get pretty nasty*"; PCP 6355 replied "*I don't think we have an option at this point.*"

136) At 18:53:20 hours PCP 6355 asked if there was a closer unit that could be assigned to the call and she was told by MTD 0217 the closest unit was at Oromocto and that he would assign them to the call.

137) At 18:53:41 hours MTD 0217 assigned ambulance 434 at the Oromocto base to this call and the ambulance was enroute at 18:55:29 hours.

138) From the time the call was received by the dispatcher until ambulance 434 was enroute to the scene thirty-five (35) minutes and thirty-nine (39) seconds elapsed.

139) At 19:00:19 hours the Operations Manager for the area spoke with MTD 0217; MTD 0217 stated "*I wasn't expecting them to take that way but once they…I didn't know those roads were closed.*" The Operations Manager stated that no one else knew the roads were closed either.

140) At 19:02:06 hours ambulance 434 asked if any first responders were enroute to the scene and MTD 0217 replied there was not and that they had already checked with the Fredericton Junction Fire Department and learned that the fire department does not respond to medical calls.

141) Ambulance 434 arrived on scene at 19:16:49 hours.

142) From the time the call was first received by the dispatcher until an ambulance arrived on scene fifty-six (56) minutes and fifty-eight (58) seconds had elapsed.

143) The paramedics from ambulance 434 found the patient VSA and that he was asystole on the cardiac monitor; they performed their cardiac arrest protocols then contacted the on line physician and received a termination of resuscitation order.

144) The patient was turned over to the care of the Coroner.

INFORMATION PROVIDED BY THE INTERIM CEO AMBULANCE NEW BRUNSWICK

Ambulance New Brunswick commenced operation as a provincial wide service in December of 2007. At that time they estimated that they were about 182 paramedics short of full staffing (66 full time and 116 part-time). 105 paramedics were hired from the last graduating class and 37 left the system. ANB then added 16 positions to their staffing model. Currently ANB estimates they are short 130 paramedics (62 full time and 68 part-time are listed for the next round of open postings). The CEO indicated that they expect 100 paramedics will be trained by June of this year and ANB hopes to hire most of these graduates, although paramedic opportunities do exist elsewhere.

ANB is also recruiting paramedics from outside the province and expect to bring more paramedics into the system on May 25, 2009 for orientation; these are serving paramedics coming from other jurisdictions. As of April 29, 2009 ANB had made offers to 30 external applicants and 5 had accepted positions as of April 28th.

The CEO was asked if ambulance coverage and response was being reduced in the rural areas to ensure response time compliance in the urban areas. His response was as follows:

> *With respect to urban and rural deployment, urban response times when we took over were much worse with compliance at the 9 minute mark than rural response times with compliance at the 22 minute mark. We have improved the urban areas, without degrading the rural regional performance - bringing urban performance nearly to mature standards while every rural region has maintained at or over the 90th percentile benchmark.*
>
> *The provincial performance reports demonstrate that the Urban areas came into our system well below mature standards and the deployment model itself has been leveraged to increase that performance, as well as increased resources; but not disproportionately or at the expense of rural performance.*
>
> *Urban area increases in unit hours include Saint John with 6448 hrs, Miramichi with 8736 hrs and Fredericton with 6448. We have not yet been able to staff all hours scheduled for increases. The only urban area unit hours decreased was Bathurst at -*

2080 hrs. However, the deployment model, including re-distribution of urban ambulances through posting at anticipated "next call" priorities has significantly improved performance.

The big improvement in rural coverage is that there was a lot of stand-by time at night in rural NB (paramedics at home, responding first to the base, then the call) and that was all eliminated. In a couple of cases neighboring community new full time on-site coverage was used to replace on-call coverage in close by communities but relatively few. Examples of this were Harvey which picked up on - site coverage from the new "night" coverage out of McAdam, and Hillsborough, picking up "night" coverage from Riverside Albert.

One of the few examples of actual reductions, was Minto/Chipman, which were reduced from 3 to two units; the third unit was primarily a transfer vehicle and we re-located it.

Since beginning service, some rural coverage has also increased, including Harvey, 4368 hrs; St. Stephen, 2288 hrs; Sussex, 4368 hrs and Woodstock 2288 hrs.

Further improvements have been to make this a "provincial" service with supporting coverage from the nearest ambulance, as well as working hard to assure transfer units have patients both ways to retain more resources for 911 coverage.

The CEO indicated that changes to the System Status Plan are on going and as data is received and analyzed regarding response times then changes to coverage locations are altered to address inadequacies in the system. In specific reference to providing coverage to Fredericton Junction the CEO wrote:

The coverage for the Junction came from Harvey (same district) and that resulted in poor performance and was changed very early; around March of 2008. Coverage was then changed to a mutual aid arrangement between the Junction and Oromocto, with Geary as the approximate midpoint, and a safe location for the ambulance. Both communities were single ambulance stations, so if a unit was gone from one community; there was no priority post to place the unit at one town over the other so the coverage for both towns was from Geary Roadside post (Balanced Emergency Coverage).

However, from that location, we were unable to meet performance in Oromocto, which had significantly higher call volume, and a 9 minute standard; while the Junction was 22 minutes, with very low volume and low probability of a call. Oromocto was then designated the priority Post; with the Junction being approx 22 minutes or slightly more, as a mutual aid response, if required, and the Geary post was discontinued (in March 09).

Because of the status of Oromocto as a single unit location, it was at that time that we attempted to modify the SSP to place the Coverage that would have come to Junction from Geary, in New Maryland instead, and have coverage come from there; which was approx the same distance as from Oromocto to the Junction. This was expected to provide safer coverage opportunities, because there are more units that operate out of Fredericton city.

The intention to have coverage for the Junction come from New Maryland (Fredericton direction), was expected to preserve Oromocto performance and based on response coming from Rte 101. The response distance of 30 kms was expected to achieve 20 minutes approximate response times (30 kms at 90 kms per hour).

Based on the call volumes the expected responses should fall within the regional performance requirements, without exposing the urban areas to delayed responses when the district was depleted of resources. We have found compliance has been better since the new SSP was implemented on the 17th in Fredericton, Oromocto and the Junction.

The SSP now only post in New Maryland when we are below ECO (5 units) and Keswick has been brought to Fredericton. Other than that a unit stays/moves into Junction. Once at 3 units the positioning is 1 in Fredericton, 1 in Oromocto and 1 in New Maryland

The current call volume and request for ambulance service identify that it is almost a fifty / fifty split between requests for patient transfers and emergency requests for ambulance service. (Stat, or emergency inter-facility transfers are counted on the emergency request data.) Since ANB commenced operations complaints regarding completing transfer requests are very few.

INFORMATION PROVIDED BY THE ANB DIRECTOR CLINICAL SERVICES

The Director said that when ANB commenced operations policies that had already been developed were provided to all paramedic staff. No formal training or testing of policy knowledge was conducted.

The Director stated that at start up there was no policy regarding 'chute' time and it was based on the historical system of 60 seconds from assignment time and so it was expected that paramedics would perform to the historical knowledge of chute times.

Originally policies were also known as Provincial Directives and this term evolved to Standard Operating Procedures. It is a requirement that SOPs will be adhered to.

ANB also issues Standard Operating Guidelines, which are recommended action/guidelines. Lastly, ANB issues memos to paramedic staff, which are used as a communication tool only and have no force such as an SOP.

As reported within the Findings portion of this report there are inadequate or non existing policies that address such issues as receiving call information, en route times, obtaining geographic assistance etc. Many policies in existence stop short of mandating reaction times etc.

As an example, Provincial Operational Directive 2008-022 deals with cross street communication directions and ETAs. The Applicability portion of the directive states "*These processes can be allied provincially, but are mandated within City Jurisdictions.*" The Directive states "*Dispatchers will include in the initial Radio patch for address, the cross street information.*"

The evidence obtained during this review identified that paramedics normally receive this information prior to their being physically in the ambulance and ready to depart base so the provision of specific address information prior to a paramedic crew being able to hear and acknowledge such information is not an appropriate policy.

In reference to the provision of ETA information, this policy does not require a paramedic crew to provide the dispatcher with their ETA to the scene; rather, it indicates that by the dispatcher following this policy they can provide medical first response crews with an improved estimated ambulance arrival to a scene.

There is no similar policy requirement in the MCMC Policies and Procedures Binder.

MCMC TRAINING PROGRAM

According to the MCMC Training Manual upon being hired for a position with the MCMC new staff is provided: "*19 days of intense classroom plus rotating shifts inside the Communications Centre and on the ambulance, 4 shifts at the Communications Centre under the tutelage of preceptor.* Staff are evaluated throughout training and if required more preceptor shifts will be scheduled.

At the completion of this training program staff perform call taking duties only, and only after being successful as a call taker do they receive training as a dispatcher.

The MCMC Staff Development Officer stated that the classroom portion consists of 2 weeks didactic followed by 2 weeks training on the CAD. He said that a new employee will not receive dispatcher training until they have completed 3 months of call taking duties, and at a minimum new staff need to receive dispatcher training at least within 6 months of commencement of employment at least one dispatch position.

The Staff Development Officer stated that there is no classroom portion to dispatcher training and that it consists of a minimum of 6 shifts with a preceptor and if the employee is doing well they are signed off as a dispatcher. Training on other dispatch positions would consist of a minimum of 2 shifts being preceptored.

MTD 0194 commenced employment with the MCMC approximately one year prior to this event. She said her training consisted of 7 days in the classroom, 3 days emergency medical dispatcher training and then 4 shifts with a preceptor before she was on her own as a call taker. She said during the classroom time there is training in policy and procedure and when new policy and procedure is introduced training is provided.

MTD 0194 said when she was hired the centre was short staffed and remembers doing about 2 days of mapping training. She said that there are road maps of the cities available at all consoles in the centre and there are two maps mounted in front of the supervisor's position showing exits from the highways.

MTD 0217 stated that he received two weeks of training after completing the emergency medical dispatcher training then was preceptored for 4 or 5 shifts before he was left on his own as a call taker. This occurred in July 2008. He said he was trained as a dispatcher in December of 2008.

MTD 0217 said that he received some training on ensuring he obtained the actual address for a call and that staff are taught to ask the right questions to obtain that information. He said that each console in the centre has the small city street map books that the ambulances also have; he believes the ambulances have another map book but he has never seen that book. As far as rural areas of the province he said the staff relies on the mapping within the CAD.

In comparison, to be trained to the call taking level in Ontario training is as follows:

- A minimum of two (2) weeks at the trainees home CACC which would include orientation to the centre, reading of pre-course materials, manual of practice, etc.
- Four (4) weeks at a regional training centre for didactic and practical training in call-taking/dispatching concepts and practices in the paper-based environment (to help illustrate concepts and prepare a solid framework for understanding CAD-down practices) and medical terminology with a test each week to confirm proficiency
- Two (2) weeks at a regional training centre for didactic and practical training in CAD specific functions; with tests each week to confirm proficiency
- Final 120 item multiple choice evaluation and practical skills evaluation to confirm knowledge/skill level – MOHLTC certification issued
- One (1) day at a central training centre for FleetNet User Training (radio system) to provide specifics on the console, features and practices for radio communications.
- This would then be followed by typically two-three (2-3) weeks of local training back at the home CACC to provide more specifics on local policies, geography, ambulance bases/hospitals, tiered response agreements, etc.
- The on-the job coaching phase would then begin, and the time required here will vary on the size of the Centre and the complexity of the operation (i.e. dispatching model, number of dispatch desks, etc.) however would begin with “plugged in” audits of call-taking, and move towards independent practice (after a review and sign-off for skills) and then progress to the dispatching area; where again, they would audit first, have coaching and move towards independent practice…..but this can take from 6-12 weeks.

INFORMATION PROVIDED BY MCMC SHIFT MANAGER

Shift Manager 0191 has been employed as a Shift Manager at the MCMC since February 2008. She has experience as an ambulance communicator from Nova Scotia where she was employed from 1997 until starting at the MCMC.

The Shift Manager is responsible to oversee all activities on the floor of the communications centre and ensures that the System Status Plan is maintained, that the correct ambulances are being assigned to calls for service, ensure transfers are organized as well as ensuring that ambulances are rotated through for maintenance at specified intervals. She stated that the Shift Manager oversees the overall coordination of the system, but does not oversee fleet operations.

The Shift Manager stated that the ultimate decision on assignment of calls to ambulances rests with the communications centre. She said a fleet manager can speak with a Shift Manager and seek the reassignment of an ambulance from one event to another and if possible MCMC would make the requested change.

INFORMATION PROVIDED BY THE MCMC MANAGER

During the time period of the call being investigated, a Shift Manager worked on the communication floor Monday to Friday from 06:30 – 14:30, and then another one from 14:00 – 22:00. An Emergency Medical Dispatch Shift Supervisor (EMDSS), a unionized supervisor, would take over from 22:00 hrs and on weekends. Two EMDSS were scheduled on every shift, that way we had two individuals capable of handling the workload after 22:00 hrs. A "walker", also a Shift Manager, was scheduled Monday to Friday from 0800 to 1600. We wanted to offer the most supervision during the hours that are the busiest and have someone to resolve problems immediately.

The following are the primary responsibilities of the "walker":

- Direct oversight of the staff on the floor.
    - All things with respect to vehicle movement
    - Seat 2 Seat
    - Direct communications with Field
    - Field Shift overrun (Proactive vs. Reactive OT)
    - Proper utilization of resources
    - Vehicle maintenance/FLEET requirements
    - Direct communications with fleet via email or phone

REVIEW OF THE MCMC POLCIES AND PROCEDURES BINDER

There is nothing within this binder that defines and outlines the roles and authorities of a Medical Transportation Dispatcher. Further, this document is referred to as a policy and procedure binder and not as a manual, nor is there anything within this document that stipulates the policies and procedures in the binder must be adhered to, and in those situations where an MTD must deviate from a policy and procedure there is no requirement to document the reason for the variance.

The review of this document identified inadequate policies as well as the absence of policy. Some examples are as follows:

Shift Change – identifies procedures for transfer calls but does not indicate what the vehicle status is for emergency calls. It is documented this policy is to ensure ambulance status is up to date but does not clearly identify what units are available to respond to emergencies.

Exemption Reporting – Gives direction on when an exemption report may be granted but does not give direction on what the MTD must do to prevent or reduce the response time to emergency calls during this time.

911/Emergency Call Processing – It appears that the PSAP confirms the patient location prior to passing the call to the MCMC and that the MTD does not confirm the address until the end of the call taking process. This could be problematic if the caller is unclear or incorrect regarding the address or if the line is lost prior to reaching this point in call processing.

Re-Assignment of 911 Calls – this policy states that any ambulance may be reassigned to a higher priority call if it can be verified that it is closer than the original ambulance responding. There is no definition of 'any' ambulance. Does this include an ambulance already transporting a patient? There is no policy or direction as to when an MTD can reassign an ambulance transporting a patient to use as first response. There is no policy for an MTD to follow as to when and under what circumstances an ambulance already assigned to a Code 1 call can be reassigned to another Code 1 call. There is no policy that speaks to a Code 1 response to a hospital.

Dispatching Procedures – the policy is not clear as to what method is the primary method to notify an ambulance for a call. Does voice calling a unit mean phone, radio, pager, base page?

Other issues with this policy section include:

- Assigning the crew – what if the MTD is unable to contact the initial crew for response? How long should the MTD wait for response from the crew? What should be done if they do not receive a response?
- Geographic information provided to a crew – there is no direction to provide geographical coordinates to the crew in regards to the location of the call - only to provide the address and municipality.
- Monitoring response – Policy 08-501 talks about the PET and if the ambulance is not on scene one (1) minute prior to the PET recommended time but there is nothing that requires the MTD to have pre-determined an appropriate response time and monitor the ambulance response prior to the one (1) minute PET time. The MTD should be monitoring response time prior to the PET notification as possible delays could be recognized and corrected prior to the 1 minute time frame. What procedures are to be followed if the ambulance is having a response delay? At what point does the MTD determine there is a response delay?
- There is no policy that deals with situations where paramedics may be denied access to the patient either by family, bystanders or allied agencies.
- There is no policy as to what an MTD is to do if they are unable to contact a crew while en route or on scene or what to do if the on scene time is excessive.
- There is no policy to direct an MTD to take action if an ambulance crew has a longer than normal scene time or check on their safety in such situations.
- There appears to be no direction in regards to crews clearing from hospitals. When should they clear, how long are they permitted to remain at hospital before they are available?
- Emergency Coverage – Policy 08-510 does not mention the System Status Plan and provides no direction on the implementation of the SSP. This policy only addresses BEC under severe weather conditions. When is it necessary for an MTD to ensure emergency coverage under normal conditions? What is proper emergency coverage? What should an MTD do if they are unable to maintain proper coverage?
- Tiered or multiple service response – Policy 08-407 only directs that police and fire be responded if there is a threat by either human or physical dangers. There is no indication of multiple patient scenarios or severe response delays. There is no direction to notify police of any situation unless there is a human danger. What about accidents or suspected foul play?
- Communicable Disease – no discernable policies on directing MTDs regarding the handling of real or suspected patients with potential or real communicable diseases.

- Vehicle involved in an MVC / vehicle breakdown with a patient on board – there is some direction regarding the administrative duties to be completed in these situations but no direction regarding procedures to be followed when a patient is involved.

The review of the MCMC Policies and Procedures Binder was not an in depth review but it would appear that the focus is on call taking and processing transfer calls. The direction and assignment of ambulances and allied resources for emergency calls and emergency coverage is severely lacking.

INFORMATION OBTAINED FROM PARAMEDIC COORDINATOR 4620

Paramedic Coordinator (PC) 4620 was on duty as of 18:00 hours on April 2, 2009. He became aware there was an issue with this call when he heard that the patient was in cardiac arrest and ambulance 490 was in the area of Dewitt and Sunpoke Roads. He said he was not familiar with the geographic area and if he had been at the Oromocto base when assigned to this call he would have used the route that went through Geary.

PC 4620 stated that he could tell by their voices that the paramedics were under stress when they found they could not get through on the Post Road. He believes that the ambulance at Oromocto should have been started to the call sooner than it was.

PC 4620 stated that he has never been on the Post Road in that area and using the map he has available, and not having any knowledge of the area, the road does appear to be a good access route to Fredericton Junction. At that time he said there was no information made available about road closures and unless an individual had knowledge of an area then there was no way of knowing what roads are closed,

PC 4620 said that when he is notified for a call he will advise the MCMC when he is actually mobile to the location. He said once mobile the paramedics do not advise the dispatcher that they are responding to a specific location. He said in his experience if he has driven past a turn off, as an example, a dispatcher might ask where he is going but this is not something done consistently.

PC 4620 said if he is being assigned to a call location and he does not know the area or how to get there he will ask for assistance. He said this is not an ANB policy.

PC 4620 said the maps provided to the paramedics are not good and there is no geographic training provided to paramedic staff. He said it is an issue that paramedics are not familiar with the areas they are being dispatched to or being sent for BEC.

INFORMATION OBTAINED FROM THE REGIONAL MANAGER – WEST

The Regional Manager (RM) stated that it was not unusual to send empty ambulances from Fredericton to Saint John to pick up patients to return them from the hospital in Saint John to the hospital in Fredericton. He stated while there are issues with maintaining coverage for emergency calls ambulances are constantly being moved to ensure BEC. He said that Saint John has a high call volume and therefore resources are taken from one area and moved to Saint John.

The RM said during the operation of the previous service model most inter-facility transfers were conducted by up-staffing ambulances. Historically, the ambulance stationed in Fredericton Junction was not sent to Saint John to perform transfer calls but under the new system they will utilize ambulances scheduled for 24 hours shifts to allow ambulances scheduled for 12 hours shifts to be able to return to base for shift change.

The RM said that there are times the volume of transfer calls being done has had a negative impact on the ability to meet response times for emergency calls and this is exacerbated by not being fully staffed with paramedics.

The RM said that rural area coverage and response times are not sacrificed to ensure urban response times are met, and there is no movement to limit rural resources for the sake of the urban area. He said his district was meeting their 90th percentile rural response and is having difficulty in meeting their 90th percentile urban response.

The RM said that neither he nor his Operations Manager can physically look at any resource to determine where ambulances are during a shift and they rely on the MCMC to maintain coverage per the SSP. He said the SSP is not always adhered to and when an Operations Manager becomes aware of an issue they will call the MCMC to ask why the SSP is not being followed. The RM said sometimes they are provided an explanation and other times they are not. He said he is aware that the MCMC has an overall picture of the call volumes etc. in the province and acknowledged there would be times when ambulances are deployed in a manner differing from the SSP and this deployment could be for very legitimate reasons. He said it would be beneficial if the MCMC kept the Operations Managers informed of changes being made to the SSP deployment model and the reasons why the change was made.

INFORMATION PROVIDED BY PCP 5805 AND 5802

PCP 5805 and PCP 5802 are regularly posted to the Fredericton Junction ambulance base. Neither PCP was on duty on April 2, 2009.

Both PCPs said that it is local knowledge that they would not operate an ambulance on Wilsey, Post or Dewitt Roads from the time the first frost is out of the ground until the roads were graded. As well, they would not use these roads any time there is a thaw during the winter. They said if Dewitt Road is impassable then they know, by their own knowledge, the Post Road would be impassable as well.

Both PCPs stated that 'local' paramedics are intimately familiar with their areas and are aware of roads and laneways that do not appear on any maps. They are also aware of local issues regarding roads and local issues that could impact ambulance response. ANB has not asked local paramedics to provide input regarding historical issues or roads etc.

INFORMATION OBTAINED FROM THE FIRE CHIEF FREDERICTON JUNCTION

The Chief stated that because not all of his staff are trained as First Responders for medical calls his department does not participate in medical first response calls. He said all staff are trained in first aid and CPR and the fire department does have portable oxygen available.

The Chief said when the call was received from the MCMC the person who answered the phone felt that the call was a general inquiry only regarding whether or not the Fredericton Junction Fire Department performs medical first response as a matter of routine. He said nothing was said that the call was in reference to an on going emergency. The Chief stated that if his department had been told the nature of the emergency and had been asked to respond and provide assistance then they would have responded.

The Chief said that the Village of Hoyt has a Search and Rescue vehicle that is equipped with a defibrillator and that if needed they would also have responded to the scene.

The Chief said that the Fredericton Junction Fire Department is now equipped with an Automatic External Defibrillator (AED).

INFORMATION OBTAINED FROM THE MAYOR FREDERICTON JUNCTION

The Mayor stated that he, his council and the residents of the area are in support of the concept of a provincial ambulance service and the model introduced by ANB.

The Mayor said they cannot and do not support using the ambulance stationed in Fredericton Junction to be taken from the community to be used for long distance low priority transfers.

The Mayor stated that they cannot and do not support coverage for the Fredericton Junction area being provided by ambulances stationed in either Oromocto or Fredericton.

The Mayor stated that the community knows that the ambulance stationed in Fredericton Junction will not always be there as it will be assigned to emergency ambulance calls. They are accepting of the promised twenty-two (22) minute response time for those times when the ambulance is not in Fredericton Junction. He said when the system was being introduced and ANB management came to a meeting in the village, of which 150 individuals attended, the ANB management was clear that the response to the area when the ambulance was not at base in Fredericton Junction would be 22 minutes. The Mayor said that this call proved to his municipality that the direct route to the village from Oromocto could not be achieved in 22 minutes.

INFORMATION OBTAINED FROM THE AMBULANCE ON BOARD TRIP RECORD DATABASE

Ambulance 490

According to the trip record database for ambulance 490 the following speeds were achieved during its response:

While travelling along Highway 7 the ambulance was travelling at 105 kmh.

After turning onto Nevers Road and as it travelled to the road closure sign on Dewitt Road speed fluctuated between 75 kmh. and 30 kmh.

When the ambulance turned around to travel to Post Road and access Fredericton Junction via Post Road the ambulance travelled between 90 kmh. down to 30 – 45 kmh. During the last portion of the trip along Post Road the ambulance travelled at between 45 and 60 kmh.

Ambulance 434

According to the trip record database for ambulance 434 the response speed was between 95 – 120 kmh.

CONCLUSIONS

↘ There was a preventable delay in the provision of emergency ambulance response for this patient.

↘ The delay was caused by the impact of numerous factors including:

- Inadequate geographic and map reading training to dispatch and fleet personnel
- Incomplete mapping resources available to dispatch and fleet personnel
- Lack of consistent and up to date maps shared by dispatch and fleet
- Inadequate dispatch policies to ensure that MCMC has adequate command and control of the ambulance system
- Inadequate dispatch policies to provide guidance and direction to MCMC staff when dealing with the assignment, dispatching and monitoring of ambulance response
- Inadequate dispatch policies to provide guidance and direction to MCMC staff on how to deal with response time delays or problems.
- No dispatch or fleet policy that speaks to the use of an ambulance carrying a low priority, medically stable patient as a first response resource
- No fleet policy that speaks to the requirement of paramedics to seek and obtain assistance when responding to locations that they are unfamiliar with prior to any movement of the ambulance commencing
- No dispatch or fleet policy that identifies notification time as opposed to actual en route time
- Inadequate dispatch policy to guide and direct MCMC staff as to the provision of information when notifying an ambulance as opposed to when paramedics are in the ambulance and ready to proceed on the call
- No dispatch or fleet policy that requires paramedics to keep MCMC informed when they have returned to their normal coverage area
- A lack of data available in the CAD to indicate roads and areas where historically there will be response time issues regarding road usage
- No formal tiered / mutual aid response plans with municipal fire departments
- No dispatch policy that permits the MCMC to initiate response assistance from allied agencies
- No dispatch policy to identify appropriate ambulance resource assignments to inter-facility transfers
- No dispatch policy to identify appropriate ambulance resource assignments for BEC in relation to shift change times
- No dispatch policy to limit the number of ambulances assigned to out of town inter-facility transfers
- Emphasis on the timely completion of low priority inter-facility transfers thereby limiting resources available to service emergency calls

- No criteria to identify when a patient qualifies for ambulance transport or whether they can use an alternative mode of transport

CONCLUSION SUMMATION

Inadequate training, a lack of clear policies and procedures and a lack of the right resources and tools available to the paramedic and dispatch staff combined to create a situation where a patient needlessly suffered.

Many of the lessons learned from this tragedy are already being implemented. Strengthening of the training, policies and procedures and the improvement in resources will enable the service to learn from this event and be able to limit or prevent a reoccurrence.