



2019 PERFORMANCE REPORT

Middlesex-London Paramedic Service
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Neal Roberts
Chief, Middlesex-London
EMS Authority

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MESSAGE FROM THE CHIEF

As Chief, on behalf of Middlesex London Emergency Medical Services Authority, it is a privilege to present our 2019 Annual Report. I do so in the midst of unprecedented times, as Middlesex-London Paramedic Service is on the front line, responding to COVID-19 and its serious impact on our communities. As I reflect on the progress we have made over the year and think about areas where we implemented approaches to make improvements, it is clear that the commitment by MLPS to strive for excellence has positioned us well as we navigate uncertain and unknown times. There are not enough words of thanks to express my sincere appreciation and gratitude for the dedication, adaptability and resilience of all our staff and teams.

This report demonstrates once again, the ongoing commitment, professionalism and dedication by all employees that has resulted in many achievements. Through innovative programs and clinical expertise, Middlesex-London Paramedic Service contributes to the overall health of our communities through direct care delivery and active collaboration with other health care, community and emergency service partners.

As with all other publicly funded health care services in Ontario, we are working hard to maintain the high-quality services we provide alongside increased demand and budgetary pressures. Middlesex-London Paramedic Service continues to be recognized as a leader in the industry. To that end, the ongoing support from Middlesex County Council is so helpful and is sincerely appreciated as they work with the Province in advocating for improved paramedic service. Other areas of consideration that would offer clinical improvements and better resource utilization include ongoing advocacy for Land Ambulance Dispatch reform and pursuit of dispatch as an integrated model for better system outcomes.

The strength of our partnership with the Ministry of Health continues to be recognized. In June 2019, the Minister of Health attended our Service to announce funding for a new dedicated Paediatric-Neonatal Transport Unit. The addition of this unit provides critical transport capabilities to some of our most vulnerable citizens in their most urgent time of need. Staffed by MLPS Paramedics and the LHSC NICU/PCCU transport team, in the first six months of use this unit was deployed 218 times and travelled more than 6,000 kilometres.

Every year our data shows an increase in need for paramedic service. The number of life threatening calls (Code 4) dispatched has increased by 14.6%, to 45,962 calls. This increase is significant when compared to the 3.3% increase seen from 2017- 2018. Calls for service increased by 12.6% over 2018 (Code 1 to 4). With all these increases in service, our commitment to patient care remains a priority. Customer satisfaction surveys showed an increase from 2018, with results at 97% positive feedback in 2019. In order to continually improve services for patients, we welcome and act on their feedback.

Data about the distribution of our calls by geography likewise demonstrates areas of need. In 2019, approximately 86% of the Code 1-4 calls attended by Middlesex-London Paramedic Service occurred within the City of London boundaries. Emergency response time across Middlesex-London was 9 minutes 58 seconds or less 90% of the time. Although this is an increase of 9 seconds from 2018, increases in call demand and offload delays were contributing factors. Average chute time (reaction time) for Code 4 calls was 1 minute and 21 seconds, an improvement over 2018. Middlesex-London Paramedic Service continues to maintain targeted goals for Land Ambulance Response Time Standards as reported to the Ministry of Health. Despite increases in call volumes over 2019, all but CTAS 2 ambulance calls were in compliance.

Offload delays at Emergency Departments remain a challenge. For 2019, Ambulance Offload delays increased by 8.1% over the previous year. In 2019, a total of 412.6 twenty-four-hour days were lost to offload delays. We continue to work with London Health Sciences Centre in seeking solutions to mitigate the problems and impact that these delays have on our ability to provide efficient and effective paramedic services to the residents of Middlesex County and the City of London. In 2019, our Service implemented a proposal that allows paramedics to offload less urgent patients to emergency department waiting rooms. Known as "fit to sit," this initiative makes a positive contribution to allowing paramedics to return to the community more quickly and be able to serve more acute patients. As we proceed with this initiative, we continue to engage with our hospital partners, and evaluate the results.

Investing in staff remains a high priority so that we can continue to give the communities we serve the highest quality care. In 2019 we started our Field Training Officer program, which brought 12 paramedics into this role to support our staff by assisting with training, skills review and mentorship. As well, we deeply appreciate the contribution of local businesses for their generous donations of money and equipment which help to support training programs. Extensive work is also led and coordinated by our Training Department, ensuring the care provided by our Paramedics is clinically sound and evidence based. Our involvement in research trials supports us in keeping abreast of best practices. In this way, we keep building a culture of learning and improvement.

Middlesex-London Paramedic Service remains committed to our role in supporting community education and saving lives. Our Public Access Defibrillator program continued to expand. Sixteen new Automated External Defibrillators were placed with the community during 2019 for a total of 353 defibrillator locations currently listed in the AED Registry. Another way that we have engaged with the community is through our Paramedic Summer Training Camp Program, where secondary school students are exposed to various aspects of the paramedic profession. This program was attended by 12 students this year, and we view this program as a positive investment in the future. In 2019, MLPS hired our first part-time paramedic who had completed the Paramedic Summer Training Camp Program in 2015, when we launched this initiative.

In closing, we continue to commit to implementing constructive strategies over the upcoming year and beyond, with the intent to provide the best possible emergency response and care service to the population of Middlesex County and the City of London. Through our established relationships with healthcare, community, and emergency service partners, I look to the future with confidence that Middlesex-London Paramedic Service will continue to make a real and significant contribution to the health of our communities.

Neal Roberts,
Chief, Middlesex-London EMS Authority



68,513

Middlesex-London Paramedic Service paramedics responded to 68,513 potential patient carrying calls.

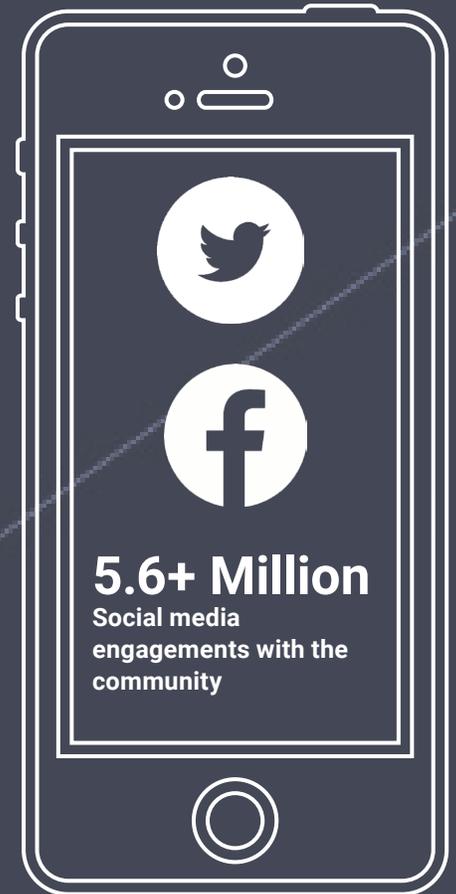
9
1
1

258
average calls
per day

116
cardiac arrest
saves

20
babies
delivered

298
Paramedics

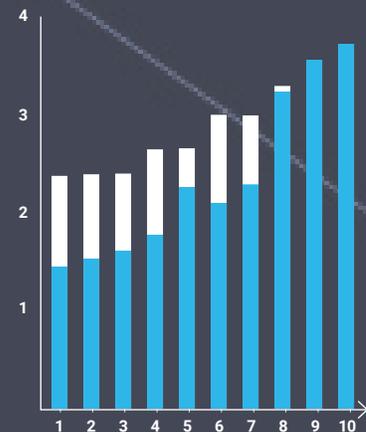


1.7 million km
driven during the past year.



Responded to 94,339 Calls for Service

Middlesex-London Paramedics responded to a total of 94,339 calls for service in 2019. An increase of 12.9% in emergency calls since last year and an increase of 71% 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.



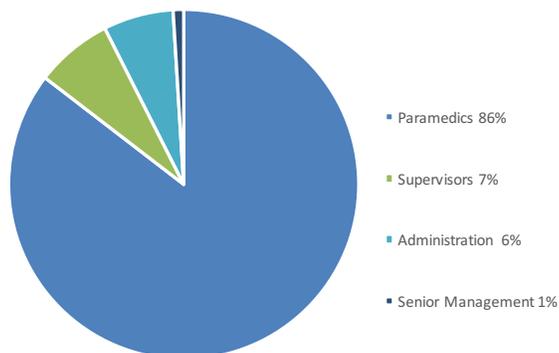
OUR TEAM — Staffing Breakdown



Middlesex-London Paramedic Service employs a total of 325 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

— 2019 Operating Costs

Middlesex-London Paramedic Service responded to an average of 258 calls per day in 2019, resulting in an 9.2% increase in service demand over the prior year.

The Stats

Total Calls Received:
94,339

Calls Per Day:
258

Increase in Service Demand:
9.2%

Unit Cost Per Hour:
\$196.83

Wages and Benefits:
81.5%

*Marginal Operating Costs:
18.5%

The increase in demand for paramedic services caused financial pressures on numerous operating lines. Middlesex-London Paramedic Service received 94,339 calls in 2019, resulting in a unit cost per hour of \$196.83.

The majority of the 2019 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 2019, the marginal operating costs comprised 8.6% of total operational expenditures. Approximately 81.5% of all operational costs are directly attributed to employee salaries, wages, and benefits.

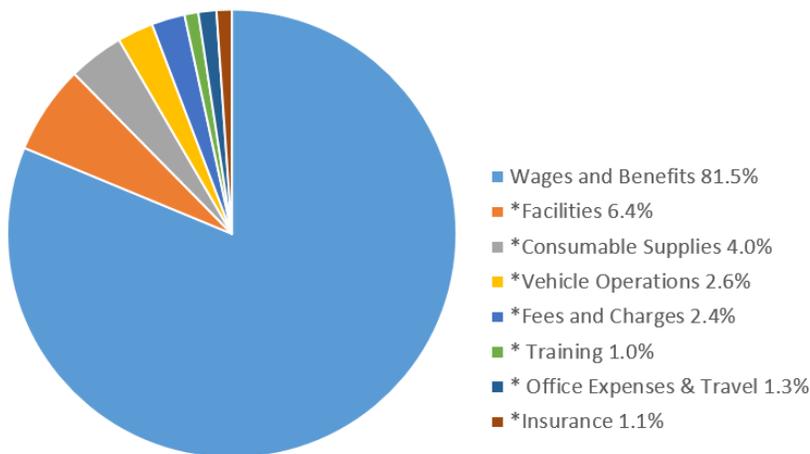
Middlesex-London Paramedic Service has worked to reduce its variable costs through strategic partnerships, purchase agreements, and business intelligence processes.

MLPS Initiatives To reduce Expenses

In 2019, Middlesex-London Paramedic Service's operating fleet consisted of 56 service vehicles, including ambulances, command vehicles, administration vehicles, and logistic vehicles. These vehicles traveled over 1.7 million kilometers in 2019. The average cost per kilometer for these vehicles, including fuel, maintenance, repairs, and insurance costs was \$1.19 per kilometer.

Middlesex-London Paramedic Service continues to work to minimize fleet costs through maintaining a comprehensive preventive maintenance program, partnering with the City of London in a corporate fuel purchasing agreement, and providing enhanced driver training to all paramedic staff.

Middlesex-London Paramedic Service Operating Costs



PERFORMANCE

— Calls for Service

Notes

Calls for service have increased by 71% since 2009.

In 2019, the number of calls for patient carrying service (Code 1-4) was 68,513 – an increase of 12.6% over 2018, and an increase of approximately 71% since 2009 when calls for service were at 40,219.



The Stats

Total Calls for Service:
94,339

Total Emergency Calls:
67,851

Number of Patients Transported:
44,120

14.6%
Increase in Life
Threatening Calls
(Code 4)

Station Name	Code 1	Code 2	Code 3	Code 4	Code 8	Total
Adelaide (HQ)	53	102	3,018	7,062	3,514	13,749
Byron	16	30	1,699	3,558	2,946	8,249
Dorchester	15	23	469	1,028	1,037	2,572
Glencoe	19	6	318	474	263	1,080
Horizon	22	27	3,336	6,676	1,931	11,992
Hyde Park	22	17	1,565	2,817	3,579	8,000
Komoka	17	10	499	1,061	1,597	3,184
Lucan	13	3	299	502	1,280	2,097
Parkhill	11	5	264	476	1,801	2,557
Strathroy	18	11	910	1,696	1,299	3,934
Trafalgar	37	62	1,533	3,206	1,361	6,199
Trossacks	17	17	1,832	3,749	2,047	7,662
Waterloo	33	56	6,147	13,657	3,171	23,064
Total	293	369	21,889	45,962	25,826	94,339

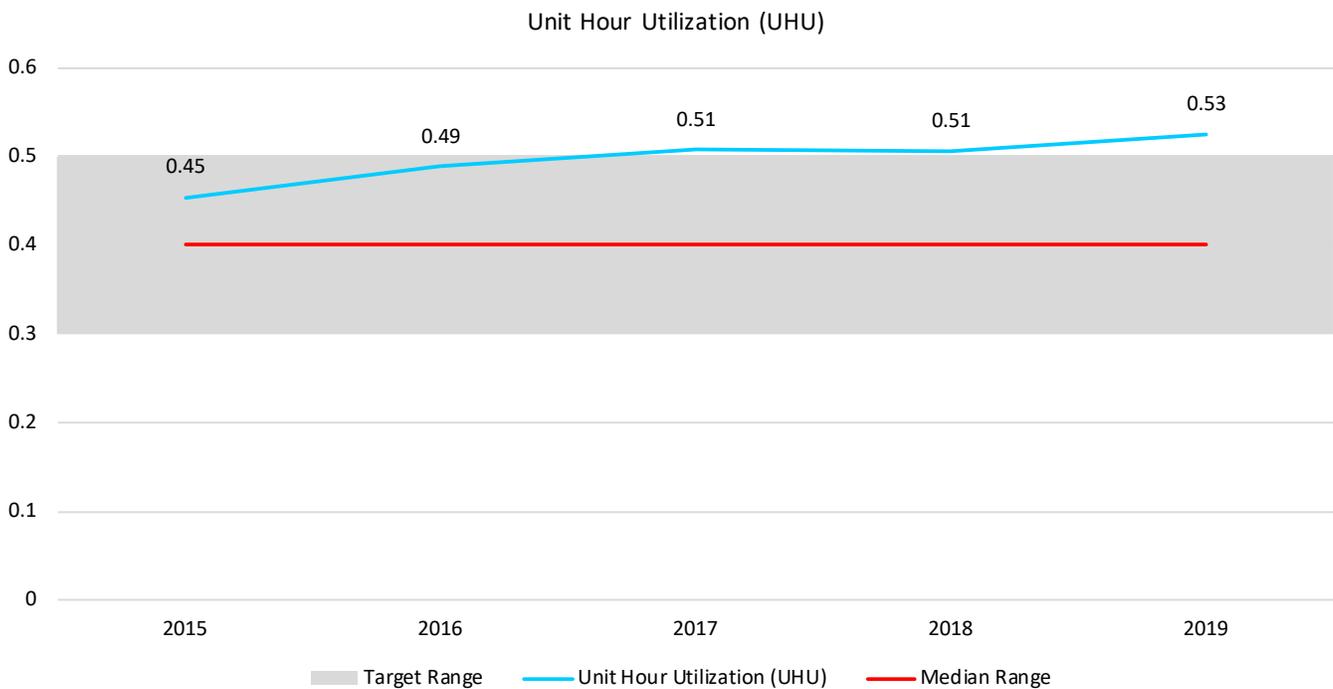
Data Source: ADRS



— 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 (see page 17 for offload delays).



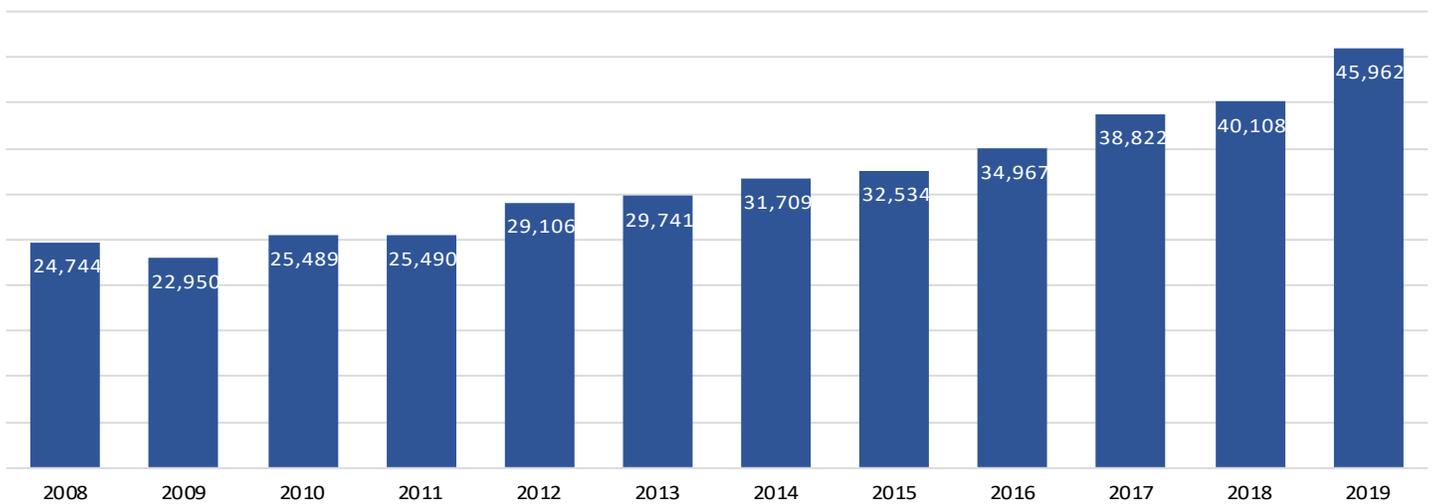
Data Source: ADRS

— Life Threatening Calls (Code 4)

In 2019, the number of life threatening calls (Code 4) dispatched was 45,962, an increase of 14.6% over 2018 and a 100.2% increase since 2009.

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



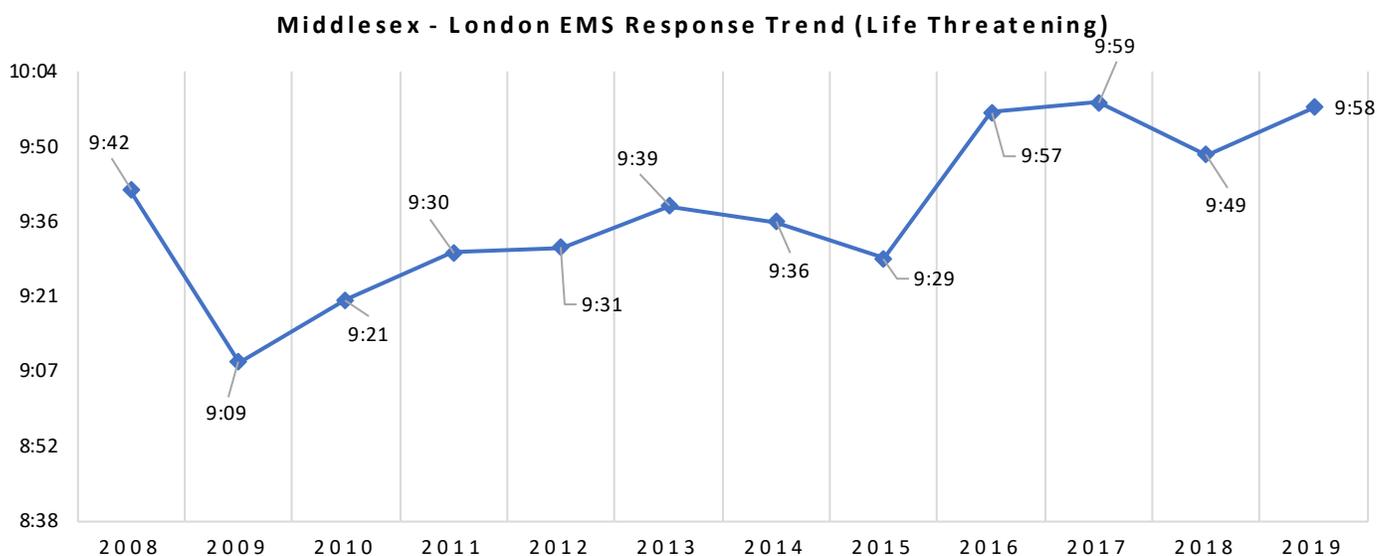
— Response Time

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 increase in 2019. Continued growth in call volume and offload delays lead to a 9 second increase in response times increasing to 9 minutes and 58 seconds in 2019.

Response times in Middlesex County improved by 10 seconds in 2019 decreasing to 13 minutes and 45 seconds.



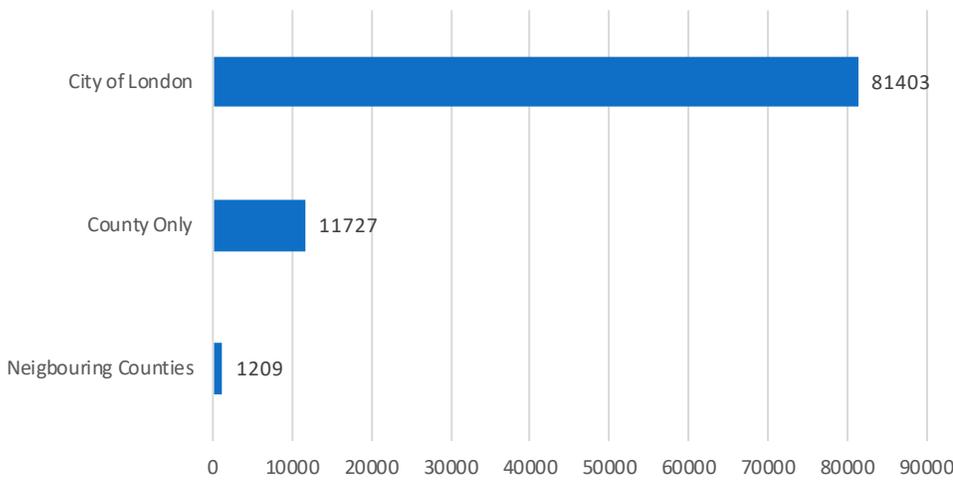
Data Source: ADRS



— Calls Completed Within Middlesex County Boundaries

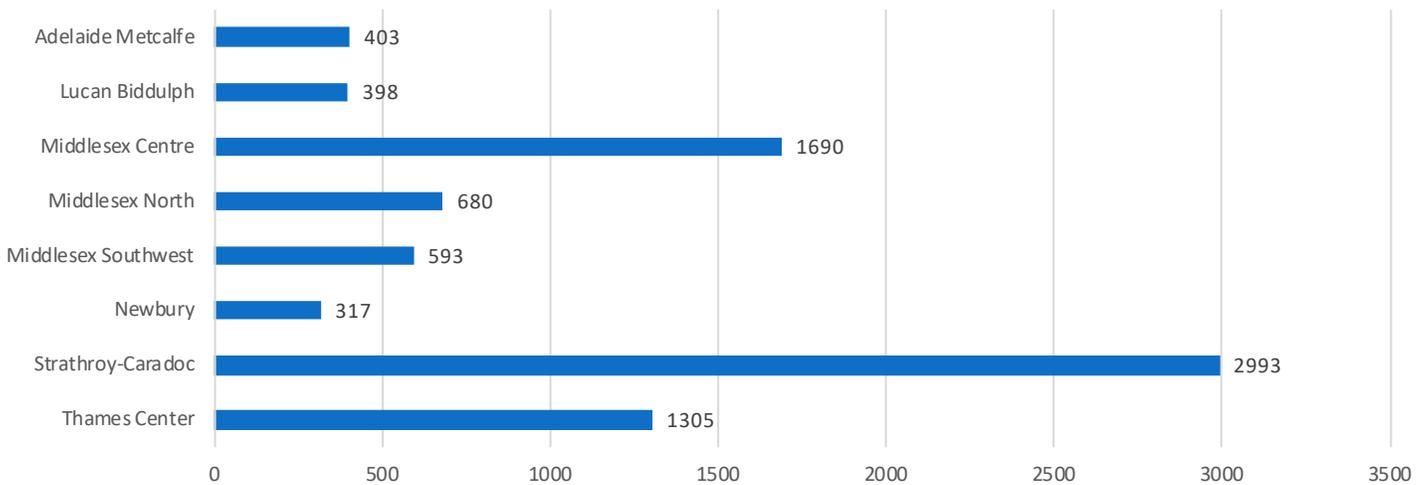
Approximately 86% of the Priority 1-4 calls attended by Middlesex-London Paramedic Service occur within the City of London. During 2019, other municipalities assisted within Middlesex-London 1,209 times. Conversely, Middlesex-London Paramedic Service assisted neighbouring municipalities 520 times.

All Calls in City of London vs County of Middlesex



Data Source: ADRS

Total Patient Calls Completed in Middlesex County



Data Source: ADRS

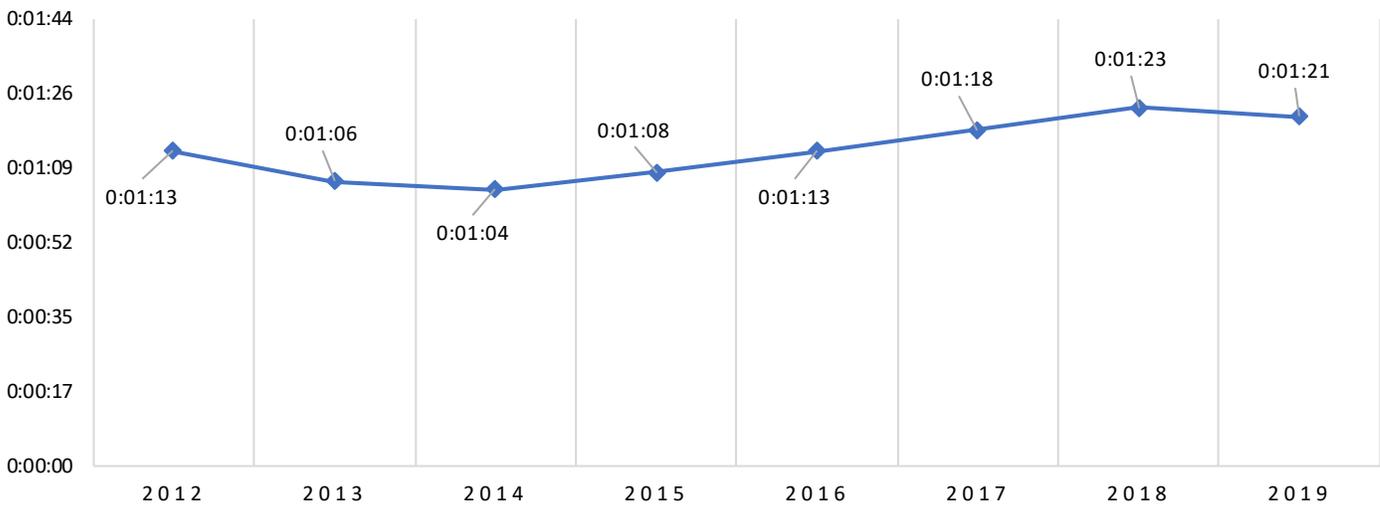


— Average Chute Time for Life Threatening Calls (Code 4)

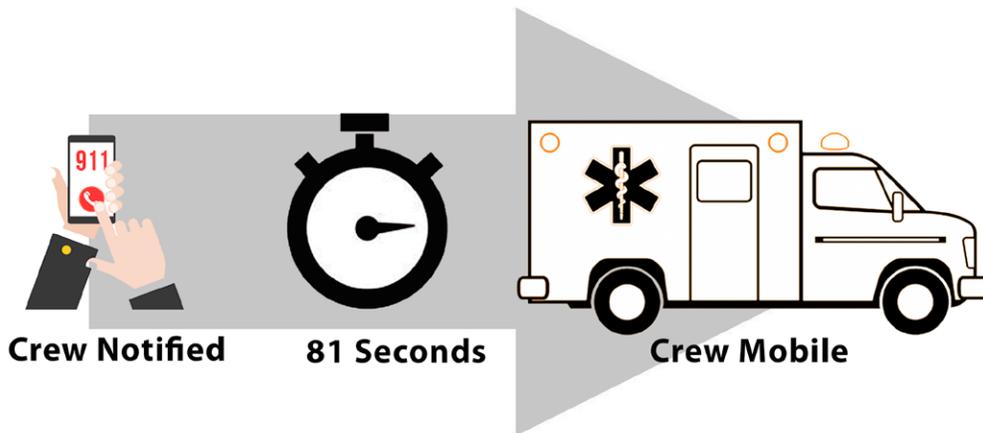
The Average Elapsed Time from the time the crew is notified of life threatening calls to the crew being mobile on the call is called the Chute Time.

In 2017, the Average Code 4 Chute Time for Middlesex-London Paramedic Service was 1 minute and 23 seconds. (Figure 8). 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



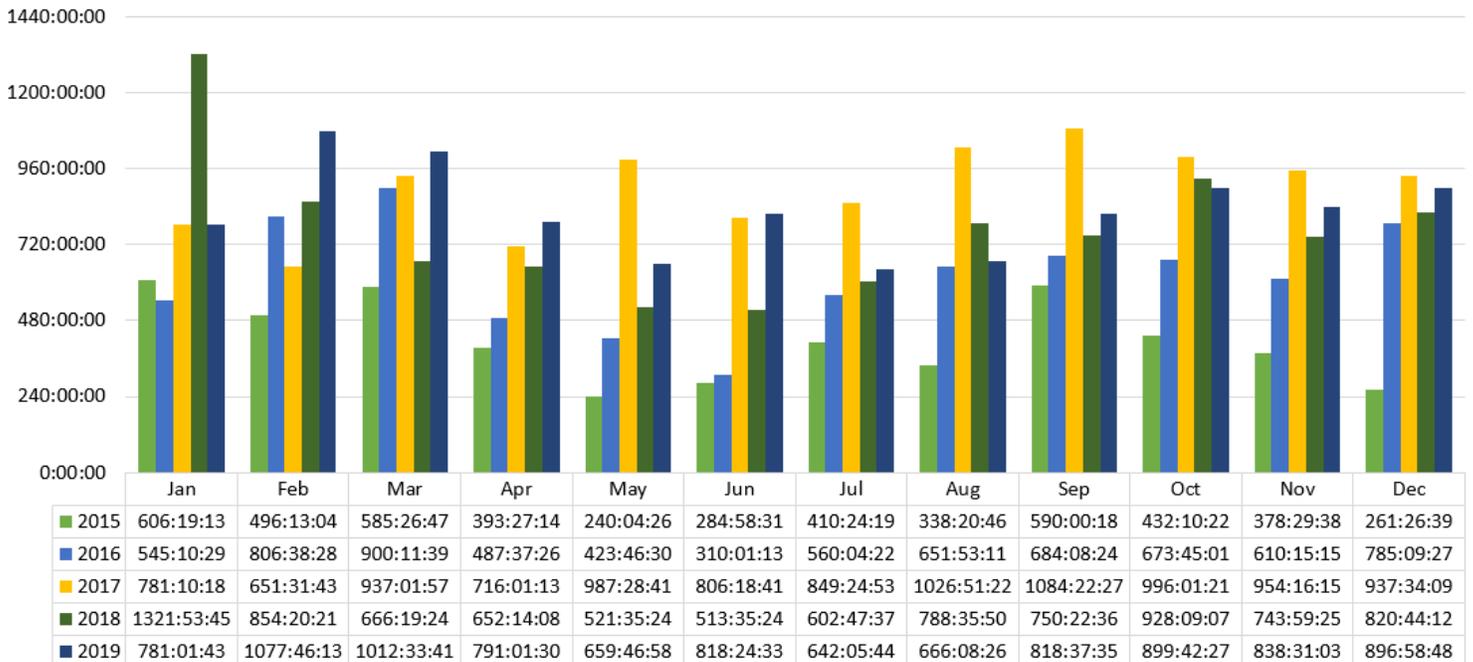
— Offload Delay

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 2019, Ambulance Offload Delay hours fluctuated throughout the year peaking in February. Offload Delay hours declined slightly and remained consistent for the remainder of 2019. Offload Delay hours increased in 2019 by 8.1% from the previous year.



Total Offload Delays Hours

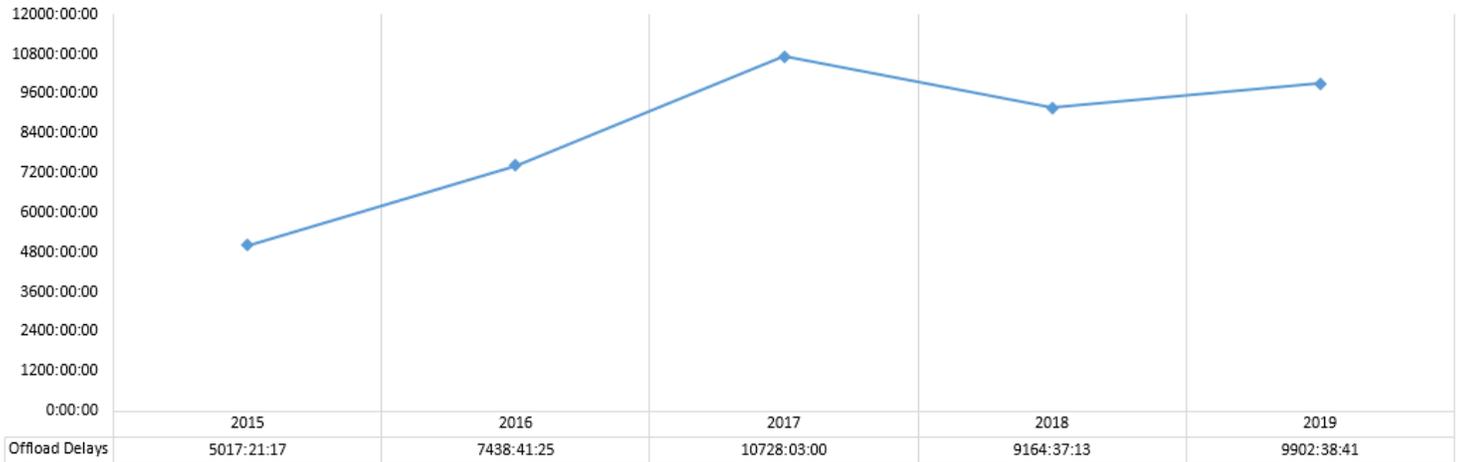


Data Source: Interdev



In 2019, a total of 412.6 24-hour days were lost to offload delays. This is an increase of 8.1% from the previous year.

Offload Delays Year Over Year (By Total Time)



Rolling Monthly Results

Number of 24 Hour Days lost to Offload Delays per Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
		32.5	44.9	42.2	33.0	27.5	34.1	26.8	27.8	34.1	37.5	34.9



In 2019, Middlesex-London Paramedic Service in collaboration with London Health Sciences Centre, began a pilot program called Fit2Sit, in order to attempt to decrease the amount of off-load delay for MLPS.

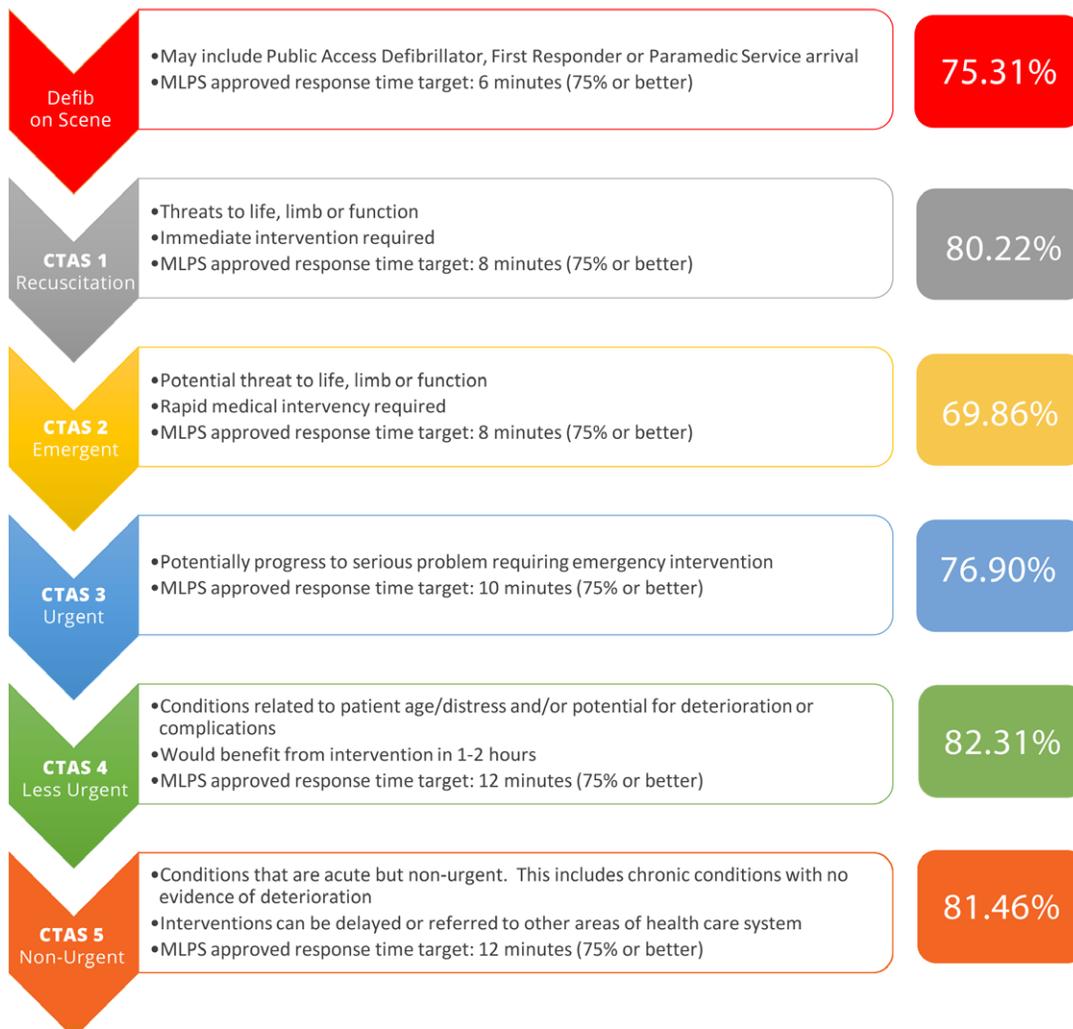
The program has strict criteria, that would see non-urgent patients being taken directly to the Emergency Department waiting room area, freeing up the paramedic crew for another call. The pilot study, contains a quality assurance program that ensures patient safety is maintained.

— 2019 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 2019.

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



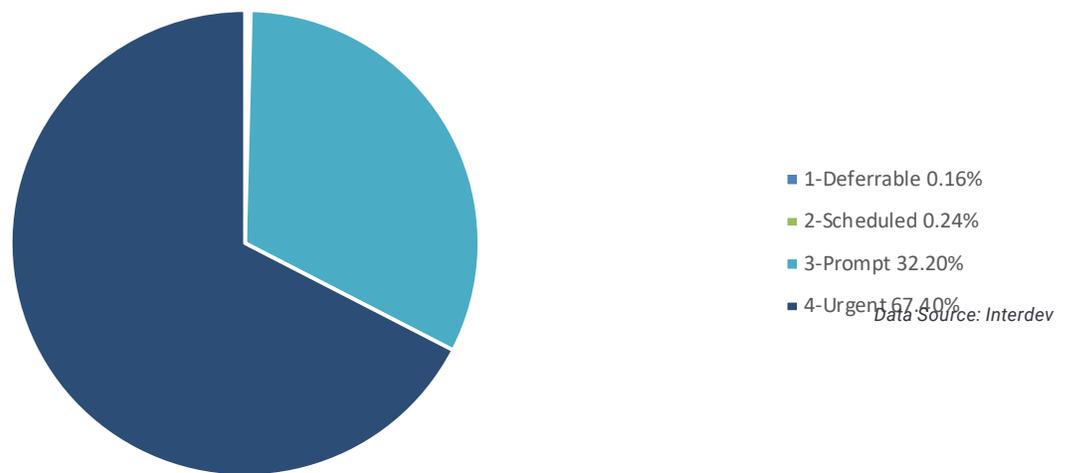
DEMOGRAPHICS

— Dispatch Priority and Return Priority

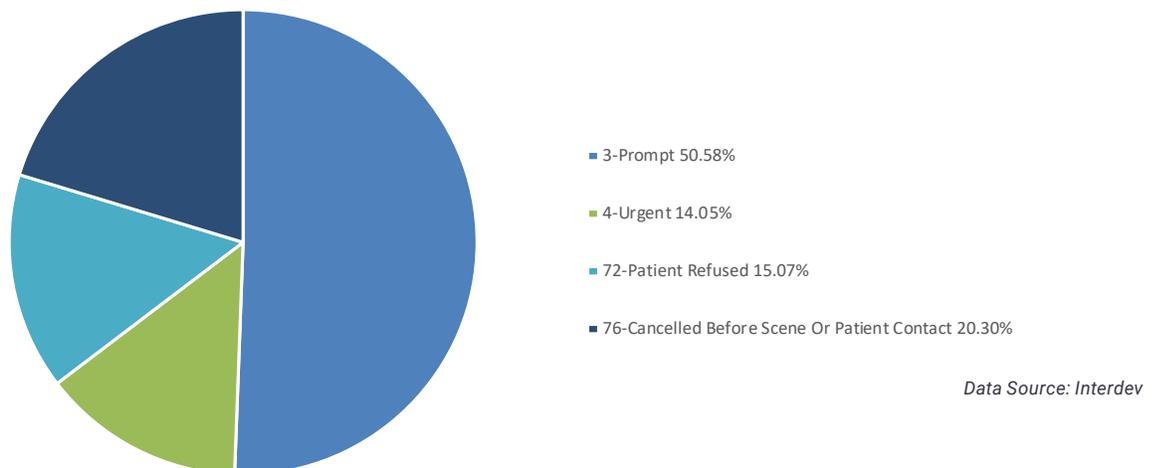
In 2019, Paramedics were sent out Code 4 (Lights and Sirens) to calls 67.40% of the time, only returning Code 4, 14.05% of the time.

In 2019 Paramedics were dispatched Code 4 67.40% of the time, this represents an increase of 2.71% over 2018. In 2019, paramedics returned Code 4 14.05% of the time which represents an increase of 10.89% over 2018.

Dispatch Priority



Return Priority

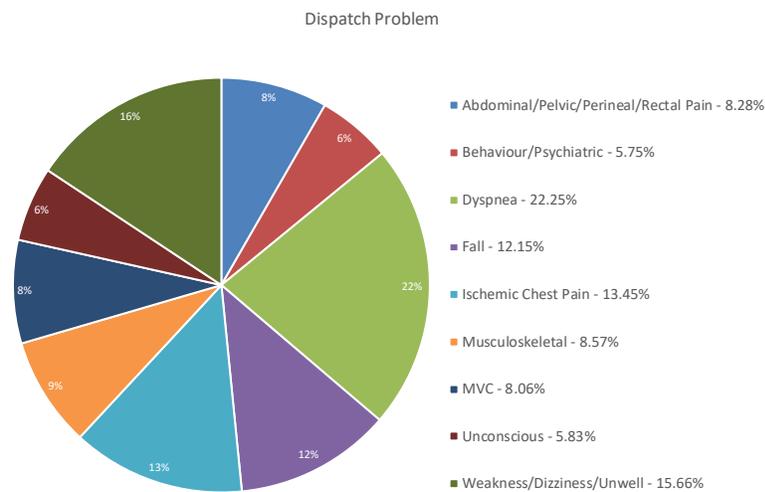


— Top Dispatch Problems and Top Primary Problems

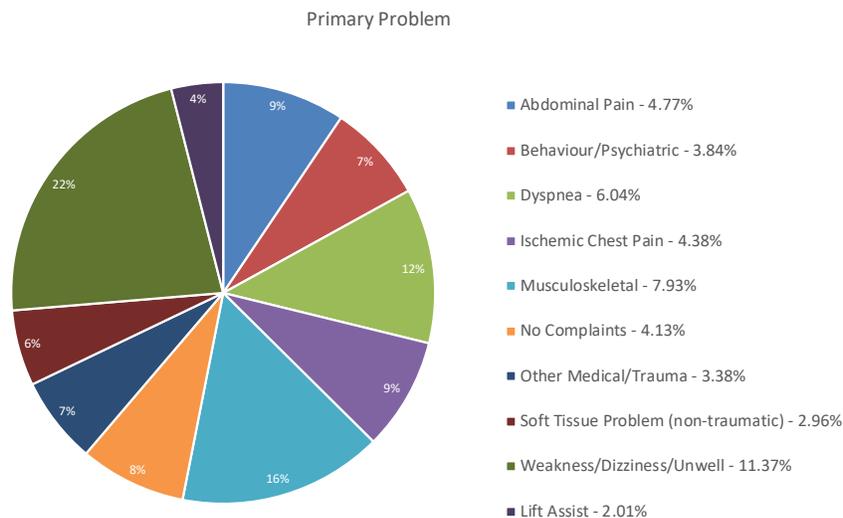
In 2019, the top Dispatch Problems (what the paramedics are told when they are assigned to the call by London CACC) were for Dyspnea (shortness of breath), Weakness/Dizziness/Unwell, Chest Pain, Falls, Abdominal Pain, Motor Vehicle Collisions and Mental Health.

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

2019 saw an increase of 10.39% in calls dispatched as Dyspnea (Shortness of Breath).



Data Source: Interdev



Data Source: Interdev

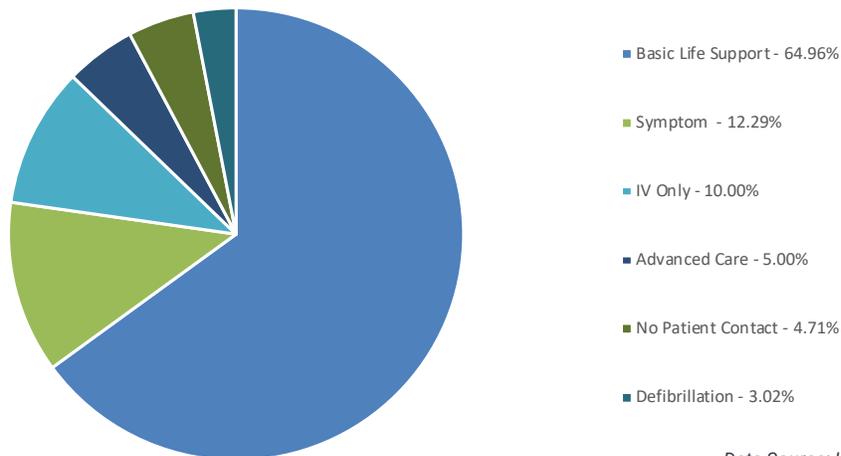


— Call Type and Age Demographics

In 2019, the majority of the calls that the Middlesex-London Paramedic Service responded to were considered Basic Life Support Calls (64.96%).

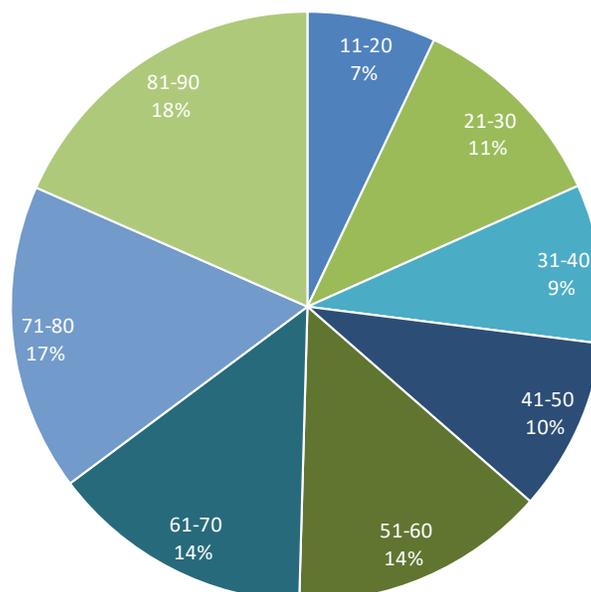
Of all the calls in 2019, 17.30% were considered the most critical Advanced Care. Primary Care Paramedics with enhanced skills of Symptom Relief and Intravenous Therapy Certification are able to provide the majority of care needed.

Call Type



Data Source: Interdev

Age Demographics 2019



Data Source: Interdev

OPERATIONS

Notes

Middlesex-London Paramedic Service participated in many operations and events over 2019.

Middlesex-London Paramedic Service participated in many planned operations and events throughout 2019. 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.

Middlesex-London Paramedic Service also provided emergency medical coverage for Rogers Hometown Hockey which took place in Strathroy. This was an extremely successful and well attended event.

Additionally Middlesex-London Paramedic Service participated in events such as the London Airshow, Rock the Park and Baconfest to name a few.



Events

London and Middlesex

Stations opened in 2018

Strathroy



Rogers Hometown Hockey

Hosted in Strathroy, this event was a huge success.

London



London Airshow

MLPS provided emergency medical coverage for this annual event.

London



Bike Unit

The MLPS Bike Unit provided deployed to many events.





On August 14, 2019 Middlesex-London Paramedic Service responded to a motor vehicle collision in Old East Village.

Within minutes of arriving there was a large explosion that completely destroyed the home and severely damaged neighbouring homes and properties. Several first responders, including police officers and fire fighters were injured in this explosion.

The Middlesex-London Paramedic Service paramedics that were already on scene began to immediately assess and treat those that were injured in the midst of the fire, destruction and chaos.



On September 28, 2019, a large unsanctioned street event known as FOCO was held on Broughdale Ave in London Ontario. This event drew in excess of 25,000 attendees on a narrow 750-meter street.

A concert known as Purple Fest was simultaneously held at the neighbouring Western University, which drew an additional 13,000 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 a joint training exercise coordinated by the Ontario Provincial Police which included participants from the Royal Canadian Mounted Police (RCMP), Canadian Security Intelligence Service (CSIS), Provincial Security Advisor, London Police Service, London Fire Department, Middlesex County, the City of London, Upper Thames Conservation Authority, Office of the Coroner and the Ontario Ministry of the Solicitor General.

This exercise spanned several days and involved multi-jurisdictional coordination and interoperability between services and agencies.

— Dedicated Paediatric Neonatal Transport Unit

The Ministry of Health attended Middlesex-London Paramedic Service in June of 2019 to announce the new dedicated Paediatric-Neonatal Transport Unit. This dedicated unit is staffed by Middlesex-London Paramedic Service paramedics and the LHSC NICU/PCCU transport team and is funded through the Ministry of Health.

The dedicated Paediatric-Neonatal Transport Unit is a specialty unit that is tasked with transporting critically ill paediatric and neonatal patients from across South-Western Ontario. The addition of this unit provides critical transport capabilities to some of our most vulnerable citizens in their most urgent times of need.

In the first six months of use this unit was deployed 218 times and travelled more than 6,000 kilometers.



CONTINUING QUALITY IMPROVEMENT

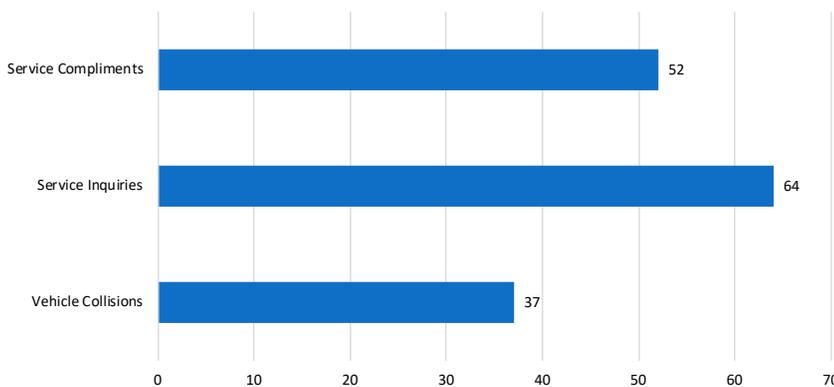
— Regulatory Compliance Office

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 2019, Middlesex-London Paramedic Service Regulatory Compliance responded to 64 inquiries from internal and/or external stakeholders of which 97% 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 2019:
52

Number of Customer Surveys Issued :
900

Number of Customer Surveys Returned :
113

Number of Customer Service Responses :
904

Number of Inquiries:
64

Number of Positive Feedback:
875

Caring and Compassion Citizen Compliments

"I just wanted to drop you a couple of lines to thank you for the fantastic work your EMS crews do. Last Thursday my mother, who is 87, had a bad fall and a severe head injury. The two EMS present were Christine and Louise. They explained everything they were doing to her and made her feel very secure and safe during a traumatic time for her. The care and compassion they took for her was over and above what I would have expected, even during the offload.

Could you please pass on our sincere thanks to Christine and Louise; my mother especially wanted to pass on her personal thanks."

"Today Saturday September 7 2019 my sister called 911 as I needed medical help asap was in major pain.

The ambulance came very quick and I could not be more impressed with the care I received from Bill and Chris they showed compassion care beyond what I would of expected I am more then impressed with how they handled my care and I would like them to be acknowledge for the up most compassion I have even encountered with ambulance attendants with my care and at my work I have dealt with many ambulance care and they still are beyond the best you have on the fleet.

Keep up the good work and thank you for all your kind compassionate Care you provided to me."

— 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 2019, 113 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 900 surveys, we received 113 responses. Only 29 responses were a negative response, which amounted to 97% 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 2019, Logistics staff processed 2,100 helpdesk requests for service.

The Stats

Helpdesk Requests:
2,100

Number of Fleet Vehicles:
54

Vehicles Readied:
6,205

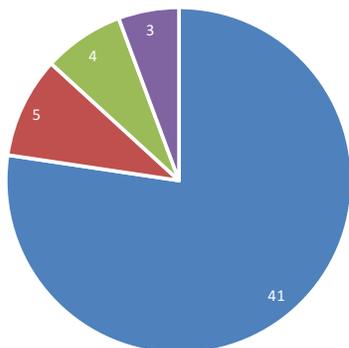
Deep Cleans Completed:
612

Kilometers Driven:
1,736,031

Reportable Collisions:
37



In 2019, Middlesex-London Paramedic Service operating fleet consisted of 54 vehicles. In 2019 Middlesex-London Paramedic Service also deployed a Gator Utility Vehicle along with bicycles 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, London Airshow, Rogers Hometown Hockey and Rock the Park. 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.



- Ambulances
- Command Vehicles
- Admin Vehicles
- Logistics 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 = 517 vehicles/month (average)
- Deep Cleans = 41 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 2019, Middlesex-London Paramedic Service a total of 1,736,031 kilometers. In 2018 there were 34 reportable incidents involving Middlesex-London Paramedic Service vehicles, 94% of which were minimal/minor in nature.

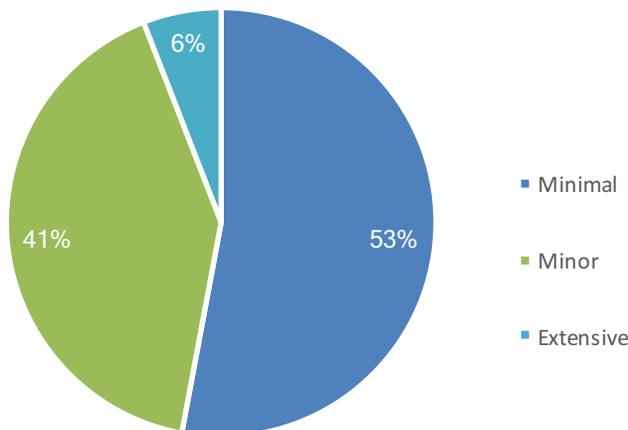
While the number of overall reportable incidents increased the number of collisions resulting in extensive damage decreased by 50 percent from 2017. This change can be attributed to the enhanced drivers training that our paramedics graduated coupled with a workplace of just culture that prompts employees to report even the most minimal of incidents.

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 2019 we drove **1,736,031 kilometers**. That's 4.5 trips to the moon and back!



Collision Severity



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.



Middlesex-London Paramedic Services launched its inaugural season for Community Paramedic-Led Influenza Vaccine Clinics. Community paramedics operated 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.

— Vulnerable Patient Monitoring

The Home Visit program in Middlesex-London, CPRPM, is a privately funded initiative of paramedic services across Ontario to keep patients with chronic illness, such as congestive heart failure (CHF), chronic obstructive pulmonary disease (COPD), and diabetes mellitus (DM) safe at home and out of the hospital. Patients with these chronic conditions are high users of the healthcare system and require long-term attention and care. This innovative program is designed to improve quality of life for patients with chronic illnesses by providing the monitoring of biometric data, access to community paramedic expertise, self-management education, and coordinated care among healthcare providers. This integrated model of care allows paramedics to work closely with health care partners such as community care services, and acute or primary care teams of professionals. Utilizing the digital monitoring devices enhances the Home Visit model of care by supporting community paramedics to triage their rostered patients on a daily basis, mobilize and follow up starting with those requiring more urgent attention, and report back to the most appropriate health care provider(s) in a timely manner to proactively address any underlying concern.

As part of the program, patients are provided with a series of Bluetooth enable monitoring devices such as, Blood Pressure Managers, Glucometers, Weight Scales and Pulse Oximeters that when used daily, allow for monitoring, trending, and reporting to other specific health care providers. The devices are user friendly, do not require a tablet, and automatically transmit and store readings.

The program was independently evaluated by Queen's University, where it has proven to be a very effective and efficient program to implement in all areas of the province. Results showed that for total patients enrolled in the program there was a reduction in 9-1-1 calls (26%), reduced ED presentations (31%), reduced hospital admissions (32%) and reduced hospital readmissions (41%). The reduction in health system utilization generated an estimated \$7,279 in cost avoidance for the health care system per patient per year, with a net return on investment over 500%.

MLPS participated in this award-winning program for over two (2) years. In April 2019, MLPS received official notification indicating the required operational funding for the CPRPM program would not be continued. As a result, all patients were required to be discharged, MLPS no longer accepted referrals for the program, and all staffing contracts assigned to CPRPM expired. MLPS was able to implement interim measures to temporarily address the abrupt program disruption by providing one-time gap funding until June 30, 2019. This permitted MLPS to strategically discharge patients safely over a three (3) month period while working with external home and community care agencies to introduce modified care plans.



To support the increasing demand on primary care physicians MLPS partnered with local primary care practices to provide a range of community-based and primary care services.

This new concept of prehospital care was designed to use community paramedics to bridge the gap between access to primary care services and the needs of the community.

Leveraging community paramedics unique position and responsiveness, they are able to conduct a specific service for the patient, and provide timely reports with pertinent findings requiring further non-urgent medical attention to the most appropriate health care professional, allowing for a more informed clinical decision on patient management.

Data Source: Community Paramedicne



STAFF EDUCATION & TRAINING

— New Employees

Notes

In 2019 Middlesex-London Paramedic Service hired 22 additional part-time paramedics.

Our new paramedics completed intense testing and interviewing to join the MLPS team.

Each paramedic has completed an approved Paramedic Program at a Community College. The new recruits complete a service orientation that lasts approximately 4 weeks.

The orientation includes stakeholder visits with the University Hospital Cardiac Catheterization Lab and the Emergency Departments, Victoria Hospitals Obstetrical unit and Pediatric Transport Team.

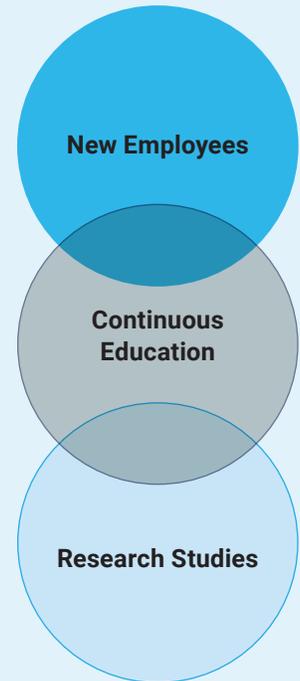
The group also received on-site training at our 9-1-1 dispatch centre, the London Airport, including the Ornge base to learn about air ambulance operations and integration.



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:
22

Staff Trained:
293

Training Hours:
500

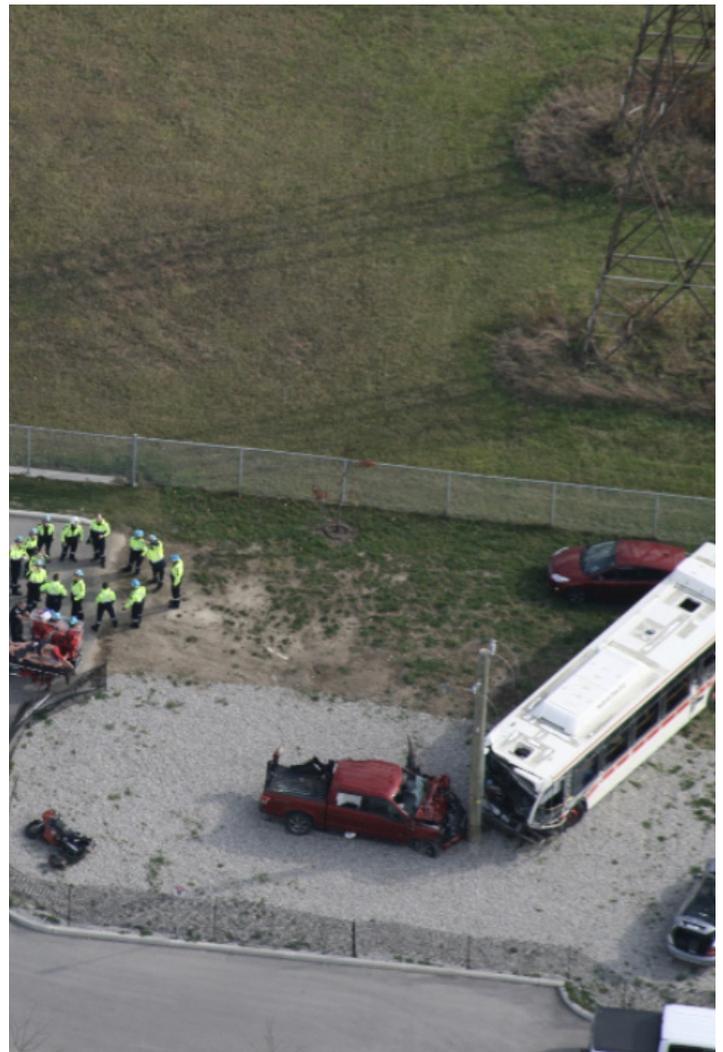
Research Studies:
13

— Continuous Training

Middlesex-London Paramedic Service was very busy during 2019. We started the Dose VF Double Sequential Defib Trial, one of only 5 services to take part in this study. Middlesex-London Paramedic Service is currently involved in over a dozen research trials using our ACR data.

We started our FTO program in 2019, which brought 12 paramedics into a Field Training Officer role, to help support our staff. Our FTOs will be assisting with training, skills review, and mentorship for our new and existing employees.

Middlesex-London Paramedic Service initiated a STEMI feedback program in 2019. This program joins our CVA feedback process to provide patient outcomes to our paramedics. In 2019 we provided feedback for 351 CVA feedback cases and 20 STEMI cases. These feedback forms were returned to all Paramedics on the call.



We trained an additional 32 staff in the CEVO 4 driving course, with the goal to complete this training for the rest of the staff in 2020

Our cardiac arrest program saw a record number of saves this year with 49 people returning home.

Our average CPR rate was 103.9 compressions per minute. Our average CPR ratio was 84.5% and our average pre shock pause time was 2.3 seconds. We completed 21 vector changes, and 6 double sequential cases in 2019

Middlesex-London Paramedic Service opened up a high fidelity simulation center. This area had vehicles donated by Ross Towing, and London Hydro graciously placed a hydro pole for our staff to use.

Firehouse Subs donated \$19,250.00 as a training grant, which went towards a life like manikin to use for Paramedic simulation. This is the second grant we have received from Firehouse subs.

Over the course of 2019, Middlesex-London Paramedic Service provided return to work training for 17 employees.

We provided some exciting learning opportunities for our staff which included hosting our second cadaver lab here, as well as co-hosting the pediatric emergency medicine refresher day.

Superintendent Multi-Casualty Incident (MCI) training was completed in the spring, as well as hands on practice utilizing our new simulation center.

Every Tuesday in the Spring, 1 Superintendent worked alongside London Fire and London Police in joint MCI training. This is our 5th year providing joint MCI training to our Superintendents alongside Police and Fire leadership.



EMPLOYEE RECOGNITION

Notes

In 2019 Paramedics Phil Adams, Dave Jeffries, Michael Chapman, Laura Douglas and Logistics Officer Dave Szuch were recognized for their extraordinary acts and contributions to the community and Middlesex-London Paramedic Service.



November 2019 marked the second Annual Service Award ceremony for Middlesex-London Paramedic Service.

This ceremony recognizes the outstanding contributions and achievements of our staff throughout the year through the presentation of the Paramedic of the Year Award (awarded to Laura Douglas), Award of Valour (awarded to Dave Jeffries and Phil Adams), Support Person of the Year (awarded to Dave Szuch) and the MLPS Service Award (awarded to Michael Chapman).

In addition to the Service Awards, 2019 marked in the inaugural year for the Middlesex-London Paramedic Long Service Medals to recognize the extended service of paramedics at MLPS.



2019 Annual Service Awards

Middlesex-London Paramedic Annual Service Awards

2019

Middlesex-London Paramedic Service was proud to issue the first ever Annual Service Awards.

Staff submitted their choices as to which of their co-workers they felt should receive these awards.

A committee with representatives from front-line staff, supervisors and management reviewed the many submissions to select recipients of awards.

PARAMEDIC OF THE YEAR

Presented to a paramedic who consistently demonstrates professionalism, dedication, initiative in the meritorious execution of their duties and responsibilities as a paramedic.

AWARD OF VALOUR

Presented in recognition of performance above and beyond the call of duty, as evidenced by an act of bravery.

SUPPORT PERSON OF THE YEAR

Presented to any member of the support services staff who provide invaluable support to our organization who consistently demonstrate professionalism, dedication, initiative in the meritorious execution of their duties and responsibilities.

SERVICE AWARD

Presented to any MLPS staff member who consistently demonstrates professionalism, dedication and initiative in the meritorious execution of their responsibilities.

NEXT PAGE

[Performance Report \[2019\]](#)



Middlesex-London Paramedic Service Long Service Medals are awarded to paramedics in recognition of their long service with Middlesex-London Paramedic Service. Medals are awarded for paramedics that have been with Middlesex-London Service for a period longer than 12 years. Bars are awarded for every additional 10 years of service.

This inaugural event was well attended and a great success with representatives from Middlesex County Council, the City of London and the Province of Ontario in attendance.

Middlesex-London Paramedic Service also had 6 members receive the Exemplary Service Medal which is awarded by the Governor General at the OAPC Annual Fall Conference.



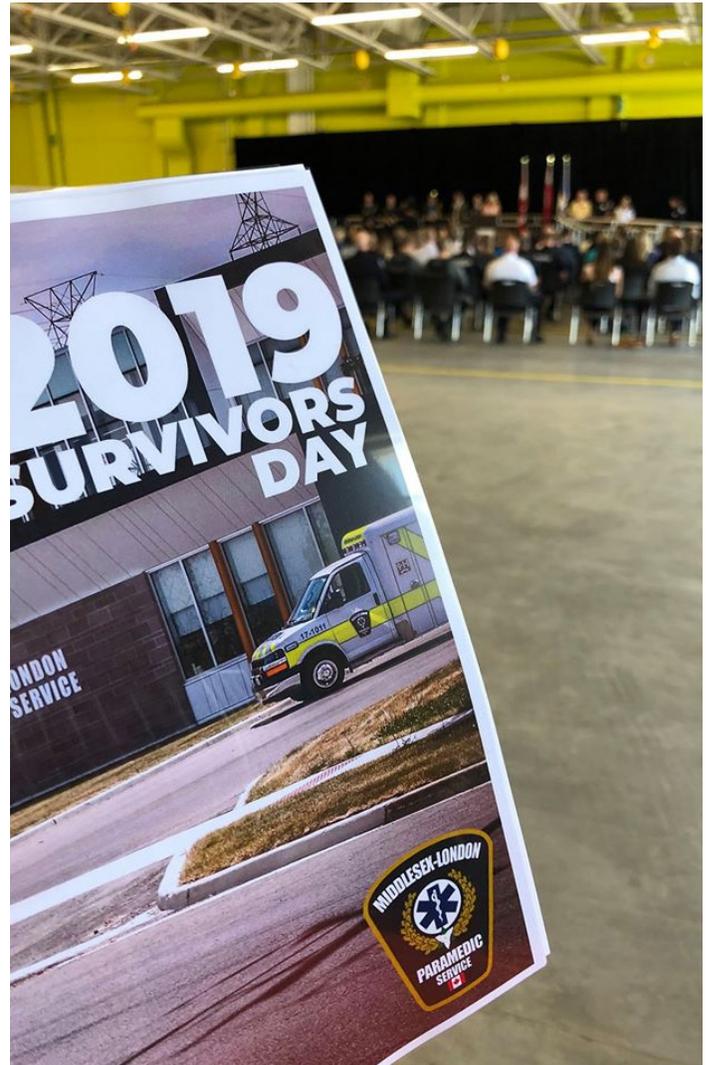
2019 Survivors Day

Hosted by Middlesex-London Paramedic Service

Program Launch at MLPS Headquarters

Middlesex-London Paramedic Service hosted the Survivors Day event in 2019. This annual event brings together survivors of cardiac arrests and their family with the paramedics and first responders (police, fire and citizens) that played a role in saving their lives.

This year, 36 survivors were invited to attend the event at Middlesex-London Paramedic Service Headquarters. The event is always an emotional and moving event. Survivors shared their stories and experiences and got to spend time with the paramedics and first responders.





COMMUNITY ENGAGEMENT

Notes

During 2018 the Middlesex-London Paramedic Service Public Access Defibrillator program focused on community CPR/ AED awareness and preparedness.

Offering certification training and public awareness programs, 437 people were trained in CPR and Standard First Aid certification through the Canadian Red Cross.

2019 focused on improving first response with allied community partners with CPR/ AED refresher sessions and we trained an additional 857 people in CPR and how to use an AED.

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 353 AEDs registered. Usage increased in 2019, with 18 AED's used, delivering a total of 16 shocks.

Middlesex-London Paramedic Service had the pleasure of assisting community groups achieve the overall goal of making our local schools heart safe.

Local business Firehouse subs generously donated money to purchase an advanced simulation manikin to be used in paramedic training.



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 857 citizens in CPR, first aid and how to use an AED in 2019 alone and placed an additional 16 AEDs in to the community.

1

Public AEDs

16
AEDs placed in the community.

2

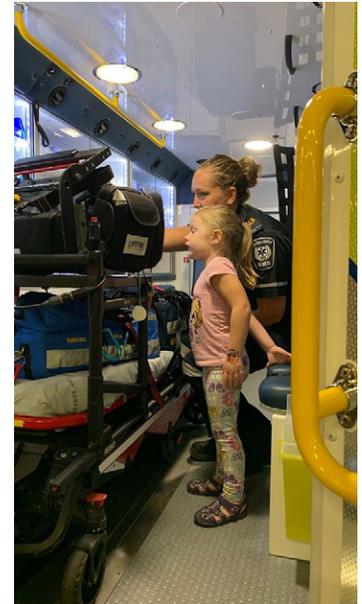
AED Registry

353
AEDs in the registry to improve patient outcomes.

3

CPR/AED Awareness

857
Citizens participated in training and awareness.



— Paramedic Training Camp



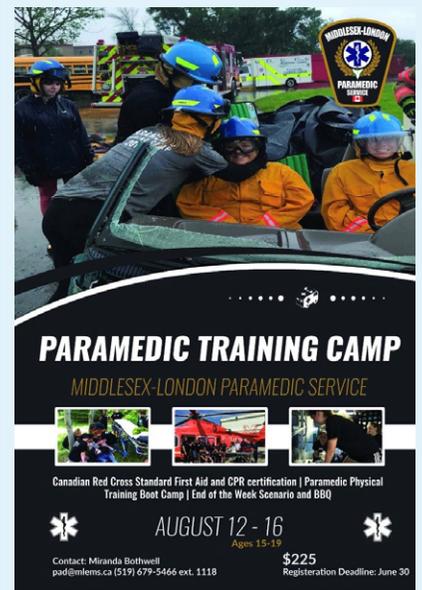
Investing in the future

Working with today's youth to strengthen their esteem and help shape tomorrow's leaders.

Middlesex-London Paramedic Service's Paramedic Training camp was a tremendous success and continuous to be a highlight every year.

In August of 2019, another group of 12 eager high school aged students who showed interest in the paramedic field participated in the training camp.

The week was packed with activities focusing on various aspects of the paramedic profession. Participants had fun while learning about paramedicine and even received certification in CPR and first aid.



MLPS responded to an "unknown odour" call at Saunders secondary school. Our Paramedics treated and assessed 9 pt's. No one was transported.



Social Media Presence

Notes
MLPS engaged with the public more than three and half million times through social media in 2019 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.



Congratulations to Devin Reynolds, a @MLPS911 paramedic, for receiving The Canadian Medic Alert Award!



MAKE THE RIGHT CALL

RECEIVE THE RIGHT CARE

#RightCallRightCare

DO YOU KNOW WHO TO CALL WHEN SEEKING MEDICAL CARE?

TWISTED YOUR ANKLE?

Consult your Primary Caregiver

SCRAPES, BUMPS, AND BRUISES?

Visit a Walk-in Clinic

GETTING THE FLU?

Call Telehealth Ontario 1-866-797-0000

HAVE SHORTNESS OF BREATH?

Call 911 for Middlesex-London Paramedics

CHEST PAINS?

Call 911 for Middlesex-London Paramedics

Exploring your health care options can result in quicker, more appropriate care.

Reserving 911 for life threatening emergencies will ensure Paramedics are available when needed most.

Never hesitate to call 911 in any medical emergency. If you experience shortness of breath, chest pain, or symptoms of a stroke, 911 is always the right call.

For more information about Middlesex-London Paramedic Service, 519-679-5466 ext. 1118 | www.mlps.ca | @MLPS911

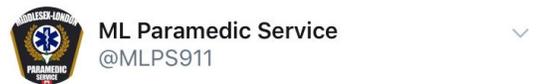




Our @MLPS911 Honour Guard travelled to Toronto to see our @Paramedic_Ride riders off! Have a great trip!! @OneFourSeven @LDNParamedics



Congratulations Harmony Woods Camp Ground on becoming a #heartsafe site with your new AED! @LDNParamedics



MLPS responded to an "unknown odour" call at Saunders secondary school. Our Paramedics treated and assessed 9 pt's. No one was transported.



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 33% over the past year.

according to 2019 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 88%.

according to 2019 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 Paramedic Service
2019 Performance Report