



Report of the Commissioner of Community and Health Services 2023 Paramedic Response Time Performance Plan Results

1. Recommendation

The Regional Clerk circulate this report to the local municipalities for information.

2. Purpose

This report informs Council of Paramedic Services Response Time Performance Plan results for 2023. It also provides an update on implementing the new Medical Priority Dispatch System at Georgian Central Ambulance Communication Centre.

Key Points:

- In 2023, Paramedic Services surpassed response time targets for all six target areas
- Responses to sudden cardiac arrests surpassed Ministry targets. Integrated community strategies involving local municipal fire services and Automated External Defibrillator Program help to improve response times for sudden cardiac arrest
- Paramedics responded to 92,473 incidents in 2023, a slight decrease from 2022
- Average hospital transfer of care times remained below the 30-minute offload target, and are comparable overall to the previous year with slight improvements at three of York Region's four hospitals
- In response to the Region's advocacy, the Ministry of Health increased funding to the Region's Dedicated Offload Nurse Program by \$856,752 to a total of \$2,386,025 in 2023/2024
- In November 2024, the Ministry of Health will launch the new Medical Priority Dispatch System at the Georgian Ambulance Communication Centre, enhancing call prioritization and dispatch to better match paramedic resources with patient needs

3. Background

Council established a response time performance plan in 2012 and reports response time performance annually to the Province

Under [Ontario Regulation 257/00](#) of the *Ambulance Act*, upper-tier municipalities that operate land ambulance services must have response time performance plans. In [September 2012](#), Council adopted the York Region Emergency Medical Services Response Time Performance Plan 2013, identifying targeted response times from Dispatch to arrival on scene.

Response times are based on the Canadian Triage Acuity Scale (CTAS), a five-level tool assessing the urgency of a patient's condition. CTAS level 1 is the most severe (resuscitation) and CTAS level 5 is the least severe (non-urgent). The Ministry of Health sets response times for sudden cardiac arrests and CTAS level 1, while municipalities set their own response times for CTAS levels 2 to 5 under Ontario Regulation 257/00.

Regulation 257/00 requires York Region to report the following performance measures to the Ministry of Health annually:

- The percentage of times anyone equipped to provide defibrillation to sudden cardiac arrest patients arrived on scene within six minutes
- The percentage of times an ambulance crew arrived on scene for CTAS 1 [level one] patients within eight minutes
- The percentage of times an ambulance crew arrived on scene for CTAS 2,3,4 and 5 patients within the response time targets set by the Region

4. Analysis

York Region Paramedic Services beat response time targets in 2023

In 2023, Paramedic Services (the Service) surpassed all six response time targets in 2023. These response time performance improvements were largely driven by the resources added as part of York Region's [Paramedic Services Master Plan, 2021 to 2031](#). Table 1 provides the 2023 response time targets and actual performance for sudden cardiac arrests and each CTAS level.

Table 1
2022 - 2023 Response Time Performance Results

Category and Examples	Target response time from Dispatch to arrival on scene	Targeted percentage to meet response times (%)	2022		2023	
			Actual (%)	Average Time (minutes)	Actual (%)	Average Time (minutes)
Sudden Cardiac Arrest Absence of breathing, pulse	Community Target: Arrival of any person equipped with an AED within 6 minutes Set by the Ministry	60	66	5:32	66	5:28
CTAS 1 - Includes sudden cardiac arrest or other major trauma	8 minutes Set by the Ministry	75	74*	7:04	76	7:07
CTAS 2 - Chest pain, stroke, overdose	10 minutes Set by York Region	80	78*	8:34	82	8:11
CTAS 3 - Moderate pain or trauma	15 minutes Set by York Region	90	89*	10:11	91	9:36
CTAS 4 – Minor trauma, general pain	20 minutes Set by York Region	90	93	12:04	95	11:12
CTAS 5 – Minor ailments, repeat visits	25 minutes Set by York Region	90	96	12:32	98	11:51

* In 2022, Paramedic Services did not meet all performance targets due to COVID-19 impacts on the Service and the health system, increased call volumes, offload delays at hospitals and cross border calls

Integrated community-based strategies help the Service improve response times for sudden cardiac arrest

Getting to a sudden cardiac arrest quickly is vital to the survival of a patient. Under Regulation 257/00 of the *Ambulance Act*, the response time to sudden cardiac arrest is measured based on the arrival on scene of a paramedic crew or any person equipped to provide any defibrillation. This includes using a defibrillator by fire services or a bystander before paramedic arrival, which can be factored into the overall performance result.

Integrated community-based strategies involving local municipal fire services and Automated External Defibrillator Programs are vital in meeting response time targets for sudden cardiac

arrest. Currently 906 defibrillators are registered with Georgian Central Ambulance Communication Centre in York Region, including 205 from the Region's Automated External Defibrillator Program. These allow dispatchers to pinpoint their location for 911 callers during emergencies.

In 2023, 19 of the 205 Regional defibrillators were used to assist individuals in medical emergencies, an 80% increase from 2022. Paramedic Services is actively working to increase awareness of Automated External Defibrillator availability in community settings. This includes outreach and promotion activities, particularly during Heart Month and National CPR and Automated Defibrillator Awareness Week. All defibrillators are registered with Dispatch, enabling them to inform the public of their availability. Additionally, there are Automated External Defibrillators located externally at all response stations to improve accessibility for the public. Supported by community-based strategies, Paramedic Services, surpassed its 60% sudden cardiac arrest target in 2023, achieving an actual performance of 66%, as indicated in Table 1.

Percentage of paramedic responses for each CTAS level in 2022 and 2023 remained stable

Patient acuity across all CTAS levels was similar in 2022 and 2023. Specifically, incidents categorized as CTAS 1, needing urgent intervention, accounted for less than 2% of incidents. CTAS 2 incidents, made up 22% of calls, typically involve urgent conditions such as stroke or heart attacks, as determined by paramedics on scene and require rapid transport to hospital. CTAS 3, at 55%, made up the majority of incidents and involved urgent conditions and physical traumas. CTAS levels 4 - 5 (minor ailments) are often addressed through Community Paramedicine initiatives, such as treating low blood sugar or seizures. This enables on-scene discharge, saving time and avoiding unnecessary hospital transport.

Table 2
2022 - 2023 Total Incidents by CTAS Level

CTAS Level	2022		2023	
	Number of Incidents	Percent of Total Responses	Number of Incidents	Percent of Total Responses
1	1,625	2%	1,509	2%
2	18,438	22%	18,058	22%
3	45,641	54%	45,516	54%
4	12,589	15%	12,671	15%
5	5,347	6%	5,736	7%
Total	83,640*		83,490*	

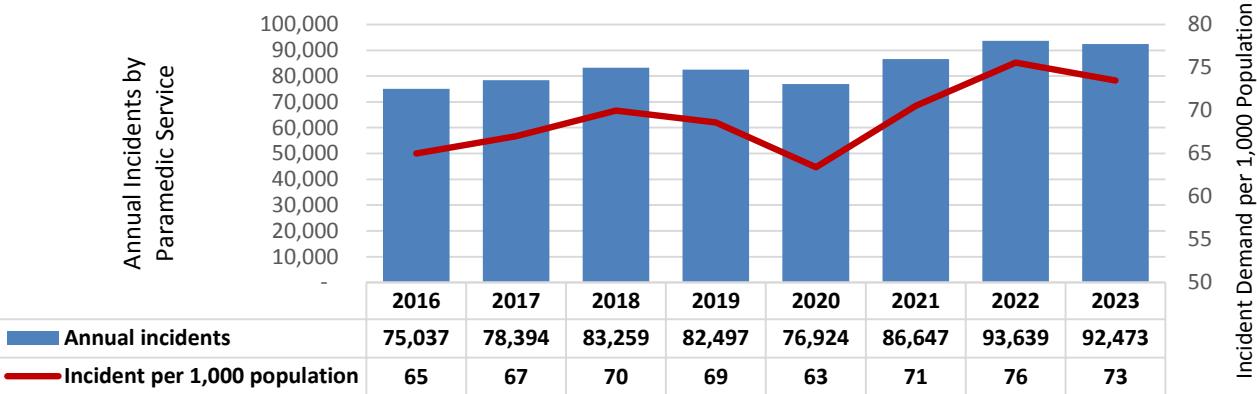
*Note: Totals only include incidents with a documented CTAS level.

In 2023 the Service responded to 92,473 incidents, a slight decrease from 2022

In 2023, the Service responded to 92,473 incidents, slightly fewer than the previous year (93,639 incidents). This can be attributed to normal variation and/or a 27% decrease (1589 calls) in out-of-region responses. For example, there were fewer cross-border calls to Peel Region due to their implementation of the Medical Priority Dispatch System and improved staffing capacity at Durham Region hospitals, which significantly impacted demand in York Region in 2022.

Figure 1 provides call volumes from 2016 to 2023. Paramedic Services received 73 calls per 1,000 residents in 2023 (compared to 76 calls per 1,000 residents in 2022 or 4% change year over year). As noted in the Paramedic Services Master Plan, 2021 to 2031, call volumes are expected to continue to increase over the long term. The Service's [community paramedicine initiatives](#), aimed at addressing healthcare needs in the community and reducing frequent 911 callers (as reported in a [2019](#) study), are expected to help manage future call demand.

**Figure 1
Paramedic Call Volume Total and per 1,000 Residents, 2016 to 2023**



Source: York Region Paramedic Services Ambulance Dispatch System

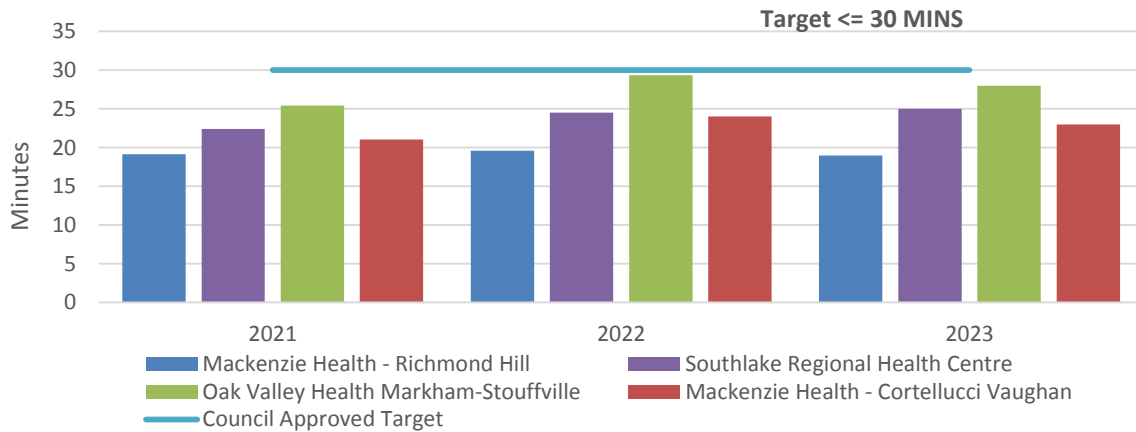
Hospital transfer of care times remained below the 30-minute target

Hospital transfer of care time refers to the average between when paramedics arrive at a hospital and when a patient is transferred from the paramedics’ care to the hospital’s care. Time over the 30-minute target is called offload delay. Shorter transfer times help get ambulances back in service faster, enabling paramedics to manage call volumes and meet response time targets.

As shown in Figure 2, average transfer of care times remained below the Region’s target of 30 minutes. Overall transfer of care times are comparable to 2022, with a slight improvement seen at all hospitals except Southlake Regional Health Centre in the Town of Newmarket, which

remained the same. Although average transfer of care times stay below the 30-minute target, they still exceed pre-pandemic levels, affecting offload delay, as discussed in the next section.

Figure 2
Average Transfer of Care Time by York Region Hospital



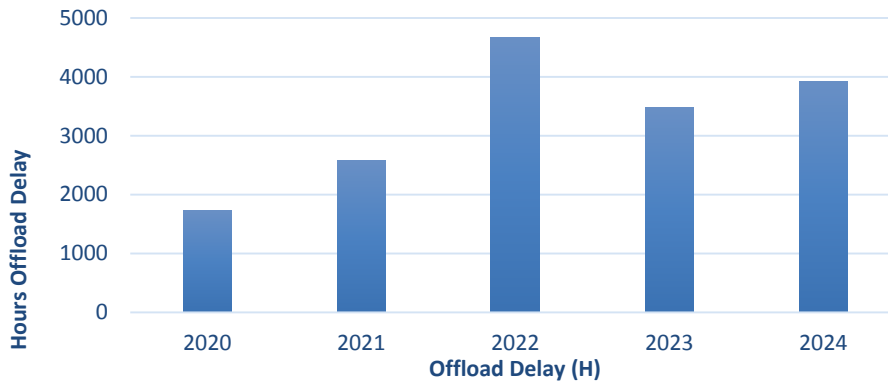
Note: Mackenzie Health – Cortellucci Vaughan opened its emergency department in June 2021
 Note: Oak Valley Health Markham-Stouffville was previously known as Markham-Stouffville Hospital

Total hours spent in offload delay has decreased significantly since 2022 but are still double the 2020 total volume

Figure 3 shows the total hours spent in offload delay at York Region hospitals (time paramedics spend over the 30-minute target for transferring care of patients to the hospital) decreased from 4,672 hours in 2022 to 3,481 hours in 2023 and is projected to be 3,919 hours in 2024. However, compared to 2020, the total hours paramedics spent in offload delays in 2023 has doubled. Every hour spent waiting in hospitals in offload delay could have been spent responding to 911 calls.

Figure 3

Offload Delay Hours at York Region Hospitals, 2020 to 2024



Through the Dedicated Offload Nurse Program, the Ministry of Health provides funding to Ontario paramedic services to reimburse hospitals for dedicated nurses to care for patients received by ambulance. The funding directly supports hospitals, enabling more nursing hours, reducing offload delay times and getting paramedics back in service faster.

Following the Region’s advocacy efforts ([February 2022](#)), in September 2023 the Ministry of Health increased the Region’s funding by \$856,752, totaling \$2,386,025 in 2023/2024. This resulted in response time performance improvements in late 2023. While ongoing improvements are expected as hospitals address staffing capacity issues, sustained funding is essential to continue reducing offload delay hours.

The total cost in 2023 for paramedic staff hours spent in offload delay was estimated at \$1,021,499.45. Without the Dedicated Offload Nurse Program and the funding increase, the cost to the Service could have been significantly higher.

Roll-out of the new Medical Priority Dispatch System at the Georgian Central Ambulance Communication Center is targeted for November 2024

In February 2024, the Ministry of Health notified the Region that implementation of the Medical Priority Dispatch System (Dispatch System) at the Georgian Central Ambulance Communication Centre is expected to occur November 2024. Council first expressed the need for dispatch improvements in 2002. Introduction of the new Dispatch System will be a significant milestone after many years of Regional Council advocacy ([April 2018](#), [April 2019](#), [February 2020](#)).

The new Dispatch System is evidence-based technology that has become the industry standard for patient triaging, replacing the current two priority system with a more detailed six priority colour coded system. The goal is to provide patients with a response time that more accurately reflects their condition, unlike the current system which prioritizes less urgent cases too highly.

The new system will maintain response times for higher acuity patients but will better match response times for lower acuity patients. This new system is already in use internationally and in

City of Toronto, Regional Municipality of Niagara, City of Kenora, City of Thunder Bay, Regional Municipality of Peel and Regional Municipality of Halton.

Paramedic Services will work collaboratively with the Ministry of Health to implement the new Dispatch System and educate the public on what they can expect when they call 911 for a paramedic response starting Fall 2024. A report on implementing the Medical Priority Dispatch System will be provided to Council in September 2024.

5. Financial Considerations

Paramedic Services' budget is managed within the Council approved budget comprised of the Regional tax levy, the Land Ambulance Service Grant, and other funding sources as shown in Table 2.

Table 2
Actual Funding Received 2023

Program	Funding Source	2023* (million)
Net Tax Levy	Regional Tax Levy	\$52.6
Land Ambulance Service Grant	Ministry of Health	\$50.4
Dedicated Offload Nursing Program	Ministry of Health	\$2.2
Community Paramedicine for Long Term Care	Ministry of Long-Term Care	**\$1.7
Community Paramedicine	Ontario Health	\$0.5
COVID-19 Response	Ministry of Health	\$0.2
Palliative Care	Canadian Partnership Against Cancer for Palliative Care	\$0.1
Subtotal of Other Sources		\$4.7
Total Funding 2023		\$107.7

*Refers to actuals received/accrued

** Includes \$0.1 million for capital vehicles

6. Local Impact

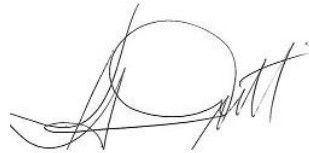
All local municipalities continue to receive reliable and responsive Paramedic Services. The Council approved Paramedic Services Master Plan, 2021 to 2031 provides the long-term plan to

ensure system capacity keeps pace with growing demand to provide equitable and consistent emergency coverage Region-wide, including each local municipality. Paramedic Services will continue to work with municipal partners to ensure optimal response to patient care and maximize resource efficiency.

7. Conclusion

York Region Paramedic Services exceeded all response time targets in 2023, an improvement from 2022. The approved Paramedic Services Master Plan, 2021 to 2031 is providing the resources needed to build capacity to meet response times. Implementation of the new Dispatch System at the Georgian Central Ambulance Communication Centre is expected to help Paramedic Services continue to meet higher priority response times targets and respond to the growing and diverse needs of the Region's communities.

For more information on this report, please contact Lisa Gonsalves, General Manager at 1-877-464-9675 ext. 72090. Accessible formats or communication supports are available upon request.



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