

Opioid Surveillance Update

TO: Chair and Members of the Board of Health

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Recommendations

It is recommended that the Board of Health:

1. Receive this report for information.

Key Points

- In recent years, the rate of opioid-related ED visits in Wellington County, Dufferin County, and the City of Guelph (WDG) appears to have stabilized, despite provincial rates continuing to rise. Preliminary estimates for 2021 for WDG region are below the provincial average. The City of Guelph remains the most impacted in WDG, with rates 2 and 3 times higher than Dufferin and Wellington Counties, respectively.
- Opioid-related mortality continues to increase across the province. Preliminary estimates suggest this trend continues also in the WDG region. Fentanyl and its analogues are identified as direct contributors to 90% of 2021 deaths so far in Ontario. Other non-opioid substances are increasingly present as contributors in opioid-related deaths.

- The Ontario Prescription Opioid tool is a publicly available resource provided by the Ontario Drug Policy Research Network.¹ This tool presents different indicators that describe opioid-prescribing trends across Ontario. In WDG, patterns of opioid prescribing for pain have been decreasing steadily between 2013 to 2020. The availability of prescribers for opioid agonist therapy (OAT) continues to improve with approximately 30 prescribers per 100 patients on OAT in 2020.
- Wellington-Dufferin-Guelph Public Health (WDGPH) continues to work closely with community partners in the operation of the FAST Overdose Alert Platform, a community driven alert system that has improved response to substance use patterns. Between August 2018 and March 15, 2022, 903 substance-related incidents have been reported into the system; 23 Health Alerts have been shared in response to concerning patterns of substance-related harms in the community.

Discussion

Background

This report is meant as an update for the Board of Health on matters of opioid-related events within Wellington County, Dufferin County, and the City of Guelph.

Surveillance

To understand the needs of the community, WDGPH continually monitors trends in opioid-related harms in WDG and across the province. WDGPH has identified several sources of information that help identify the impact that opioids and their related harms have in WDG. This information allows WDGPH to better support those who are most impacted by opioid-related harms by supporting strategic collaboration with key community partners in the development of initiatives designed to deliver services to priority populations.

This section outlines WDGPH's current understanding of opioid-related harms through the available data.

Please note, emergency department visits and opioid-related deaths are available only to the end of September 2021. Annual estimates for 2021 are calculated by extending the totals from the first nine months into the full year. This may not reflect the true impact in the last three months of the year and should be understood as preliminary and subject to change.

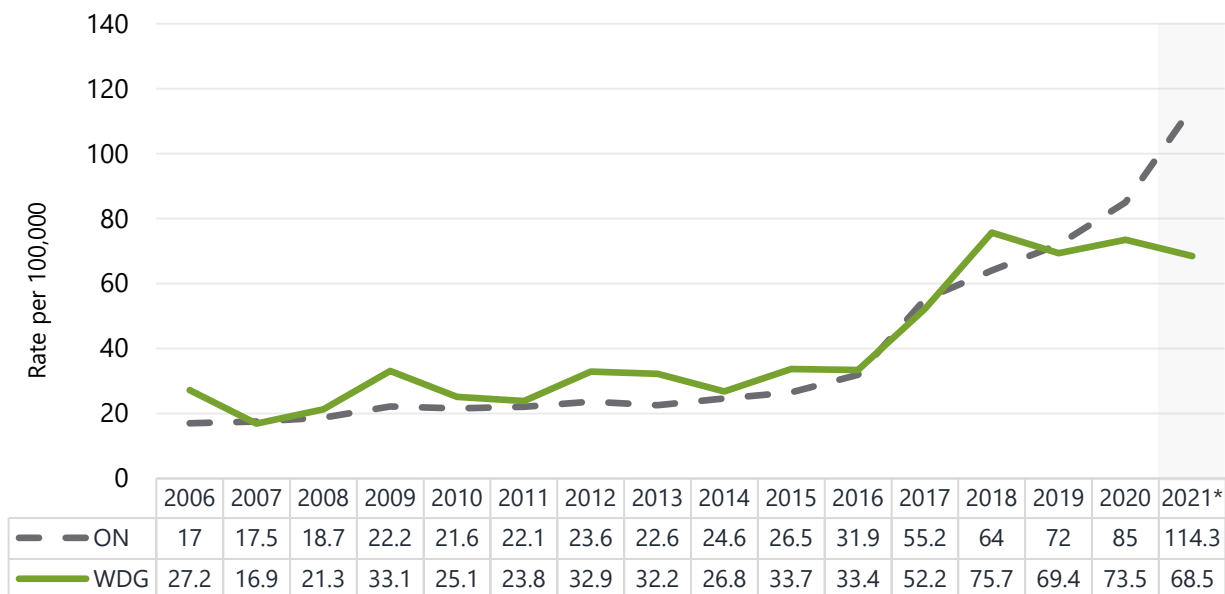
Opioid-Related Emergency Department Visits

Across the province severe outcomes related to opioid use have been increasing. In 2020 the rate of opioid-related emergency department (ED) visits in Ontario was 85 per 100,000 people, an 18% increase from the year before (72 per 100,000 – Figure 1). Based on an estimated rate for 2021, this trend appears to continue upwards, currently showing as a 34% increase from 2020.

In the WDG region, the annual rate for ED visits appears to stabilize around an average rate of 72 per 100,000 between 2018 and 2021*. In 2018, this resulted in the rate in WDG placing higher than the provincial average, however, due to the continuing rise in the annual provincial rate, WDG has been below the provincial average in the years since.

*Rates for 2021 are estimated based on ED visits up to and including September 2021. As such, these rates are subject to change as new data becomes available.

Figure 1 – Rate per 100,000 Residents of Opioid-Related Emergency Department Visits in WDG and Ontario, 2006-2021*

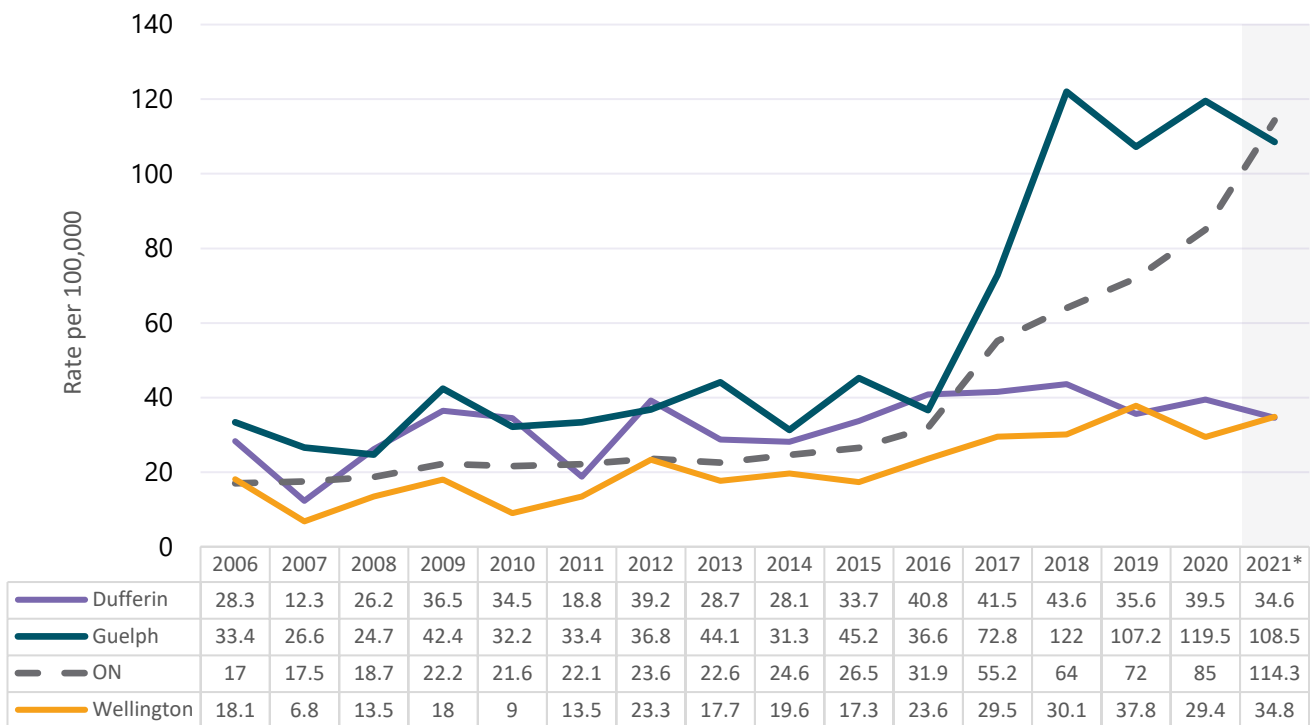


*Rates for 2021 are estimated using ED Visits from January through September and are subject to change.
Data source - National Ambulatory Care Reporting System (NACRS). 2006-2021, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH Ontario; accessed February 24, 2021.

The rate of opioid-related ED visits in the City of Guelph, Wellington County, Dufferin County (Figure 2) resemble the same pattern seen in the larger WDG region; an apparent stabilization of the rate is seen in all regions in years between 2018 and 2021*; despite the continued increase seen across the province.

Having increased steeply from 2016 to 2018, the rate in the City of Guelph in 2020 was the highest of the four regions, placing 40% higher than the rate for Ontario, 2 times higher than the rate in Dufferin County and 3 times higher than in Wellington County. However, due to the continued rise in the annual rate of the province, estimates for 2021 show the rate in the City of Guelph falling below the provincial average for the first time in 15 years. Dufferin County and Wellington County have not seen the steep increase evident in Guelph from 2016 to 2018 and continue to show rates lower than the rest of the province.

Figure 2 – Rate per 100,000 Residents of Opioid-Related Emergency Department Visits in Wellington County, Dufferin County, the City of Guelph, and Ontario, 2006-2021***



*Rates for 2021 are estimated using ED Visits from January through September 2021 and are subject to change.

**Wellington County does not include the City of Guelph

Data source - National Ambulatory Care Reporting System (NACRS). 2006-2021, Ontario Ministry of Health and Long Term Care, IntelliHEALTH Ontario; accessed February 24, 2021.

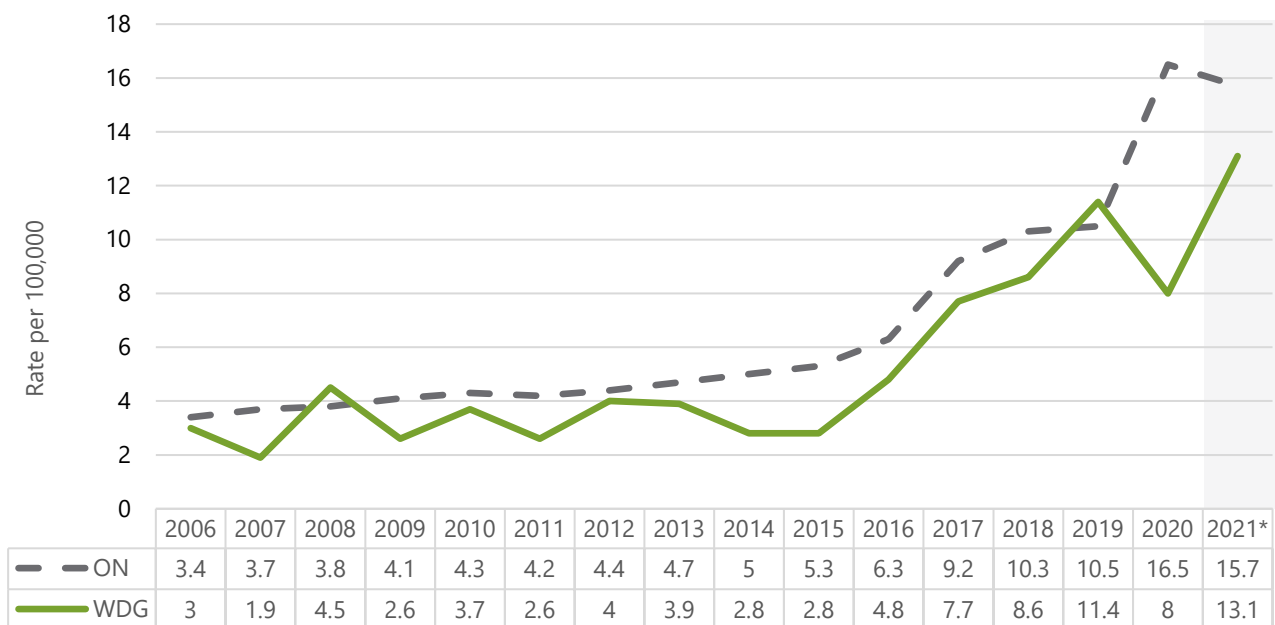
Opioid-Related Mortality

Figure 3 (page 5) displays the rate of opioid-related death for the province of Ontario and WDG, including preliminary estimates for the 2021 year. The 2021 estimates are provided by the Office of the Chief Coroner for Ontario (OCCO) up to September and are not yet complete; please note this data is subject to change.

In Ontario, opioid-related mortality has continued to increase (Figure 3). Between 2019 and 2020, the rate increased by 58%, the largest increase in the rate of opioid-related death in the past 15 years. Preliminary information suggests this rate remains similar into 2021.

In the WDG region, opioid-related mortality shows a decrease from 2019 into 2020, followed by an increase in 2021. Preliminary estimates indicate 31 confirmed opioid-related deaths from January to September in 2021, compared to 17 and 30 confirmed deaths for the same period in 2020 and 2019, respectively.

Figure 3 – Rate per 100,000 Residents of Opioid-Related Death in WDG and Ontario, 2006-2021*



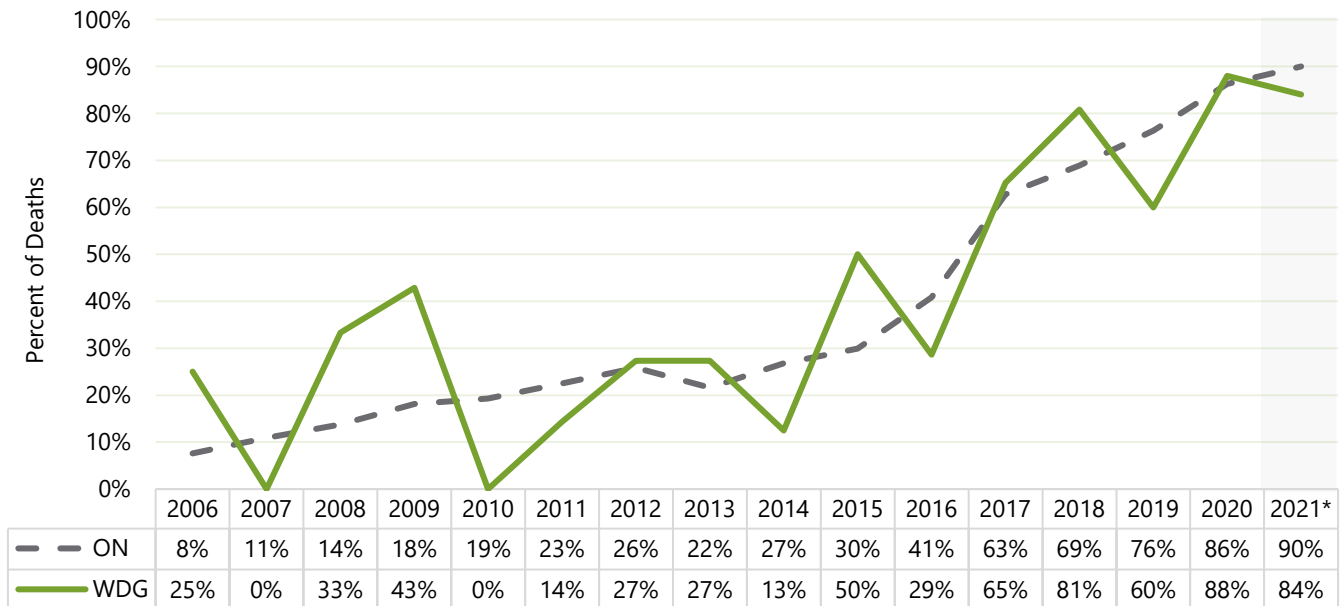
*Rates for 2021 are estimated using opioid-related mortality counts from January through September 2021 and are subject to change.

Data source - Ontario Opioid-Related Death Database, 2006-2020, Office of the Chief Coroner for Ontario; accessed through the Interactive Opioid Tool 24February2022;

Coroner's Opioid Investigative Aid, May 2017 to September 2021, Office of the Chief Coroner for Ontario, extracted February 1, 2022.

Across Ontario, fentanyl and its analogues are becoming increasingly present in opioid-related deaths (Figure 4). These substances were identified as direct contributors to death in 90% of deaths in Ontario so far in 2021; compared to 69% of deaths in 2018. In WDG, a similar representation of fentanyl and its analogues as a direct contributor to death is seen, with its presence in 84% of deaths in so far in 2021, and 88% in 2020.

Figure 4 – Percent of Opioid-Related Deaths by Fentanyl and its Analogues in WDG and Ontario, 2006-2021*



*Rates for 2021 are estimated using opioid-related mortality counts from January through September 2021 and are subject to change.

Data source - Ontario Opioid-Related Death Database, 2006-2020, Office of the Chief Coroner for Ontario; accessed through the Interactive Opioid Tool 24February2022;

Coroner's Opioid Investigative Aid, May 2017 to September 2021, Office of the Chief Coroner for Ontario, extracted February 1, 2022.

In addition to opioids, other, non-opioid substances have been identified as direct contributors in opioid-related deaths reported in 2021. Table 1 below outlines the involvement of these substances in opioid-related deaths in 2021. These substances are not mutually exclusive and so a combination may have been present in each death.

Table 1 – Non-Opioid Substances Directly Contributing to Opioid-Related Death, WDG and Ontario, 2021

Substance	WDG	Ontario
Cocaine	20%	41%
Methamphetamines	20%	32%
Benzodiazepines	10%	11%
Alcohol (Ethanol)	3%	11%

Coroner's Opioid Investigative Aid, May 2017 to September 2021, Office of the Chief Coroner for Ontario, extracted February 1, 2022.

The increasing presence of fentanyl, and non-opioid substances in opioid-related deaths continue to point to an increasingly volatile supply. The variability in strength and purity of unregulated opioids further contributes to the increasing patterns of substance-related harms across the province³.

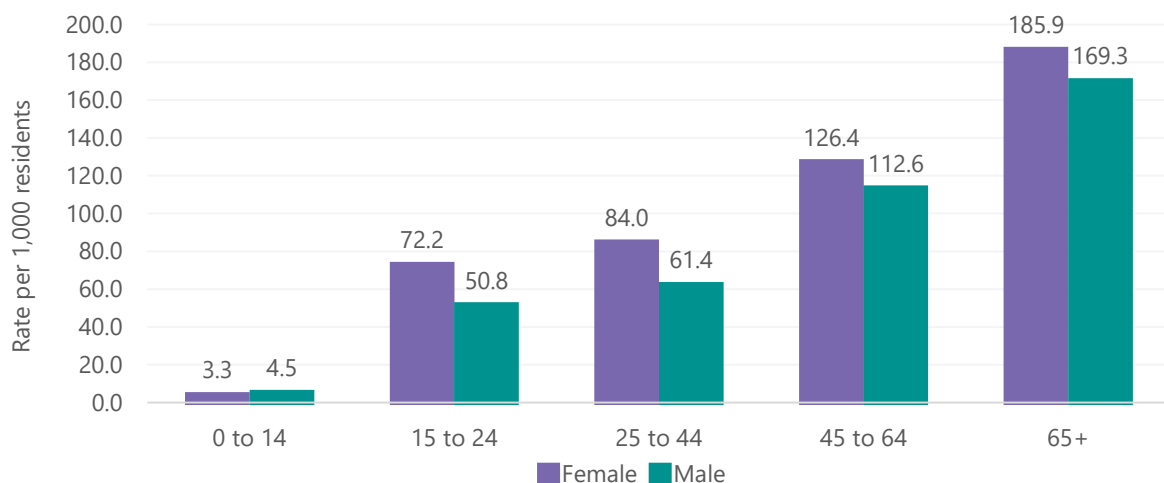
Opioid Prescriptions and Dispensing

The Ontario Prescription Opioid tool is a publicly available resource developed by the Ontario Drug Policy and Research Network (ODPRN) in collaboration with Public Health Ontario (PHO).¹ The tool uses data collected in the Narcotics Monitoring System (NMS) and presents measures of prescription opioid dispensing from community pharmacies across Ontario. This section describes patterns in opioid dispensing across WDG in comparison to the province of Ontario as a whole.

Since 2013, the total amount of opioids dispensed for pain has continued to decrease yearly across the province of Ontario and several other provinces in recent years⁴. In WDG the volume of dispensed opioid medications (in milligrams of morphine equivalents per population) decreased by 46% from 2013 to 2020, reflecting a similar decrease of 48% for the province.

In 2020, the proportion of people who are dispensed opioids increased with age, with the highest proportion in the age group of 65 and above (Figure 5). In all age groups except 0 to 14 years, the number of women receiving opioids for pain is higher than that of men. These trends, both for age and sex, appear in both WDG and the province.

Figure 5 – Rate of Individuals per 1,000 Residents Dispensed Opioids to Treat Pain in WDG, by Age Group, 2020



Data source - Ontario Drug Policy Research Network. Ontario Prescription Opioid Tool. Toronto, ON; March, 2022. DOI: 10.31027/ODPRN.2018.01. Available from: <https://odprn.ca/ontario-opioid-drug-observatory/ontario-prescription-opioid-tool/>

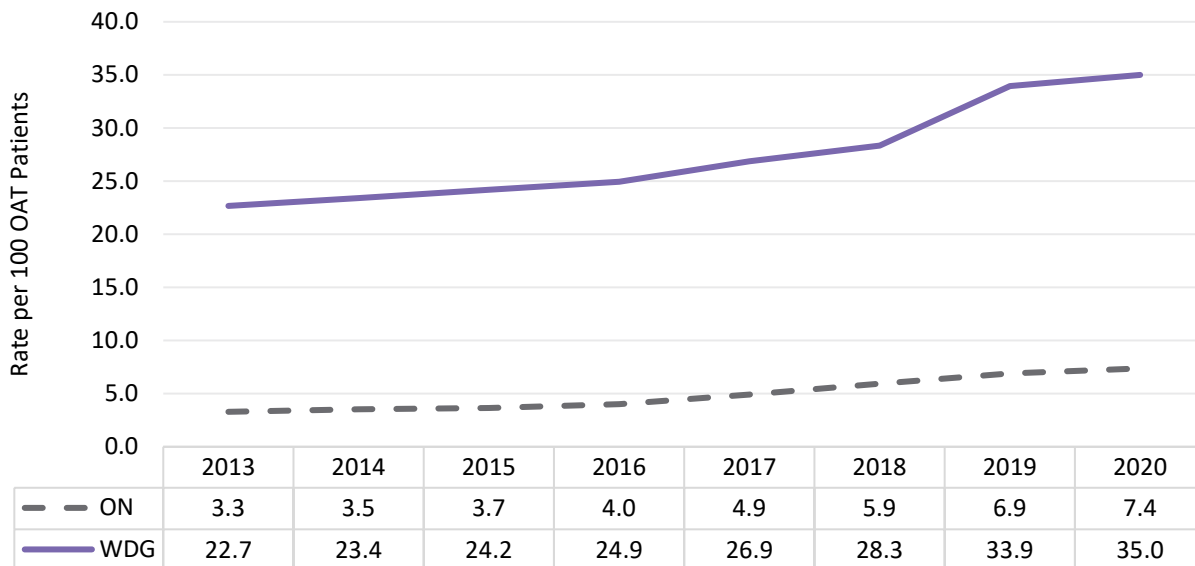
Individuals aged 45 and older are receiving 86% of the total amount of opioid medication dispensed in the WDG region, resembling that of the province.

Opioid Agonist Therapy

Opioid Agonist Therapy (OAT) is an available therapy for addiction to opioid substances. OAT offers methadone and increasingly buprenorphine to people who use drugs as a prescribed action to prevent withdrawal and reliance on opioid substances. Despite opioid prescribing decreasing overall, the rate of OAT prescribing continues to increase in WDG and across the province¹.

Figure 5 displays the average number of prescribers available per 100 patients between 2013 and 2020 for WDG and Ontario. In 2020, 35 prescribers per every 100 residents were available in WDG, compared to 7.4 in the province (Figure 6). Additionally, WDG had approximately 2.3 times more OAT prescribers per capita than the provincial average in the same year (not shown)¹. This data suggests better coverage of OAT prescribing in the WDG region, as more prescribers are available relative to the population, as well as each patient.

Figure 6 – Rate of Opioid Agonist Therapy (OAT) Prescribers in WDG and Ontario, 2013-2020



Data source - Ontario Drug Policy Research Network. Ontario Prescription Opioid Tool. Toronto, ON; March, 2022. DOI: 10.31027/ODPRN.2018.01. Available from: <https://odprn.ca/ontario-opioid-drug-observatory/ontario-prescription-opioid-tool/>

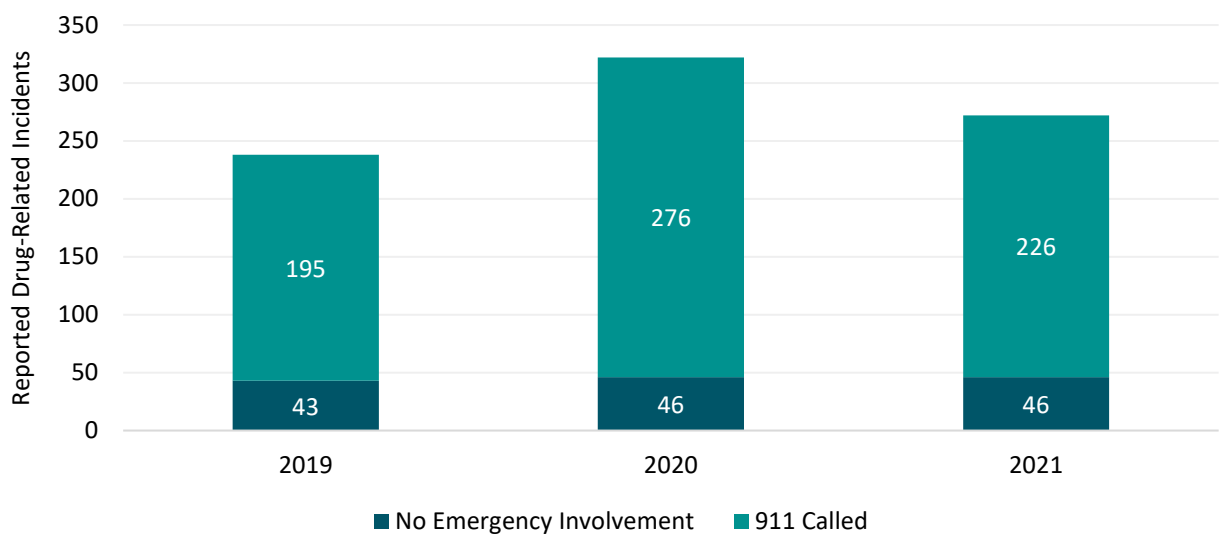
The FAST Overdose Alert Platform

The FAST Overdose Alert Platform is a system that leverages community expertise through an online reporting tool that collects information about suspect-drug poisonings in our communities. This system was designed by WDGPH in partnership with members of the Wellington Guelph Drug Strategy (WGDS) and has been operating to identify and share information related to overdoses in the local community, including new patterns of overdoses, tainted drug supply, and counterfeit pharmaceuticals.

Currently, the FAST System collects information about drug-related harms within the City of Guelph. From the beginning of collection in August of 2018, 908 substance-related incidents have been input into the system.

A strength of the FAST system is that it allows for reporting by agencies not tied to emergency response (police, paramedic, etc.). This allows for visibility of drug-related incidents that do not access emergency services. For complete years 2019-2021, an average of 19% of incidents reported were those that did not involve these supports and would be missed in traditional systems (Figure 7). Despite the ability of this system to collect information about these types of incidents, stigma surrounding substance use likely prevents a complete understanding of those harms seen outside emergency services. An underestimation of harms associated with drugs when looking solely at emergency department visits and hospitalizations is likely and supports the continued development of coordinated approaches to understanding substance use.

Figure 7 – Reported Drug-Related Incidents by Year and Emergency Involvement, City of Guelph, 2019-2021



In response to patterns visible in the FAST system and other available databases regarding drug-harms in the community, 23 health alerts have been shared with the community from the project beginning in August 2018. The most recent alert was shared on February 23, 2022, in response to 5 drug poisonings including 1 suspect-drug-related death to circulating fentanyl.

Conclusion

Opioid-related harms continue to negatively affect individuals who use substances across WDG and Ontario as a whole. Between 2016 to 2021, every region in WDG continued to see opioid-related emergency department visits and mortality. The variability in strength and purity of unregulated opioids further contributes to the increasing patterns of substance-related harms across the province, alongside the many stressors contributed by negotiating the COVID-19 pandemic⁶. The FAST Overdose Alert Platform continues to operate in WDGPH and allows a timelier understanding of substance use patterns in the City of Guelph.

Ontario Public Health Standard

Population Health Assessment

“Population health assessment includes **measuring, monitoring, and reporting on the status of a population’s health**, including **determinants of health and health inequities**. Population health assessment provides the information necessary to understand the health of populations through the collaborative development and ongoing maintenance of population health profiles, identification of challenges and opportunities, and monitoring of the health impacts of public health practice.”

The board of health shall:

1. Assess current health status, health behaviours, preventive health practices, health care utilization relevant to public health, and demographic indicators
2. Assess trends and changes in local population health
3. Use population health, determinants of health and health inequities information to assess the needs of the local population
4. Tailor public health programs and services to meet local population health needs
5. Provide population health information, including determinants of health and health inequities to the public, community partners, and health care providers

Surveillance

“Surveillance is the **systematic and ongoing collection, collation, and analysis of health-related information** that is **communicated in a timely manner to all who need to know**, so that action can be taken. Surveillance contributes to effective public health program planning, delivery, and management. Dissemination of surveillance analyses **may take the form of reports, advisories, healthy public policy recommendations, alerts, or warnings**. Surveillance has historically been associated with infectious diseases and vaccination programs, but its importance has become increasingly recognized for environmental health issues, child health, reproductive health, chronic disease prevention, and injury prevention.”

The board of health shall:

1. conduct surveillance, including the ongoing collection, collation, analysis, and periodic reporting of population health indicators
2. interpret and use surveillance data to communicate information on risks to relevant audiences

WDGPH Strategic Direction(s)

Health Equity: We will provide programs and services that integrate health equity principles to reduce or eliminate health differences between population groups.

Organizational Capacity: We will improve our capacity to effectively deliver public health programs and services.

Service Centred Approach: We are committed to providing excellent service to anyone interacting with WDG Public Health.

Building Healthy Communities: We will work with communities to support the health and well-being of everyone.

Health Equity

Health equity principles are being applied across all WDGPH opioid projects with the goal of reducing or eliminating differences in opioid-related harms between population groups. According to a study by the Public Health Agency of Canada, opioid and other drug-related overdose deaths occurred across all sociodemographic and socioeconomic groups. However, characteristics most common among those who died include.⁴

- a history of mental health concerns, substance use disorder, trauma, and stigma

- decreased drug tolerance
- being alone at the time of overdose
- lack of social support
- lack of comprehensive and coordinated healthcare and social service follow-up

Strategies, such as Supervised Consumption Sites, tend to engage people who are more likely to be experiencing unstable living arrangements or homelessness, mental health concerns and/or chronic substance use.⁵ Different approaches and strategies are needed to reach a diversity of groups who have different risk factors and different needs. WDGPH will continue to explore the needs of different population groups and use a comprehensive and targeted approach to reduce health inequities and reduce the burden of substance related harm in the community.

References

1. Ontario Prescription Opioid Tool [Internet]. Ontario Drug Policy Research Network.; 2020 [cited 2022 March 2]. Available from: <https://odprn.ca/ontario-opioid-drug-observatory/ontario-prescription-opioid-tool/>
2. Coroner's Opioid Investigative Aid, May 2017 to September 2021, Office of the Chief Coroner for Ontario, extracted February 1, 2022.
3. The COVID-19 Science Advisory Table. 2021. The Impact of the COVID-19 Pandemic on Opioid-Related Harm in Ontario. Available from: <https://covid19-sciencetable.ca/sciencebrief/the-impact-of-the-covid-19-pandemic-on-opioid-related-harm-in-ontario/>
4. Canadian Institute for Health Information. 2019. Opioid Prescribing in Canada: How Are Practices Changing? Available from: <https://www.cihi.ca/sites/default/files/document/opioid-prescribing-canada-trends-en-web.pdf>
5. Ontario Opioid-Related Death Database, 2006-2020, Office of the Chief Coroner for Ontario; accessed through the Interactive Opioid Tool 24February2022;
6. Centre for Addiction and Mental Health. 2016. Opioid agonist therapy. Available from: <https://www.camh.ca/-/media/files/oat-info-for-clients.pdf>
7. Wellington-Dufferin-Guelph Board of Health. BOH report – BH.01.OCT0318.R30 Opioid Surveillance Update. [Internet]. 2018 May 4. [cited 2020 March 10]. Available from: <https://www.wdgpUBLICHEALTH.ca/sites/default/files/file-attachments/basic-page/bh.01.oct0318.r30 - opioid surveillance update.pdf>
8. Wellington-Dufferin-Guelph Board of Health. BOH report – BH.01.MAY0218.R13 Naloxone Distribution Program. [Internet]. 2018 May 4. [cited 2020 March 10]. Available from: <https://www.wdgpUBLICHEALTH.ca/sites/default/files/file-attachments/BOH/bh.01.may0218.r13 - naloxone distribution program access.pdf>
9. Special Advisory Committee on the Epidemic of Opioid Overdoses. Highlights from phase one of the national study on opioid- and other drug-related overdose deaths:

insights from coroners and medical examiners [Internet]. Public Health Agency of Canada. 2018 Sept [cited: 2018 Sept 24]. Available from: <https://www.canada.ca/en/public-health/services/publications/healthy-living/highlights-phase-one-national-study-opioid-illegal-substance-related-overdose-deaths.html>

10. Wellington-Dufferin-Guelph Board of Health. BOH report - BH.01.MAR0718.R06 Community Response to Opioid Harms: Considerations for Supervised Consumption Sites. [Internet]. 2018 Mar 7. [cited 2018 Sep 24]. Available from: <https://www.wdgpUBLICHEALTH.ca/sites/default/files/file-attachments/basic-page/bh.01.mar0718.r06- community response to opioid harms - considerations for supervised consumption sites access.pdf>