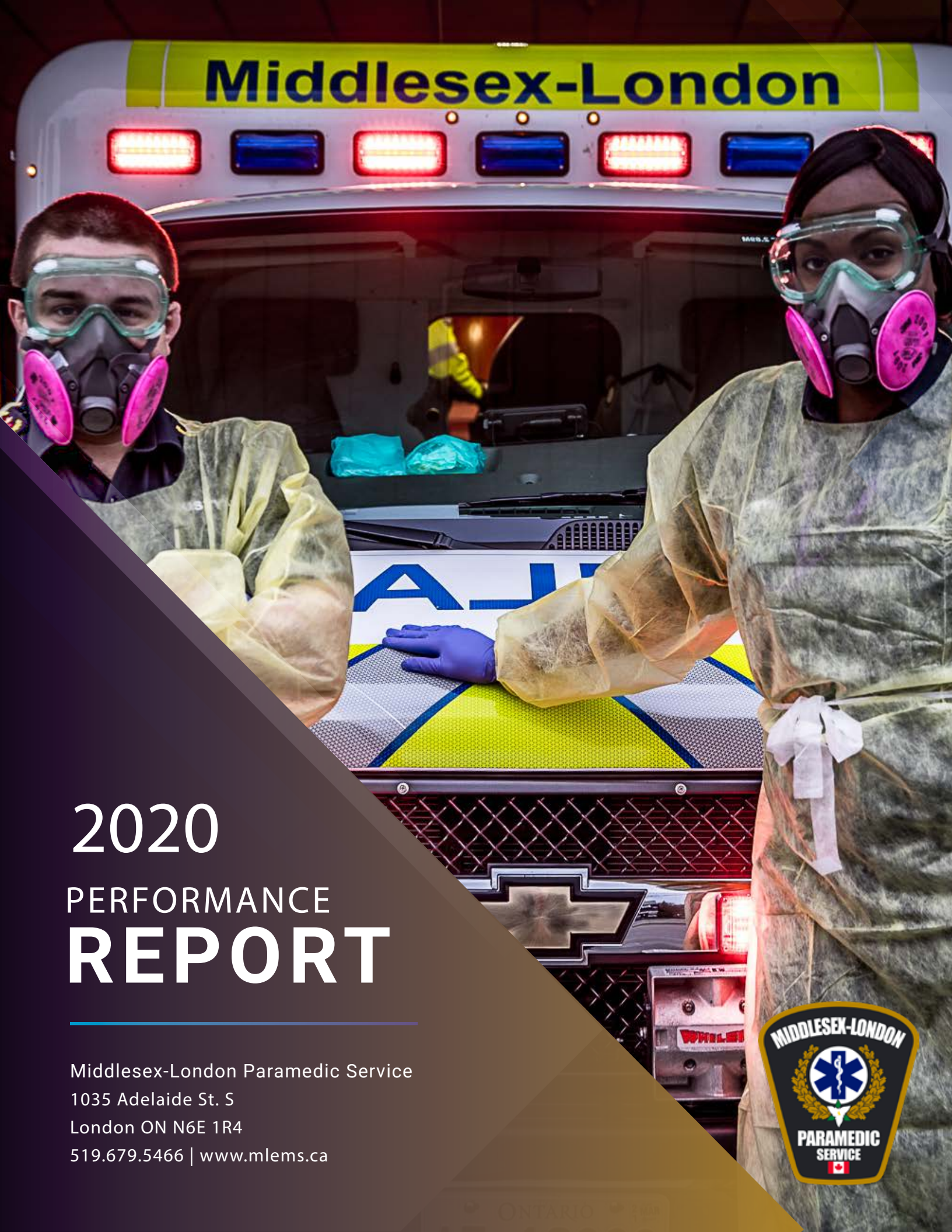


Middlesex-London



2020 PERFORMANCE REPORT

Middlesex-London Paramedic Service
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Neal Roberts
Chief, Middlesex-London
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MESSAGE FROM THE CHIEF

Welcome to the 2020 Annual Report for Middlesex-London Paramedic Service. The year began with much uncertainty and many unknowns, as we faced unprecedented challenges in caring for patients with COVID-19. The entire MLPS team has been called upon in many different ways to adapt and respond to the evolving effects of the pandemic on our communities. It is with sincere gratitude and respect that I extend appreciation to all of our staff and teams for their day-to-day work that is delivered with professionalism, compassion, excellence and dedication.

As Chief, and on behalf of Middlesex-London Paramedic Service, it is a privilege to share through this annual report, the advancements, improvements, partnerships and achievements gained over the past year. This report also offers insight into the impact of the pandemic on our programs and performance metrics. An analysis of these for 2020 reveals that the COVID-19 pandemic affected unit hour utilization in that overall call demand decreased by 3.9%. Data shows that at the onset of the pandemic many people did not seek medical attention; however, as restrictions were lifted and the pandemic remained ongoing, we saw a resurgence in call volume. Similarly, we saw variation in offload delays with the subsequent waves of the pandemic. Given that circumstances can shift rapidly, we remain vigilant and attentive to monitoring data, and collecting new information as needed.

Throughout 2020 we developed and implemented programs that supported mobile COVID-19 testing and expanded vaccine administration opportunities. In rallying together around a common cause, we developed unique partnerships in pursuit of achieving specific and measurable outcomes. As an example, MLPS worked with London Transit to secure and retrofit a bus to serve as an Emergency Support Unit (ESU). The first deployment for the ESU-Bus was to the municipalities in Middlesex County to provide mobile COVID testing. The ESU-Bus has also been deployed in response to crisis situations, and was immensely helpful in providing support at the structure collapse on Teeple Terrace in London.

In response to the COVID-19 pandemic, a top priority has been the health and safety of all our employees and patients. We quickly transitioned to provide the necessary protective equipment, supplies and procedures; and we continue to implement changes based on scientific evidence. In this regard, many teams worked tirelessly to source equipment and provide just-in-time training. The ability of our collective departments and teams to pivot rapidly has been tested, and I am extremely proud of their innovation, resilience and responsiveness.

Other enhancements have been implemented due to the impacts of the pandemic, which our staff have so capably integrated into their day-to-day work, such as new patient triage and assessment processes, new equipment, enhanced cleaning practices, and staff pre-shift screening. It is also important to recognize that our day-to-day operations and responsibilities through community-based programs have been maintained, and the results demonstrate their value. Our community paramedic program continues to maximize efficiencies in supporting vulnerable patients in their homes.

The work that we do here at MLPS benefits from strong governance and public policy, through the support of the Authority Board, County Council, the City of London and the Province of Ontario. Our sphere of partnerships has greatly expanded as we consistently work with Ontario Health and other provincially led groups. It is a privilege to work closely with contacts within various ministries and the Premier's Office; they are grateful for our contributions and MLPS is appreciative of their trust and confidence in us to deliver services where it matters most. MLPS is also grateful for the incredible support and generosity shown by our communities in recognizing the ongoing hard work, sacrifice and dedication of our paramedics and teams during the past year.

The future will be filled with continued growth, change and exciting opportunities to build upon our expanding scope to serve patients in new and innovative ways. Growth continues in response to the need for services and our changing health care system. However, we are mindful of examining ways to best balance our system costs with the resources that are available. 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.

Without a doubt, 2021 is already presenting itself as another year of new and evolving challenges and changes. An issue of continuing concern relates to better resource utilization and system outcomes that would be achieved through Land Ambulance Dispatch reform. Ongoing advocacy by Middlesex County Council is appreciated as a means of improving overall service. As we continue with focused and strategic approaches, and with the strength of our exceptional team, MLPS looks ahead in continuing to deliver safe, timely and compassionate care.

In closing, my sincere thanks go out to our employees; they are the strength and foundation of all that we do in serving our communities.

Neal Roberts,
Chief, Middlesex-London EMS Authority



64,896

Middlesex-London Paramedic Service paramedics responded to 64,896 potential patient carrying calls.



9
1
1

248
average calls
per day

179
cardiac arrest
saves

29
babies
delivered

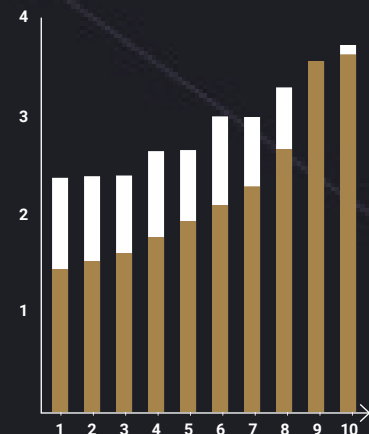
329
Paramedics

1.9 million km
driven during the past year.



Responded to 90,590 Calls for Service

Middlesex-London Paramedics responded to a total of 90,590 calls for service in 2020. A decrease of 3.9% in calls since last year and an increase of 51% in emergency calls in the past 10 years.





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.



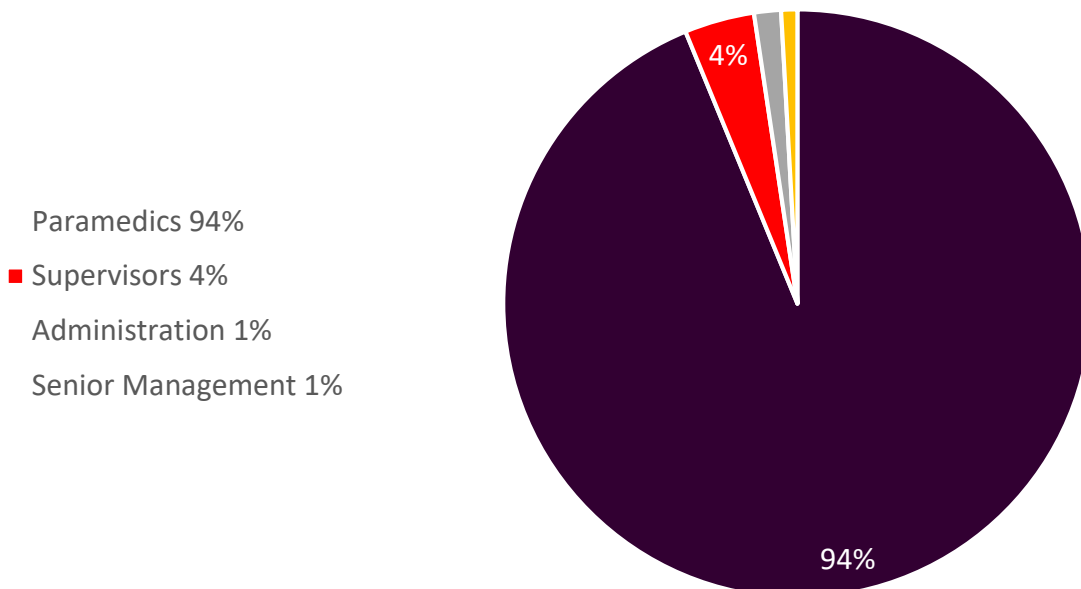
OUR TEAM — Staffing Breakdown



Middlesex-London Paramedic Service employs a total of 375 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



ADVANCED CARE PARAMEDIC 3 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

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

— 2020 Operating Costs

Despite the global COVID-19 pandemic, Middlesex-London Paramedic Service responded to an average of 248 calls per day in 2020.

The Stats

Total Calls Received:
90,590

Calls Per Day:
248

Decrease in Service Demand:
3.9%

Unit Cost Per Hour:
\$186.68

Wages and Benefits:
76.87%

Marginal Operating Costs:

Middlesex-London Paramedic Service received 90,590 calls in 2020, resulting in a unit cost per hour of \$186.68.

The majority of the 2020 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 2020, the marginal operating costs comprised 17.90% of total operational expenditures. Approximately 72.77% 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.

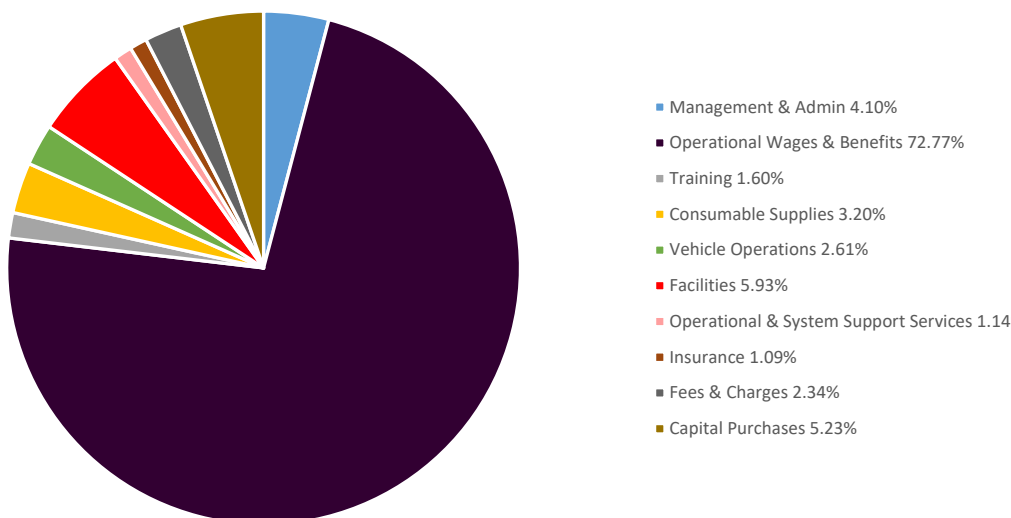
MLPS Initiatives To reduce Expenses

In 2020, Middlesex-London Paramedic Service's operating fleet consisted of 65 service vehicles, including ambulances, command vehicles, administration vehicles, and logistic vehicles. These vehicles traveled over 1.8 million kilometers in 2020. The average cost per kilometer for these vehicles, including fuel, maintenance, repairs, and insurance costs was \$0.87 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.

Operating Costs



PERFORMANCE

— Calls for Service

Notes

Calls for service have increased by 51% since 2010.

In 2020, the number of calls for patient carrying service (Code 1-4) was 64,896 – an decrease of 5.3% over 2019, and an increase of approximately 51% since 2010 when calls for service were at 43,583.



The Stats

Total Calls for Service:
90,590

Total Emergency Calls:
64,896

Number of Patients Transported:
44,120

6.8%
Decrease in Life
Threatening Calls
(Code 4)

Station Name	Priority 1	Priority 2	Priority 3	Priority 4	Priority 8	Total
Adelaide (HQ)	82	164	3,526	7,811	4,639	16,222
Waterloo	35	48	5,289	11,160	2,327	18,859
Trossacks	24	25	1,810	3,854	2,198	7,911
Glencoe	20	4	256	356	175	811
Parkhill	0	0	180	413	1,527	2,120
Lucan	0	2	244	502	1,343	2,091
Komoka	4	0	394	741	1,208	2,347
Byron	3	24	1,869	3,552	3,063	8,511
Hyde Park	7	14	1,305	2,210	2,719	6,255
Horizon	26	15	3,599	6,594	2,562	12,796
Strathroy	16	22	830	1,459	1,249	3,576
Dorchester	11	22	514	975	1162	2,684
Trafalgar	18	35	1,611	3,221	1,522	6,407
Total	246	375	21,427	42,848	25,694	90,590

Data Source: ADRS



— Unit Hour Utilization

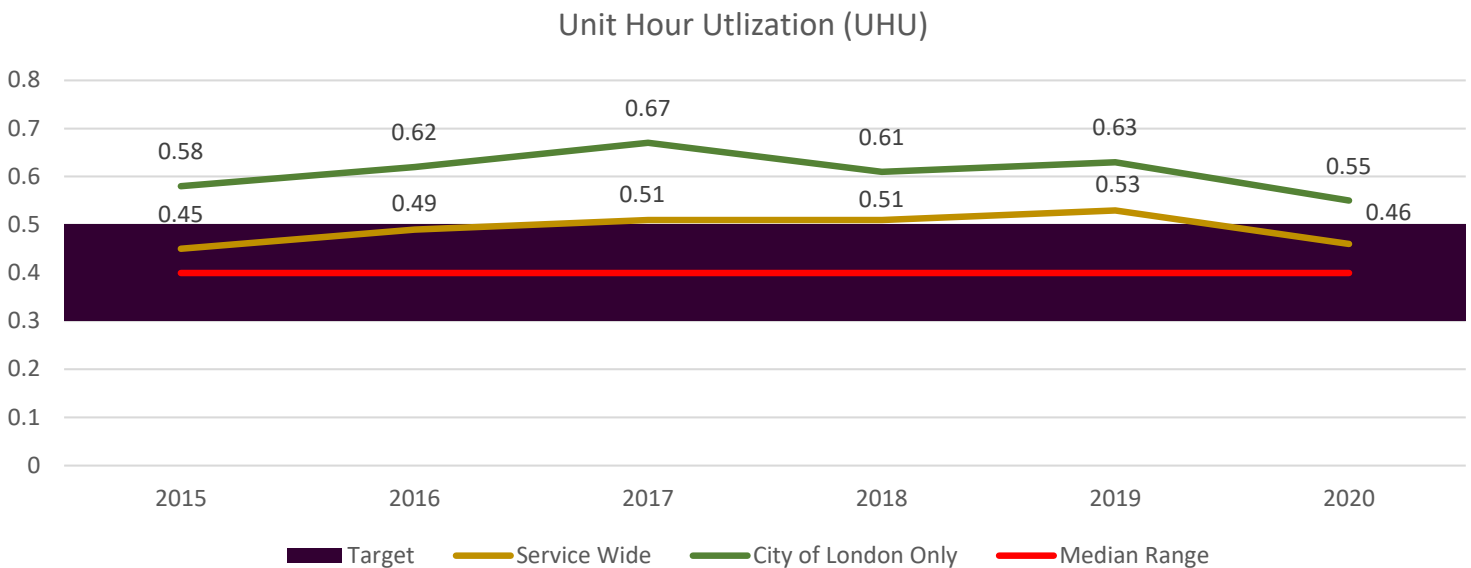
Unit Hour Utilization (UHU) is a ratio which measures the number of calls for service in relation to the number of units available over the period of one hour. Generally, 9-1-1 systems target between 0.30 and 0.50 to ensure that there enough resources available in the 9-1-1 system to respond to large 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.

The COVID-19 pandemic affected unit hour utilization (UHU) in that overall call demand decreased in relation to the pandemic. A correlation was seen with the subsequent waves of COVID and in relation to provincial and municipal lockdowns. Call volume decreased dramatically at the onset of the pandemic with many people not seeking medical attention in the emergency departments and with citizens staying at home in their residences tertiary calls decreased as well. In preparation for the pandemic, hospitals and emergency departments (LHSC) made preparations to receive more patients, this in turn resulted in more capacity within the emergency department and significantly reduced offload delays. Together, these two factors resulted in a reduction in unit hour utilization (less calls and each call taking less time to complete).

As restrictions began to lift and citizens acclimated to the pandemic we saw a resurgence in call volume. Additionally, offload delays began to increase again contributing to higher unit hour utilization in the later half of 2020. With each wave of COVID-19 we see a reduction in call demand but these reductions have become smaller and over a shorter period of time providing less of an impact on UHU.

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.



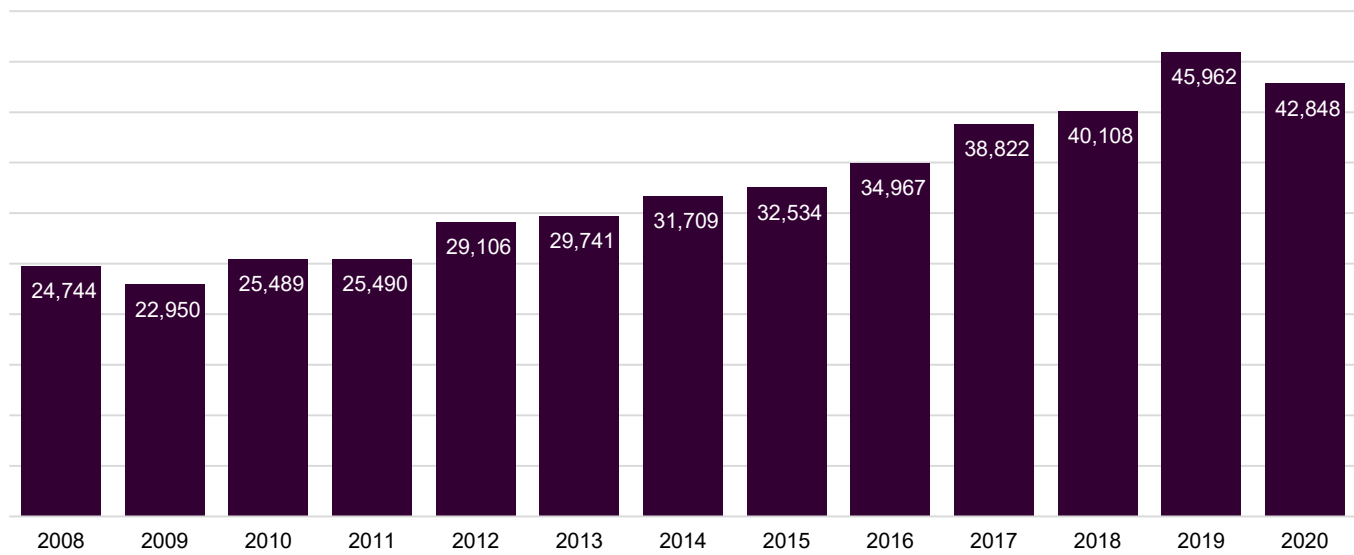
Data Source: ADRS

— Life Threatening Calls (Code 4)

In 2020, the number of life threatening calls (Code 4) dispatched was 42,848, a decrease of 6.8% over 2019 and a 68.1% increase since 2010.

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

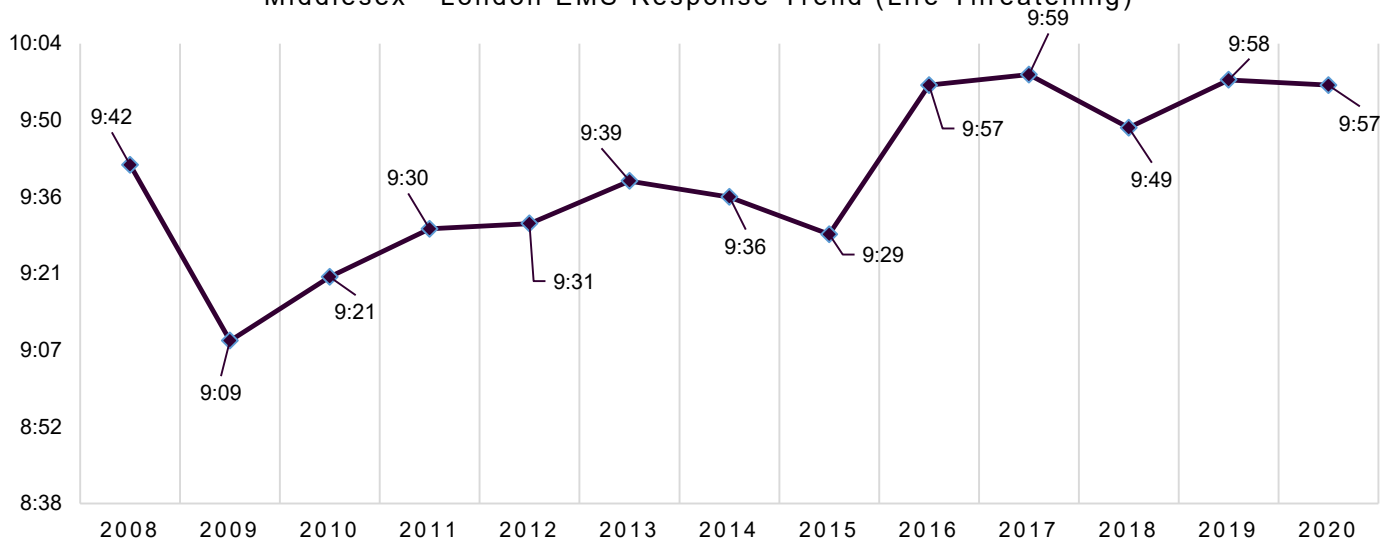
Notes

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 an decrease in 2020. A reduction in offload delays led to a 1 second decrease in response times, dropping to 9 minutes and 57 seconds in 2020.

Response times in Middlesex County increased by 30 seconds in 2020 increasing to 14 minutes and 00 seconds.

Middlesex - London EMS Response Trend (Life Threatening)



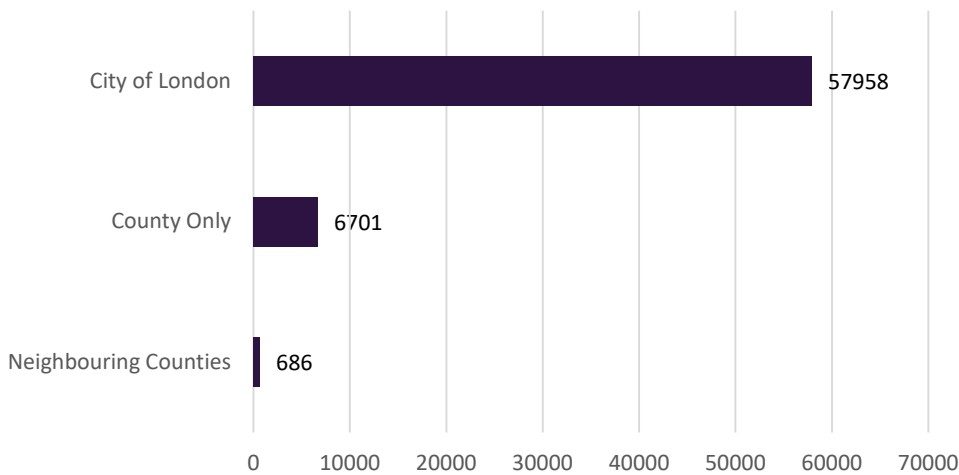
Data Source: ADRS



— Calls Completed Within Middlesex County Boundaries

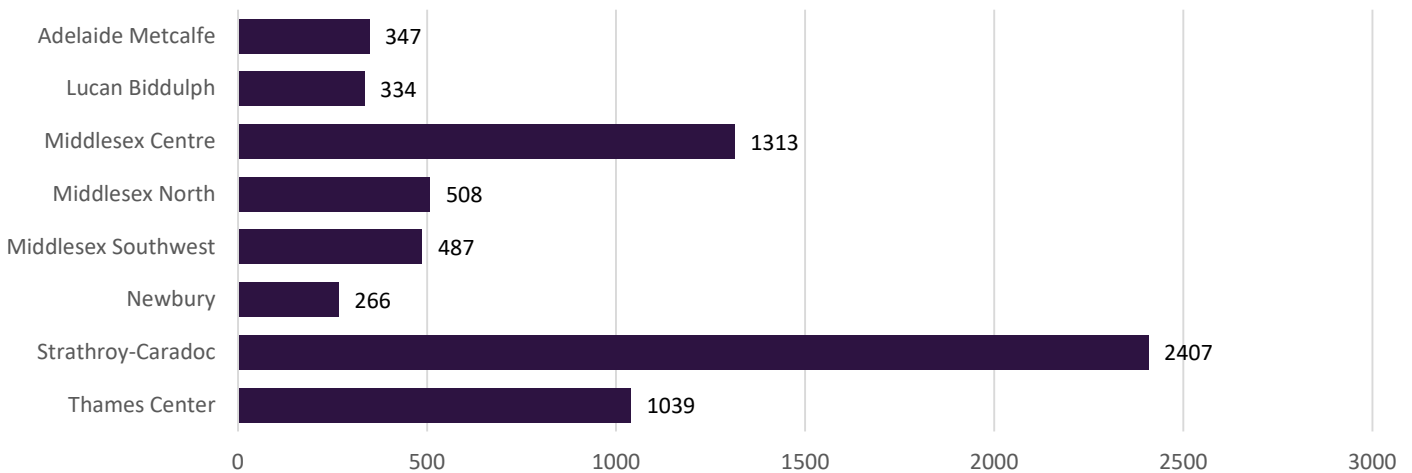
Approximately 90% of the Priority 1-4 calls attended by Middlesex-London Paramedic Service occur within the City of London. During 2020, other municipalities assisted within Middlesex-London 829 times. Conversely, Middlesex-London Paramedic Service assisted neighbouring municipalities 686 times.

Calls in City of London vs County of Middlesex



Data Source: ADRS

Total Patient Calls Completed in Middlesex County



Data Source: ADRS

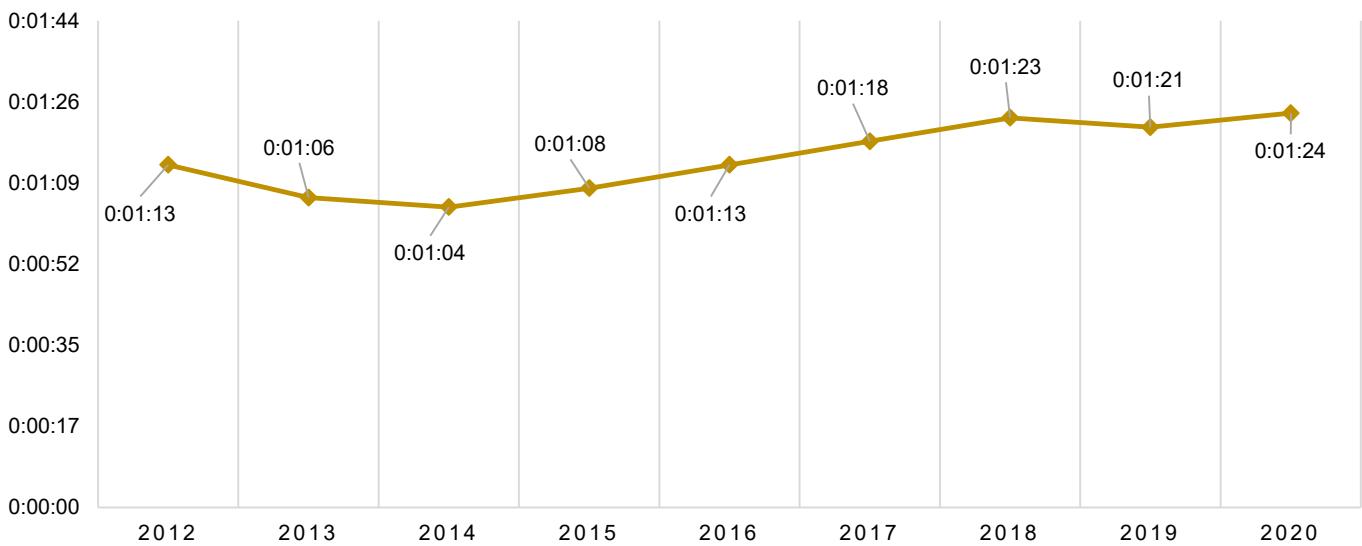


— Average Chute Time for Life Threatening Calls (Code 4)

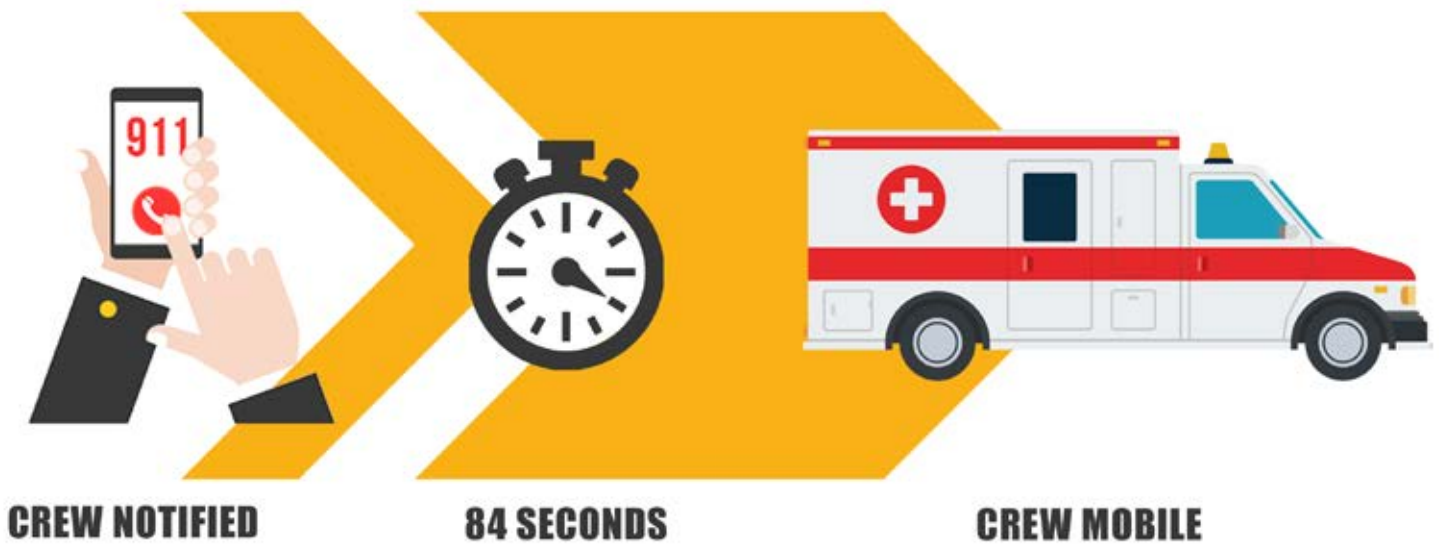
The Average Elapsed Time from the time the crew is notified of life threatening calls to the crew being mobile on the call is called the Chute Time.

In 2020, the Average Code 4 Chute Time for Middlesex-London Paramedic Service was 1 minute and 24 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.

Middlesex - London EMS Chute Trend (Life Threatening)



Data Source: ADRS



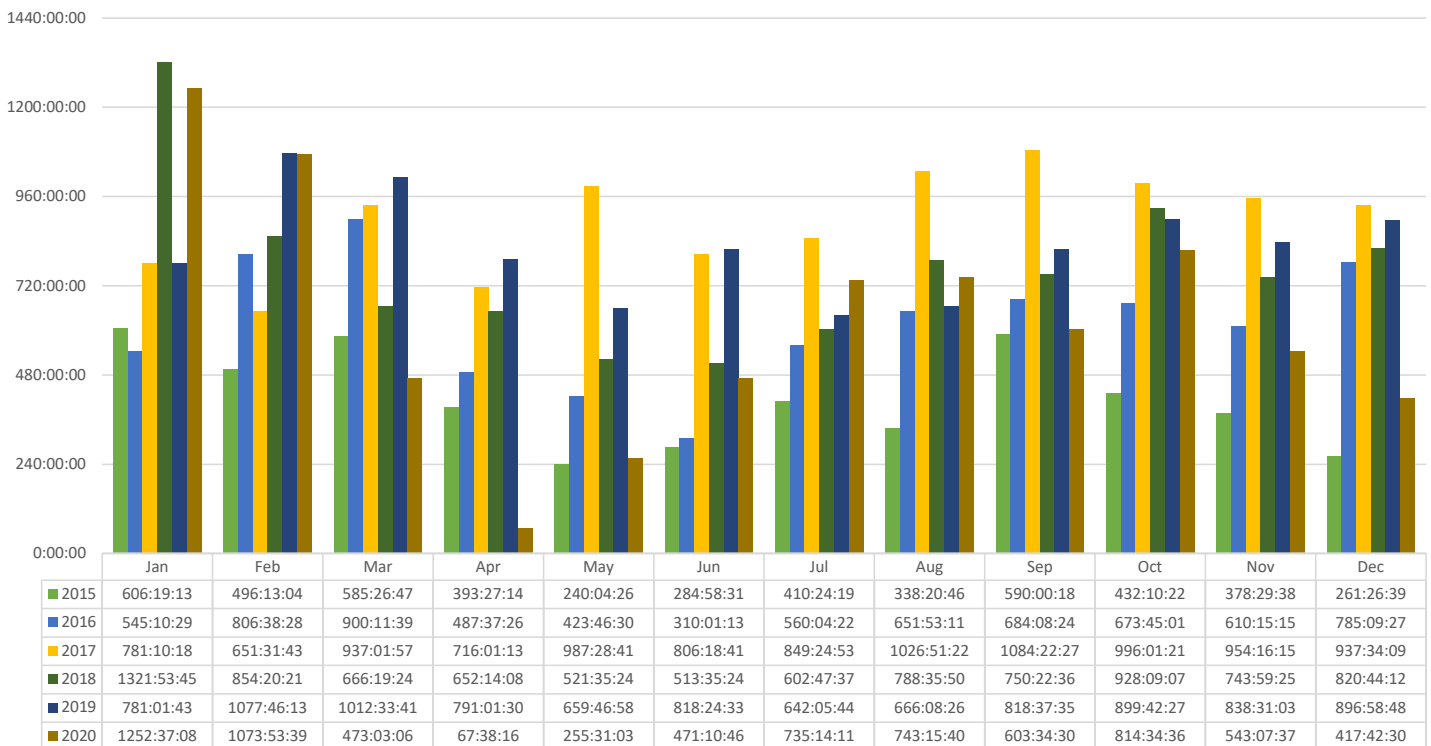
— Offload Delay

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 2020, Ambulance Offload Delay hours fluctuated throughout the year peaking in February. In response to COVID-19, Offload Delay hours declined in 2020 decreasing by 24.8% from the previous year.



Total Offload Delay Hours

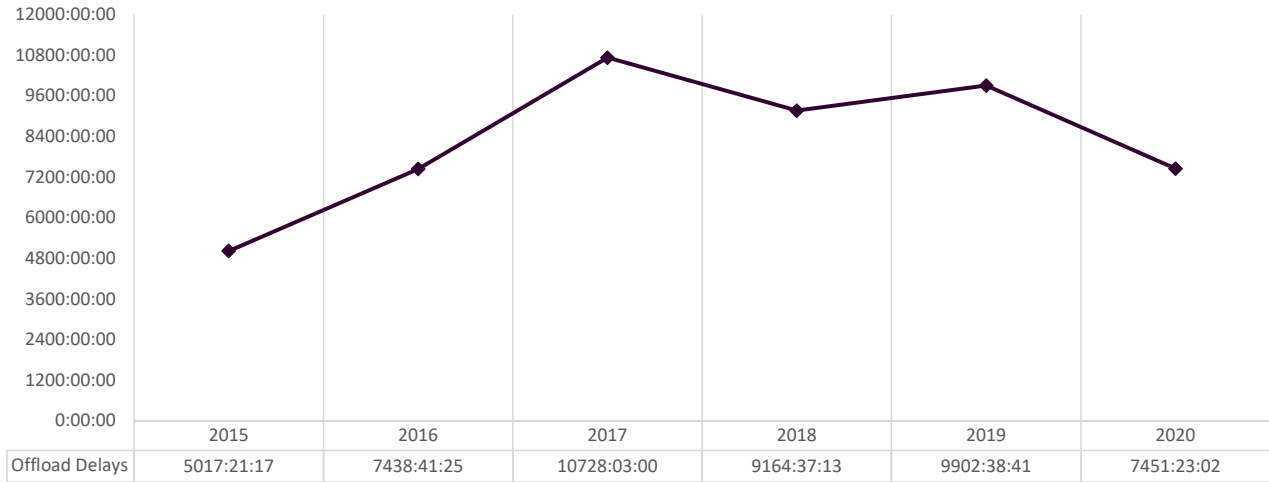


Data Source: Interdev



In 2020, a total of 310.5 24-hour days were lost to offload delays. This is a decrease of 32.9% from the previous year.

Offload Delays Year Over Year (By Total Time)



Number of 24-Hour Days Lost per Month in 2020

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
52.19	44.75	19.71	2.82	10.65	19.63	30.63	30.97	25.15	33.94	22.63	17.40

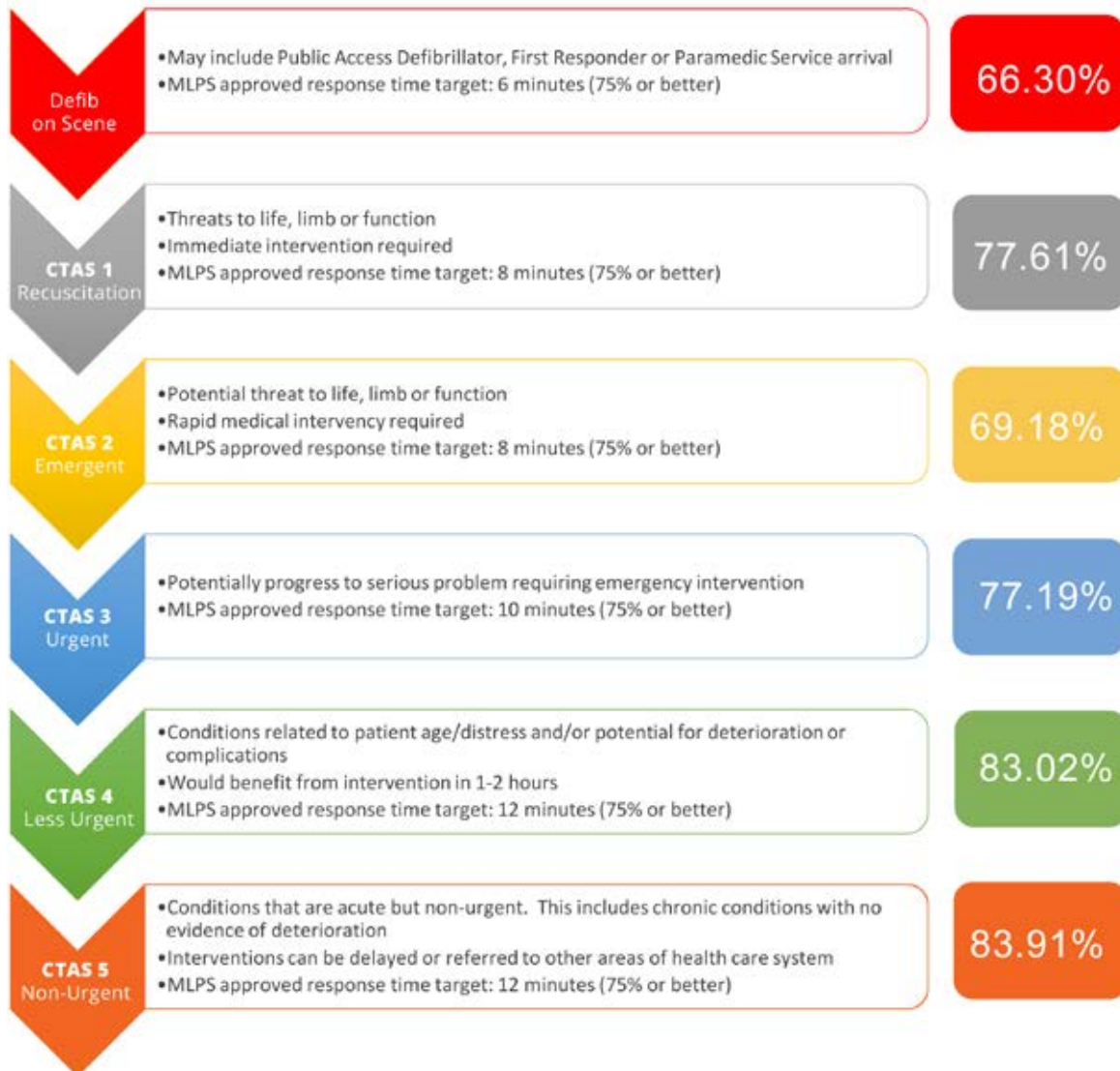


— 2020 Middlesex-London Paramedic Service Response Time Plan

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 2020.

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



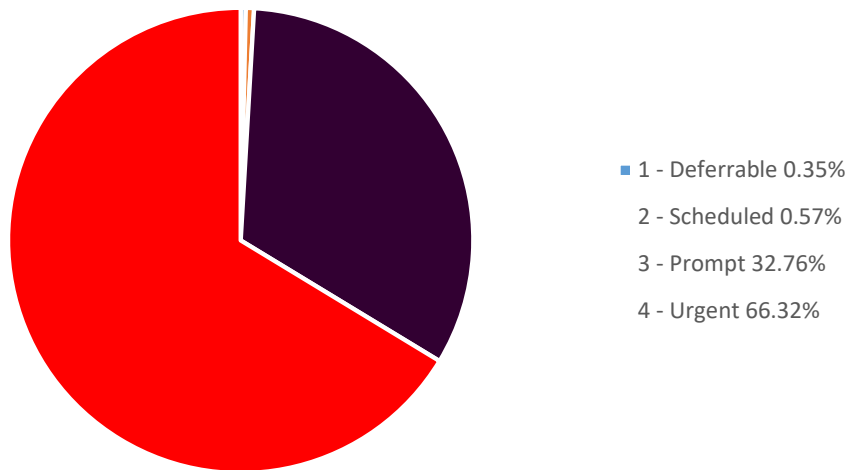
DEMOGRAPHICS

— Dispatch Priority and Return Priority

In 2020, 66.32% of all calls were dispatched as Code 4 (lights and sirens) and 11.60% of all calls were returned Code 4.

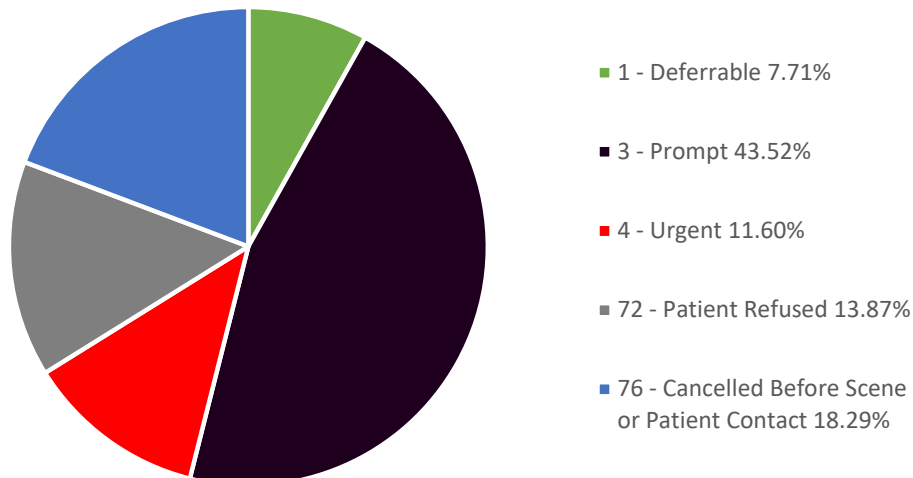
The calls dispatched as Code 4 in 2020 represent a 1.08% decrease from that of 2019 and the calls returned Code 4 represent a decrease of 2.45% from 2019.

Dispatch Priority



Data Source: Interdev

Return Priority



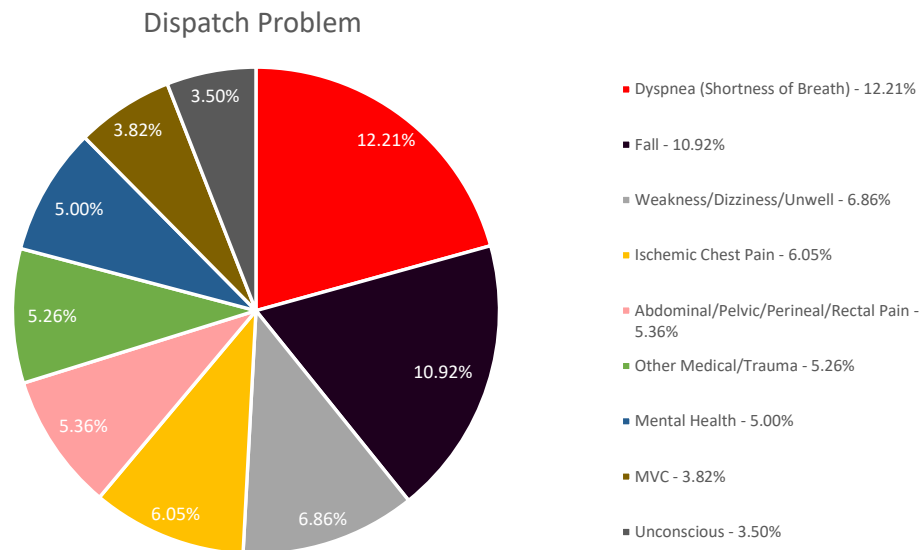
Data Source: Interdev

— Top Dispatch Problems and Top Primary Problems

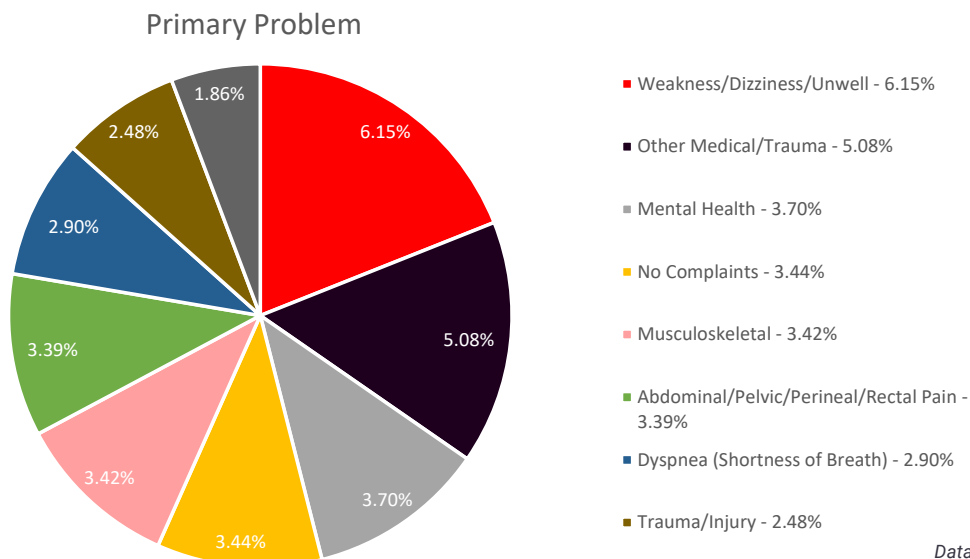
In 2020, the top Dispatch Problems, what the paramedics are told when they are assigned to the call by London Central Ambulance Communications Centre (CACC) were for Dyspnea (shortness of breath), Falls, Weakness/Dizziness, Ischemic Chest Pain, Abdominal pain and Mental Health.

The top Primary Problems, what the actual problem is with the patient when the paramedics arrive on scene, included General Illness/Weakness, Mental Health, Musculoskeletal Injuries, Abdominal Pain and Dyspnea (shortness of breath).

2020 saw an increase of 10.04% in calls dispatched as Dyspnea (shortness of breath).



Data Source: Interdev



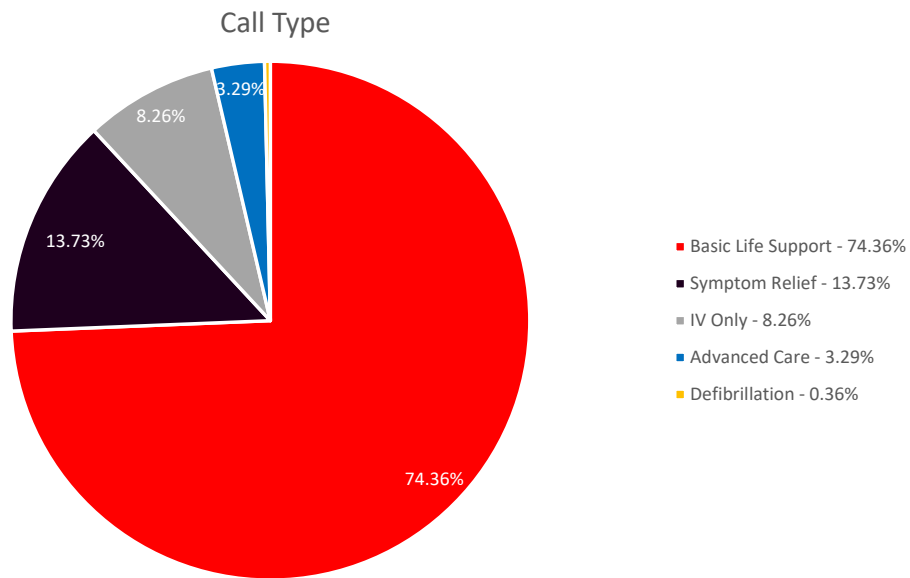
Data Source: Interdev



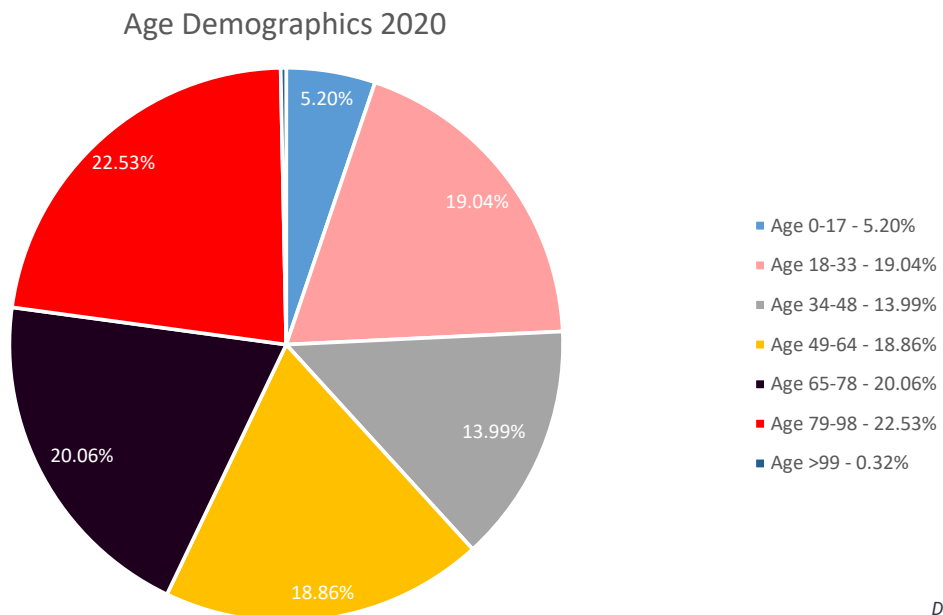
— Call Type and Age Demographics

In 2020, the majority of the calls that the Middlesex-London Paramedic Service responded to were considered Basic Life Support Calls comprising 74.36% of all calls.

Of all the calls in 2020, 17.02% 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 2020.

Middlesex-London Paramedic Service participated in several planned operations and events throughout 2020. Middlesex-London Paramedic Service worked with the City of London, London Police Services, London Fire, Western University, LHSC and the MLHU to prepare messaging, public education and a response plan for the Broughdale Ave Unsanctioned Street Event (FOCO). In the heights of the COVID-19 pandemic a coordinated effort resulted in a safe day in which citizens and students largely adhered to provincial and local directives for public health.

Middlesex-London Paramedic Service also participated in the London Airshow which hosted the first ever “drive-in” airshow.



Events

London and Middlesex

London



Student Unsanctioned Street Event

MLPS participated in the planning, education and response for FOCO.

Middlesex



COVID-19 Testing

MLPS provided mobile COVID-19 testing to Middlesex County.

London



Bike Unit

The MLPS Bike Unit provides rapid support at crowded events.

NEXT PAGE

Performance Report [2020]





Middlesex-London Paramedic Service worked with London Transit to secure and retrofit a bus to be deployed as an Emergency Support Unit (ESU). The ESU-Bus was designed to be modular so that it could be quickly deployed to different emergencies and provide support to different projects and community initiatives. The first deployment for the ESU-Bus was to the municipalities of Middlesex to provide mobile COVID testing. This initiative was immensely successful and provided support to these communities that would otherwise not be able to access this testing.

The ESU-Bus has also been deployed to scenes such as the structure collapse on Teeple Terrace to provide support for the first responders and a secured triage and assessment area for citizens.



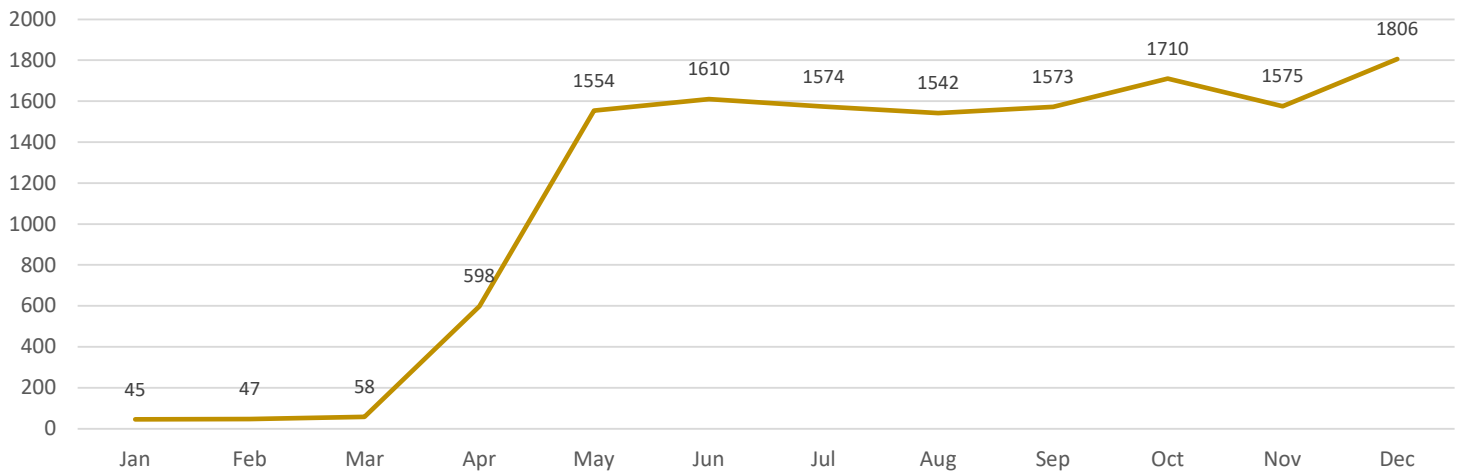
COVID-19

Notes

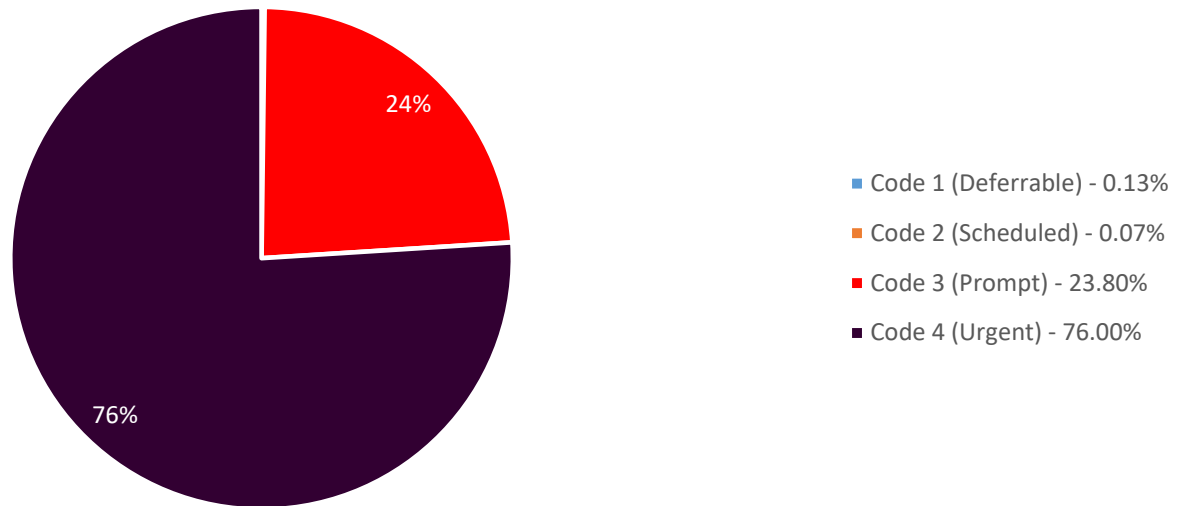
The impact of the global COVID-19 pandemic on Middlesex-London Paramedic Service

Over the course of 2020 Middlesex-London Paramedic Service responded to and transported 13,692 patients that were potentially positive for COVID-19, that comprised 21.10% of all patient encounters. COVID-19 encounters increased dramatically in the second quarter of 2020 and remained high for the rest of the year with 29.92% of all patient encounters being potentially positive for COVID-19.

COVID-19 Risk by Patient Encounters



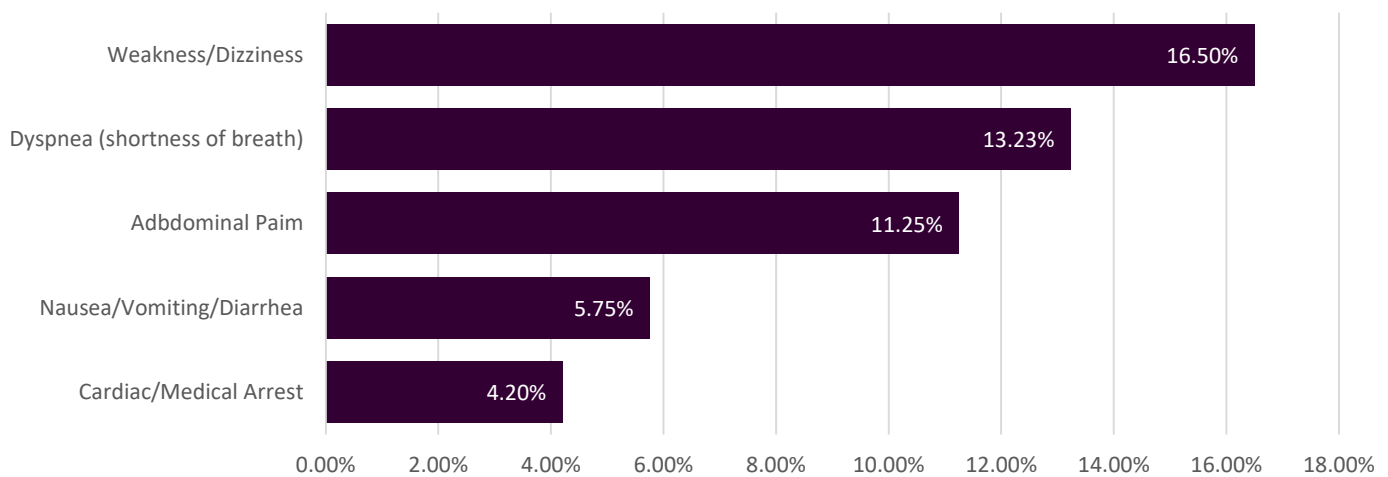
Return Priority for Possible COVID-19 Positive Patients



Of the 13,692 potential COVID-19 positive patient interactions had by Middlesex-London Paramedic Service in 2020, 76% of these calls required a Code 4 (lights and sirens) response.

Of all the possible COVID-19 positive patient encounters, 16.50% were for patients experiencing weakness and 13.23% were for patients experiencing shortness of breath.

Primary Problem for Possible COVID-19 Positive Patients



CONTINUING QUALITY IMPROVEMENT

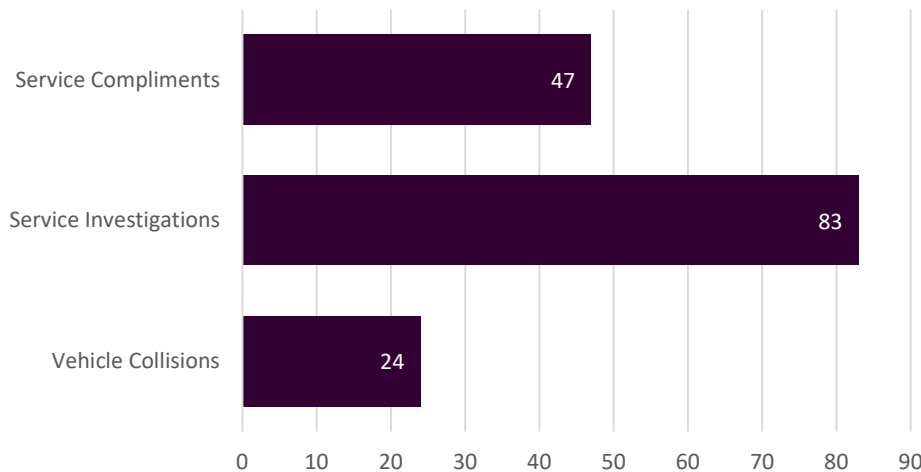
— Regulatory Compliance Office

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. Our quality assurance process involves a review of all feedback from patients, external and internal agencies. In 2020, Middlesex-London Paramedic Service Regulatory Compliance responded to 83 inquiries from internal and/or external stakeholders of which 99% were positive feedback or compliments.

The remaining inquiries required further investigation to determine if service or behavioral improvements can be made to better serve the residents of Middlesex and London.

Types of Inquiries



The Stats

Service Compliments in 2020:
47

Number of Customer Surveys Issued :
650

Number of Customer Surveys Returned :
89

Number of Customer Service Responses :
712

Number of Inquiries:
83

Number of Positive Feedback:
704

Caring and Compassion Citizen Compliments

Your staff is sooooo comforting to me. Some have met me several times. But EVERY TIME is a positive experience.

I would like to share and pass on a compliment with gratitude to the crew who attended to a cardiac arrest on September 14th in the am.

The family was so thankful for the respect and dignity that the paramedics showed to not only the patient but to his wife. The patient was beyond distraught and the love, respect and compassion that was given to her from the paramedics was so very much appreciated by her family. I saw first hand the great work Paramedics do on a daily basis and the difficult emotional job they have. The way they made the family feel during the worst day of their life has truly made a difference in their life.

I feel safe in your Ambulances even when I m feeling my worst.



— Customer Survey

The Professional Standards Department sends out customer satisfaction surveys each month to clients who have used the services of Middlesex-London Paramedic Service. Each month 65 surveys are sent out – 5 picked at random from the 13 stations of Middlesex-London Paramedic Service. Clients are given an option to use online submissions or mail in results.

In 2020, 89 surveys were returned. The survey format prompts the client to choose words to describe 8 different stages of their emergency experience, from the moment the 911 call is placed to the point at which the Paramedics transfer care over to the staff at the hospital. The words indicate either a positive experience or a negative experience and the client is encouraged to add comments.

Survey Questions

I felt	in regard to the 911 call experience?
I felt	with the paramedic's treatment at the scene?
I felt	during the transport to the hospital?
I felt	waiting at the hospital with the paramedics before being transferred to the hospital staff?
I felt	about the crew's introduction & approach?
I felt	in regard to the way the crew communicated with me?
I felt	about the crew's listening skills with me and others at scene?
I felt	in regard to the overall treatment the crew provided?

Each survey has 8 questions for 8 possible responses, either a positive response or a negative response. Of the 650 surveys, we received 89 responses. Only 8 responses were a negative response, which amounted to 99% of all responses being positive.

LOGISTICS & SUPPORT

— Fleet Services

The Logistics Department is responsible for a wide variety of services that supports Middlesex-London Paramedic Service. In 2020, Logistics staff processed 1,480 helpdesk requests for service.

The Stats

Helpdesk Requests:
1,480

Number of Fleet Vehicles:
65

Vehicles Readied:
8,030

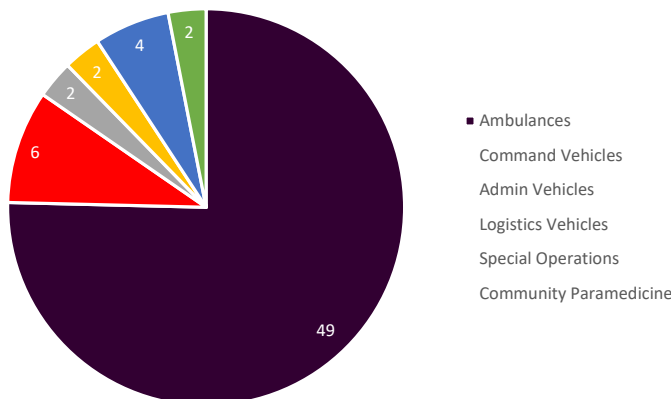
Deep Cleans Completed:
720

Kilometers Driven:
1,844,482

Reportable Collisions:
24



In 2020, Middlesex-London Paramedic Service operating fleet consisted of 65 vehicles. In 2020 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 the Broughdale Unsanctioned Street Event, 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 sixteen hours per day including washing, restocking vehicles and response bags, checking equipment and vehicle deep cleans.

- Vehicle preparedness = 720 vehicles/month (average)
- Deep Cleans = 60 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

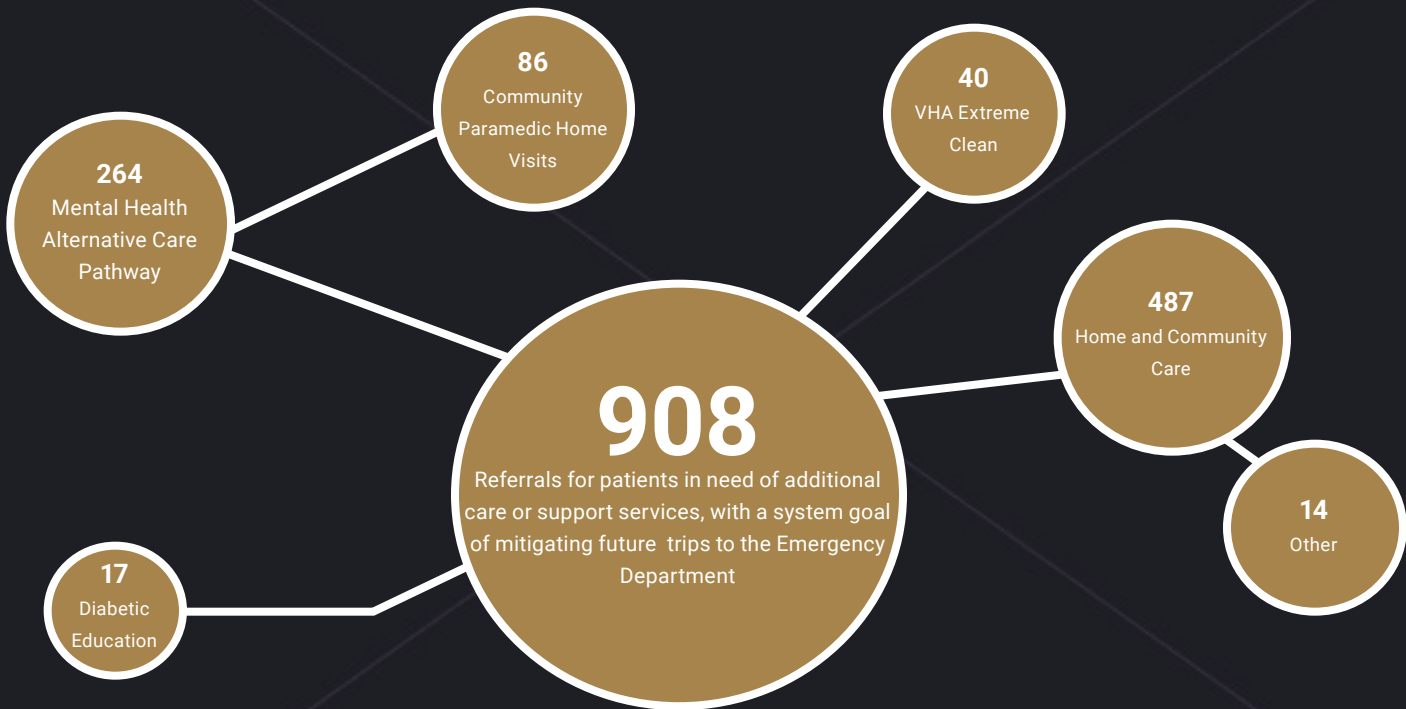
Project Management

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



COMMUNITY PARAMEDICINE

Community Paramedicine (CP) is designed to maximize efficiencies in patient care and resources by allowing paramedics to apply their education and skill beyond the traditional role of emergency medical response. Comprised of a non-emergent mobile response team with specialized training, this team is dedicated to supporting vulnerable patients in the community and those at risk of institutionalization, while helping to reduce unnecessary emergency department visits and hospital admissions by bringing primary care into a patient's home.



Individuals being discharged home from hospital, who are at risk of institutionalization are often sent home requiring additional services to support them with their medical or physical needs in the home while they recuperate from their hospitalization. Many of the needed Community Support Services include a service fee, which poses a further barrier to access. To address this need the MLPS CP program partnered with community support services to pilot a comprehensive approach to ensure successful discharge by providing up to 160 patients between December 1, 2020 to March 31, 2021, with access to a bundle of free services for a short period giving them time to rebuild their strength and regain their ability to live independently.



— Mobile COVID-19 Testing



As MLPS community paramedics work in a unique setting of both 9-1-1 response and community paramedicine, there is potential risk of community transmission of infectious diseases to some of Middlesex-London's most vulnerable patients. In response to COVID-19, the MLPS CP program designed a multi-phased approach based on the seriousness of the pandemic to maintain surveillance of vulnerable patients where possible, and transition to support 9-1-1 response as required.

Throughout 2020, the MLPS CP program was heavily requested by various community partners to support the Middlesex-London COVID-19 response. As part of the COVID-19 response, community paramedics were deployed to support the City of London Assessment Centres in partnership with London Health Sciences Centre, St. Joseph's Health Care London, Thames Valley Family Health Team, Middlesex-London Health Unit and the City of London. Assessment Centres are out-of-hospital clinics where people can be seen by a health-care provider for COVID-19 concerns, rather than have them visit an Emergency Department, Urgent Care Centre or their family doctor's office. Community paramedics worked in fixed, mobile, and pop-up clinic locations designated to perform COVID-19 screening, assessment, and nasopharyngeal swabbing under the Middlesex-London Health Unit Associate Medical Director. An additional request for community paramedics to support COVID-19 vaccine administration was submitted in December, 2020.

In addition the MLPS CP program supported a regional request by Ontario Health West to assist in development and implementation of a collaborative approach to community-based palliative care to provide crisis and symptom management (24/7) for palliative patients in their home when resources are in demand. To support the work of the South West Hospice Palliative Care Network and South West LHIN London Middlesex Palliative Care Outreach Teams (PCOT) 2 and 3, a seven member team from Middlesex-London Paramedic Service was established to support the Community Paramedic PCOT Response pilot until August 31, 2020. Due to preliminary findings the South West Hospice Palliative Care Network the pilot was extended until further notice. In October, 2020, an adjustment was made to the pilot to add a dedicated PCOT Response peak car available (mon-fri, 9-5) to enhance surveillance and management of high intensity long-term trajectory palliative patients.

— Influenza Vaccine Clinic



This is the second year MLPS has supported the MLHU by providing Community Paramedic-Led Influenza Vaccine Clinics. The Community Paramedic-Led Influenza Vaccine Clinic is a mobile, drop-in, community-based health promotion program complementary to the existing influenza vaccine settings to service populations less likely to utilize one of the existing service settings. Community paramedics received training, medical directive and delegation through the Middlesex-London Health Unit to administer influenza vaccine (Fluzone QIV and High-Dose) to individuals at high risk of influenza-related complications or hospitalization outlined by the Ministry of Health.

Community Paramedics held nineteen clinics over a four-week period at the beginning of the 2020/2021 influenza season. In addition, Community Paramedics provided mobile vaccinations to vulnerable individuals in the community unable to access existing services. These were done at the request of the Southwest Local Health Integration Network (SW LHIN) and the Palliative Care Outreach Teams (PCOT) in conjunction with the Middlesex-London Health Unit.



STAFF EDUCATION & TRAINING

— New Employees

Notes

In 2020 Middlesex-London Paramedic Service hired 40 additional part-time paramedics.

COVID-19 impacted multiple areas of Middlesex-London Paramedic Service, including training.

To ensure that staff were protected and that physical distancing parameters were upheld, Middlesex-London Paramedic Service adopted a modular approach to training and transitioned to a combination of controlled in person sessions with online training and remote sessions that allowed staff to participate remotely.

In total, Middlesex-London Paramedic Service trained and on-boarded 40 new paramedics, conducted 17 training sessions and released 23 on-line learning and training packages.

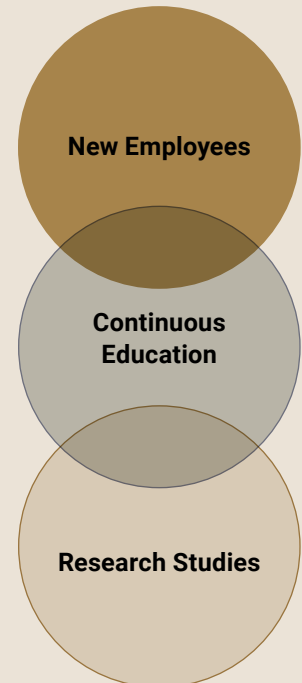
Additionally, Middlesex-London Paramedic Service was able to continue to participate in 6 research studies.



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

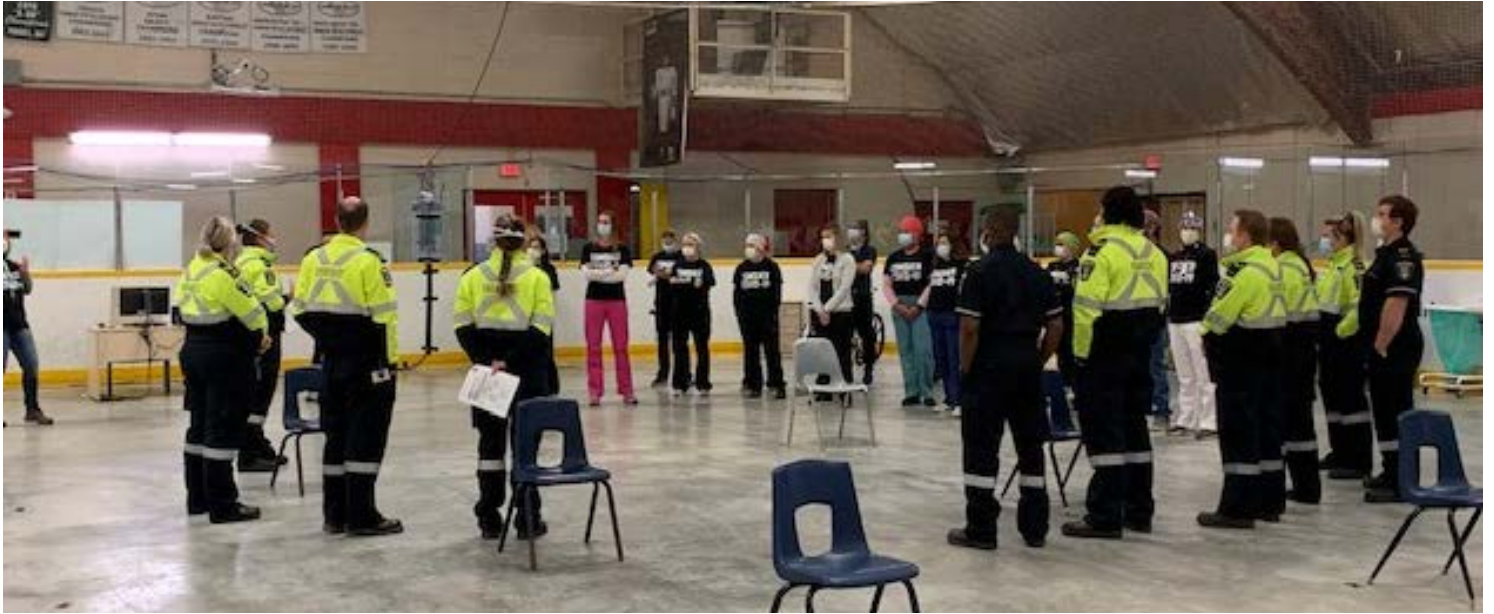
Number of New Employees:
40

Training and Education Sessions:
40

Training Hours:
500

Research Studies:
6

— Continuous Training



Our Education / Training division oversees all of the training and education needs of our service and community. This includes yearly service training days, continuing education sessions, online learning through our learning portal, return to work programs, patient feedback programs, the intake of new employees, orientation programs, as well as liaising with college students and physicians for their ride out placements. The division looks after all research and development for our service as well as new equipment implementation programs.



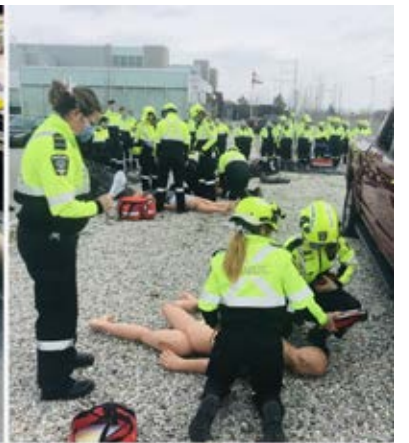
12 Field Training Officers (FTO's) assist with content development and delivery. The FTO's act as a mentor to current and new staff, and are seen in the classroom at various times each year, as well as playing a large part in our driver education, and continuing education programs. In 2019, we provided over 500 hours of training to our staff.



Middlesex-London Paramedic Service worked with London Transit to train 8 paramedics as ESU-Bus operators. This intensive program gave paramedics the skills they need to be safe and effective operators and be able to deploy this resource at a moment's notice when it is needed the most. Thanks to the teamwork and initiative from London Transit, this program was a huge success.

Over the course of the year, Middlesex-London Paramedic Service paramedic educators attended stations to help teach new skill sets and drill scenarios. Paramedics had the opportunity to practice important and less frequently used skills and work through unusual and challenging scenarios increasing their knowledge and experience.

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. Over the course of 2020, Middlesex-London Paramedic Service, with the assistance of the Field Training Officers (FTO) were able to return 22 paramedics to the workforce.



EMPLOYEE RECOGNITION

Notes

The community had an outpouring of support and positivity for paramedics during the COVID-19 pandemic.



2020 was a difficult year for healthcare professionals. The community of Middlesex and the City of London showed incredible support for the paramedics of Middlesex-London during such a challenging time.

This outpouring of positivity reached paramedics and buoyed spirits during some of the most challenging times of their careers.

The caring and generosity shown by the community is deeply appreciated by all of Middlesex-London Paramedic Service.



2020 Memorial Ride

The annual Paramedic Memorial Ride to honour fallen paramedics.

2020

Middlesex-London Paramedic Service participated in the annual Paramedic Memorial Ride to honour fallen paramedics.

This ride begins in Nova Scotia and sees paramedics cycle across Canada and finishing in British Columbia. The ride stops at paramedic services as it moves across the provinces bringing with it a memorial bell.

The Memorial Paramedic Ride honours paramedics that have been killed in the line of duty and brings awareness to their sacrifices.



COMMUNITY ENGAGEMENT

Notes

During 2020 the Middlesex-London Paramedic Service Public Access Defibrillator program focused on community CPR/ AED awareness and preparedness.

Offering certification training and public awareness programs, 446 people were trained in CPR and Standard First Aid certification through the Canadian Red Cross despite the challenges faced with the COVID-19 pandemic.

With public engagements and in-person training not possible for much of the year, Middlesex-London Paramedic Service focused on ways to support the community and provide important information including keepig the community informed and engaged with the MLPS mobile COVID testing program.

The 9-1-1 AED registry continues to grow as we added even more crowd sourced public access defibrillators, placing AEDs throughout Middlesex County and the City of London. There are currently 425 AEDs registered. Over the course of 2020, 7 public AED's were used, delivering a total of 5 shocks.

During the month of May, Middlesex-London Paramedic Service staff wanted to find a way to give back to our very generous community who has shown us tremendous support. Our "Food Drive Challenge" was able to raise \$ 3,250.00 for the London Food Bank.



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 446 citizens in CPR, first aid and how to use an AED in 2020 alone and placed an additional 9 AEDs in to the community.

1

Public AEDs

9 AEDs placed in the community.

2

AED Registry

425 AEDs in the registry to improve patient outcomes.

3

CPR/AED Awareness

446 Citizens participated in training and awareness.





Social Media Presence

Notes

MLPS engaged with the public more than seven million times through social media in 2020 alone.

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.



7:10 AM · Mar 13, 2020 · Hootsuite Inc.



9:43 AM · Apr 30, 2020 · Hootsuite Inc.





Today, our MLPS gator was deployed to assist our Paramedics in accessing a person requiring medical attention on a trail. #RightCareRightTime





ML Paramedic Service
@MLPS911

Last call for Paramedic 61741 Chris "Bones" Skelton.
May you rest in peace Chris.



1:13 10.8K views

3:35 PM · Feb 29, 2020 · Hootsuite Inc.

View Tweet activity

51 Retweets 5 Quote Tweets 358 Likes



ML Paramedic Service
@MLPS911

"We are here for you, please stay home for us"
Paramedics are here to help those who need us the most. By staying home, you can help keep everyone as safe and healthy as possible! #practiceSocialDistancing #community



3:53 PM · Mar 20, 2020 · Hootsuite Inc.

View Tweet activity

67 Retweets 5 Quote Tweets 190 Likes



ML Paramedic Service
@MLPS911

We were honoured to welcome @celliottability back to @MLPS911 this morning for a very exciting Ontario Health Team announcement. @ChiefMlps



12:06 PM · Feb 26, 2020 · Hootsuite Inc.



ML Paramedic Service
@MLPS911

Congratulations to the Royal Canadian Legion Branch 341 in Parkhill on becoming a #heartsafe facility! @northmiddlesx #chainofsurvival



Twitter

Middlesex-London Paramedic Service engages with the public through Twitter to show the amazing job our paramedics do on a daily basis and to share with them important information. Growth and engagements through Twitter with the public has increased by 53% over the past year.

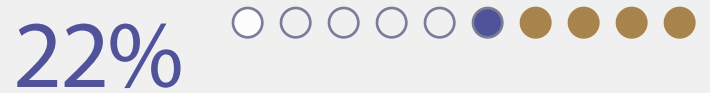
according to 2020 Twitter statistical analysis



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. Over the past year our engagements on the Facebook platform have grown by 22%.

according to 2020 Facebook statistical analysis



Social Media Statistics



Twitter Followers

Follow us on Twitter @MLPS911



Twitter Engagements

Follow us on Twitter @MLPS911



Facebook Followers

Join our Facebook Page



Facebook Engagements

Join our Facebook Page

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.

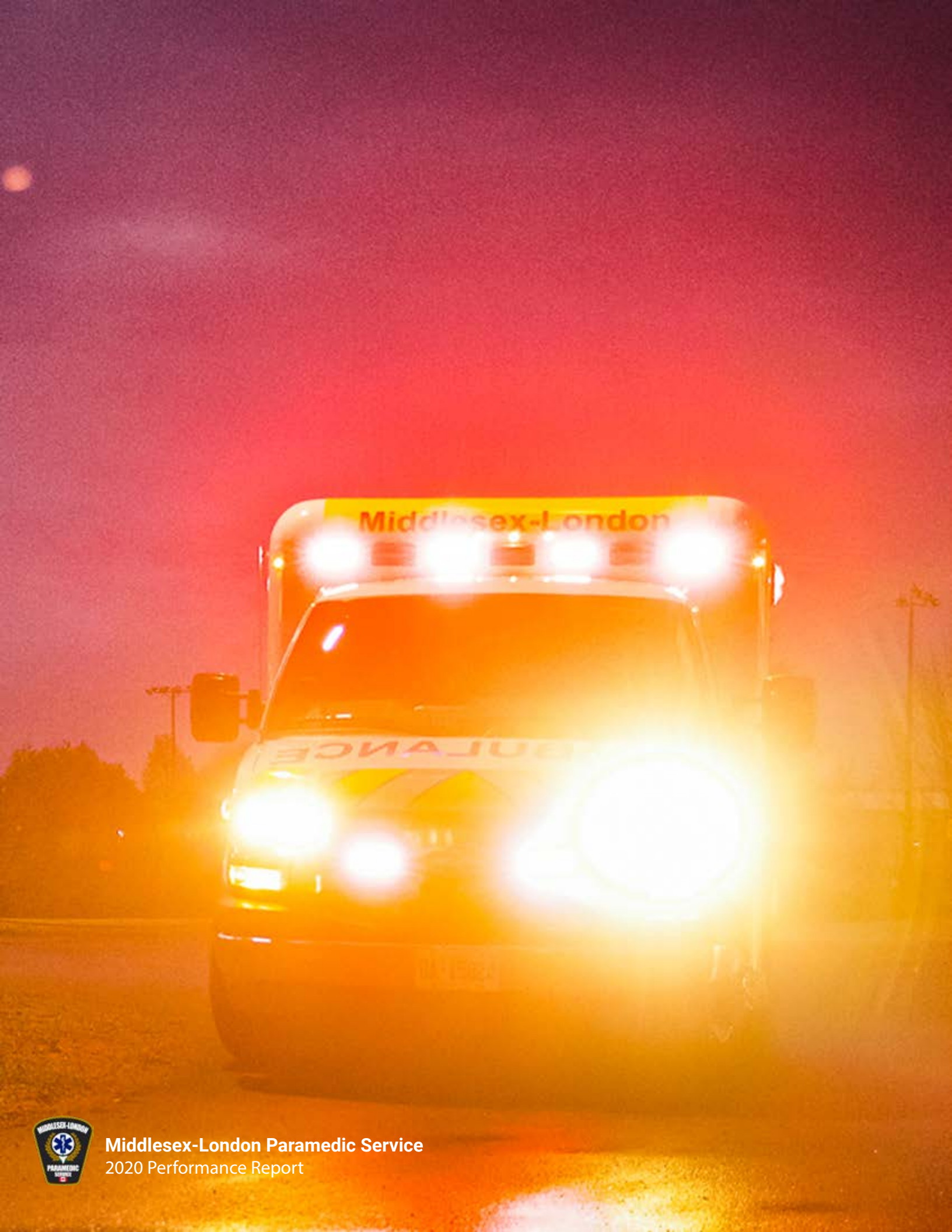
Offload Delay: Offload delay is the amount of time spent in the Emergency Department transferring care to the hospital. It is calculated as the difference in time from when the ambulance arrives at the Emergency Department until Transfer of Care is documented – less the standard thirty (30) minutes which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





Middlesex-London

AMBULANCE



Middlesex-London Paramedic Service
2020 Performance Report