

COVID-19 Impacts on Niagara Emergency Medical Services

Public Health & Social Services Committee
PHD 5-2020

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COVID-19 Impacts on Niagara EMS

PHD-05-2020 For Information Only

Business Continuity

- uninterrupted provision of all EMS services since the onset of COVID-19

Enhanced Role in COVID Response

- NEMS continues to assume unconventional roles in response to the pandemic

System Demand

- call volume for NEMS has decreased by 9.2% compared to YTD 2019
- a decrease of ambulance offload delays by 81%

System Performance

- system performance normalized with a positive impact on response times

Business Continuity



Enhanced Role in COVID Response

Community COVID-19 Assessment and Testing (CCAT)

- a team of paramedics that provide community specimen collection (swabbing) for people who are homebound and unable to attend an Assessment Centre or their own physician
- Specialized PPE to reduce consumption of disposable supplies
- over **500** tests completed



Enhanced Role in COVID Response

Infection Prevention & Control (IPAC) Coaching & Support

- created after Public Health's observation that some long term care home and retirement home outbreaks exacerbated by improper PPE usage
- a team of paramedics training on appropriate PPE usage procedures to LTC facilities, retirement homes, Public Health Inspectors and local area municipality employees



- Over **500** trained to date

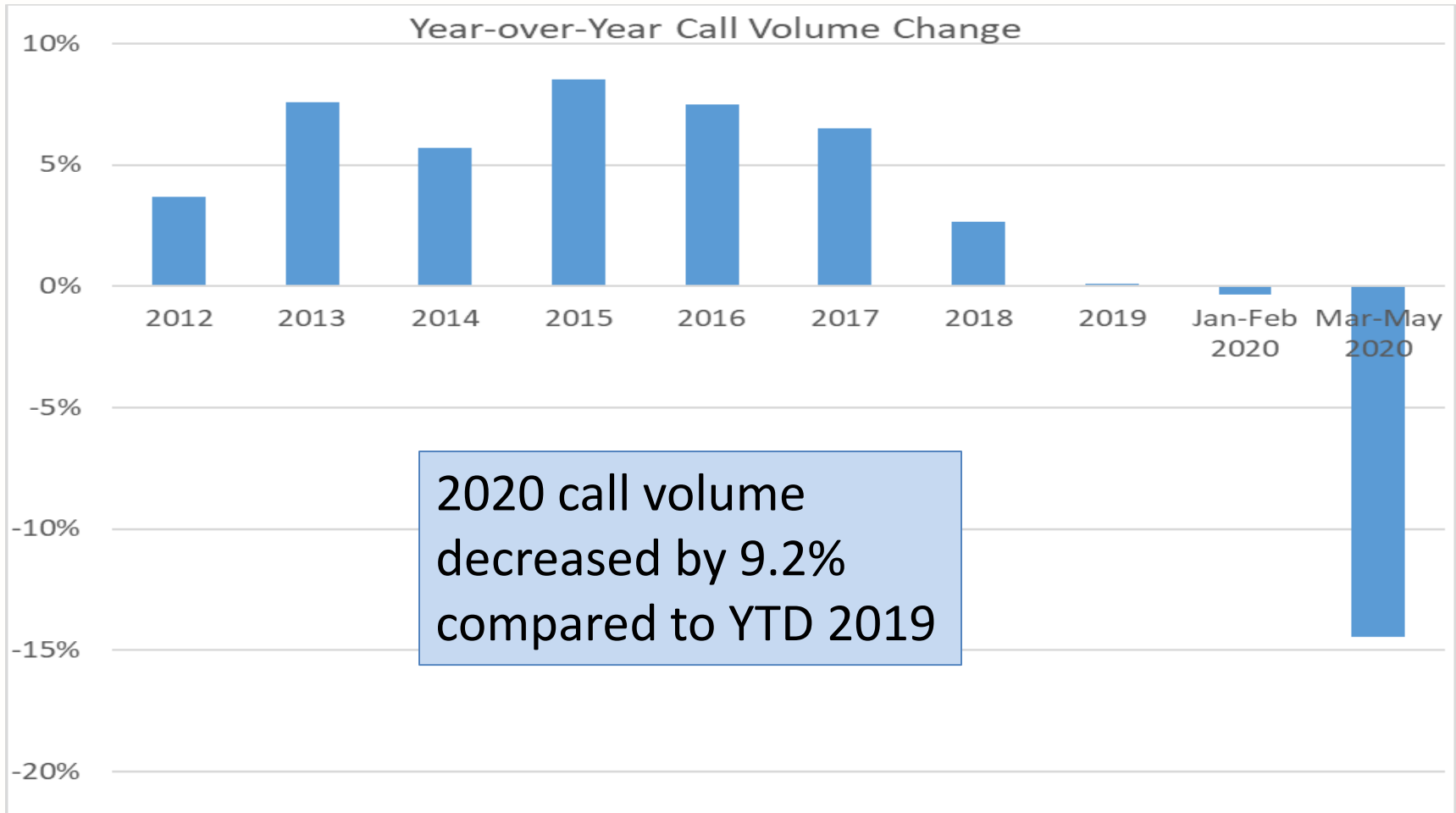
Enhanced Role in COVID Response

Pandemic Response Plan

- a modification to the allocation of EMS resources in preparation for a possible response to 911 call volume increases and/or hospital overcapacity challenges
- included the use of NEMS Emergency Call Nurses (ECN) to provide enhanced telephone triage for 911 callers under a specific Pandemic Protocol
- reduction of tiered response calls for municipal fire services from approximately 10% of all EMS calls to 3%



System Demand



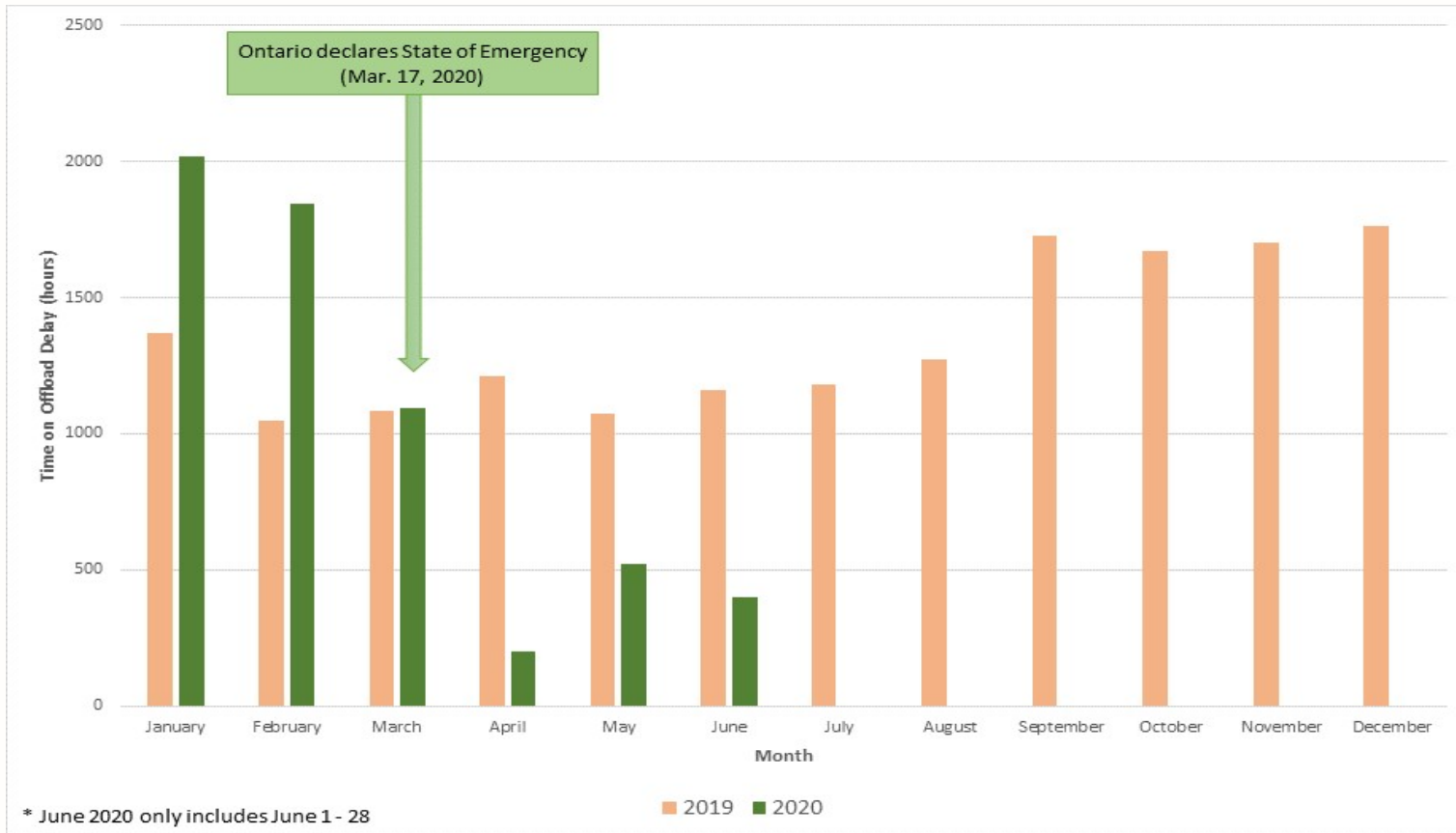
System Demand

Call Volumes by Initial Clinical Presentation

EMS Call Type (MPDS)	EMS Calls 2019 n(%)	EMS Calls 2020 n(%)	Change 2020	2020 compared to previous 4 year average
Assault/ Sexual Assault	629 (2.58)	682 (3.07)	8.4%	0.85%
Cardiac Arrest	336 (1.38)	385 (1.73)	14.6%	20.22%
Chest Pain	2007 (8.22)	1790 (8.06)	-10.8%	-6.36%
Overdose/ Poisoning	865 (3.54)	928 (4.18)	7.3%	59.18%
Psychiatric/ Abnormal Behaviour	1588 (6.50)	1426 (6.42)	-10.2%	-2.79%
Stab/Gunshot	36 (0.15)	42 (0.19)	16.7%	35.48%
Stroke	690 (2.83)	717 (3.23)	3.9%	8.19%
Total	24,424	22,212	-9.1%	-3.73%

System Demand

EMS Offload Hours per Month, 2019-2020



- First **12** weeks 2020 offload delay was **4853** hours
- Following **11** weeks since pandemic onset reduced to **909** hours

System Performance

Response time comparison for the time period pre COVID-19 and current

CTAS	Jan 1-Mar 15 (pre COVID-19) AVG	Mar 15-May 31 AVG	CHANGE	Jan 1-Mar 15 (pre COVID-19) 90th	Mar 15-May 31 90th	CHANGE	Response Time Target 90 th except as shown
Sudden Cardiac Arrest	6:36	6:05	-0:31	10:55	9:16	-1:39	6:00 55 th
1	6:56	6:10	-0:46	11:45	9:31	-2:14	8:00 80 th
2	8:57	8:31	-0:26	14:47	13:54	-0:53	15:00
3	17:43	15:32	-2:11	33:06	27:18	-5:48	30:00
4	22:31	18:28	-4:03	45:52	33:53	-7:59	60:00
5	24:20	18:58	-5:22	49:19	35:41	-13:38	120:00

With the significant reduction in offload delays, decreased call volumes and recovery of these emergency resources, for the first time since the implementation of the system transformation in Q3 of 2019, response time performance targets are able to be achieved

COVID-19 Impacts on Niagara EMS Summary

- staffing levels remain consistent for full business continuity
- ability to continue to provide specialized support services specific to COVID-19 response
- benefits of transformation to mobile integrated health model being realized – resource rationalization
- strong collaboration ongoing with Niagara Health to avoid the resumption of lengthy offloads



Thank
you

STARCARE 
Begins with me

