

# The County of Peterborough

Appendix B

## County Council

To: Warden and Members of Council  
From: Bob English, Chief, Emergency Medical Services  
Date: September 22, 2010.

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**Subject: EMS Legislated Response Time Reporting Changes**

**Recommendation:** That County Council endorse the EMS Response Time plan to be submitted to the MOHLTC as outlined in this report.

**Financial Impact:** Nil.

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**Background/Analysis:**

In 2006, in consultation with AMO, the province established a Land Ambulance Committee (LAC) to review ambulance response time standards. On July 31, 2008, changes were made to the Ambulance Act, Ontario Regulation 267/08, amending Ontario Regulation 257/00 with the heading Section 22: Part VIII, Response Time Performance Plans, Section 22 and 23. These changes were to be phased in over three years and will be fully in effect in 2011 with reporting requirements starting in October 2010. A copy of the new regulation is attached.

The County is to submit their Response Time Plan to the MOHLTC, Emergency Health Services Branch (EHSB) no later than October 31 of each year (Section 23 (5) including performance targets for sudden cardiac arrest, CTAS 1, CTAS 2,3,4 and 5. By March 31<sup>st</sup> of each year the same table with the actual times achieved in the year will be reported to the MOHLTC.

The Canadian Triage and Acuity Scale (CTAS) is a priority setting scale to describe the severity of a patient's condition. In this scale, "CTAS 1" is the most serious with "CTAS 5" being the least.

The previous emergency response time standard had been based on 1996 performance that differed for each upper tier municipality. Since then the ambulance system and associated demands have changed. The new regulation provides flexibility for each County to establish their own percentages of time that they expect to meet their target times considering their local resources. In some categories Counties can establish their own targets in both time and percentage.

The 1996 90<sup>th</sup> percentile response time measurement of 19 minutes establishes that 90 of every 100 calls were responded to in less than 19 minutes. The new reporting process simply restates this performance in relation to a set time, again, as a percentage of calls. Specifically, Sudden Cardiac Arrest responses will have a target of 50% of the responses having a defibrillator on scene within 6 minutes; 66% of CTAS 1 responses will have a paramedic resource on scene within 8 minutes; and, all other emergency calls 65% within 10 minutes.

Regarding both the old and new processes, the times identified to the province are applicable to the entire service area of Peterborough County/City EMS. There are no provisions in the regulations to provide for variations in population or call volume density. It is important to note that response time performance is increased in densely populated areas. The response time performance reported is an amalgamation of responses throughout the service area, and expectations should be tempered as such.

Under this new regulation, Counties will be credited when any defibrillator is used to assist a victim of sudden cardiac arrest including any of our Public Access Defibrillators (50) currently in place. They will be considered a “clock stopper”.

With this new regulation, the response times will be measured based on the severity of the response as found by the paramedic arriving on scene (vs. how it was dispatched). This is similar to how medical evaluations are currently triaged at local ER departments. This is intended to continue to pursue system improvements to more accurately identify patient’s greatest needs.

It is suggested that the new Response Time Plan reflect current performance elements, so that a year over year benchmarking of response times can be evaluated.

Attached is a summary of information and our recommendation.

Respectfully submitted,

Originally signed by

Robert S. English  
Chief



## 2010/11 Land Ambulance Response Time Standard Plan

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*At present there is not a consensus among EMS providers as to what time period is deemed appropriate nor is there available medical evidence known by PCEMS to assist in the establishment of an appropriate period of time for this plan.*

### **Establishment of Response Time Plan:**

In an attempt to establish response time plan targets that are realistic and appropriate, a retrospective review was performed applying the mandated targets of the new response time plan to the response time performance over the past several years. Problems that arise in utilizing this data include:

- ▶ Inconsistent data obtained through Lindsay CACC dispatch data system;
- ▶ Limited data available regarding defibrillator equipped arrival times (Fire or Public Access Defibrillator – PAD Program);
- ▶ Recent growth of PTBO EMS coverage with several enhancements to EMS coverage over the past 3 years;
- ▶ Deployment plan and strategy adjustments to address growing response times;
- ▶ Variables effecting response such as Ambulance Offload Delay pressures;
- ▶ Previous 90<sup>th</sup>% response time benchmark addressed Code 4 (Emergency Response) only. The new response time standard plan is based on CTAS category as assessed by paramedic on arrival regardless of dispatch priority.

Given the many variables affecting the response time, it is the opinion of EMS Management that the most appropriate material to use to set the new response time targets would be based on the response times achieved in by Peterborough EMS in 2009.

Response time options based on 2009 performance are as follows:

- ▶ Arrival of **Defibrillator Equipped Responder** to the location of a patient determined to be in sudden cardiac arrest within 6 minutes from the time ambulance dispatch conveys the call information to the paramedic:
  - **50 %** - based on 2009 performance of 43%, not inclusive of Fire Department Tiered Response, PAD programs and future efficiencies.
- ▶ Arrival of **Paramedic** to the location a patient determined to be CTAS 1, from the time ambulance dispatch conveys the call information to the paramedic.
  - **66%** - based 2009 performance.
- ▶ CTAS 2, 3, 4 & 5
  - Based on the 2009 performance and in consideration of the lack of consensus and/or guidance as to “appropriate” period of time to set as a target, and in consideration of the enhancements coupled with recent trends of improved response times in Peterborough County, EMS Management has proposed the following options for response time targets for patients in this category:

Option #1	CTAS	Target Time (minutes)	Target %	2009 Performance
	2	18:00	90%	17:55
	3	18:00	90%	18:59
	4	18:00	90%	18:43
	5	18:00	90%	15:50
Option #2	CTAS	Target Time (minutes)	Target %	2009 Performance
	2	8:59	60%	63%
	3	8:59	60%	59%
	4	8:59	60%	56%
	5	8:59	60%	58%
Option #3	CTAS	Target Time (minutes)	Target %	2009 Performance
	2	9:00	Average	8:56
	3	9:00	Average	9:23
	4	9:00	Average	9:46
	5	9:00	Average	9:18
Option #4	CTAS	Target Time (minutes)	Target %	2009 Performance
	2	10:00	65%	68%
	3	10:00	65%	65%
	4	10:00	65%	63%
	5	10:00	65%	65%

## **Summary of Options:**

Option #1 – This option is to essentially report an updated 90<sup>th</sup>% Response Time which is very similar to the currently reported 1996 Benchmark. This option allows for ease of reporting and a degree of familiarity for stakeholders. While meets the requirements of the new Response Time Standard this option does not address the Response Time Standard Working Group’s conclusion that the current land ambulance certification standard regarding response times was out of date and in need of change.

Option #2 – This option is based on a target response time of 8:59 – 90% of responses. While this target has been widely by many urban service providers across North America and is based largely on studies of patient outcomes related to early response to cardiac arrest victims. In consideration that the new Response Time Standard does not differentiate between urban, rural or remote responses, it is the opinion of staff that an 8:59 response time target is not a realistic goal for a county with geographically diversity such as Peterborough County.

Option #3 – This option utilizes past performance and current deployment strategies to project an overall average response time to CTAS 2,3,4 & 5 patients. The benefits of this option include a familiarity and ease of understanding for stakeholders and it allows for a similar reporting structure to allied agencies such as the Fire Services who generally report response time averages. The difficulty with reporting the average response time for Peterborough’s diverse coverage area is that the high urban call volume is such that the average response time becomes unrealistic in the rural areas. The reported data may result in unrealistic expectations for rural stakeholders.

Option #4 – This option includes a reported target response time goal of 10:00 with a target achievement of 65% based on past performance and future deployment strategies. This target is interpreted by staff to be a more realistic time frame with achievable parameters given the unique performance elements of Peterborough County.

## **Recommendation:**

Based on the information summarized above, EMS staff recommends that Option #4 be adopted and reported as the EMS Response Time Plan to be reported on October 1, 2010 for the calendar year of 2011, as mandated by Ontario Regulation 267/08 of the Ambulance Act.

- ▶ ***50 percent of the time, within 6 minutes from the time ambulance dispatch conveys the call information to the paramedic, the County of Peterborough will endeavour to have a responder equipped and ready to use an AED at the location of a patient determined to be in sudden cardiac arrest.***
- ▶ ***66 percent of the time, within 8 minutes from the time ambulance dispatch conveys the call information to the paramedic, the County of Peterborough will endeavour to have a PARAMEDIC as defined by the Ambulance Act and duly equipped at the location of a patient determined to be CTAS 1.***
- ▶ ***The County of Peterborough will endeavour to have a PARAMEDIC as defined by the Ambulance Act and duly equipped at the location of a patient determined to be CTAS 2, 3, 4, 5 within a period of time as noted below, or as resources permit:***

<b>CTAS</b>	<b>Target time from paramedic received until on scene (min.)</b>	<b>% Target</b>
2	10:00	65
3	10:00	65
4	10:00	65
5	10:00	65