

# EMERGENCY MEDICAL SERVICES (EMS)

## SNAPSHOT MEDIANS FOR 2016

### RESPONSE TIME



911 CALL TO DISPATCH

EMDS480 (COMMUNITY IMPACT)

Ambulances spend

**19.8%**  
of operational time at the hospital

EMDS150 (COMMUNITY IMPACT)

Ambulance service cost:  
**\$217/hour**

EMDS306T (EFFICIENCY)



### KEEP IN MIND: Influencing Factors

Influencing factors can create variances in comparison data from year-to-year and from municipality-to-municipality.



#### Demographics

Age and health status of population have an impact on calls



#### Dispatch

System, processes and governance impact effectiveness and efficiency



#### Geography

Urban vs. rural areas



#### Governance

Local strategy and Provincial regulations



#### Hospital Delay

Lengths of delays off-loading patients



#### Non-Residents

Measures are based on municipal population and do not include non-residents



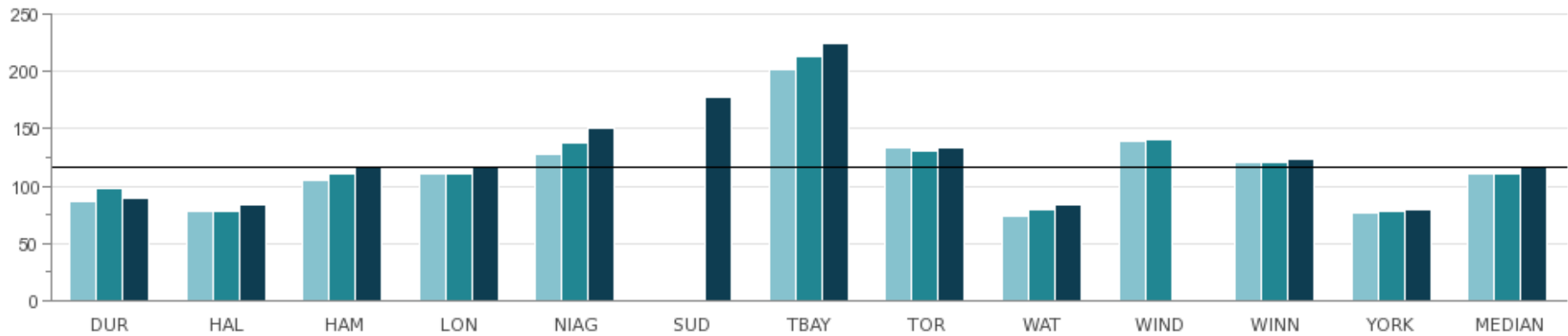
#### Vehicle Mix

Vehicle type and staffing requirement

For a full description of influencing factors, please go to: [www.mbnccanada.ca](http://www.mbnccanada.ca)

**Fig. 8.1 Unique Responses per 1,000 Population**

This measure refers to the number of unique events responded to by Emergency Medical Services (EMS). This does not reflect the total number of EMS vehicles responding to events.

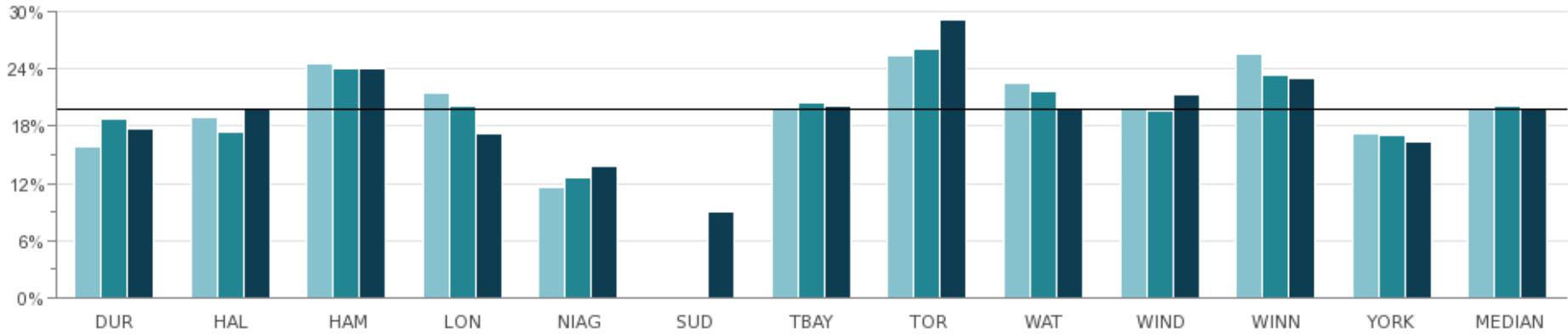


2014	87	78	105	110	128	N/A	202	133	74	139	121	77	110
2015	98	78	110	111	138	N/A	213	130	79	140	120	78	111
2016	90	83	116	117	151	177	225	133	84	N/A	123	80	117

Source: EMDS229 (Service Level)

**Fig. 8.2 Percent of Ambulance Time Lost to Hospital Turnaround**

Time spent in hospital includes the time it takes to transfer a patient, delays in transfer care due to lack of hospital resources (off-load delay), paperwork and other activities. The more time paramedics spend in the hospital process equates to less time they are available to respond to calls.

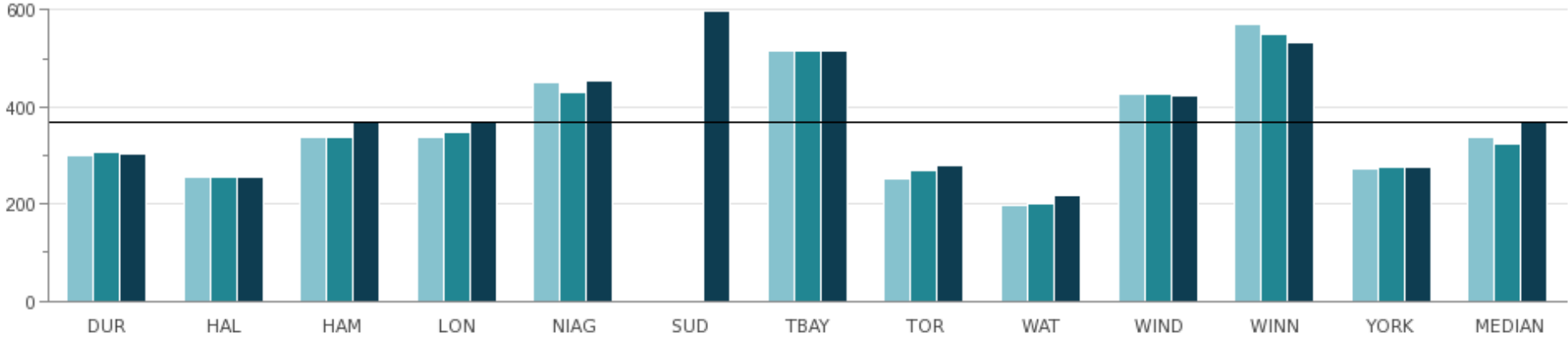


2014	15.9%	19.0%	24.5%	21.5%	11.5%	N/A	19.9%	25.5%	22.5%	19.7%	25.6%	17.3%	19.9%
2015	18.7%	17.4%	24.1%	20.1%	12.6%	N/A	20.5%	26.1%	21.6%	19.6%	23.4%	17.0%	20.1%
2016	17.7%	19.7%	24.0%	17.2%	13.8%	9.0%	20.2%	29.2%	19.9%	21.4%	23.1%	16.3%	19.8%

Source: EMDS150 (Community Impact)

**Fig. 8.3 EMS Weighted Vehicle In-Service Hours per 1,000 Population**

'In-Service Hours' refers to only the hours that vehicles are available for service.

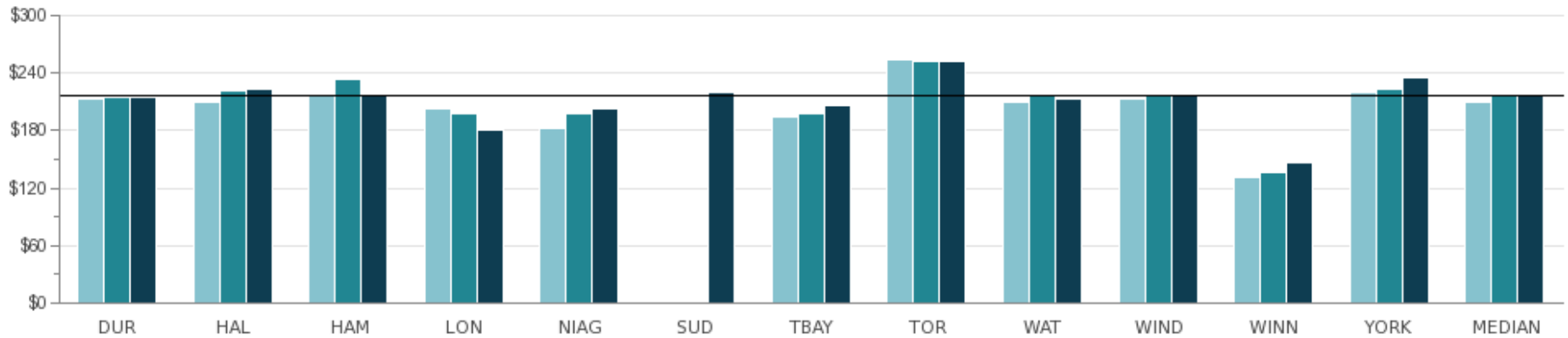


2014	300	257	336	337	451	N/A	515	253	198	427	571	272	336
2015	307	254	338	349	431	N/A	514	269	199	427	551	276	338
2016	303	255	373	367	455	596	515	279	219	422	531	275	370

Source: EMDS226 (Service Level)

**Fig. 8.4 EMS Total Cost per Weighted Vehicle In-Service Hour**

'In-Service Hour' refers to only the hours that vehicles are available for service. Costs include paramedic, administrative, medical supply, building, operating, supervision and overhead.



2014	\$214	\$210	\$217	\$203	\$182	N/A	\$194	\$254	\$209	\$213	\$131	\$220	\$210
2015	\$215	\$221	\$234	\$197	\$198	N/A	\$198	\$253	\$217	\$219	\$137	\$223	\$217
2016	\$215	\$223	\$218	\$181	\$203	\$220	\$207	\$252	\$213	\$219	\$146	\$235	\$217

Source: EMDS306T (Efficiency)

**Fig. 8.5 Response Time Performance Standard – Canadian Triage & Acuity Scale 1**

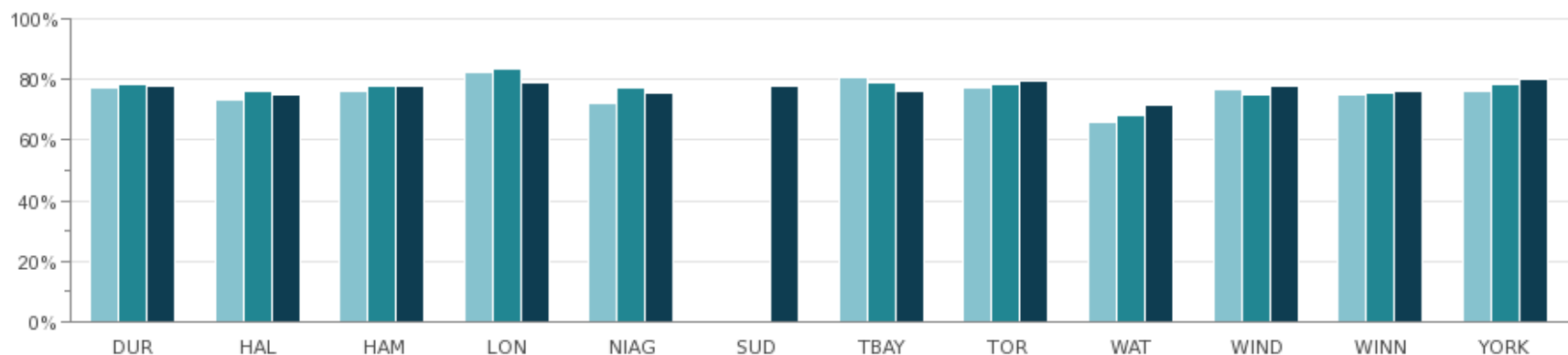
The percentage of time an ambulance crew arrive on scene to provide ambulance services to sudden cardiac arrest patients or other patients categorized as CTAS 1, within eight minutes of the time notice is received respecting such services.

The Canadian Triage & Acuity Scale is a standardized tool that enables emergency departments and Paramedic services to prioritize care requirements according to the type and severity of the presenting signs and symptoms. Patients are assigned a CTAS level between 1 – more severe, life threatening; and 5 – least severe.

Target Percentage: Each service is able to determine and set the percentage of compliance for this measure.

The response time is calculated based on the crew notified (T2) time of the first vehicle being notified of the call and the arrived scene (T4) time of the first vehicle to reach the scene.

Actual Percentage: The percentage of time that an ambulance crew has arrived on-scene to provide ambulance services to sudden cardiac arrest patients or other patients categorized as CTAS 1 within eight minutes of the time notice is received respecting such services.



TARGET	75.00%	75.00%	75.00%	75.00%	80.00%	80.00%	70.00%	75.00%	70.00%	75.00%	90.00%	75.00%
2014	77.28%	73.50%	76.00%	82.59%	72.10%	N/A	81.00%	77.40%	66.00%	77.00%	75.15%	76.00%
2015	78.52%	76.00%	78.00%	83.78%	77.15%	N/A	79.00%	78.70%	68.00%	75.00%	75.41%	78.70%
2016	77.78%	75.00%	78.00%	79.08%	75.66%	78.00%	76.00%	79.40%	71.70%	77.70%	76.26%	80.00%

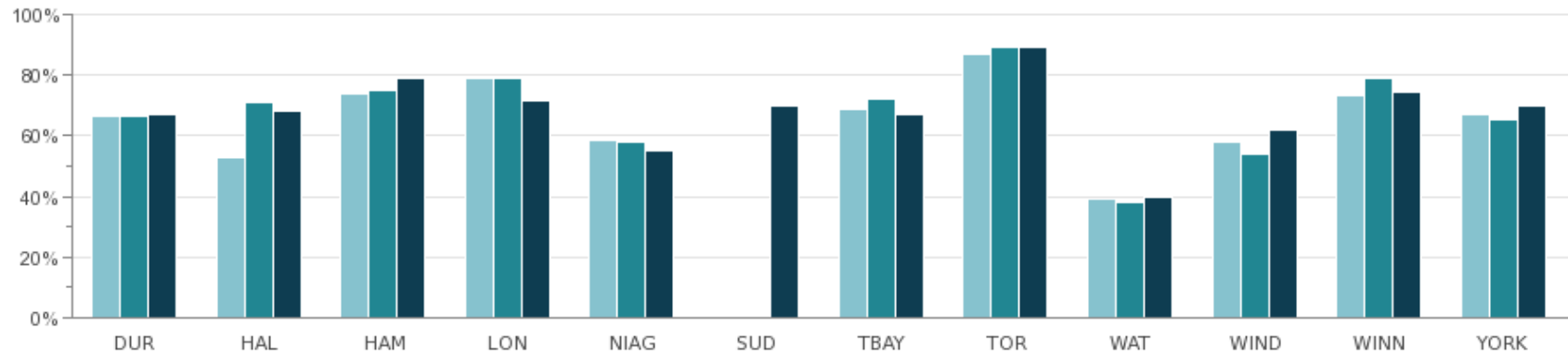
Source: EMDS431 (Customer Service)

**Fig. 8.6 Response Time Performance Standard – Sudden Cardiac Arrest Within Six (6) Minutes**

The percentage of time any person equipped with a defibrillator arrives on scene to a sudden cardiac arrest patient within six minutes of the time notice is received from dispatch.

**Target:** Each service is able to determine and set the percentage of compliance for this measure. Any person with a defibrillator stops the clock on this measure so the paramedic (service) is required to capture the time of arrival for any defibrillator by a non-paramedic party. These times are reflected at procedure code 385 with a soft time (best estimate) provided by the attending paramedic. The response time is calculated based on the crew notified (T2) time of the first vehicle being notified of the call and the arrived scene (T4) time of the first vehicle to reach the scene.

**Actual:** The percentage of time that any person equipped to provide any type of defibrillation has arrived on-scene to provide defibrillation to sudden cardiac arrest patients within six minutes of the time notice is received from dispatch.



TARGET	60.00%	55.00%	75.00%	75.00%	55.00%	70.00%	60.00%	60.00%	50.00%	55.00%	90.00%	60.0%
2014	66.67%	52.90%	74.00%	79.25%	58.80%	N/A	69.00%	87.30%	39.00%	58.00%	73.33%	67.00%
2015	66.32%	71.00%	75.00%	78.82%	57.72%	N/A	72.00%	89.60%	37.90%	54.00%	79.09%	65.50%
2016	67.31%	68.00%	79.00%	71.92%	54.97%	70.00%	67.00%	89.50%	39.90%	62.10%	74.60%	70.00%

Source: EMDS430 (Customer Service)

**Fig 8.7 90<sup>th</sup> Percentile Call Processing Time (Dispatch) – EMS TO-2 Code 4 (AMPDS 1 and 2/DE, optional in C)**

Municipality	Actual 90th Percentile Call Processing Time (Dispatch) EMS TO-2, Code 4 (AMPDS 1 and 2/DE, optional in C) (min:sec)		
	2014	2015	2016
DUR	3:07	3:17	3:21
HAL	2:49	2:49	3:02
HAM	2:59	3:01	3:07
LON	2:59	3:06	3:11
NIAG	1:58	2:00	2:03
SUD	N/A	N/A	2:44
TBAY	2:50	2:46	2:32
TOR	3:04	2:57	2:53
WAT	3:53	4:08	4:11
WIND	2:47	3:13	3:19
WINN	2:41	2:36	2:45
YORK	2:57	2:56	3:05
MEDIAN	2:57	2:57	3:03

The Ministry of Health and Long Term Care (MOHLTC) directly operates all land ambulance dispatch service in Ontario with the exception of Niagara and Toronto. Dispatch time is the time from a phone call being received to the EMS unit being notified. Code 4 refers to the highest priority calls. 90<sup>th</sup> percentile means that 90% of all calls of the service have a dispatch time within the period reflected in the graph.

Source: EMDS480 (Customer Service)