

Hamilton Paramedic Service 2023 Annual Report



July 2024

Introducing the
Hamilton Paramedic Service
Community Engagement Bike Unit



In 2023, HPS established Hamilton's first-ever paramedic bike unit.

Paramedics on bikes can provide a more rapid response than an ambulance for areas that are difficult to access.

This unit of specially trained paramedics will be deployed to large community events where they can easily maneuver through congestion and crowds.

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Message from the Chief



I am pleased to share the activities and accomplishments of the Hamilton Paramedic Service that took place in 2023 in this annual report. This was a year in which we returned to mostly normal service delivery after COVID-19 was no longer deemed to be a public health emergency. However, we continued to experience an increase in demand for service. Despite being increasingly busy, we were able to respond to calls in a timely manner and significantly decrease offload delay times. This can be attributed to working with our hospital partners and City Council's approval for additional staffed ambulances.

A number of new and exciting initiatives took place in 2023 as we completed a full year of implementing our 10-year Master Plan. We conducted our second resident survey to help us to better understand the needs and expectations of the community and inform the update of the Master Plan next year. We also introduced our first-ever mascot, a husky pup, to help us deliver health and safety messages to the public. A stuffed version of pup is now on all ambulances to give to our pediatric patients.

In 2023, we launched our paramedic bike unit, called the Community Engagement Bike Unit (CEBU); we expanded our harm reduction program; and we continued to train our primary care paramedics in autonomous intravenous administration. We also introduced new technology, one example is a device used by our Community Paramedics that provides images of wounds so we can assess its severity and treat accordingly. We also received delivery of an all-terrain vehicle that is currently being converted to an emergency medical vehicle and will be response ready by the end of 2024. As well, we added 7 ambulances to our fleet and a second unit to support the McMaster Childrens' Hospital neonatal and pediatric transport teams, funded 100% by the Ministry of Health. All while our paramedics continued to develop professionally as they learn new skills and enhance existing ones.

As with every year, despite being a busy service, in 2023 our paramedics led a number of charitable events to collect food (which they also grew in the Community Garden), toys, clothes, gifts for seniors and raise money for local community organizations and causes. Paramedics also participated in recognizing and celebrating the work of their peers with the H.E.A.R.T. trophy awarded monthly to an outstanding paramedic. This 2023 Annual Report provides just a glimpse into some of these activities.

I want to thank the Mayor, members of Council, the Senior Leadership Team and the General Manager of the Healthy and Safe Communities Department for their unwavering support in ensuring effective operations of the service.

Above all, I want to express my sincere appreciation to all paramedics, whether they have been newly recruited or are seasoned medics. They continue to impress and inspire me with their dedication and compassion as they run into the chaos to assist individuals in their most difficult times.

A handwritten signature in black ink, appearing to read "Michael Sanderson".

Michael Sanderson, Chief
Hamilton Paramedic Service

Service Overview

HPS Services



The Hamilton Paramedic Service (HPS) is the designated sole provider of paramedic services for the City of Hamilton serving over 569,000 residents in addition to those who come to Hamilton to work, play and learn.

Operating out of 18 stations in urban and rural areas of the city, HPS provides pre-hospital advanced medical care, trauma care and the transport of patients from emergency incidents to health care facilities.

In addition, HPS provides a range of programs and services to promote the health of the community and proactively mitigate the demand on ambulance transports to hospitals. These include:

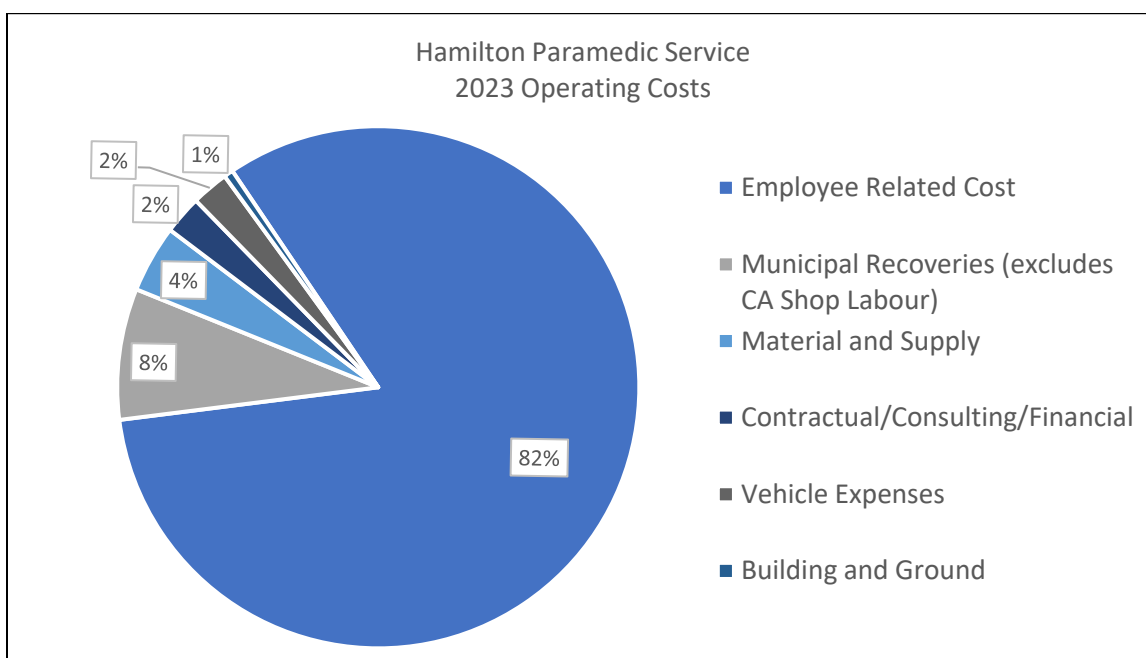
- Seniors' clinics
- Home visits
- Remote patient monitoring
- Palliative support
- Long-term care wait list support
- Social Navigator Program
- Support for the unhoused and encampment residents
- Mental health support
- Addiction support
- Point of care testing and wound imaging
- Mobile immunization testing
- Neonatal intensive care transfer
- Pediatric intensive care transfer
- Public access defibrillators
- Community and stakeholder engagement
- Public education
- Continuing education classes for Hamilton paramedics
- Media and awareness campaigns
- Fundraising and support for local charities

By the end of 2023, HPS was also equipped to provide rapid response to community events of large crowds with the inception of the Community Engagement Bike Unit.

HPS Finances

In 2023, HPS had an overall operating budget of \$73,887,609 however, 50% of direct land ambulance costs are funded by the province. In addition, the province provides 100% of funding for community paramedics, dedicated offload nursing and the Neonatal and Pediatric Intensive Care Unit ambulances. The allocation of funds per each cost category and percentage of the overall budget is shown in the chart below.

2023 Operating Budget		
Category	\$	%
Employee Related Cost	60,919,484	82
Municipal Recoveries (excludes CA Shop Labour)	5,999,642	8
Material and Supply	3,086,117	4
Contractual/Consulting/Financial	1,763,667	2
Vehicle Expenses	1,698,340	2
Building and Ground	420,359	1
Total	73,887,609	100



The following chart shows the cost of responding to emergency medical calls in 2023. HPS has a corporate fuel purchase arrangement and utilizes the Hamilton Fire Department vehicle maintenance services to realize cost efficiencies.

2023 Responses Costs	
Category	Total
Kilometres Travelled	2,216,775
Cost per Response	\$725.57
Cost of Materials & Supplies per Response	\$34.17
Vehicle Operating Cost per kilometre	\$0.98

HPS Structure

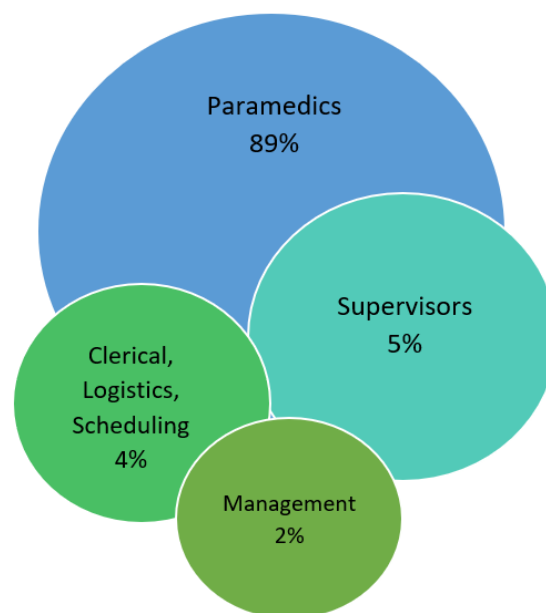
As an integral part of the health care system, HPS helps to promote the health and safety of Hamilton's residents and visitors through prevention, response and follow-up activities. HPS achieves this best by being situated within the Healthy and Safe Communities Department which enables collaboration with other divisions in the Department focused on similar outcomes for the community such as Hamilton Public Health Services, Long-Term Care facilities and the Hamilton Fire Department.

Reporting to the General Manager of the Healthy and Safe Communities Department, the Paramedic Chief is responsible to lead the planning and operationalization of HPS which is comprised of four sections:

- Office of the Chief
 - Organizational oversight, strategic direction, budget management and stakeholder partnerships
- Operations Section
 - Response performance, deployment and resource utilization
- Logistics Section
 - Equipment and supplies procurement, maintenance and asset management
- Performance and Development Section
 - Regulatory compliance, quality improvement, community engagement, continuing education and training, health and safety

A total of 409 full-time equivalent (FTE) positions made up the HPS workforce in 2023. Approximately 89% of staff are paramedics with 17% Advanced Care Paramedics. While paramedics provide direct services to the community, supervisors, logistics technicians, schedulers, clerical staff and management provide a variety of supportive and regulatory functions to meet Ministry of Health (MOH) mandates. HPS's workforce breaks down as follows:

Position	FTEs	
	Full-time	Part-time
Total Paramedics	337	25
Primary Care	275	24
Advanced Care	62	1
Supervisors	22	-
Clerical, Logistics & Scheduling Staff	17	-
Management	8	-

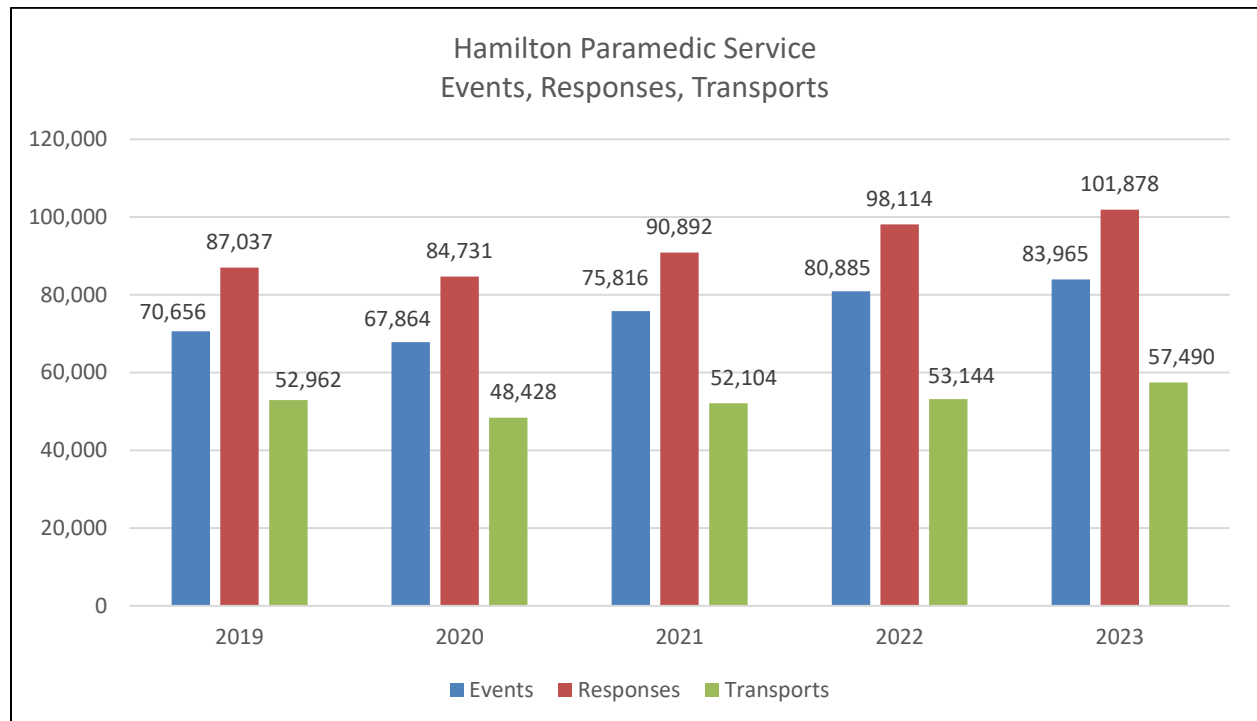


Performance Overview

At a Glance: Events, Responses, Transports

The following graph shows the total number of events, responses, and transports respectively, each year from 2019 to 2023.

HPS experiences an increase in service demands each year with the exception of the start of the COVID-19 pandemic in March 2020. As projected in the HPS 10-year Master Plan, the number of events, responses and patients transported to hospital have all increased in 2023 from 2022, and are at levels significantly higher than the pre-pandemic call volume.

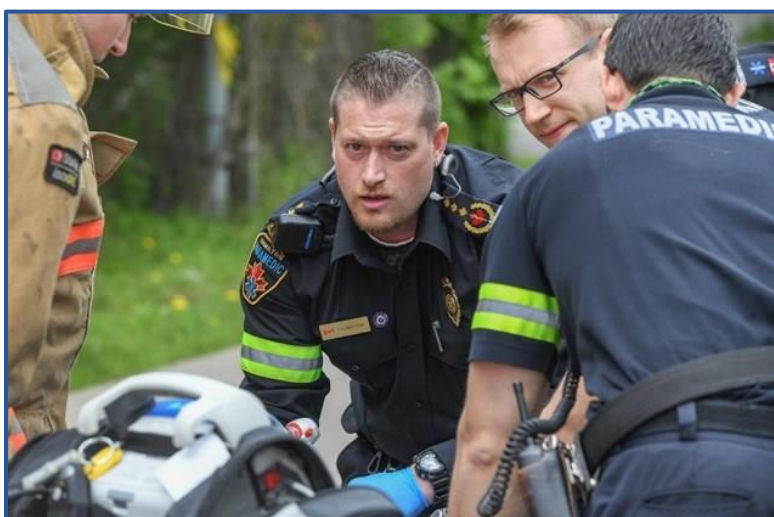
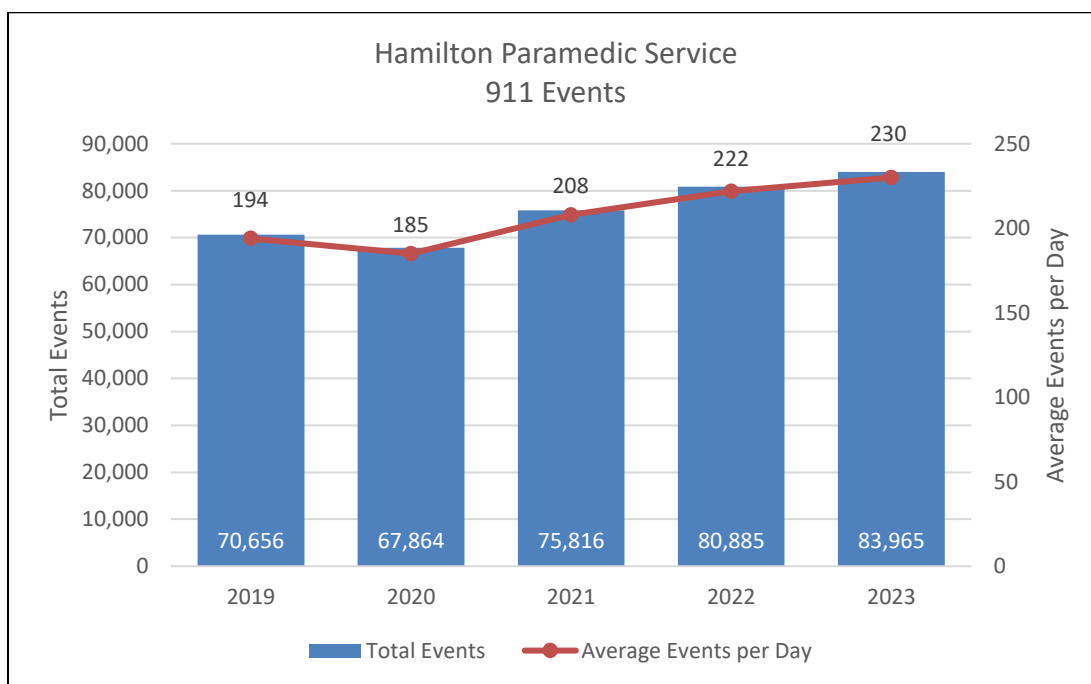
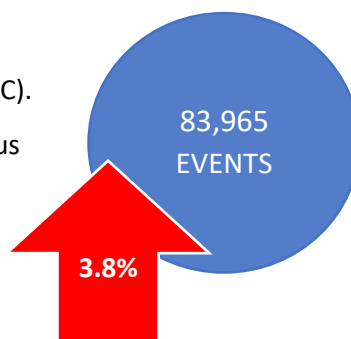


Source: J. Rennison, Hamilton Spec

Events

An event is generated every time 911 is called for paramedic assistance through dispatch, the Central Ambulance Communications Centre (CACC).

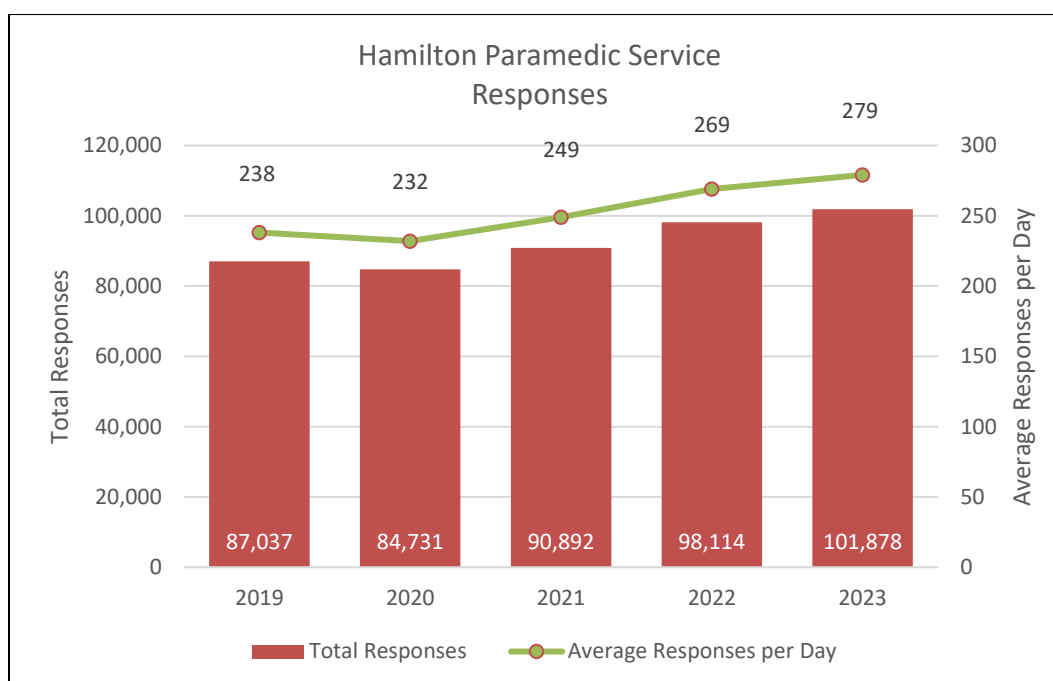
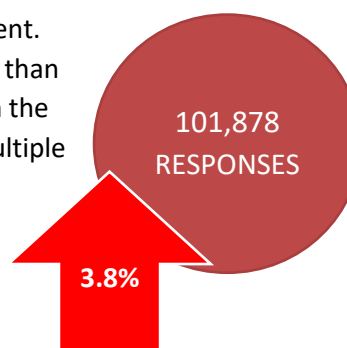
In 2023, HPS experienced a larger number of 911 events than in previous years with 83,965 events, an average of 230 events per day and an increase of approximately 4 percent from 2022.



Responses

Responses are the number of paramedic vehicles that are sent to an event. This number is higher than the number of events as there may be more than one vehicle required to manage an emergency incident. For example, in the event of a motor vehicle collisions or a complex medical emergency, multiple paramedic vehicles may be required to respond.

In 2023, HPS had a total of 101,878 responses with a daily average of 279 responses, an increase of almost 4 percent from 2022 and unsurpassed in previous years.



Top 10 Patient Problems by Dispatch Category 2023	% of Call Responses
Dyspnea (shortness of breath)	14
Fall	14
Unknown	7
Ischemic (obstruction of blood flow)	7
Unconscious	6
Abdominal/Pelvic/Perineal/Rectal Pain	5
Unwell	3
Motor Vehicle Collision	3
Behaviour/Psychiatric	3
Active Seizure	3

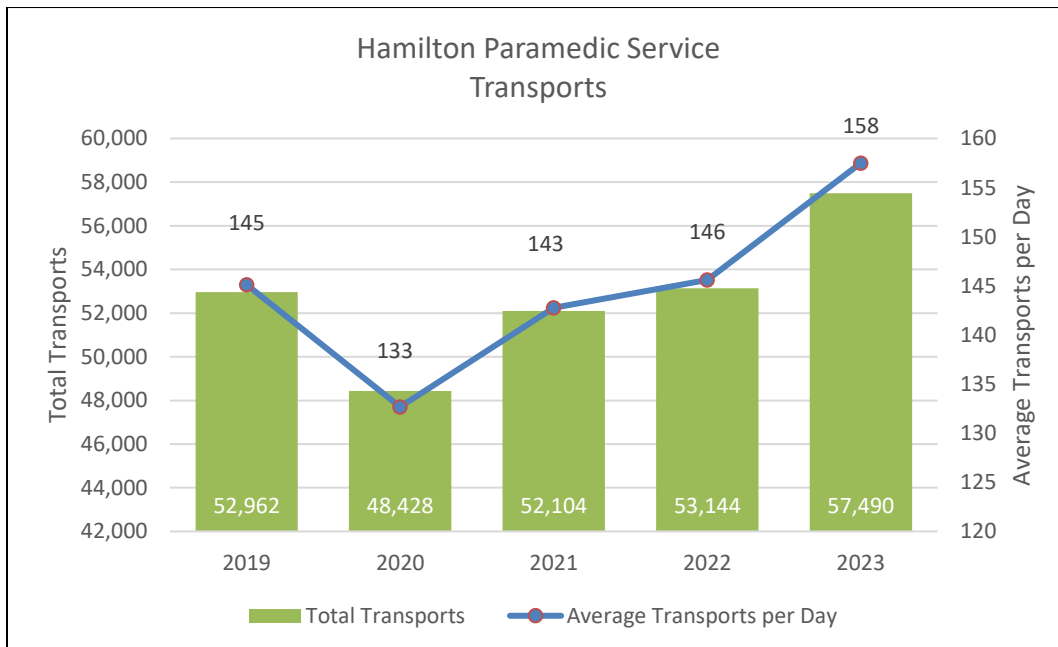
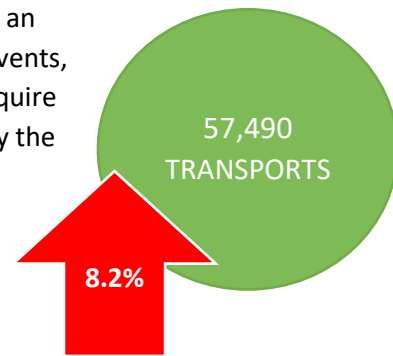
Patient Problems

Listed here, are the top ten reasons an ambulance was dispatched for medical assistance in 2023.

Transports

Transports refers to the number patients transported to hospitals by an HPS ambulance. This number is typically lower than the number of events, as some patients decline transport to hospital or are found not to require hospital services as determined through an assessment conducted by the paramedics.

HPS transported a total of 57,490 patients in 2023, an average of 158 transports every day and an increase in over 8 percent from 2022.



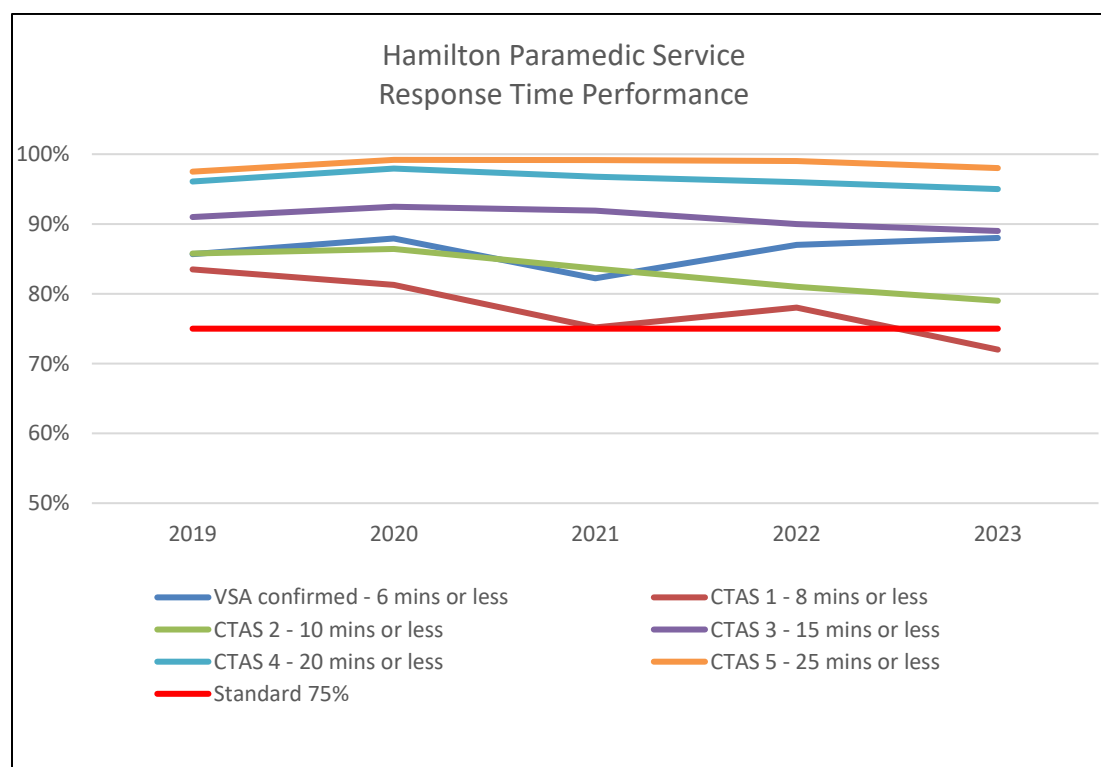
Response Time Compliance

The *Ambulance Act of Ontario* requires that every paramedic operator in Ontario is responsible to establish and publicly report on response time performance. The City of Hamilton and the MOH approved target response times based on the Canadian Triage and Acuity Scale (CTAS). CTAS is a triage system that prioritizes patient care by severity of the injury or illness. HPS is expected to achieve the target times in each CTAS category at least 75% of the time.

With ongoing and significant increases in demand for service experienced in 2023, HPS surpassed the standard for achieving the target times for each CTAS category except one, as shown below.

CTAS Category	Acuity Level	Target Time	Standard % of Time Target Time to be Achieved	% of Time HPS Achieved Target Time
Vital Signs Absent	VSA Confirmed	6 minutes	75	88
1	Resuscitation	8 minutes	75	72
2	Emergent	10 minutes	75	79
3	Urgent	15 minutes	75	89
4	Less Urgent	20 minutes	75	95
5	Non-Urgent	25 minutes	75	98

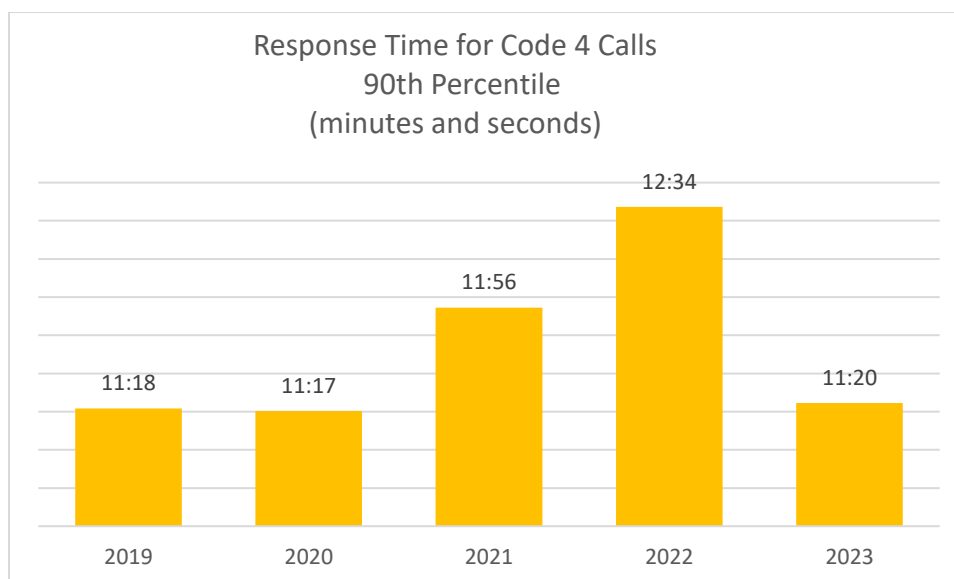
In previous years, HPS achieved and exceeded the response time standard of 75% (as indicated below by the red line) in each CTAS category. In 2023, the only category that did not meet the standard response time was CTAS 1 with response time of up to 8 minutes occurring 72% of the time.



Emergency Response Time

When a call is dispatched, a priority code is given based on level of urgency. A code 4 call is the top priority indicating a life-threatening emergency requiring immediate response. The target time to have an ambulance on the scene of calls dispatched as life-threatening is within 10 minutes, 90 percent of the time.

In 2023, response to calls dispatched as a life-threatening emergency (Code 4) was 11 minutes and 20 second at the 90th percentile. This represents the period from when dispatch assigns the call to paramedics until paramedics arrive on scene. Despite the increase in call volume from 2022, the response time for 2023 improved by 1 minute and 14 seconds from 2022, and an improvement of 36 seconds from 2021.



Offload Delays

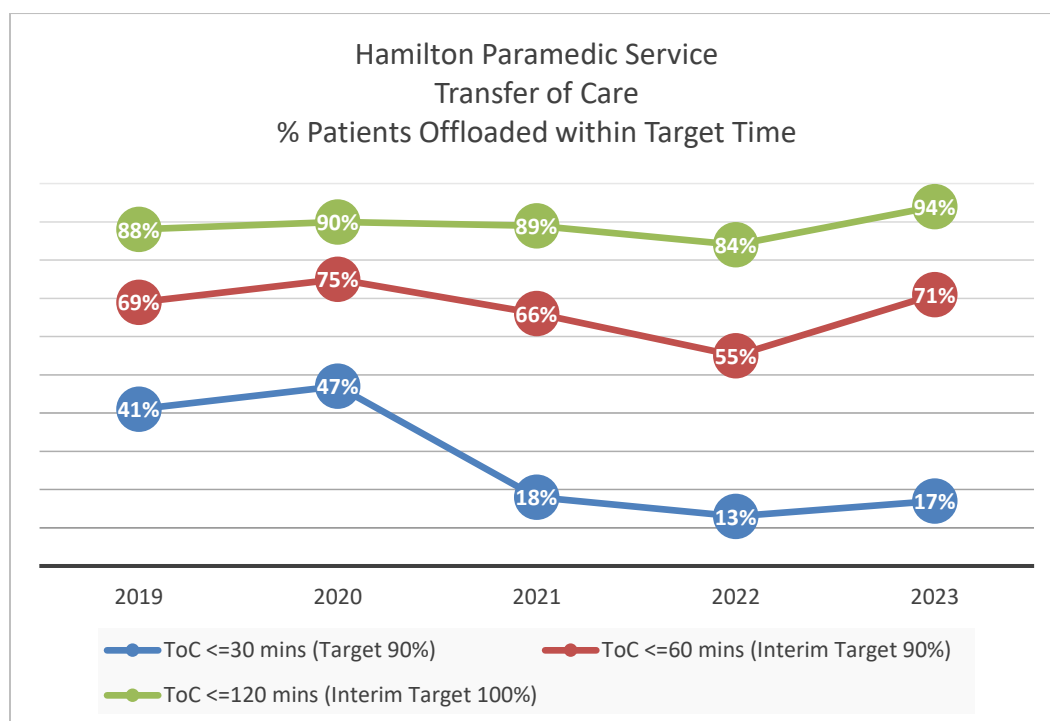
An offload delay occurs when the hospital does not accept responsibility for the care of the patient from paramedics within 30 minutes of their arrival to the Emergency Department. The provincial government standard is that transfer of care (TOC) of patients occurs within 30 minutes 90% of the time. Paramedics are required to remain with and care for the patient until the hospital is ready to accept the responsibility.



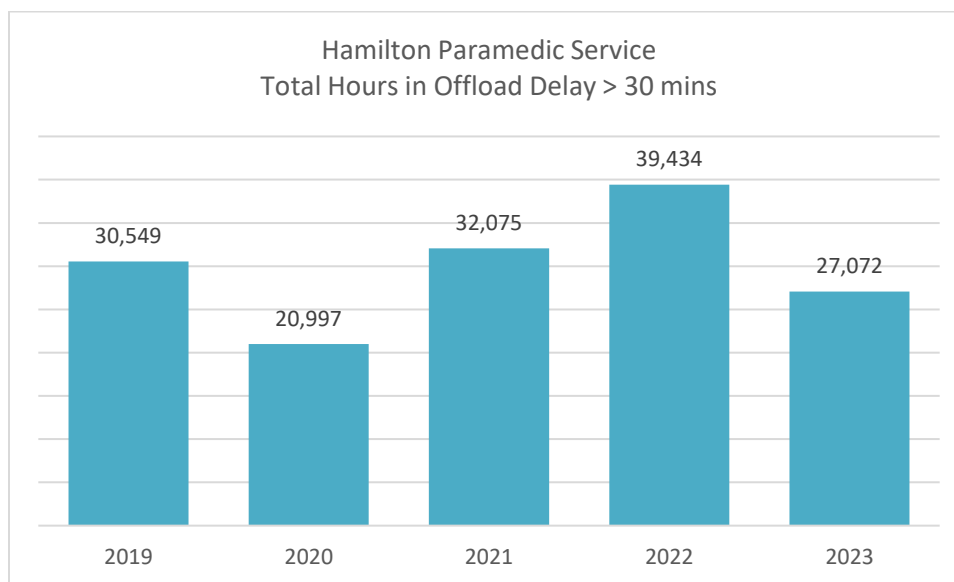
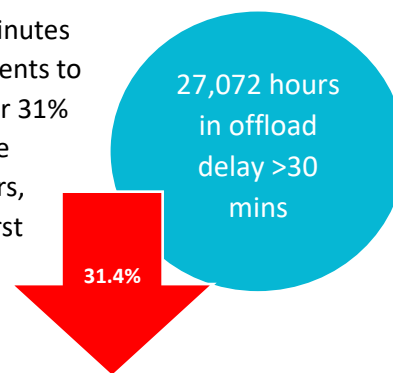
As a result of ongoing system pressures, hospitals in Hamilton have struggled to meet the target of accepting the patient within 30 minutes of paramedic arrival. Thus, the City of Hamilton and hospitals have implemented interim targets to transfer the care of the patient to the hospital within 60 minutes, 90% of the time and within 120 minutes, 100% of the time.

In 2023, 17% of patients were transferred from paramedics to the hospital within 30 minutes, a slight improvement from 2022 but down significantly from 2020. Transfer of care within 60 minutes occurred 71% of the time, a 16% improvement from 2022 but short of the interim target of 90% of the time. Hospitals took over the care of patients from paramedics within 120 minutes 94% of the time, a 10% improvement from 2022 and just below the target of 100% of the time.

The graph below shows the percentage of time patients were transferred to the care of hospitals within 30, 60 and 120 minutes for each year since 2019, illustrating the continuing challenge in achieving target times.



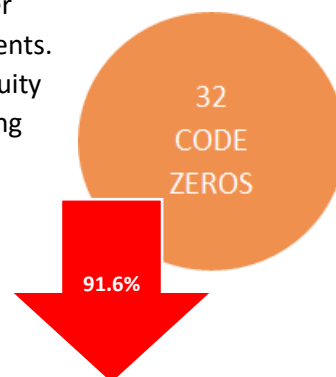
In 2023, paramedics spent a total of 27,072 hours in excess of 30 minutes waiting in Emergency Departments to transfer the care of their patients to the hospital. This represents an improvement from 2022 of just over 31% or 12,362 hours. As illustrated in the graph below, fewer hours were spent in offload delay over 30 minutes in 2023 than in previous years, with the exception of 2020 when call volume dropped during the first part of the COVID-19 pandemic.

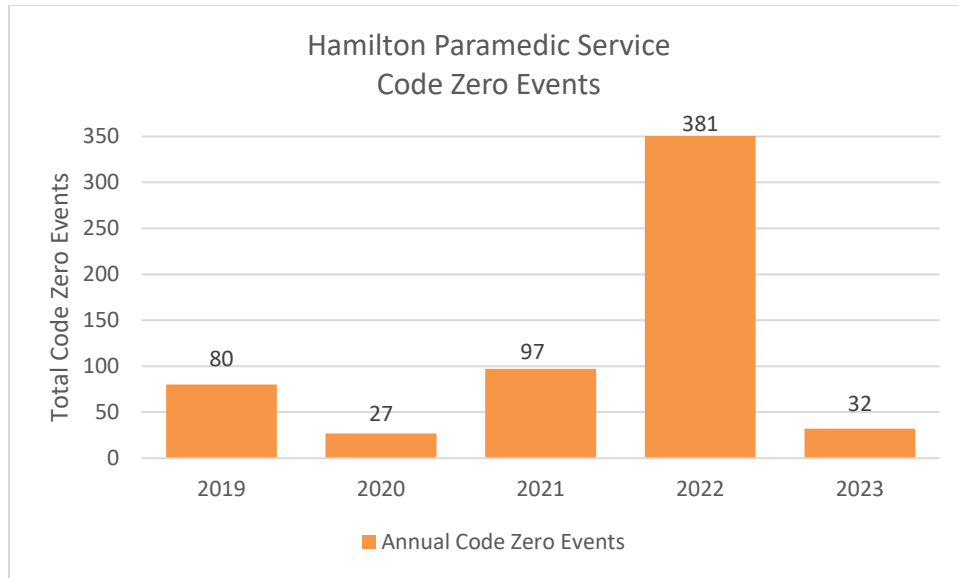


Code Zero Events

Long offload delays, particularly when there are 10 or more delays longer than 2 hours in one day, continue to be the major cause of code zero events. When a code zero event occurs, lower acuity calls are queued, higher acuity calls have lengthened response times, and ambulances from neighbouring municipalities are assigned to respond to emergency calls in Hamilton.

In 2023, there were a total of 32 code zero events in Hamilton that lasted approximately 18 minutes on average with the longest lasting 1.1 hours. This is a significant decrease from the previous year of 381 code zero events and the lowest reported number of code zero events in 15 years.





The reduction in offload delay times and code zero events amid increasing demands for service can be attributed to collaborative efforts with hospital partners to optimize offload processes utilizing continuous improvement strategies and the addition of resources dedicated to offloading. Such improvements have meant patients are being seen by hospital staff more promptly and paramedics are spending more time responding to calls in the community. This effort is described in detail in the Continuous Improvement section of this report.



Mobile Integrated Health



In addition to emergency response and pre-hospital care, HPS also provides comprehensive medical services directly to individuals in their homes and communities. The Mobile Integrated Health (MIH) unit consists of specially trained paramedics who provide on-site advanced medical assessments, treatment, and coordination of care, addressing various health concerns. By offering proactive and preventive care, MIH aims to improve health outcomes, reduce hospital readmissions, and enhance the overall well-being of residents in Hamilton.

The MIH Program includes the Community Paramedic @Clinic program, the @Home program which includes Remote Patient Monitoring, the Mobile Immunization Testing Team, MIH long-term care response and the Social Navigator Program.

Each of these are described in the following pages.

Social Navigator Program/Rapid Intervention and Support Team

The Social Navigator Program (SNP) is a collaboration with the Hamilton Police Service to support the most marginalized individuals in Hamilton. The Rapid Intervention and Support Team (RIST), led by Hamilton Police Service, is an extension of SNP consisting of a multi-disciplinary outreach team of community service providers. RIST members work together daily to provide resources and support in a timely fashion. This team is focused on helping individuals with complex and often concurrent issues navigate systems that are equally complex.



In 2023, 581 new individuals were referred to the SNP and RIST program. Contact was made with 1,292 unique individuals resulting in the delivery of 12,833 services to clients including referrals to service providers, document and application support, appointments, harm reduction resources, transportation, food, clothing, wound care, first-aid and check-ins. On average, the SNP/RIST team interacted with 325 clients per month in 2023.

SNP External Referrals

In 2023, SNP/RIST made 594 service referrals to various agencies for their clients. The majority of referrals were for housing support (204), shelter (113), mental health support (47), addiction support (44), income support (37), primary care or connection to the shelter health network (29), identification (23). The remaining (97) included referrals to such supports as brain injury services, women's counselling, youth programs, court support, peer support, outreach, veteran affairs, taxes and seniors supports.

SNP Annual Winter Coat Drive

The SNP Annual Coat Drive began in 2014, when paramedics and police officers started collecting winter clothing items from their colleagues and families to distribute to clients who did not have proper winter attire.

In 2023, the Winter Coat Drive took place over two nights in November at the Philpott Church where 685 winter coats were provided to community members in need. Many of whom were newcomers and had not yet experienced a Canadian winter.



CP@Clinic

The CP@Clinic program was developed to help keep low-income older adults healthy at home and reduce avoidable 911 calls. Community paramedics visit older adults in the common room of their building to assess and address their need. This evidence-based program focuses on chronic disease prevention, management, and health promotion to improve older adults' health and quality of life, reduce their social isolation, and connect them with primary care and community resources.

In 2023, MIH expanded the number of clinics to 16 buildings including CityHousing Hamilton locations and residential care facilities. Community paramedics staffed monthly clinics in these buildings and conducted 714 assessments in 2023.

CP@Home

The @Home program provides in-home supports to vulnerable clients such as frequent callers of 911, palliative patients, clients on the long-term care wait-list and the underserved population. A community paramedic visits the client where they live, conducts an in-depth assessment including point of care urine and blood testing and wound imaging and can quickly connect the client to the resources they require related to a variety of issues such as congestive heart failure, diabetes, falls, mental health and

addiction and palliative care. During the pandemic, the @Home program also provided COVID-19 testing and vaccinations for homebound residents.

In 2023, the @Home program had 1,595 new clients with community paramedics making 2,967 in-person visits and 15,043 telephone check-ins with clients to ensure their medical needs were addressed in a timely manner.

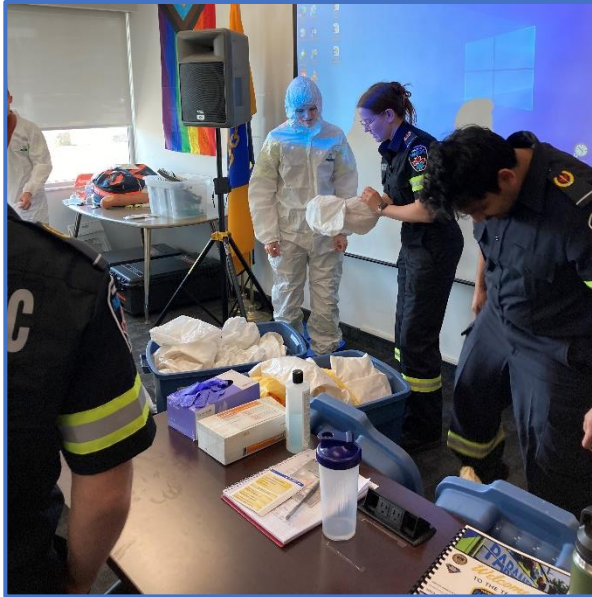
Community Paramedic Remote Patient Monitoring

As part of the @Home program, community paramedics leverage technology to monitor clients' conditions in their home. The patient-generated health data is transmitted wirelessly to a database and monitored by a community paramedic. Through this program, a client's condition is proactively managed before it requires an emergency 911 response and hospitalization.

In 2023, community paramedics received 7,552 patient reading alerts from 229 different patients and followed up with all alerts either in-person, on the phone or activated an emergency response.



Clinical Excellence

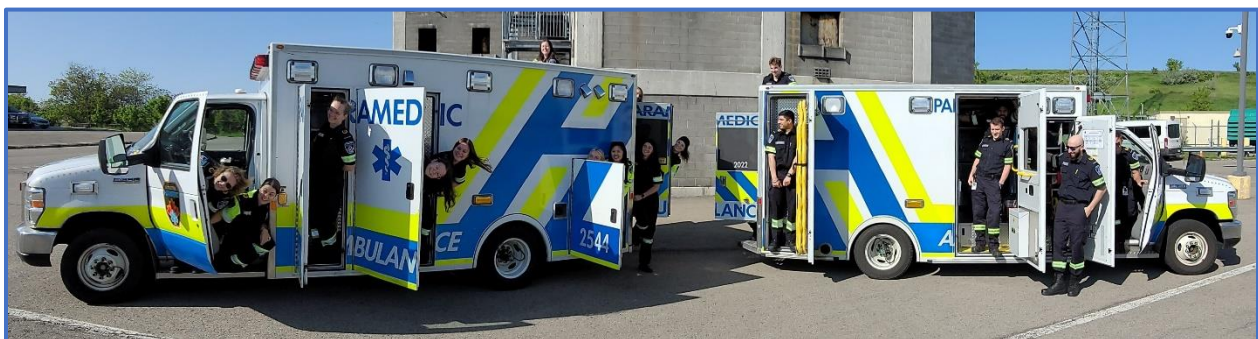


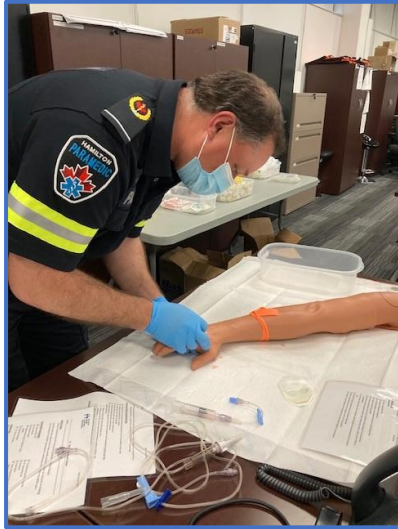
Clinical excellence is the expert knowledge, skills and practices of a clinician that results in the delivery of informed and compassionate patient care. At HPS, clinical excellence is achieved through a commitment to continued growth and development. HPS has a skilled and experienced team of instructors dedicated to enhancing the performance and further developing the expertise of Hamilton paramedics. In 2023, new clinical procedures and medical equipment were added to the continuous education paramedics undertake to refresh and expand their capabilities. In total, over 28,200 hours of training and continuing education were delivered to paramedics in 2023 to ensure excellent clinical care is provided to clients and patients.

2023 New Recruits

In 2023, HPS continued to experience challenges in staffing, as did other paramedic services across the region. As a result, the Performance and Development section of HPS recruited and trained 61 new Hamilton paramedics in 2023. Thirty-three of these new recruits were fast tracked as they already had experience working as a paramedic. The orientation training is condensed for the fast track group so they are able to get on the road and serve the community in an expedited timeframe. The remaining 28 new recruits had recently completed a paramedic college program and therefore receive a more comprehensive orientation process than the experienced paramedics.

All new recruits undergo extensive training consisting of in classroom training, simulation scenarios, hands-on learning, driver training and time on the road. In 2023, over 11,400 hours of orientation training were delivered to new recruits. Once orientation training is complete, the new paramedics are assigned to a team of two Hamilton paramedics and as the third person they are given the opportunity to drive the ambulance and act in full capacity as a certified paramedic while they become accustomed to their new career.





Primary Care Paramedics Autonomous Intravenous

HPS offers Autonomous Intravenous (AIV) training to all Hamilton Primary Care Paramedics (PCPs) through the service's Performance and Development section. The PCP AIV course expands the scope of practice of PCPs enabling them to assist with an increasing number of high acuity patients. Through this course, PCPs are trained to perform controlled medical acts that are performed by Advanced Care Paramedics. PCPs certified in PCP AIV can administer peripheral intravenous therapy and medications outside of the scope of regular practice of a PCP.

In 2023, 64 paramedics completed this course totaling 1,280 hours of classroom training in addition to clinical training at the hospital. Since the introduction of this training in the spring of 2021 to the end of 2023, a total of 251 PCPs have been PCP AIV trained. This moves HPS closer to achieving the objective identified in the HPS Master Plan of having every PCP trained and certified in AIV. By the end of 2023, 84% of PCPs have been trained in PCP AIV.

Wound Assessment

In 2023, MIH introduced new technology to its point of care services to assess wounds in the comfort and convenience of the client's place of residence. Community paramedics can now use a handheld fluorescence imaging device for a digital measurement of the wound size and to detect elevated levels of bacteria in the wound.

Such information enables the community paramedic to target treatment to the precise areas with high bacterial loads. This helps to prevent the infection from worsening. Early and accurate detection of bacteria can help minimize complications and reduce the healing time.



Emergency Medical Response Utility Vehicle

HPS will soon be better equipped to respond to medical emergencies at mass gatherings and in wooded areas. In 2023, HPS was awarded a grant from Firehouse Subs Public Safety Foundation of Canada in the amount of \$55,170.98 for an emergency medical response all-terrain vehicle (ATV).

An ATV equipped with medical equipment can quickly reach and extricate a patient from areas that cannot be readily or safely reached by a full-size ambulance, such as Hamilton's Supercrawl event and on the trails along the escarpment. Responding to medical emergencies in a timely manner is often the key to saving a life. HPS plans to have the ATV response ready by the end of 2024.

Community Engagement Bike Unit

In the fall of 2023, a group of Hamilton paramedics underwent rigorous training and testing to expand their expertise to become a member of Hamilton's first-ever paramedic bike unit.

The Community Engagement Bike Unit (CEBU) will be deployed to mass gatherings and large-scale events in the city. These specially equipped bicycles will enhance prompt response to someone in medical distress in dense crowds where ambulance response is restricted.



While deployed at city events, members of the CEBU will also serve a public relations role by interacting with event goers. CEBU team members will answer questions about the city and paramedic services and promote healthy and safe behaviours related to such areas as bicycle safety, heat-related illnesses, bug bites, playground injuries, water safety and sun safety.

By the end of 2023, CEBU was ready for action. Refer to the Community Connections section of this report to read about the deployment of CEBU at community events.



Continuous Improvement

HPS is constantly looking for ways to improve processes, programs and services through innovation and best practices to ensure the delivery of optimal care to the community. Just some of the continuous improvement initiatives undertaken in 2023 are highlighted below.

The Hamilton Paramedic Master Plan (2022-2031)

2023 was the first full year of implementation of the service's 10-year Master Plan. Completed and endorsed by City Council in May 2022, the HPS Master Plan (2022-2031) sets the course for more integrated services delivered by paramedics equipped with progressive technology and expanded skills to ensure the best outcomes for all people who depend on HPS for their health and well-being.

The HPS Master Plan identifies five priorities with 29 distinct objectives and corresponding actions.

Master Plan Priorities



The key objectives that were completed in 2023 are as follows:

- ✓ Add five 12-hour shifts at peak demand hours providing 21,500 additional hours of staffed ambulance time to meet existing service demands **Objective 1**
- ✓ Add one staffed ambulance per year to address growth in service demands **Objective 2**
- ✓ Redeploy Emergency Response Vehicles to improve response time performance **Objective 5**
- ✓ Supporting Primary Care Paramedics in becoming certified in Primary Care Paramedic Autonomous Intravenous (PCP AIV) **Objective 11a**
- ✓ Assume responsibility for procuring and managing medical supplies and PPE for the City of Hamilton's long-term care home, Public Health Services, Hamilton Fire Department and Hamilton Street Railway **Objective 19**
- ✓ Provide respirator testing for City of Hamilton employees requiring respirator masks **Objective 19b**
- ✓ Implemented a comprehensive asset management system to effectively manage inventory over the long term for HPS and City of Hamilton divisions where applicable **Objective 20**
- ✓ Procure the online learning system and train a reliability management team to lead the implementation a collaborative high reliability system **Objective 26**



- ✓ Continue to build relationships with diverse communities to develop a program that expands HPS recruitment activities and promotes cultural competency to better serve diverse populations **Objective 29b**

A detailed description of the HPS Master Plan accomplishments will be presented to City Council in the fall of 2024.

Quality Assurance

HPS has a robust quality assurance program that, among other activities, reviews and responds to feedback from customers. Follow-up with paramedics is an integral part of the program to ensure the continuous improvement of service delivery.

In 2023, the reviews conducted to identify opportunities for improvement and employee recognition consisted of:

- Compliments on performance (104)
- Collisions (83)
- Customer concerns (37)

In comparison to 2022, the number of complaints has decreased by 32% and collisions have remained about the same, decreasing by just one collision from 2022.

Most of the complaints were related to professional conduct and clinical practice. Such incidents are thoroughly reviewed and may result in coaching or additional training of paramedics. Most of the collisions in 2023 were related to clearance issues involving damage of under \$1,000.

A wide range of compliments were received in 2023 from people who used HPS services or from their caretakers or loved ones. These related to paramedics' performance including, compassion, kindness, caring, skillfulness, ability to calm, professionalism and going above and beyond their duties.

The following excerpts are examples of the recognition Hamilton paramedics received in 2023 from the community they serve.

I contacted community paramedics, they couldn't have been more helpful. Within 2 hours, I got a call from a community physician service and a home appointment!

My child collapsed in our home. The paramedics were calm, professional, and quick to take action. They took the time to keep my child in good spirits by building rapport and using humour. Having calm, caring, and professional support meant that I was able to remain calm during a very stressful time. Thank you so much for the excellent support!

The paramedics went out of their way to make the patient feel at ease and also cleaned up for her. She had spilled juice all over the floor in her fall and they actually cleaned the floor for her!

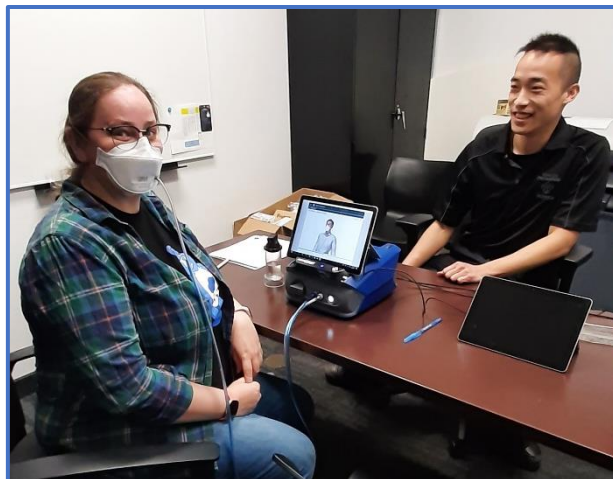
Your paramedics saved my sister's life and I just wanted to thank you from the bottom of my heart.



Respirator Fit Testing

The City of Hamilton as an employer is responsible to administer a fit test for employees who are required to wear respirator masks such as an N95 and P100. A fit test verifies the mask is the right size to form a tight seal against the face of the wearer. A properly fitted mask protects the wearer from inhaling infectious or hazardous agents.

All paramedics are required to be fit tested, as such HPS has specialized equipment and paramedics with the skills and experience to perform fit tests.



To enhance uniformity in testing across the organization, make access to testing readily available for all City employees and realize cost efficiencies by performing fit tests in-house, HPS began providing fit tests to all employees in 2023. Since then, paramedics have fit tested a range of employees including public health nurses and dental hygienists, public health inspectors and library staff, who work with historical materials such as film negatives, that may emit chemicals.

Ambulance Offloading

Delays in ambulance offload upon arrival at hospitals have been a major systemic problem for several years, causing decreased ambulance availability and delayed emergency responses. As reported earlier, Hamilton's offload delays have been increasing year-over-year, with the exception of the first part of the COVID-19 pandemic.

However, 2023 saw a reduction in offload delay times, fewer offload delays lasting from 1 to 6+ hours and a significant decrease in code zeros, when no ambulances are available to response to an emergency.

System improvements began in 2023 with the Juravinski Hospital. In 2022, the monthly 90th percentile transfer of care time at Juravinski averaged just over 3 hours, with a record high point in June of almost 4.5 hours. In 2023, following the implementation of improvement initiatives, Juravinski's monthly 90th percentile averaged only 34 minutes, with 6 months below the provincial 30-minute target time. This had not been achieved at the Juravinski Hospital in the preceding 15 years.

Collaborative efforts between HPS and Hamilton's hospitals led to reduction in offload delays across the system. Hospitals implemented strategies to improve patient flow thereby enabling paramedics to offload patients more promptly. Some of the strategies used to achieve this success are as follows:

- Consultations with an expert from North York General Hospital



- Site visits to high-performing hospitals in the Greater Toronto Hamilton Area
- Established a new triage process
- Installed Registered Nurses dedicated to offloading patients 24 hours a day
- Added beds dedicated to ambulance patients
- Connected to the HPS dashboard for real-time data on transfer of care times

The reduction of offload delays ensures that ambulance patients are seen more quickly by hospital staff thereby improving patient health outcomes. Moreover, this frees up paramedics to get back into the community rather than waiting in the Emergency Department with their patients for much of their shift.

Women in Leadership

While women made up almost half (48.3%) of the HPS workforce in 2023, they are underrepresented in leadership positions. This disparity exists in Emergency Medical Services organizations across North America.

In 2022, HPS Commander Linda Minas-Connelly conducted research on the barriers that exist for women in progressing into leadership roles and explored the value of mentorship programs to assist women in their professional development.

Some key barriers identified are:

- Family responsibilities
- Lack of female role models
- Women stigmatized in EMS
- Glass ceiling environment
- Different standards for males versus females
- Discrimination

In addition, the study showed males were twice more likely to have a mentor than females and over 50% of leaders reported having a mentor during their careers.

As a result of these findings, HPS began a Women in Leadership program in 2023 that brings together women from all levels of the service to explore leadership competencies through inspirational speakers and share challenges and solutions to overcoming barriers.

The next phase of this program will examine developing a mentorship program to support continuous learning and advancement within the service.



Harm Reduction Program

In an effort to prevent substance misuse and expand on the naloxone distribution program, HPS in collaboration with Hamilton Public Health Services began distributing harm reduction supplies in early 2023.

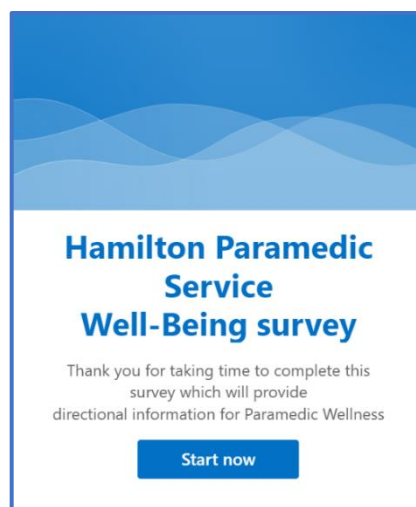
The use of shared or dirty supplies can lead to infections and diseases. Having access to sterile consumption supplies helps to prevent infections, hospitalizations and deaths. Harm reduction supplies are now available on all HPS ambulances and provided by Social Navigator Paramedics.

In addition to reducing harm, the program is designed to decrease the stigma related to substance use and lead to conversations with highly skilled paramedics who can connect people to the resources they need when they need them.

A thorough evaluation of the harm reduction program is planned with results presented to City council in 2024.



Employee Well-Being



Promoting and protecting good physical and mental health of HPS employees is of the utmost importance and key to delivering quality service to the community. In 2023, HPS established an employee wellness program with the addition of an experienced and highly trained supervisor to develop and lead the program.

To get a better understanding of the well-being needs of paramedics, a wellness survey was developed and administered in 2023. With 350 paramedics responding to the survey, results showed that the majority of paramedics have a good work-life balance, feel supported by peers at work, and experience good or excellent overall mental health and wellness. However, findings indicated paramedics do face challenges on the job that affects their mental and physical health and expressed interest in

participating in activities to support their well-being such as visits from therapy dogs, exercise classes, yoga/meditation sessions and cooking/nutrition classes.

As this new employee wellness program is developed, results of the survey will be addressed and activities to promote paramedic wellness will be implemented beginning in early 2024.

Community Connections

Hamilton paramedics play an important role in the community not just by providing emergency response and medical care to people where they live, but also by providing information and support to promote health and well-being in the community. Hamilton paramedics do this through attending events and participating in fundraisers and awareness-raising campaigns. Despite the increasing demands for medical service response in 2023, HPS continued to educate, support, learn from and give back to the community.

HPS Resident Survey

HPS values the input of the community it serves and conducts a resident survey every five years. In 2023, HPS administered its second survey via telephone calls and online. The results help inform planning of HPS programs and services. Key findings of the telephone survey of 550 residents follow.

- The majority of respondents rated HPS services overall as excellent, very good or good (93%)
- In the case of a life-threatening emergency, the majority of respondents felt that paramedics should arrive in less than 5 minutes (33%) or between 5 to 7 minutes (33%)
- For a minor injury or illness, the majority of respondents felt it is acceptable:
 - to receive care instructions over the phone from the paramedic dispatcher rather than sending an ambulance (74%)
 - for the paramedics who arrive on scene to provide treatment, then refer them to another medical professional, rather than taking them to the hospital (77%)
 - for the paramedics to settle them in the emergency waiting room and then leave so they can prepare to respond to another 911 emergency call (87%)
- The majority of respondents rated the importance of the following services as very or moderately important:
 - Outreach care to vulnerable residents (88%)
 - Public education to promote health and safety of residents (87%)
 - Charity activities (63%)
- The majority of respondents felt it was very important to allocate tax dollars to update HPS technology and medical equipment (81%) and increase the number of staffed ambulances for a more timely response (73%)
- A minority of respondents felt it was very important to allocate tax dollars to improve the comfort of the ride in the ambulance (32%) and reduce the environmental impact of HPS (28%)
- Approximately 73% respondents indicated being aware of or having seen public AEDs and 65% indicated they felt comfortable using a public AED to assist someone in cardiac arrest
- The majority (78%) of respondents indicated it is very or moderately important that the cultural beliefs and values of patients/clients be considered when delivering paramedic care



Orange Shirt Day

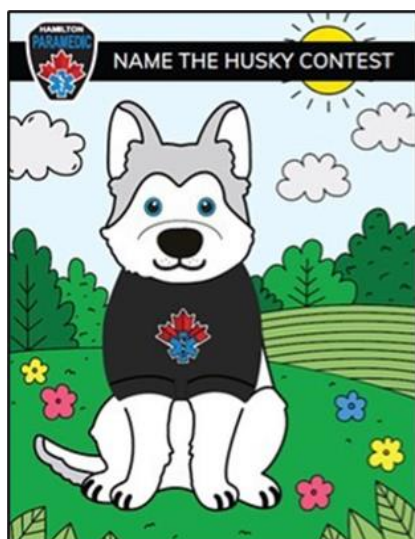
HPS collaborates with the City of Hamilton's Indigenous Relations team on a number of initiatives to honour indigenous contributions, learn about indigenous culture and work toward reconciliation.

For National Day for Truth and Reconciliation Day in September 2023, HPS Chiefs and Commanders wore orange uniformed shirts. For the entire month, paramedics donned orange epaulettes that they purchased with the proceeds of over \$1,000 being donated to local Indigenous foodbanks.



HPS Mascot

HPS welcomed its newest member to the team in 2023, a Husky pup named Howler. Frontline paramedic, Amar Grewal, proposed the idea for the service to have a mascot that would also be a stuffed toy for paramedics to give to their young patients during a medical emergency.



HPS had a contest for children to name the Husky pup. The Hamilton Public Library was a key partner in this initiative and provided contest forms in all of their branches. Hamilton school boards also distributed contest forms and HPS took to social media for help. In total, HPS received over 1,100 entries from children in the community.



A team of judges, made up of the Chief, Deputy Chief and paramedics, selected the winning name of Howler. Not only does a Husky howl, but it is also the type of siren used on ambulances that enhances sound to warn drivers more effectively.

Five children had submitted the name Howler, and all were presented with a stuffed Howler and a certificate of appreciation from Chief Sanderson at an event in their honour in the summer of 2023.



All HPS ambulances now carry a supply of Howlers that paramedics give to their pediatric patients to help them feel less afraid and more comforted.

For the next phase of this initiative in 2024, a life-size Howler will be introduced who will attend events and schools to help educate the community on staying healthy and safe.



CEBU at Grey Cup

Hamilton's newly established paramedic bike unit was deployed for its inaugural assignment at the Canada Football League's 110th Grey Cup game held in November 2023 at Tim Hortons Field in Hamilton.

In addition to staffed ambulances, 6 members of the CEBU were also deployed to circulate and engage with fans throughout the game, ready to provide medical care to any of the almost 29,000 people in attendance.



Santa Claus Parade

The CEBU also participated for the first time in the Santa Clause parade through Hamilton's downtown core in November 2023. Hamilton paramedics on bike, on foot and in an ambulance helped to bring the holiday spirit and sense of community to the crowds of onlookers.



Food Drive

2023 marked the 25th year of the food drive. Hamilton paramedics partnered with the Burlington Auxiliary O.P.P. to hold a food drive on location at Fortinos grocery stores. This two-day event resulted in the collection of 7,344 lbs of food and \$30,028.27 that was donated to the Neighbour to Neighbour Centre to provide essential food to families during the holidays.





Community Garden

Since 2014, Hamilton paramedics have been volunteering their time and green thumbs tending to the community garden. Paramedic use organic practices such as weeding by hand, no chemicals, rotating crops and fish mulch fertilizer to grow vegetables. In 2023, HPS donated approximately 1,400 pounds of fresh produce from the Community Garden to Neighbour to Neighbour Centre for those utilizing food banks and programs.

Toy Drive

The annual Paramedic Toy Drive for CityKidz ensures that children in Hamilton who experience the challenges of poverty receive a personalized and meaningful gift for Christmas. HPS has led the drive for 19 years with 2023 being a record-breaking year. Hamilton paramedics helped to raise \$12,442.43 and over 2,439 toys for CityKidz.



Santa for Seniors

In its third year, this initiative began by Hamilton paramedics to help seniors living in long-term care residents who do not have or see their loved ones during the holiday season. Different residences are selected each year to receive personalized gifts for seniors donated and delivered by Hamilton paramedics. Once again in 2023, Hamilton's Central Ambulance Communication Centre (CACC) partnered with Hamilton paramedics to deliver 130 gifts to residents at Grace Villa nursing home and Victoria Gardens long-term care home.



Recognitions

A number of employees of HPS were formally recognized in 2023 for their extraordinary achievements in serving the community and their peers.

Quality of Care Award

The Hamilton Heath Sciences Centre for Paramedic Education and Research (CPEP) Quality of Care Award recognizes paramedics for a variety of reasons including outstanding patient care and documentation, community involvement regarding clinical care, continued medical education or promoting the paramedic profession. Paramedics are nominated by their peers or CPEP's program staff.

The recipients of the CPEP Quality of Care Award for 2023 are:

- ❖ Lindsay Noël, Primary Care Paramedic
- ❖ Morgan Osterman, Advanced Care Paramedic



Medal of Bravery

The Ontario Medal for Paramedic Bravery honours paramedics who have performed an act of exceptional courage. The medal is given to paramedics who have demonstrated great bravery without concern for their personal safety, risking their lives to save others. 2023 was the first year paramedics received an Ontario honour medal for their actions.

Hamilton Advanced Care Paramedic, Steven Kawamura received the award in 2023 for intervening to save the life of a suicidal

individual. In 2021, Steven encountered a distraught person running toward the edge of a highway overpass. Steve pulled over and sprinted to the person and grabbed their leg just as the person was jumping over the barricade. Steve pulled the person back to safety and stayed with the distressed person until the police arrived. Steven's quick actions and courage in the face of danger saved a life.

In May 2023, Honourable Elizabeth Dowdeswell, Lieutenant Governor of Ontario, and Sylvia Jones, Deputy Premier and Minister of Health presented the award to Paramedic Kawamura.



Governor General of Canada Emergency Medical Services Exemplary Service Medal

The Emergency Medical Services Exemplary Service Medal awarded by the Governor General of Canada recognizes professionals who provide pre-hospital emergency medical services to the public in an exemplary manner, characterized by good conduct, industry and efficiency. The following recipients received the award in 2023 for completing 20 years of exemplary service in a high-risk organization:

- ❖ Steven Kawamura, Advance Care Paramedic
- ❖ Brad McMurray, Supervisor
- ❖ Linda Minas-Connolly, Commander
- ❖ Alison Reid, Supervisor
- ❖ Dave Thompson, Supervisor



Spirit of Hope Group Award

The Rapid Intervention Support Team (RIST), which includes Social Navigator paramedics, received the St Joseph's Healthcare Foundation of Hamilton Spirit of Hope Group Award in 2023. This award recognizes individuals or groups who have made impactful contributions in overcoming mental health or addiction challenges. RIST/SNP was honoured for fearlessly supporting vulnerable Hamiltonians when they need it most.



HPS H.E.A.R.T. Award

The HPS H.E.A.R.T. was developed by staff to recognize their colleagues who go above and beyond in performing their duties when serving the residents of Hamilton. This monthly peer-nominated award represents excellent service that exemplifies Heart, Empathy, Accountability, Responsibility, Teamwork and Trustworthiness (H.E.A.R.T.).

The following are the 2023 award recipients who were presented with the H.E.A.R.T. trophy, a certificate and the Chief's Challenge Coin which signifies caring, compassion, courage and competence.



January

Sarah Batchelor

Dedicated to charity programs and professional development.

February

David Goveia

Always positive and calm and creates a serene and welcoming environment for patients and peers.



March

Herman Alvarado

Committed to excellence in patient care through consulting with physicians for most effective treatments.



April

Derek Dawson

Always eager to guide, teach and learn and has a sense of humour enjoyed by peers and patients.



May

Nathan Wilke

Kind-hearted, compassionate and supportive of peers with the cleanest vehicle in the service!



June

Ilan Hill

Inspires others with optimism, humility and integrity and is consistently selfless.



July

Vanessa Koprach

An excellent source of information with a passion for teaching who leaves every patient feeling better in some way.



August

Jason Lawrence

Saved a person's life while off duty with quick thinking and skilled competency.

September

Jamie Hodgkinson

Provides an abundance of compassion and kindness even in the tensest of situations.





October

Clidan Hamilton

Held a pediatric patient in his arms to calm him down until the young patient fell asleep and vitals could be taken.

November
Benjamin Crouse
Went above the call of duty to make a meal for a diabetic patient who had not eaten in hours.



November

Jennifer Books

Made a meal for a diabetic patient who had fallen and been on the floor hours.

December
Fareed Khodabux
Provides exceptional quality care to patients and even ensures the pet is taken care to put the patient's mind at ease.

