

Greater Sudbury Paramedic Services Update Report



Presented to: Emergency Services Committee on June 5, 2019

This report aims to provide the City of Greater Sudbury Emergency Services Committee with an update on good news stories and relevant statistics as well as recent business activities within the Paramedic Services Division of the Community Safety Department.

Greater Sudbury Paramedic Services is responsible for the delivery of a performance-based paramedic service that complies with legislative and regulatory requirements, ensuring pre-hospital emergency medical care and transportation to those individuals suffering injury or illness. A performance-based paramedic service focuses on clinical excellence, response time performance, patient outcomes, patient satisfaction, continuous quality improvement, and a healthy work environment conducive to professional growth.

Good News Stories

Grant Pitman Retirement



Grant Pitman, an Emergency Vehicle Technician of 10 years, has retired from Paramedic Services. Grant has provided the City and Paramedic Services a tremendous amount of time and energy in his tenure here. Grant's retirement was celebrated on May 1 with close friends and colleagues with his last day of work May 31, 2019. Paramedic Services wishes Grant all the best in his next chapter and thank him for his service over the years.

Survival story

Paramedics Luke Leslie and Joel Roy met a former patient of theirs who is a survivor of a cardiac arrest. This person wanted to meet their "hero" paramedics who provided treatment, got a Return of Spontaneous Circulation (ROSC) and transported promptly to HSN. The short but very meaningful gathering occurred on April 10th and all parties were very appreciative of the opportunity to meet.



Paramedic Services Statistics Defined

Paramedic Calls for Service

A measure of calls **received** by Greater Sudbury Paramedic Service by the Central Ambulance Communications Centre (CACC) to respond to emergencies. In simpler terms, the number of calls to 911 for Paramedic services that resulted in the Paramedics being dispatched.

Paramedic Unit Responses

A measure of units **dispatched** by the CACC to Paramedics to service emergencies. This number will typically be higher than calls for service as some calls necessitate the use of multiple ambulances, Paramedic Response Units, or Superintendent units.

Paramedic Patients Transported

A measure of patients being transported on both an emergency and non-emergency basis.

Calls for Service/Unit Response/Patients Transported by Year

A comparative chart detailing, since 2011, the 3 measures together.

2018 No. of Calls by Age

A clustered bar chart detailing the age of each patient encountered. The purpose of this chart is to detail the effects of the aging population in comparison to call volumes.

2018 Calls by Problem Group

A pie chart detailing the categorized primary problem of each patient who was transported. Paramedics detail in great granularity the primary problem as assessed and treated where possible. These primary problem codes have been rolled up into primary categories as detailed on the Patient Care Record and displayed here.

2018 Patients Transported by Dispatch Priority vs. CTAS on Contact

A metric consisting of a 100% stacked bar chart that measures the urgency at which Paramedics are dispatched by the CACC against the actual patient acuity at patient contact.

Ambulance Communications Officers (ACOs) at the CACC currently use a system called the Dispatch Priority Card Index (DPCI) when determining a patient priority. This system automatically generates a priority based on the series of questions answered by the caller of the emergency. Then, once on scene, Paramedics assign a detailed Canadian Triage Acuity Scale (CTAS) rating based on the patient's presenting condition.

Paramedics are generally dispatched patient calls on 4 different "Priority" codes.



- **Code 1** “Deferrable” (no time factor) – e.g. a non-scheduled transfer with no definitive time factor, a minor injury
- **Code 2** “Scheduled” (time is a factor) – e.g. inter-hospital transfers for scheduled diagnostic tests, a scheduled meet with an air ambulance, patient transferred for a scheduled appointment.
- **Code 3** “Prompt” – transport without delay (serious injury or illness e.g. stable fracture)
- **Code 4** “Urgent” – where the patients “life or limb” is at risk (e.g. Vital Signs Absent patient; unconscious).

CTAS is a widely recognized rating scale used across within Canadian healthcare institutions. There are 5 different CTAS ratings.

- **CTAS 1:** Severely ill, requires RESUSCITATION
 - Requires resuscitation and includes conditions that are threats to life or imminent risk of deterioration, requiring immediate aggressive interventions (for example, arrest, and major trauma or shock states).
- **CTAS 2:** Requires EMERGENT care and rapid medical intervention
 - Requires emergent care and includes conditions that are a potential threat to life or limb function, requiring rapid medical intervention or delegated acts (for example, head injury, chest pain or internal bleeding).
- **CTAS 3:** Requires URGENT care
 - Requires urgent care and includes conditions that could potentially progress to a serious problem requiring emergency intervention, such as mild to moderate asthma, moderate trauma or vomiting and diarrhea in patients younger than 2 years.
- **CTAS 4:** Requires LESS-URGENT care
 - Requires less-urgent care and includes conditions related to patient age, distress or potential for deterioration or complications that would benefit from intervention, such as urinary symptoms, mild abdominal pain or earache.
- **CTAS 5:** Requires NON-URGENT care
 - Requires non-urgent care and includes conditions in which investigations or interventions could be delayed or referred to other areas of the hospital or health care system, such as sore throat, menses, conditions related to chronic problems or psychiatric complaints with no suicidal ideation or attempts.

Greater Sudbury Paramedic Services Statistics 2019

as of May 6th

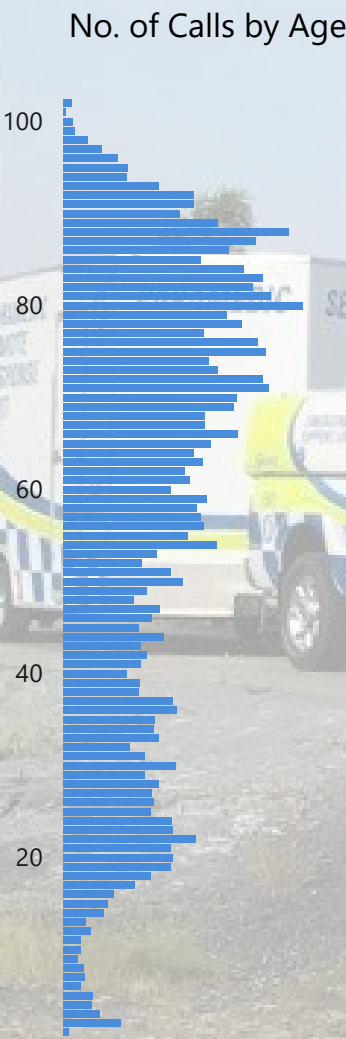
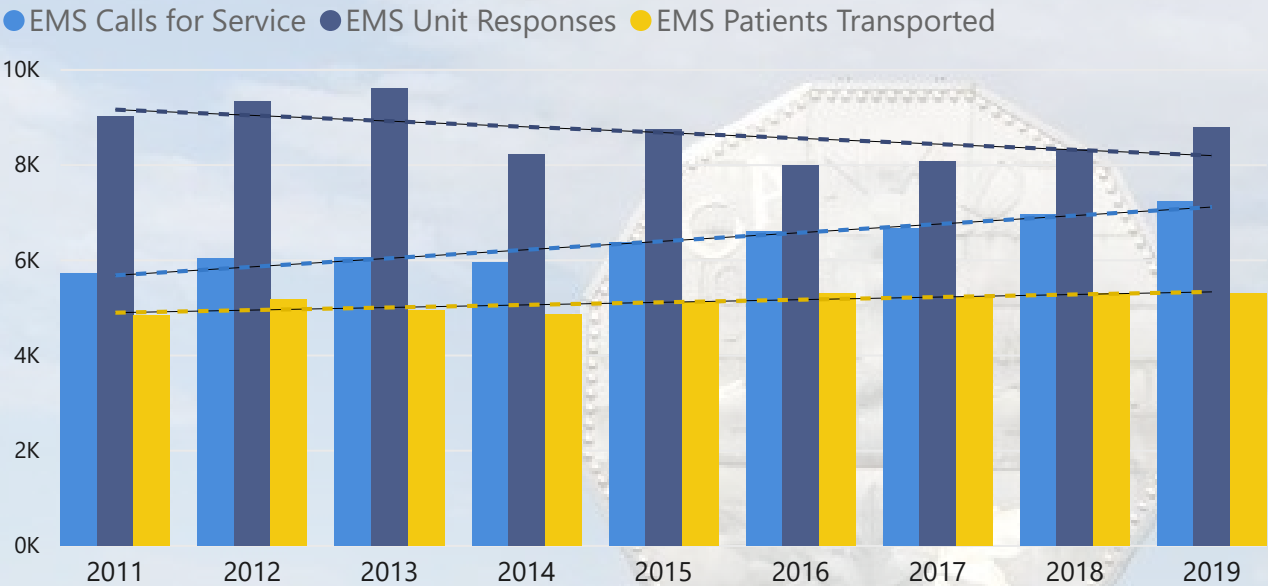


9582
EMS Calls for Service

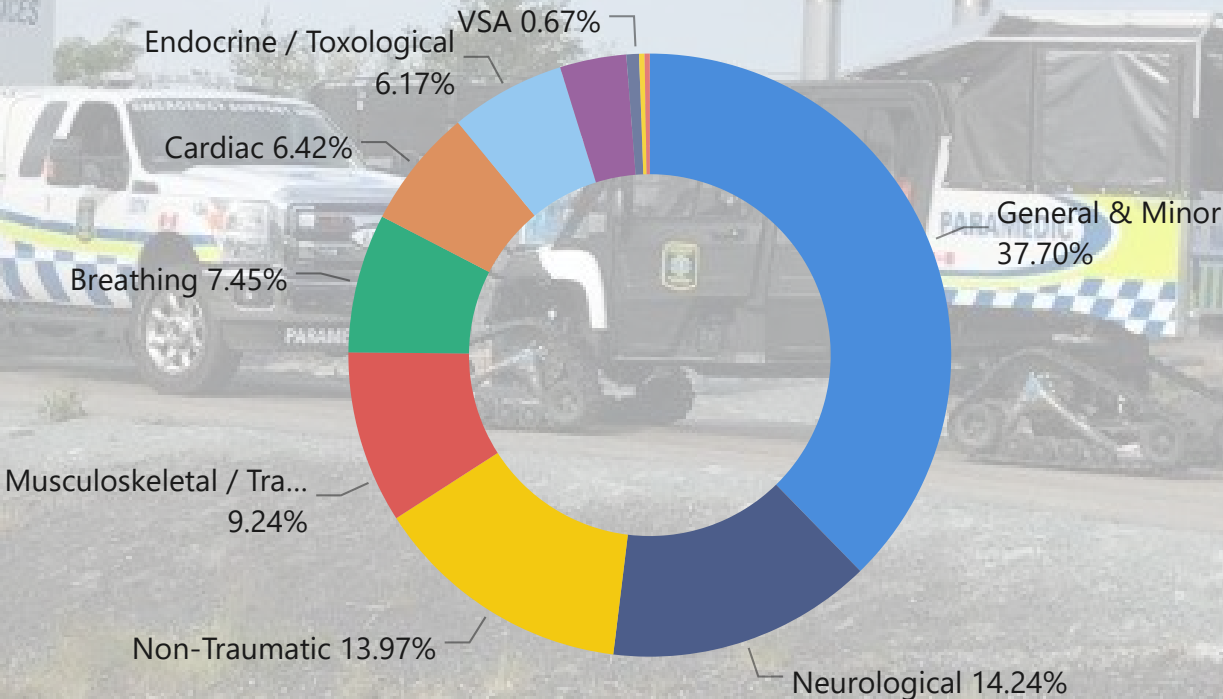
11492
EMS Unit Responses

7046
EMS Patients Transported

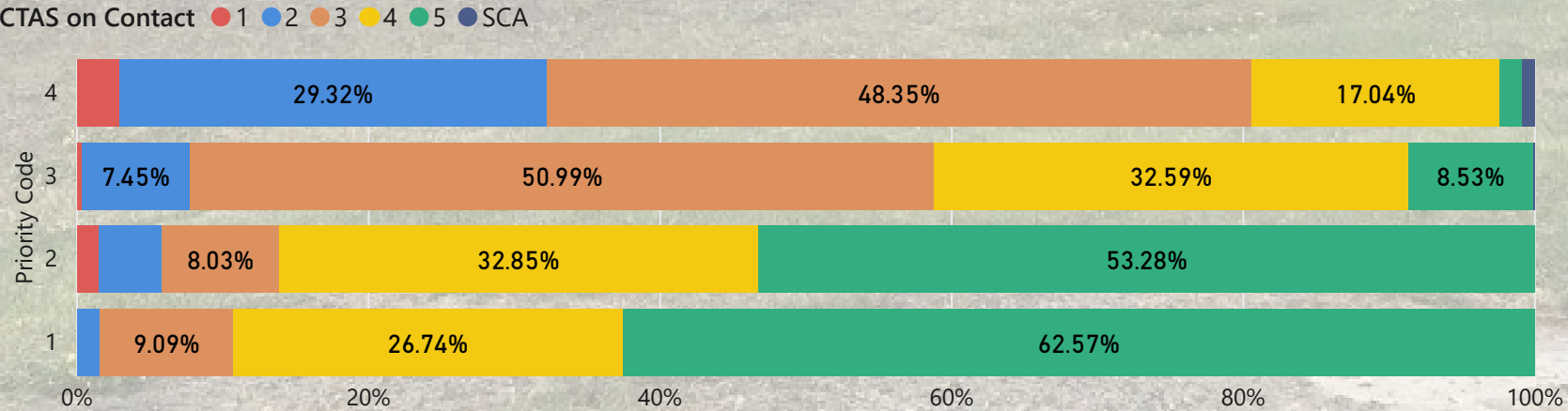
Calls for Service / Unit Responses / Patients Transported by Year



Calls by Problem Group



Patients Transported by Dispatch Priority vs. CTAS on Contact





Paramedic Operations

The Operations Section provides pre-hospital emergency medical care and transportation as well as non-urgent transportation between health-care facilities, the airport and residences, to over 21,000 patients. 83% of the Division's resources are used to deliver approximately 114,000 hours of ambulance services in accordance with mandated provincial legislation. Responding to over 27,000 calls for service, Paramedic operations maintains a response time for the most serious patient acuity (CTAS 1) within eight minutes, 80% of the time.

PEER support training



The Community Safety Department, Paramedic Division and Fire Division (career and volunteer) participated in PEER training provided by Dr. Paulette Laidlaw from April 23rd to April 26th. This training is crucial in providing the best support to fellow co-workers when they are in need. Community Safety is proud to say that 13 staff from Paramedic Services have successfully completed the course. This proactive education is designed to minimize the harmful effects of stress through reactive interventions when emergency personnel request assistance.

Esso Cup 2019

Paramedic Services was present at the 2019 Esso Cup hockey tournament providing on-site medical coverage for approximately 80 hours for all 19 games. Congratulations to our Sudbury Lady Wolves and how well they represented the City of Greater Sudbury.





Alliance of Canadian Paramedic Honour Guards



The Community Safety Department, Paramedic Division hosted the Alliance of Canadian Paramedic Honour Guards at the Lionel E. Lalonde Centre from March 25th to the 28th. Paramedic honour guards from multiple Canadian provinces were represented during this grueling four days of instruction. Paramedic Services was fortunate to have Nathan Ryan, Roger Frappier, James Urquhart and Blaise Quenneville participate representing Greater Sudbury Paramedic Honour Guard.

Professional Standards

Using 5 % of the Division's resources, the Professional Standards Section is responsible for the delivery of continuous quality improvement programming ensuring that legislatively mandated responsibilities of the Division are upheld. This Section also manages the electronic patient care record system in accordance with various legislative and regulatory requirements. By conducting approximately 1,600 clinical audits of paramedic documentation this Section endeavours to achieve the goal of improving safety and high-quality clinical care. Conducting approximately 1,400 event analysis/reviews in relation to patient care and operational investigations this Section assists in preparation for related legal proceedings. Lastly, this Section provides approximately 500 hours of stakeholder/community relations to ensure integration into the health-care framework.

Paramedics Providing Palliative Care in the Home

Work remains underway in further establishing the role in the provision of care to palliative patients in our community. Paramedics completed their specialized palliative care training – LEAP and have commenced working with the Palliative Nurse Practitioners in our Community to further strengthen their working relationship. Paramedics' goal is to bridge the gap between palliative patients and shared care teams when there is a sudden increase in need (patient unexpectedly worsens) and/or



the usual care team is unavailable. The goal is to assist and refer patients to palliative care, if they are not being followed by a palliative care team, while preventing Emergency Department visits and unnecessary hospital admissions in the last few months of life.

Logistics

Encompassing 7% of the Division's resources, the Logistics Section provides asset management and supply maintenance services for paramedics and vehicles. Processing approximately 5,400 paramedic vehicles each year meeting the processing standard 93% of the time, ensures both vehicle and equipment are sanitized, stocked and operationally ready for service, in accordance with all legislative requirements and industry best practices. Inventory control is managed through the purchasing and deployment of materials within a centralized model with delivery to five satellite stations on a regular basis. This Section also maintains operational oversight of two specialized response units; the Mobile Command Unit and remote response Gator unit, as well as maintenance oversight of the City's emergency helipads. Ensuring the reliability of paramedic vehicles according to manufacturer's recommendations, logistics personnel monitor and deliver paramedic vehicles to the maintenance depot on average over 780 times per year.

New Ambulances Purchased

The approved purchase of three ambulances has begun with Demers Ltd. Paramedic Services requires three new ambulances each year as part of our annual vehicle replacement program. These new vehicles replace those that have reached or exceeded their service life. These much needed ambulances have an estimated delivery date of September 2019.

EVT Workspace Improvements

Emergency Vehicle Technicians (EVT) will soon see an improvement to their physical work space at LEL. Planning is underway to make the field bag processing area more efficient. This will in turn also allow for better stock management and shift transitions.

Training

Training utilizes 5% of the Division's resources to orient new staff, sustain legislatively-mandated training requirements for staff, and support reorientation of staff returning to work after a medical leave. Service level training is delivered annually to 165 staff on initiatives that include continuing medical education and remedial education to address identified gaps in knowledge, skill or critical decision-making. Additionally, the Training Section devotes an average of 28 days of orientation support for newly hired paramedics. Coordinating with educational institutions this Section assists with the clinical placement of paramedic students, and educational observer shifts for other allied agencies. Lastly, Training participates in national and international clinical research initiatives aimed at improving pre-hospital clinical care.



Paramedic Training – Spring Training Session

On April 29, the Paramedic Training Section began hosting the annual spring training sessions for all paramedic staff, which will conclude on May 29. Updates for staff from Operations and Professional Standards were provided, including a presentation from Trillium Gift of Life – considering organ donation following termination of resuscitation. Members from the Attorney General's Office provided some training on court process and legal documentation for staff followed by a special guest speaker, Professor William Morin of Laurentian University, who facilitated a workshop to bring about awareness of Indigenous Communities and their many cultural experiences and differences. SafeTalk Suicide Awareness Training was delivered to all staff as well as orientation to the new extrication device recently placed into operations, called a SKED.

Hands Only CPR Training

On May 3, 78 grades 7 & 8 students attended a Bystander Hands Only CPR session that was hosted by Health Promotion Community Paramedic. CPR and AED training was hosted at TDS on May 6. Hands Only CPR Training and AED review was provided for a total of 30 people from City of Greater Sudbury Finance Department.

Paramedic Week – Seniors Day

On May 29 as part of Paramedic Week, paramedics will host a session that will include a hands-on educational experience for seniors including CPR, a blood pressure clinic, and interactive discussion. There will be an information booth with a key focus on hypertension, falls, heart attacks and strokes. Seniors will also be provided with information regarding community resources and expectations when placing a 911 call.

Community Paramedicine

The Community Paramedicine section, while technically overseen by Operations Section, utilizes Paramedics in non-traditional roles providing home visits, clinical interventions, and preventative health initiatives with the goal of reducing 9-1-1 calls, demand for Emergency Department visits and hospital admissions. They also assist our at-risk aged population to keep them healthy and at home while attempting to aid our vulnerable population by directing them to suitable community resources.

Our newest Community Paramedic Research Project – CP@Home

As reported in MBNC – Municipal Benchmarking Network Canada for Paramedic Services in 2018:

- Visited 750 individuals who called 911 ≥ 4 times
- Accounted for over 4700 calls for service
- More than 6600 hours spent on responding to these multiple callers
- Amount of calls per individual range from 4 to 38 calls



City of Greater Sudbury's multiple caller rates are growing faster than other communities as they have increased by 24% in 2018. In this research, Paramedic Services will be proactive and look to understand the root cause of their dependence on the 911 system and provide them with solutions to their needs.

The aim is to lower the 911 use by these multiple callers. Data will be analyzed to identify repeat callers and have a Community Paramedic go to their homes and assess for unmet needs and provide support to end this reliance on the 911 system.

CP@Home is the sister research project to the wellness clinics, where CPs will book home visits with these identified multiple callers. A total of 3 visits (1st visits = 1 to 1.5 hours, 2nd and 3rd visits = 20 minutes; each visit separated by 2 weeks). During these interactions the following services will be provided:

- home safety and needs assessment,
- home and caregivers/support,
- chronic disease screening ,
- medication reconciliation,
- disease management,
- education and coaching,
- healthy lifestyle change promotion,
- determination of social isolation or suspicion of mental health addictions issues,
- Community Referrals to helpful programs that exist in the community to provide the unmet need(s) to lessen or end the dependence on emergency services.