Information Report

TO: Chair and Members
Emergency & Community Services Committee
WARD(S) AFFECTED: CITY WIDE

COMMITTEE DATE: June 8, 2011

SUBJECT/REPORT NO:
Ambulance Service Review, Hamilton Emergency Medical Services, May 4-6, 2010 (HES11009) (City Wide)

SUBMITTED BY:
Brent Browett
Director, Emergency Medical Services
Hamilton Emergency Services

PREPARED BY:
Brent Browett (905) 546-2424 x7741

SIGNATURE:

Council Direction:
Not Applicable

Information:

It is mandatory for Land Ambulance Programs in Ontario to undergo a provincial audit to be accredited through the Ministry of Health Long Term Care (MOHLTC) to operate the service.

During 2010 the MOHLTC conducted its fourth Service Review of Hamilton Emergency Medical Services (HEMS) since the inception of the service. The more intensive components of the MOHLTC Service Review typically occur over six (6) months and the areas evaluated include:

1) Level and type of ambulance service provided.
2) Qualifications of patient care providers.
3) Maintenance of patient care provider competencies.
4) Measures taken to ensure provision of required patient care.
5) Vehicles and equipment are maintained in accordance with standards.
6) Measures are taken to protect patients and the public.
7) Patient care and public safety policies and procedures are in place.
8) Documentation and security of patient care information.
See Attachment A for the investigative methods used by the MOHLTC Service Review Team.

The grading of the land ambulance service in the Service Review is limited to either satisfying or not satisfying the requirement to be certified.

On May 9, 2011, the MOHLTC provided their written findings and noted that Hamilton EMS “overall meets the certification criteria and the legislative requirements” (see Attachment B) and issued 11 legislative recommendations that must be addressed to the satisfaction of the MOHLTC, and eight (8) recommendations that should be addressed to be performing at the level of ‘best practice’ in those areas.

Hamilton EMS has until June 9, 2011 to provide the MOHLTC with a work plan to address the MOHLTC recommendations. Attachment C includes the MOHLTC recommendations and the Hamilton EMS ‘Service Response’ is interposed to stand as the Hamilton EMS work plan that will be submitted to the MOHLTC. At a future date the MOHLTC Service Review Team will conduct a follow up site visit to verify that Hamilton EMS has implemented the remedies to their recommendations. Hamilton EMS will provide Council with an update on the outcome of the follow up visit.

Attachment A – Overview of the MOHLTC Service Review Process
Attachment B – MOHLTC Service Review Summary Letter
Attachment C – MOHLTC Service Review Recommendations and Hamilton EMS Service Response – Proposed Work Plan
Attachment A
Overview of the MOHLTC Service Reviews Process

“The Ambulance Service Review program evaluates the success that each Service Provider has achieved in meeting the requirements of the legislation and standards. The Ambulance Service Review program is focused on ensuring that the quality of patient care and public safety is maintained. The Ambulance Service Review program does not evaluate the financial or operational management of ambulance services except where there is a direct link to the provision of patient care (e.g. purchase of supplies / maintenance of patient care equipment).”

The MOH Service Review is conducted over the span of a year including five stages that the MOH Service Review Team (SRT) conducts as follows:

1. Months in advance of a site visit the MOH SRT team conducts surveys to hundreds of key stakeholders including paramedics, CACCs, Base Hospitals, Receiving Hospitals and Senior Field Managers. The MOH SRT also engages in a comprehensive review mandatory documents supplied by EMS to the MOH SRT.

2. A three (3) day on-site visit by 10 to 15 MOH SRT investigators. During this phase the MOH SRT conducts the following interventions:
   - Interviews with EMS management and support staff; paramedics; receiving hospital emergency unit staff; base hospital staff; CACC staff; and the MOHLTC Area Senior Field Manager for Emergency Health Services Branch.
   - Documentation Review including; patient care, staff qualification, and operational files including: policies and procedures, incident reports, ambulance call reports, vehicle and equipment maintenance records, staff training records and other relevant documents.
   - Ride-outs with the paramedics to assess the provision of patient care and these observations are combined with the documented patient care information provided by the crews and feedback from the receiving hospitals.
   - Observation and Examination by the Review Team of service vehicles, equipment and documents.

3. The MOH SRT team hosts an exit interview to convey preliminary findings.

4. The MOH SRT months later provides a detailed written report with findings and recommendations. EMS is required to respond within 30 days with a plan to address the recommendations.

5. The MOH SRT does a follow-up site visit to verify that the action plan has been implemented in a manner satisfactory to the MOHLTC.
May 6, 2011
Mr. Brent Browett
Director of EMS
Hamilton Emergency Services
55 King William Street
Hamilton, ON L8R 1A2
Dear Mr. Browett:

Enclosed is the Ambulance Service Review draft report that is the result of the Review conducted at the City of Hamilton Emergency Medical Services during the period May 4-6, 2010.

The Review Team found that overall the City of Hamilton Emergency Medical Services meets the certification criteria and the legislated requirements. Please review the draft report and respond to the recommendations that relate to areas where improvement is necessary. The recommendations herein require immediate attention in order for your service to fully comply with the certification criteria. Please respond in writing, within 30 days of receipt of this letter, providing your comments, a plan and a timeline for addressing these deficiencies. We encourage you to consult with your Senior Field Manager when preparing to respond to the recommendations.

It is necessary that your service meets the requirements of the Ambulance Service Review in order to recommend that the City of Hamilton Emergency Medical Services be issued a renewed certificate to operate an ambulance service.

Sincerely,

Michael Bay
Manager, Inspection, Certification and Regulatory Compliance

Cc: Mr. Chris Murray, City Manager, The City of Hamilton
Mr. Jim Kay, General Manager, Hamilton Emergency Services
Mr. Malcolm Bates, Director, Emergency Health Services Branch
Dr. Tony Campeau, Senior Manager, Operations, EHSB
Ms. Jill Ackerman, Senior Field Manager, Southwest Field Office, EHSB
Dr. David Reeleder, Manager, Performance Improvement, EHSB
Introduction

The Ambulance Act (the Act) stipulates that no person shall operate an ambulance service unless the person holds a certificate issued by the certifying authority. The Act further stipulates that a person shall be issued a certificate by the certifying authority only if the person has successfully completed the certification process prescribed by the regulations. This Service has been in operation since August 1, 2000. The certificate for Hamilton Emergency Medical Services expires on October 29, 2010. As required, and in order to renew their certificate, Hamilton Emergency Medical Services participated in an Ambulance Service Review by the Ambulance Service Review Team on May 4-6, 2010.

The purpose of the Ambulance Service Review is to ensure Hamilton Emergency Medical Services operates in a manner consistent with the Land Ambulance Certification Standards and in compliance with the legislation.

Hamilton Emergency Medical Services operates from twelve ‘Start-Stop’ stations and six Rest Stations, including headquarters and provides Primary and Advanced Care Paramedic patient care. The Service responded to approximately 65,382 calls in 2009. The Service has twenty-one front line ambulances, ten mechanical spares, fifteen emergency response vehicles, two emergency support units and four administrative vehicles. The Service provides ambulance service to the residents of the City of Hamilton as well as the surrounding area.

Headquarters is located at 489 Victoria Street South in Hamilton. Hamilton Emergency Medical Services is dispatched by Hamilton CACC and has operational dealings with Hamilton Health Sciences Base Hospital.

In general, the site review found that Hamilton Emergency Medical Services has substantively met the requirements of the Land Ambulance Certification Standards. This draft report is the result of the Review Team findings and contains legislated mandatory recommendations and Quality Assurance or best practice recommendations to assist the Service Provider to ensure the provision of high quality delivery of service to the community.

The Service is to be commended for making staff available to the Review Team to respond to any recommendations or areas of non-compliance. The Review Team would like to thank Hamilton Emergency Medical Services staff for their assistance throughout the review.

The Review found that on this occasion Hamilton Emergency Medical Services meets the requirements of the Land Ambulance Certification Standards.
Review Findings and Recommendations

Hamilton Emergency Medical Service is to be commended for its efforts in the following areas:

- Well organized employee files.
- Innovative response to hospital off load delays.
- Detailed policy and procedure manual.
- Thorough preparation for ambulance service review.

The following areas require attention so that Hamilton Emergency Medical Services may make further improvements to ensure delivery of quality ambulance service:

- Level of Service (see recommendation 1);
- Employee Qualifications (see recommendations 2, 3, 4);
- Staffing (see recommendations 5, 6, 7);
- Documentation (see recommendations 8, 9, 10, 11);
- Training (no recommendation);
- Service Review Program (no recommendation);
- Patient Care (see recommendation 12, 13);
- Vehicles (see recommendations 14, 15, 16 17);
- Patient Care Equipment (see recommendations 18, 19, 20);
- Policy and Procedure (no recommendation);
- Operations (see recommendation 21); and
- Liaison/Communication (no recommendations)

Recommendations

The Ambulance Service Review found that the following areas require attention in order that Hamilton Emergency Medical Services may make ongoing improvement towards ensuring delivery of high quality ambulance service.

Recommendations in **BLUE (and noted as ‘legislated’)** signify the subject matter is a legislated requirement and must be accommodated by the Ambulance Service Provider.

Recommendations in **MAROON (and noted as ‘best practice’)** signify the subject matter is a Quality Assurance best practice that indicates a Service Provider has the measures in place to move toward achieving full compliance with a legislated requirement and is provided to recognize the Service Provider’s attempt to be compliant and to ensure optimal delivery of service to the community.

The foregoing includes the MOHLTC Recommendations and immediately following the HEMS proposed response to those recommendations.

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Values: Honesty, Accountability, Innovation, Leadership, Respect, Excellence, Teamwork
Level of Service (see recommendation 1)

1. The Service Provider must ensure that the response time standard shall not be of a longer time duration than the 90th percentile response time standard for priority four emergency calls set by the operator who provided land ambulance and emergency response service in the area in 1996 while they continue to develop their response time performance plan (Legislated).

Service Response: The City of Hamilton is committed to reducing the response time, and in 2010 there were a number of months that Hamilton EMS performed better than the 1996 standard and the HEMS put more street hours on the road than any other years since 2000. The longest interval of an ambulance call in Hamilton is the time spent in the hospital and this is and will continue to be the focus of attention of HEMS to recover unit hours in 2011 and in 2012 HEMS will be implementing the new provincial response time plan.

Employee Qualifications (see recommendations 2, 3, 4)

2. The Service Provider must have a record indicating that each type paramedic is immunized according to Table 1 Part A, of the Ambulance Service Communicable disease Standard (Legislated).

Service Response: Since the May 4-6, 2010 MOHLTC visit; HEMS has addressed this matter with all staff that were outstanding. In addition, HEMS implemented an annual process so each June the HEMS Data Coordinator will conduct a self-audit of the applicable records and provide an aggregate report to the HEMS managers for review and resolution of any gaps.

3. The Service Provider must ensure a personnel record is maintained for each employed emergency medical attendant and paramedic and that the record shall include evidence of qualification as described in Part III of Regulation 257/00 (Legislated).

Service Response: Since the May 4-6, 2010 MOHLTC visit; HEMS has addressed this matter with all staff that were outstanding. In addition, HEMS implemented an annual process so each June the HEMS Data Coordinator will conduct a self-audit of the applicable records and provide an aggregate report to the HEMS managers for review and resolution of any gaps.

4. Job description changes should be communicated to and signed off by staff (Best Practice).

Service Response: Since the May 4-6, 2010 MOHLTC visit; HEMS has addressed this matter with all staff. In addition, if there are any future job description changes they will be communicated via an in-house education delivery and audit tool and we can electronically verify compliance.

Staffing (see recommendations 5, 6, 7)

5. The Service Provider should ensure section A, B and C or each identification card application submitted to the EHSB’s Policy and Operational Assessment Unit are fully completed (Best Practice).

Service Response: HEMS will conduct a trial to have an outside delegate review the applications for completeness prior to submission, similar to the copy editor concept,
while exploring adapting the MOHLTC application to an electronic form that cannot be submitted unless all required fields are complete.

6. The Service Provider must return to the EHSB’s Policy and Operational Assessment Unit the identification card held by each employee upon their release from employment (Legislated).

**Service Response:** HEMS is committed to make all reasonable attempts to recover the MOHLTC identification card from the employee. From time to time the employee may refuse to provide the employer with the MOHLTC identification card. If the employer is not able to convince the past employee to return the card to the MOHLTC the employer will pick up the identification card.

7. The Service Provider should advise the EHSB’s Policy and Operational assessment Unit in a timely manner of the termination dates of employees who have left the service (Best Practice).

**Service Response:** HEMS will establish a continuous quality improvement process to measure the number of days it takes for the HEMS Data Coordinator’s office to notify the EHSB when an employee leaves the service with a target that it is completed within 7 calendar days in 9 out of 10 occurrences.

**Documentation (see recommendations 8, 9, 10, 11)**

8. The Service Provider must ensure that Ambulance Call Reports will be completed as per the Land Ambulance Documentation Standards (Legislated).

**Service Response:** HEMS will enhance the continuous quality improvement process to regularly verify that each HEMS supervisor is conducting the required number of audits each month of the ambulance call reports from their assigned staff, and that the managers are doing the same regarding their assigned supervisor’s performance. In addition, in 2011 HEMS will be introducing an electronic ambulance call report that has closed call rules built into the program that will perform some electronic auditing.

9. The Service Provider must ensure that copies of completed Ambulance Call Reports for all patient carrying and patient refusal of service calls will be distributed within 48 hours of completion of the call, as follows (Legislated):.

• The original copy of the completed ambulance call report will be left with the receiving hospital staff who is taking over responsibility for the patient (with the exception of patient refusal of service calls),

• A copy as designated will be distributed to the base hospital,

• A copy as designated will be distributed to the department or office that is responsible for billing (with the exception of patient refusal of service calls),

• A copy as designated will be retained by the service operator.

**Service Response:** Since the May 4-6, 2010 MOHLTC visit; HEMS has modified our processes as it applies to the distribution of Ambulance Call Reports (ACRs). To address the delivery of the ACR within 48 hours the HEMS supervisor now assigns modified staff take completed ACRs to the hospitals and the paramedics have been reminded of their professional obligation. Complementing this process HEMS has an on-duty Platoon Manager 24-7 that can assist with locating an ACR if the hospital requires a particular copy. Recently the process for sending ACRs to the Base Hospital has also been improved. Finally in the last quarter of 2011 HEMS will be introducing an electronic ambulance call report and this will facilitate more timely completion and
delivery of completed forms.

10. The Service Provider must ensure that patient care is provided in adherence to the BLS/ALS Standards (version 2) dated January 2007, and that completed ACRs reflect patient care was provided in accordance with the BLS/ALS Standard (Legislated).

**Service Response:** Since the May 4-6, 2010 MOHLTC visit; HEMS has reminded staff of their professional patient care obligation. In addition, all supervisors and managers have been reminded of their professional accountability for the activity of their assigned staff in meeting these requirements. In key areas of perceived or real challenges was the focus of the HEMS spring 2011 continuing education sessions and there is a renewed focus on street service supervision and support.

11. The Service Provider must ensure that Incident Reports will be completed as per the Land Ambulance Documentation Standards (Legislated).

**Service Response:** HEMS will enhance the continuous quality improvement process to regularly verify that each HEMS supervisor is conducting the required number of monthly audits of the incident reports from their assigned staff, and that the managers are doing the same regarding their assigned supervisor’s performance. In addition, HEMS is exploring the introduction of an electronic incident report that will have closed call rules and therefore performing some electronic auditing. HEMS will explore a means to enhance the supervisor resources to lead improvements in patient care and documentation standards.

**Patient Care (see recommendation 12, 13)**

12. The Service Provider should enforce the service seat belt policy (Best Practice).

**Service Response:** HEMS has sent reminder educational notices to all staff on the value and requirement of these systems. HEMS will conduct a trial to measure the effectiveness of implementing a continuous quality improvement process that will involve adding to the monthly health and safety station inspections a requirement to observe the on duty staff utilization of the vehicle restraint systems.

13. The Service Provider will ensure each item of equipment transported in an ambulance or ERV is properly restrained to protect against projectiles in the event of an unforeseen incident (Legislated).

**Service Response:** HEMS has sent staff reminder educational notices highlighting the public and staff safety value of properly restraining equipment in the vehicles, and reinforcing that this is a service and MOHLTC requirement. HEMS will conduct a trial of having the health and safety inspection team add random checks of equipment restraint systems to the monthly health and safety inspections.

**Vehicles (see recommendations 14, 15, 16 17)**

14. The Service Provider must have a letter signed by the Director, EHSB from each vehicle manufacturer or conversion vendor certifying that each vehicle used in the provision of ambulance service meets the Emergency and Response Vehicle Standard (Legislated).

**Service Response:** Since the May 4-6, 2010 MOHLTC visit; HEMS has verified this obligation has been met and all required documents are on file. In addition an annual self-audit is being implemented to ensure that this obligation is being continuously maintained.
15. The Service Provider must ensure that each vehicle used as an ambulance or emergency response vehicle shall contain as a minimum the accessory and patient care equipment and supplies as set out in the Provincial Equipment Standards for Ontario Ambulance Services (Legislated).

**Service Response:** Since the May 4-6, 2010 MOHLTC visit, HEMS has reminded staff that they are required to maintain adequate equipment and supplies at all times in their vehicles. HEMS have on-duty 24-7 an operations supervisor in each of the 3 districts in the city. HEMS has implemented the requirement that every shift the supervisor in that district must visit each station in their district and check the vehicles associated with that district over the course of their scheduled tour, and they are now required to document that activity in their shift report. In addition, if HEMS implements a vending machine supply of stock as noted in Response #19, automated alerts will be sent to HEMS management when key items are missing.

16. Ambulance 2214 must have ID numbers displayed on the front of the vehicle (Legislated).

**Service Response:** Since the May 4-6, 2010 MOHLTC visit; HEMS has verified this obligation has been met. HEMS have verified with the HES mechanical divisions this mandatory requirement and have implemented an annual continuous quality improvement process to ensure that this obligation is maintained and reviewed this requirement with HEMS staff responsible for this matter.

17. Vehicles should be locked when the paramedics are away from the vehicle for extended periods of time (Best Practice).

**Service Response:** HEMS has sent to staff reminder educational notices highlighting the public and staff safety value of locking and securing the vehicles and HEMS has reinforced that this is an HEMS and a MOHLTC requirement. HEMS will conduct a trial of having the health and safety inspection team add random checks of vehicle locks to the monthly health and safety inspections.

18. Patient care equipment and supplies should be prevented from exposure to contamination or excessive heat or cold and in a manner that protects it from exhaust and particulate contamination (Best Practice).

**Service Response:** Since the May 4-6, 2010 MOHLTC visit, all HEMS staff have been reminded of their obligation to limit the patient compartment of the vehicles from being exposed to extremes in temperature including keeping garage doors closed during cold burst. At the main station an alarm has been installed if the garage door remains open any longer than 5 minutes. HEMS will establish seasonal reminders to staff of the importance of this undertaking. HEMS is currently conducting a trial of new on-board vehicle technology that will allow the vehicle to continuously cool and or heat the patient compartment with minimal idling requirements.

19. Additional patient care supplies, including oxygen cylinders should be readily accessible to emergency medical attendants and paramedics (Best Practice).

**Service Response:** Since the May 4-6, 2010 MOHLTC visit; HEMS has reminded staff that equipment and supplies are available 24-7 from various locations geographically spaced throughout the city. In addition they have been reminded that 24-7 each of the 3...
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districts in the city has a supervisor that is a mobile supply of stock that can be summoned to assist with any real or perceived gaps, including oxygen. In addition, staff has been reminded that an on-duty platoon manager is available 24-7 to assist with any perceived supply concerns. Finally, 24-7 the HEMS administrator on-call has full access to 3 months of supply of any key items if required. That notwithstanding HEMS will explore introducing vending machines at key locations to further enhance access 24-7 to supplies and consider acquiring vehicle cleaning and supply support. Front line staff has been reminded of their personal obligation to maintain adequate supplies and acquire stock when the opportunities occur between calls and to notify their immediate supervisor if stock at a station needs to be replenished.

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<tr>
<th>20. The Service Provider should ensure expired medications are disposed of according to service policy (Best Practice).</th>
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<td><strong>Service Response:</strong> Since the May 4-6, 2010 MOHLTC visit; HEMS has reminded staff that they are required every shift to check to ensure that none of their supplies have expired. HEMS have on-duty 24-7 an operations supervisor in each of the 3 districts in the city. HEMS have implemented the requirement that each operations supervisor must check the vehicles associated with their district over the course of their scheduled tour and document that activity in their shift report. This check includes a random sample check for expired medications no less than one vehicle per tour. In addition, if HEMS implements a vending machine supply of stock as noted in Response #19, automated alerts will be sent to HEMS management when key items are expiring.</td>
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- **Operations (see recommendation 21)**

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<th>21. The Service Provider must ensure that each emergency medical attendant and paramedic follows every direction or instruction issued by a communications officer with respect to the assignment of calls (Legislated).</th>
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<td><strong>Service Response:</strong> Since the May 4-6, 2010 MOHLTC visit; HEMS has reminded staff of this requirement. The HEMS supervisors and managers have been instructed that they are to maintain continuous situational awareness and ensure that their assigned staff is aware of this obligation and adhere to it. This position has been reiterated with the MOHLTC CACC including a request that any real or perceived breach be immediately brought to the attention of HEMS management for review.</td>
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