

Opioid Surveillance Update

To: Chair and Members of the Board of Health

Meeting Date: April 5, 2023

Report No. **BH.01.APR0523.R13** Pages: 14

Prepared By: Michael Whyte
Health Promotion Specialist, Health Analytics
Sonja Vukovic
Health Promotion Specialist, Health Promotion

Approved By: Dr. Kyle Wilson, M.Sc., Ph.D.
Director – Information Systems & Chief Privacy Officer

Submitted By & Signature: *Original signed document on file.*

Dr. Nicola J. Mercer, MD, MBA, MPH, FRCPC
Medical Officer of Health & CEO

Recommendations

It is recommended that the Board of Health receive this report for information.

Key Points

- The rate of opioid-related ED visits in Wellington and Dufferin Counties appear similar to recent years. Preliminary numbers for 2022 show a decrease in the number of opioid-related ED visits in the City of Guelph and Ontario from 2021. The City of Guelph remains the most impacted in Wellington-Dufferin-Guelph (WDG), with rates 1.2 and 2 times higher than Dufferin and Wellington Counties, respectively.
- Preliminary estimates in opioid-related mortality for 2022 show a decrease in the rate across the province from 2021. In the Wellington County, Dufferin County, and

the City of Guelph (WDG) Region, these estimates show a rate consistent to that seen in 2021, remaining below the provincial average.

- Xylazine, a sedative used in veterinary medicine, has appeared in 2-4% of opioid-related deaths in the province between Q4 2021 and Q3 2022. The effects of this substance cannot be reversed using naloxone and can cause severe skin lesions, leading to the need for amputation if left untreated. The presence of fentanyl and non-opioid substances in the unregulated opioid supply remain a strong focus of Wellington-Dufferin-Guelph Public Health (WDGPH) communication and community partnerships in reducing its impact.
- The Ontario Prescription Opioid tool is a publicly available resource provided by the Ontario Drug Policy Research Network. 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 2021.
- 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 February 28, 2023, 1162 substance-related incidents have been reported into the system; 26 Health Alerts have been shared in response to concerning patterns of substance-related harms in the community.
- Through strong community partnerships, WDGPH is supporting a community-wide response to the opioid-related harms demonstrated by the data.

Background

This report is an update for the Board of Health on matters of opioid-related events within Wellington County, Dufferin County, and the City of Guelph. It outlines WDGPH's current understanding of opioid-related harms through the available data and provides an update to the Board of Health Report, "Opioid Surveillance Update" from April 2022 (BH.01.APR0622.R08).¹ Understanding this data is important for optimizing public health strategies in reducing opioid-related harms occurring in WDGPH and across the province.² Initiatives including support for Consumption and Treatment Service Sites (BH.01.MAR0718.R06) and enhancements to the Ontario Naloxone Program by the Ministry of Health and Long Term Care (BH.01.MAY0218.R13) were supported with this understanding and remains a major effort of WDGPH.^{3,4}

Discussion

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.

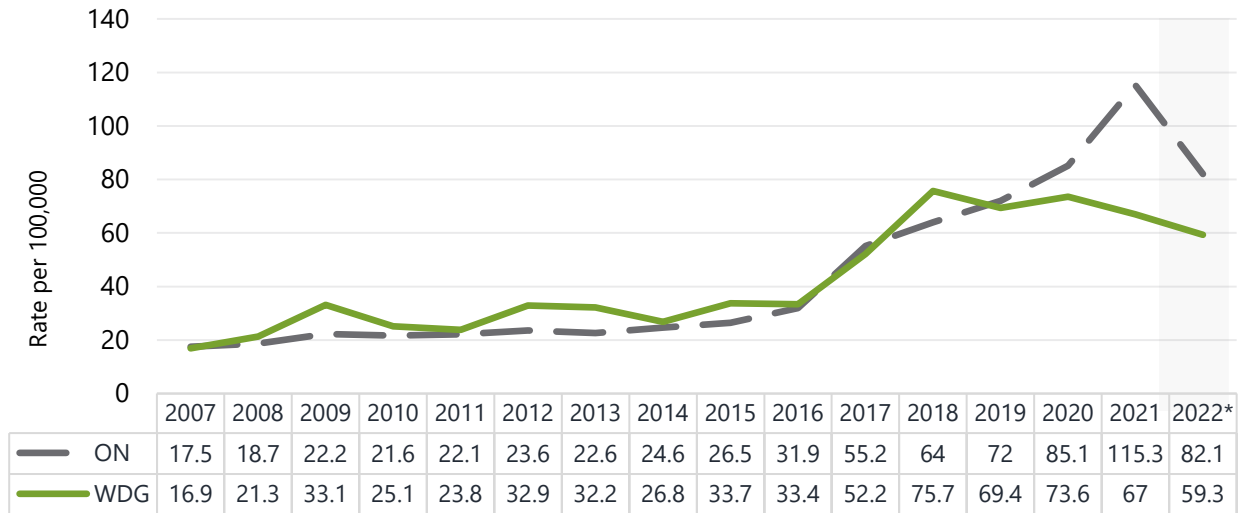
Please note, emergency department visits and opioid-related deaths are available only to the end of September 2022. Annual estimates for 2022 are calculated by extending the totals from the first nine months into the full year. This may not reflect the true impact in the last three months of the year and should be understood as preliminary and subject to change.

Opioid-Related Emergency Department Visits

In the past decade, the province has seen a continued increase in outcomes related to opioid use. Although still preliminary, 2022 rates identify a shift away from this direction in opioid-related emergency department (ED) visits in Ontario. Figure 1 displays these estimates and show a decrease in the provincial rate by 29% to a rate of 82.1 ED visits per 100,000 residents in 2022, from 115.3 in 2021.

In the WDG region, a downward trend is beginning to appear with the addition of preliminary 2022 data. Although slight, 2022 estimates see the rate decrease from 2021 by 11.5% to 59.3 per 100,000 residents. The WDG rates maintain below the provincial average from 2019 onwards.

Figure 1 – Rate per 100,000 Residents of Opioid-Related Emergency Department Visits in WDG and Ontario, 2007-2022*



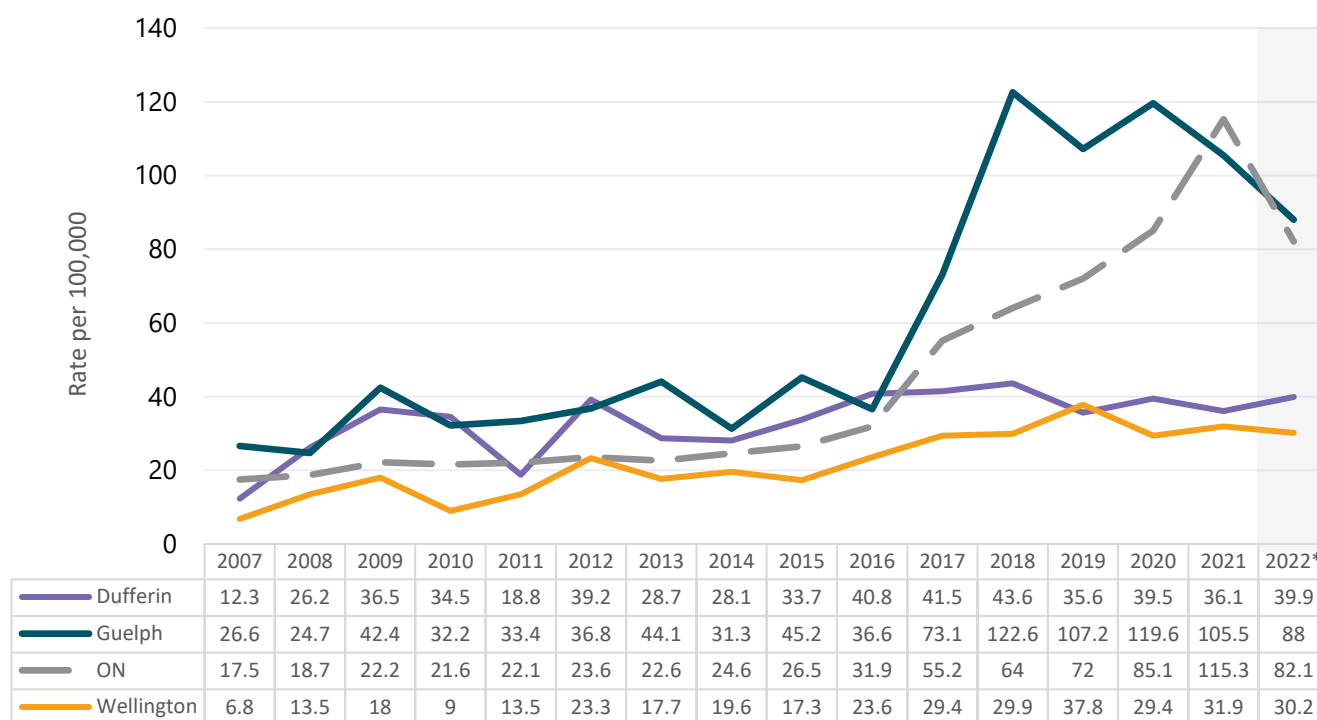
*Rates for 2022 are estimated using ED Visits from January through September and are subject to change.

Data source - National Ambulatory Care Reporting System (NACRS). 2007-2022, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH Ontario; accessed February 08, 2023.

Figure 2 (below) presents a closer look at WDG sub-regions, displaying opioid-related ED visits per 100,000 for the City of Guelph, Wellington County (not including Guelph) and Dufferin County. Wellington and Dufferin Counties continue to see an apparent stabilization of the rate in years between 2018 and 2022*, with an average rate across these four years of 32.3 and 37.8 per 100,000, respectively. Dufferin County and Wellington County continue to show rates lower than the rest of the province.

The City of Guelph continues to see a decrease to 88 ED visits per 100,000 residents in 2022*. This presents a steady downward trend across the past three years. As seen above in Figure 1, the decline in rate of opioid-related ED visits in Ontario places the provincial average below the City of Guelph once again in 2022.

Figure 2 – Rate per 100,000 Residents of Opioid-Related Emergency Department Visits in Wellington County (not including Guelph), Dufferin County, the City of Guelph, and Ontario, 2007-2022*



*Rates for 2022 are estimated using ED Visits from January through September 2022 and are subject to change. Data source - National Ambulatory Care Reporting System (NACRS). 2007-2022, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH Ontario; accessed February 08, 2023.

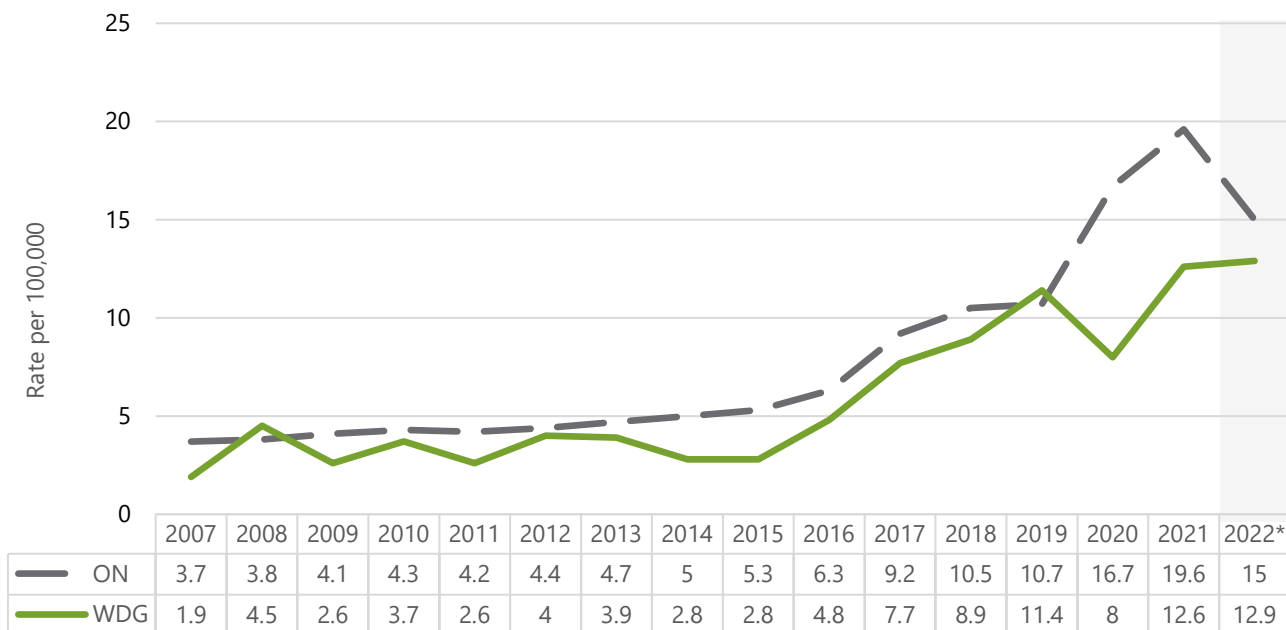
Opioid-Related Mortality

Figure 3 displays the rate of opioid-related mortality for the province of Ontario and WDG, including preliminary estimates for the 2022 year. The 2022 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, like patterns seen in opioid-related ED visits, mortality has seen a decrease provincially in 2022 after a period of increase in 2020 and 2021. Preliminary information suggests the rate in 2022 has decreased by 23.5% from 2021 to 15 opioid-related deaths per 100,000 residents.

In the WDG region, opioid-related mortality shows a decrease from 2019 into 2020, followed by an increase into 2021 and 2022. Preliminary estimates indicate 31 confirmed opioid-related deaths from January to September in 2022, compared to 31 and 17 confirmed deaths for the same period in 2021 and 2020, respectively.

Figure 3 – Rate per 100,000 Residents of Opioid-Related Mortality in WDG and Ontario, 2007-2022*



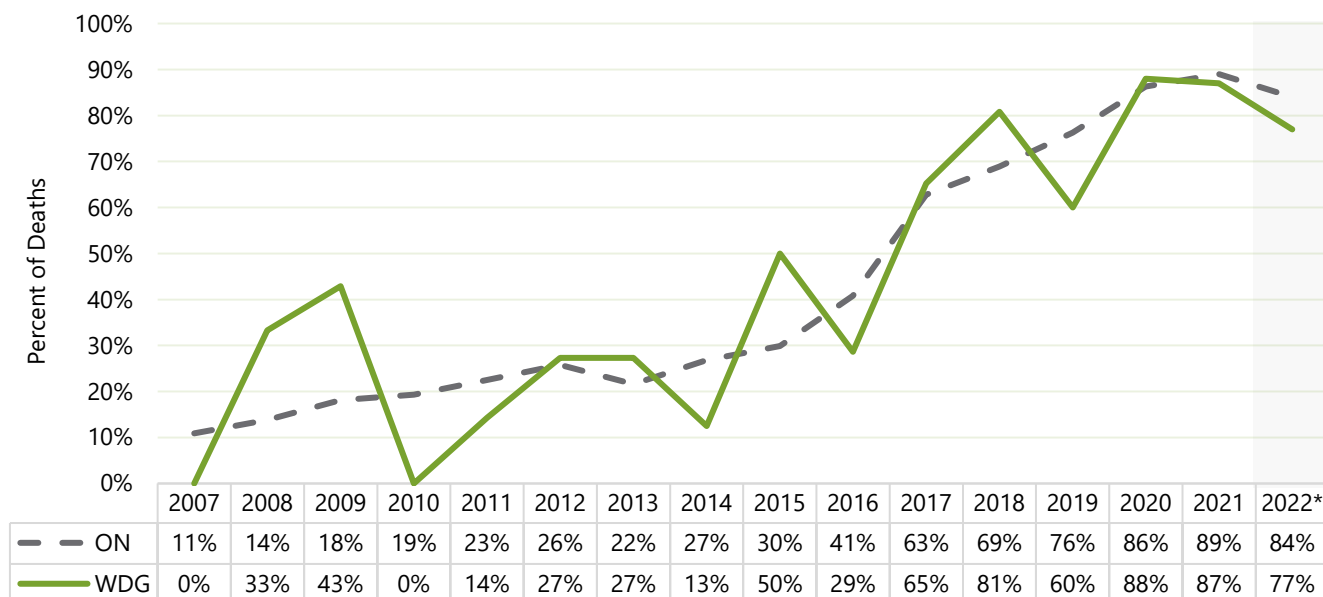
*Rates for 2022 are estimated using opioid-related mortality counts from January through September 2022 and are subject to change.

Data source - Ontario Opioid-Related Death Database, 2007-2021, Office of the Chief Coroner for Ontario; accessed through the Interactive Opioid Tool, March 1, 2023;

Coroner's Opioid Investigative Aid, May 2017 to September 2022, Office of the Chief Coroner for Ontario, extracted March 1, 2023.

Across Ontario, fentanyl and its analogues are becoming increasingly common in opioid-related deaths (Figure 4). These substances were identified as direct contributors to death, contributing to over 80% of deaths between 2020 and 2022 in Ontario. In WDG, a similar representation of fentanyl and its analogues as a direct contributor to death is seen, with its presence found in 77% of deaths in 2022 so far.

Figure 4 – Percent of Opioid-Related Deaths by Fentanyl and its Analogues in WDG and Ontario, 2007-2022*



*Rates for 2022 are estimated using opioid-related mortality counts from January through September 2022 and are subject to change.

Data source - Ontario Opioid-Related Death Database, 2007-2021, Office of the Chief Coroner for Ontario; accessed through the Interactive Opioid Tool, March 1, 2023;

Coroner's Opioid Investigative Aid, May 2017 to September 2022, Office of the Chief Coroner for Ontario, extracted March 1, 2023.

In addition to opioids, other, non-opioid substances have been identified as direct contributors in opioid-related deaths reported in 2022. Table 1 below outlines the involvement of these substances in opioid-related deaths in 2022. 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, 2022

Substance	WDG	Ontario
Methamphetamine	53%	32%
Cocaine	37%	41%
Benzodiazepines	7%	9%
Ethanol (Alcohol)	7%	12%

Coroner's Opioid Investigative Aid, May 2017 to September 2022, Office of the Chief Coroner for Ontario, extracted March 1, 2023.

Additional to the substances seen above, concerns have been appearing around an increasing presence of a substance known as Xylazine in the unregulated drug supply.⁵ Xylazine is a depressant that is typically used by veterinarians for sedation, muscle relaxation and pain relief for animals. It is not approved for use in humans and has been detected in 2-4% of opioid toxicity deaths in Ontario between Q4-2021 and Q3-2022. Despite having similar effects as opioids, naloxone will not reverse its effects when administered. Particularly concerning is that it is known to cause severe skin lesions which, if left untreated, can lead to need for amputation. Investigation to better understand its presence in the WDG region is underway.

The 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 province.²

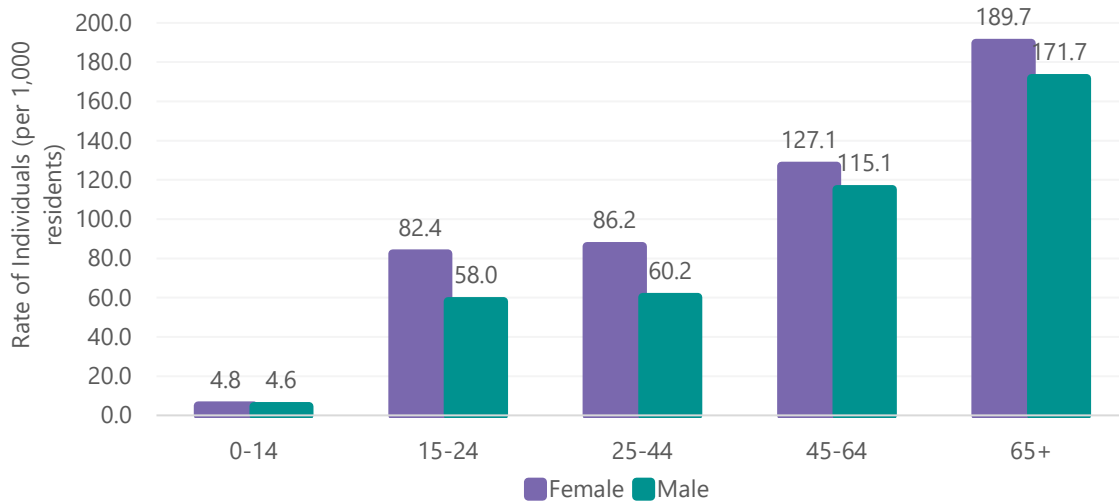
Opioid Prescriptions and Dispensing

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).⁴ 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 year-over-year across the province of Ontario and several other provinces in recent years.⁶ In WDG the volume of dispensed opioid medications (in milligrams of morphine equivalents per population) decreased by 40% from 2013 to 2021, reflecting a similar decrease of 44% for the province.

In 2021, 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 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, 2021



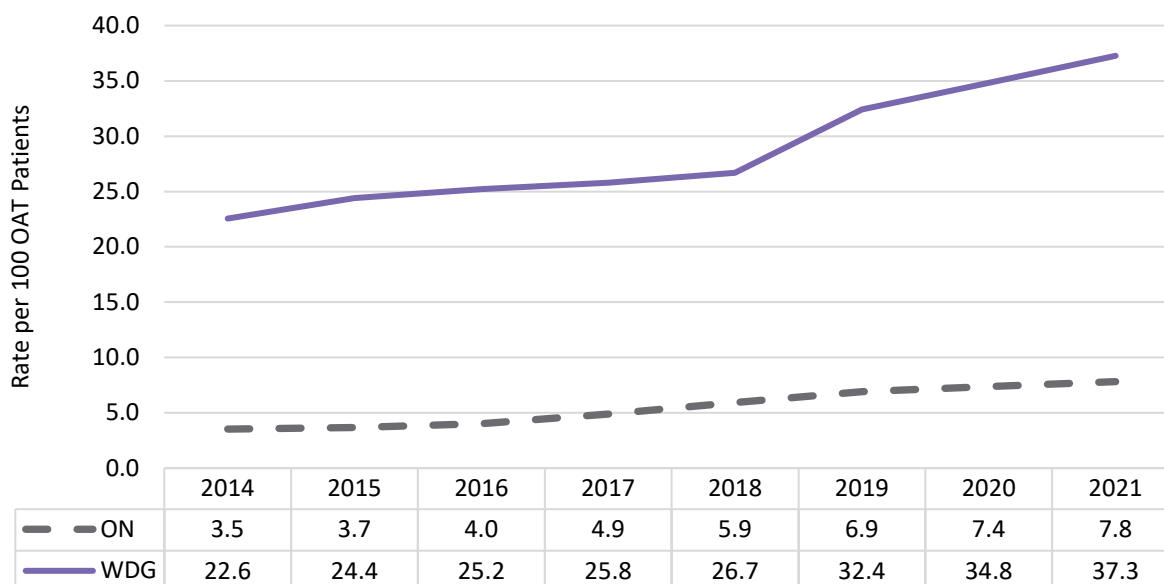
Data source - Ontario Drug Policy Research Network. Ontario Opioid Indicator Tool. Toronto, ON; Updated August 2022. DOI: 10.31027/ODPRN.2022.01. Available from: <https://odprn.ca/ontario-opioid-indicator-tool/>

Opioid Agonist Therapy

Opioid Agonist Therapy (OAT) is an effective and lifesaving treatment therapy for opioid use disorder.⁶ OAT offers methadone, and increasingly, buprenorphine to people who use drugs as a prescribed action to prevent withdrawal and reliance on opioid substances. As an accepted treatment and harm reduction option, the rate of OAT prescribing continues to increase in WDG and across the province.

Figure 6 displays the average number of prescribers available per 100 patients between 2013 and 2021 for WDG and Ontario. In 2021, 37.3 prescribers per every 100 residents were available in WDG, compared to 7.8 in the province. Additionally, WDG had approximately 2.3 times more OAT prescribers per capita than the provincial average in the same year (not shown).⁶

Figure 6 – Rate of Opioid Agonist Therapy (OAT) Prescribers in WDG and Ontario, 2014-2021



Data source - Ontario Drug Policy Research Network. Ontario Opioid Indicator Tool. Toronto, ON; Updated August 2022. DOI: 10.31027/ODPRN.2022.01. Available from: <https://odprn.ca/ontario-opioid-indicator-tool/>

The FAST Overdose Alert Platform

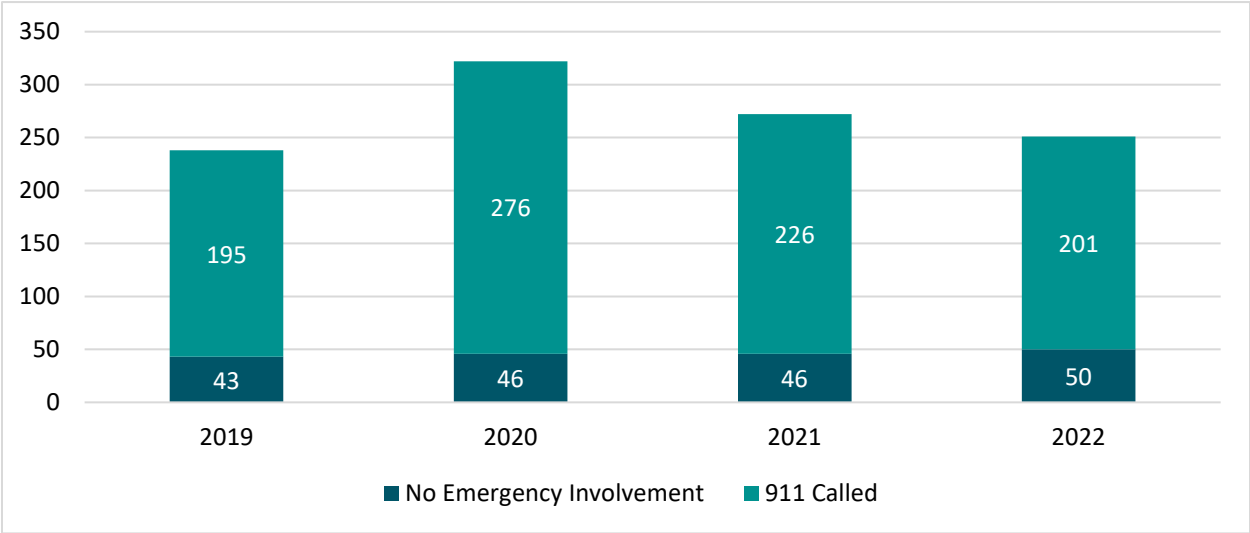
The FAST Overdose Alert Platform is a system that leverages community expertise through an online reporting tool that collects information about suspect-drug poisonings in our communities. This system was designed by WDGPH in partnership with members of the Wellington Guelph Drug Strategy (WGDS) and 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 2018, 1162 substance-related incidents have been submitted into the system.

A significant 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 2019-2022, an average of 17.1% 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, 2019-2022



In response to patterns visible in the FAST system and other available databases regarding drug-harms in the community, 26 health alerts have been shared with the community from the project beginning in August 2018. The most recent alert was shared on April 29, 2022, in response to 6 drug poisonings occurring within the span of one hour in the City of Guelph.

WDGPH Partnerships and Response

Currently, there is a multidisciplinary response to opioid-related harms across WDG.

The Wellington Guelph Drug Strategy (WGDS) is a local coalition of partners that utilizes a four-pillar drug strategy which includes prevention, harm reduction, treatment and recovery, and community safety. WDGPH’s current work supports the prevention and harm reduction pillars through the WGDS advisory group to expand access to harm reduction supplies in Wellington County (e.g., clean needles, syringes, cookers, pipes, and foils). WDGPH is also working with WGDS partners such as Stonehenge, Wellington County and Sanguen Health Centre to determine optimal locations to install large sharps drop boxes in Wellington County.

As a part of the Dufferin-Caledon Drug Strategy (DCDS), WDGPH is exploring the expansion of harm reduction supplies through service providers, as well as identifying the need and locations for potential sharps drop boxes across Dufferin County. With this group's expertise, WDGPH is also currently facilitating the establishment of a FAST Overdose Alert Platform.

WDGPH also supports the opioid response by distributing naloxone to the public and to other community agencies via the Ontario Naloxone Program. This includes seeking opportunities to expand the number of community agencies who distribute naloxone.

Conclusion

Opioid-related harms continue to negatively affect individuals who use substances across WDG and Ontario as a whole. The variability in strength and purity of unregulated opioids further contributes to the increasing patterns of substance-related harms across the province. The presence of Xylazine in the unregulated supply presents concern with additional potential for severe health outcomes for those who use these substances.

As demonstrated by the data, there continues to be a need for a community response to opioid-related harms. WDGPH continues to support our community through established and effective partnerships with community partners such as the WGDS and DCDS. Further development of the FAST Overdose Alert Platform in Dufferin will improve the ability to understand and react to opioid-related harms across WDG.

Ontario Public Health Standards

Foundational Standards

- Population Health Assessment
- Health Equity
- Effective Public Health Practice
- Emergency Management

Program Standards

- Chronic Disease Prevention and Well-Being
- Food Safety
- Healthy Environments
- Healthy Growth and Development

- Immunization
- Infectious and Communicable Diseases Prevention and Control
- Safe Water
- School Health
- Substance Use and Injury Prevention

2023 WDGPH Strategic Directions

- People & Culture:** WDGPH has an organizational culture of engagement, inclusion and agility.
- Partner Relations:** WDGPH collaborates with partners to address priority health issues in the community.
- Health System Change:** WDGPH is positioned to be an agent of change within the broader health sector.

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 include⁷

- 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.⁸ 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. Wellington-Dufferin-Guelph Board of Health. BOH report – BH.01.APR0622.R08 Opioid Surveillance Update. [Internet]. 2021 April 6. [cited 2023 March 1]. Available from: <https://www.wdgpUBLICHEALTH.ca/sites/default/files/file-attachments/basic-page/bh.01.oct0318.r30 - opioid surveillance update.pdf>
2. The COVID-19 Science Advisory Table. 2021. The Impact of the COVID-19 Pandemic on Opioid-Related Harm in Ontario. Available from: <https://covid19-science.ca/sciencebrief/the-impact-of-the-covid-19-pandemic-on-opioid-related-harm-in-ontario/>
3. 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>
4. 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>
5. Memo from the Office of the Chief Medical Officer of Health: Xylazine presence in Ontario. Ministry of Health; 2023. Received February 28, 2023.
6. Ontario Prescription Opioid Tool [Internet]. Ontario Drug Policy Research Network.; 2021 [cited 2023 March 3]. Available from: <https://odprn.ca/ontario-opioid-drug-observatory/ontario-prescription-opioid-tool/>
7. 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>
8. 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>