Opioid Use and Impacts in Thunder Bay District

An Updated Situational Assessment

May 2023

Thunder Bay District Health Unit

THUNDER BAY Drug Strategy

We honour the individuals represented in these data and acknowledge the hardships and loss experienced by their families, friends and communities.

This report was prepared by the Situational Assessment Working Group of the Opioid Surveillance and Response Task Force ("Task Force"). The Task Force was convened in 2017 by the Thunder Bay Drug Strategy in response to rising opioid-related morbidity and mortality in Thunder Bay District. The goal of the Task Force is to reduce the harms associated with opioid use through coordinated surveillance and response.

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The Thunder Bay District Health Unit area, where the information contained in this report relates to, is situated on the traditional lands of the Anishnaabe within the Robinson Superior Treaty, Treaty 9, and Treaty 3 areas. We are committed to truth and reconciliation, and striving through our work and partnerships to respect and honour Indigenous Peoples who have cared for the land since time immemorial.

Contents

Purpose

In March 2018, the Opioid Surveillance and Response Task Force prepared a situational assessment related to opioid use and impacts in Thunder Bay District. The report, which can be found here, addressed the following questions:

- What factors may influence the opioid situation in Thunder Bay District?
- What is the scope of opioid use in Thunder Bay District?
- What is the burden of opioid-related harms in Thunder Bay District?
- What opioid-related services are available in Thunder Bay District?

Throughout the report, gaps in knowledge about opioid use, associated harms, and service accessibility were highlighted to help guide future data collection efforts.

Since the report was published, opioid use continues to have significant impacts on people living in Thunder Bay District. More recent data, as well as information to address some of the data gaps in the previous report, is available. In addition, the COVID-19 pandemic exacerbated the overdose crisis across Canada [1]. Changes in opioid use and related health services utilization during the pandemic have also shaped more recent data.

What is the difference between this report and the 2018 report?

The current report provides an update to previously reported data regarding the scope of opioid use, the burden of opioid-related harms, and available opioid-related services in Thunder Bay District. It also includes some new sources of information related to these areas. Consideration of the most recent evidence of opioid use and impacts in Thunder Bay District will help community partners plan and implement initiatives that aim to reduce the harms associated with opioid use.

This report also includes a timeline of the opioid policy landscape in Canada. This offers a backdrop to understanding and addressing the opioid crisis in our communities. The current report also significantly expands upon the opioid-related services that are now available in Thunder Bay District, as many developments have been achieved in this area.

In addition, Appendices A and B provide an initial comparison of the burden of some opioid-related harms in Thunder Bay District prior to the COVID-19 pandemic (April 1, 2018 to March 31, 2020) and during the first two years of the pandemic (April 1, 2020 to March 31, 2022).

Considerations when interpreting this report [2]:

- It is important to keep in mind when interpreting the opioid-related morbidity and mortality data that we do not have information on the pathways that led individuals to opioid use, the factors that may have contributed to opioid-related harms, nor whether the outcomes were from prescription or non-prescription opioids.
- Some of the data sources are based on self-report. Response bias may be present. Thus, responses may be an under- or over-representation of accurate rates.
- In most instances, proportions and rates are provided instead of the number of individuals, as the number of individuals was often too small to report. This practice protects confidentiality and ensures a minimum standard in terms of the precision of estimates.
- Small numbers need to be interpreted with caution because small absolute changes can produce large relative or proportionate changes in rates that may be misinterpreted by end users. Rates calculated from numerators smaller than 20 (e.g., death data) are not necessarily reliable and should be interpreted with caution.
- Data up until the most recent full available year were gathered and presented. As such, the year of data may differ among indicators.

A note about terminology [2]

This document uses the terms "opioid poisoning" and "opioid overdose" interchangeably. Opioid poisoning is the diagnostic term used by the World Health Organization's International Statistical Classification of Diseases and Related Health Problems that refers to the immediate adverse health effects resulting from the ingestion, inhalation, injection, or absorption of an opioid, excluding intoxication/inebriation. This term encompasses the outcomes of both prescribed and street drug use, as well as intentional and unintentional drug use [3]. The term "opioid overdose" may imply that people who use drugs choose to take an excessive dose that results in poisoning. Especially in the context of a contaminated drug supply in which people who use drugs are not choosing to be exposed to contaminants, "opioid poisoning" is a more encompassing term [4]. At the same time, the term overdose is more commonly used, and many of the references to which this document refers use the term overdose, so both terms are used here.

Background

What are opioids?

Opioids are psychoactive (mind-altering) substances that activate opioid receptors in the human body. They are intended to be used in medical settings to treat pain, but are sometimes used problematically[¥] by individuals, which can lead to the development of a substance use disorder, including an opioid use disorder. There are many different kinds of opioids. Endogenous opioids are naturally produced by the human body (e.g., endorphins), while exogenous opioids may be naturally produced by the opium poppy ("opiates" such as codeine and morphine), or synthetically produced in laboratories (e.g., fentanyl and methadone).

Opioids have widespread medical use. Examples of opioid medications include codeine, morphine, oxycodone, fentanyl, methadone, and buprenorphine. All of these medications can be used to treat pain. Methadone and buprenorphine are also used to treat opioid use disorder, while codeine is also used as a cough suppressant [5].

Opioids alter the experience and perception of pain and act as a central nervous system depressant. Short-term effects of opioids may include slowed breathing, constricted pupils, an overall feeling of well-being (euphoria) [6]. Opioids can also increase the risk of sleep apnea and mood changes, and decrease sexual interest and appetite [6].

Why do people use opioids?

Research shows that many people living in Canada will use some kind of psychoactive substance in their lifetime, with the most commonly used substances being alcohol, tobacco, prescription medications (such as opioids) and cannabis [7]. Some reasons why people use substances include to relax, have fun, experiment, or cope with stressors [8]. For opioids specifically, reasons range from treating physical pain and cough; to managing a substance use disorder; to experiencing euphoria; to coping with stress or psychological pain; to preventing withdrawal.

Additionally, experiencing traumatic events, such as adverse childhood experiences (ACEs)[§], has been linked to opioid use. For example, one study found that every increase of one ACE was associated with a 12–23% increase in the odds of opioid use [9]. Furthermore, because humans naturally produce endogenous opioids in response to positive social activities, like meaningful work and close relationships, individuals excluded from these activities may seek to acquire opioids elsewhere [10]. Social exclusion and traumatic events are strongly predictive of future drug use [10, 11].

¥ Problematic substance use refers to patterns of use that result in physical, psychological, economic, social or other problems.

§ Adverse childhood experiences (ACEs) are potentially traumatic events that occur in childhood (0-17 years). Examples include experiencing violence, abuse, or neglect.

Why are we seeing a rise in opioid-related poisonings and deaths?

Opioid-related poisonings and deaths have increased at an exponential rate over the past several years. And while many people who use substances do so without causing harm to their health or well-being, the increasing toxicity of opioids has intensified harms related to substance use more broadly as opioid toxicity is found in both opioid and non-opioid substances. Additionally, most opioid-related deaths are a result of an unintentional overdose. Consider, for example, from January to March 2022, there were 1,883 apparent opioid-related deaths recorded in Canada, and the vast majority (96%) were accidental [1]. At a systemic level, a variety of environmental factors are driving the alarming increase in poisonings and deaths. These include, but are not limited to, the toxicity of the drug supply in the unregulated market driven by non-pharmaceutical fentanyl analogs[μ], difficulty accessing a regulated safer supply of opioids and other drugs, and government policies.

At an individual level, risk factors increasing the likelihood of an unintentional overdose include, but are not limited to, experiencing poverty, a lack of housing or housing instability, psychiatric illness, concomitant use of alcohol or benzodiazepines, administration of drugs by injection, and previous overdose [12]. Other risk factors for overdose include periods of abstinence that result in reduced opioid tolerance, like withdrawal management or incarceration [13].

How can we prevent substance use-related harms?

Preventing substance use-related harms requires a multi-pronged approach that recognizes the complexity and evolving comprehension of the underlying factors that drive people to use substances, and addresses factors that increase the risk of harm for those who do use substances. Key strategies to prevent harms from substance use include [7]:

- Addressing the root causes of problematic substance use
- Better addressing needs of Canadians living in pain
- Reducing stigma around substance use
- Improving access to comprehensive, evidence-based treatment[π] services
- Exploring innovative approaches to harm reduction[∞]
- Applying a health lens to regulation and enforcement activities
- Supporting Indigenous Peoples
- Addressing the needs of equity-seeking populations
- Grounding substance use policy in evidence

μ Non-pharmaceutical fentanyl analogs are illegal, and often deadly, alterations of the medically prescribed fentanyl. The analogs have a similar chemical structure to fentanyl and mimic its pharmacological effects.

π Treatment refers to a continuum of services and interventions that provide support to individuals with substance use health issues who wish to make changes in their lives. These options can include withdrawal management, counselling, addiction medicine (including opioid agonist therapy and concurrent disorder treatment), bed-based treatment, pre- and post-treatment supports, and case management services.

∞ Harm reduction refers to non-judgmental, person-centered interventions, including programs and policies, which aim to reduce the adverse health, social, and economic consequences that may arise from the use of legal and illegal substances, and can include (but does not require) abstinence. Harm reduction efforts can include distribution of sterile drug equipment, access to naloxone, supervised consumption services, efforts toward decriminalization, and safer supply programs.

What Factors May Influence the Opioid Situation?

Thunder Bay District population

Thunder Bay District comprises a geographical area of 103,723 square kilometers and has a population of approximately 146,048 people [14]. Seventy-four percent of the population lives in the City of Thunder Bay, with the remaining 26% residing in smaller towns, municipalities, and First Nation communities throughout the region. Although Northern Ontario residents often report a higher quality of life and increased sense of belonging compared to the rest of Ontario, the rates of mental illness hospitalization and mental illness patient days are more than double of the rest of Ontario [15].

Historical and ongoing impacts of colonization

According to 2021 Census data, 16.2% of Thunder Bay District residents self-identified as Indigenous (First Nations, Métis, Inuit) [14]. However, it is known that the Census undercounts Indigenous Peoples living in cities by 2-5 times, and the Our Health Counts study estimates that the 2016 Census undercounted Indigenous Peoples living in the City of Thunder Bay by 3.1 times [16]. Accordingly, the true proportion of Thunder Bay District residents who self-identify as Indigenous is likely much higher than 16.2%. This is significant to the opioid situation in Thunder Bay District as data shows that, in Ontario, Indigenous Peoples have been disproportionately affected by the opioid crisis [17, 18]. Research also shows that historic, ongoing, and inter-generational impacts of colonialism, government policies and practices (such as residential schools), and systemic oppression (such as barriers to accessing health care services) create the conditions wherein Indigenous Peoples find themselves at a higher risk of experiencing health related harms, including opioid-related harms [17, 18].

As the *Final Report of the Truth and Reconciliation Commission of Canada* summarizes, "the central goals of Canada's Aboriginal policy were to eliminate Aboriginal governments; ignore Aboriginal rights; terminate the Treaties; and, through a process of assimilation, cause Aboriginal peoples to cease to exist as distinct legal, social, cultural, religious, and racial entities in Canada", resulting in ongoing trauma to, and social exclusion of, Indigenous Peoples [19]. This is important to understand as multiple studies have identified trauma and intergenerational trauma◊ as risk factors for substance use disorder and overdose among Indigenous populations [19, 20, 21, 22].

Historical and current policies are reflected in present-day racism experienced by Indigenous Peoples [19]. Almost all (97%) of Indigenous respondents to a United Way Thunder Bay Counts survey reported witnessing or experiencing racism and discrimination. Historical and current policies are also reflected in the continued dislocation from communities that individuals travelling to larger centres experience in order to access treatment, education, health services, specialized care, etc. Research in Northwestern Ontario has highlighted the importance of social relationships, Anishinaabe

◊ Inter-generational trauma is defined as the cumulative emotional and psychological harm experienced throughout an individual's lifespan and through subsequent generations [26].

teachings, and community strength in maintaining wellness [23]. The First Nations Mental Wellness Continuum Framework asserts the foundational importance of culture to individual and community wellness [24].

Health services and supports

In Thunder Bay District, most health services and supports are mainly located in the city of Thunder Bay, which presents significant barriers for those who must travel to access mental health and substance use health services. Often, residents of rural areas and remote Indigenous communities are required to travel to gain access to healthcare providers. In some instances, when individuals are discharged from services in the city of Thunder Bay, they have no method of returning home to their families and support networks [15]. Further, Indigenous populations in Thunder Bay have very limited access to addiction services that are culturally appropriate and safe, creating barriers to effective treatment and recovery.

There is a wide range of mental health and substance use health services available in the city. However, despite providers being innovative, entering into partnership agreements, and eliminating duplication of services to make the best use of all available health system dollars invested in our region, there are still significant gaps in the system resulting in an inability to effectively meet the needs of the population. For instance, the delivery of mental health and addiction services in rural and northern communities significantly differs from urban communities, and are often only accessible for a limited time or through telemedicine initiatives [15].

Impact of the COVID-19 pandemic

Substance use harms are closely linked to structural inequities, the policy environment, and individual factors such as mental health status and experience of stress and trauma. The COVID-19 pandemic brought significant changes on all these fronts; available data confirms substantial increases in opioid use and opioid-related deaths since the World Health Organization's declaration of the

COVID-19 pandemic in March 2020 [1, 26, 27, 28].

Additionally, in Ontario, the increase of opioid-related harms during the COVID-19 pandemic has disproportionately impacted rural and Northern communities; people experiencing poverty or homelessness; people experiencing incarceration; Black, Indigenous, and People of Colour (BIPOC) communities; and persons with substance use disorders [29].

Already marginalized and underserved, individuals with a substance use disorder experienced additional stressors during the pandemic. Evidence suggests that the scaling back or loss of pre-pandemic support systems including social supports, treatment and harm reduction services, coupled with a more unpredictable and unregulated drug supply and increased stress, put individuals with substance use disorders at even greater risk of unplanned withdrawal, unintentional overdoses, and death [30].

In March 2020, shortly after the state of emergency was declared in Ontario, updated Opioid Agonist Treatment (OAT) Guidance was developed and released. The goal was to facilitate continuity of care, while adhering to public health guidance for physical distancing during the pandemic [31]. In particular, the guidance promoted expanding virtual care, reducing the frequency of clinic visits and urine screening, and

expanding unsupervised doses of OAT. A study evaluating the changes to the COVID-19 OAT guidelines found no significant increase in harms with their implementation [31]. This initial research demonstrates the need to actively explore post-pandemic clinical guidance to reduce barriers to care.

Given the likely impact that the COVID-19 pandemic had on the unregulated drug supply, barriers to accessing harm reduction and treatment services, and changes in drug use behaviours (such as using drugs alone), **Appendices A and B** provide a comparison of the circumstances surrounding paramedic-attended suspected opioid overdoses and accidental opioid-related deaths prior to, and during the COVID-19 pandemic. These analyses may inform public health interventions and policies during current and anticipated future waves of the COVID-19 pandemic, or other future pandemics, in an effort to decrease opioid overdoses in Thunder Bay District.

Changing opioid landscape

The opioid landscape has seen various changes over the past several years. For instance, changes to policy, the availability of prescription medications used to treat pain or opioid use disorder, the illegal drug supply, known and unknown polysubstance use, varying trends for the ways in which individuals use substances, and more information on disproportionately impacted populations. Notably, some of these changes have been more pronounced since the start of the COVID-19 pandemic.

Research suggests that pandemic related social changes, physical distancing requirements, and businesses and border closures have affected the illegal drug supply in Canada by causing disruptions in supply chains, drug shipping routes, and overseas drug production facilities. This has resulted in fewer drugs entering the country, and in turn, led to drug shortages and increased domestic production. The amount and quality of drugs available are thus impacted, and the risks and health harms for people who use drugs are potentially increased [32].

Throughout the pandemic, numerous research reports and evidence-informed bulletins have further described some of these changes. For example, the Canadian Community Epidemiology Network on Drug Use (CCENDU) released several bulletins and alerts describing an increasingly toxic and unpredictable drug supply [33]. Concerning substances, such as xylazines[£], nitazenes[€], benzodiazepines, and various analogs have shown up in Health Canada Drug Analysis Service data more consistently since 2019 [32, 34, 35, 36]. The presence of these substances increases the risk of drug poisonings as people who use drugs are usually not expecting them in their supply. In Ontario, a joint report found that fentanyl and stimulants were the most common direct contributors to opioid related deaths during the first 15 weeks of the pandemic, demonstrating the need to further explore polysubstance use [32].

Further to the changes in the composition and toxicity of substances, there have been marked changes in the ways in which people are consuming substances; with a shift toward inhalation/smoking of drugs. The most common type of drug consumption materials present at opioid deaths across Ontario are inhalation and smoking materials; however, signs of injection remain common. Notably, the presence of both inhalation/smoking materials and injection materials is higher in the Thunder Bay District Health Unit area than the provincial average. This is an important consideration as both methods pose different risks amongst people who use drugs, thus requiring tailored interventions to help

£ Xylazine is a non-opioid pain reliever developed as a sedative and muscle relaxant for animals.

€ Nitazenes are extremely potent synthetic opioids, usually found unexpectedly in substances thought to be other opioids, such as fentanyl.

reduce risks and harms [37].

More recent research in Ontario has identified that, of those employed at the time of an opioid toxicity death, one-third worked in the construction industry. Upon further analysis, researchers found that men working in the construction industry are disproportionately impacted by opioid overdoses, and less of these deaths involved prescription opioids, and instead, a higher proportion involved fentanyl, cocaine and alcohol, which differed from toxicology of individuals with no history of employment in the construction industry [38]. To address this disproportionality, the Ontario government introduced legislation in March 2022 that required high-risk workplaces to have naloxone onsite. The legislation passed and it was later announced that, as of June 1, 2023, the Occupational Health and Safety Act (OHSA) will require some workplaces to have nasal spray naloxone onsite if certain conditions are met.

Gangs and guns

Over the past several years, the City of Thunder Bay has seen a large proliferation of street gangs, and thus drug trafficking, into the community from larger urban areas. As such, incidents of gang-related crime and drug trafficking activity are on the rise. There has also been an associated notable increase in the presence and use of illegal firearms to commit serious offences, as evidenced by the seizure of 75 firearms related to drug trafficking from 2019 – 2021 [39, 40, 41].

In October 2021, a CBC News article noted that the Thunder Bay Police Service was concerned over the safety of the public and its own officers amid more incidents involving gangs and guns [42]. The same article also noted that between January and October 2021, police executed more than 100 drug-related search warrants, arresting 221 people, 138 of which were not from Thunder Bay [42]. Additionally, over the same time period, there were 830 charges laid in relation to drug investigations and 38 home takeover investigations [42]. Police also seized large amounts of various illicit drugs, including: 7.8 kg of cocaine, 3.3 kilograms of crack cocaine, 535 grams of crystal meth, and 1.3 kg of fentanyl [42].

Changing opioid policies

Policy can impact the health of populations. The evolving drug policy ecosystem has contributed to the opioid crisis. In many ways, our past is our present. People who use opioids and other substances continue to be impacted by historical and current prohibitionist policies and underfunding, while advocates continue to push for policy changes that are grounded in evidence and a concern for human rights [43]. This advocacy has made a difference. In recent years, Canada has seen the introduction of critical harm reduction programs such as supervised consumption services and safer supply programs, and there is a growing movement toward decriminalization. This timeline of the policy landscape in Canada offers a backdrop to understanding and addressing the opioid crisis in our communities.

The Evolving Drug Policy Landscape: A Timeline

1987

Canada's National Drug Strategy

First national 5-year strategy [44,60].

1997

Controlled Drugs and Substance Act

The Act establishes eight schedules of controlled substances and repealed the Narcotic Control Act [45].

1998

VANDU founded (BC)

User-led advocacy group pushes for supervised injection sites and heroin-assisted treatment [48].

1999

Drug Strategy Renewal

National Drug Strategy takes on the "Four Pillars" approach to drugs, which includes: Education and Prevention; Treatment and Rehabilitation; Harm Reduction; Enforcement and Control [45,60].

2001

A Four Pillars approach

The "Four Pillars" is adopted as official policy by the City of Vancouver and will inform drug policy approaches across Canada [44].

2003

Insite opens

Despite safe injection sites not being legalized, Insite is permitted by the former Liberal government through an exemption [45,47].

2005

NAOMI study begins

First North American heroin-assisted treatment (HAT) trial (NAOMI) begins in Vancouver and Montreal; results published in 2009 demonstrate benefits of diacetylmorphine to clients; a permanent HAT program will not open until 2017 [44,64].

National Framework for Action – CCSA

Report released by the Canadian Centre for Substance Use and Addiction (CCSA), which was developed collaboratively [45].

2007

National Anti-drug Strategy

The Conservative government removes harm reduction as a key pillar in the new National Anti-drug Strategy. Begins efforts to shut down Insite [44-47].

2010

Rising deaths from opioids

Unregulated fentanyl and carfentanil contaminates the drug supply and leads to a long term epidemic and rising deaths from drug poisoning and overdose [44].

Supreme Court decision on Insite

The Supreme Court decides that closing Insite would violate the Charter of Rights and Freedoms. Later the Conservative government introduces legislation making it difficult for other safe injection sites to open [44,47].

2011

SALOME study begins

Follow-up study to NAOMI begins; results published in 2016 demonstrate that hydromorphone is an effective treatment for long-term street opioid use [44,65].

2012

Removal of oxycodone from Drug Formulary

In response to escalating harms from overprescribing, the drug is removed from Canada's legal market. Counterfeit versions of the pill appear made with fentanyl, a stronger opioid [46, 47].

Narcotics Monitoring System implemented

The system is implemented as a surveillance tool to monitor physicians' prescribing practices [46].

Take Home Naloxone service created (BC)

BC's initiates THN and leads the way for many other provinces. Training, harm reduction, and naloxone materials are used across Canada [49].

2013

Respect for Communities Act

The Conservative government passes a new law generating more rules for safe injection sites to operate [47].

Ontario Naloxone Program

Injectable naloxone kits and training supplies distributed to needle exchange programs housed at public health units, community-based organizations and ministry-funded Hepatitis C teams [66].

First Do No Harm Report

Report published by the CCSA in response to the growing opioid problem in Canada. The report presents 58 recommendations [45].

2014

Fentanyl leading cause of opioid deaths (ON)

Fentanyl is the leading cause of opioid deaths for the first time in the province [47].

Canada allows Safe Injection Sites

Canada begins to add legislative and regulatory changes to respond to the opioid epidemic, allowing safe injection sites to operate [47].

2016

Paramedics able to administer naloxone (ON)

All paramedics in Ontario are equipped and trained to administer naloxone [59,61].

Naloxone expanded to pharmacies (ON)

Ontarians with a valid health card can access a naloxone kit from participating pharmacies, along with training [55,56].

2017

Public Health Emergency declared (BC)

Public Health Emergency declared by BC's provincial health officer after a spike in overdoses and deaths [47].

Good Samaritan Drug Overdose Act

This grants legal protection from those seeking help during an overdose emergency [47, 52].

Naloxone distribution expanded through PHUs (ON)

Ontario Ministry of Health launches public health unit-led distribution of naloxone to eligible agencies [66].

Public Health Emergency declared (ON)

Alberta (May) declares public health crisis and Ontario (Dec) declares a public health emergency due to increasing opioid deaths [47,62-63,67].

Crosstown Clinic offers HAT

Crosstown offers heroin-assisted treatment on an ongoing basis [44].

SOS Program opens

The London Intercommunity Health Centre opens the first formal Safer Opioid Supply (SOS) program in Canada [57].

2019

Overdose prevention services (OPS) offered in a correctional setting

Correction Service of Canada begins offering OPS at Drumheller, AB [53].

2020

COVID-19 Pandemic State of Emergency (ON)

State of Emergency declared in March 2020, after which there is a 79% increase in the number of opioid-related deaths across the province [51].

COVID-19 OAT Guidance released (ON)

Guidance released by Centre for Addiction and Mental Health and the Ontario Medical Association to guide opioid agonist treatment (OAT) during COVID-19 [69].

2021

Requests for decriminalization (BC)

BC and the City of Vancouver ask Health Canada for exemptions to enable decriminalization of small amounts of illicit drugs for personal use [50].

Compassion Clubs (BC)

Vancouver City Council unanimously passes a motion to back a push for compassion clubs to supply safer drugs in the city in the form of a peer-led facility selling pharmaceutical-grade drugs [50].

Chiefs of Ontario call for urgent action on opioids

Chiefs of Ontario release two reports highlighting the increase in opioid-related poisoning during the COVID-19 pandemic and the urgent need to address the opioid crisis affecting First Nations in Ontario [58].

2022

Progress on decriminalization

BC is the first province to receive a 3-year exemption beginning Jan 2023 to decriminalize possession of some illegal drugs for personal use, including heroin, morphine and fentanyl. The City of Toronto requests an exemption [54].

2023

High risk workplaces required to provide naloxone (ON)

Starting June 1, 2023, employers must provide naloxone in the workplace if certain circumstances described in the Occupational Health and Safety Act apply [68].

What is the Scope of Opioid Use in Thunder Bay District?

Data contained in this section:

- Prescription opioid use
  - Opioids for pain (2013/14-2021)
  - Opioids for opioid agonist therapy (2014-2021)
- Non-medical use of opioids
  - TRACKS Study (2018-19)
  - Community Urinalysis and Self-Report Project (CUSP) (2019-21)

Prescription Opioid Use

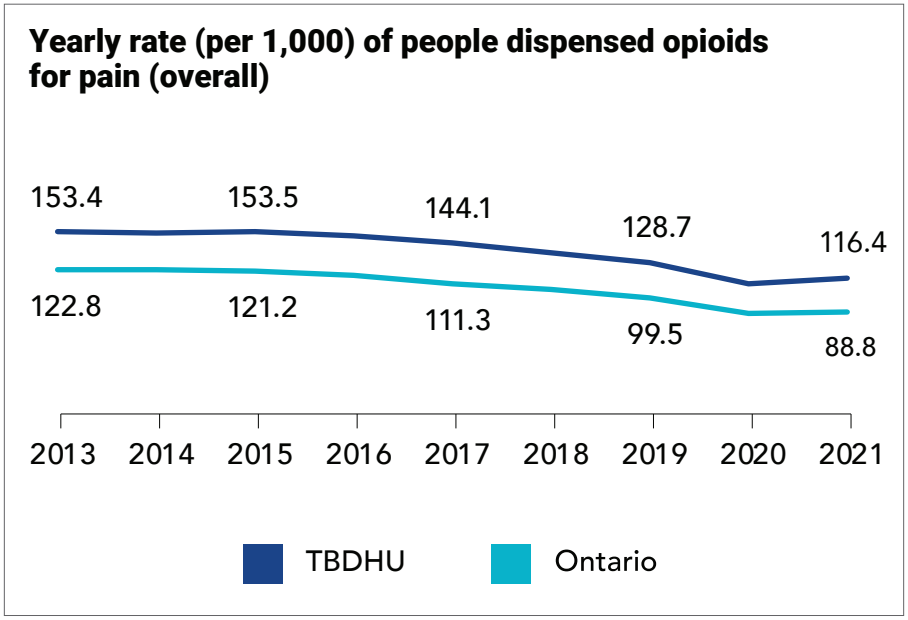
Note: The data presented in this section are provided by the Ontario Drug Policy Research Network [70].

Prescription opioids refer to those prescribed with an indication to treat pain, or those prescribed opioids to treat opioid use disorder (i.e., opioid agonist therapy (OAT)).

It is important to note that "since 2018, the landscape of the overdose crisis in Ontario has shifted, with an increasing recognition that the majority of opioid-related harms have been associated with the unregulated opioid supply, which is predominantly made up of fentanyl [27]." Therefore, when considering the importance of these data and an effective response to the opioid situation in Thunder Bay District, it may be most relevant to focus on opioids used for the treatment of opioid use disorder, as well as complications arising from opioid-related harms.

Prescription Opioids for Pain

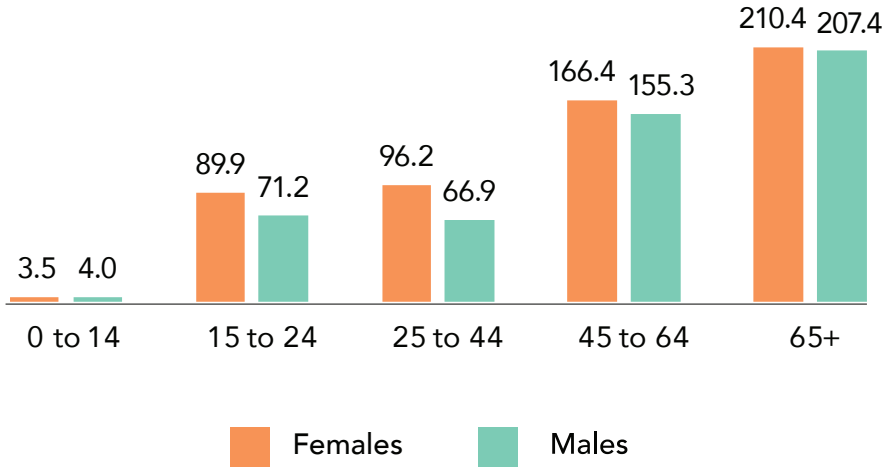
The following data represent the rate of individuals with a valid health card who were dispensed an opioid prescription for pain in Ontario. This includes codeine, fentanyl, morphine, hydromorphone, oxycodone, Tramadol, etc.



Since 2013, there has been an overall **decrease** in the rate of people dispensed an opioid for pain in **Thunder Bay District**. The same trend is reflected in **Ontario**.

Overall, **Thunder Bay District** has **higher** rates of people dispensed opioids for pain, compared to **Ontario**.

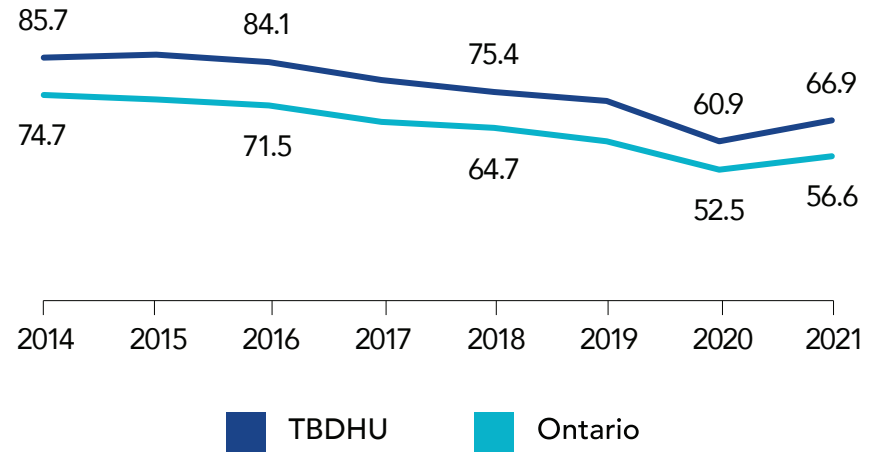
2021 rate (per 1,000) of individuals dispensed opioids for pain (overall), by age and sex



In 2021 in Thunder Bay District, people **aged 65+** had the highest rate of opioids dispensed for pain.

Females had higher rates of opioids dispensed for pain than males (with the exception of the 0 to 14 age group).

Yearly rate (per 1,000) of individuals newly* dispensed opioids for pain

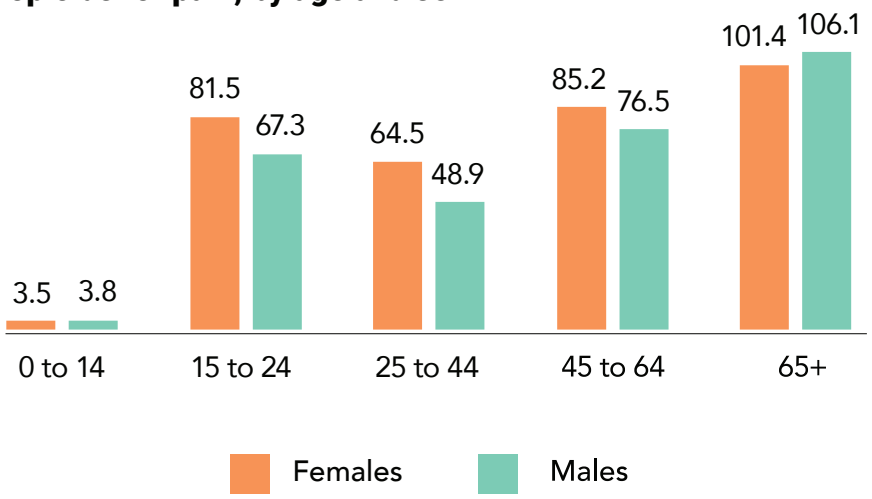


Since 2014, there has been an overall **decrease** in the rate of people newly dispensed an opioid for pain in **Thunder Bay District**. The same trend is reflected in **Ontario**.

Overall, **Thunder Bay District** has higher rates of people newly dispensed opioids for pain, compared to **Ontario**.

* Individuals newly dispensed an opioid for pain were defined as those who had not been dispensed a prescription opioid with an indication to treat pain, cough, or for OAT in the 1 year prior to their first prescription opioid claim for pain in a given year.

2021 rate (per 1,000) of individuals newly* dispensed opioids for pain, by age and sex



In 2021 in Thunder Bay District, people **aged 65+** had the highest rate of people newly dispensed opioids for pain.

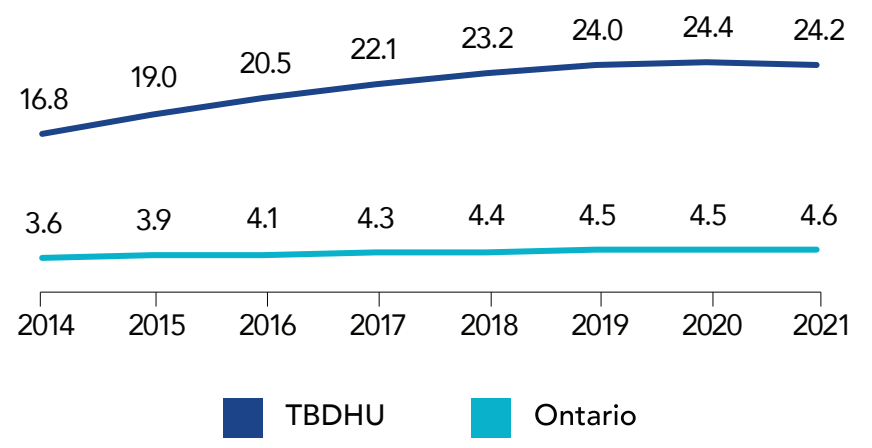
In most age groups, **females** had higher rates of newly dispensed opioids for pain than males.

* Individuals newly dispensed an opioid for pain were defined as those who had not been dispensed a prescription opioid with an indication to treat pain, cough, or for OAT in the 1 year prior to their first prescription opioid claim for pain in a given year.

Prescription Opioids for Opioid Agonist Therapy

The following data represent the rate of individuals with a valid health card who were dispensed a prescription opioid with an indication for OAT. As noted in the 2018 report [2], the term "opioid agonist" refers to any chemical that activates the opioid receptor in humans in order to prevent withdrawal, without resulting in euphoria or a high, for individuals with substance use disorders. OAT includes prescriptions of methadone, buprenorphine/naloxone (suboxone), and slow-release oral morphine. Suboxone is the preferred first-line opioid agonist for the treatment of substance use disorder because of its superior safety profile compared to methadone [71].

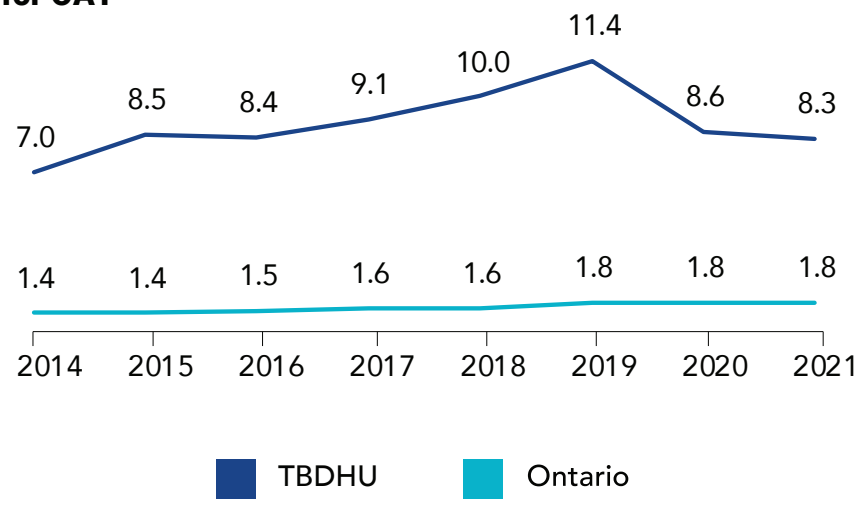
Yearly rate (per 1,000) people dispensed Opioid Agonist Therapy (overall)



Since 2014, there has been an overall **increase** in the rate of people dispensed an opioid for OAT in **Thunder Bay District**, though rates have plateaued since 2019.

Overall, **Thunder Bay District** has much **higher**, compared to **Ontario**.

Yearly rate (per 1,000) people newly* dispensed opioid for OAT

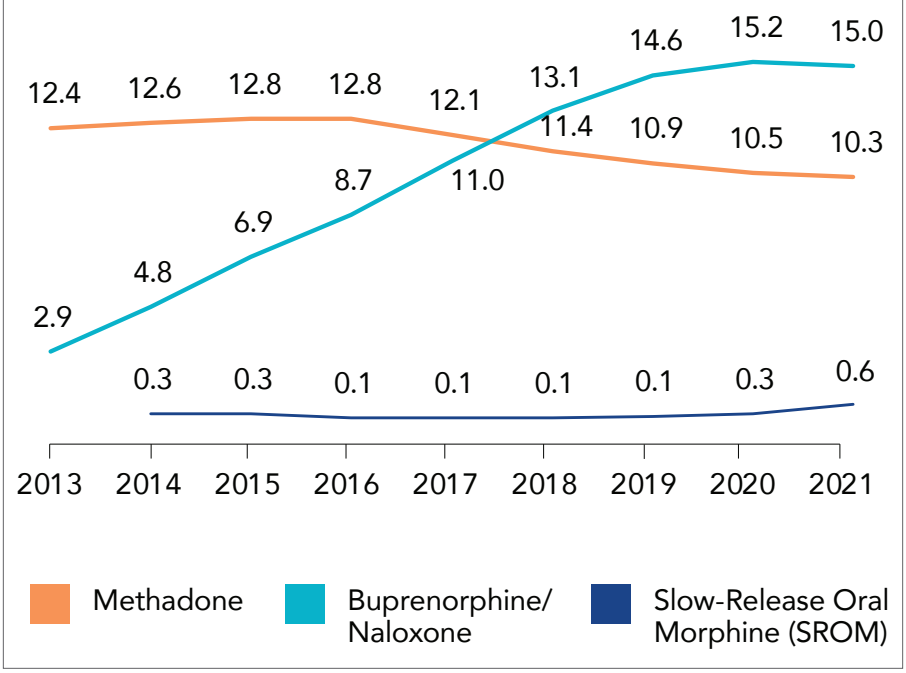


Between 2017-19, there was an increase in the rate of people newly dispensed an opioid for OAT in **Thunder Bay District**. In more recent years (2020-21), the rate has **decreased**.

Overall, **Thunder Bay District** has much **higher** rates of people newly dispensed opioids for OAT, compared to **Ontario**.

* Individuals newly dispensed an opioid for OAT were defined as those who had not been dispensed a prescription opioid with an indication for OAT in a predefined period prior to their first prescription in a given month or year.

Yearly rate (per 1,000) people dispensed an opioid for OAT in TBDHU, by treatment type

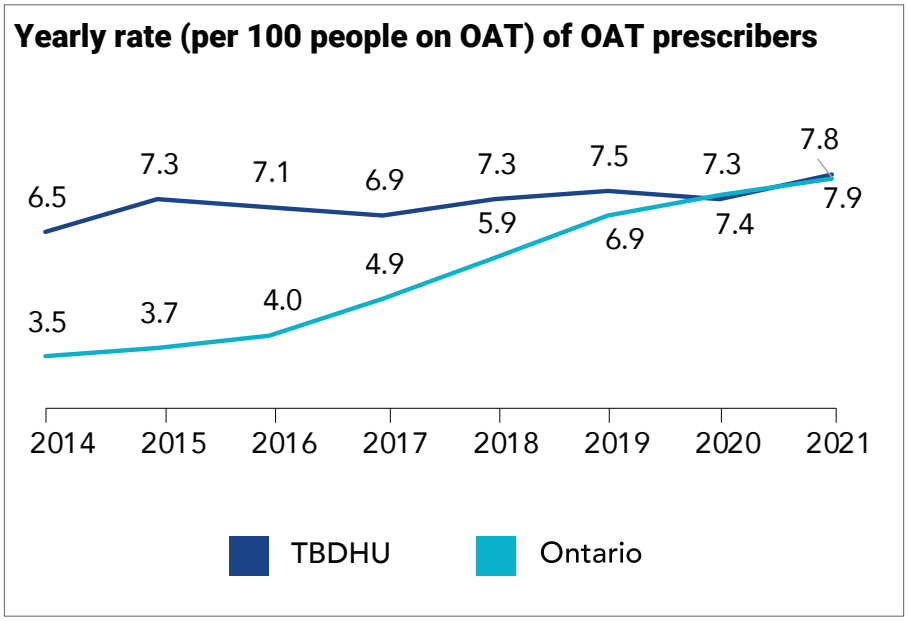


In Thunder Bay District, the rate of people dispensed **methadone** for OAT has **decreased** over time, while the rate of people dispensed **suboxone** for OAT has **increased**.

Since 2018, the rate of people in Thunder Bay District dispensed **suboxone** has been **higher** than the rate of individuals dispensed **methadone** for OAT.

In contrast, in Ontario, the rate of individuals dispensed methadone for OAT remains higher than for suboxone.

The following data represent the total number of unique prescribers (i.e., physicians and nurse practitioners) who wrote prescriptions for methadone, buprenorphine/naloxone (suboxone), and slow-release oral morphine.



There has been an **increase** in the rate of OAT prescribers over time, both in the **Thunder Bay District** and **Ontario**.

The **Thunder Bay District** has historically had higher rates of OAT prescribers compared to **Ontario**, but rates were similar in 2020-2021.

Non-Medical Use of Opioids

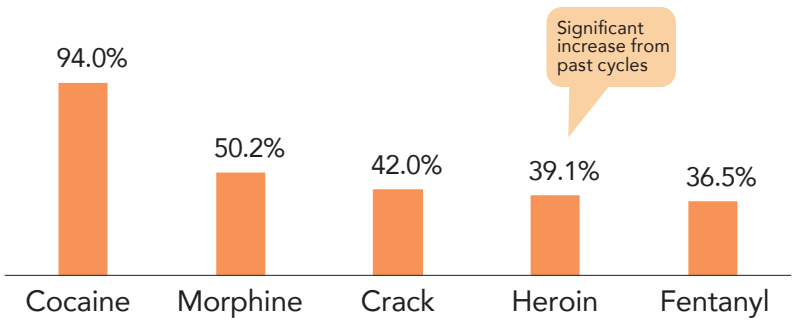
"Non-medical use of opioids" refers to the use of both non-prescription opioids (e.g., heroin, carfentanil) and prescription opioids obtained outside of a therapeutic relationship with a healthcare provider (e.g., purchased on the street). There is limited data on non-medical opioid use in Thunder Bay District. However, two research studies provide valuable information on this matter.

TRACKS Study

Note: The data presented in this section are provided by the Ontario TRACKS study [72].

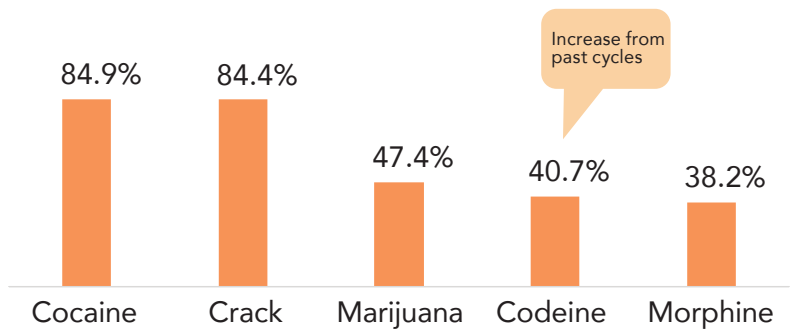
One source of this information is the TRACKS study - an enhanced surveillance system to track HIV and hepatitis C-associated risk behaviours in people who inject drugs. Thunder Bay joined the TRACKS study for Phases 2 (2006-7), 3 (2010-12) and 4 (2018-19). Since this data was last collected in 2019, it may not necessarily reflect current patterns in substance use behaviours. Also, responses in the following graphs were non-mutually exclusive, so total percentages exceed 100%.

Top reported drugs injected in the previous six months (N=200)



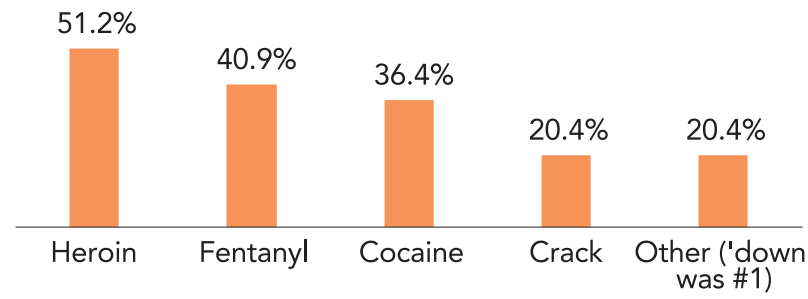
Cocaine was the most commonly reported drug injected among participants, followed by morphine and crack.

Top reported drugs not injected in the previous six months (N=200)



Cocaine was also the most commonly reported drug used (not injected) among participants, followed by crack and marijuana.

Top reported drugs involved in overdose in the previous six months (N=200)



22.1% of participants reported experiencing an overdose in the past 6 months.

The most common substance reported in these overdoses was heroin, followed by fentanyl.

'Down' is a street-name for drugs that often refers to heroin, but may also be a generic opioid.

Community Urinalysis and Self-Report Project (CUSP)

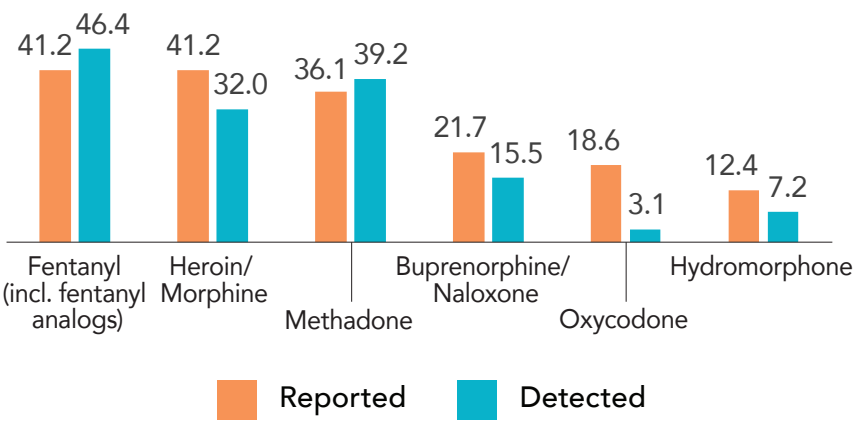
Note: The data presented in this section are provided by the Canadian Centre on Substance Use and Addiction [73].

Through the Community Urinalysis and Self-Report Project (CUSP), data were collected from people who use drugs (PWUD) about their substance use (via a self-report survey) and detected drug contents (urinalysis) in seven regions across Canada. In Thunder Bay, data were collected April to June 2021 from 97 PWUD at harm reduction organizations in the south-core. The study collected and reported on substances beyond opioids, including stimulants and benzodiazepines; however, due to the nature of this report, only the data related to opioid use is presented.

Opioids were detected in the urine samples of 54% of participants (this does not include those on opioid antagonist therapy (OAT)).

Of participants with opioids in their urine, 85% had fentanyl; 47% had morphine; 26% had heroin; 11% had hydromorphone; and 8% had oxycodone.

Overall percentage of past three-day reported substance use and substance detection among participants



In Thunder Bay, fentanyl was the most reported (41.2%) and detected (46.4%) opioid used in the past three days.

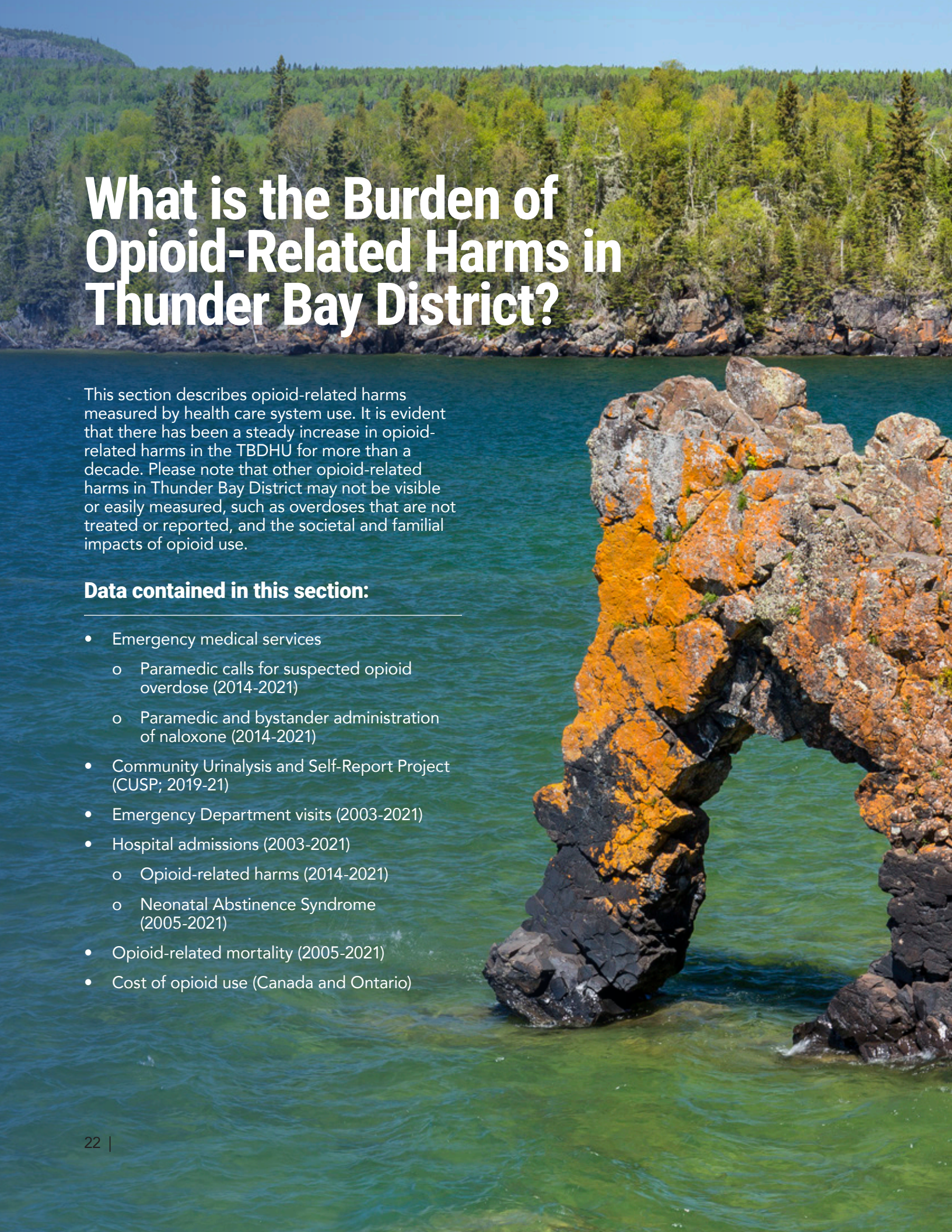
Polysubstance Use

In Thunder Bay, 72.2% of participants reported using at least one opioid and one stimulant in the past three days. Also, 26.8% of participants reported using at least one opioid and one benzodiazepine in the past three days. Of note:

- 88.6% of those with opioids in their urine also had benzodiazepines in their urine;
  - however, of those participants with both opioids and benzodiazepines, 68% were unaware of the benzodiazepines

The results of the CUSP study highlight that the contents of drugs from the unregulated supply are unpredictable, which increases the risk of harm to PWUD from this supply.

What is the Burden of Opioid-Related Harms in Thunder Bay District?



This section describes opioid-related harms measured by health care system use. It is evident that there has been a steady increase in opioid-related harms in the TBDHU for more than a decade. Please note that other opioid-related harms in Thunder Bay District may not be visible or easily measured, such as overdoses that are not treated or reported, and the societal and familial impacts of opioid use.

Data contained in this section:

- Emergency medical services
  - Paramedic calls for suspected opioid overdose (2014-2021)
  - Paramedic and bystander administration of naloxone (2014-2021)
- Community Urinalysis and Self-Report Project (CUSP; 2019-21)
- Emergency Department visits (2003-2021)
- Hospital admissions (2003-2021)
  - Opioid-related harms (2014-2021)
  - Neonatal Abstinence Syndrome (2005-2021)
- Opioid-related mortality (2005-2021)
- Cost of opioid use (Canada and Ontario)

Emergency Services

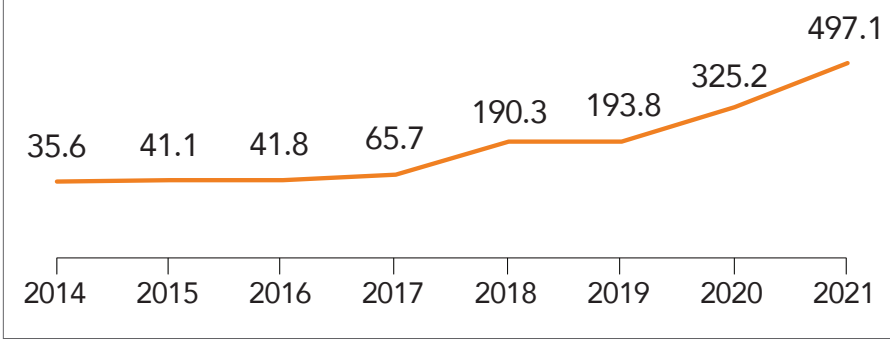
Emergency medical services in Thunder Bay District are provided by Superior North Emergency Medical Services (SNEMS). As incident scenes are often chaotic, and patients and bystanders can be vague or uncertain with patient history, these results must be interpreted with caution. These data only include instances where 911 was called in response to a suspected overdose, so underrepresent the true number of opioid overdoses in Thunder Bay District. Thunder Bay Fire Rescue (TBFR) also responds to suspected opioid overdoses where 911 is called. Due to current emergency call infrastructure, it is difficult to track the exact number of suspected opioid overdoses that TBFR responds to; however, between 2017-2021, TBFR was requested on scene at approximately 65-70% of suspected overdoses.

Paramedic Calls for Suspected Opioid Overdose

Note: The data presented in this section are provided by Superior North Emergency Medical Services [74].

In 2021, SNEMS attended to 726 (497.1 per 100,000) suspected overdoses where there was a high likelihood of opioid involvement vs. 475 (325.2 per 100,000) in 2020 - this represents a 52.8% increase between 2020 and 2021. Over the past 5 years (2017 to 2021), there was a 656.2% increase in the absolute number of SNEMS-attended suspected opioid overdoses.

Yearly rate (per 100,000) of paramedic-attended suspected opioid overdoses

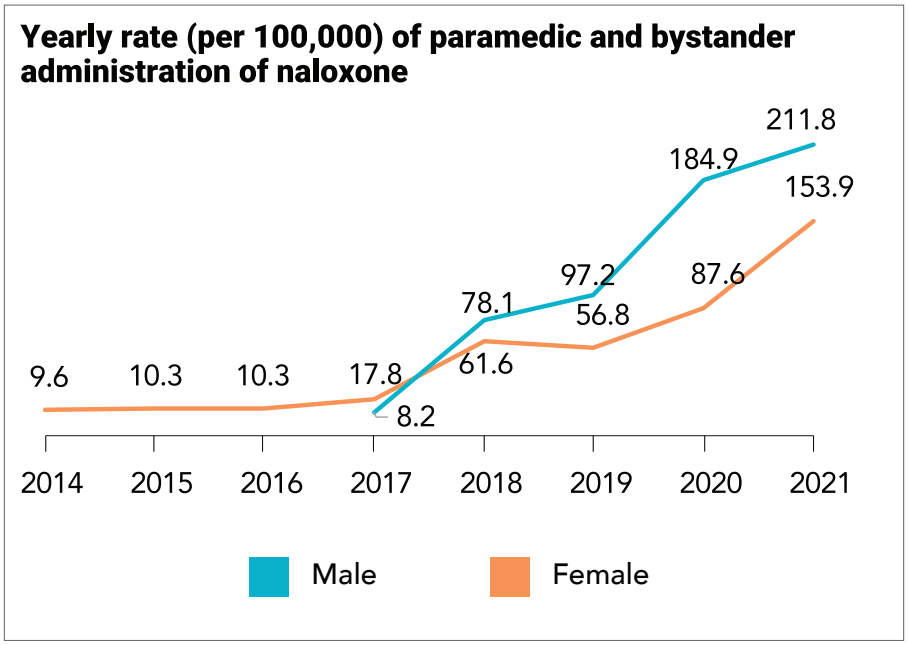


There has been a steady **increase** in the crude rate of SNEMS-attended suspected opioid overdoses in the Thunder Bay District over time.

For a more detailed analysis of the SNEMS-attended suspected opioid overdoses in Thunder Bay District prior to, and during the COVID-19 pandemic, please refer to *Appendix A: Trends in Paramedic-Attended Suspected Opioid Overdoses in Thunder Bay District prior to, and during the COVID-19 Pandemic.*

Paramedic and Bystander Administration of Naloxone

After December 23, 2016, paramedics could administer naloxone without contacting a base hospital physician. Administration of naloxone prior to paramedic arrival (i.e., by a bystander, Thunder Bay Fire and Rescue, and/or Thunder Bay Police Services) is only recorded if a paramedic recognizes naloxone administration, or a community member reports administering naloxone. So, the true frequency with which naloxone is administered in our communities is unknown. Also, there are times when naloxone is administered in the community when paramedics are not called.



There has been an **increase** in the crude rate of SNEMS-administered and bystander-administered naloxone in Thunder Bay District. These increases may be associated with increased incidence of opioid overdoses.

In 2021, paramedics administered 226 doses of naloxone for suspected opioid overdose (153.9 per 100,000), and bystanders reported administering 311 doses of naloxone prior to paramedic arrival (211.8 per 100,000).

Community Urinalysis and Self-Report Project (CUSP)

Note: The data presented in this section are provided by the Canadian Centre on Substance Use and Addiction [73].

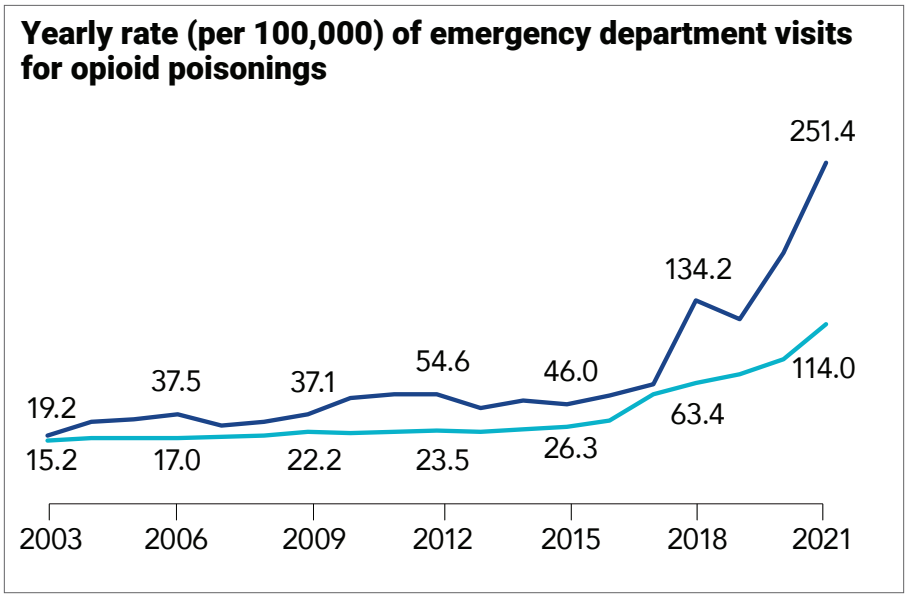
As noted above, the CUSP study collected data from 97 PWUD from Thunder Bay in 2021 about reported substance use (via a self-report survey) and detected drug contents (via urinalysis). Among participants:

- 30.6% reported experiencing an overdose in the past 6 months
  - 24.0% experienced an opioid overdose
- 44.0% reported witnessing someone else having an opioid overdose in the past six months
- 58.0% possessed naloxone; 25.0% did not possess naloxone but wish to possess it.

Emergency Department (ED) Visits

Note: The data presented in this section are provided by Public Health Ontario [28].

In 2021, there were 389 (251.4 per 100,000) emergency department visits for opioid poisonings in Thunder Bay District vs. 270 (174.6 per 100,000) in 2020 – this represents a 44.1% increase between 2020 and 2021. Over the past 5 years, there was a 305.2% increase in the absolute number of emergency department visits for opioid poisonings in Thunder Bay District (i.e., from 96 in 2017 to 389 in 2021).



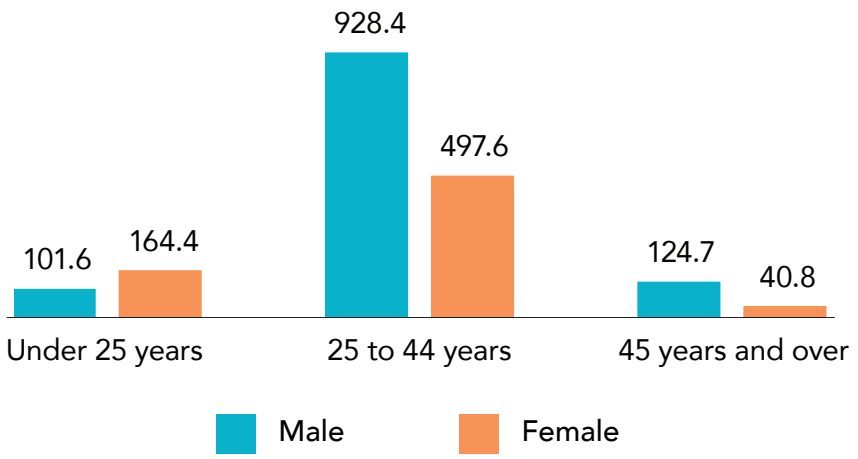
There has been an **increase** in the crude rate of emergency department visits for opioid poisonings in **Thunder Bay District** over time.

Thunder Bay District has consistently experienced higher rates of ED visits for opioids poisonings than **Ontario**.

Please note that a new flagging system for opioid-related emergency department visits was implemented in 2018. It is unclear how much of the increase in opioid-related emergency department visits is due to the implementation of the new system.

A further breakdown of emergency department visits for opioid poisonings in Thunder Bay District in 2021 is provided below.

2021 rates (per 100,000) of opoid-related ED visits by age group and sex

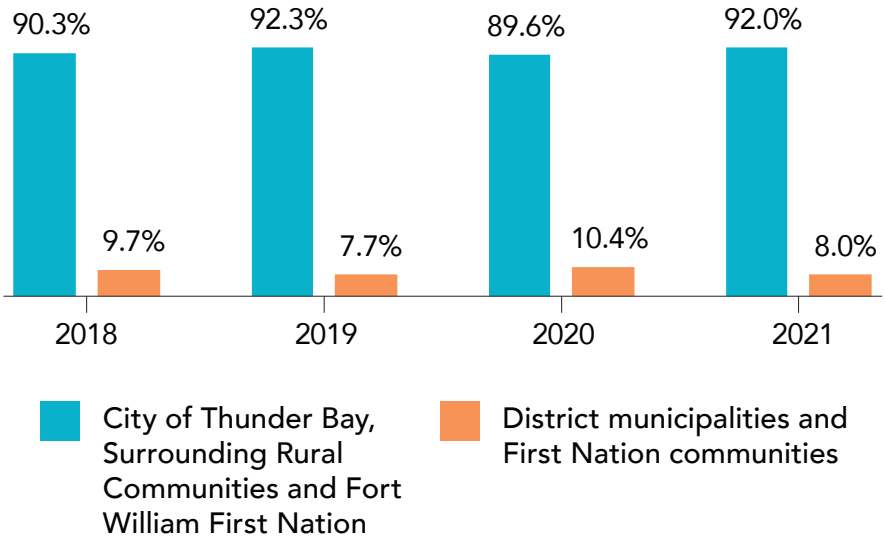


In 2021, people **aged 25 to 44 years** had the highest rates of opioid-related ED visits in Thunder Bay District.

Among those under 25 years, **females** had a higher rate of opioid-related ED visits compared to **males**.

Among the older age groups (25 to 44 years and 45 years and over), **males** had higher rates of opioid-related ED visits compared to **females**.

Proportion of opioid-related ED visits by patient's address [75]



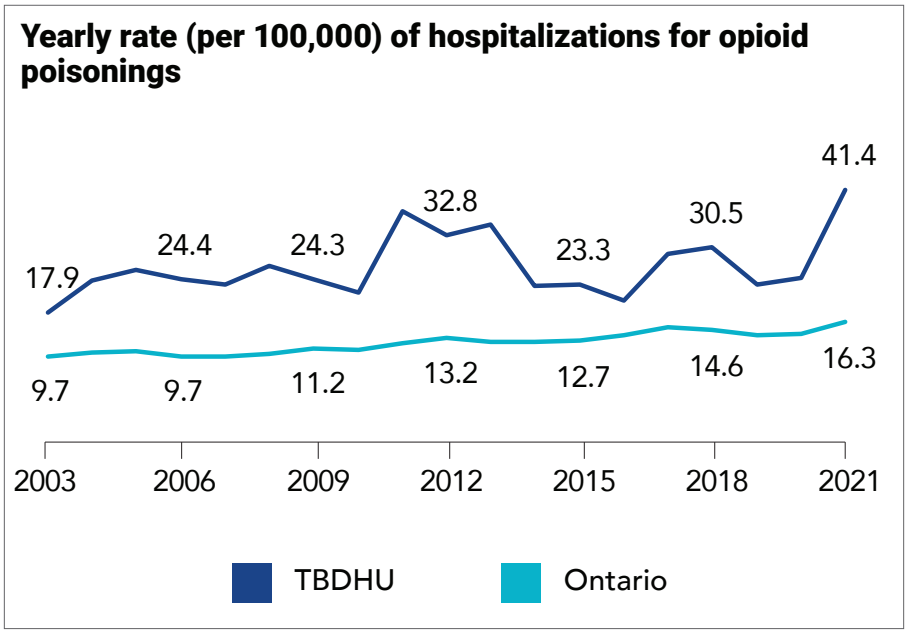
Over the past five years, the majority of opioid-related ED visits in Thunder Bay District were among patients who resided in the **City of Thunder Bay** and **surrounding areas**.

Note: Due to the risk of presenting identifying information, other opioid-related harms by patient's address are not presented. However, the majority of other opioid-related harms (e.g., hospitalizations, deaths) occurred among those who resided in the City of Thunder Bay and surrounding areas.

Hospitalizations

Note: The data presented in this section are provided by Public Health Ontario [28].

In 2021, there were 64 (41.4per 100,000) hospitalizations for opioid poisonings in Thunder Bay District vs. 38 (24.6 per 100,000) in 2020 – this represents a 68.4% increase between 2020 and 2021. Over the past 5 years, there was a 42.2% increase in the absolute number of hospitalizations for opioid poisonings in Thunder Bay District (i.e., from 45 in 2017 to 64 in 2021).



There has been an overall **increase** in the crude rate hospitalizations for opioid poisonings in **Thunder Bay District** over time.

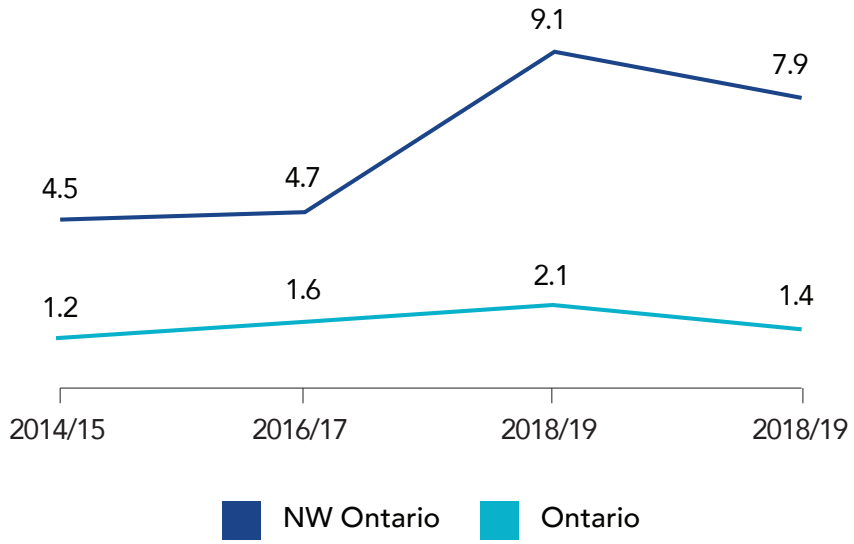
Thunder Bay District has consistently experienced **higher** rates of ED visits for opioids poisonings than **Ontario**.

Complications Arising from Opioid-Related Harms

Note: The data presented in this section are provided by the Ontario Drug Policy Research Network [70].

Complications can arise from opioid-related harms. These data describe the rate of hospitalizations for opioid-related infective endocarditis and other opioid-related serious infections (including spinal infections, other bone infections, and skin or soft tissue infections (excluding endocarditis)). This data is not available for Thunder Bay District, specifically, but is presented for Northwestern Ontario (i.e., the Ontario Health North West region) as a whole.

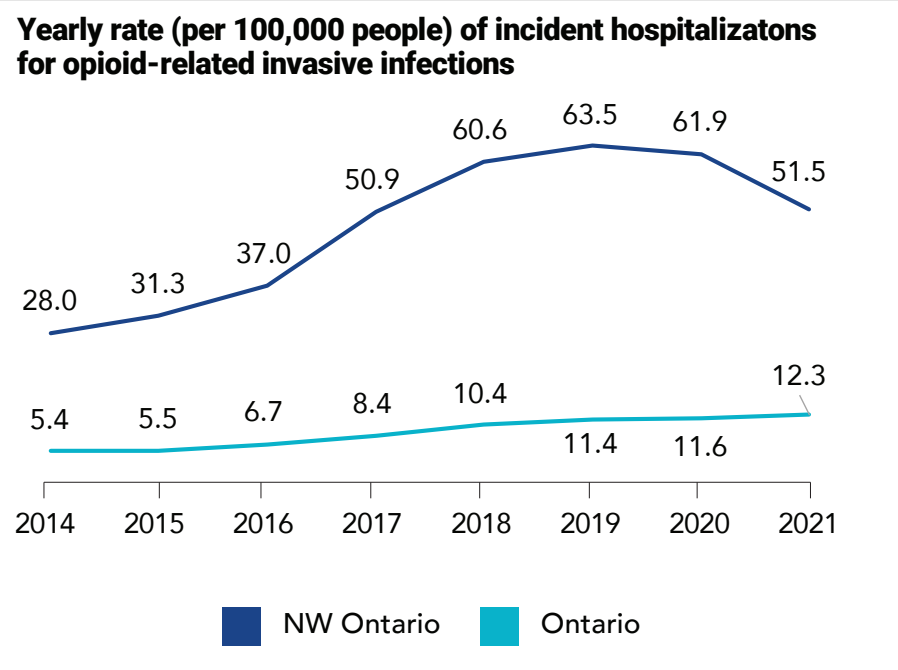
Two-year rate (per 100,000) of incident hospitalizations for opioid-related infective endocarditis



There has been an overall **increase** in the crude rate of incident hospitalizations for opioid-related infective endocarditis in **Northwestern Ontario**.

Northwestern Ontario has consistently experienced **higher** rates of incident hospitalizations for opioid-related infective endocarditis than **Ontario**.

Note: Two-year rate is provided due to the Ontario Health North West region having a small number of incidents in some single years, leading to unstable rates.



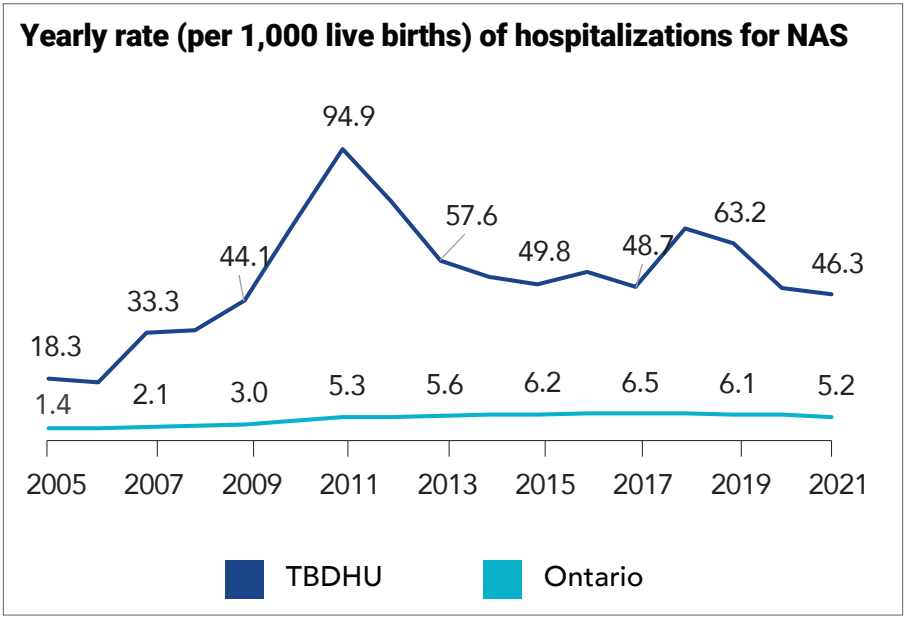
There has been an overall **increase** in the crude rate of incident hospitalizations for opioid-related invasive infections in **Northwestern Ontario**. However, there has been a slight decrease in the most recent years.

Northwestern Ontario has consistently experienced significantly **higher** rates of incident hospitalizations for opioid-related invasive infections than **Ontario**.

Neonatal Abstinence Syndrome

Note: The data presented in this section are provided by the Discharge Abstract Database [76].

Neonatal Abstinence Syndrome (NAS) occurs in newborn babies who were exposed to opioids while in utero.



The highest rate of NAS hospitalizations occurred in 2011 in **Thunder Bay District**.

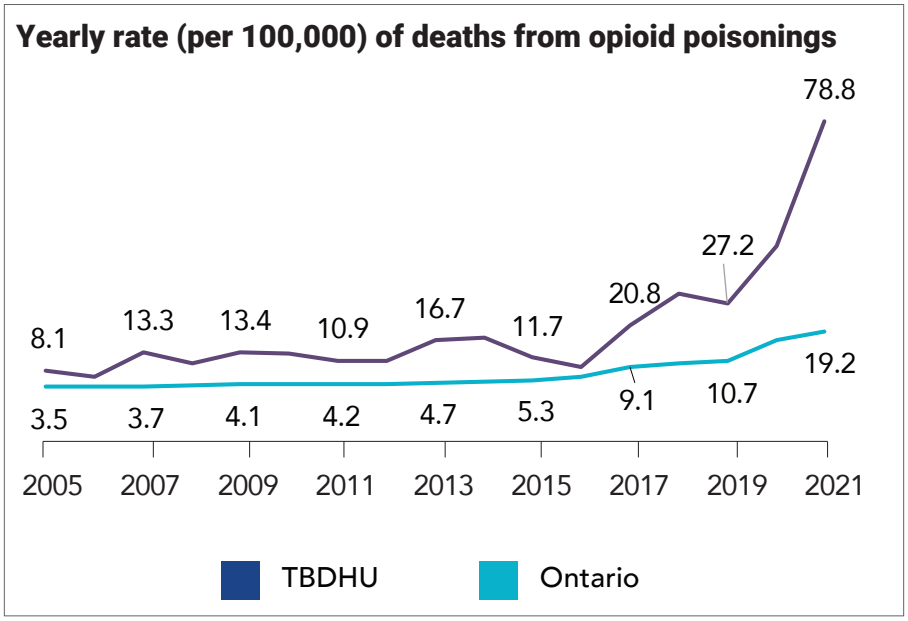
Rates have since declined in **Thunder Bay District**, yet still remain consistently much **higher** compared to **Ontario**.

Note: Due to updated methodology, these rates may differ slightly from those presented in the 2018 Opioid Situational Assessment report.

Opioid-Related Mortality

Note: The data presented in this section are provided by Public Health Ontario [28].

In 2021, there were 123 (79.5 per 100,000) deaths from opioid poisonings in Thunder Bay District vs. 67 (43.3 per 100,000) in 2020 – this represents an 83.6% increase between 2020 and 2021. Over the past 5 years, there was a 284.4% increase in the absolute number of deaths from opioid poisonings in Thunder Bay District (i.e., from 32 in 2017 to 123 in 2021).



There has been an **increase** in the crude rate of deaths from opioid poisonings in **Thunder Bay District** over time.

Thunder Bay District has consistently experienced **higher** rates of deaths from opioids poisonings than **Ontario**.

For a more detailed analysis of deaths from opioid poisonings in Thunder Bay District prior to, and during the COVID-19 pandemic, please refer to *Appendix B: Opioid-related mortality in Thunder Bay District, prior to and during the COVID-19 pandemic.*

Cost of Opioid Use (Canada and Ontario)

In 2020, the Canadian Centre on Substance Use and Addiction (CCSA) published an updated report, Canadian Substance Use Costs and Harms: 2015-2017, that calculated the cost of substance use‡ across Canada [77]. The researchers examined four types of costs: healthcare costs, lost productivity costs, criminal justice costs, and other direct costs.

The report found that, in 2017, opioids were the third most costly substance in Canada ($5.9 billion or 12.9% of the total costs), preceded by tobacco ($12.3 billion or 26.7% of the total costs) and alcohol ($16.6 billion or 36.2% of the total costs) [77]. The report also found that opioids had the second highest increase in overall per-person cost between 2015 and 2017 (20.9% from $135 to $163) [77].

In Ontario, the overall cost of opioid use in 2017 was $2.1 billion and the per-person cost was $149. Notably, the overall cost attributed to opioid use followed an upwards trend, increasing from $122 in 2015, to $126 in 2016, and $149 in 2017 [77].

Healthcare costs were calculated using the following data sources: inpatient hospitalizations, day surgery, emergency department visits, specialized substance use treatment, physician time, and prescription drugs. In 2017, the overall cost of opioid use to healthcare in Ontario was $132.28 million or $9.39 per-person [77].

Lost productivity costs were calculated using the following data sources: premature death, long-term disability, and short-term disability. In 2017, the overall cost of opioid use to lost productivity costs in Ontario was $1.47 billion or $104.67 per-person [77].

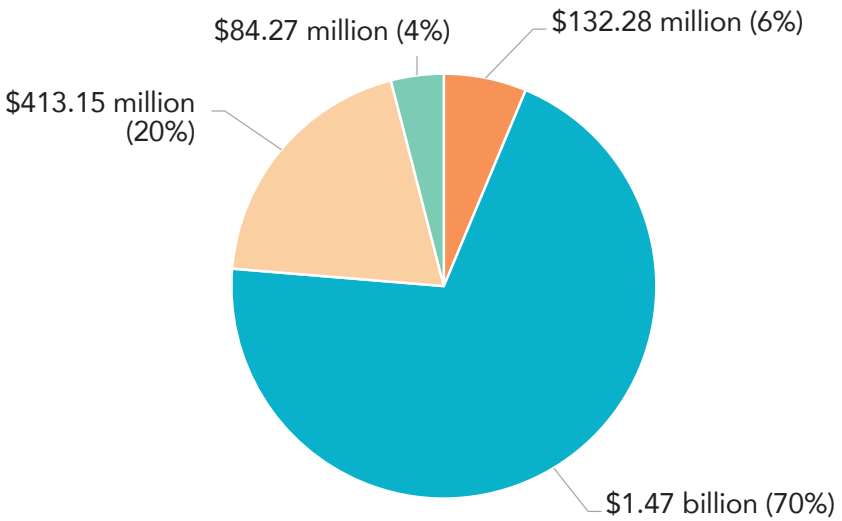
Criminal justice costs were calculated using the following data sources: policing, courts, and correctional services. In 2017, the overall criminal justice costs in Ontario was $413.15 million or $29.35 per-person [77].

Other direct costs were calculated using the following data sources: research and prevention, fire damage, motor vehicle damage, workplace drug testing, employee-assistance programs, and workers' compensation administrative costs. In 2017, the overall other direct costs in Ontario was $84.27 million or $5.98 per-person [78].

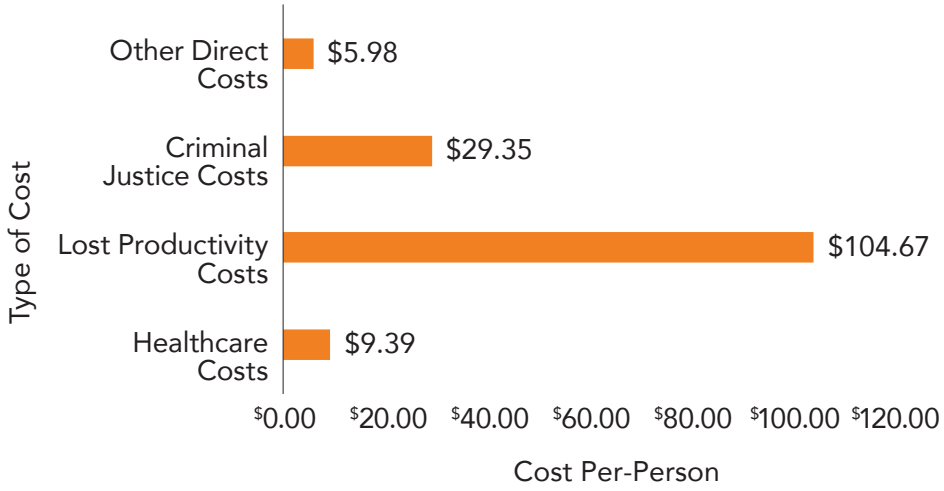
It is important to note that, given the higher mortality and morbidity incidence rates observed in Thunder Bay District, the costs attributed to opioid use are likely higher in Thunder Bay District than provincial averages. Please also note that because the report informing this section use data limited to the time period of 2015 – 2017, any costs associated with increased opioid use from 2018 – 2021, particularly during the COVID-19 pandemic, are not reflected.

‡ The types of substances are as follows: alcohol, tobacco, cannabis, central nervous stimulants, cocaine, and other substances.

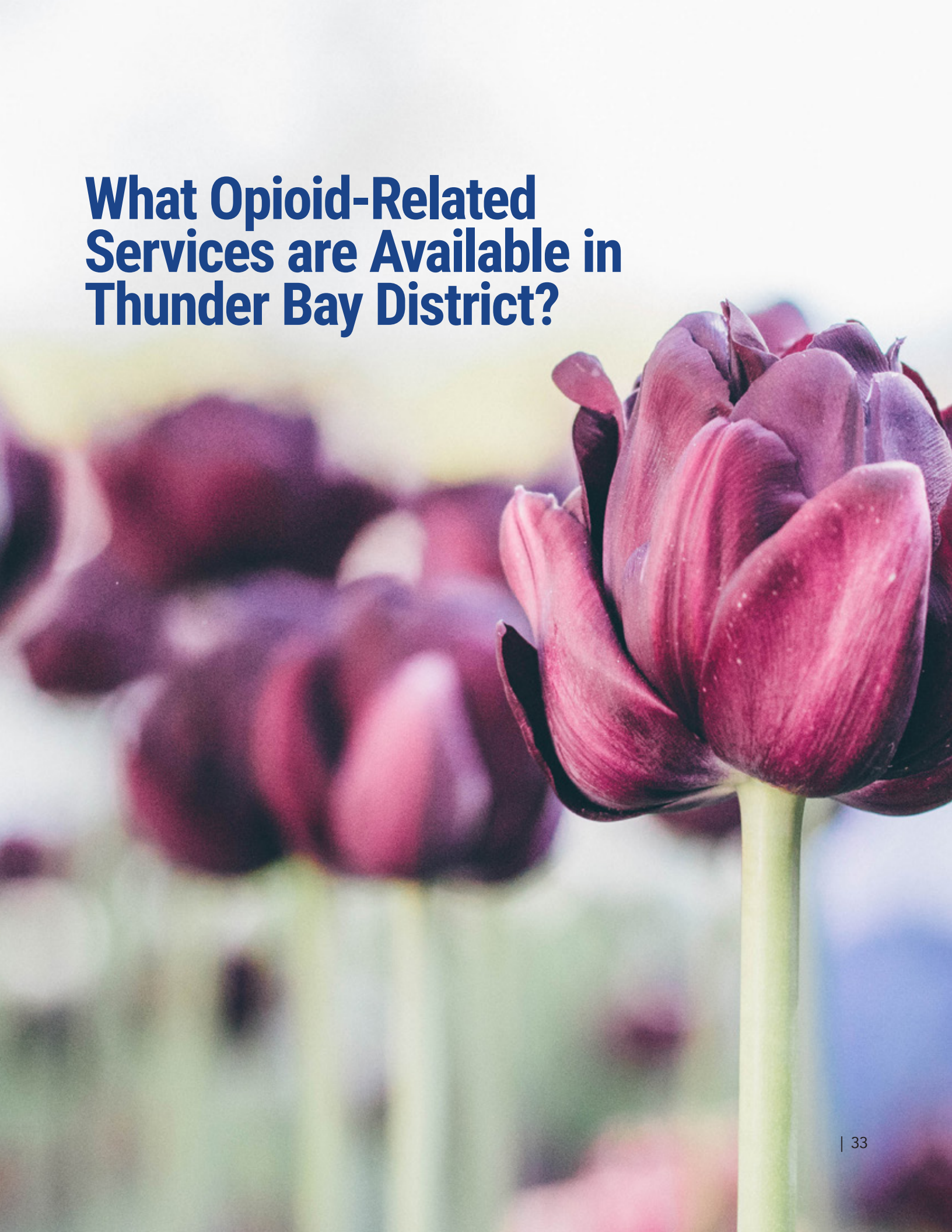
Overall Cost of Opioid Use in Ontario by Cost Type



Pre-Person Cost of Opioid Use in Ontario by Cost Type



What Opioid-Related Services are Available in Thunder Bay District?



Naloxone

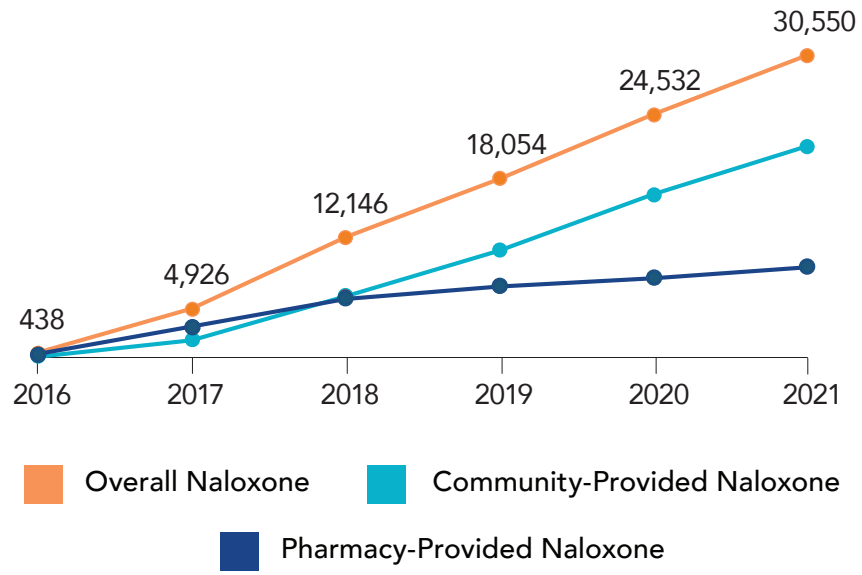
Note: The data presented in this section are provided by the Ontario Drug Policy Research Network [70].

Naloxone is an opioid antagonist that is used to temporarily reverse the effects of opioids and associated overdoses. It can restore normal breathing to someone whose breathing has slowed or stopped due to an opioid overdose. Naloxone is available in injectable and nasal spray forms. Naloxone is distributed in two ways:

- The Ontario Naloxone Program (**community-provided naloxone**): Provides naloxone doses to Public Health Units for distribution through eligible community-based organizations, including Community Health Centres, Aboriginal Health Access Centres, shelters, withdrawal management programs, AIDS Service Organizations, outreach programs, Consumption Treatment Services, and hospitals with an emergency department and/or urgent care centre.
- The Ontario Naloxone Program for Pharmacies (**pharmacy-provided naloxone**): Provides naloxone doses through participating community pharmacies.

Naloxone kits provided by pharmacies and community include 2 naloxone **doses**. Please note that this data reflects the number of doses *distributed*, and not the number of doses *administered*.

Yearly count of naloxone doses provided in Thunder Bay District



There has been a significant **increase** in the **overall** number of naloxone doses provided in Thunder Bay District, as well as doses provided by the **health unit** and **pharmacies**.

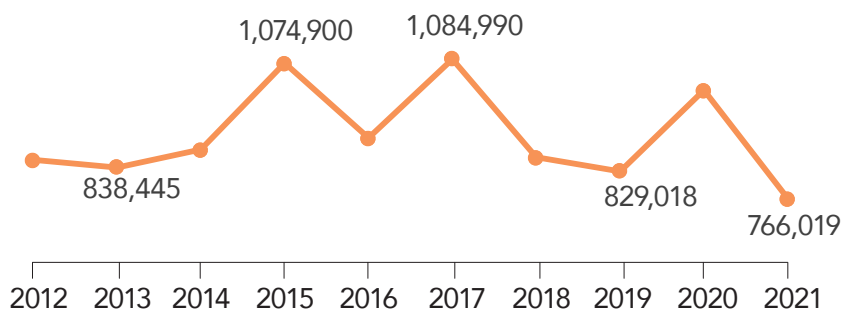
Note: Naloxone doses provided to police, fire and St. John Ambulance are excluded.

Needles

Note: The data presented in this section are provided by the Ontario Drug Policy Research Network [70].

The Superior Points Harm Reduction program at the TBDHU provides sterile needles and injection equipment. The use of sterile needles provided by this program prevents the spread of blood borne illnesses associated with injection drug use, including HIV and hepatitis C. Superior Points, in partnership with other community organizations, has 25 fixed sites in Thunder Bay District, 8 of which are located in the surrounding district communities, and 2 in First Nation communities.

Yearly count of needles provided in Thunder Bay District



The number of needles provided in Thunder Bay District has varied from year to year.

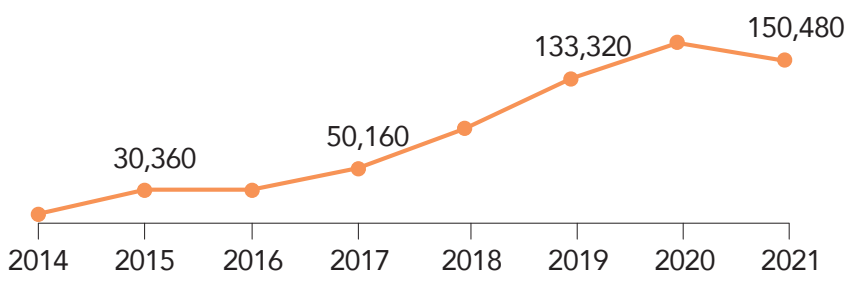
Since 2012, the lowest number of needles provided in Thunder Bay District was in 2021 (766,019 needles). This may be due to a change in the types of substances being used and/or a change in route of administration of substances being used.

Straight stems

Note: The data presented in this section are provided by the Ontario Drug Policy Research Network [70].

Straight stems are provided through the Ontario Harm Reduction Distribution Program to TBDHU. They are used for the safer smoking of crack cocaine as an alternative to homemade 'crack pipes'. They are made from low expansion borosilicate glass (Pyrex) which is resistant to high temperatures. When used with brass screens and a mouthpiece, straight stems can reduce burns, prevent cuts, and limit the transmission of infectious diseases such as HIV and hepatitis C.

Yearly count of straight stems provided in Thunder Bay District



There has been an overall increase in the number of straight stems provided in Thunder Bay District. This may indicate a change in the types of substances being used and/or a change in route of administration of substances being used.

Consumption and Treatment Services (CTS)

As part of the range of harm reduction programs offered at NorWest Community Health Centres (NWCHC), the Path 525 Consumption and Treatment Services (CTS), in partnership with Dilico Anishinabek Family Care, opened on November 27, 2018. Path 525 CTS provides a safe place to consume illicit drugs aimed at improving overall physical health and social well-being of clients as part of the core services provided:

- Supervision of injection and emergency overdose responses
- Injection-related first aid and disease screening/testing
- Safer consumption education, harm reduction information and counselling
- The distribution and safe disposal of injection equipment
- Minor wound care, education related to abscess prevention and vein care

Drug checking services are also available using Spectra Plasmonics, which is a Canadian drug checking and reporting technology for frontline harm reduction and public health organizations. Whether you are a person who uses drugs or someone who supports them, the purpose is to provide you with better substance-related information to reduce harm. With Path 525's Amplifi ID kits, they can complete a trace scan to detect contaminants (e.g., carfentanil) with just a few grains (~5 mg). The results and information regarding each result is provided and explained to the participant.

Rapid Access to Addiction Medicine (RAAM) Clinics

RAAM Clinics offer specialized services and care for individuals seeking treatment for any substance use issue. The RAAM Clinic allows individuals experiencing substance use issues to receive counselling, appropriate addiction medications, and connections to community treatment programs. RAAM Clinics are available in Thunder Bay (April 2018), Nipigon (January 2020), Marathon (January 2020), Fort William First Nation (November 2020), and Longlac (July 2022). Services available include:

- Review of treatment options including harm reduction and abstinence
- Prescription of addiction medications
- Education and support related to withdrawal
- Counselling and peer support services
- Education on overdose prevention and the use of naloxone
- Referral to longer-term supports for ongoing care, if required
- Access to traditional healers and Indigenous cultural support

Balmoral Centre Withdrawal Management Services

St. Joseph's Care Group's Balmoral Centre Withdrawal Management Services is a local, regional and provincial resource offering withdrawal management services. Their approach to treatment is holistic, client-centered and respects diversity in culture, spirituality, age, gender, sexual orientation, religion and belief systems. Open 24 hours a day, 7 days a week, Balmoral Centre provides medically supported withdrawal management services, including:

- Support and care during the acute stages of intoxication and to safely withdraw from substances
- Stabilization, education and group programming
- Referrals and linkages for medical, counselling, addiction treatment, harm reduction and mental health services
- Individualized assessment for treatment planning

- Discharge planning in collaboration with community partners and services
- 24/7 RPN on-site
- Nurse Practitioner on-site 7 days per week
- Indigenous relations and cultural participation

Lifeguard Connect

Launched in June 2021, the Lifeguard smartphone app became available for use in Northwestern Ontario through a partnership between NorWest Community Health Centres and the District of Thunder Bay Social Services Administration Board. The Lifeguard app can be activated by people who use substances before they take their dose. A timer runs for one minute and can be extended up to five minutes. If the user fails to stop the timer at that point, the alarm will become louder, and a text-to-voice call is sent to local emergency response services. This call could save the life of someone who may be experiencing an overdose. Lifeguard also provides up-to-date access to local information and supports for people who use substances.

Opioid Agonist Treatment Centres and Clinics

Opioid agonist treatment (OAT) is a practical approach to opioid dependency, where medications such as methadone or Suboxone are prescribed and monitored by a medical professional to treat opioid addiction. There are a number of OAT centres and clinics available in the community, some long-standing, while others are more new to the community. There are currently four Ontario Addiction Treatment Centres (OATCs), Lucero Health Centre, two Thunder Bay Addiction Centres, and a few other pharmacy/clinics that support access to OAT.

Safer Supply Program

NorWest Community Health Centres collaborated with a number of community partners to develop the first Safer Supply Program in Thunder Bay. The pilot project has been funded by Health Canada until September of 2023. It is based on a flexible, low-barrier, community-based safer supply model, embedded within NorWest Community Health Centres' existing model of care. Thunder Bay Safer Supply Program (TBSSP) prescribers provide assessment, monitoring, and prescriptions for daily-dispensed, oral or injectable opioids to eligible clients in replacement of the toxic street supply. Clients have access to a range of wrap-around services to address unmet health care and social needs such as access to primary care, system navigation, housing, food security, financial support, outreach, and harm reduction supplies.

FAST Overdose Reporting Platform

The FAST Overdose Reporting platform was developed by the Wellington-Dufferin-Guelph Public Health Unit, and the Thunder Bay Drug Strategy's Opioid Surveillance and Response Task Force received a grant to locally adapt it in early 2021. FAST stands for Flexible, Scalable, Accessible, and Timely. The FAST Overdose Reporting Platform collects real-time information on substance-related overdoses from local service providers to build a detailed understanding of local patterns and trends. FAST allows for the collection of overdose information about incidents in which emergency services are not accessed, and also includes all overdose/drug toxicity events (not just opioids) – all of which will increase our ability to respond quickly and appropriately to contaminated substances and abnormal overdose patterns.

Implications and Future Directions

This situational assessment summarizes the available epidemiological information about opioid use and harms in Thunder Bay District. Overall, the Thunder Bay District experiences some of the highest burdens of opioid-related harms in Ontario, including emergency department visits, hospital admissions and deaths. There has been an expansion of harm reduction and overdose prevention services in the Thunder Bay District. However, opioid-related harms have continued to escalate in recent years, demonstrating that further action and monitoring is needed to support people who use drugs.

Opportunities for Action

1. Include people with lived and living experience in all levels of efforts to address opioid-related harms, including understanding the context of opioid use in Thunder Bay District, determining appropriate interventions, and in implementation.
2. Provide expanded access to opioid-related services (e.g., naloxone, Consumption and Treatment Services) during 'busy' times, including evenings and weekends, and to areas that may be currently underserved. This may include extended hours of operation, increased staffing or additional service locations.
3. Continue efforts to support and expand naloxone use and access, and increase promotion of bystander intervention. Promote calling 911 if naloxone has been administered.
4. Advocate for the expansion of services to meet the needs of people who use substances by inhalation.
5. Collaborate with relevant community partners, including Indigenous leadership, organizations and individuals, to develop and implement culturally competent harm reduction, overdose prevention, and treatment services.
6. Target harm reduction and overdose prevention messaging to the groups disproportionately impacted by opioid-related harms in the Thunder Bay District, as evidenced by data, including, but not limited to: males aged 25-44 years, individuals who are unemployed/employed in the trades, Indigenous Peoples, individuals leaving corrections, and individuals who use substances in private residences and/or alone.
7. Maintain a collaborative and coordinated approach for harm reduction and treatment services across organizations, and continue to explore opportunities for new models of care as they develop.
8. Support law enforcement in its initiatives to make Thunder Bay District communities safer.
9. Advocate for equitable funding and support to address opioid-related morbidity and mortality in the Thunder Bay District.
10. Promote activities that address stigma and the resulting discrimination related to opioid use.
11. Take a public health approach to substance use by advocating for policy changes such as decriminalization, and a legal, regulated safe drug supply in Canada.
12. Support the Community Safety & Well-Being Advisory Committee in its efforts to understand and implement upstream prevention approaches.Ω

Ω Upstream approaches requires investing in social, health and community infrastructure to improve social determinants of health to increase overall community safety and well-being.

Opportunities for Data Collection and Sharing

1. Continue to maintain the Opioid Information System on the TBDHU website. Explore and improve opportunities for enhanced real-time surveillance and reporting.
2. Update the Opioid Situational Assessment every four years, to coincide with the update of the Drug Strategy 'Check In' reports. Continue to identify any emerging priority populations and opportunities for action based on the updated local-level data.
3. Provide opioid-related information and support its interpretation for Indigenous organizations (e.g., Fort William First Nation, Nishnawbe Aski Nation, Métis Nation of Ontario, and Matawa First Nations Management) to support their own data efforts, as well as opioid-related prevention, harm reduction, and treatment efforts among Indigenous Peoples.
4. Explore how opioid use may differ among men, women, and those who do not identify as male/female. Based on these findings, develop gender-relevant and targeted (e.g., family members, employers) prevention and harm reduction messaging.
5. Request additional data to further explore patterns seen in local-level opioid-related mortality data.
6. Explore opportunities to collect and describe additional social burdens (e.g., workplace, criminal justice) related to opioid use in the Thunder Bay District.
7. Continue to collaborate with academic organizations and support research related to substance use in the Thunder Bay District.
8. Explore ways to help community organizations increase their capacity to collect, interpret and operationalize opioid-related data.
9. Develop an infographic that summarizes the findings of the Opioid Situational Assessment for wider distribution and reach.
10. Support the Thunder Bay Drug Strategy to interpret and operationalize opioid-related data in their wider strategic and implementation plans.

References

1. Special Advisory Committee on the Epidemic of Opioid Overdoses. (2022). Opioid- and Stimulant-related Harms in Canada. Ottawa: Public Health Agency of Canada. Available at: https://health-infobase.canada.ca/substance-related-harms/opioids-stimulants
2. Sawula E, Greenaway J, Olsen C, Jaun A, Flanagan Q, Leiterman A, Groot E. (2018). Opioid Use and Impacts in Thunder Bay District. Thunder Bay, ON: Thunder Bay District Health Unit. Available at: https://www.tbdhu.com/resource/opioid-use-and-impacts-thunder-bay-district-2018
3. World Health Organization. ICD-10 Classifications of Mental and Behavioural Disorder: Clinical Descriptions and Diagnostic Guidelines. (2016). Geneva, Switzerland: World Health Organization. Available at: http://apps.who.int/classifications/icd10/browse/2016/en.
4. Allingham J. (2017). Is the fentanyl situation an overdose crisis or a poisoning crisis? CBC News. Available at: http://www.cbc.ca/news/canada/british-columbia/overdose-fentanyl-1.4269917
5. Gomes T, Pasricha S, Martins D, Greaves S, Tadrous M, Bandola D, et al. (2017). Behind the Prescriptions: A snapshot of opioid use across all Ontarians. Toronto, Canada. Available at: https://odprn.ca/wp-content/uploads/2017/08/ODPRN-Report_Behind-the-Prescriptions.pdf
6. Alberta Health Services. (2018). Opioids: Information for Health Professionals.
7. Health Canada. (2018). Background Document: public consultation on strengthening Canada's approach to substance use issues. Available at: https://www.canada.ca/content/dam/hc-sc/documents/services/substance-use/canadian-drugs-substances-strategy/strengthening-canada-approach-substance-use-issue/strengthening-canada-approach-substance-use-issue.pdf
8. Canadian Mental Health Association. (2022). Substance use and addiction. Available at: https://ontario.cmha.ca/addiction-and-substance-use-and-addiction/#:~:text=Many%20people%20use%20substances%20such,and%20may%20lead%20to%20dependence
9. Guarino, H., Mateu-Gelabert, P., Quinn, K., Sirikantraporn, S., Ruggles, K. V., Syckes, C., ... & Friedman, S. R. (2021). Adverse childhood experiences predict early initiation of opioid use behaviors. Frontiers in Sociology, 6, 620395.
10. Heilig, M., Epstein, D. H., Nader, M. A., & Shaham, Y. (2016). Time to connect: bringing social context into addiction neuroscience. Nature Reviews Neuroscience, 17(9), 592-599.
11. Dube, S. R., Felitti, V. J., Dong, M., Chapman, D. P., Giles, W. H., & Anda, R. F. (2003). Childhood abuse, neglect, and household dysfunction and the risk of illicit drug use: the adverse childhood experiences study. Pediatrics, 111(3), 564-572.
12. Borgundvaag, B., McLeod, S., Khuu, W., Varner, C., Tadrous, M., & Gomes, T. (2018). Opioid prescribing and adverse events in opioid-naive patients treated by emergency physicians versus family physicians: a population-based cohort study. Canadian Medical Association Open Access Journal, 6(1), E110-E117.

13. Health Quality Ontario. (2018). Starting on Opioids: Opioid prescribing patterns in Ontario by family doctors, surgeons, and dentists, for people starting to take opioids [Internet]. Toronto, Canada. Available at: http://www.hqontario.ca/Portals/0/Documents/system-performance/starting-on-opioids-en.pdf

14. Statistics Canada. (2022). Census Profile [table]. 2021 Census of Population. Statistics Canada Catalogue no. 98-316-X2021001. Ottawa. Available at: https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/index.cfm?Lang=E

15. Canadian Mental Health Association. (2009). Rural and Northern Community Issues in Mental Health [Internet]. Toronto, Canada. Available at: https://ontario.cmha.ca/documents/rural-and-northern-community-issues-in-mental-health/

16. McConkey S., Brar R., Blais G., Hardy, M., Smylie, J. (2022). Indigenous Population Estimates for the City of Thunder Bay. Available at: http://www.welllivinghouse.com/wp-content/uploads/2022/06/ohc-thunder-bay_pop-estimates-factsheet_final_1June2022.pdf

17. Chiefs of Ontario and Ontario Drug Policy Research Network. (2021). Opioid Use, Related Harms, and Access to Treatment among First Nations in Ontario, 2013-2019. Toronto, ON: Chiefs of Ontario. Available at: https://odprn.ca/wp-content/uploads/2021/11/First-Nations-Opioid-Use-Harms-and-Treatment-Report.pdf

18. Chiefs of Ontario and Ontario Drug Policy Research Network. (2021). Impacts of the COVID-19 pandemic on opioid-related poisoning among First Nations in Ontario. Toronto, ON: Chiefs of Ontario. Available at: https://chiefs-of-ontario.org/wp-content/uploads/2021/11/First-Nations-COVID-Opioid-Related-Poisoning-Report-25NOV2021-002.pdf

19. Truth and Reconciliation Commission of Canada. (2015). Honouring the Truth, Reconciling for the Future: Summary of the Final Report of the Truth and Reconciliation Commission of Canada [Internet]. Winnipeg, Canada. Available at: http://www.trc.ca/websites/trcinstitution/File/2015/Honouring_the_Truth_Reconciling_for_the_Future_July_23_2015.pdf

20. Ross, A., Dion, J., Cantinotti, M., Collin-Vézina, D., & Paquette, L. (2015). Impact of residential schooling and of child abuse on substance use problem in Indigenous Peoples. Addictive behaviors, 51, 184-192.

21. Nutton, J., & Fast, E. (2015). Historical trauma, substance use, and indigenous peoples: seven generations of harm from a "big event". Substance use & misuse, 50(7), 839-847.

22. Jongbloed, K., Pearce, M. E., Pooyak, S., Zamar, D., Thomas, V., Demerais, L., ... & Spittal, P. M. (2017). The Cedar Project: mortality among young Indigenous people who use drugs in British Columbia. CMAJ, 189(44), E1352-E1359.

23. Big-Canoe, K., & Richmond, C. A. (2014). Anishinabe youth perceptions about community health: Toward environmental repossession. Health & Place, 26, 127-135.

24. Health Canada. (2015). First Nations Mental Wellness Continuum Framework: Summary Report. Available at: https://thunderbirdpf.org/wp-content/uploads/2022/03/first_nations_mental_wellness_continuum_framework_summary_report-1.pdf

25. Marsh, T. N., Coholic, D., Cote-Meek, S., & Najavits, L. M. (2015). Blending Aboriginal and Western healing methods to treat intergenerational trauma with substance use disorder in Aboriginal peoples who live in Northeastern Ontario, Canada. Harm reduction journal, 12(1), 1-12.

26. Canadian Institute for Health Information. (2021) Unintended consequences of COVID-19: Impacts on harms caused by substance use. Available at: https://www.cihi.ca/sites/default/files/document/unintended-consequences-covid-19-substance-use-report-en.pdf

27. Gomes T, Murray R, Kolla G, Leece P, Bansal S, Besharah J, Cahill T, Campbell T, Fritz A, Munro C, Toner L, Watford J on behalf of the Ontario Drug Policy Research Network, Office of the Chief Coroner for Ontario and Ontario Agency for Health Protection and Promotion (Public Health Ontario). (2021). Changing circumstances surrounding opioid-related deaths in Ontario during the COVID-19 pandemic. Toronto, ON: Ontario Drug Policy Research Network. Available at: https://www.publichealthontario.ca/-/media/documents/c/2021/changing-circumstances-surrounding-opioid-related-deaths.pdf?sc_lang=en

28. Public Health Ontario. (2021). Interactive Opioid Tool: Opioid-related morbidity and mortality in Ontario. Toronto: Queen's Printer for Ontario. Available at: https://www.publichealthontario.ca/en/data-and-analysis/substance-use/interactive-opioid-tool

29. Friesen EL, Kurdyak PA, Gomes T, et al. (2021). The impact of the COVID-19 pandemic on opioid-related harm in Ontario. Science Briefs of the Ontario COVID-19 Science Advisory Table. https://doi.org/10.47326/ocsat.2021.02.42.1.0

30. Melamed, O. C., Hauck, T. S., Buckley, L., Selby, P., & Mulsant, B. H. (2020). COVID-19 and persons with substance use disorders: Inequities and mitigation strategies. Substance abuse, 41(3), 286-291.

31. Corace, K., Suschinsky, K., Wyman, J., Leece, P., Cragg, S., Konefal, S., ... & Hutton, B. (2022). Evaluating how has care been affected by the Ontario COVID-19 Opioid Agonist Treatment Guidance: Patients' and prescribers' experiences with changes in unsupervised dosing. International Journal of Drug Policy, 102, 103573.

32. The Ontario Drug Policy Research Network, The Office of the Chief Coroner for Ontario/Ontario Forensic Pathology Service, Ontario Agency for Health Protection and Promotion (Public Health Ontario), & Centre on Drug Policy Evaluation. (2020). Preliminary patterns in circumstances surrounding opioid-related deaths in Ontario during the COVID-19 pandemic. Available at: https://www.publichealthontario.ca/-/media/Documents/O/2020/opioid-mortality-covid-surveillance-reportdf?rev=f44a37dcd80d49a69a5d262ed715dd94&sc_lang=en

33. Canadian Centre on Substance Use and Addiction. (n.d.). CCENDU alerts and bulletins [Internet]. Available at: https://www.ccsa.ca/ccendu-alerts-and-bulletins

34. Canadian Community Epidemiology Network on Drug Use. (2022). CCENDU drug alert: Xylazine. Canadian Centre on Substance Use and Addiction. Available at: https://ccsa.ca/sites/default/files/2022-07/CCSA-CCENDU-Drug-Alert-Xylazine-2022-en.pdf

35. Canadian Community Epidemiology Network on Drug Use. (2022). CCENDU drug alert: Nitazenes. Canadian Centre on Substance Use and Addiction. Available at: https://www.ccsa.ca/sites/default/files/2022-03/CCSA-CCENDU-Drug-Alert-Nitazenes-2022-en_0.pdf

36. Canadian Community Epidemiology Network on Drug Use. (2021). CCENDU bulletin: Risks and harms associated with the nonmedical use of benzodiazepines in the unregulated drug supply in Canada. Canadian Centre on Substance Use and Addiction. Available at: https://ccsa.ca/sites/default/files/2021-12/CCSA-CCENDU-Nonmedical-Use-Benzodiazepines-Unregulated-Drug-Supply-Bulletin-2021-en.pdf

37. Cheng, C., Wang, T., Campbell, T., Kolla, G., Smoke, A., Besharah, J., Munro, C., Magboo Cahill, T., McCormack, D., Macdonald, M., & Gomes, T. (2022). Contributions of stimulants and varying modes of drug use to opioid toxicity deaths across Public Health Units in Ontario, Canada. Ontario Drug Policy Network. Available at: https://odprn.ca/wp-content/uploads/2022/11/Data-Brief-Stimulants-and-mode-of-use-in-opioid-toxicity-deaths.pdf

38. Gomes, T., Iacono, A., Kolla, G., Nunez, E., Leece, P., Wang, T., Campbell, T., Auger, C., Boyce, N., Doolittle, M., Eswaran, A., Kitchen, S., Murray, R., Shearer, D., Singh, S., & Watford, J. (2022). Lives lost to opioid toxicity among Ontarians who worked in the construction industry. Available at: https://odprn.ca/wp-content/uploads/2022/07/Opioid-Toxicity-in-the-Construction-Industry-Report-Final.pdf

39. Thunder Bay Police Service. (2020). 2019 annual report. Available at: https://www.dropbox.com/s/w7evq8jvkkffobn/Annual%20Report%202019.pdf?dl=0

40. Thunder Bay Police Service. (2021). 2020 annual report.

41. Thunder Bay Police Service. (2022). 2021 annual report. Available at: https://thunderbaypolice.ca/sites/default/files/2022-10/AR%202021%20-%20FINAL%20Oct%2011%20Web%20Version_0.pdf

42. Ketonen, K. (2021). Guns, drugs and gangs: Police in Thunder Bay, Ont., concerned over rise in violent street crime. CBC News. Available at: https://www.cbc.ca/news/canada/thunder-bay/guns-gangs-thunder-bay-1.6226826

43. Canadian Drug Policy Coalition. (n.d.). Our Issues. Available at: https://drugpolicy.org/issues

44. Canadian Drug Policy Coalition. (n.d.). History of drug policy in Canada. Available at: https://drugpolicy.ca/about/history/

45. Canadian Mental Health Association. (n.d.). History of Mental Health Reform. Available at: https://ontario.cmha.ca/provincial-policy/health-systems-transformation/history-of-mental-health-reform/

46. Morin, K. A., Eibl, J. K., Franklyn, A. M., & Marsh, D. C. (2017). The opioid crisis: past, present and future policy climate in Ontario, Canada. Substance abuse treatment, prevention, and policy, 12(1), 1-7.

47. Craig, S. (2019, January 8). Timeline of the opioid crisis in Canada: How prescription drugs, the government's war on drugs, and black market fentanyl generated high addiction rates. The Link. Available at: https://thelinknewspaper.ca/article/timeline-of-the-opioid-crisis-in-canada

48. Vancouver Area Network of Drug Users. (n.d.). Available at: https://vandureplace.wordpress.com/about/

49. Tsang, V., & Buxton, J. A. (2021). History of naloxone kits in BC: From inception to expansion. BC Med J, 63, 122-5.

50. Zussman, R. (2021, November 1). B.C. formally asks Ottawa for exemption to decriminalize illicit drug possession. Global News. Available at: https://globalnews.ca/news/8340404/bc-tainted-drug-deaths-next-steps/

51. Gomes, T., Murray, R., Kolla, G., Leece, P., Bansai, S., Beshharah, J., et al. (2021). Changing circumstances surrounding opioid-related deaths in Ontario during the COVID-19 pandemic. Ontario Drug Policy Research Network, Office of the Chief Coroner for Ontario and Ontario Agency for Health Protection and Promotion (Public Health Ontario). Toronto, ON: Ontario Drug Policy Research Network. Available at: https://odprn.ca/research/publications/opioid-related-deaths-in-ontario-during-covid/

52. Government of Canada. (2022, September). Federal actions on opioids to date. Available at: https://www.canada.ca/en/health-canada/services/opioids/federal-actions/overview.html

53. Correctional Service Canada. (2019, August 28). The overdose prevention service. Available at: https://www.csc-scc.gc.ca/health/002006-2002-en.shtml

54. Government of Canada. (2022, June 1). B.C. receives exemption to decriminalize possession of some illegal drugs for personal use. [News release]. Available at: https://www.canada.ca/en/health-canada/news/2022/05/bc-receives-exemption-to-decriminalize-possession-of-some-illegal-drugs-for-personal-use.html

55. Government of Ontario. (2017, December 7) Taking action to prevention opioid addiction and overdose. [News release]. Available at: https://news.ontario.ca/en/backgrounder/47406/taking-action-to-prevent-opioid-addiction-and-overdose

56. Government of Ontario. (2016, June 29). Naloxone now available without a prescription in Ontario pharmacies. [News release]. Available at: https://news.ontario.ca/en/release/40972/naloxone-now-available-without-a-prescription-in-ontario-pharmacies

57. Gomes, T., Kolla, G., McCormack, D., Sereda, A., Kitchen, S., & Antoniou, T. (2022). Clinical outcomes and health care costs among people entering a safer opioid supply program in Ontario. CMAJ, 194(36), E1233-E1242.

58. Chiefs of Ontario. (2021, November 26). Chiefs of Ontario calls for action to address the rise of opioid-related deaths among First Nations in Ontario. Available at: https://chiefs-of-ontario.org/chiefs-of-ontario-calls-for-action-to-address-rise-of-opioid-related-deaths-among-first-nations-in-ontario/?fbclid=IwAR0VASqNrrN3KFqOyYEuDSz5BDNiDqeLf9lnJllzQqaSS6MU0CgkMRrJWsM

59. Ontario Ministry of Health and Long-Term Care (n.d.). Naloxone: Frequently asked questions. Available at: https://www.health.gov.on.ca/en/pro/programs/drugs/naloxone/naloxone_faq.aspx

60. Government of Canada. (2002). Report of the Special Committee on Non-medical Use of Drugs [Chapter 3]. Available at: https://www.ourcommons.ca/Content/Committee/372/SNUD/Reports/RP1032296/snudrp01/snudrp01-e.pdf

61. Canadian Community Epidemiology Network on Drug Use. (2016, March). CCENDU Bulletin: The availability of take-home naloxone in Canada. Available at: https://www.ccsa.ca/availability-take-home-naloxone-canada-ccendu-bulletin

62. Reevely, D. (2017, December 7). Health Minister declares opioid emergency after overdose rates spike over summer. Ottawa Citizen. Available at: https://ottawacitizen.com/news/local-news/health-minister-declares-opioid-emergency-after-overdose-rates-spike-over-summer

63. Bartko, K. (2017, May 31). Alberta declares opioid public health crisis, announces $30M and new panel to address deaths. Global News. Available at: https://globalnews.ca/news/3491715/aggressive-opioid-plan-to-be-unveiled-by-alberta-government/

64. Oviedo-Joekes, E., Brissette, S., Marsh, D. C., Lauzon, P., Guh, D., Anis, A., & Schechter, M. T. (2009). Diacetylmorphine versus methadone for the treatment of opioid addiction. New England Journal of Medicine, 361(8), 777-786.

65. Centre for Health Evaluation and Outcome Sciences. (2016, April 6). Results of the world's first study on new treatment for heroin addiction [News Release]. Available at: https://www.cheos.ubc.ca/research-in-action/results-of-worlds-first-study-on-new-treatment-for-heroin-addiction/

66. Canadian Agency for Drugs and Technologies in Heath (CADTH). (2018, March). Funding and management of naloxone programs in Canada. Available at: https://www.cadth.ca/funding-and-management-naloxone-programs-canada-0

67. Government of Ontario. (2017, December 7). Ontario expanding opioid response as crisis

grows. [News release]. Available at: https://news.ontario.ca/en/release/47409/ontario-expanding-opioid-response-as-crisis-grows

68. Government of Ontario. (2022, December 14). Ontario providing free naloxone kits in workplaces. [News release]. Available at: https://news.ontario.ca/en/release/1002593/ontario-providing-free-naloxone-kits-in-workplaces

69. Centre for Addiction and Mental Health and Ontario Medical Association. (2022, March 22). COVID-19 opioid agonist treatment guidance. Available at: https://www.camh.ca/-/media/files/covid-19-modifications-to-opioid-agonist-treatment-delivery-pdf.pdf

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

71. Bruneau J, Ahamad K, Goyer M-È, Poulin G, Selby P, Fischer B, et al. Management of opioid use disorders: A national clinical practice guideline. Can Med Assoc J. 2018;190(9):E247–57. Available at: http://www.cmaj.ca/lookup/doi/10.1503/cmaj.170958

72. Millson P, White S. Ontario I-Track Report: Enhanced Surveillance of Risk Behaviours and Prevalence of HIV and Hepatitis C Among People Who Inject Drugs. Toronto, Canada; 2016.

73. Canadian Centre on Substance Use and Addiction. (2022). Community Urinalysis and Self-Report Project: Cross-Canada report on the use of drugs from the unregulated supply, 2019-2021 data. Ottawa, Ont.: CCSA.

74. Superior North EMS, Paramedic Electronic Patient Care Record. 2014-2022. Extracted October 2022.

75. Discharge Abstract Database. January 2018 – December 2021. Ottawa, ON: Canadian Institute for Health Information [producer]; Toronto, ON: Ontario. Ministry of Health and Long-Term Care, IntelliHealth Ontario [distributor]; [unpublished] [data extracted 2022 Aug 23].

76. Discharge Abstract Database (DAD), 2005-2021, Ontario Ministry of Health and Long-Term Care, IntelliHealth Ontario, extracted 2022 December 14.

77. Canadian Substance Use Costs and Harms Scientific Working Group. (2020). Canadian Substance Use Costs and Harms: 2015 – 2017. Ottawa, ON: Canadian Centre on Substance Use and Addiction. Available at: https://csuch.ca/publications/CSUCH-Canadian-Substance-Use-Costs-Harms-Report-2020-en.pdf

78. Canadian Substance Use Costs and Harms Scientific Working Group. (2022). CSUCH Visualization Tool. Available at: https://csuch.ca/explore-the-data/

79. Special Advisory Committee on the Epidemic of Opioid Overdoes. (2019). National report: apparent opioid-related deaths in Canada (January 2016 to September 2018). Ottawa, ON: Her Majesty the Queen in Right of Canada. Available from: http://infobase.phac-aspc.gc.ca/datalab/national-surveillance-opiod-mortality.html

80. Office of the Chief Coroner. Opioid investigative and user guide. (2017). Toronto, ON: Queen's Printer for Ontario.

81. Office of the Chief Coroner for Ontario. (2022). Coroner's Opioid Investigative Aid, May 2017 to June 2022.

82. Ontario Agency for Health Protection and Promotion (Public Health Ontario). (2022). Quarterly Public Health Unit Opioid Mortality Reports: May 2017 to June 2022 [unpublished data table]. Toronto, ON: King's Printer for Ontario.

Appendix A

Trends in paramedic-attended suspected opioid overdoses in Thunder Bay District prior to, and during the COVID-19 pandemic

Note: The data provided in this section was provided by Superior North Emergency Medical Services [74].

Background

This report provides a comparison of SNEMS data collected in the two years prior to the COVID-19 pandemic (April 1, 2018 to March 31, 2020 [Pre-pandemic]) and during the first two years of the COVID-19 pandemic (April 1, 2020 to March 31, 2022 [Pandemic]).

Data

SNEMS maintains an electronic patient care record (ePCR), which is completed by the responding paramedics after each 911 emergency medical call. The data reviewed in this report includes ePCR records identified as a "suspected opioid overdose" by the attending paramedic. Identification of specific substances is obtained from the incident history data on the ePCR. The incident history is a combination of the paramedic's observations and information provided by the patient or bystanders on scene. As incident scenes are often chaotic, and patients and bystanders can be vague or uncertain with patient history, these results must be interpreted with caution.

The data include information on patient demographics, time of incident, acuity, and naloxone administration. If no patient identification was available to the paramedic on scene, age and sex was determined at their discretion or left blank (and, therefore, omitted from analysis).

Analysis

All incidents deemed as a 'high likelihood of opioid involvement' in a suspected overdose reported pre-pandemic and during the pandemic were included in the analyses. Incidents are noted as suspected opioid overdoses because the final diagnosis in hospital may differ from paramedic's initial assessment.

Data from before and during the pandemic were compared to identify any differences among patient demographics, time of day/week/month, acuity, and naloxone use. Chi-squared and Fisher's exact tests were used to compare proportions between the pre-pandemic and pandemic cohorts.

Limitations

The case definition of 'suspected opioid overdose' has not been validated. Based on their clinical judgement, paramedics classify these incidents based on whether the patient(s) exhibit symptoms or signs consistent with opioid overdose (i.e., respiratory rate, pupil size, level of consciousness, evidence of drug paraphernalia, witness report, etc.). The specificity and sensitivity of this case definition has not currently been determined.

This data source only includes suspected opioid overdoses that involve a call to 911. The data do not provide a complete representation of all suspected opioid overdoses. Though the data from SNEMS includes a large number of calls than other sources of opioid-related information, it likely underestimates the true burden of opioid overdose in the Thunder Bay District.

Information presented in this Appendix is based on the best available evidence at the time of the incident; however, some variables may be underreported if the information was not documented or available to the paramedic. This may contribute to the underreporting of certain characteristics. Therefore, findings should be interpreted with caution.

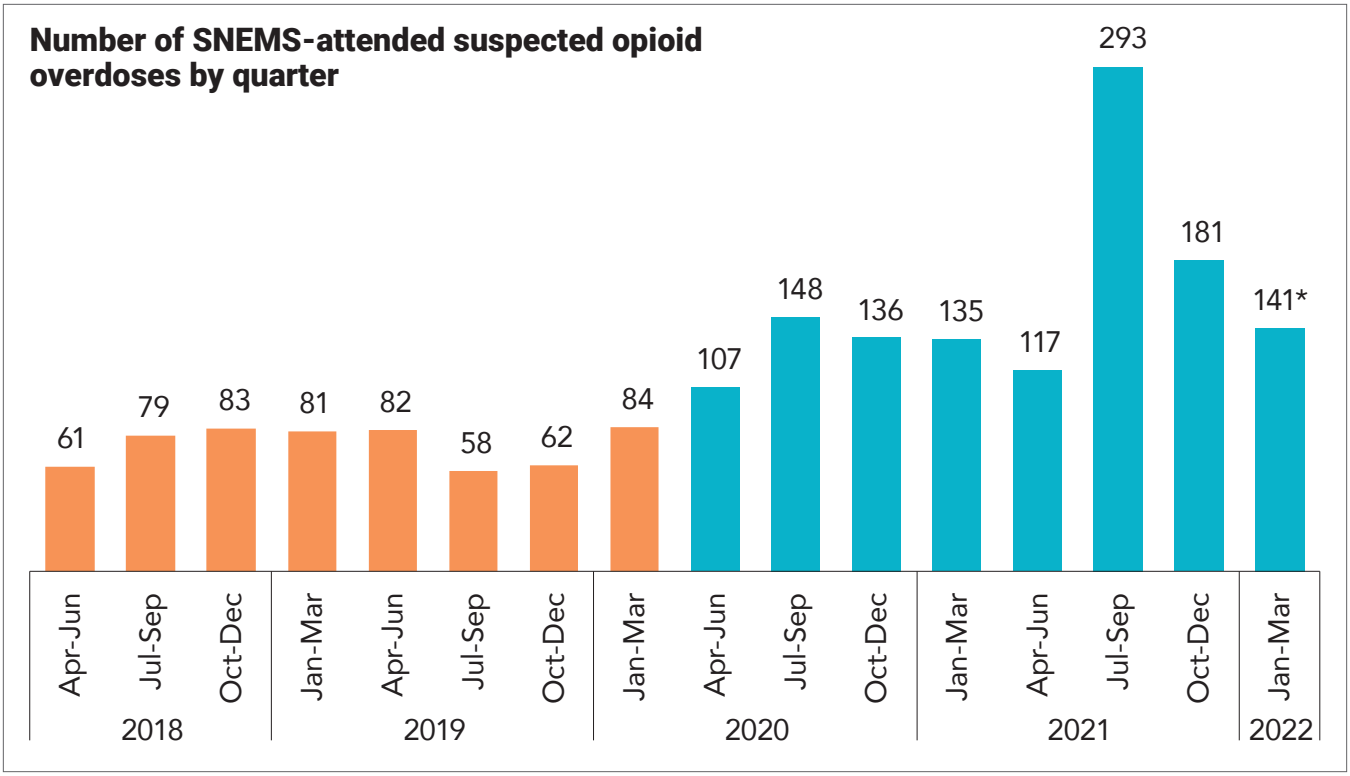
Due to the descriptive nature of the analyses presented in this Appendix, it is important to note that we cannot determine if the increase in paramedic-attended suspected opioid overdoses in Thunder Bay District, or how much of the increase, was caused by pandemic-related changes; there has been a steady increase in paramedic-attended suspected opioid overdoses in Thunder Bay District since before the COVID-19 pandemic.

Results

Pre-pandemic: In the two years prior to the COVID-19 pandemic (April 1, 2018 to March 31, 2020), SNEMS attended to 590 suspected overdoses where there was a high likelihood of opioid involvement.

Pandemic: In the first two years of the COVID-19 pandemic (April 1, 2020 to March 31, 2022), SNEMS attended to 1258 suspected overdoses where there was a high likelihood of opioid involvement.

Number of SNEMS-attended suspected opioid overdoses by quarter

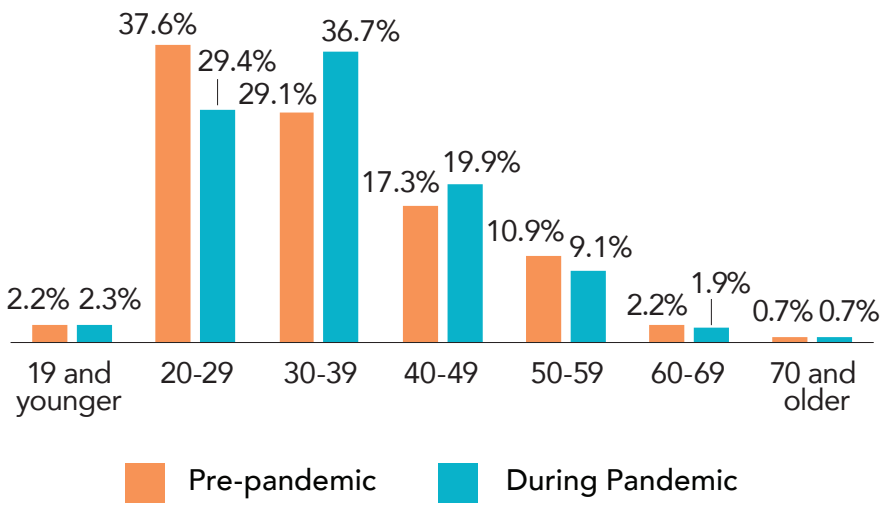


* Considered preliminary and subject to change.

Demographics

During both the pre-pandemic and pandemic periods, nearly two-thirds of SNEMS-attended suspected opioid overdoses were among males (60.3% vs. 62.6%, pre-pandemic vs. pandemic).

Proportion SNEMS-attended suspected opioid overdoses by age group



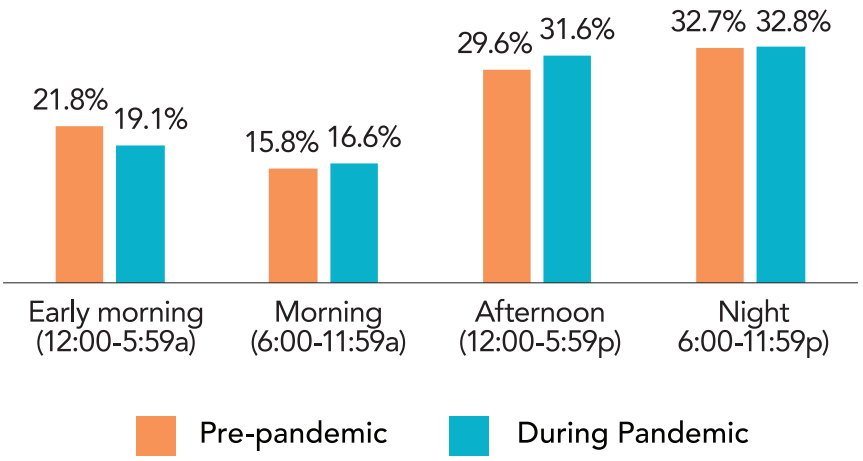
There were no statistically significant changes in the distribution of SNEMS-attended suspected opioid overdoses by age group **pre-pandemic** vs. **pandemic**.

However, **pre-pandemic**, the highest proportion of SNEMS-attended suspected opioid overdoses occurred among those aged 20 to 29 years (37.6%). During the **pandemic**, the highest proportion of SNEMS-attended suspected opioid overdoses shifted to those aged 30 to 39 years (36.7%).

Timing of Incident

The analysis of suspected opioid overdose by hour/day were conducted among non-fatal suspected opioid overdoses only. This was due to the potential inconsistency between the occurrence of a fatal suspected opioid overdose and the time and day when it was attended by paramedic services.

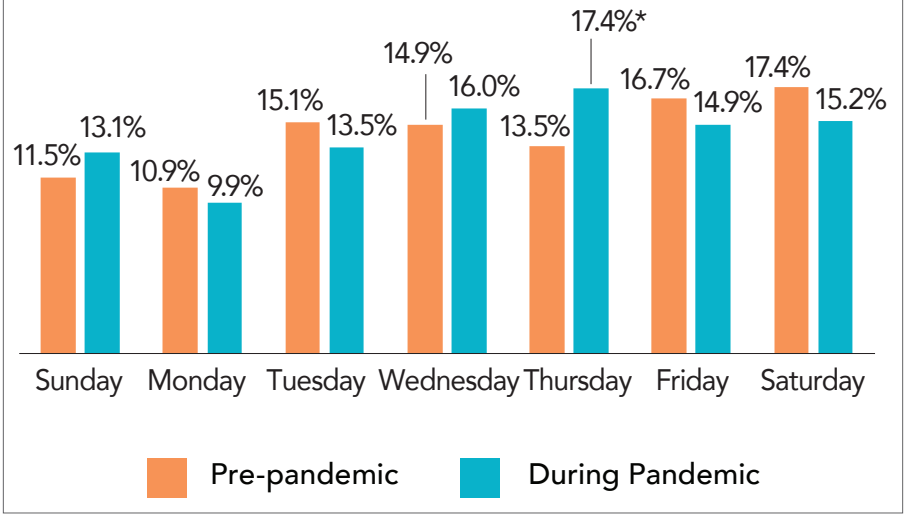
Proportion SNEMS-attended suspected opioid overdoses by time of day



There were no statistically significant changes in the distribution of SNEMS-attended suspected opioid overdoses by time of day **pre-pandemic** vs. **pandemic**.

During both **pre-pandemic** and **pandemic**, periods, the highest proportion of suspected opioid overdoses occurred during the night (6:00-11:00pm; 32.7% and 32.8%).

Proportion SNEMS-attended suspected opioid overdoses by day of the week



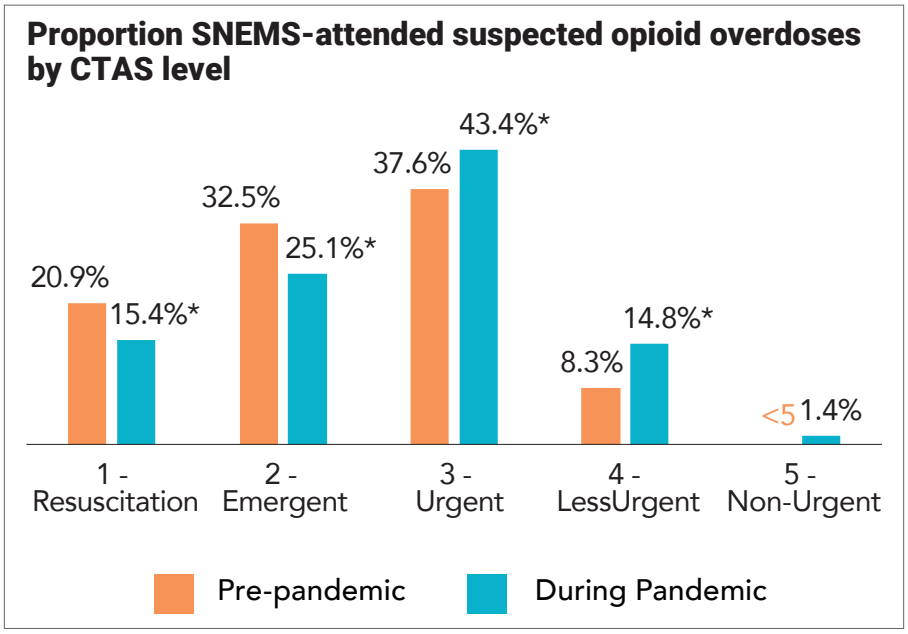
During the **pandemic**, there was a statistically significant increase in the proportion of SNEMS-attended suspected opioid overdoses that occurred on Thursdays (17.4% vs. 13.5% **pre-pandemic**).

Regardless of whether the pandemic is specifically driving this change, greater resources related to opioid overdoses may be required Wednesday-Thursday, in addition to on the weekends.

* Indicates statistically significant difference in proportions between cohorts.

Acuity

The Canadian Triage and Acuity Scale (CTAS) was first developed for use in hospital emergency departments as a tool to help define a patient's need for care. Shortly after, CTAS was successfully adapted for use by paramedics in the prehospital environment. CTAS is based on a five-level scale with Level 1 (Resuscitation) representing the "sickest" patients and Level 5 (Non urgent) representing the least ill group of patients.



During the **pandemic**, there was a statistically significant reduction in the proportion of SNEMS-attended suspected opioid overdoses that were classified as CTAS Level 1 and 2 (most severe).

There was a statistically significant increase in the proportion of SNEMS-attended suspected opioid overdoses that were classified as CTAS Level 3 and 4.

* Indicates statistically significant difference in proportions between cohorts.

Naloxone Use

Naloxone is an opioid antagonist that is used to temporarily reverse the effects of opioids and associated overdoses.

- **Pre-pandemic**: Of the 590 SNEMS-attended suspected opioid overdoses where there was a high likelihood of opioid involvement, naloxone was administered in 75.7% of the incidents.
  - 47.5% of the time, naloxone was administered by a bystander prior to paramedic arrival.
- **Pandemic**: Of the 1258 suspected opioid overdose calls where there was a high likelihood of opioid involvement, naloxone was administered in 70.9% of the incidents.
  - 41.5% of the time, naloxone was administered by a bystander prior to paramedic arrival.

Although the overall prevalence declined, the absolute number of SNEMS-attended suspected opioid overdose calls in which naloxone was administered by a bystander almost doubled.

Conclusion

During the first two years of the COVID-19 pandemic in Thunder Bay District, SNEMS responded to 1258 suspected overdoses where there was a high likelihood of opioid involvement, representing a 113% increase compared to the two years prior the pandemic.

We cannot determine if the increase in SNEMS-attended suspected opioid overdoses, or how much of the increase, may have been due to pandemic-related changes; we have seen a steady increase in SNEMS-attended suspected opioid overdoses since before the COVID-19 pandemic. Regardless, the increasing trend of SNEMS-attended suspected opioid overdoses warrants ongoing monitoring. Further, the findings from the most recent time period (April 1, 2020 to March 31, 2022) may indicate areas of focus for resource and program planning, and harm reduction and overdose prevention service delivery:

- The majority of SNEMS-attended suspected opioid overdoses were **among males**.
- The highest proportion of SNEMS-attended suspected opioid overdoses **has shifted from those aged 20 to 29 years, to those slightly older, aged 30 to 39 years**.
- The highest proportion of SNEMS-attended suspected opioid overdoses occurred **during the night (6:00-11:00pm)**.
- SNEMS-attended suspected opioid overdoses **were not necessarily concentrated on weekends, as has been seen in the past**.
- **Naloxone was administered in 70.9%** of SNEMS-attended suspected opioid overdoses.
- The highest proportion of SNEMS-attended suspected opioid overdoses were classified as **CTAS Level 3 (Urgent) and 4 (Less Urgent)**.

Appendix B

Trends in opioid-related mortality in the Thunder Bay District prior to, and during the COVID-19 pandemic

Adapted from: Gomes T, Murray R, Kolla G, Leece P, Bansal S, Besharah J, Cahill T, Campbell T, Fritz A, Munro C, Toner L, Watford J on behalf of the Ontario Drug Policy Research Network, Office of the Chief Coroner for Ontario and Ontario Agency for Health Protection and Promotion (Public Health Ontario). Changing circumstances surrounding opioid-related deaths in Ontario during the COVID-19 pandemic. Toronto, ON: Ontario Drug Policy Research Network; 2021.

Background

This Appendix provides a comparison of opioid-related deaths that occurred in Thunder Bay District during the two years prior to the COVID-19 pandemic (April 1, 2018 to March 31, 2020 [pre-pandemic]) and during the first two years of the COVID-19 pandemic (April 1, 2020 to March 31, 2022 [pandemic]).

Data

This report includes information obtained by the Office of the Chief Coroner (OCC)/ Ontario Forensic Pathology Service (OFPS) from completed investigations of confirmed opioid-related deaths. In May 2017, the OCC/OFPS implemented an enhanced data collection tool for suspected substance-related deaths to allow for more comprehensive and consistent reporting across the province.

Following the national case definition, an opioid-related death is an acute intoxication/toxicity death resulting from the direct contribution of a consumed substance(s), where one or more of the substances was an opioid, regardless of how the opioid was obtained [79]. These deaths do not include those due to: 1) the medical effects of long-term substance use; 2) medical assistance in dying; 3) trauma where substance(s) contributed to the circumstances of the injury, but was not directly involved in the death; and 4) homicide.

An opioid-related death investigation is completed by investigating coroners using multiple sources of information (including, but not limited to, hospital and health records, family members, bystanders and emergency responders) and encompasses information on demographics, medical, mental health and substance use history, scene information and the circumstances surrounding the death. The cause and manner of death are determined after a thorough review of information collected, in conjunction with post-mortem examinations by pathologists and toxicological testing. The integrated investigation informs inclusion as a death resulting from opioid toxicity or exclusion as a non-opioid death.

Analysis

The following analyses focused on deaths classified as 'accidental' (i.e., the coroner determined that the death involving opioids was unintentional; that is, due to an occurrence, incident or event that occurred without foresight or expectation) [80]. These represent the highest number of opioid-related deaths in Thunder Bay District and interventions for prevention may differ when addressing unintentional versus intentional deaths. Descriptive statistics related to people experiencing an opioid-related death/ opioid-related deaths are presented, including demographic information, drugs involved, and circumstances surrounding the death.

Categories with counts of less than five are suppressed. Chi-squared tests and the Fisher's exact test were used where appropriate to compare proportions between the pre-pandemic and pandemic cohorts.

Limitations

Not all investigations for opioid-related deaths that occurred during the pandemic period are complete. Data from 2022 should be considered preliminary and subject to change.

Information presented in this Appendix is based on the best available evidence at the time of the death investigations; however, some variables may be underreported if the information was not documented or available to the coroner/ pathologist (e.g., employment status). This may contribute to the underreporting of certain characteristics. Therefore, findings should be interpreted with caution.

Due to the descriptive nature of the analyses presented in this Appendix, it is important to note that we cannot determine if the increase in opioid-related deaths in Thunder Bay District, or how much of the increase, was caused by pandemic-related changes; there has been a steady increase in opioid-related deaths in Thunder Bay District since before the COVID-19 pandemic.

Results

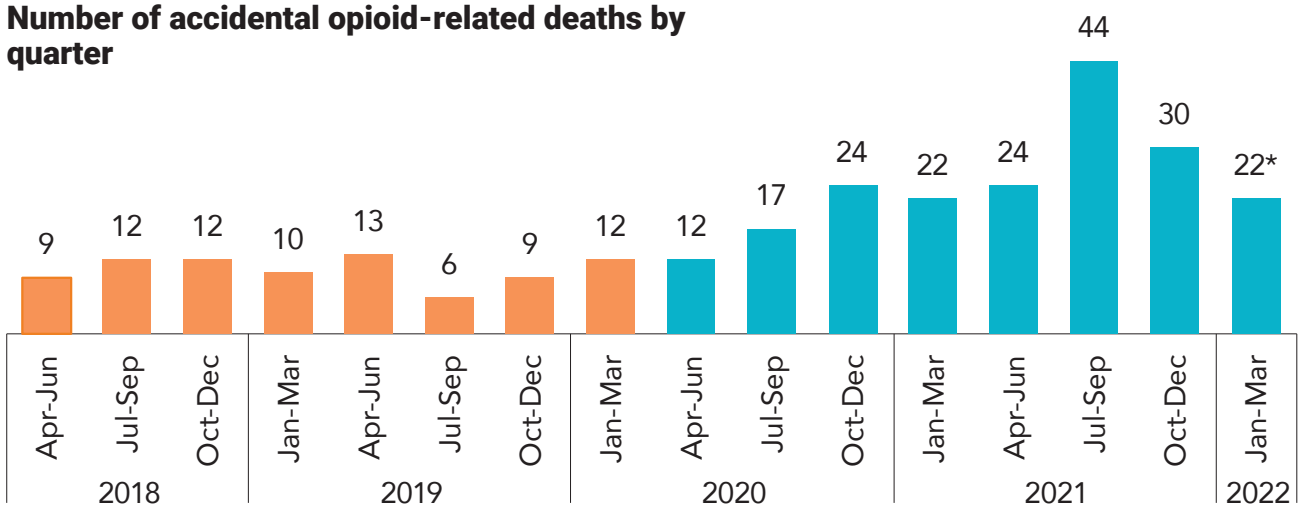
All of the data presented in this Appendix are from the Coroner's Opioid Investigative Aid distributed to public health units by Public Health Ontario [81, 82]. The definitions that accompany the results were provided by the Office of the Chief Coroner/ Ontario Forensic Pathology Service [80].

Pre-pandemic: In the two years prior to the COVID-19 pandemic (April 1, 2018 to March 31, 2020), there were 86 opioid-related deaths in Thunder Bay District; 83 (96.5%) of which were deemed 'accidental'.

Pandemic: In the first two years of the COVID-19 pandemic (April 1, 2020 to March 31, 2022), there were 198 opioid-related deaths; 195 (98.5%) of which were deemed 'accidental'.

This represents a 135% increase in accidental opioid-related deaths in Thunder Bay District between the pre-pandemic and pandemic periods.

Number of accidental opioid-related deaths by quarter



* Considered preliminary and subject to change.

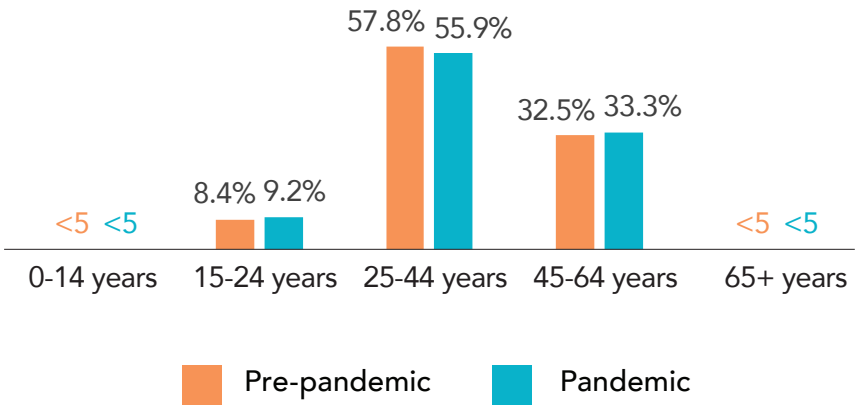
Demographics

Gender

Gender is assigned based on gender identity at time of death. During both the pre-pandemic and pandemic periods, over two-thirds of people experiencing an accidental opioid-related deaths were male (67.5% vs. 68.2%, pre-pandemic vs. Year 1).

Age Group

Proportion of people experiencing an accidental opioid-related death by age group (both genders)



There were no statistically significant changes in the distribution of age among people experiencing an accidental opioid-related death during the **pandemic**.

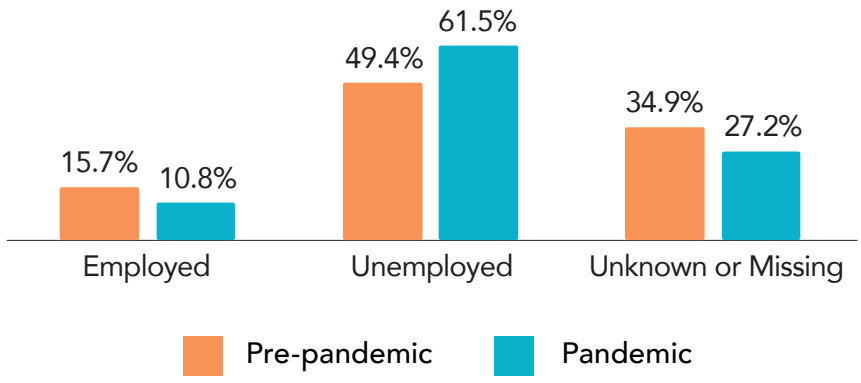
However, during both the **pre-pandemic** and **pandemic** periods, over half of the people experiencing an opioid-related deaths were aged 25-44 years.

Employment status

Employment status was identified by family and friends during the death investigation.

- Unemployed: Includes people who may be looking for employment, receiving income assistance or unable to work due to injury or disability.
- Employed: Includes full-time, part-time, seasonal and temporary employment.

Proportion of people experiencing an accidental opioid-related death by employment status



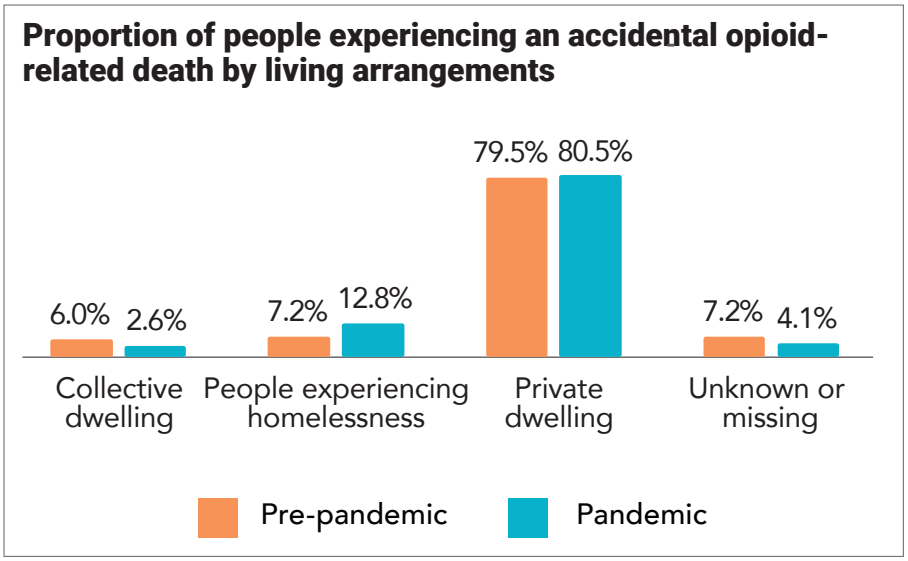
There were no statistically significant changes in the distribution of employment status among people experiencing an accidental opioid-related death during the **pandemic**.

However, during both the **pre-pandemic** and **pandemic** periods, most people experiencing an opioid-related death were unemployed.

Note: A large proportion of employment status information was unknown or missing, so results should be interpreted with caution.

Living arrangement

- **Collective dwelling**: May include lodging and rooming houses, hotels, motels, sober living facilities, etc.
- **People experiencing homelessness**: Includes people who are unsheltered, emergency sheltered, provisionally accommodated or at immediate risk of homelessness.
- **Private dwelling**: May include apartments/condominiums, row houses/townhouses, trailers/mobile homes, single-detached houses, semi-detached houses and community housing.



There were no statistically significant changes in the distribution of living arrangement among people experiencing an accidental opioid-related deaths during the **pandemic**.

However, during both the **pre-pandemic** and **pandemic** periods, most people experiencing an accidental opioid-related death lived in a private dwelling at the time of death.

Substance Involvement and Mode of Use

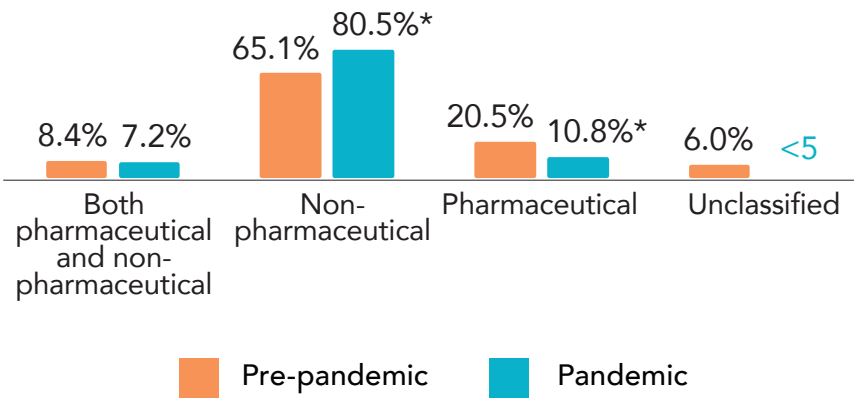
The opioids in this section are considered those directly contributing to death (i.e., substances determined by the pathologist and/or coroner to have directly contributed to the death based on the complete investigative findings such as toxicology reports and information obtained during death investigations).

* Indicates statistically significant difference in proportions between cohorts.

Origin of opioids

- **Non-pharmaceutical origin of opioids**: Includes those without evidence of a prescription.
- **Pharmaceutical origin of opioids**: Includes opioids that were prescribed to the deceased person or that were prescribed to someone else (i.e., diverted).

Proportion of accidental opioid-related deaths by origin of opioids directly contributing to death



During the **pandemic**, there was a significant increase in the role of non-pharmaceutical opioids directly contributing to death, and a significant decrease in the role of pharmaceutical opioids directly contributing to death.

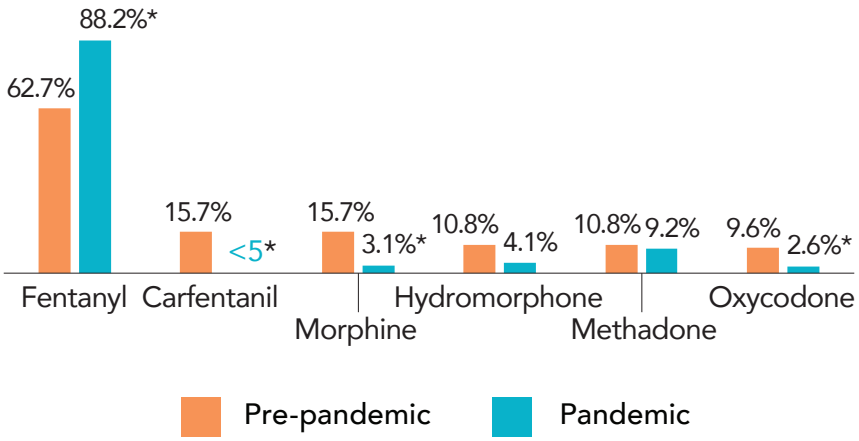
Regardless of whether the pandemic is specifically driving this change, the rising prevalence of non-pharmaceutical opioids directly contributing to death further highlights concerns about the unregulated opioid drug supply.

Type of opioid

During the **pandemic**, there was a significant increase in the role of fentanyl directly contributing to death. There was a significant decrease in role of carfentanil, morphine, and oxycodone directly contributing to death.

Regardless of whether the pandemic is specifically driving the increase in fentanyl directly contributing to opioid-related deaths, the rising prevalence of it further highlights concerns about its presence in the unregulated opioid drug supply.

Proportion of accidental opioid-related deaths by type of opioid directly contributing to death



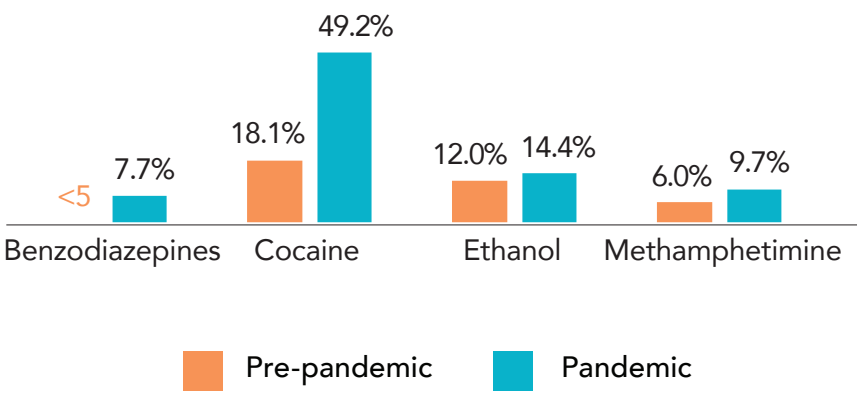
Note: Other opioids such as heroin, buprenorphine, hydrocodone, etc. are not presented due to very small counts (in most instances, 0).

* Indicates statistically significant difference in proportions between cohorts.

Non-opioid substances

Includes the four most common non-opioid(s) present in toxicology results which directly contributed to cause of death in addition to an opioid. These may include pharmaceutical and non-pharmaceutical non-opioids substances.

Proportion of accidental opioid-related deaths by other non-opioids directly contributing to death



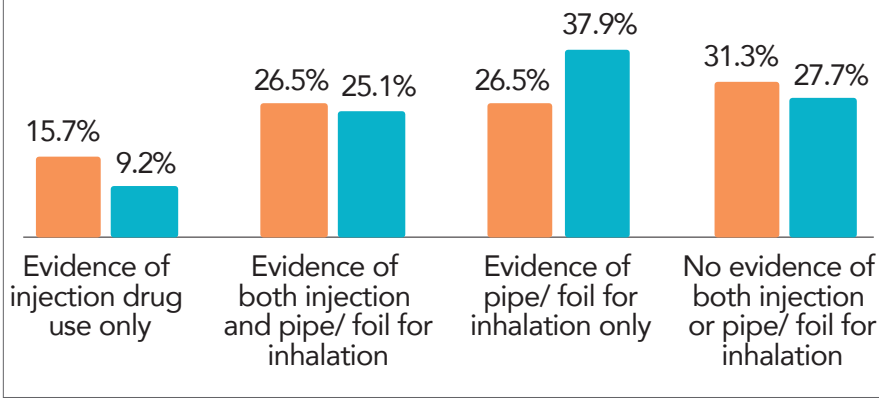
There were no statistically significant changes in the distribution of opioid-related deaths by other non-opioids directly contributing to death during the **pandemic**.

However, during both the **pre-pandemic** and **pandemic** periods, cocaine was the most prevalent non-opioid directly contributing to death.

Likely mode of drug use

Drug paraphernalia found at the scene may provide proxy information for potential mode of drug use. When no pipe, foil or evidence of injection was present, mode may include oral, nasal, transdermal, other or unknown modes of drug use.

Proportion of accidental opioid-related deaths by likely mode of drug use based on coroner's investigation



There were no statistically significant changes in the distribution of opioid-related deaths by likely mode of drug use (based on the coroner's investigation) during the **pandemic.**

However, during the **pandemic** period, there was a shift away from accidental opioid-related deaths with evidence of injection only and towards deaths with evidence of a pipe/foil for inhalation at the scene. Regardless of whether the pandemic is driving this shift, it suggests a need for expanded harm reduction services related to inhalation.

Circumstances Surrounding Death

Location

During both the **pre-pandemic** and **pandemic** periods, the majority of accidental opioid-related deaths occurred at a **private residence** (71.1% pre-pandemic vs. 84.6% during pandemic).

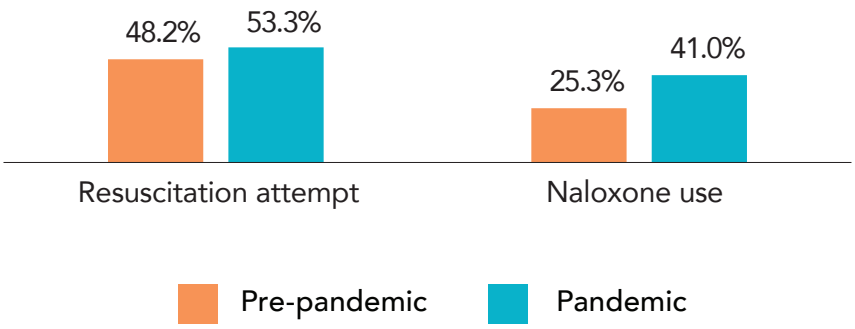
Individual present who could intervene

During the **pandemic**, among accidental opioid-related deaths where this information was available, just over half (50.3%) of deaths occurred when **no one was present to intervene**. This was slightly higher to the **pre-pandemic** period (39.8% (not statistically different)). Information on whether an individual was present was not available for 31.3% (pre-pandemic) and 20.5% of accidental opioid-related deaths.

Resuscitation attempts

Resuscitation attempts include emergency measures in an attempt to sustain life that could include naloxone administration, as well as other methods, such as rescue breathing and/or chest compressions.

Proportion of accidental opioid-related deaths by whether there was a resuscitation attempt



There was a resuscitation attempt for roughly half of accidental opioid-related deaths (48.2% **pre-pandemic** and 53.3% during the **pandemic**).

During the **pandemic**, there was a significant increase in naloxone use, with naloxone being administered 41.0% of the time. When used, naloxone was most commonly administered by first responders (71.4% pre-pandemic and 66.3% during pandemic) or a bystander (42.9% pre-pandemic and 56.3% during pandemic). It was less commonly administered in a hospital setting (47.6% pre-pandemic vs. 25.0% during pandemic).

Conclusion

As noted in Changing Circumstances Surrounding Opioid-Related Deaths in Ontario During the COVID-19 Pandemic, "the circumstances surrounding opioid-related deaths have shifted in Ontario over the past decade, even in the absence of the COVID-19 pandemic. Therefore, the observed differences between the pre-pandemic and pandemic cohorts could be attributed to the COVID-19 pandemic or may be due to pre-existing temporal changes."[27] Regardless, "the synergistic effects of the COVID-19 pandemic and Ontario's overdose epidemic have led to a continued escalation in the rate of opioid-related deaths across the province, demonstrating that rapid action is needed to support people who use drugs as this pandemic continues to evolve."[27]

Reflecting on opioid-related deaths in the Thunder Bay District, there was a **135% increase** in accidental opioid-related deaths between the pre-pandemic and pandemic periods. The findings from the most recent time period (April 1, 2020 to March 31, 2022) may indicate areas of focus for resource and program planning, and harm reduction and overdose prevention service delivery:

- Over two-thirds of people experiencing an accidental opioid-related death **were male**.
- Over half of the people experiencing an opioid-related death were **aged 25-44 years**.
- Most people experiencing an opioid-related death were **unemployed**.
- Most people experiencing an accidental opioid-related death were **housed** (i.e., lived in a private dwelling at the time of death).
- There has been a **significant increase in the role of non-pharmaceutical opioids directly contributing to death**, further highlighting concerns about the unregulated opioid drug supply.
- There has been a significant **increase in the role of fentanyl directly contributing to death**.
- **Cocaine** was the most prevalent non-opioid directly contributing to death.
- There has been **a shift away from accidental opioid-related deaths with evidence of 'injection only' and towards deaths with 'evidence of a pipe/foil for inhalation'** at the scene, suggesting a need for expanded harm reduction programming.
- Most accidental opioid-related deaths occurred at a **private residence**.
- Among accidental opioid-related deaths where this information was available, just over half of deaths occurred when **no one was present to intervene**.
- **There has been significant increase in naloxone use**; however, naloxone was only administered 41.0% of the time.

Privacy Statement

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Thunder Bay District
Health Unit


THUNDER BAY
Drug Strategy