

Report Summary

This report for information was prepared to provide the Emergency Services Committee with information regarding the collaboration between Paramedic Services and Public Health Sudbury and Districts Community Drug Strategy in developing a community early warning system related to opioid related incidents.

Paramedic Services Opioid Surveillance and Reporting

Background

In November, 2015 the Community Drug Strategy (CDS) published a Call to Action that was endorsed by the City of Greater Sudbury (CGS) Council in October 2015. The City of Greater Sudbury Paramedic Services has been an active member of the City of Greater Sudbury Community Drug Strategy (CGSCDS) Steering Committee since its inception.

The CDS is a Call to Action, providing a community focused strategic map to address the issue of substance misuse. At this table are members with a range of knowledge and experience, and a variety of backgrounds representing the geographical area, sectors and demographics of the City of Greater Sudbury. The vision of this Committee is to have a community working together to improve the health, safety, and well-being of all individuals, families, neighbourhoods, and communities by reducing the incidence of drug use and creating a society increasingly free of the range of harms associated with both substance misuse and use (CGSCDS Call to Action). The committee's objective is to facilitate the implementation of the recommendations contained within the CDS. The five foundations of the CDS are:

1. Health Promotion and Prevention of Drug Misuse;
2. Treatment;
3. Harm Reduction;
4. Enforcement and Justice;
5. Sustaining Relationships.

With opioid misuse incidents on the rise in 2017, the Ministry of Health and Long-Term Care (MoHLTC) announced new investments to Boards of Health that focused on four key areas; appropriate pain management, treatment for opioid users, harm reduction, and surveillance and reporting.

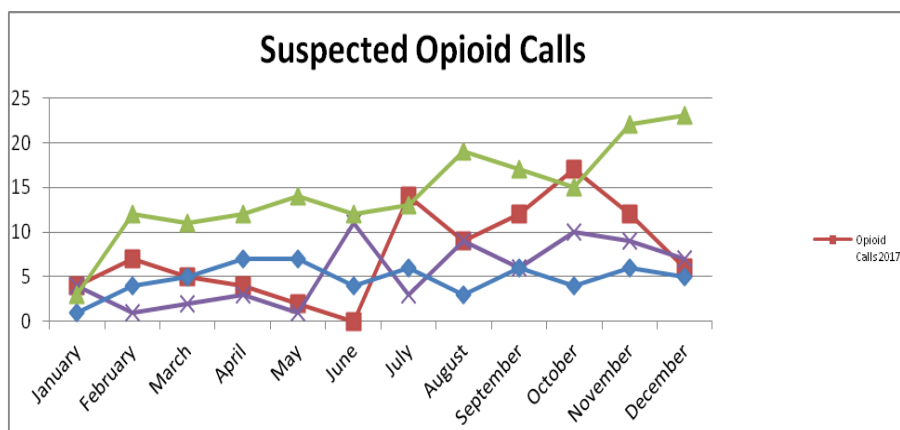
Opioids

Prescription opioids are used by doctors, nurse practitioners and dentists to treat moderate to severe pain. Misusing prescribed opioids or taking street opioids can lead to addiction, overdose and even death. Some commonly prescribed opioids include codeine, fentanyl, hydromorphone, methadone, morphine and oxycodone. Street opioids include any of the aforementioned opioids in their original or fake form, such as, street fentanyl and heroin. Fentanyl and Carfentanyl are some of the most potent

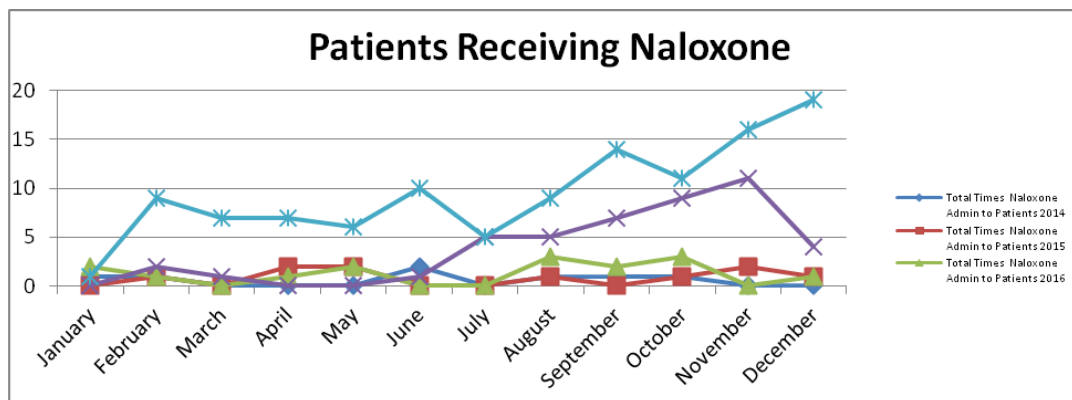
opioids and both have been found in Ontario street drugs. Management of opioid overdoses by Paramedic Services personnel includes airway management and continuous assessment of oxygenation and ventilation, along with administration of Naloxone in select cases. Naloxone is a medication which can temporarily reverse an opioid overdose.

City of Sudbury Paramedic Services Opioid Overdose and Naloxone Use Tracking

The following data displays the number of suspected opioid overdose occurrences and Naloxone use tracked by Paramedic Services that is now being made available to Public Health Sudbury and Districts for the purpose of developing an early warning system. Public Naloxone administration is increasing and Paramedic administered Naloxone numbers are decreasing as access to Naloxone becomes more readily available to the public.



Opioid Calls				
	2015	2016	2017	2018
January	1	4	4	3
February	4	1	7	12
March	5	2	5	11
April	7	3	4	12
May	7	1	2	14
June	4	11	0	12
July	6	3	14	13
August	3	9	9	19
September	6	6	12	17
October	4	10	17	15
November	6	9	12	22
December	5	7	6	23
Total	58	66	92	173
% Increase		14%	40%	88%



Naloxone Administration By Paramedic					
	2014	2015	2016	2017	2018
January	1	0	2	0	1
February	1	1	1	2	4
March	0	0	0	1	3
April	0	2	1	0	4
May	0	2	2	0	4
June	2	0	0	1	6
July	0	0	0	5	2
August	1	1	3	4	2
September	1	0	2	6	0
October	1	1	3	7	1
November	0	2	0	7	6
December	0	1	1	3	6
Total	7	10	15	36	39
% Increase		43%	50%	140%	8%

Naloxone Administration by Non Paramedic		
	2017	2018
January	0	0
February	0	5
March	0	4
April	0	3
May	0	2
June	0	4
July	0	3
August	1	7
September	1	14
October	2	10
November	4	10
December	1	8
Total	9	70
% Increase		678%

Opioid Surveillance and Reporting – a collaboration between Paramedic Services and the Community Drug Strategy

Proactively, in early 2012 Paramedic Services developed a tracking system for the purpose of monitoring and noting any increases in opioid related community health emergencies. This surveillance was warranted due to the increase in opioid related incidents associated with oxycodone across the country. We continued surveillance of all opioid related calls and by 2015 the Ministry of Health and Long-Term Care (MoHLTC) required all Paramedic Services to commence tracking this call type, as well as Naloxone usage by Paramedics and the public. Additionally, the MoHLTC requested electronic patient care records (ePCR) vendors to add the “opioid” data field to the patient care record for more reliable data and a more efficient screening of opioid related overdoses from the other overdose related call types.

Paramedic Services sits on three levels of the CDS, CDS Steering Committee, CDS Treatment Pillar working group, and CDS Surveillance working group. The CDS Surveillance working group is tasked with the development of an early warning system for opioid related emergencies in our community. Members of this group include CGS Paramedic Services, Health Sciences North (HSN), Greater Sudbury Police Service (GSPS) and Public Health Sudbury and Districts (PHSD). Key components of an opioid overdose early warning system include:

- Establishing membership of an integrated community response;

- Establishing formal collection and reporting mechanisms for local data sources used to identify observed changes in the community “triggers” that would suspect that a surge in opioid overdoses is occurring;
- Development of an action plan in response to a surge in opioid overdoses.

While at the CDS table, CGS Paramedic Services were able to volunteer early warning data we had been collecting since 2015. Although this data was disclosed as being raw, (i.e. did not contain any personal health information and was solely based on Paramedic assessment both of the patient and from the scene of the emergency), it was identified as being the most current. This data was notable in that there are no other data sources as current as ambulance call data. Emergency Department, Coroner, or Institute for Clinical Evaluative Sciences (ICES) data could not be provided early enough to be purposeful to support the necessary timely integrated community response for the detection of a surge.

The utilization of Paramedic Services data for enhanced monitoring of opioid emergencies as an alert for our community can allow community service agencies and opioid users to be informed, prepared and empowered with real time knowledge of local opioid misuse trends.

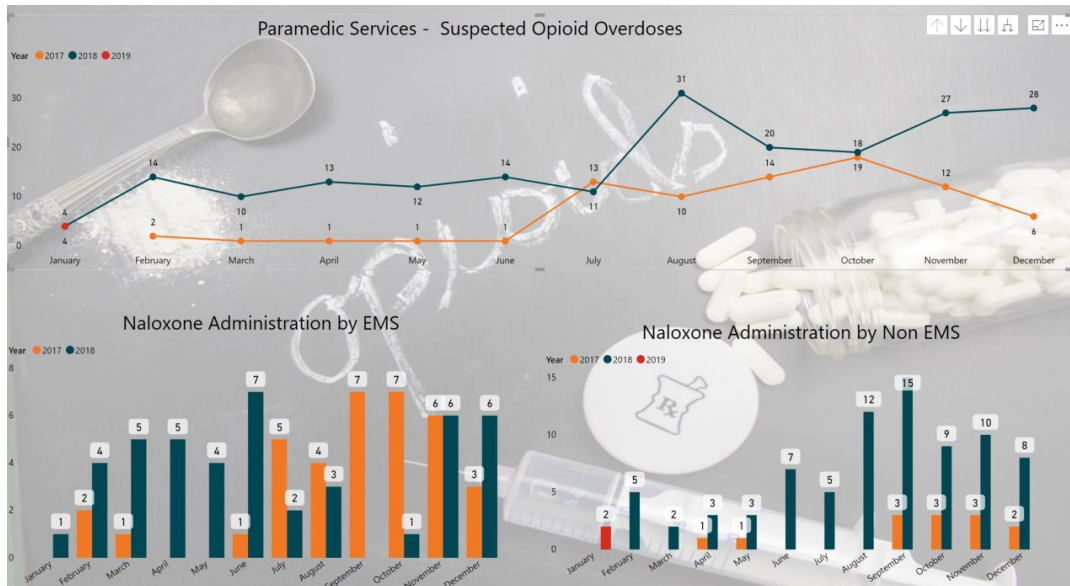
Following the establishment of the Data Sharing Agreement, work commenced by Paramedic Services to develop a data dashboard to be accessible to the CDS Steering Committee. A sample of the dashboard can be found below (Appendix 1). Public Health will be using a syndromic surveillance aberration detection and analysis protocol which is a formula to identify statistically significant increases in opioid-related community emergencies. Together with Public Health we will be building the aberration detection into our dashboard where data is analyzed and if it finds specific standard deviations over a period of time it will meet the threshold for an alert. This just means alerting PHSD and CDS staff that Paramedic Services have seen a spike in suspected opioid overdoses. As a result, PHSD and the CDS will reach out for corroborating evidence from collaborating agencies. PHSD and CDS then decide whether or not a community alert is prudent. In order to alert the community of potential harm, the CDS has established a process to send out information on potential overdoses and other harms from substance use as a result of information they receive from other community partners (including GSPS, and outreach organizations). A sample of a CDS Warning from December, 2018 for CGS can be found in Appendix 2.

Successes to date:

- November 15, 2018 – Data sharing agreement between Public Health Sudbury and Districts was signed between the Chief/General Manager of Community Safety and the Medical Officer of Health and CEO Public Health Sudbury and Districts.
- December 17, 2018 – Paramedic Services Suspected Opioid Overdose data dashboard validation was completed. This was presented to PHSD for review and the integration of aberrant detection model work commenced. Work is still underway in sharing this dashboard to PHSD.

- Community Opioid alert issued by CDS in August, 2018 when alerted by Paramedic Services staff of a surge in suspected opioid overdoses; eight suspected opioid overdoses within the first four days.
- Public Service Announcement to community from CDS regarding a surge in suspected opioid overdoses when alerted by staff at Paramedic Services; eight suspected opioid overdoses over a 27 hour period December 20 and 21, 2018.

Appendix 1



Appendix 2



DRUG WARNING: INCREASE IN SUSPECTED OPIOID OVERDOSES

August 10, 2018

The Community Drug Strategy has received a report of a higher volume of suspected opioid overdoses in Sudbury.

While we cannot confirm the substance that has caused the overdoses, this situation serves as an important reminder to the community that street drugs may be cut or mixed with substances such as fentanyl or carfentanyl, and that even a very small amount of these substances can cause an overdose.

An overdose occurs when a person uses more of a substance, or combination of substances, than their body can handle. As a consequence, the brain is unable to control basic life functions. The person might pass out, stop breathing or experience a seizure. Overdoses can be fatal.

Prevent opioid overdose / save lives:

- Avoid mixing drugs, including prescribed, over the counter and illegal drugs.
- Avoid drinking alcohol while using other drugs.
- Use caution when switching substances: start with a lower dose than you usually would.
- If you have not used in a while, start with a lower dose. Your tolerance may be lower.
- Avoid using drugs when you are alone.
- Carry a naloxone kit.
- Call 911 if you suspect an overdose.

Overdose symptoms include:

- blue lips or nails
- dizziness and confusion
- the person can't be woken up
- choking, gurgling or snoring sounds
- slow, weak or no breathing
- drowsiness or difficulty staying awake

For a free naloxone kit, contact *The Point* at Public Health Sudbury & Districts, Réseau Access Network, Sudbury Action Centre for Youth (SACY) or ask your local pharmacist.

www.ontario.ca/page/get-naloxone-kits-free

Please distribute this information widely to help share the message.



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Conclusion

Having the privilege of being a member of the Drug Strategy Steering Committee along with exposure in field operations, Paramedic Services recognizes the magnitude of substance misuse issues and the need for a comprehensive community strategy to address it. Paramedic Services is ready and remains engaged in taking action with all members of the Drug Strategy Steering Committee assisting in cross-community efforts working toward efforts to improve drug-related health and safety in our community.

<https://www.phsd.ca/alerts/increase-in-suspected-overdoses-december-21-2018-drug-warning>

<https://www.phsd.ca/health-topics-programs/alcohol-drugs/community-drug-strategy/news-alerts>

<https://www.ontario.ca/page/understanding-opioids>