



2022 PERFORMANCE REPORT

Middlesex-London Paramedic Service
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Neal Roberts
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MESSAGE FROM THE CHIEF

As Chief, and on behalf of Middlesex London Paramedic Service, it is a privilege to present our 2022 Annual Performance Report. There have been many achievements and successes during the past year, along with opportunities that are coming forward where MLPS can serve the residents of Middlesex County and the City of London in new and innovative ways.

Here at MLPS, our year began by continuing to adapt and respond to the evolving challenges and effects of the COVID-19 pandemic as we provided care for our patients. It is only through the professionalism, compassion, excellence and dedication demonstrated by all of our staff and teams throughout the pandemic that we are stronger and more resilient than ever before.

MLPS continues to grow in response to the need for services and our changing health care system, as demonstrated by the substantial growth in staff over the past year. In order to meet the increasing demands in call volume and maximize our efforts in serving the residents of Middlesex-London, we hired a total of 87 new employees, with 60 of these employees in the paramedic position.

Along with expanding our staffing levels, we are exploring opportunities through various models of care to better serve our communities. MLPS is in the active stages of planning for the implementation of Paramedic Rapid Response Units, which would help to reduce response times and help deliver more timely care to patients. Further to this, concurrent programs such as 'treat-and-refer' to our community paramedicine program will help in supporting the 9-1-1 system. There are already positive outcomes seen through our partnership with the Canadian Mental Health Association (CMHA), where instead of visiting an Emergency Department, eligible patients have the option of going to a 24/7 Crisis Centre.

Offload delays at Emergency Departments continue as an ongoing challenge for MLPS. In 2022, offload delays increased by 158.7 per cent from the previous year. The delay hours fluctuated throughout the year, peaking in October, then declining in November and December. We continue to regularly collaborate with our local hospital partners, generating solutions to mitigate the impact that these delays have on our ability to provide patient care services to the residents of Middlesex and London. We remain vigilant in monitoring data, and collecting new information to identify trends and areas needing attention.

The work we do here at MLPS is grounded in governance structures and public policy through the support of the Middlesex-London Emergency Medical Services Authority Board, Middlesex County Council, the City of London and the Province of Ontario. Under the leadership of Middlesex County Council, MLPS worked with Operational Research in Health (ORH), an independent consulting agency on the completion of an Operational Strategic Plan. The objective of the Strategic Plan was to produce a master plan for the delivery of paramedic services for the next five years (2022-2026). Throughout the project, ORH met with key stakeholders, including MLPS staff, to inform their report. During the analysis, strategic recommendations were developed by ORH based on key deliverables. MLPS remains well positioned to engage the future and to provide the residents of Middlesex County and the City of London with the highest quality of care and service possible.

Each year presents new and evolving challenges and changes, and the future will be filled with continued opportunities to build upon our expanding scope. It is only through the collective efforts of all employees at MLPS that our service continues to deliver safe, timely and compassionate care. MLPS receives many messages of recognition and thanks from community members and local partners for the ongoing hard work, sacrifice and dedication of our paramedics and teams. We appreciate the trust and confidence by our communities.

In closing, my sincere thanks go out to all our employees; I extend to each of you my gratitude and respect for all that you do every day. You are the strength and foundation of all that we do in serving our communities.

50,551

Middlesex-London Paramedic Service paramedics responded to 50,551 patient carrying calls.

9
1
1

299
average calls
per day

35
cardiac arrest
saves

16
babies
delivered

362
Paramedics

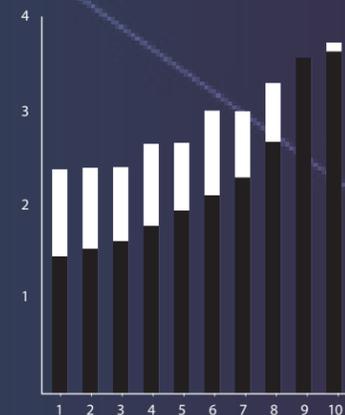


2.3 million km
driven during the past year.



Responded to 115,511 Calls for Service

Middlesex-London Paramedics responded to a total of 115,511 calls for service in 2022.



MIDDLESEX-LONDON PARAMEDIC SERVICE — Mission Statement

To deliver an efficient and high quality emergency response and care service to the population of Middlesex – London, with required provincial targets and standards as a minimum service level, and to contribute to the health of the community through active collaboration with other health care, community and emergency services partners.

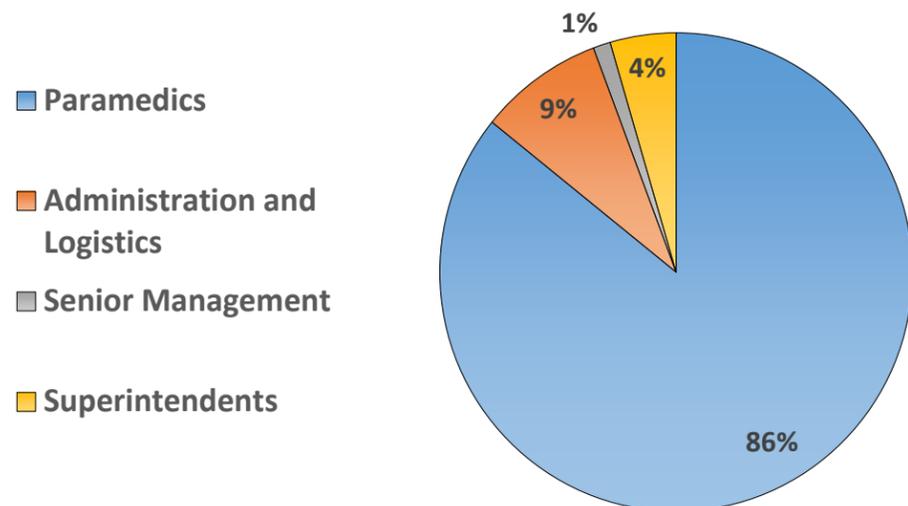


OUR TEAM — Staffing Breakdown

Middlesex-London Paramedic Service employs a total of 422 staff including Paramedics, Supervisors (operations superintendents & deputy superintendents); Administration staff (coordinators, administrative support, logistics, and training staff); and Senior Management.

Made up of full-time and part-time staff, Middlesex-London Paramedic Service has paramedic staff on duty 365 days a year.

Front line paramedics are responsible for providing patient care and make up 86% of the employees of Middlesex-London Paramedic Service.



What is a paramedic?

Paramedics are graduates of a community college full-time program dedicated to the paramedic profession.

Upon graduation from a paramedic program, the paramedic student must complete the Ontario Ministry of Health and Long-Term Care provincial certification.

The certification, known as the Advanced Emergency Medical Care Assistant (A-EMCA) exam, must be successfully completed the practice as a primary care paramedic in Ontario.

In addition, the paramedic must be authorized by medical director or regional Base Hospital to perform controlled medical ask. All Middlesex-London paramedics are certified under the southwest Ontario Regional Base Hospital program by Dr. Matt Davis.



ONTARIO PARAMEDIC SCOPE OF PRACTICE

PRIMARY CARE PARAMEDIC 2 Year Community College Diploma Program



Medications

- Acetaminophen (PO)
- Antibiotics (TOP)
- ASA (PO)
- Dextrose (IV)
- Dimenhydrinate (IM, IV)
- Diphenhydramine (IM, IV, PO)
- Epinephrine (IM, NEB)
- Glucagon (IM)
- Glucose (PO)
- Ibuprofen (PO)
- Ketorolac (IM, IV)
- NaCl 0.9% (IV)
- Naloxone (IM, SC, IN)
- Nitroglycerine (SL)
- Oxygen (100%)
- Salbutamol (MDI, NEB, BVM)

Procedures & Controlled Medical Acts

- 12 Lead ECG & STEMI Diagnosis
- Advanced Airway (Supraglottic LMA / KingLT)
- Airway Suctioning
- Capnometry (ETCO₂)
- CPAP Therapy (PEEP)
- Defibrillation (Automated External)
- Intravenous Access & Monitoring
- SpO₂ / SpCO
- Taser Probe Removal
- *Evidence Based Research

ADVANCED CARE PARAMEDIC 3 Year Community College Diploma Program

Medications

- Acetaminophen (PO)
- Adenosine (IV)
- Amiodarone (IV, IO)
- Antibiotics (TOP)
- ASA (PO)
- Atropine (IV, IO)
- Calcium Gluconate (IV, IO)
- Dextrose (IV, IO)
- Dimenhydrinate (IV, IM)
- Diphenhydramine (IV, IM, PO)
- Dopamine (IV, IO)
- Epinephrine (IV, IM, NEB, IO, ETT)
- Glucagon (IM, SC)
- Glucose (PO)
- Ibuprofen (PO)
- Ketorolac (IV, IM)
- Lidocaine (IV, IO, ETT, TOP)
- Midazolam (IV, IM, IN, BC)
- Morphine (IV, IM, IO, SC)
- NaCl 0.9% (IV, IO)
- Naloxone (IV, IM, IN, SC, IO)
- Nitroglycerine (SL)
- Oxygen (100%)
- Salbutamol (MDI, NEB, BVM)
- Sodium Bicarbonate (IV, IO)
- Xylometazoline / Phenylephrine (IN)

Procedures & Controlled Medical Acts

- 12 Lead ECG, Posterior, Right & STEMI Diagnosis
- Advanced Airway (Endotracheal Intubation)
- Advanced Airway (Supraglottic LMA / KingLT)
- Advanced Airway (Tracheal Tube Introducer Device)
- Airway Foreign Body Removal (McGill Forceps)
- Airway Suctioning & Deep Suctioning
- Capnometry & Capnography (ETCO₂)
- CPAP Therapy (PEEP)
- CVAD Infusion
- Defibrillation (Manual External)
- Intraosseous Therapy
- Intravenous Therapy
- Needle Cricothyrotomy
- Needle Thoracostomy
- SpO₂ / SpCO
- Synchronized Cardioversion
- Taser Probe Removal
- Transcutaneous Pacing
- *Evidence Based Research

FINANCIALS

— 2022 Operating Costs

In 2022, Middlesex-London Paramedic Service responded to an average of 299 calls per day in 2022.

The Stats

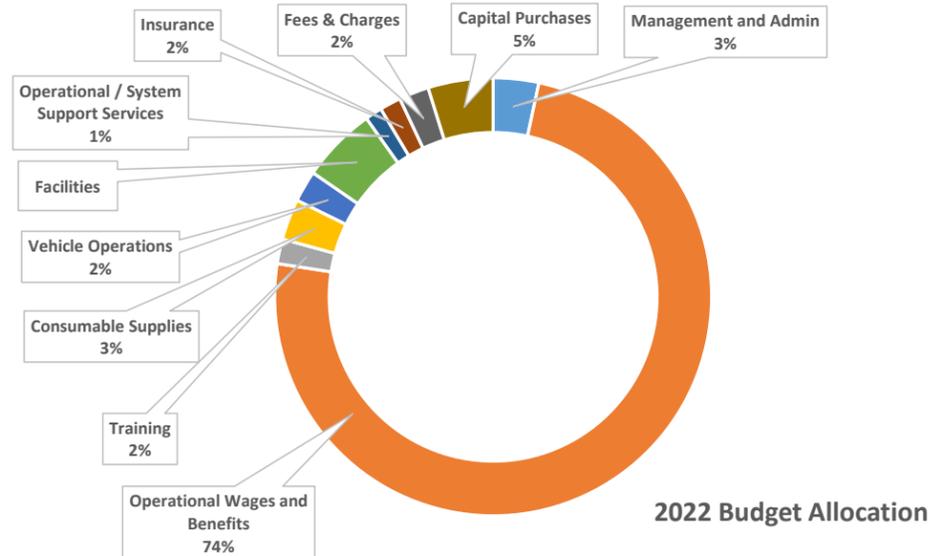
- Total Calls Received: 109,061
- Calls Per Day: 299
- Increase in Service Demand since 2020: 16.9%
- Unit Cost Per Hour: \$189.28
- Wages and Benefits: 74%

Middlesex-London Paramedic Service received 109,061 calls in 2022, resulting in a unit cost per hour of \$189.28.

The majority of the 2022 operating costs are fixed and based on emergency response capacity. A significant portion of the marginal operating costs for Middlesex-London Paramedic Service are variable in nature. These costs are primarily related to vehicle operations and consumable supplies.

For 2022, approximately 74% of all operational costs are directly attributed to employee salaries, wages, and benefits.

Middlesex-London Paramedic Service has worked to reduce its variable costs through strategic partnerships, purchase agreements, and business intelligence processes.



MLPS Initiatives To reduce Expenses

In 2022, Middlesex-London Paramedic Service's operating fleet consisted of 81 service vehicles, including ambulances, command vehicles, administration vehicles, and logistic vehicles. These vehicles traveled over 2.3 million kilometers in 2022. The average cost per kilometer for these vehicles, including fuel, maintenance, repairs, and insurance costs was \$1.25 per kilometer.

Middlesex-London Paramedic Service continues to partner with the City of London in a corporate fuel purchasing agreement.

Additionally, Middlesex-London Paramedic Service utilizes advanced Logistics and warehouse supply software to accurately account for consumables and assets.

PERFORMANCE

— Calls for Service

Notes
Calls for service have increased by 73% since 2013.

In 2022, the number of calls for patient carrying service (Code 1-4) was 80,265 – an increase of 10.0% over 2021, and an increase of approximately 73% since 2013 when calls for service were at 46,425.



The Stats

- Total Calls for Service: 111,057
- Total Emergency Calls: 79,365
- Number of Patients Transported: 50,551

7.9%
Increase in Life Threatening Calls (Code 4)

Station Name	Code 1	Code 2	Code 3	Code 4	Code 8	Total
Adelaide (HQ)	51	426	3,296	7,493	4,933	16,199
Byron	3	24	2,305	4,536	3,198	10,066
Dorchester	2	20	1,075	1,884	1,673	4,654
Glencoe	26	20	431	684	830	1,991
Horizon	15	21	3,366	6,688	1,922	12,012
Hyde Park	7	19	2,120	3,746	3,477	9,369
Komoka	1	18	698	1,221	2,200	4,138
Lucan	0	20	426	845	2,029	3,320
Parkhill	0	18	698	1,221	2,029	3,966
Strathroy	7	20	1,075	1,884	1,673	4,659
Trafalgar	15	34	2,877	5,444	2,076	10,446
Trossacks	8	23	2,625	4,802	2,991	10,449
Waterloo	65	38	5,573	12,351	1,761	19,788
Total	200	701	26,565	52,799	30,792	111,057

Data Source: ADRS

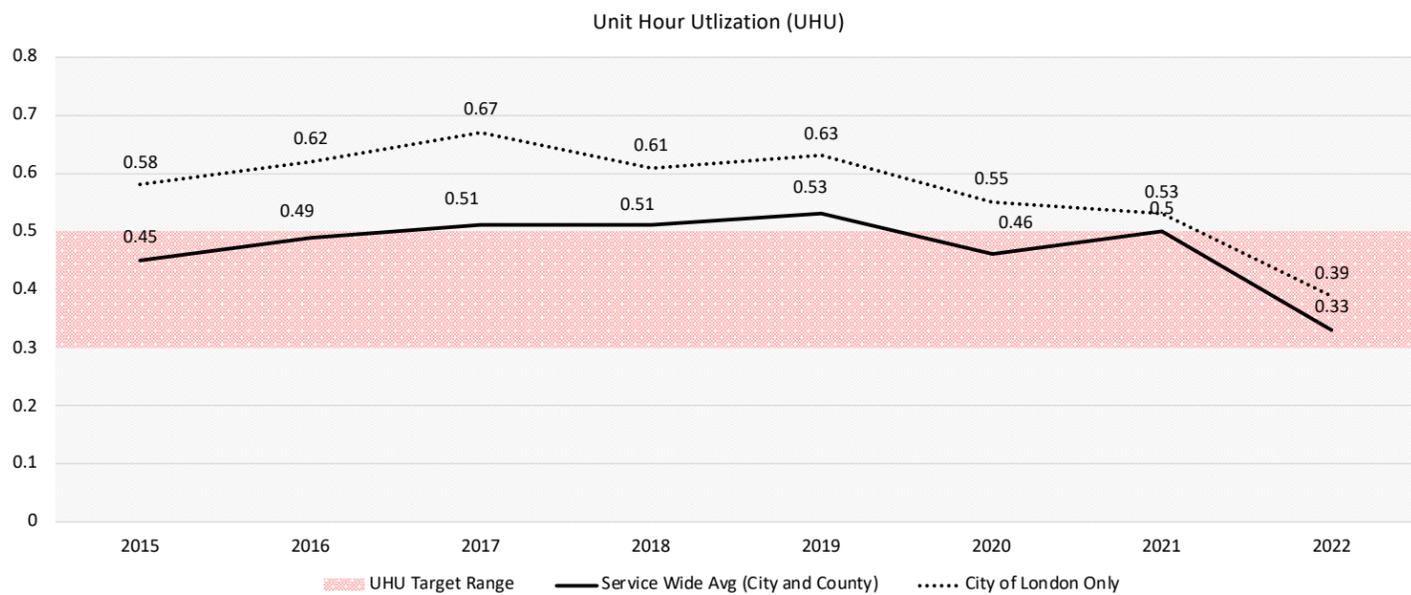
— Unit Hour Utilization

Unit Hour Utilization (UHU) is a ratio which measures the number of calls for service in relation to the number of units available over the period of one hour. Generally, 9-1-1 systems target between .30 and .50 to ensure that there enough resources available in the 9-1-1 system to respond to large scale incidents and to accommodate surges in call volume.

It is important to note that UHU does not capture productivity outside of responding to 9-1-1 calls (such as cleaning and restocking the vehicle) nor does it capture time spent driving to the call or time lost to offload delays.

Unit Hour Utilization (UHU) for Middlesex-London Paramedic Service for 2022 was 0.33 (an improvement of 32% over the previous year).

When examining unit hour utilization for Middlesex-London Paramedic Service it is important to examine utilization for the service as a whole and to break out and focus on the utilization for the City of London independently, due to the ratio of call demand and units available in the city to service those calls.



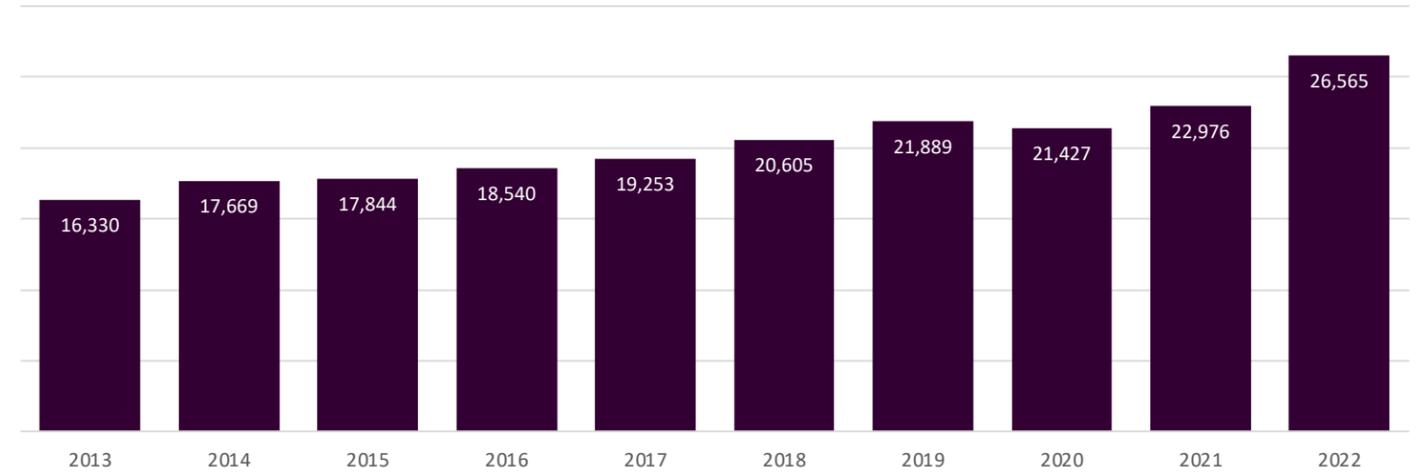
Data Source: ADRS

— Life Threatening Calls (Code 4)

In 2022, the number of life threatening calls (Code 4) dispatched was 52,799, an increase of 7.8% over 2021 and a 77.5% increase since 2013.

Middlesex-London Paramedic Service continued to analyze trends in call demand, unit utilization and activity in order to adapt to and make adjustments to ensure resources are optimized.

Life Threatening Calls (Code 4)



Data Source: ADRS



— Response Time

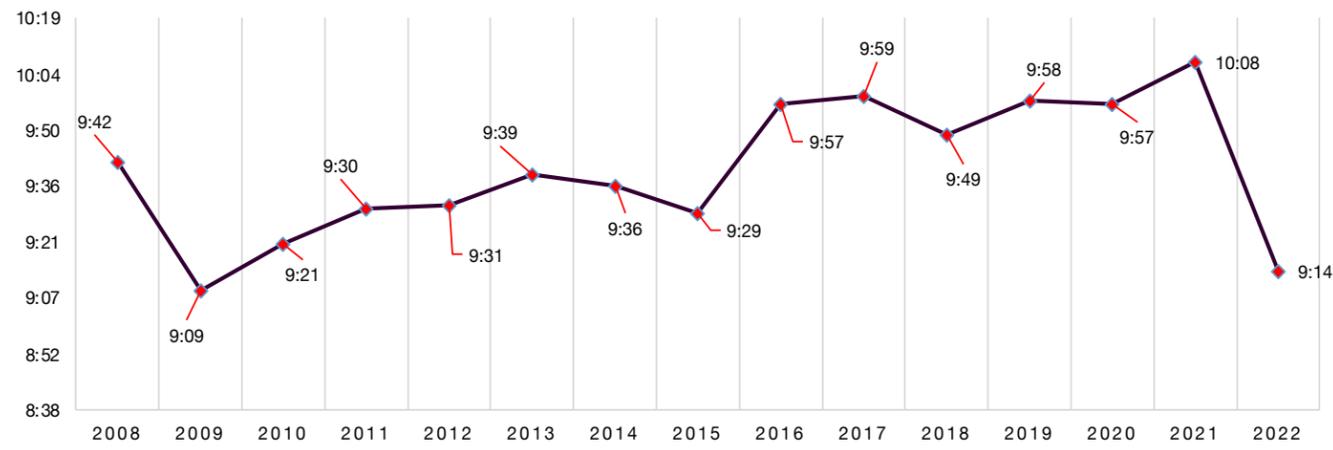
Notes

Length of time for Middlesex-London Paramedic Service to arrive at an emergency scene.

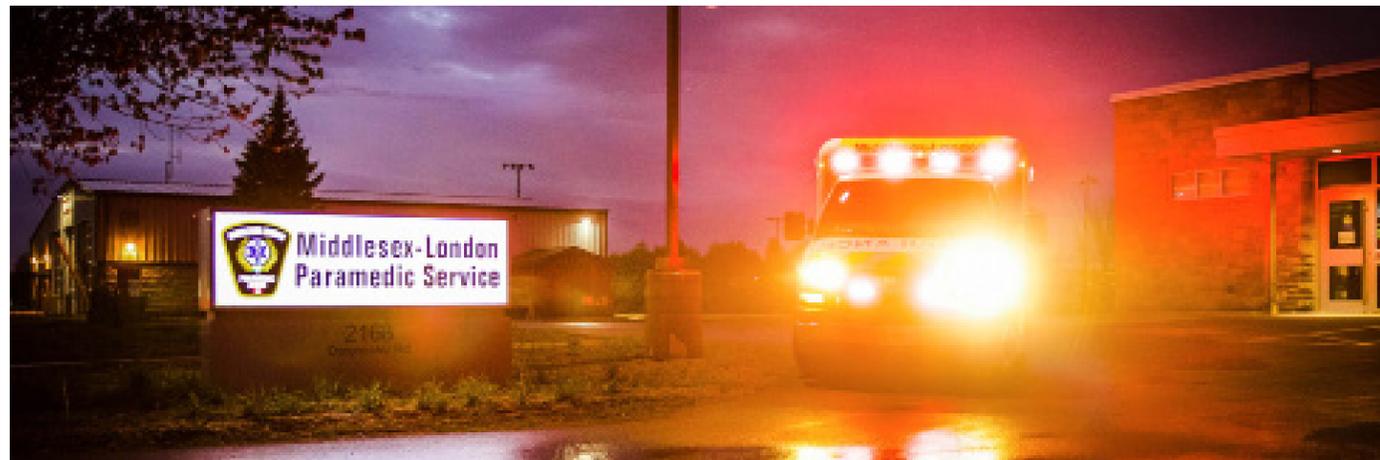
Middlesex-London Paramedic Service 90th percentile response time trend for life-threatening “Code 4” calls saw a decrease in 2022. In response to continued growth in call volume and offload delays, Middlesex-London Paramedic Service re-evaluated the alignment of paramedic resources and made adjustments that lead to a 1 minute and 6 second decrease in response times resulting in an average response time of 9 minutes and 14 seconds in 2022.

Response times in Middlesex County decreased by 50 seconds in 2022 and response times in the City of London decreased by 53 seconds.

Middlesex - London EMS Response Trend (Life Threatening)



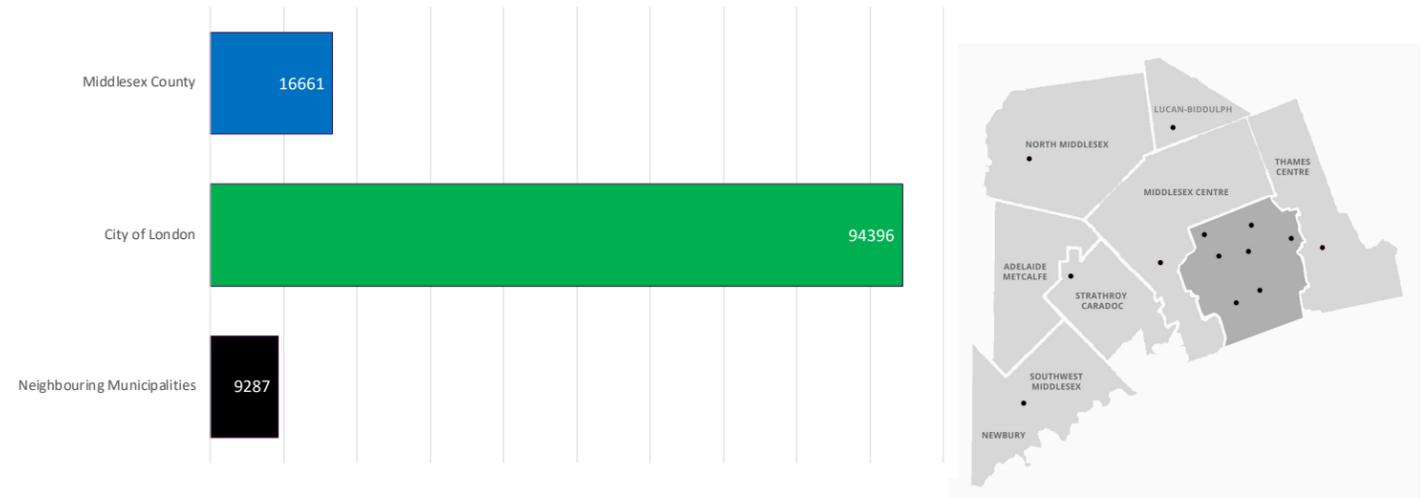
Data Source: ADRS



— Calls Completed Within Middlesex County Boundaries

Approximately 85% of the calls attended by Middlesex-London Paramedic Service occur within the City of London. During 2022, other municipalities assisted within Middlesex-London 2,634 times. Conversely, Middlesex-London Paramedic Service assisted neighbouring municipalities 9,287 times.

All Calls Completed by Middlesex-London Paramedic Service



Data Source: ADRS

Patient Calls Completed in Middlesex County

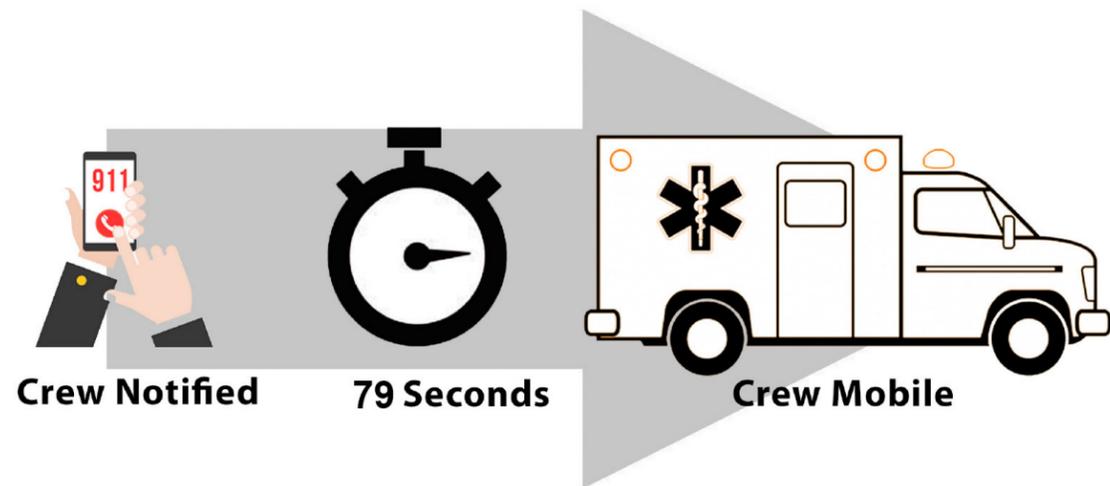
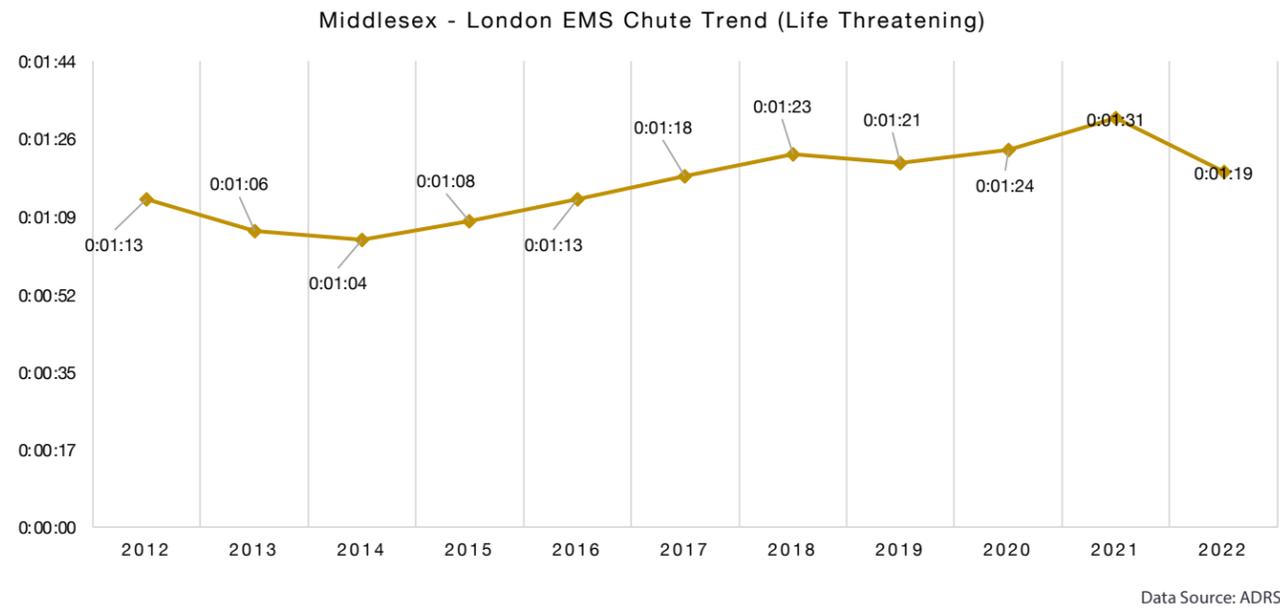


Data Source: ADRS

— Average Chute Time for Life Threatening Calls (Code 4)

The Average Elapsed Time from the time the crew is notified of life threatening calls to the crew being mobile on the call is called the Chute Time.

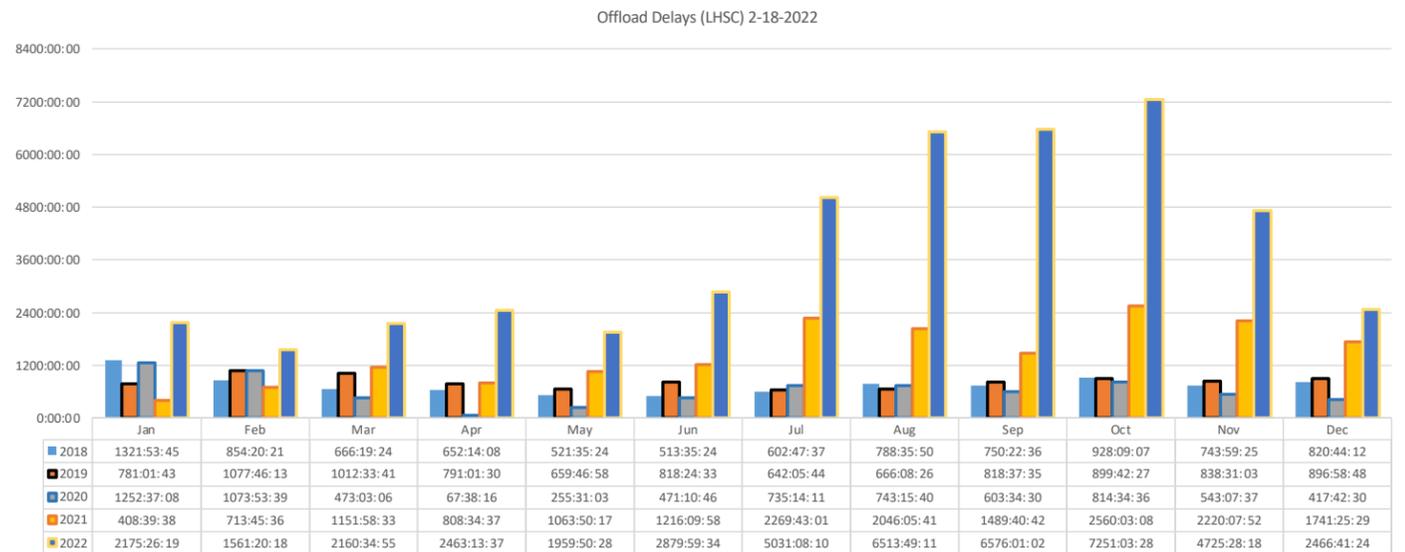
In 2021 the average Code 4 Chute Time for Middlesex-London Paramedic Service was 1 minute and 31 seconds. This time can vary as the Paramedics could be at a station, in a hospital (further away from their vehicle) or already in the vehicle. With the realignment of paramedic resources, Chute Time for 2022 was reduced by 20 seconds (25.3%).



— Offload Delay

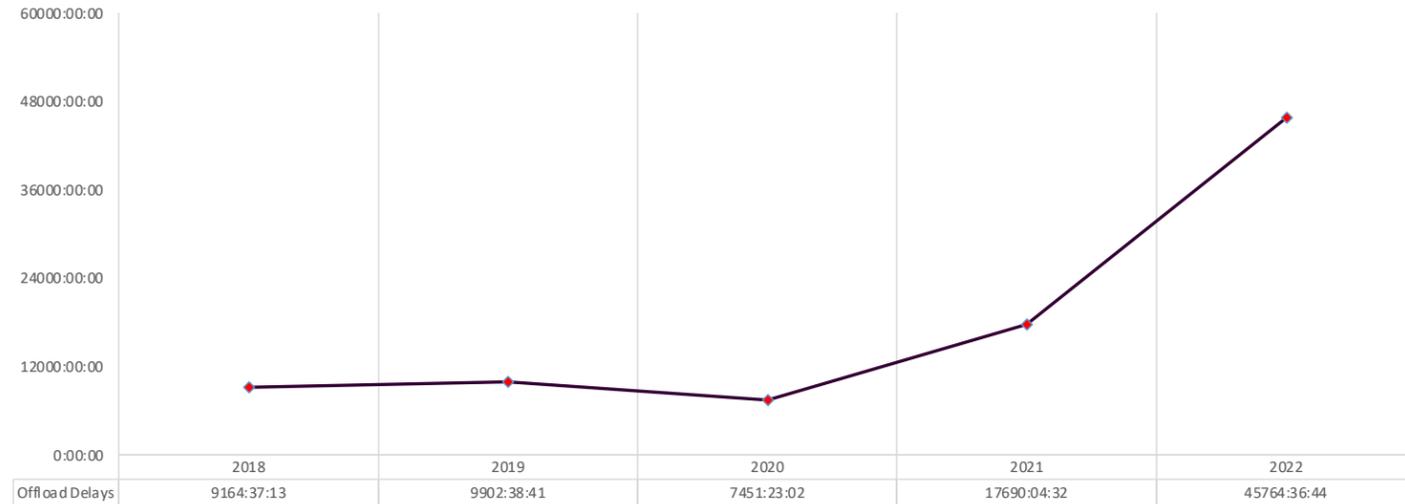
The definition of offload delay is the amount of time spent in the Emergency Department transferring care to the hospital staff. It is calculated as the difference in time from when the ambulance arrives at the Emergency Department until Transfer of Care is documented and acknowledged on the Ambulance Call Report – less the standard thirty (30) minutes which is normal for ambulance turnaround. Any time greater than thirty minutes is considered offload delay.

Over the course of 2022, Ambulance Offload Delay hours fluctuated throughout the year peaking in October. Offload Delay hours declined greatly in November and December. Offload Delay hours increased in 2022 by 158.7% from the previous year.



In 2022, a total of 1,906 24-hour days were lost to offload delays. This is an increase of 158.7% from the previous year.

Offload Delays Year over Year



Rolling Monthly Totals (Lost 24-Hour Days)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
90.6	65.1	90.0	102.6	81.7	120.0	209.6	271.4	274.0	313.4	196.9	102.8



— 2022 Middlesex-London Paramedic Service Response Time Plan

Ontario Regulation 368/10 as consolidated into Ontario Regulation 257/00 requires ambulance service delivery agents to adopt municipally-developed response time plans for cardiac arrest patients and CTAS (Canadian Triage Acuity Scale) 1, 2, 3, 4 and 5 patients receiving emergency responses.

As the designated delivery agent for ambulance service for Middlesex County and the City of London, Middlesex County Council adopted a performance plan respecting response times for 2022.

Middlesex-London Paramedic Service continues to monitor the targeted response time standards, working towards bringing all categories into compliance with the standards.

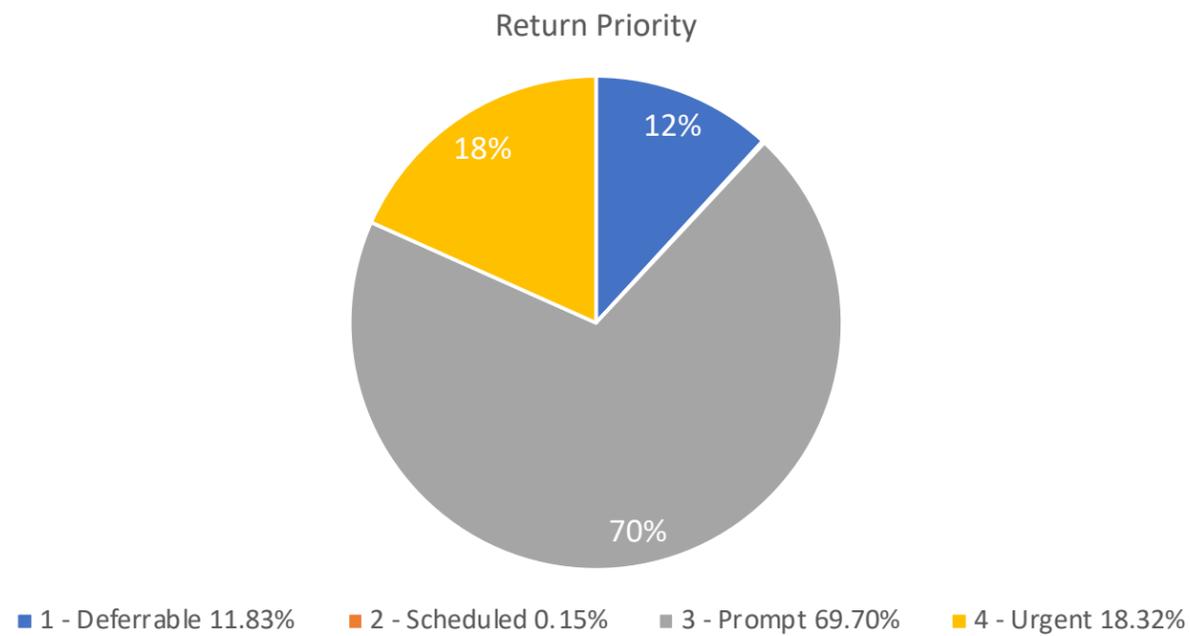
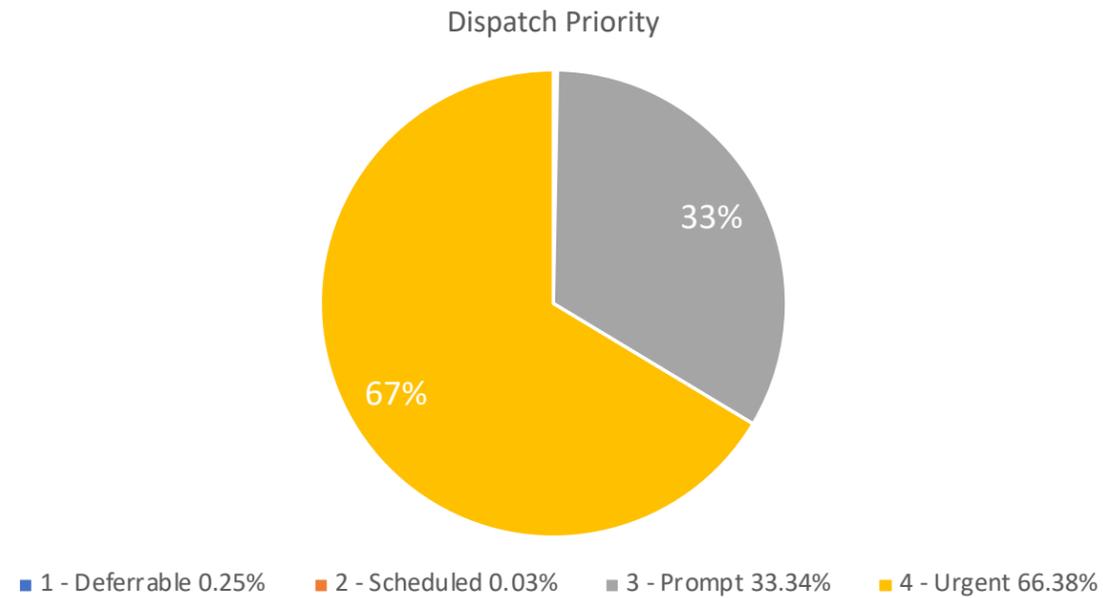


Data Source: Interdev

DEMOGRAPHICS

— Dispatch Priority and Return Priority

In 2022, Middlesex-London Paramedic Service paramedics were dispatched Code 4 (Lights and Sirens) to calls 66.57% of the time, only returning Code 4, 15.11% of the time.



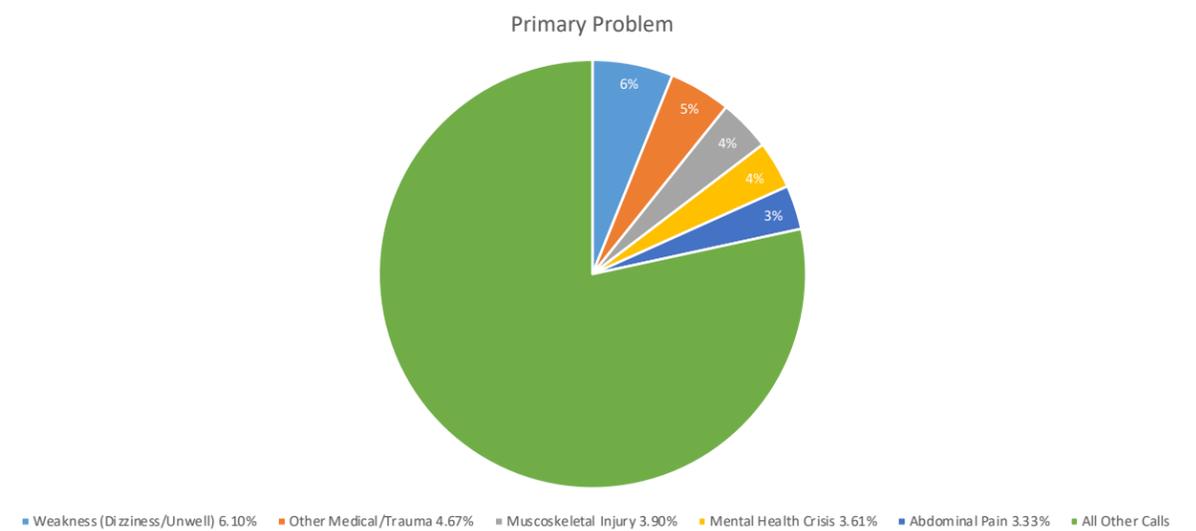
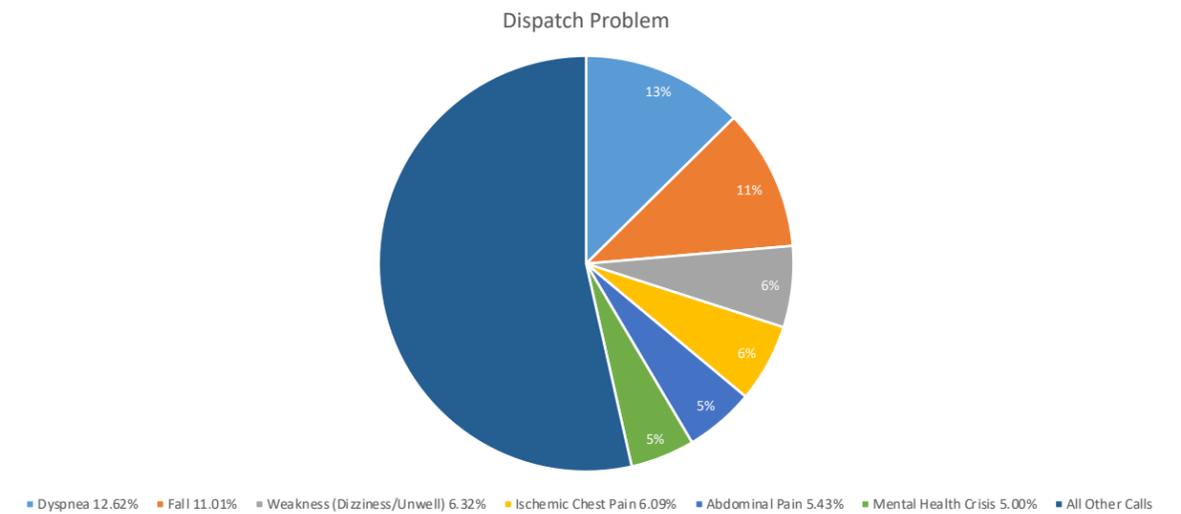
Data Source: Interdev

— Top Dispatch Problems and Top Primary Problems

In 2022, the top Dispatch Problems (what the paramedics are told when they are assigned to the call by London CACC) were for Dyspnea (shortness of breath), Weakness/Dizziness/Unwell, Chest Pain, Abdominal Pain, and Mental Health Crisis.

The top Primary Problems (what the actual problem is with the patient when the paramedics arrive on scene) included General Illness/Weakness, Other Medical/Traumatic injuries, Musculoskeletal injuries, Mental Health Crisis and Abdominal Pain.

Of the five most responded to calls for service, the most significant change was the increase to responses for mental health crisis. The increase in responses to patients in mental health crisis exceeded the change of the next closest comparator by more than 28%.

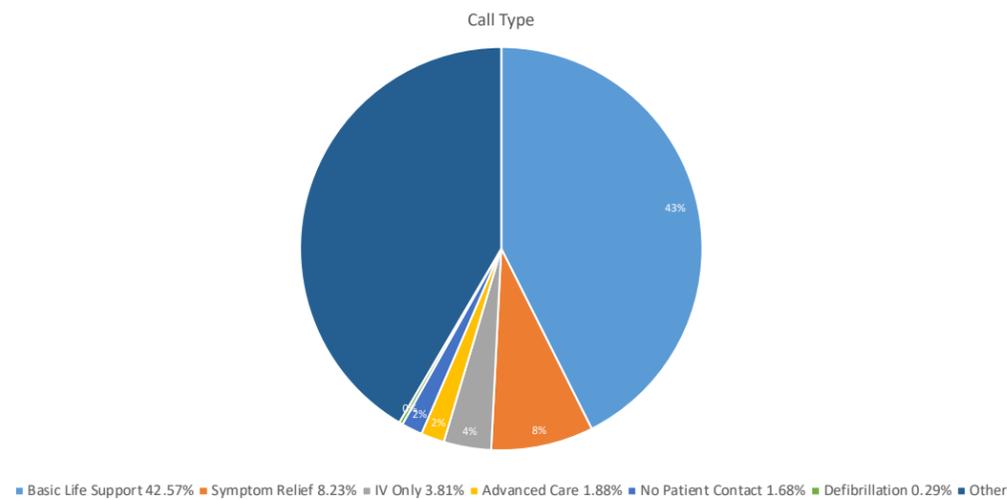


Data Source: Interdev

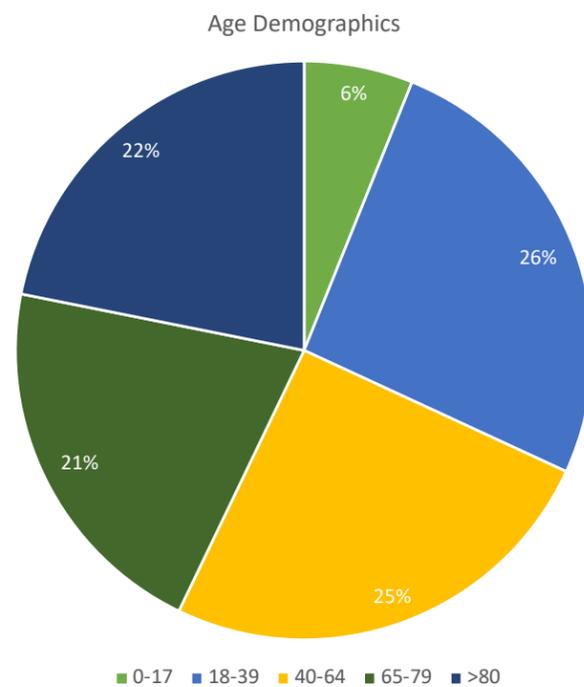
— Call Type and Age Demographics

In 2022, the majority of the calls that the Middlesex-London Paramedic Service responded to were considered Basic Life Support Calls (42.57%).

Of all the calls in 2022, 16% were considered the most critical Advanced Care. Primary Care Paramedics with enhanced skills of Symptom Relief and Intravenous Therapy Certification are able to provide the majority of care needed.



Data Source: Interdev



Data Source: Interdev

OPERATIONS

Notes

Middlesex-London Paramedic Service participated in several operations and events over 2022.

Middlesex-London Paramedic Service participated in many planned operations and events throughout 2022. Middlesex-London Paramedic Service worked with the City of London and allied agencies to create a coordinated response to the Student Unsactioned Street Event that took place on Broughdale Ave and Huron St.

Middlesex-London Paramedic Service participated in municipal training exercises and worked with allied agencies through joint training to ensure operational readiness.

Additionally Middlesex-London Paramedic Service participated in events such as the London Airshow, Rock the Park, OUR Family London events and the Turtle Island March to name a few.



Events London and Middlesex

Operational Responses 2022

Large Crowds



Turtle Island March
Event takes place in Victoria Park and moves across the City of London.

Dynamic Environment



London Airshow
MLPS provided emergency medical coverage for this annual event.

Special Operations



Bike Unit
The MLPS Bike Unit provided deployed to many events.



On September 24, 2022, a large unsanctioned street event known as FOCO was held on Broughdale Ave and Huron St in London Ontario. This event drew in excess of 30,000 attendees on a narrow 750-meter street and surrounding neighbourhood.

A concert known as Purple Fest was simultaneously held at the neighbouring Western University, which drew an additional 10,000 people.

Middlesex-London Paramedic Service worked the City of London and allied agencies, including London Police Service, London Fire and City of London By-Law, for the period leading up to the event creating a plan that would ensure the safety of the students while protecting the ability to provide emergency coverage to the City of London and the County of Middlesex.

Middlesex-London Paramedic Service participated in several joint training exercises with allied agencies. This training included response to high risk settings such as the London International Airport as well as Fanshawe Conversation Area.

Through these joint training exercises, Middlesex-London Paramedic Service ensures operational readiness and continues to expand the response capabilities of paramedics to ensure that patients are able to receive care in even the most austere environments.



Middlesex-London Paramedic Service continued to utilize its Emergency Support Unit (ESU) as support at various events throughout 2022 such as the Our London Family event, Western Homecoming, Remembrance Day and Air Show London. Operationally, the ESU was utilized as a stationary triage point for these large scale events. The ESU was mobilized to specific events with two paramedics (Operator and Triage) to deal with any walk up emergencies occurring during the events. The paramedics are able to assist and treat multiple patients while waiting for a transporting ambulance to arrive. The ESU was fully equipped with paramedic bags and equipment, as well as additional supplies to deal with any unplanned operational occurrences. It also was of great assistance for individuals suffering from heat related illnesses, fatigue and allergic reactions at other large scale gathering. The ESU is fully accessible to individuals with disabilities, which was also an asset.



In November of 2022 the ESU was involved in the Joint Emergency Response Training day held at Fanshawe Conservation Area. This exercise was a joint training collaboration with Middlesex London Paramedic Service, London Fire Department, London Police Service, Salvation Army, The Canadian Navy, Canadian Coast Guard and the Upper Thames Conservation Authority. The ESU remains at a readied state for Emergency Response to unplanned events. Middlesex London Paramedic Service currently holds 10 in house trained operators.

PROFESSIONAL PRACTICE CLINICAL EXCELLENCE AND SYSTEM OVERSIGHT

The Professional Practice, Clinical Excellence and System Oversight division is responsible for providing operational and system support services to the organization.

Middlesex-London Paramedic Service works diligently to provide quality patient care services to the public. In order to achieve and enforce the highest standards possible, the Professional Practice, Clinical Excellence and System Oversight division is responsible for conducting all investigations, which includes responding to community complaints and inquiries in a timely manner.

Quality Assurance is a component of the division and is tasked with confirming clinical excellence and system analysis to maintain comprehensive quality management in respect to various Acts, legislative requirements and best practices. This is accomplished by analyzing and providing data on organizational systems, identifying trends, defining best practices, performing field audits and completing detailed recommendations for system improvement.

The Professional Practice, Clinical Excellence and System Oversight division also oversees the occupational health and safety program, contractual and legislated reporting requirements and is responsible for coordination of the Ministry of Health Ambulance Service Review.

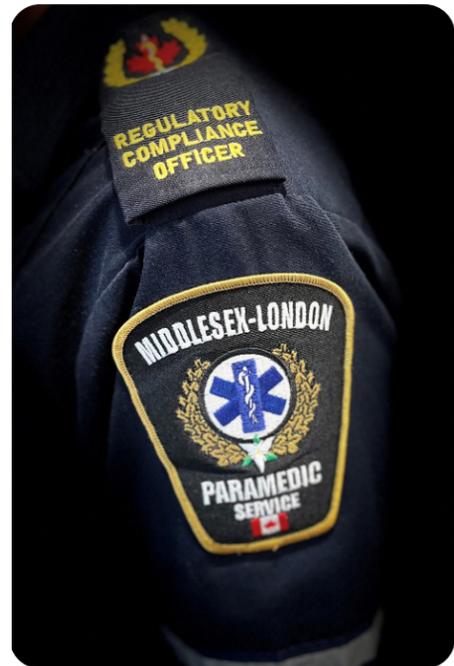
Additionally, the Professional Practice, Clinical Excellence and System Oversight division gathers, stores and audits ambulance call reports, as mandated by the Ontario Ministry of Health and Long-Term Care, oversees credentialing of paramedic staff in line with the

Ambulance Act, liaises with the Southwest Ontario Regional Base Hospital Program (SWORBHP) and reports incidents to the Ministry of Health – EHS Field Office as required.

The Regulatory Compliance office is responsible for auditing and maintaining policies and procedures for the operation of Middlesex-London Paramedic Service and its related activities. This office manages and conducts all workplace investigations of complex and unique scale and works closely with the Ministry of Health and Long-Term Care, specifically the Investigations, Certification and Regulatory Compliance Group (ICRCG), Provincial Coroner's Office, local and municipal Police Services, Special Investigations Unit (SIU) and any other external investigative bodies.

Middlesex-London Paramedic Service strives to provide the highest quality of care to anyone

who requires our services. Inquiries that require further investigation to determine if service or behavioral improvements can be made to better serve the residents of Middlesex and London.



Caring and Compassion Citizen Compliments

"I was in a collision on the highway today after my vehicle lost control and ran straight into the concrete median. Your team of paramedics were quick to arrive and assessed me for any injuries. we're excellent. Professional, empathetic and thorough. Please see to it that these paramedics are recognized for their service and thank them for me."

"Patient's spouse called to state how friendly, professional and kind the crew were who responded when her husband had a fall and suffered a bleed to his arm."

"To the paramedics who attended yesterday. I wanted to reach out to say they were both amazing, caring, non-judgmental and professional while putting the student and her mother at ease. Well done!"

"Called an ambulance for my wife. It was 20 min later and she was on her way hospital. Great work gang. The one paramedic stopped by and checked on my wife a couple of times. Great job."

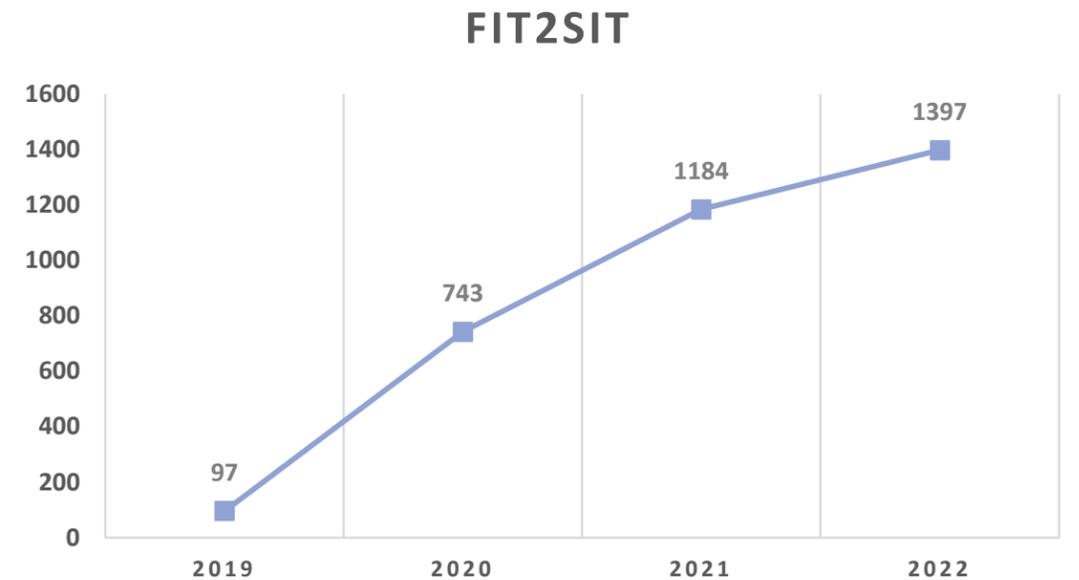
"My RN partner and I were on a transport tonight and we wanted to send a thank you to the paramedic crew that we went with. We picked up a medically fragile paediatric patient with CVST that was a life or limb transfer. Apart from being professional and friendly with us, we wanted to recognize that they went above and beyond in their assistance with the patient's mom as well as got us back to London quickly and safely, extremely helpful assisting us with fluid resuscitation in the back of the ambulance. If you could please pass along our thanks, we would greatly appreciate it".

"I just wanted to confirm the excellent attention and service provided by your attending paramedics for my son's fracture at Boler Mountain on Saturday. Please thank them for their service and attention."



In 2019, Middlesex-London Paramedic Service (MLPS), in collaboration with London Health Sciences Centre, implemented a program called Fit2Sit in order to attempt to decrease the amount of off-load delay for MLPS. This program continues to provide relief to offload delays with a 98% success rate.

The program has strict criteria, that would see non-urgent patients being taken directly to the Emergency Department waiting room area, freeing up the paramedic crew for another call. The study, contains a quality assurance program that ensures patient safety is maintained.



Data Source: Interdev

LOGISTICS & SUPPORT

— Fleet Services

The Logistics Department is responsible for a wide variety of services that supports Middlesex-London Paramedic Service. In 2022, Logistics staff processed 3,397 servicedesk requests for service.

The Stats

Servicedesk Requests:
3,397

Number of Fleet Vehicles:
81

Vehicles Readied:
Over 11,000

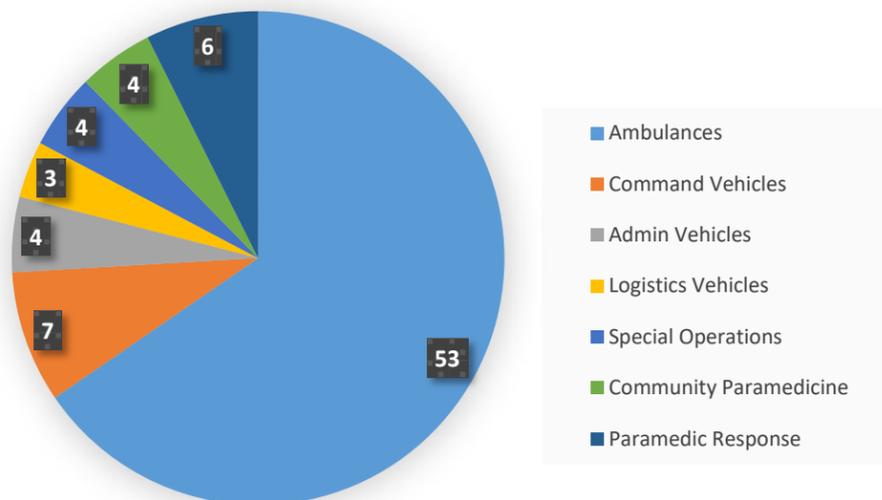
Deep Cleans Completed:
923

Kilometers Driven:
2,344,178

Reportable Collisions:
52



In 2022 Middlesex-London Paramedic Service operating fleet consisted of 81 vehicles and 4 bicycles. In 2022 Middlesex-London Paramedic Service also deployed a Gator Utility Vehicle along with Emergency Support Units to be used at special events. These units allow paramedics more expeditious access to patients and help strengthen the positive presence and engagement of Middlesex-London Paramedic Service in the community. These units were deployed for events such as Western homecoming and the London Airshow. Logistics is responsible for coordinating the maintenance of vehicles through external vendors and commissioning new emergency vehicles for service as well as decommissioning retired vehicles.



LOGISTICS & SUPPORT

Logistics Technicians

(LT's) prepare vehicles twenty-four hours per day including washing, restocking vehicles and response bags, checking equipment and vehicle deep cleans.

- Vehicle preparedness = 916 vehicles/month (average)
- Deep Cleans = 77 vehicles/month (average)

Supply Chain Management

- Purchasing of supplies and services including RFP and RFI's
- Warehousing / Distributing of supplies
- Liaising with external suppliers for fuel and linen supplies
- Asset management
- General facility maintenance

Equipment

- Coordinating maintenance of equipment through external vendors
- Equipment testing

Project Management

- New station construction
- Support the introduction of new products and equipment

— Ambulance Collisions

Over the course of 2022, Middlesex-London Paramedic Service a total of 2,344,178 kilometers. In 2022 there were 52 reportable incidents involving Middlesex-London Paramedic Service vehicles, 94% of which were minimal/minor in nature.

The total number of kilometers driven over the course of the year increased by 17%. This improvement can be attributed to the continuing safe drivers training by Middlesex-London Paramedic Service.

Collisions are categorized as Extensive Damage, Minor Damage and Minimal Damage. Minor damage includes punctured tires, dented roofs, etc., while minimal damage includes broken side mirrors, small surface dents, scratches, etc.



In 2022 we drove
2,344,178
kilometers.
That's 58 trips
around the Earth!



COMMUNITY PARAMEDICINE

Community Paramedicine (CP) is a broad and developing model of community-based health care where paramedics use their education and expertise in non-emergent mobile integrated response, to provide immediate or scheduled primary, urgent, and/or specialized healthcare to vulnerable patient populations while focusing on improving equity in healthcare access across the continuum of care. The CP program has rapidly expanded as a specialized and integral division within Professional Standards to support Middlesex-London Paramedic Service (MLPS) reduce non-essential 911 calls, Emergency Department presentations, and hospital admissions. A core value of CP is to provide additional supports and connections for high risk or vulnerable

individuals, and support the province’s modernization plan to address systemic barriers in health care. CP provides care to a variety of patient populations through several specialized programs.

In 2022 the MLPS program included the following:

- Community Paramedicine for Long-Term Care (CPLTC)
- Health Outreach Mobile Engagement (HOME)
- Community Outreach and Support Team (COAST)
- Frontline Paramedic Referral

COAST: St. Joseph’s Health Care London (SJHC), Canadian Mental Health Association Thames Valley (CMHATV), London Police Service (LPS), and MLPS have partnered to develop a proactive Crisis Outreach and Support Team (COAST). The team provides a health care led, police supported, and community crisis response strategy for individuals experiencing mental health crisis. This team assists with medical assessments, de-escalation techniques, diversion from medical intervention where appropriate, and facilitation of transition to acute care when required to ensure positive outcomes for the individual.

HOME: The HOME program was developed to improve the health outcomes and health equity of highly marginalized individuals who are experiencing homelessness, insecure housing, or are rostered with the London InterCommunity Health Centre by utilizing community paramedics to deliver mobile primary care services to people where they are at. The program launched in January 2021, and has had significant positive outcomes such as: improved access and decreased barriers to supports and services, development of trust and reduced stigma, timely access to care, and improved health outcomes for the highly marginalized population. During the first year the...

— Community Paramedic Programs

CPLTC: Mandated by the Ministry of Long-Term Care to provide 24/7 access to CP for non-emergent procedures and services for patients who are waiting for placement in a long-term care home, patients who are soon to be eligible for long-term care, or patients with specific chronic conditions. CPLTC CP’s undergo specialized training which allows them to provide non-emergent mobile response and work in collaboration with a patient’s primary care providers to perform a range of community-based primary care services in the comfort of a patient’s home. Delegation of controlled acts is under the authorization of the MLPS CP Medical Advisor, in conjunction with the patient’s primary care or on-call provider.



- 1,059 unique patients accessed medical and wraparound care services
- 71% of patients accessed care 1 time
- 29% of patients accessed care 2+ times
- 2,194 primary care services
- 780 chronic care services
- 498 mental health care services
- 182 infections disease care services
- 64 prenatal care service
- 1,175 non-essential ED visits were prevented
- 18 emergency medical interventions



STAFF EDUCATION & TRAINING — New Employees

Notes

In 2022 Middlesex-London Paramedic Service hired 60 additional part-time paramedics.

2022 was the second year MLPS ran a successful Mentorship program.

This is an extensive program which takes final semester paramedic students, places them with a mentor and provides training to them during their placement with us. Successful mentorship students may qualify for employment with our service. The program lasts approximately 450 hours. In 2022 we had a total of 26 students in the mentorship program. 23 went on to become employed paramedics with MLPS.

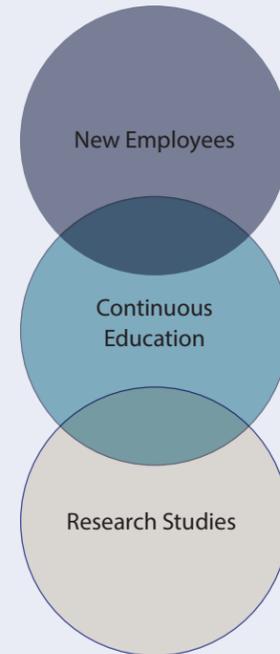
In total, Middlesex-London Paramedic Service trained and on-boarded 60 new paramedics over the course of 4 different orientation classes, conducted 48 training sessions and released 8 on-line learning and training packages.



HOW WE DO IT

Notes

The Middlesex-London Paramedic Service Education and Training Division stays current with best practices and trends in paramedicine.



Training Stats

Number of New Employees:
60

Training and Education Sessions:
48

Training Hours:
2220

— Continuous Training

Middlesex-London Paramedic Service also continues with the Field Training Officer program whereby paramedics participate in the ongoing training of their peers and assist in paramedics returning to work. In 2022 Middlesex London Paramedic Service had a total of ____ trained FTO's and completed a total of 2220 hours of training. This included the onboarding of new medics, in house service training for 381 paramedics and training for paramedics returning to the workplace. Over the course of 2022, Middlesex-London Paramedic Service, with the assistance of the Field Training Officers (FTO) were able to return ___ paramedics to the workforce.

Each year, Middlesex-London Paramedic Service participates in several research studies. One in particular for 2022 was the world renowned Double Sequential Defibrillation study, which had 2 defibrillators shocking one person on certain patients. This was a 3 armed trial comparing standard defibrillation to double sequential defibrillation to vector change defibrillation (changing the position of the standard defibrillation pads) The results of this study showed a survival rate of 13.3% for standard defibrillation, 21.7% for vector change defibrillation and 30.4% for double sequential. We were one of 5 paramedic services in the world to take part of this study which is now shaping how the world responds to cardiac arrest care.



EMPLOYEE RECOGNITION

Middlesex London Paramedic Service would like to recognize an initiative created by one of our very own paramedics, Matthew Pusateri. Marathons for Mental Health is a fundraiser that supports mental health initiatives that directly impact supporting first responders across the country. In October of 2022, while representing paramedics by wearing a Middlesex London Paramedic Service bike uniform shirt, Matthew ran in the TCS Toronto Waterfront Marathon, raising a total of \$2539 that he donated to #IVEGOTYOURBACK911. The money was used to support their therapy dog program. On race day, Matthew had many friends supporting him, replacing his hydration bottles and cheering him on, including some of his Middlesex London Paramedic Service coworkers. Matthew came up with the idea for Marathons for Mental Health when he first started training for the Toronto marathon. Matthew said, "I wanted the funds raised to support mental health initiatives because as first responders, we have lots of bad calls that effect our mental health".



After the success of his marathon, Matthew decided to start a Marathons for Mental Health team. The team currently has 29 members, 8 of whom are paramedics with Middlesex London Paramedic Service. The team continues to help raise money for the fundraiser by training and participating in various marathons. Matthew says his future goal for the team is to host its very own 5km running race with all contributions going towards continuing to support first responder mental health initiatives. Middlesex London Paramedic Service would like to congratulate Matthew and his fellow coworkers on this outstanding accomplishment. More information on Marathons for Mental Health can be found on their Instagram and Facebook social media pages, 'Marathons for Mental Health'.



2022 THE PREMIER THANKS MLPS

2022

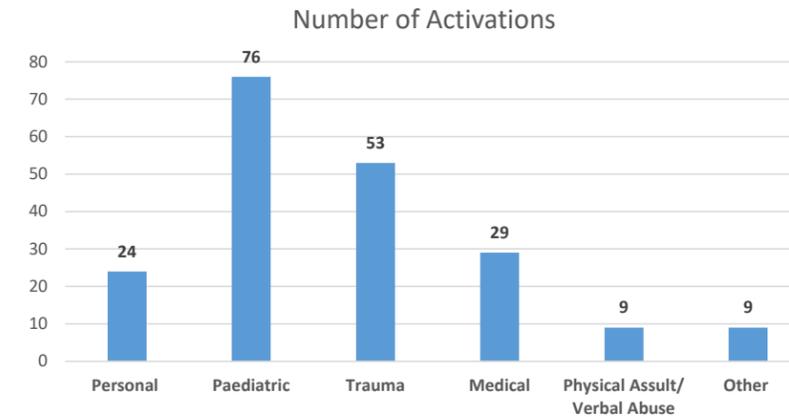
MLPS received a special visit from the Premier in early 2022. The purpose of this visit was to personally come and thank paramedics and all Middlesex London Paramedic Service employees for their valiant efforts and dedication to serving their community through the course of the pandemic. Middlesex London Paramedic Service had the pleasure of welcoming the premier back again at our Head Quarters location for the provincial announcement of the Ontario Stay and Learn grant. This program provides full funding for students studying to become a paramedic.



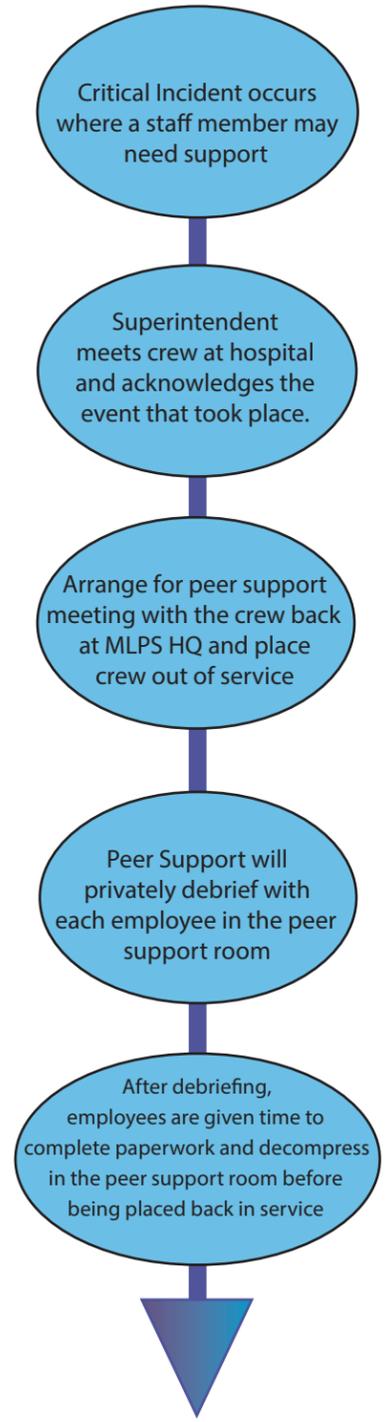
EMPLOYEE MENTAL HEALTH INITIATIVES — Peer Support Team

The Middlesex London Peer Support Team was assembled in 2017 with the mission of coworkers supporting coworkers mental health and well being through difficult calls and situations that paramedics and other employees may encounter on shift. The Peer Support Team is a group of volunteer employees who have been trained by the International Critical Stress Foundation (ICISF) in both group and individual support as well as suicide prevention. Clinical oversight is provided by Dr. Chares Nelson. The team members are required to complete annual recertification and attend a mental wellness conference every year in conjunction with Dr. Nelson as part of their annual training. The team currently has 17 members consisting of 2 departmental leads, 2 team leads and 13 front line peer support members.

In 2022, the team was activated 200 times to support employees after various critical situations:



Activation Protocol of The Peer Support Team



COMMUNITY ENGAGEMENT

Notes

During 2022 the Middlesex-London Paramedic Service Public Access Defibrillator program focused on community CPR/ AED awareness and preparedness.

MLPS on May 26, 2022: Middlesex London Paramedic Service Holds the Cardiac Survivor Day event at the South London headquarters and marked the first time since the start of the pandemic that officials were able to hold the ceremony in person.
“In 2020, there were a total of 743 responses to cardiac arrest calls within the Middlesex-London response area. Of those 743, Middlesex-London Paramedic Service treated 381. When we look at our statistics ... relating to sudden cardiac arrest, we saw a 67 percent bystander CPR rate for (those who) witnessed cardiac arrest, and folks that is truly amazing and remarkable for our community.”

-Chief Neal Roberts

It was great to return to the 2022 Western Fair! It was amazing meeting everyone in the community at the Agriplex Community Pavilion alongside with London Police Service and London Fire Department. We hope you learned a lot about all of the services we provide and see a glimpse of what goes behind the scenes in the work we do.

Throughout 2022 it was great to get back out into the community to support CPR/AED/Emergency Awareness programming. Classes ranged from virtual baby choking/ CPR where parents and guardians could brush up on their skills from the comfort of their own homes, to providing emergency preparedness to new Canadians living throughout Middlesex-London. Our virtual baby choking/CPR classes were first introduced during covid when face-to-face classes were not permitted. This virtual class was well received and continues to provide new parents with flexible and more accessible options to learn infant CPR.

Public Awareness

Increasing cardiac arrest survival outcomes.

Middlesex-London Paramedic Service is dedicated to helping improve survivability of out of hospital cardiac arrests.

Through public education and awareness and programs such as the Public Access Defibrillator (PAD) program and CPR training Middlesex-London Paramedic Service is making London-Middlesex a better place to live and work.

We trained 325 citizens in CPR, first aid and how to use an AED in 2022 alone and placed an additional 15 AEDs in to the community.

- 1 Public AEDs
15
AEDs placed in the community by MLPS.
- 2 AED Registry
568
AEDs in the registry to improve patient outcomes.
- 3 CPR/AED Awareness
325
Citizens participated in training and awareness.



Throughout the pandemic our MLPS public education program tried something new by offering virtual public awareness sessions for our community. A huge shout out to Middlesex EarlyON for partnering with us to offer infant/child choking/CPR sessions. #community



Middlesex-London Paramedic Service

3.9K likes • 4.4K followers

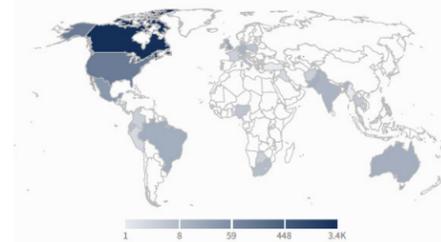


Social Media Presence

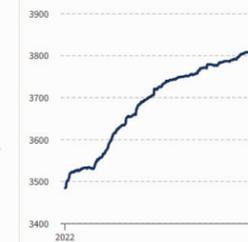
MLPS engaged with the public more than 1 million times through social media in 2022 and gained 370 new followers on Facebook and 317 new followers on on Instagram.

Middlesex-London Paramedic Service is active on social media and engages with the public to communicate our message, build trust and confidence with the public and share the amazing stories of our paramedics and interact with the citizens of London and Middlesex.

Page fans > Country



Followers trend



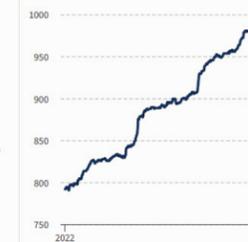
New fans

370
new fans

Audience > Country



Followers trend



New followers

317
followers

PROGRAM OVERVIEW



Public Awareness PAD Program Engagement First Aid Training Communication

ML Paramedic Service @MLP... 8/22/22
MLPS Back to School Series: Allergy Readiness!
Knowing how to recognize the signs of an allergic reaction could save a life!
@FoodAllergyCAN



ML Paramedic Service @MLPS911

It's so great to see so many people out at the open house!

We are at Fire Station #12 (275 Boler Road London) between 10 am – 3 pm.
#EPWeek2022 #LdnOnt





ML Paramedic Service @MLPS... · 6/13/22
Have you heard about our MLPS Paramedic Access Program?

As an emergency medical service provider, at times Paramedics are faced with variable factors that delay prompt, effective pre-hospital treatment and transport to the emergency department for definitive care.

Paramedic Access

Middlesex-London Paramedic Service has developed a proactive community-based initiative, "Paramedic Access", in an attempt to reduce delay to patient contact in the setting of a medical emergency.

The "Paramedic Access" initiative uses a simple process of installation of a lockbox and registering the unique access code to our local Central Ambulance Communications Centre. In the event a 9-1-1 call is placed from the registered address, an alert will generate and provide the unique access code for Paramedic entry if needed.

Cost: \$25

If you are a private or commercial property and interested in installation of a lockbox, registering an existing lockbox, or require additional information please contact:
PAD Coordinator Miranda Bothwell at 519-679-5466 ext 1118 (pad@mlems.ca)

ML Paramedic Service @MLPS911

We were happy to participate in the @BGCLondon Coats for Kids drive this year! So proud of our fantastic MLPS staff for all of their donations.

For more information: bgclondon.ca/get-involved/s...

ML Paramedic Service @MLP... · 5/25/22
Special Operations Bariatric Unit

Operations deploys a specialty unit for bariatric patients. This unit is configured with a special stretcher that can accommodate patients of greater size and weight and has a special lift to move the patient and stretcher in to the ambulance.

ML Paramedic Service @MLPS... · 6/21/22
HEAT ADVISORY IS IN EFFECT
Know the signs of heat related emergencies.

For cooling centres in @CountyMiddlesex please visit any @MXCountyLibrary location. For locations in @CityofLdnOnt please follow the below link. london.ca/cooling-centres

Stay cool and stay safe!

KNOW THE SIGNS	
HEAT EXHAUSTION	HEAT STROKE
Headache/ dizziness	Throbbing headache/ possible seizures
Anxious behaviour	Altered behaviour: Irritable, aggressive
Normal breathing	Rapid/ shallow breathing
Nausea/ vomiting	Nausea/ vomiting
Skin: Redder or paler than normal (Excessive sweating)	Skin: Dry, Red, Hot (No Sweat)

How you can help **CALL 911**

- Remove the person from heat
- Loosen tight clothing
- Cool shower or apply cool towel to groin/armpits
- DO NOT DRY SKIN
- If person is alert, provide cool drink (small amounts at a time)

mlps911

26 likes
mlps911 Shout Out and Congratulations to Centennial Hall on becoming a #heartsafefacility with your new AED!
#YouHaveTheTools

11:56 5G 89

ML Paramedic Service
6,453 Tweets

Tweets Replies Media Likes

You Retweeted
c burghardt-jesson @L... · 2022-03-22
Such a great news story being shared by @MLPS911 Acting Superintendent Miranda Bothwell the results of the 72 vaccination clinics that were hosted. 8033 doses delivered!!! The @CountyMiddlesex and @CityofLdnOnt is well served. #ThankYou #COVID19 #wevegotthis #MiddlesexProud

ML Paramedic Service @MLPS911

We are ready for an awesome weekend @AirshowLondon ✈️

Instagram

Middlesex-London Paramedic Service engages with the public through Instagram to show the amazing job our paramedics do on a daily basis and to share with them important information. The Middlesex London Paramedic Service Instagram page has seen a 171% increase in profile visits from the public in 2022, according to 2022 Instagram statistical analysis



Facebook

Facebook allows us to engage in real time with our clients and the public and build a positive relationship with the citizens of London and Middlesex while sharing the stories of our amazing paramedics. The Middlesex London Paramedic Service Facebook page has seen an increase of 52% in new likes, according to 2022 Facebook statistical analysis



Social Media Statistics



GLOSSARY

ACC: Ambulance Communications Centre

ADRS: Ambulance Dispatch Reporting System

AED: Automatic External Defibrillator – An electronic device that applies an electric shock to restore the rhythm of a fibrillating heart.

Chute Time: The time it takes an ambulance to depart once notified of a call.

Code 1 (Deferrable): A routine call that may be delayed without detriment to the patient (e.g. a non-scheduled transfer; a minor injury).

Code 2 (Scheduled): A call which must be done at a specific time, for example because of special treatment or diagnostic facility requirement (e.g. inter-hospital transfers or a scheduled meet with an air ambulance).

Code 3 (Prompt): A call that should be performed without delay (e.g. serious injury or illness).

Code 4 (Urgent): A call that must be performed immediately where the patient's 'life or limb' may be at risk (e.g. Vital Signs Absent patient or unconscious head injury).

Code 8: This is a call for emergency coverage. This occurs when an ambulance is required to reposition to maintain response times and coverage of the region in the event that the next 911 call occurs within that area.

CTAS Level: The 'Canadian Triage & Acuity Scale' is used to assign a level of acuity to a patient. Acuity refers to the gravity of the situation – the potential for death and/or irreversible illness. CTAS is a tool that more accurately defines the patient's need for care. Assignment of the CTAS level is to be based upon not only the presenting complaint identified on the initial assessment made by the paramedic, but also on their examination findings, and response to treatment.

Dispatch Priority Code: The priority code number that is assigned to the call by the dispatcher. It identifies the priority under which the ambulance responds to the call location (e.g. an urgent response would be entered as Code 4).

Dispatch Problem: The problem given to the crew by the Ambulance Dispatcher indicating the nature of the problem of the call they are responding to.

iMedic ePCR: The electronic documentation software used to chart the Ambulance Call Report.

IMS: Incident Management System is a consistent and systematic way for multiple agencies to coordinate and respond to public emergencies and disasters.

LHIN: Local Health Integration Networks are the health authorities responsible for regional administration of public healthcare services in the Province of Ontario, Canada.

Offload Delay: Offload delay is the amount of time spent in the Emergency Department transferring care to the hospital. It is calculated as the difference in time from when the ambulance arrives at the Emergency Department until Transfer of Care is documented – less the standard thirty (30) minutes which is normal for ambulance turnaround. Any time greater than thirty minutes is considered offload delay.

Primary Problem: The primary complaint of the patient upon assessment by the paramedic crew.

Response Time: Response time is measured in two different ways; in cardiac arrest, it is the time the 911 call is received until a defibrillator arrives to the scene (by paramedic or otherwise). In non-cardiac arrest calls, it is the time the 911 calls is received until the paramedic crew arrives to the scene.

Return Priority Code: The priority code number that is assigned to the call by the ambulance crew. It identifies the priority under which the patient is transported (e.g. a prompt return to a medical facility would be entered as a Code 3).

