



Hamilton

INFORMATION REPORT

TO:	Mayor and Members Public Health Committee
COMMITTEE DATE:	December 4, 2023
SUBJECT/REPORT NO:	Quarterly Update on Hamilton Opioid Information System (July – September 2023) (BOH23041) (City Wide)
WARD(S) AFFECTED:	City Wide
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SIGNATURE:	

COUNCIL DIRECTION

This report is in follow-up to direction provided via a motion at the February 13, 2023 Board of Health Meeting:

“That City staff be directed to provide quarterly reports on overdoses tracked by [Emergency Medical Systems] and all deaths related to toxic drugs to the Board of Health beginning in Q2 2023.”

INFORMATION

Hamilton continues to experience a significant public health burden related to the on-going toxic and unpredictable drug supply. This report provides an overview of the opioid-related impacts in Hamilton based on data available up to September 30, 2023. In Hamilton, opioid-related paramedic calls and emergency department visits continue to rise. Other harms such as hospitalizations, suspect drug-related deaths, and opioid-related deaths have remained comparable to previous quarters in 2023 (Figure 1).

Between July and September 2023, the distribution of harms across age and sex groups has remained consistent, with most paramedic calls and suspect drug-related deaths occurring among males aged 30-60 years. Most incidents leading to suspect drug-related deaths occurred in private residences and toxicology data show that most

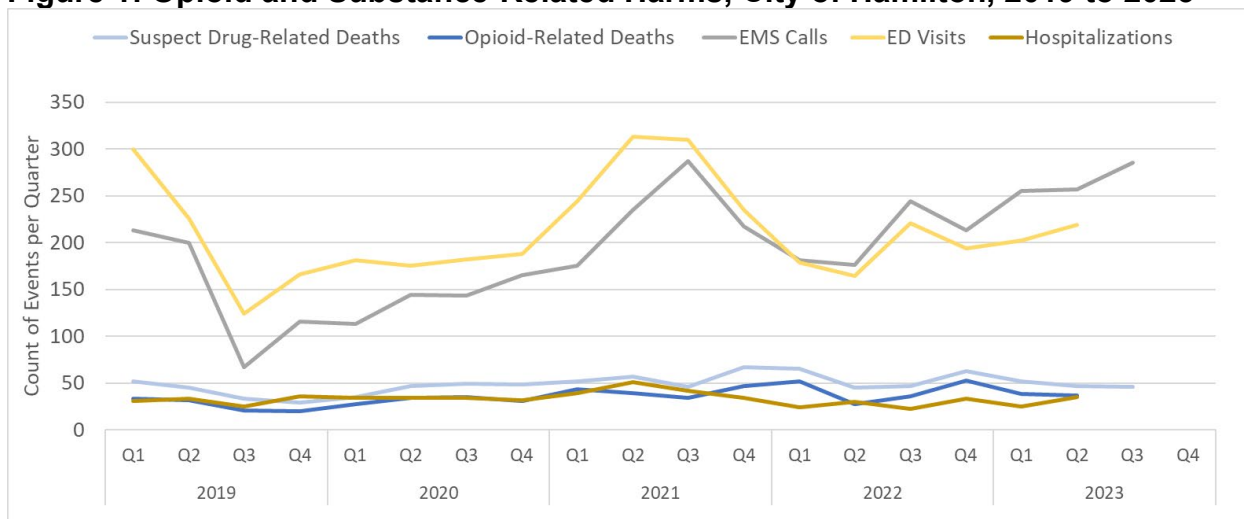
OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

opioid-related deaths in Hamilton involve at least one other substance, most commonly a stimulant. Further analysis of the local data is described below.

Figure 1: Opioid and Substance-Related Harms, City of Hamilton, 2019 to 2023



Data Sources:

Hamilton Paramedic Services. Opioid-Related Emergency Medical Services Calls. Extracted October 16, 2023.

Hamilton Health Sciences, Integrated Decision Support: National Ambulatory Care Reporting System. Opioid-related emergency department visits and hospitalizations. Received October 17, 2023.

Office of the Chief Coroner, Ontario. Office of the Chief Coroner Weekly Update: Suspect drug related deaths. Received October 19, 2023.

Office of the Chief Coroner, Ontario. Office of the Chief Coroner Monthly Update: Suspect drug opioid related deaths August 2023. Received October 13, 2023.

Opioid-Related Paramedic Calls

So far in 2023, there have been 797 opioid-related paramedic calls, ranging from 255 to 285 per quarter.¹ This is consistently higher than in any other recent period between 2019 and 2022, with the exception of one quarter in 2021 (July to September 2021, n=287). Between July and September 2023, paramedic calls were concentrated geographically, with approximately half originating in Ward 2 and 24% occurring in Ward 3.

¹ Hamilton Paramedic Services. Opioid-Related Emergency Medical Services Calls. Extracted October 16, 2023.

Emergency Department Visits and Hospitalizations

Data describing counts of opioid-related emergency department visits and hospitalizations at Hamilton hospitals is available up to June 30, 2023. Opioid-related emergency department visits and hospitalizations are those where opioids are confirmed as either the main or contributing cause.

The number of opioid-related emergency department visits in Hamilton hospitals historically mirrors trends observed for opioid-related paramedic calls. Emergency department visits have increased slightly in 2023.² From January to March 2023 there were 202 visits, and 219 visits from April to June 2023. However, it is unclear at this point whether this represents an ongoing trend or normal levels of variation in the data.

Opioid-related hospitalizations have also increased slightly in 2023 with 25 hospitalizations between January to March 2023, and 35 hospitalizations from April to June 2023. These 35 hospitalizations represent the most recorded since the third quarter in 2021 (42 hospitalizations). More data is needed to determine if this is indicative of a sustained increase in opioid-related hospitalizations.

Suspect Drug-Related Deaths and Opioid-Related Deaths

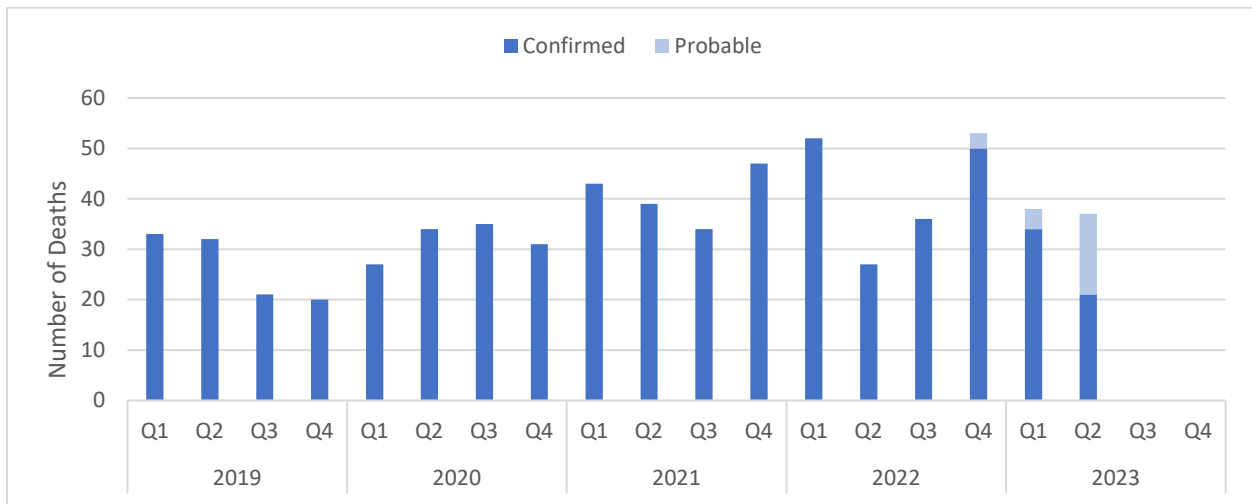
Suspect drug-related deaths are deaths in which the preliminary Coroner investigation indicates drug involvement. These data are preliminary and subject to change. While not all suspect drug-related deaths are opioid-related, the demographic distribution of suspect drug-related deaths is similar to the distribution of opioid-related deaths. Between July and September 2023 there were 46 suspect drug-related deaths, which brings the total to 145 suspect drug-related deaths in Hamilton in 2023.³ Of these suspect deaths, so far 75 of the deaths have subsequently been confirmed or probable opioid-related deaths (up to June 30, 2023) (Figure 2).⁴

² Hamilton Health Sciences, Integrated Decision Support: National Ambulatory Care Reporting System. Opioid-related emergency department visits and hospitalizations. Received October 17, 2023.

³ Office of the Chief Coroner, Ontario. Office of the Chief Coroner Weekly Update: Suspect drug related deaths. Received October 19, 2023.

⁴ Office of the Chief Coroner, Ontario. Office of the Chief Coroner Monthly Update: Suspect drug opioid related deaths August 2023. Received October 13, 2023.

Figure 2: Confirmed and Probable Opioid-Related Deaths, City of Hamilton, 2019 to 2023

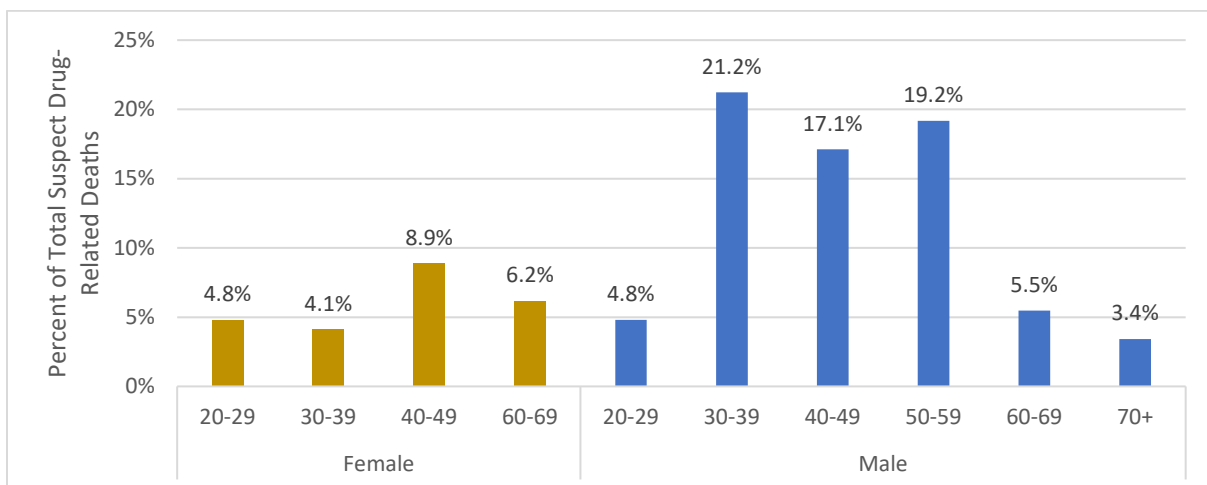


Data Source:

Office of the Chief Coroner, Ontario. Office of the Chief Coroner Monthly Update: Suspect drug opioid related deaths August 2023. Received October 13, 2023.

From January to September 2023, the majority of suspect drug-related deaths have occurred among males (72%) and among those aged 30 to 59 years (73%) (Figure 3). The age and sex distribution of suspect drug-related deaths has not changed substantially in recent years and is comparable to the distribution of suspect drug-related deaths across Ontario.

Figure 3: Suspect Drug-Related Deaths by Age and Sex, City of Hamilton, January 1 to September 30, 2023



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Data Source:

Office of the Chief Coroner, Ontario. Office of the Chief Coroner Weekly Update: Suspect drug related deaths. Received October 19, 2023.

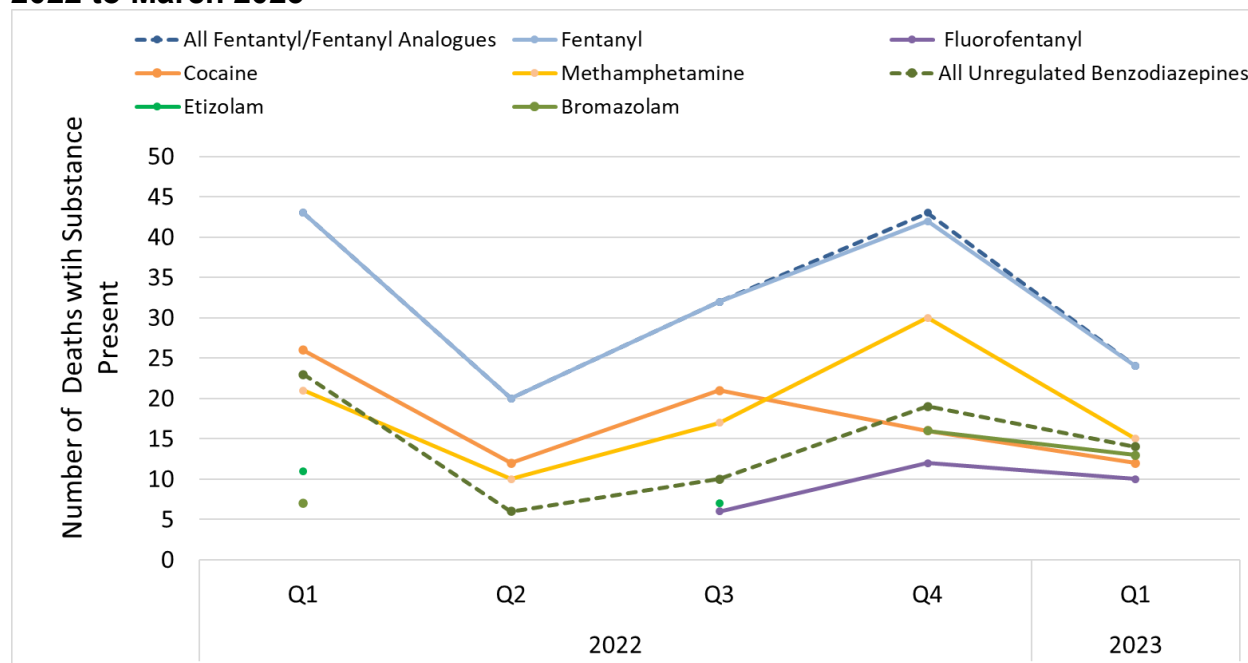
Data are not shown for age/sex groups with <5 counts (ages 0-19 years and Females ages 50-59 years and 70+ years)

From January to September 2023, 66% of suspect drug-related deaths in Hamilton occurred in a private residence. In Hamilton, other common incident locations included the outdoors (14%) and congregate living (8%). The number and percentage of incidents occurring outdoors was significantly higher during this period in 2023 (n=21, 14%) compared to the same time period in 2022 (n=9, 6%). This trend was not observed for Ontario overall.

Substances Involved in Opioid-Related Deaths

Toxicology reports from accidental opioid-related deaths occurring from January 2022 to March 2023 find that, in Hamilton, 89% of all opioid-related deaths involved more than one substance (median 3 substances).⁵ Stimulants were identified in 77% of opioid-related deaths, benzodiazepines in 40% of opioid-related deaths, and xylazine in 4% of opioid-related deaths (Figure 4).

Figure 4: Substances Present in Opioid Toxicity Deaths, City of Hamilton, January 2022 to March 2023



⁵ Office of the Chief Coroner, Ontario. Office of the Chief Coroner Toxicology data for opioid toxicity deaths 2023 Q1. Received August 3, 2023.

Notes:

Only those substances involved in at least 10% of all toxicology reports were plotted. Dashed lines indicate groups of substances, and individual substances in those groups are also plotted. For example, deaths involving bromazolam are plotted independently and are also plotted as part of the group titled “All Unregulated Benzodiazepines”. For some substances and time points (such as etizolam in Q2 and Q4 2022), there were fewer than five deaths. Data have been suppressed in these instances.

Data source:

Office of the Chief Coroner, Ontario. Office of the Chief Coroner Toxicology data for opioid toxicity deaths 2023 Q1. Received August 3, 2023.

In the most recent six-month period (October 2022 to March 2023), there was an increase in the detection of bromazolam (36% of deaths), fluorofentanyl (30%), and hydromorphone (14%) as compared to previous time periods. Note that these data are incomplete, as only confirmed (not probable) opioid-related deaths are included in this analysis. Data are preliminary and subject to change.

Community Reports & Alerts

Public Health Services shares a weekly Opioid Situation Report to healthcare providers, social service staff, and community members through the established early-warning email system. The information received from members between July to September 2023 is summarized below.

During this time period, one alert was issued by Public Health Services on July 7, 2023. This alert notified that paramedic calls and suspected emergency department visits had increased that week and correlated with received community reports of an increased potency of fentanyl circulating. In addition, data received from the community continued to support ongoing concerns of the unpredictable toxic drug supply, with reports of adverse reactions (e.g. seizure like responses) and overdoses that took multiple doses of naloxone to reverse.

Public Health Services is engaged in work to improve the reach and engagement of the early-warning email system to support local communications regarding drug poisonings and the illicit drug supply.

Overall, this quarterly report continues to highlight the burden of the unpredictable and toxic drug supply in Hamilton, and the impact on the health of the community. Continued work to address the harms associated with opiate use is ongoing through the Hamilton Opioid Action Plan. An update on the plan will be brought back in Q1 2023 to the Public Health Committee.

APPENDICES AND SCHEDULES ATTACHED

Not Applicable.