

Mental Health and Addictions System Performance in Ontario First Nations (2009-2019)

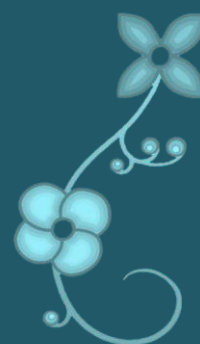


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Data

Data were linked using unique encoded identifiers and analyzed at ICES.

We would like to thank the Chiefs of Ontario for allowing the use of the Indian Register. Parts of this report are based on data and/or information compiled and provided by the Canadian Institute for Health Information (CIHI) and the Ontario Ministry of Health (MOH). Information on deaths was provided by the Office of the Registrar General (ORG), which received the information from Service Ontario. However, the analyses, conclusions, opinions, and statements expressed in the report are solely those of the authors and not necessarily those of CIHI, MOH, ORG or the Ministry of Government and Consumer Services; no endorsement is intended or should be inferred. Geographical data are adapted from Statistics Canada, Postal Code Conversion File + 2011 (Version 6D) and 2016 (Version 7B). This does not constitute endorsement by Statistics Canada of this project.

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About the Research Partners

Chiefs of Ontario (COO)

Chiefs of Ontario supports all First Nations in Ontario as they assert their sovereignty, jurisdiction, and their chosen expression of nationhood.

Guided by the Chiefs in Assembly, we uphold self-determination efforts of the Anishinabek, Mushkegowuk, Onkwehonwe, and Lenape Peoples in protecting and exercising their inherent and Treaty rights. Keeping in mind the wisdom of our Elders, and the future for our youth, we continue to create the path forward in building our Nations as strong, healthy Peoples respectful of ourselves, each other, and all creation. The activities of the Chiefs of Ontario are mandated through and guided by:

- Resolutions passed by the Chiefs in Assembly of the 133 First Nations in Ontario;
- The Leadership Council made up of the Grand Chiefs of Political Territorial Organizations (PTOs) and Independent First Nations;
- The elected Regional Chief for the Chiefs of Ontario.

ICES

ICES (formally the Institute for Clinical and Evaluative Sciences) is an independent, nonprofit research institute that uses population-based health information to produce knowledge on a broad range of health care issues. ICES' unbiased evidence helps measure health system performance, provides a clearer understanding of the shifting health care needs of Ontarians, and creates discussion of practical solutions for using scarce resources. ICES' knowledge is highly regarded in Canada and abroad, and is widely used by governments, hospitals, planners and practitioners to make decisions about care delivery and develop policy.

Throughout this report, the reader will notice the term: "Data Not Shown". In this case, additional information on the data can be found in a technical report produced by ICES for all indicators mentioned in this report. First Nations communities can request a copy of the technical report from Chiefs of Ontario by contacting: Roseanne Sutherland (roseanne.sutherland@coo.org) or Bernadette deGonzague (bernadette@coo.org)

Project Background

Access to Mental Health and Addiction (MHA) services has been identified as a priority by First Nations communities. Consequently, there is a need for a focused report assessing MHA service use and system performance. A request was submitted to ICES by the Chiefs of Ontario to replicate an Ontario Mental Health Scorecard using First Nations identifiers across the lifespan. The Indian Register (IR) has been linked with ICES health administrative data and is used to identify First Nations people in Ontario with a history of MHA-related service use and outcomes. ICES received approval from the Chiefs of Ontario to use the IR for this project on March 12, 2018. It examines rates of mental health System Use, Access to Care, and Outcomes, compared to non- First Nations people and to Ontario overall. This is the first project to assess MHA-related performance indicators and factors relating to those indicators among First Nations population in Ontario.

Project Objectives

1. Assess Mental Health and Addictions (MHA) indicators, which describe the current state of MHA service provision among Ontario First Nation communities
2. Examine trends in performance indicators to assess changes over time in system performance and outcomes among Ontario First Nations people
3. To explore the impact of socio-demographic characteristics (e.g. age, sex) on mental health service use and access to care and outcomes.

Executive Summary

This summary presents the combined results of the Mental Health and Addictions Systems Performance First Nations in Ontario (2009-2019) Interim Report, October 2021, and the Final Report, September 2022. This work was done by ICES in response to a request by the Chiefs of Ontario First Nations Mental Health and Addictions Working Group under the Trilateral First Nations Health Senior Officials Committee, as a First Nations specific analysis following release of the Ontario Mental Health and Addictions (MHA) Scorecard. The mainstream reports provide comprehensive trends over time in Ontario's MHA system, including measures of MHA-related hospital and emergency department use access to receiving mental health care; and outcomes such as intentional self-injury and suicide. Since the performance of Ontario's MHA system for First Nations in Ontario was unknown, the First Nations report was intended to replicate that work in order to provide baseline data specifically for First Nations in Ontario. ICES received approval from the Chiefs of Ontario to use the Indian Register (IR) for this project on March 12, 2018. The IR is linked with ICES health administrative data to identify First Nations people in Ontario with a history of MHA-related service use and outcomes for First Nations people, compared to non- First Nations people. This is the first project to assess the ability of the MHA-system to provide services to the First Nations population in Ontario. ICES was funded for this project by the Ontario Ministry of Health (MOH).

Project Objectives

- Assess Mental Health and Addictions indicators, which describe the current state of MHA service provision among First Nation communities in Ontario
- Examine trends in performance indicators to assess changes over time in system performance and outcomes among First Nations people in Ontario
- To explore the impact of socio-demographic characteristics (e.g. age, sex) on mental health service use and access to care

The Mental Health and Addictions System Performance in First Nations in Ontario study includes the following indicators:

System Use: (Reported in the Interim report)

1. Rates of MHA-related outpatient visits
2. Percentage of individuals with MHA-related outpatient visits
3. Rates of MHA-related emergency department visits
4. Rates of MHA-related hospitalizations
5. Median length of stay for psychiatric hospitalizations

Access to Care: (Reported in the Final Report)

1. Emergency department as first point of contact for MHA care
2. Rates of emergency department re-visits within 30-days following a MHA emergency department visit
3. Rates of hospital readmission within 30-days following a MHA hospital discharge
4. Rates of outpatient visits within 7 days following a MHA hospital discharge

Outcomes:

5. Prenatal opioid exposure (POE) and neonatal abstinence syndrome (NAS)
6. Rates of death by suicide
7. Rates of emergency department visits for intentional self-injury
8. Use of physical restraints during MHA hospitalizations

KEY FINDINGS

INDICATOR CATEGORY: SYSTEM USE

System use indicators (outpatient visits, Emergency department visits, and hospitalizations) can be a measure of whether First Nations have access to services at the right place and the right time when addressing mental health and addictions issues. The indicators in this study did not measure access to community-based services and allied health care providers who do not bill OHIP for their services.

Outpatient physician services can be provided by a primary care provider (PCP), paediatrician, or psychiatrist. The data may tell us who is providing services to respond to MHA needs, but does not speak to the *unmet* needs in the community, particularly among those who do not have a PCP or cannot access them easily. The emergency department (ED) is an important MHA access point for people who have additional needs or if they are in crisis. The ED may also be the only access point for individuals who cannot find appropriate or timely care in outpatient and community settings. This includes whether an individual requires hospitalization for mental health and addictions care, and length of their stay, is influenced by a number of things such as: resources available in their home community, the severity of their illness requiring psychiatric hospitalization, and the regional availability of hospital beds, among other factors.

FINDINGS:

Outpatient visits

First Nations people are visiting primary care providers almost 3x more frequently compared to the rest of Ontario for MHA-related outpatient visits, particularly among young people, and those living outside of community. These results may be useful to advocate for human resource planning for more community-based non-physician services. Psychiatrists and pediatricians were seen infrequently, perhaps related to long waitlists for these specialists.

Emergency department visits

First Nations people had higher rates of visits to the Emergency Dept. for MHA concerns, and greater increases over time than non-First Nations people, with the top 2 reasons being substance-related and addictive disorders, and anxiety disorders. ED visits for alcohol-related disorders and “other” drugs and addictions increased over time to a much greater extent among First Nations people compared with non-First Nations people. Alcohol withdrawal remains the primary cause for ED visits and hospitalizations.

Hospitalizations

First Nations people had higher rates of MHA hospitalizations compared to Non-First Nations people. These rates increased over time most notably among First Nations people aged 14-24 years, more than doubling among 14-17 year-olds from 2009-2019. The three most common reasons for MHA hospitalizations were substance-related and addictive disorders, mood disorders, and schizophrenia among both First Nations people and Non-First Nations people. However, First Nations people had shorter median lengths of stay compared to non-First Nations.

INDICATOR CATEGORY: ACCESS TO CARE

Access to care in the community for mental health services is reflected by measuring the use of a hospital for Mental Health and Addictions care by individuals who need services but cannot find them in the community. The high rate of use of the emergency department as a first point of contact and for

unscheduled return visits for MHA care after a hospitalization or ED visit, can be a signal that there is inadequate access to outpatient physician- and community-based follow-up care. Individuals who need services may use the ED as their first point of contact with the health system for a variety of reasons, including long wait times, lack of services, or a lack of safe or culturally appropriate services. We were unable to measure these reasons within the scope of this study, but the results indicate an overall need for additional community-based supports along the continuum of care in prevention and early intervention, as well as follow-up treatment and wraparound supports.

FINDINGS:

Use of the Emergency department for Mental Health and Addictions care

The use of the ED as the first point of contact for MHA care was similar among First Nations people and non-First Nations people. First Nations people living within a First Nations community used ED as first-contact more frequently than those living outside a community.

First Nations people were less likely to use the ED as a first-contact for substance-related and addictive disorders compared to non-First Nations people. However, mood disorders, anxiety disorders, personality disorders, and intentional self-injury were more frequently the cause for ED visits among First Nations people. Young people (10-17 year-olds) seem to be using the ED as a first point of contact more than older people, suggesting that young people have poor access to early intervention and preventative care. They should not be having their first experience with mental health care through the ED.

Revisits to the ED within 30 days

From 2009 – 2019, the rates of a revisit to the ED within 30 days of a previous ED visit for a MHA diagnosis trended upward for all MHA diagnoses. Between 2017 and 2019, **First Nations people had 1.5 times higher rates of 30-day MHA ED revisits** compared with non-First Nations people. Repeated unscheduled emergency department visits for mental health and addictions (MHA) care could mean there is inadequate access to follow-up care in the community or outpatient settings, particularly where ED may be the only after-hours care available in a community. This trend may also signal growing care needs now and in the future.

Readmissions within 30 days after discharge from Psychiatric Hospitalization Between 2017 and 2019, the rate of 30-day MHA hospital readmissions was slightly higher among First Nations people compared with non-First Nations people. Among both First Nations people and non-First Nations people, the greatest increase in MHA hospital readmission rates over time (2009-2019) was for substance-related disorders.

Rates of outpatient visits within 7 days following a MHA hospital discharge

First Nations people had lower rates of 7-day outpatient follow-up with any care provider, particularly with psychiatrists, compared with non-First Nations people. First Nations people were seen less frequently than non-First Nations within 7 days for follow-up, across all types of MHA diagnoses.

Frequent use of the ED for mental health and addictions (MHA) as a *first point of contact* for care, and repeated unscheduled frequent ED visits for follow-up care may mean that access to outpatient physician and community-based care are inadequate within First Nations community or outpatient settings, particularly where ED may be the only after-hours care available in a community. Early follow-up after hospital discharge likely helps to improve continuum of care for treatment and communication between health care providers and patients which may prevent hospital readmission. The gaps in outpatient care are also evidenced by the low rates of 7-day follow-up for outpatient visits after a psychiatric hospital discharge. Higher rates for First Nations people presenting at the ED without any prior help for intentional self-injury/suicide attempts means that our health care system is

failing to respond to their needs and is not accessible to people in crisis. The experience of stigma and racism can also be strong deterrents for accessing the ED for MHA care.

This upward trend in ED use may also signal growing mental health care needs now and in the future. In the years since the analysis conducted in this report, closures of EDs across Ontario have been necessitated by impacts of the COVID-19 pandemic, threatening an already fragile Mental Health service system.

INDICATOR CATEGORY: OUTCOMES

Prenatal opioid exposure (POE) and neonatal abstinence syndrome (NAS)

Prenatal Opioid Exposure among First Nations infants affects approximately 16% of infants overall. Rates vary from approximately 4% in Central and South West, to 31% of those in the North West¹ and is mostly due to opioid agonist therapy for the treatment of opioid use disorders. Changing trends from the use of methadone to Suboxone from 2013 to 2019 is important as Suboxone is associated with better infant outcomes including less severe withdrawal. While there was a slight increase of POE over time from 2013 to 2015, these changes then stabilized, reflecting improved access to effective treatments for First Nations women. POE is higher among infants born to older mothers and lower among those born to teenage mothers and may indicate that more older mothers are being treated for opioid use disorder. First Nations communities in North West Ontario have the highest numbers of mothers who take opioids during pregnancy, with the majority of those mothers being treated for opioid use disorder. One consequence is that rates of infants born with Neonatal Abstinence Syndrome has increased, requiring longer hospital stays for infants for treatment of their symptoms. NAS is not, in and of itself, a risk factor for poor infant/child outcomes (such as development), and reflects in part the use of medications to treat opioid use disorder. It is far safer for the pregnancy (mother and fetus) to be treated for opioid use disorder than to either discontinue opioid use during pregnancy or take diverted prescriptions or illicit drugs (i.e. to not be treated for opioid use disorder).

There is little research on the long-term effects of POE and NAS, and the negative outcomes associated with the presence of withdrawal at birth. More work is needed to better understand the longer-term trajectories and treatment of mothers throughout their pregnancies, as well as the effect of integrated programming for a holistic approach with mothers and infants within the family context. Fear of child apprehension and poor access to services are strong deterrents of treatment. Funding to support improved access to culturally safe, equitable pre- and postnatal care among mothers of all ages may contribute significantly to better outcomes in terms of opioid use during pregnancy now and in generations to come. Additionally, support for First Nations midwifery as an integral component of the health care system would improve outcomes with follow up for wholistic culturally appropriate post-pregnancy follow-up care as an option with doctor-supported hospital births.

Death by suicide

The data on deaths by suicide are the most tragic and indicative of failure of the mental health system to support First Nations, especially our youth, in the time of life when supports are most needed. Data presented are likely an underestimate, since method of suicide is not consistently recorded, and do not always identify if the intent of self-inflicted injury was suicide.

¹ The 14 LHINs were clustered into five “Ontario Health Interim and Transitional Regions” (the “Interim Regions”). The 14 LHINS were organized under five Interim Regions. Northwest region formally known as the North West LHIN. https://www.osler.com/en/resources/regulations/2019/ontario-taking-next-steps-to-integrate-health-care-system#_ftnref3

The rate of death by suicide is three times higher among First Nations than among non-First Nations, and is **very high in young First Nations individuals** aged 10-24 years, and higher among females than males. For non-First Nations in Ontario, the opposite is typically observed - deaths by suicide are rare in youth, and rates start to increase in adults. Data on death by suicide must be considered as a *symptom* of inequities and other social determinants of health, such as inadequate housing, poverty, intergenerational trauma, poor access or multiple barriers to services, and systemic racism in health care. As seen in other indicators in this study, ED visits among First Nations people for intentional self-injury are much higher than for non-First Nations. Those living in the North West region had the highest rates of ED visits for intentional self-injury; and First Nations females had higher rates of ED visits for intentional self-injury compared to First Nations males and non-First Nations females. Current policies and programming may be missing the target for First Nations youth and females.

Rates of emergency department visits for intentional self-injury

This indicator highlights individual visits to an emergency department for a nonfatal self-poisoning or self-injury, carried out with at least some attempt to end one's life. Between 2017 and 2019, the rate of emergency department visits for intentional self-injury was over 6 times higher among First Nations people compared with non-First Nations people. Females and those aged 14 – 24 years of age had higher rates of emergency department visits for intentional self-injury compared with males and these trends are continuing over time. Rates of emergency department visits for intentional self-injury were highest for those people living in North West, Toronto Central, South West, and Central West regions. Poisoning represented 65% of all Intentional self-injury attempts among First Nations people. In a related report² more frequent follow-up was not associated with better outcomes. Timely access to mental health care after intentional self-injury was poor at 31%. Follow-up care had virtually no association with subsequent risk; treatment “as usual” was insufficient. Care after an intentional self-injury event must include evidence-based wraparound care and other healing modalities founded in First Nations culture, based on the First Nations Mental Wellness Continuum Framework <https://Health.chiefs-of-ontario.org/resources/>.

Use of physical restraints during MHA hospitalizations

When caring for individuals with severe mental illness who are in acute crisis, reducing the risk for harm to self or others is a priority for hospital staff. The practice of using physical restraints (external devices, materials or equipment that are attached to or near a person's body to hinder freedom of movement) is intended to prevent suicide or aggressive acts. Other, less restrictive forms of reducing agitation are preferred whenever possible and psychiatric hospitals have been strongly encouraged to minimize the use of restraints.

The use of physical restraints during psychiatric hospitalizations has been increasing since 2016, and is higher among males than females. First Nations people experience similar rates of use of physical restraints during psychiatric hospitalizations compared to non-First Nations.

Physical restraint use was similar between First Nations people living outside or within a First Nations community during psychiatric hospitalizations, and were used most frequently for people diagnosed with schizophrenia and other psychotic disorders.

² Jon Hunter, Robert Maunder, Paul Kurdyak, Andrew S. Wilton, Andrea Gruneir, Simone Vigod, Mental health follow-up after deliberate self-harm and risk for repeat self-harm and death, Psychiatry Research, Volume 259, 2018, Pages 333-339. <https://www.sciencedirect.com/science/article/pii/S016517811730879X>

KEY CONSIDERATIONS / RECOMMENDATIONS

Taken together, these findings present important service delivery implications, and support the need for additional health human resources within communities as has been identified by First Nations Leadership. Adequate sustainable funding would allow First Nations to access critical, culturally relevant services in a timely manner close to home such as “wrap-around” services including more culturally appropriate care such as traditional healers, access to elders, midwives, counsellors, and the ongoing need for treatment for alcohol use disorder. Ontario is generally under-serviced to meet the needs of First Nations patients at the community level, and the gap between services provided and actual need is not measured. Higher rates of system use is not indicative of good access to appropriate care.

Further attention to a number of factors influencing these results can influence effective changes with program and policy planning.

- Provision for adequate health human resources within communities as has been identified as a need by First Nation Leadership. Support for traditional healers and land-based programs, as well as harm reduction programs are urgently needed.
- Timely and accessible mental health services to reduce the long waitlists for services for children/youth especially for psychiatrist services is critical as evidenced by the high use of EDs and rates of death by suicide.
- Supports for provision of First Nations midwifery would provide a benefit to families with supportive wholistic care for the mother and baby through traditional methods of birthing and childcare.
- The need for trauma-informed mental health supports for many First Nations will continue to escalate in the coming years, as a result of the Truth and Reconciliation process which began in 2009, recent Indian Residential School recoveries, and the effects of the COVID-19 pandemic.
- Virtual access to specialists would improve care for those living in rural/remote areas.
- Policy and programming planning needs to focus on supporting prevention, harm reduction, and crisis management and recovery. Drug formularies, and prescribing guidelines need to consider unintended consequences of more dangerous street-sourced drugs being inserted into the supply.
- Systemic racism within the health care system must be addressed as stigma and discrimination prevents many individuals from seeking medical care or harm-reduction programs.

Content Warning

The intention of this report is to provide an overview of the above noted project objectives. This report will be hard to read and may trigger uncomfortable emotional reactions at times and it is encouraged that you take breaks and moments to reflect on what the data are showing. Please read at your own comfort and pace. If you need emotional support, please contact:

24 hour NAN Hope

Support line at 1-844-NAN-HOPE (1-844-626-4673)

The First Nations and Inuit Hope for Wellness Help Line

Call the toll-free Help Line at 1-855-242-3310 or connect to the online chat at hopeforwellness.ca

Service languages: Ojibway, Cree, Inuktitut, English, French.

Indian Residential School Support Line

Help is available 24/7 for people experiencing pain or distress as a result of their residential school experience. Call 1-800-464-8106 or the 24 Hour Crisis Line: 1-866-925-4419 (open 7 days a week).

Kids Help Phone

24/7 phone counselling service for children and youth, or their caregivers: Call 1-800-668-6868; Text CONNECT to 686868; or through Facebook Messenger: [KidsHelpPhone.ca/Messenger](https://www.facebook.com/KidsHelpPhone.ca/Messenger)

Introduction

Mental health has been established as a key priority by First Nations in Ontario, with several leaders calling for action to address the mental health crises in their communities. A Motion made on September 1, 2010 states that: “*The Ontario Chiefs Committee on Health (OCCOH) and the Health Coordination Unit (HCU) be directed to explore other areas of First Nation health surveillance and analysis with the Institute for Clinical Evaluation (sic) Sciences; to include such areas as diabetes, mental health and heart and stroke.*” Additionally, in 2016, the Chiefs of Ontario, the Ontario SPOR Support Unit, the Centre for Rural and Northern Health Research, and ICES hosted a First Nations Health Research Symposium where the need for MHA research was also highlighted as a priority by First Nations community members.

Beginning in 2015, as part of Ontario’s Open Minds, Healthy Minds: Ontario’s Comprehensive Mental Health and Addictions Strategy, ICES developed a baseline scorecard report³ describing the state of the child and youth MHA system in Ontario, followed by an update in 2017⁴, an adult baseline scorecard in March 2018⁵ and across the lifespan report in February 2021⁶. The reports provide comprehensive trends over time in Ontario’s MHA system, including measures of MHA-related hospital and emergency department use, access to receiving mental health care; and outcomes such as intentional self-injury and suicide. To date, the performance of Ontario’s MHA system for First Nations in Ontario is relatively unknown.

Since 2017, the Chiefs of Ontario has been working with ICES to respond to the research priorities set in February 2016. Thus, this project will be the first report assessing MHA-related performance and contextual-level indicators among the First Nations in Ontario population. All work has been guided by a First Nations Advisory Committee.

The Mental Health and Addictions System Performance in Ontario First Nations study examines indicators on System Use, Access to Care, and Outcomes. The following System Use indicators were reported in an Interim report released in late Fall 2021, which can be viewed at: <https://chiefs-of-ontario.org/priorities/health/research/>

System Use:

- Rates of MHA-related outpatient visits
- Percentage of individuals with MHA-related outpatient visits
- Rates of MHA-related emergency department visits
- Rates of MHA-related hospitalizations
- Median length of stay for psychiatric hospitalizations

³ MHASEF Research Team. *The Mental Health of Children and Youth in Ontario: A Baseline Scorecard*. Toronto, ON: Institute for Clinical Evaluative Sciences; 2015.

⁴ MHASEF Research Team. *The Mental Health of Children and Youth in Ontario: 2017 Scorecard*. Toronto, ON: Institute for Clinical Evaluative Sciences; 2017.

⁵ MHASEF Research Team. *Mental Health and Addictions System Performance in Ontario: A Baseline Scorecard*. Toronto, ON: Institute for Clinical Evaluative Sciences; 2018.

⁶ MHAP Research Team. *Mental Health and Addictions System Performance in Ontario: 2021 Scorecard*. Toronto, ON: ICES; 2021.

This Final report includes results on indicators within the second and third categories, Access to Care, and Outcomes

Access to Care:

- Emergency department as first point of contact for MHA care
- Rates of 30-day emergency department re-visits following a MHA emergency department visit
- Rates of 30-day hospital readmission following a MHA hospital discharge
- Rates of outpatient visits within 7 days following a MHA hospital discharge

Outcomes:

- Prenatal opioid exposure (POE) and neonatal abstinence syndrome (NAS)
- Rates of death by suicide
- Rates of emergency department visits for deliberate self-harm
- Use of physical restraints during MHA hospitalizations

Methodology

Population: All registered First Nations (FN) people in Ontario aged, 6 to 105 years, from 2009-2019, including both FN people living within a FN community and outside of a FN community. The Indian Registry System that has been linked with the Registered Persons Database, will be used to identify First Nations in Ontario with a history of MHA-related service use and outcomes between 2009 and 2019 through linkage with ICES administrative health databases.

Annual Population Estimate: The annual population estimate is determined with the Registered Persons Database (RPDB). This database contains the age, sex, and postal codes of every resident that is covered under Ontario’s universal health insurance. The annual Ontario population includes individuals’ ages 6-105 years, with a valid health card between the calendar years 2009 to 2019. Ages 0-6 were excluded due to few MHA outcomes among First Nations population. It is then linked with the Indian Register (IR) database. First Nations and non-First Nations groups were created. Location is determined as living within or outside of a First Nations community. Exception: Emergency Department (ED) visits indicator captures FN people aged, 0 to 105 years.



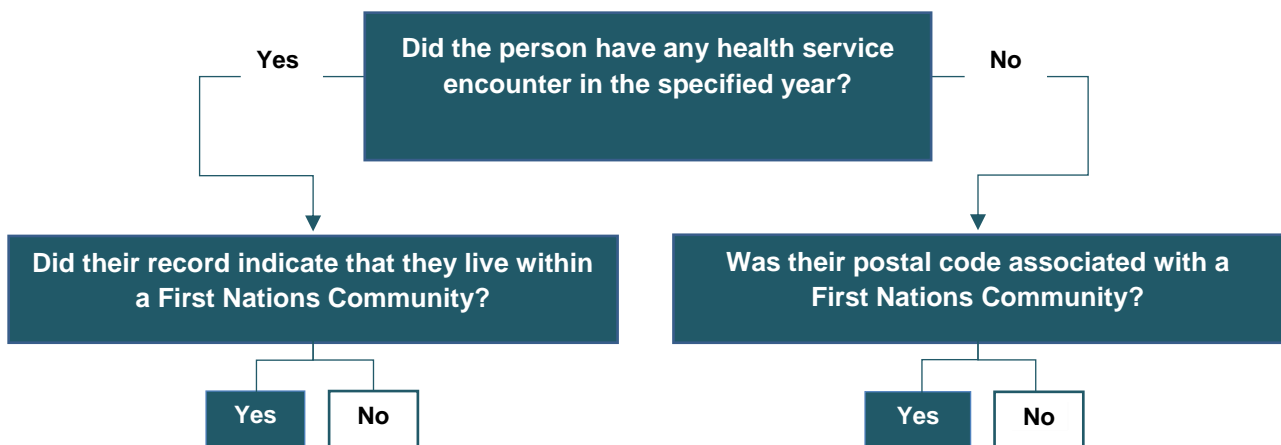
Project Data Sources

The following list is all of the project's data sources. Indicators may not access every database. A full description of indicator descriptions and data sources can be found in the Technical Appendix.

- Indian Register (IR)
- Ontario Health Insurance Plan (OHIP)
- Community Health Centre (CHC)
- Postal Code Conversions File (PCCF)
- Registered Person's Database (RPDB)
- Discharge Abstract Database (DAD)
- Ontario Mental Health Reporting System (OMHRS)
- National Ambulatory Care Reporting System (NACRS)
- MOMBABY Database (MOMBABY)
- Narcotics Monitoring System (NMS)
- Office of the Registrar General – Deaths (ORGD) Vital Statistics Database

Geographical Stratifications

The data were stratified according to location within Ontario: Local Health Integration Network (LHIN), living within a First Nations community and living outside a First Nations community. Sometimes LHINs were grouped together into larger regions to present data without small cell constraints.



Rate is how often an event or circumstance happens per unit of time, population or other standard of comparison. Crude rate is total number of cases in a given period of time by total population and standardized rate is the rate of an event that is adjusted for age and sex.

Limitations and Strengths

We acknowledge that this report does not provide a complete picture of mental health service use and how care is provided across Ontario. Access to additional information, as well as qualitative information, would help us form a more complete picture of mental health service use in Ontario and describe how care is coordinated across different sectors.

Limitations

- There is a lack of data on mental health and addictions (MHA) services provided by non-physicians, particularly allied health professionals such as social workers, traditional counsellors and healers, etc. These service providers do not upload patient data onto a centralized system that feeds into ICES.
- Individuals who access health services in Ontario without a valid Ontario health card, and data from those who access health services outside of Ontario are not included.
- Data are not available from Federal Nursing Stations and Aboriginal Health Access Centres (AHAC).
- Location may be misclassified due to use of postal code identifiers, which may include those living in proximity to, but not within, a First Nation community with the same postal code. Location may also be misclassified if the OHIP card address is not updated.
- ICES was unable to receive approval from Kenora Chiefs Advisory to include data about their community members in this study. This is approximately 5000 First Nations people.
- Indian Register (IR) data: First Nations registration status are only available through 2014. Since IR data is only available up to 2014 any persons born 2015 and later were not included in this analysis; therefore, data is only available for ages 6 and up.
- Given that the First Nations population on average is younger than the rest of Ontario, we calculated both crude and standardized rates to account for this. This is to adjust for the impact of the younger age within the First Nation population on indicator rates.
- We are only able to access IR data for First Nations people from communities located within Ontario. Therefore, any First Nation individual who is a registered Band member from a community outside of Ontario but living within Ontario and accessing services here with an OHIP card will be included in the Ontario data.

Strengths

The preparation of this report is guided by the First Nations Mental Health System Performance Advisory Committee, which includes representation from each of the Provincial Territorial Organizations (PTOs) and the Independent First Nations in Ontario. In particular, this partnership focused on engagement practices and perspectives from First Nations communities, and on integration of the principles of OCAP® and First Nations way of knowing.

Results

As stated in the Introduction, the Mental Health and Addictions Systems Performance in Ontario First Nations study includes three (3) categories of indicators: System Use, Access to Care, and Outcomes. Analysis of indicators on Access to Care and Outcomes are reported here in the order below.

Access to Care:

1. Emergency department as first point of contact for MHA care
2. Rates of 30-day hospital readmission following a MHA hospital discharge
3. Rates of 30-day emergency department re-visits following a MHA emergency department visit
4. Rates of outpatient visits within 7 days following a MHA hospital discharge

Outcomes:

5. Prenatal opioid exposure (POE) and neonatal abstinence syndrome (NAS)
6. Rates of death by suicide
7. Rates of emergency department visits for deliberate self-harm
8. Use of physical restraints during MHA hospitalizations

Crude rates are presented unless otherwise specified.

Access to Care

1. Emergency Department as First Point of Contact for Mental Health and Addictions Care

When people experience challenges in finding access to timely, community-based mental health assessment and treatment, those who need services may use the emergency department (ED) as their first point of contact. A high rate of use of the ED as a first point of contact for mental health and addictions (MHA) care may be a useful indicator of inadequate access to outpatient physician and community-based care.

Key Findings:

Between 2017 and 2019, the rate of the emergency department as the first point of contact for MHA care was similar among First Nations people and non-First Nations people (31.3 compared to 29.7 per 100 MHA ED visits, respectively).

Among First Nations people:

- Those living within a First Nations community used ED as first-contact more frequently than those living outside a community.
- First Nations people had lower rates of ED first-contact for substance-related and addictive disorders compared to non-First Nations people. First Nations people had higher rates for mood disorders, anxiety disorders, personality disorders, and deliberate self-harm compared to non-First Nations people.
- Rates of ED first-contact were notably lower among First Nations people compared to non-First Nations people living in Waterloo Wellington, Central West, Mississauga Halton, Toronto Central, and Central regions.

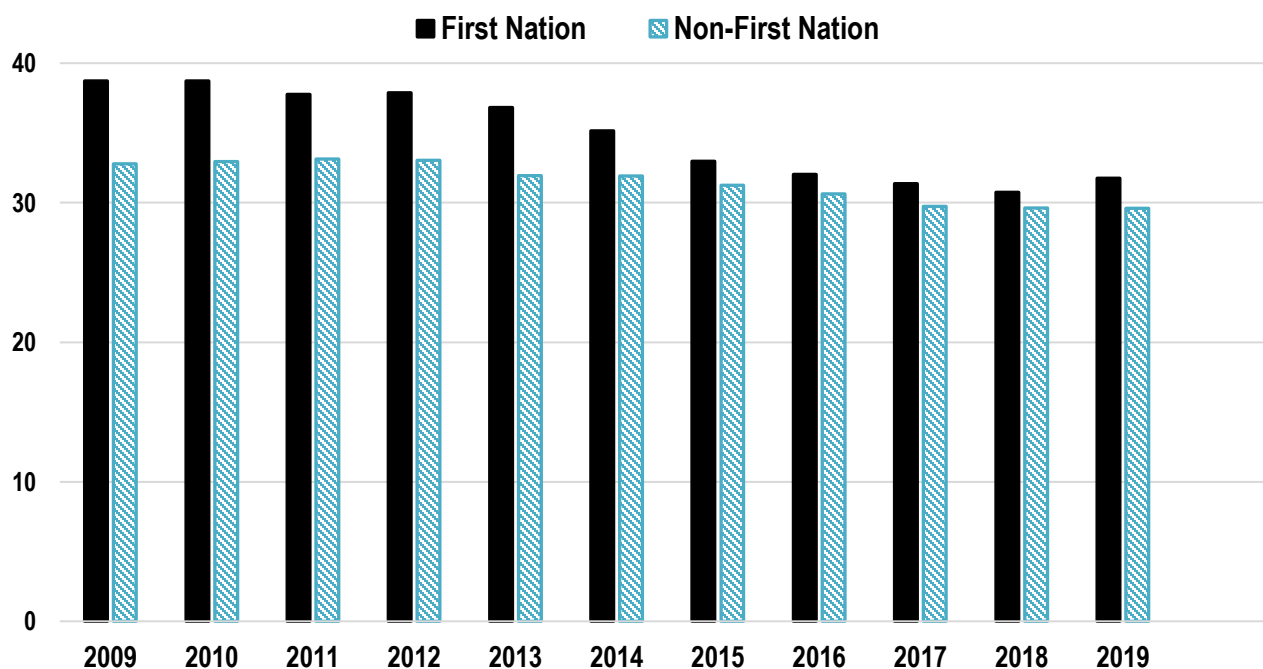
As the rate of outpatient physician care visits for First Nations people increased as seen in our MHA Interim Report, there was a corresponding decrease in First Nations people using the ED as a first point of contact for MHA care. This may suggest that access is improving over time, however, the quality of care that is received and willingness to return for follow-up were not measured.

Figure 1.1. ED first point of contact for MHA care: approximate number of visits, 2017-2019

	First Nations	Non-First Nations
Annual number of first contact emergency department visits for MHA care	2,400	47,700
Total annual number of emergency department visits for MHA care	7,900	161,000
Annual rate of first contact visits for MHA care per 100 MHA ED visits	31	30

Note: This is an approximate annual rate, the actual rate is listed in the key findings.

Figure 1.2. ED first point of contact for MHA care: per 100 individuals with incident MHA-related ED visits, aged 6 to 105 years, overall in Ontario, 2009-2019



In 2009, the rate of ED first-contact was notably higher in First Nations people compared with non-First Nations people (39 and 33 per 100 MHA-related ED visits, respectively). By 2019, the gap in rate of ED first-contact was reduced, with First Nations approaching the lower rate among non-First Nations (32 and 30 per 100 MHA-related ED visits, respectively). From 2009 to 2019, the rate for First Nations was reduced to a greater extent than non-First Nations, narrowing the gap between First Nations and non-First Nations.

Emergency Department First Point of Contact for MHA care
Aged 6 to 105 years (2009 to 2019)



In 2019, rates for First Nation people and non-First Nation people were near similar.

By Sex
(2009-2019)

The rate of emergency department visits for first point of contact for MHA care has decreased overtime, in both First Nation females and males.

18%
FEMALE



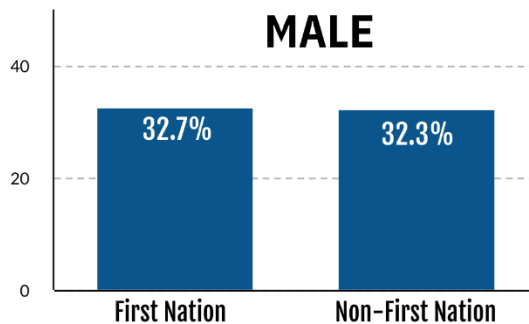
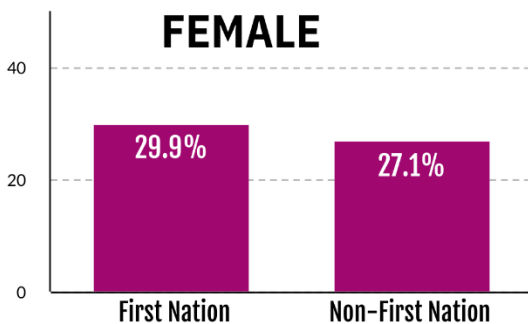
18%
MALE

Emergency Department First Point of Contact for MHA care
First Nations Three Year Average (2017-2019) By Location

ED visits as first point of contact for MHA care was nearly 1.4 times higher for First Nation people living within First Nation community compared to those outside First Nation community.

By Sex
(2017-2019)

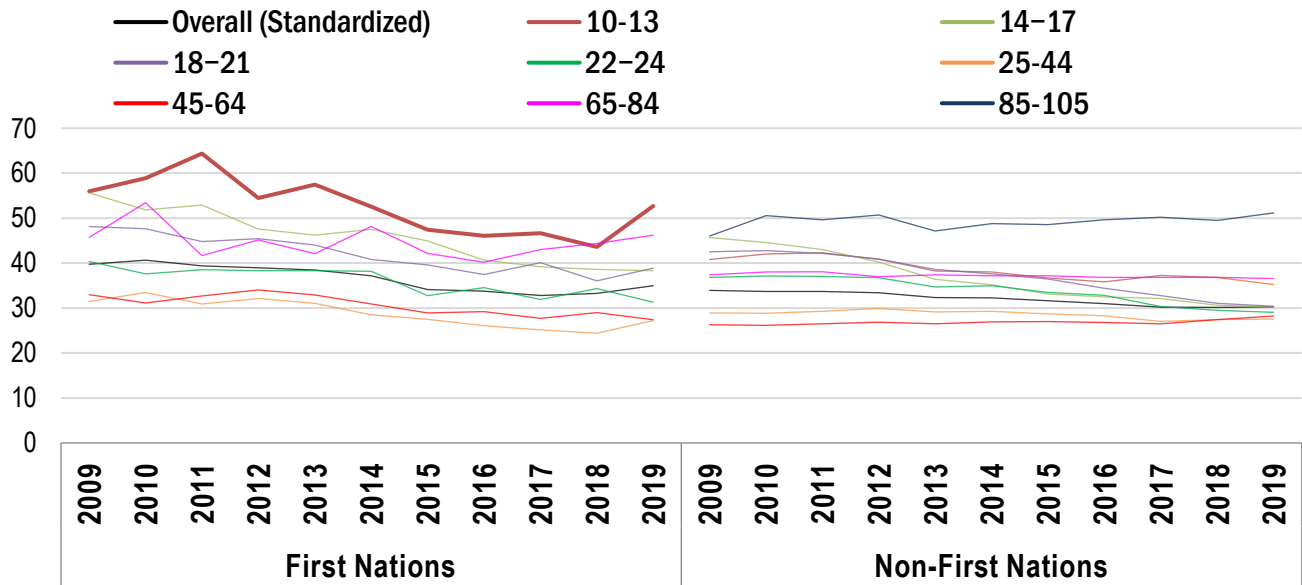
The rate of emergency department visits for first point of contact for MHA care has decreased overall in both females and males.



Males were more likely to use the ED as a first point of contact for MHA care.

NOTE: In some cases, the percentages have been rounded. Due to rounding, some totals may not correspond with the sum of the separate figures.

Figure 1.3. ED first point of contact for MHA care: per 100 individuals with incident MHA-related ED visits, by age group 10 to 105 years, overall in Ontario, 2009-2019



As Figure 1.3 indicates, among First Nations people, rates of ED first-contact were highest in young people ages 10-13.

Rates of ED first-contact were generally higher among First Nations people than non-First Nations across age groups, except for those aged 25-44.

Note: For First Nations people aged 85-105 years, the yearly trend could not be presented due to small cells. People aged 25-64 years had the lowest rates of ED first contact among First Nations people and non-First Nations people.

Among First Nations people and non-First Nations people, rates of ED first-contact decreased over time for those age 14-24. People aged 25 to 64 years had the lowest rates of ED first-contact among First Nations people and non-First Nations people. By 2019, First Nations children aged 6-9 years had the highest variability over time.

Note: For First Nations people aged 85-105 years, the yearly trend could not be presented due to small cells.

Emergency Department First Point of Contact for MHA care

First Nations aged 6 to 105 years (2009 to 2019)

The rate of Emergency department visits for first point of contact for MHA care decreased by 18% (crude rate) overall from 2009 to 2019 for First Nations.

Despite a decrease from 2009, rates remain high in 2019

**FOR AGE GROUPS
10-13 and 64-85**

about **5 out of 10**

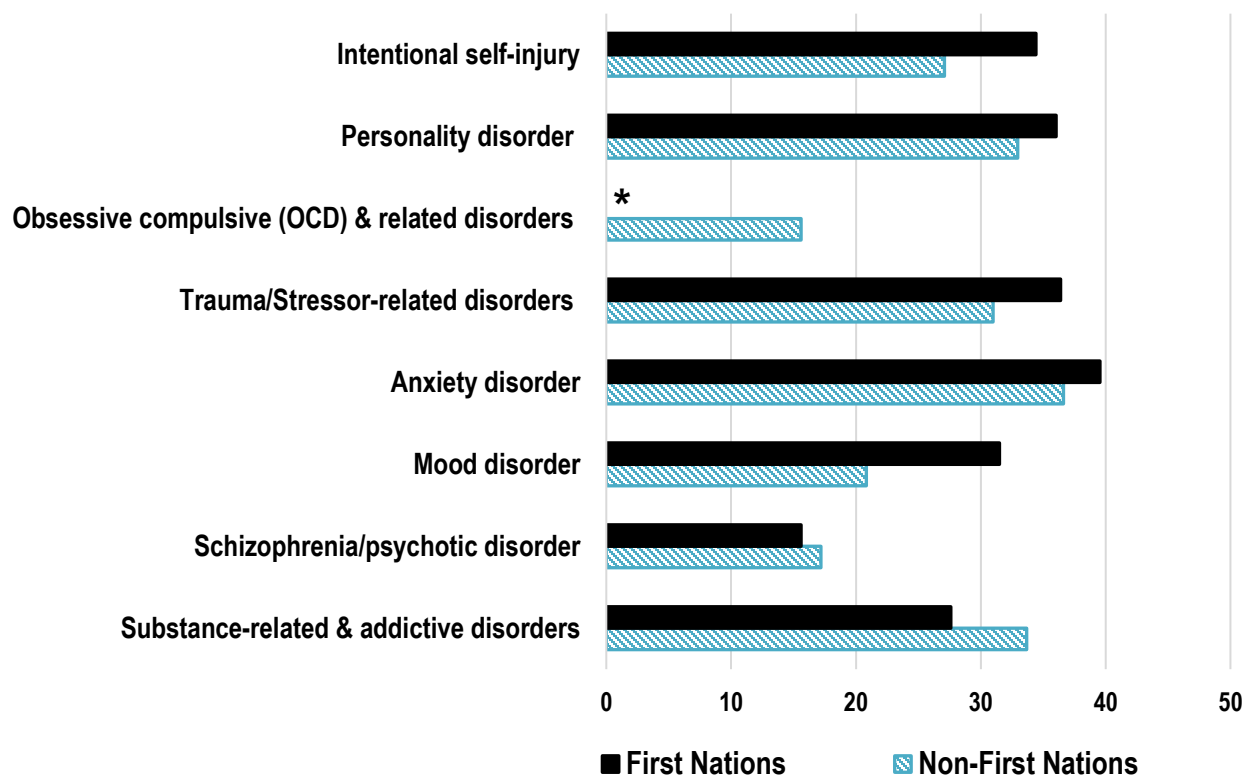
**FOR AGE GROUPS
14-21**

4 out of 10

used the Emergency department as their first point of contact for MHA care.

NOTE: The percentages have been rounded. Due to rounding, some totals may not correspond with the sum of the separate figures.

Figure 1.4. ED first contact for MHA care: per 100 individuals, aged 6 to 105 years, by diagnosis, in Ontario, 2017-2019

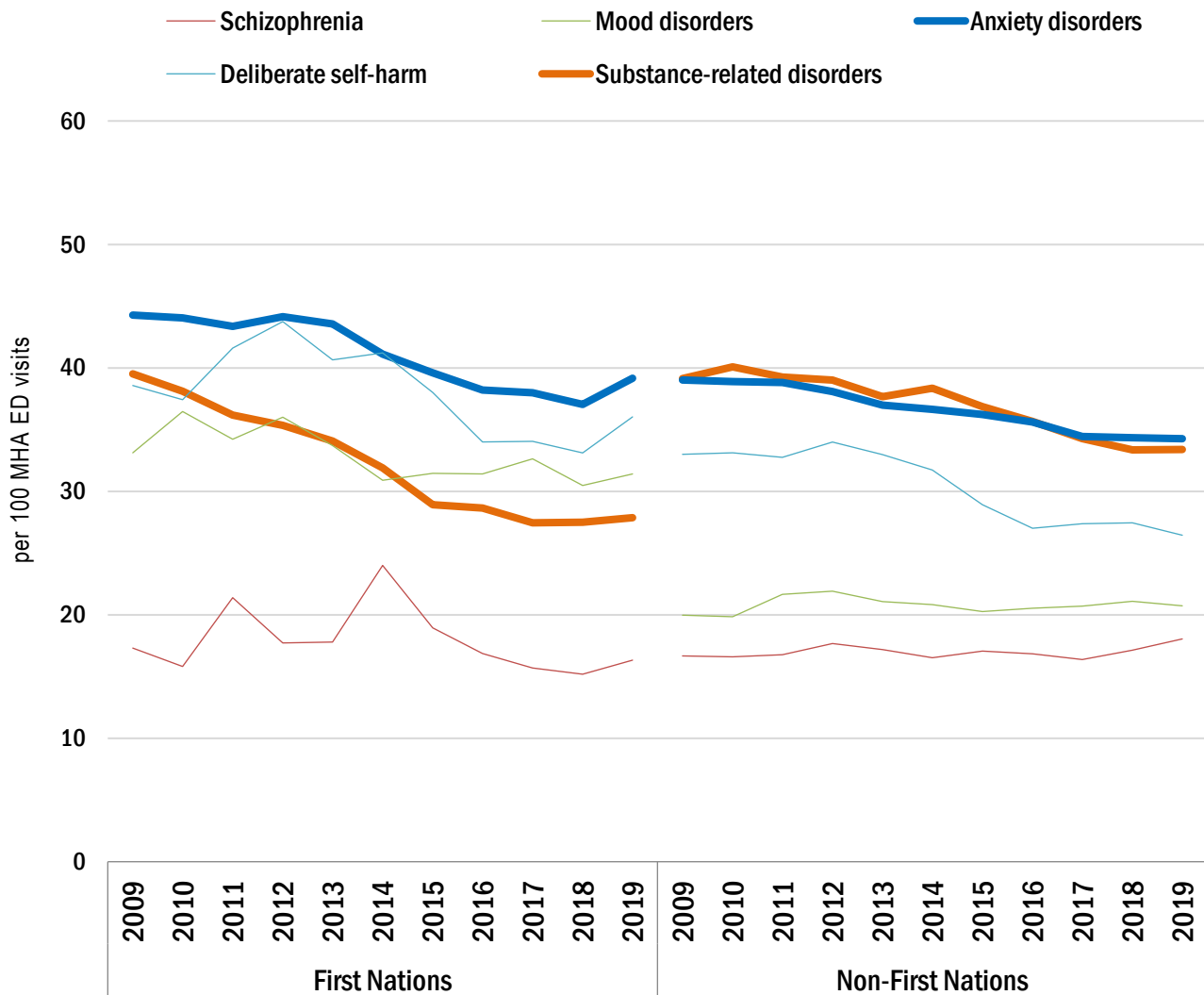


Rates for mood disorders, anxiety disorders, personality disorders, and intentional self-harm were higher among First Nations people compared to non-First Nations people. In contrast, rates for substance-related/ addictive disorders and Schizophrenia were higher for non-First Nations people compared to First Nations people.

The higher rates of First Nations people requiring an ED visit without prior contact for deliberate self-harm/suicide attempts is a signal that health care is not accessible to people in crisis – this a signal of access failure.

Note: Some rates for obsessive compulsive and related disorders are not shown due to small cells.

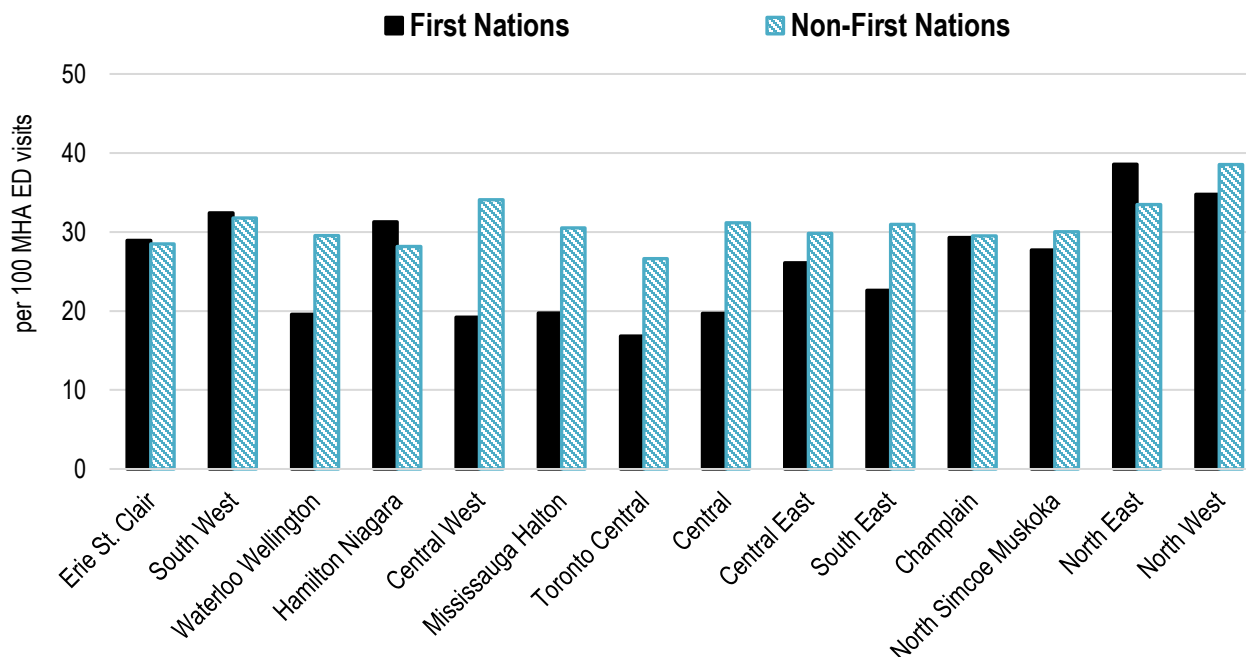
Figure 1.5. ED first point of contact for MHA care: by diagnosis, in Ontario, 2009 to 2019



Among First Nations people, rates of ED first-contact for substance-related or addictive disorder decreased considerably from 40 per 100 MHA ED visits in 2009 to 28 per 100 MHA ED visits in 2019.

Rates of ED first-contact for anxiety disorder decreased over time among both First Nations people and non-First Nations people.

Figure 1.6. ED first point of contact for MHA care: per 100 individuals, three year average 2017-2019, by Local Health Integration Network



Among First Nations people, those living in North East and North West regions had the highest rates of people with the ED as their first point of contact for MHA care (39 & 35 per 100 MHA ED visits, respectively). By contrast, the lowest rates were in Toronto Central and Central West (17 & 19 per 100 MHA ED visits, respectively). Lower rates of ED as first point of contact in urban regions may indicate better access to outpatient care in urban compared to rural regions.

Rates of ED first-contact were notably lower among First Nations people compared to non-First Nations people living in Waterloo Wellington, Central West, Mississauga Halton, Toronto Central, and Central regions.

The fact that the rates of ED first contact are notably lower for First Nations people vs. non-First Nations people in a number of particular LHINs, but the overall rate is slightly higher among First Nations people, suggests that the total number of events are likely greater in the other LHINs. 10 of 14 LHINs have lower rates for First Nations compared to non-First Nations.

2. Rates of Mental Health and Addictions Emergency Department Revisits within 30-days

Rates of Mental Health and Addictions Emergency Department Revisits within 30 days per 100 visits, in Ontario among persons aged 6 – 105 years, unless otherwise noted.

Repeated unscheduled emergency department visits for mental health and addictions (MHA) care could mean there is inadequate access to follow-up care in the community or outpatient settings.

Key Findings:

- Between 2017 and 2019, **First Nations people had higher rates of 30-day MHA ED revisits** compared with non-First Nations people.
- Rates of MHA ED visits among First Nations people were higher among those **living outside the community** than those living within the community.
- For both First Nations people and non-First Nations people, rates of MHA ED revisits were **highest among 25 to 64 year-olds** and **males had higher rates** than females.
- The rates of MHA ED revisits were highest for substance-related and addictive disorders and schizophrenia more than any other MHA diagnosis among both First Nations people and non-First Nations people.
- Rates of MHA ED revisits were highest among First Nations people living in **Toronto Central and Central West compared to other** regions.

Additional Information:

- The MHA diagnosis from the initial ED visit may not necessarily match the diagnosis of the subsequent ED visit; it can be an ED visit for any MHA diagnosis.
- Only the first revisit per person per follow-up period was counted.
- The 30-day time period is a standard period of time used in other clinical areas and is a reasonable amount of time to look at an ED re-visit or hospital readmission.
- Most hospitalizations come in from the ED, so there may be overlap between hospital admissions and ED revisits.

The ED is open 24/7 for people who are in crisis and may be the only point of care for MHA care when the rest of the system (e.g. primary care physician; psychiatrist, etc.) is difficult to access. Timely and appropriate outpatient care in the community, especially after an MHA ED visit or hospitalization, may reduce the need for acute care. Recent closures of EDs across Ontario may seriously impact Mental Health services.

Figure 2.1. MHA ED 30 day Revisits: approximate number of visits, 2017-2019

	First Nations	Non-First Nations
Annual number of MHA ED 30-day revisits	5300	48,000
Total annual number of MHA ED visits	14,050	195,000
Annual rate 30-day MHA ED visits (per 100 MHA ED visits)	38	25

Note: This is an approximate annual rate, the actual rate is listed in the key findings. Each number is the 3-year rounded value for the time period, 2017-2019.

MHA ED 30-day revisits (per 100 persons, 6 to 105 years) (2017-2019)

Rate is **1.5x** higher for First Nations people compared to non-First Nations people

THREE YEAR AVERAGE FOR FIRST NATIONS (2017-2019) BY LOCATION



The rate of 30-day MHA ED revisits was **22% higher** for **First Nation people living outside** the community compared to those living within First Nation community.

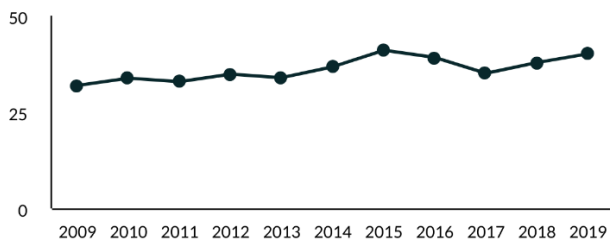
THREE YEAR AVERAGE FOR FIRST NATIONS (2017-2019) BY SEX



Rate is nearly **1.5x** higher for **First Nation males** compared to First Nation females



MHA ED 30-DAY REVISITS FOR FIRST NATIONS (2009-2019)



MHA ED revisits among First Nations people has steadily increased over time.



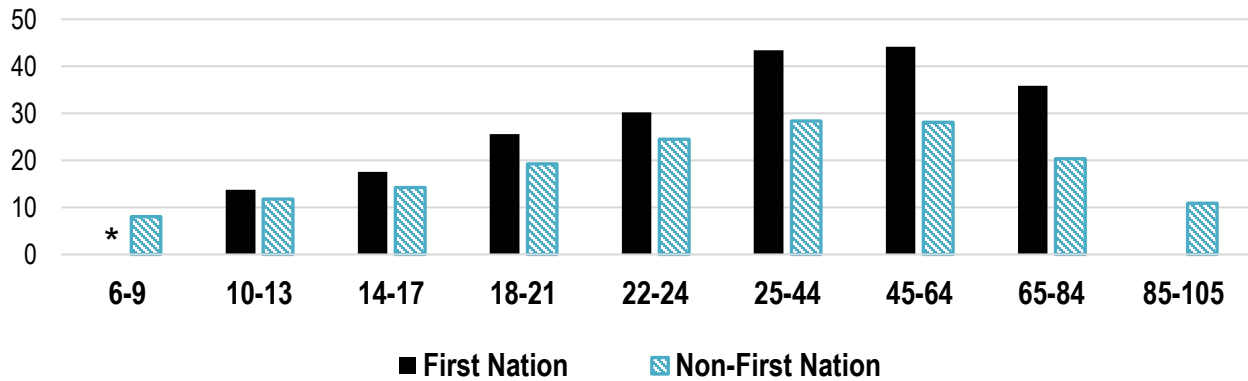
2009 32% **2019 40%**

MHA ED 30-DAY REVISITS FOR FIRST NATIONS (2009-2019) BY LOCATION

Rates increased to a greater extent among **First Nations people living within the community (51%)** compared to those **living outside the community (22%)**.

NOTE: The percentages have been rounded. Due to rounding, some totals may not correspond with the sum of the separate figures.

Figure 2.2. MHA ED 30 day Revisits: Three year rates, overall by age group 6 to 105 years, 2017-2019



Among First Nations people, 30-day MHA ED revisits were highest in those aged 25 to 44 and 45 to 64 years (43.4 and 44.2 per 100 MHA ED visits, respectively).

First Nations people had higher rates across all age groups, compared with non-First Nations people

*Note: For First Nations people aged 6-9 years, the rate was suppressed due to small cells (marked with an *); and the 3-year average 30-day MHA ED revisit rate for First Nations people aged 85-105 years was 0.*

MHA ED 30-DAY REVISITS FOR FIRST NATIONS (2009-2019) BY AGE

AGE GROUP

10-13 decrease **16%**

AGE GROUP

14-17 increase **54%**

18-21 increase **26%**

22-24 increase **81%**

25-44 increase **21%**

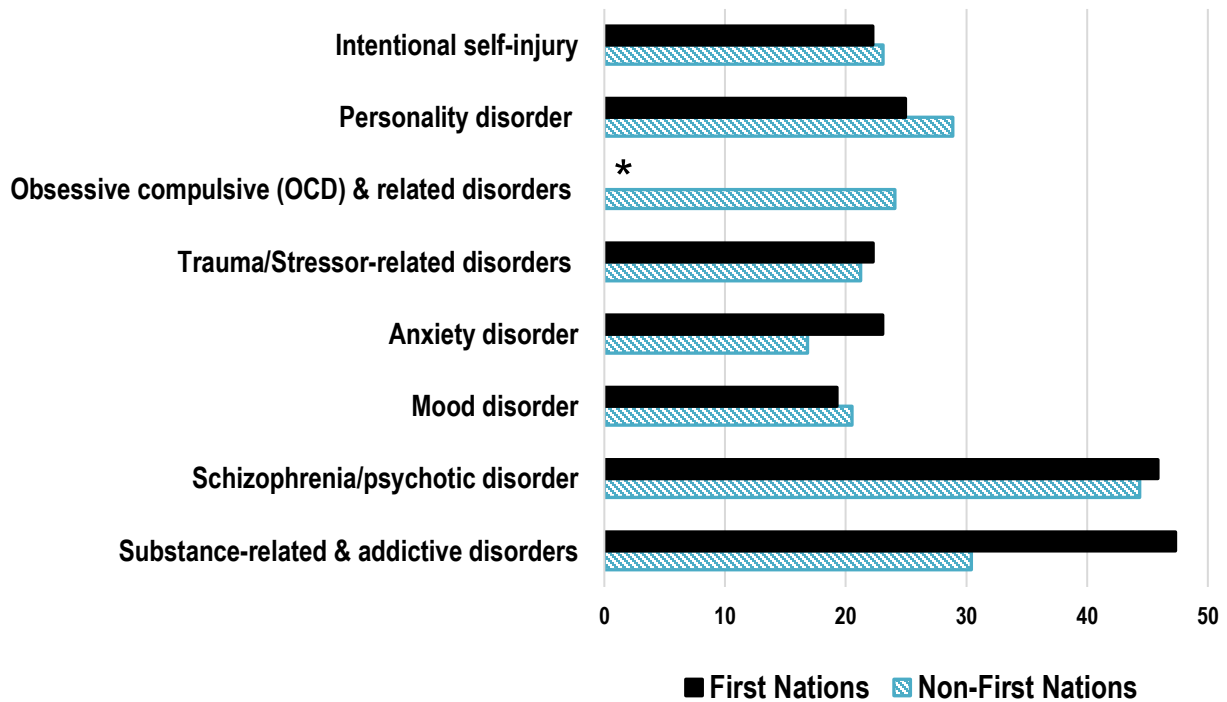
45-64 increase **22%**

65-84 increase **59%**

Note: For First Nations people aged, 6-9 years and 85-105 years, the yearly trend could not be presented due to small cells.

NOTE: The percentages have been rounded. Due to rounding, some totals may not correspond with the sum of the separate figures.

Figure 2.3. MHA ED 30 day Revisits: Three-year average 2017-2019 by diagnosis



First Nations had 1.5 times higher rates of MHA ED revisits than non-First Nations for substance-related & Addictive disorders, which could indicate inadequate follow-up treatment or management available at community/outpatient services for First Nations. The picture is different for Schizophrenia and related disorders where First Nations and non-First Nations have similar rates of MHA ED revisits

*Note: The rate was suppressed For First Nations people with Obsessive Compulsive and related disorders, due to small cells (marked with an *).*

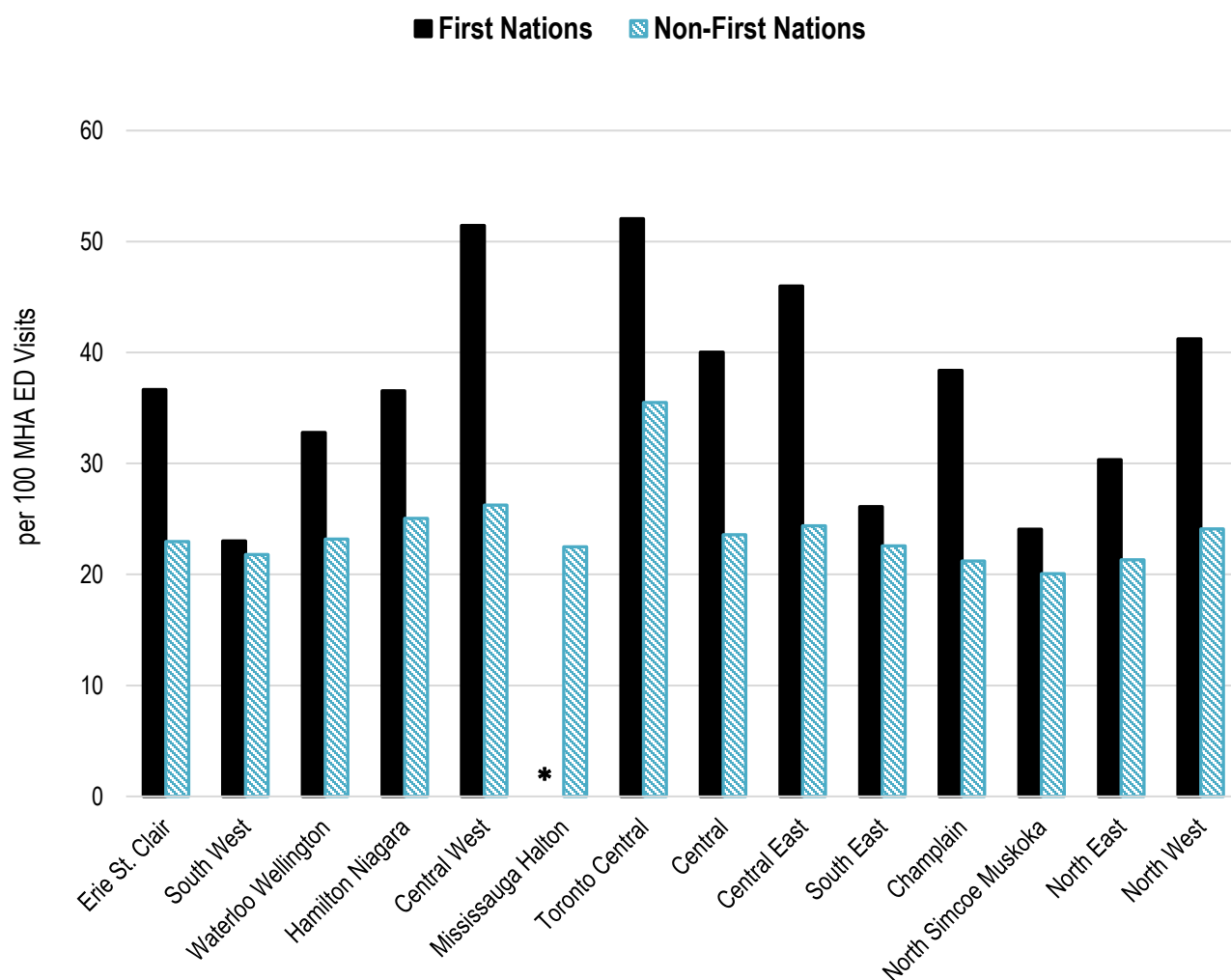
MHA ED 30-DAY REVISITS FOR FIRST NATIONS (2009-2019) BY DIAGNOSIS

	Substance-Related & Addictive Disorders	Schizophrenia/ Psychotic Disorder	Anxiety Disorders	Intentional Self Injury
↑ Increased:	22%	26%	31%	34%

NOTE: The percentages have been rounded. Due to rounding, some totals may not correspond with the sum of the separate figures.

Among the diagnoses studied, substance-related and addictive disorders and schizophrenia revisit rates appear to be the highest among both First Nations people and non-First Nations people. However, from 2009 – 2019, the rates are trending upward for other MHA diagnoses at an even faster rate. This may signal higher care needs now and in the future. The exception was for mood disorders which decreased slightly over time among both First Nations and non-First Nations people.

Figure 2.4. MHA ED 30 day Revisits: Three-year average 2017-2019 by Local Health Integration Networks



Among First Nations people, those living in Toronto Central and Central West regions had the highest rates of 30-day MHA ED revisits (52.1 and 51.5 per 100 MHA ED visits, respectively) Overall, First Nation people had higher MHA ED revisit rates than non-FN people across all LHINs.

*Note: For First Nations people in Mississauga Halton region, the rate was suppressed due to small cells (marked with an *) The rates presented are age and sex standardized.*

3. Rates of 30-day MHA hospital readmissions

Rates of MHA hospital readmissions within 30 days, per 100 MHA-related hospital discharges, among persons aged 6 – 105 years, unless otherwise noted.

The rate of inpatient readmissions within 30 days of discharge, a commonly reported performance indicator, could reflect inadequate community support and outpatient physician-based mental health and addictions (MHA) services.

Key Findings:

- Between 2017 and 2019, the rate of 30-day MHA hospital readmissions was **slightly higher among First Nations people** compared with non-First Nations people.
- Among First Nations people **living outside the community**, the rate of 30-day MHA hospital readmissions was higher than First Nations people living within the community.
- Among both First Nations people and non-First Nations people, rates of MHA hospital readmissions between 2017 and 2019 were:
 - **highest** among **18 to 44 year-olds**
 - **highest** for **personality, schizophrenia/psychotic and substance-related disorders**
 - **highest** in **Central and North East** regions
 - **similar** between females and males
- Among both First Nations people and non-First Nations people, the **greatest increase in MHA hospital admission rates over time** (2009-2019) has been for **substance-related disorders**.

Additional Information:

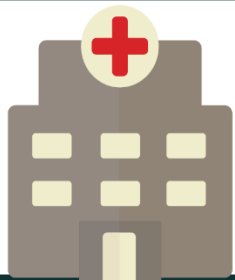
- The MHA diagnosis from the subsequent hospitalization does not necessarily match the diagnosis of the initial hospitalization, but can be for any MHA related diagnosis.
- If an individual is readmitted more than once to the hospital for a MHA-related reason during the time period, only the first readmission is counted for this indicator.

Figure 3.1. MHA hospital readmissions: Approximate number of hospitalizations, 2017-2019

	First Nations	Non-First Nations
Annual number of 30-day MHA hospital readmissions revisits	510	10,210
Total annual number of MHA hospitalizations	3,270	72,890
Annual rate 30-day MHA hospital readmissions (per 100 MHA hospitalizations)	16	14

Note: This is an approximate annual rate, the actual rate is listed in the key findings.

MHA HOSPITAL READMISSIONS (2009-2019)



The rate of 30-day MHA hospital **readmissions for First Nations increased by 32%** over the ten year period. The rate for non-First Nations has remained relatively unchanged.

MHA READMISSIONS THREE YEAR AVERAGE FOR FIRST NATIONS (2017-2019) BY LOCATION



First Nations people living outside the community were **1.4 times** more likely to be readmitted than those living within community.

NOTE: The percentages have been rounded. Due to rounding, some totals may not correspond with the sum of the separate figures.

The rate of 30-day MHA ED revisits among First Nations people living outside the community was higher than among those living within the community (16.8 and 11.6 per 100 MHA hospitalization discharges, respectively).

**MHA READMISSIONS FOR FIRST NATIONS
(2009-2019) BY LOCATION**



**MHA READMISSIONS FOR FIRST NATIONS
(2009-2019) BY SEX**

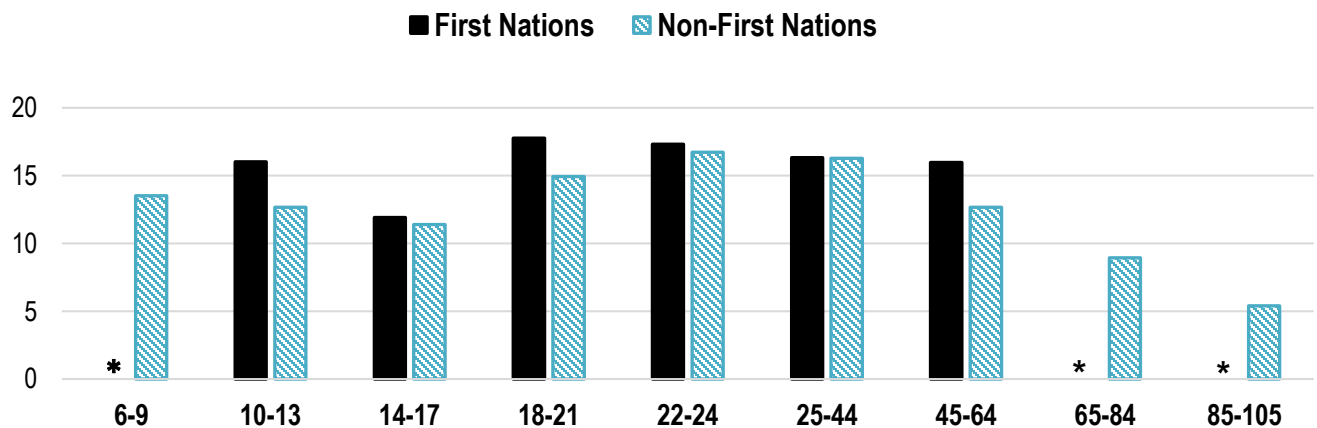


NOTE: The percentages have been rounded. Due to rounding, some totals may not correspond with the sum of the separate figures.

Among First Nations people, the rate of 30-day MHA hospital readmissions increased for both females and males over this time frame (2009-2019).

The three year average (2017-2019) rates of 30-day MHA hospital readmissions were similar between sexes among both First Nations people and non-First Nations people. *(Data not shown.)*

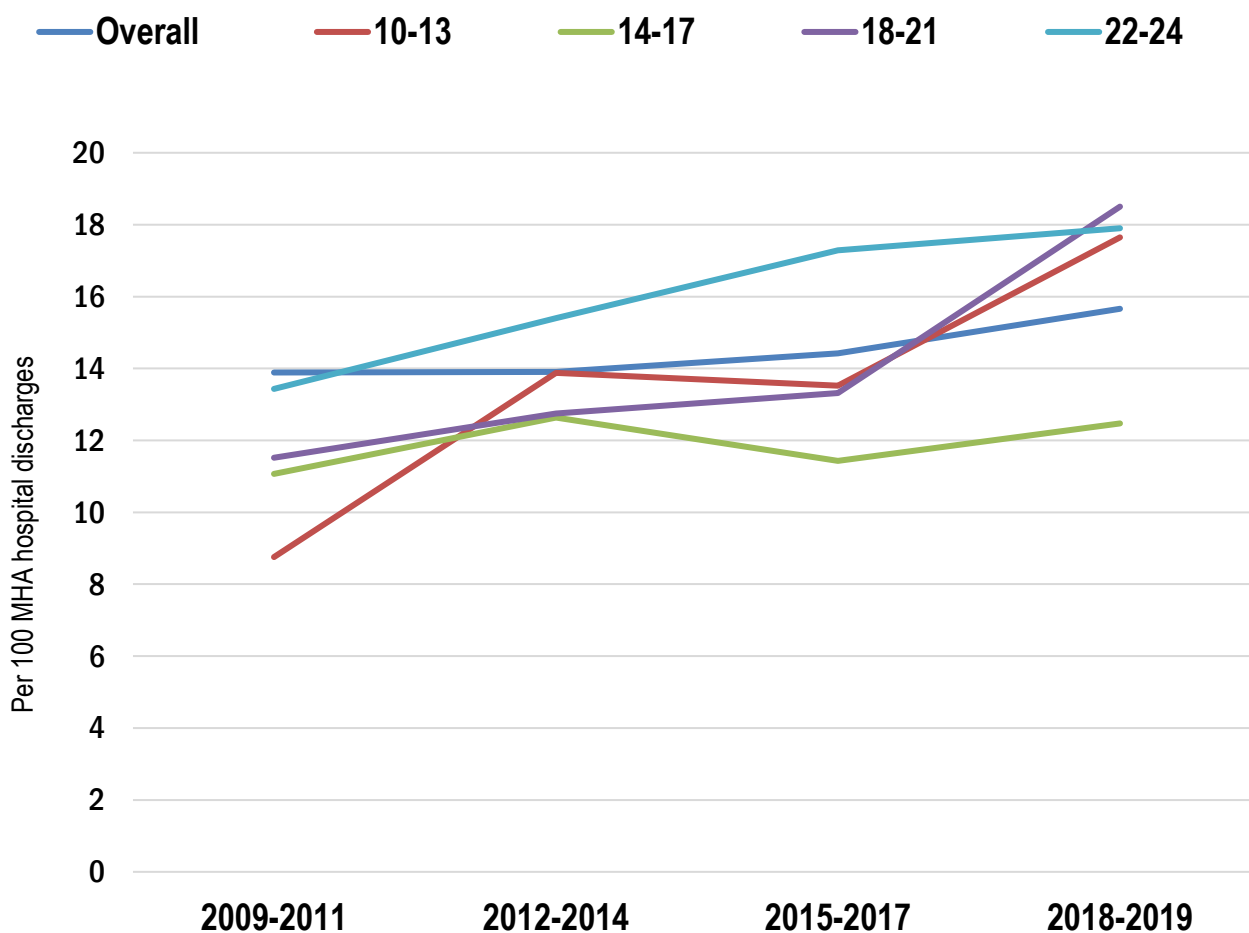
Figure 3.2. MHA hospital readmissions: Among people aged 6 to 105, by age groups, in Ontario, Three year average (2017-2019)



Among First Nations people and non-First Nations people, the rates of 30-day MHA hospital readmissions were highest among those aged 18 to 44 years.

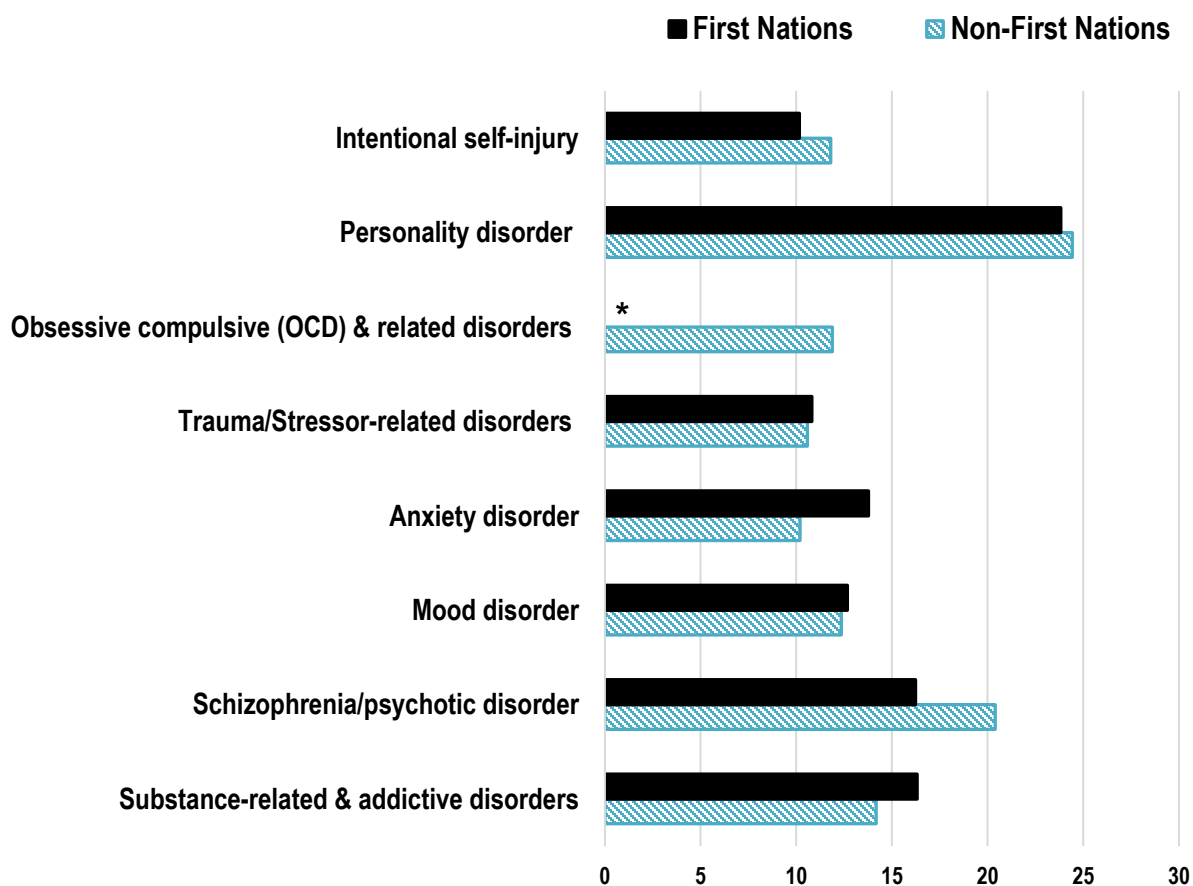
*Note: For First Nations people aged 6-9 years and 65-105 years, the rates were suppressed due to small cells (marked with *)*

Figure 3.3. MHA hospital readmissions: Among First Nation people aged 10 to 24 years, in Ontario, Overtime (2009 to 2019)



The rates of 30-day MHA hospital readmissions increased over time for most age groups (10-24 years) for First Nations people, especially among those aged 10-13, and 18-21 years. The rate of 30-day MHA hospital readmissions was relatively unchanged among First Nations people aged 25 years and older. (**data not shown for those age groups.*)

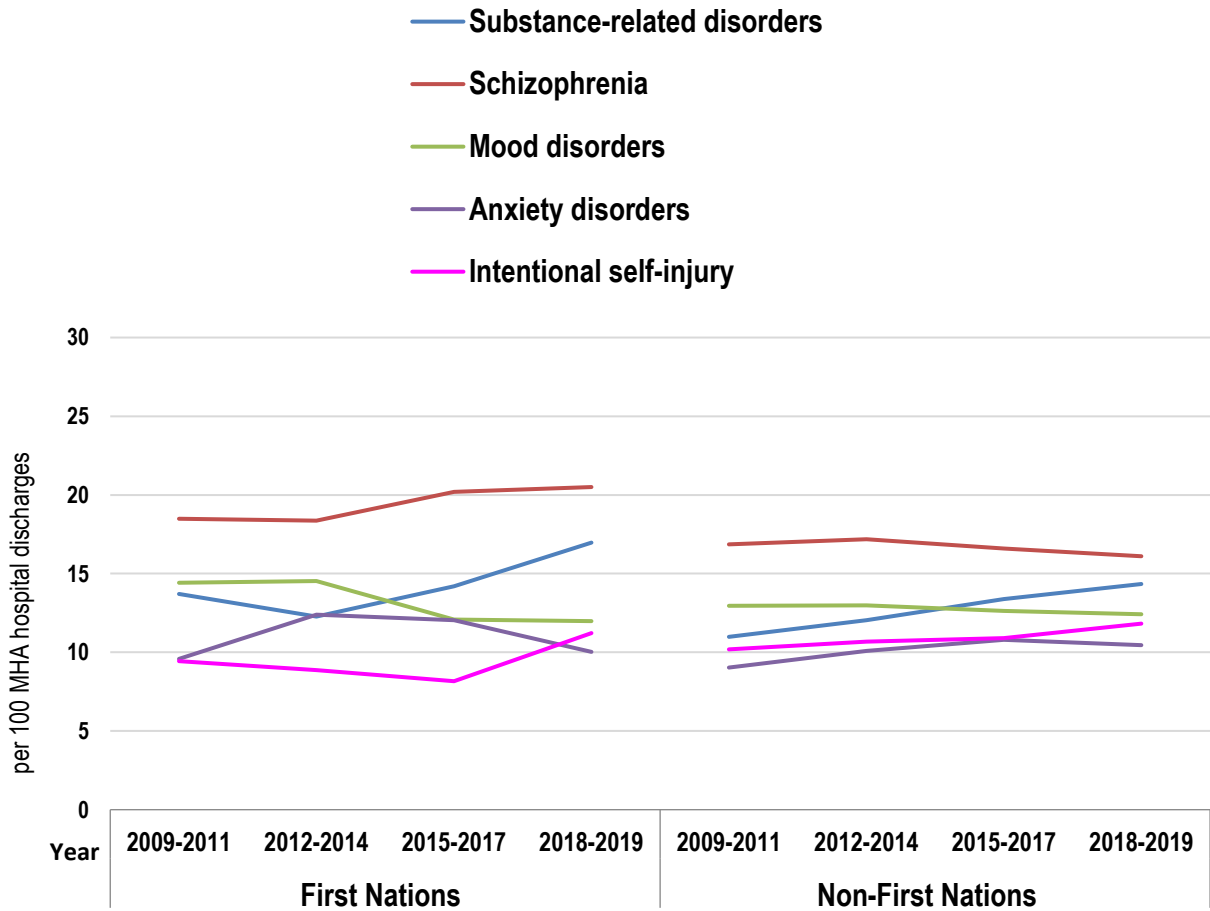
Figure 3.4. MHA hospital readmissions: By diagnosis among persons aged 6 to 105 years, in Ontario, Three-year average for 2017 to 2019



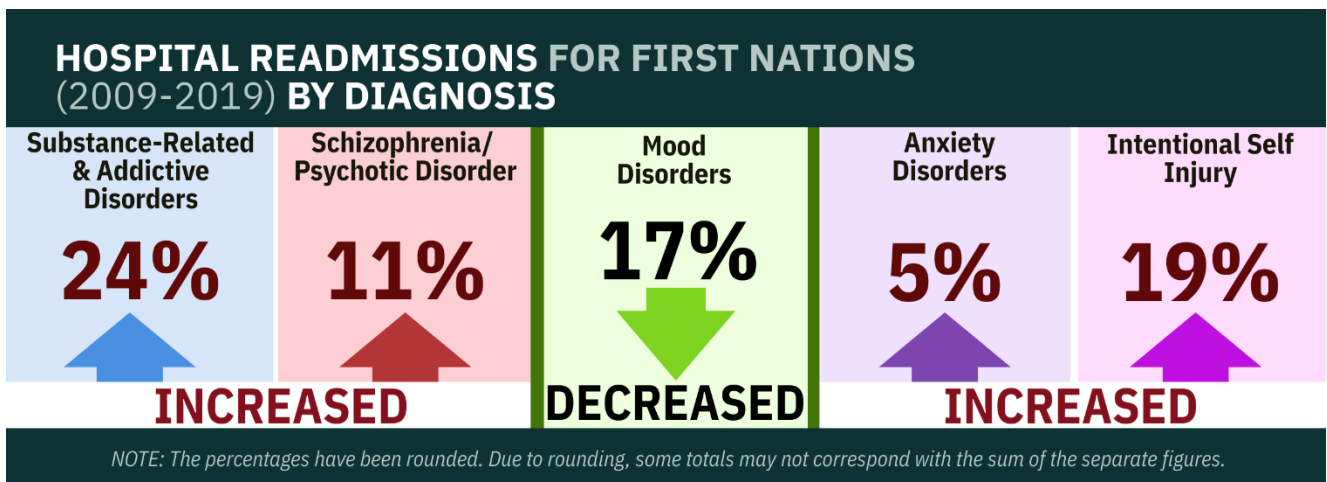
As seen in Figure 3.4, for both First Nations people and non-First Nations people, the highest rates of 30-day MHA readmissions were for personality disorders followed by schizophrenia/psychotic and substance-related disorders.

*Note: For First Nations people with (OCD) Obsessive Compulsive and related disorders, the rate was suppressed due to small cells (marked with an *).*

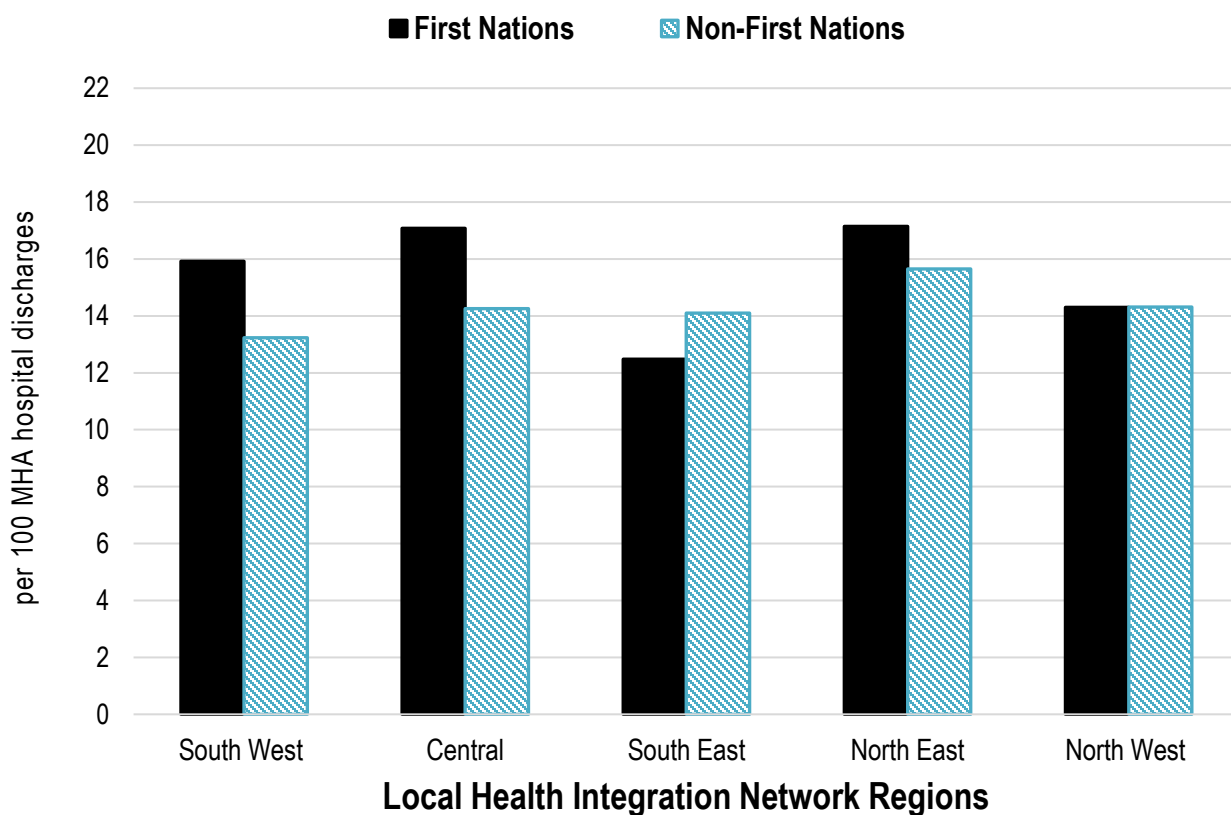
Figure 3.5. MHA hospital readmissions: MHA-related hospital discharges, by diagnosis, in Ontario, Overtime (2009-2019)



From 2009 - 2019, the greatest increase in rates of 30-day MHA hospital readmissions was for substance-related disorders among both First Nations people and non-First Nations people.



**Figure 3.6. MHA hospital readmissions: By Local Health Integration Network regions
Three-year average for 2017-2019**



In both First Nations people and non-First Nations people, the highest rates of 30-day MHA hospital readmissions were in Central and North East regions.

First Nations people had higher rates than non-First Nations people across most regions, except South East where the rates were lower among First Nations people and North West where rates were similar between both groups.

Note that LHIN region data are age and sex standardized.

4. Rates of outpatient visits within 7 days following a MHA hospital discharge

(Rates of outpatient visits within 7 days following a MHA hospital discharge, per 100 hospital discharges, among people aged 6 – 105 years, unless otherwise noted)

Early follow-up after hospital discharge likely helps to improve continuum of care for treatment and communication between health care providers and patients which may prevent hospital readmission. Higher rates of inpatient readmissions within 30 days of a hospital discharge, could reflect inadequate access to community support and outpatient physician-based mental and addictions (MHA) services.

Key Findings:

Among First Nations people:

- The rate of 7-day outpatient follow-up was lower compared with non-First Nations people. Access to psychiatrists was particularly low among First Nations people.
- The rates of follow-up with primary care providers have increased over time, but rates of follow-up with psychiatrists have remained relatively stable.

The rates of follow-up were lower among First Nations people living within the community, but these rates improved to a greater extent over time compared with First Nations people living outside the community.

Among both First Nations people and non-First Nations people, rates of follow-up were:

- **lower among younger age** groups (especially younger First Nations people)
- lowest for trauma/stressor-related disorders and schizophrenia/other psychotic disorders
- lowest in North East and North West regions
- similar between females and males

First Nations people visited a psychiatrist half as often compared to non-First Nation people.

Additional Information:

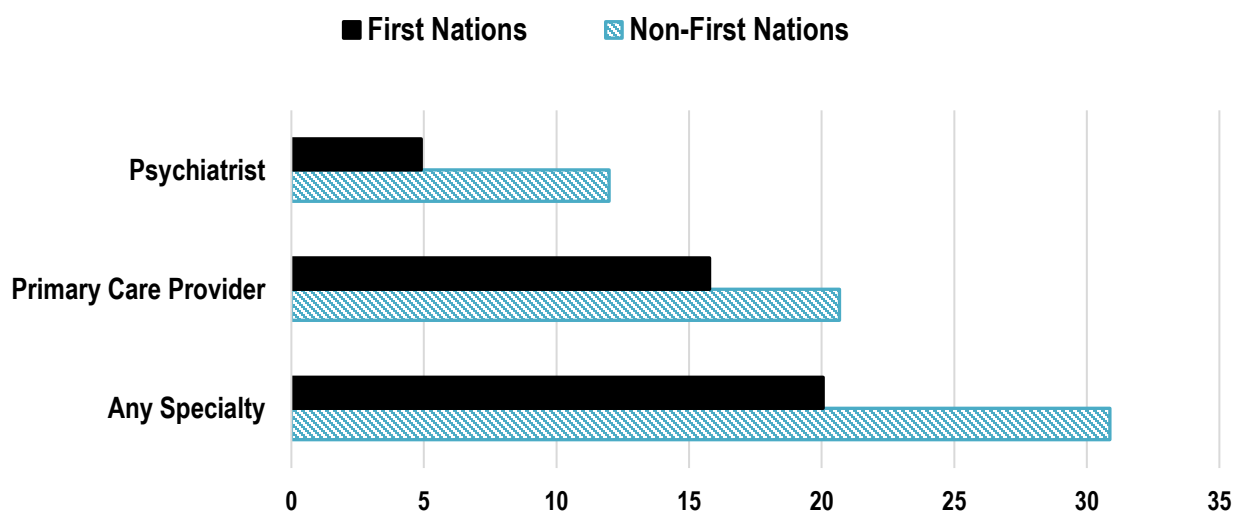
- The MHA diagnosis from the outpatient visit within 7 days does not necessarily have to match the diagnosis of initial hospitalization but can be for any related MHA diagnosis

Figure 4.1. 7-day outpatient follow up: Approximate number of visits, 2017-2019

	First Nations	Non-First Nations
Annual number of 7-day outpatient follow-ups	580	20,660
Total annual number of MHA hospital discharges	2,900	66,900
Annual rate 7-day outpatient follow up (per 100 MHA hospital discharges)	20	31

Note: This is an approximate annual rate, the actual rate is listed in the key findings.

Figure 4.2. 7-day outpatient follow up: 3 year average, in Ontario, by physician specialty, 2017-2019



Between 2017 and 2019, First Nations people had lower rates of 7-day outpatient follow-up with any care provider compared with non-First Nations people (20 vs 31, respectively). Access to psychiatrists was particularly low among First Nations people (60% lower) compared to non-First Nation people.

For both First Nations people and non-First Nations people, visits to primary care providers (family physicians/general practitioners) were the most common type of follow-up visit.

Among First Nations people, the rate of 7-day outpatient follow-up with primary care providers increased 35% from 2009 to 2019 (26% for all specialties), but rates of follow-up with psychiatrists have remained relatively the same.

Note: "Any specialty" also includes follow-up visits to paediatricians; however, these make up a very small proportion of the overall visits and are not shown.

Outpatient visits within 7 days following a MHA hospital discharge
3-year average for 2017 to 2019, by location



Rates were higher among those living outside a First Nations community, compared to within.

**WITHIN
FIRST NATION**

21%

**OUTSIDE
FIRST NATION**

22%

**Outpatient visits within 7 days following a MHA hospital discharge
FOR FIRST NATIONS (2009-2019) BY LOCATION**

The rates of 7-day outpatient follow-up was lower but improved to a greater extent over time among First Nations people living within the community compared to First Nations people living outside the community.

**WITHIN
FIRST NATION**

105%



INCREASED

**OUTSIDE
FIRST NATION**

17%

**Outpatient visits within 7 days following a MHA hospital discharge
THREE YEAR AVERAGE (2017-2019) AGED 6-105 YEARS, BY LOCATION AND BY SEX**

For both First Nations people and non-First Nations people, the rates of 7-day outpatient follow-up were similar between females and males.

FEMALES

FIRST NATION

21%

NON FIRST NATION

33%



MALES

FIRST NATION

19%

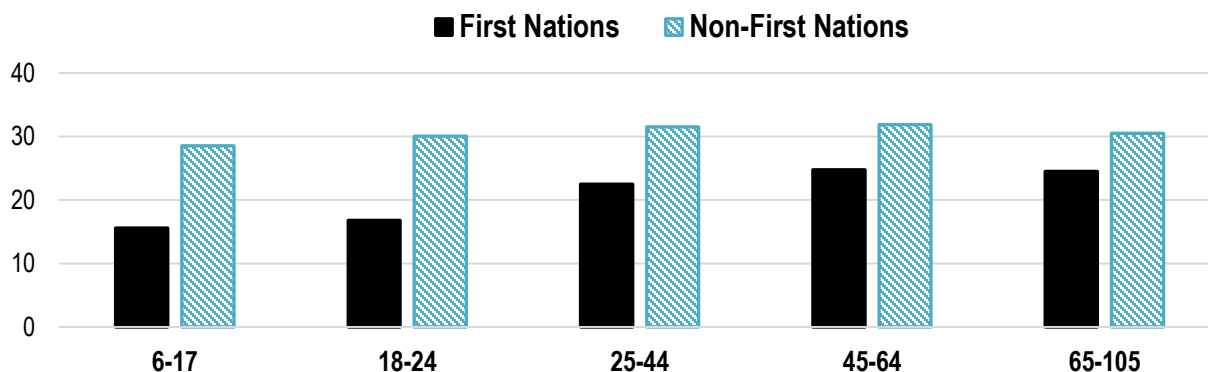
NON FIRST NATION

29%



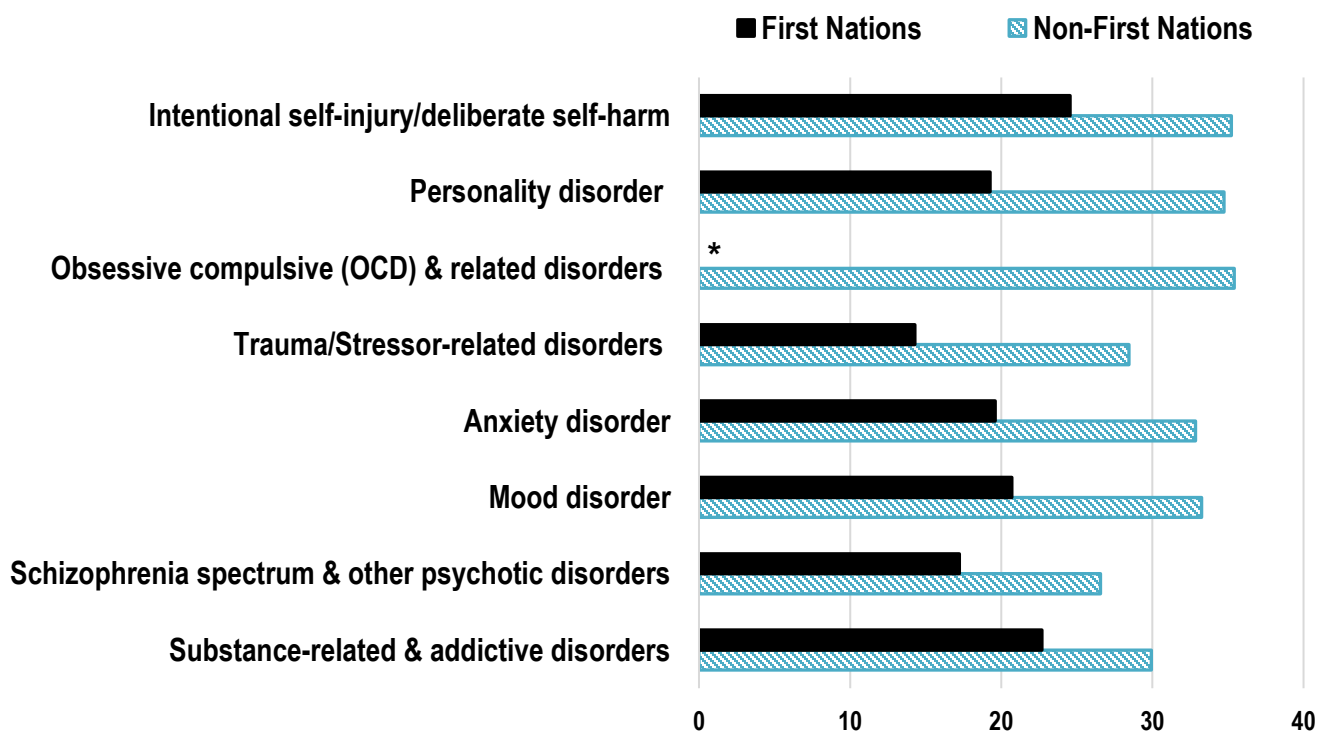
NOTE: The percentages have been rounded. Due to rounding, some totals may not correspond with the sum of the separate figures.

Figure 4.3. 7-day outpatient follow up: 3 year average, in Ontario, by age, 2017-2019



Among both First Nations people and non-First Nations people, the rates of 7-day outpatient follow-up were lower among First Nations people for all age groups, even more so for younger age groups.

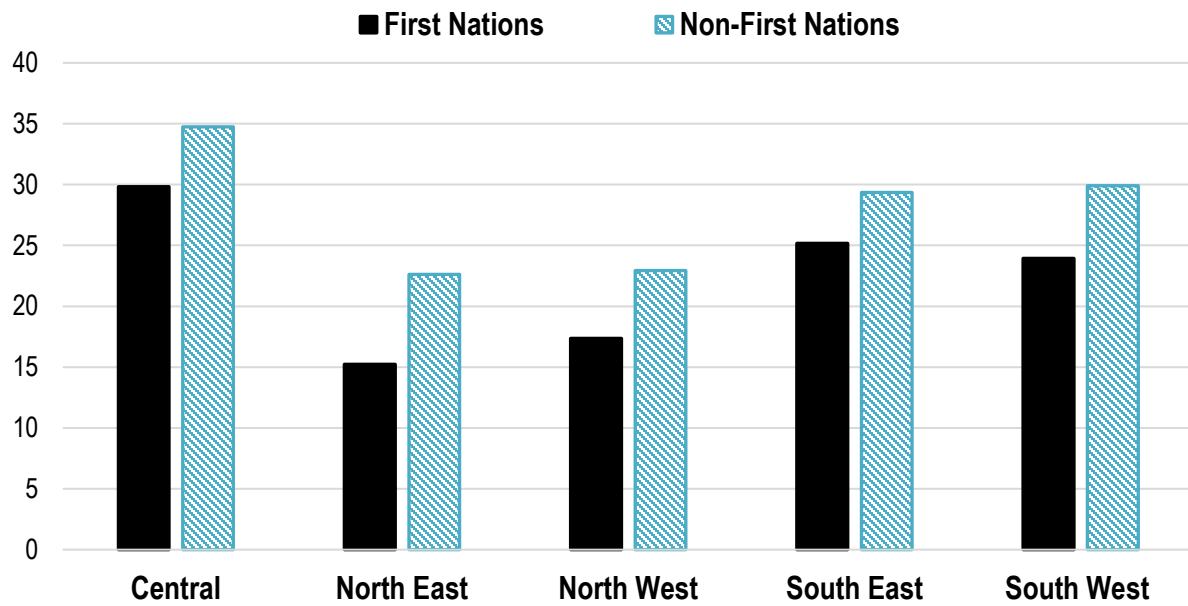
Figure 4.4 7-day outpatient follow up: 3 year average, in Ontario, by diagnosis, 2017-2019



For both First Nations people and non-First Nations people, the lowest rates of 7-day outpatient follow-up was lower for First Nations people across all types of MHA diagnoses. This may indicate a lack of follow up treatment available for these for these conditions.

*Note: Some diagnoses were not show due to small cells or to prevent re-identification (marked with an *)*

Figure 4.5 7-day outpatient follow up: 3 year average, in Ontario, by Local Health Integration Network Regions (LHINS), 2017-2019



For both First Nations people and non-First Nations people, rates of 7-day outpatient follow-up were lower in all areas, suggesting poor access to follow-up services.

Outcomes

5A. Prenatal Opioid Exposure (POE)

Prevalence of Prenatal Opioid Exposure (POE), including Neonatal Abstinence Syndrome (NAS) in infants.

Key Findings:

- Prenatal opioid exposure among First Nations infants:
 - Affects approximately 16% of infants overall. Rates vary from approximately 4% in Central and South West, to 31% of those in the North West⁷.
 - The discrepancy in First Nations vs. non-First Nations rates for this indicator are striking (16.0% vs. 1.3%).
 - Is mostly due to opioid agonist therapy for the treatment of opioid use disorders, which accounts for approximately 70% of all prenatal opioid exposure.
 - Of the 5,915 mothers in Ontario treated for opioid use disorder between 2013 and 2019, 1,856 (31.4%) were First Nations.
 - Is higher among infants born to mothers living within the community than those living outside the community.
 - Is higher among infants born to older mothers than those born to teenage mothers.

- **Over time:**
 - Among First Nations mothers using opioid agonist therapy (OAT), there was a large shift towards the prescription of Suboxone® versus methadone between 2013 and 2019, with Suboxone® prescribing surpassing methadone in 2016.
 - Among First Nations infants living within community, the percent of infants exposed has increased from 17% in 2013 to approximately 23% in 2019.
 - Among FN mothers with POE exposure, we observed a shift in OAT use over time. In 2013, 50% of POE was due to OAT in FN mothers, this rose to 80% in 2019

⁷ The 14 LHINs were clustered into five “Ontario Health Interim and Transitional Regions” (the “Interim Regions”). The 14 LHINS were organized under five Interim Regions. Northwest region formally known as the North West LHIN. https://www.osler.com/en/resources/regulations/2019/ontario-taking-next-steps-to-integrate-health-care-system#_ftnref3

Figure 5A.1. Prenatal Opioid Exposure: Approximate annual estimates 2017-2019

	First Nations	Non-First Nations
Annual number of infants born with prenatal opioid exposure	350	1,640
Total annual number of births	2,200	125,900
Annual percentage of infants with prenatal opioid exposure	16	1

Note: This is an approximate annual rate, the actual rate is listed in the key findings.



Prenatal Opioid Exposure (POE)

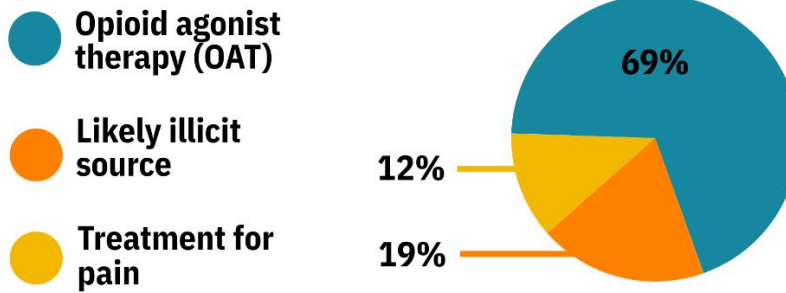
12x Higher
among First Nations infants compared to Non-First Nations infants.

The percent of First Nations infants with prenatal opioid exposure increased from 15% in 2013 to 18% in 2015 and then decreased and remained steady at 16% thereafter. Among non-First Nations infants, the percent with prenatal opioid exposure has decreased from 1.5% in 2013 to 1.2% in 2019.

First Nations infants with POE between 2013 and 2019:

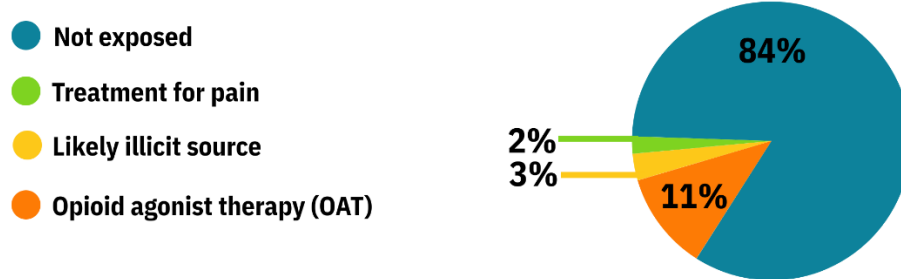
The vast majority (83.5%) of First Nations infants were not exposed to POE. Of the 16.5% of those First Nations infants with prenatal opioid exposure, mothers treated for opioid use disorders (opioid agonist therapy) accounted for the largest proportion (11.4%), followed by 3.1% with likely illicit use, and 2.0% with prescription opioids for pain control.

First Nations infants with POE between 2013 and 2019



NOTE: The percentages have been rounded. Due to rounding, some totals may not correspond with the sum of the separate figures.

Percentage of Infants Born to First Nations mothers



NOTE: The percentages have been rounded. Due to rounding, some totals may not correspond with the sum of the separate figures.

Non-First Nations infants with POE between 2013 and 2019:

Of the 1.4% of non-First Nations infants with prenatal opioid exposure, the largest proportion (53%) were born to mothers using prescription opioids for pain control, followed by 32% being treated for opioid use disorders (opioid agonist therapy), and approximately 15% with likely illicit use.

First Nations Infants whose mothers used OATs between 2013 and 2019:



NOTE: The percentages have been rounded. Due to rounding, some totals may not correspond with the sum of the separate figures.

Over this 7 year period, among First Nations, the trend toward Suboxone® being prescribed more often than Methadone, is indicated by a steady increase in Suboxone® prescription (from 21% to 64%) and a decrease in methadone (from 79% to 36%).

Among non-First Nations mothers who used opioid agonist therapy between 2017 and 2019, methadone was prescribed to 77% of mothers vs. those prescribed Suboxone® 23%.

PRENATAL OPIOID EXPOSURE (POE) AMONG FIRST NATION INFANTS BY LOCATION



POE is almost 2x higher within First Nation communities compared to outside First Nation communities

Prenatal Opioid Exposure (POE) remained at 23% of all live births within First Nations Communities since 2015



The incidence of POE is almost 4 times LOWER among First Nation teenage mothers compared to First Nation mothers over 19 years of age

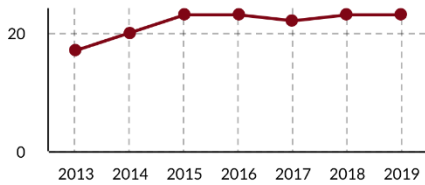
NOTE: The percentages have been rounded. Due to rounding, some totals may not correspond with the sum of the separate figures.

This is not the case among non-First Nations teenage mothers who are slightly more likely to use opioids in pregnancy than older mothers. (*data not shown).

PRENATAL OPIOID EXPOSURE (POE) AMONG FIRST NATION INFANTS (BY LOCATION)

WITHIN COMMUNITY

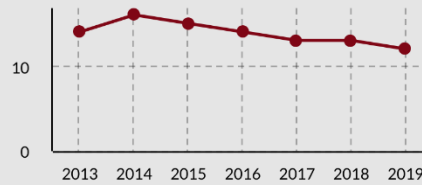
INCREASED: 2013 - 2015



REMAINED STABLE 2016 - 2019

OUTSIDE COMMUNITY

INCREASED: 2013 - 2014



DECREASED: 2014 - 2019

Type of Opioid

EXPOSURE OVER TIME (2013-2019)

Among First Nation mothers using opioids, there was an increase in those who received opioid agonist therapy (OAT).

Methadone and Suboxone®

INCREASED

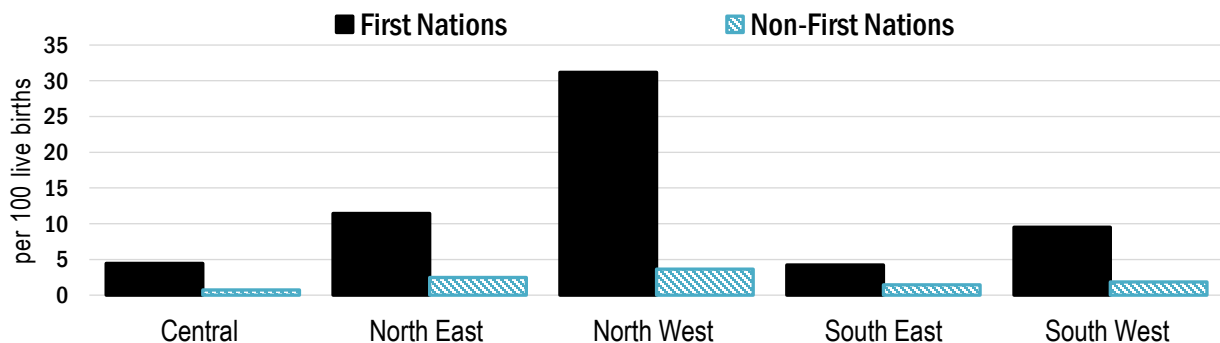
2013 **50%** ↑ 2019 **80%**

Opioids for pain control and likely illicit sources

2013 **26%** → 2019 **13%**
DECREASED to less than

NOTE: The percentages have been rounded. Due to rounding, some totals may not correspond with the sum of the separate figures.

Figure 5A.2. 3-year average, 2017 to 2019 Percent of First Nations and non-First Nations infants with prenatal opioid exposure region



The percentage of infants with prenatal opioid exposure varies greatly by region.

The highest rates of POE among both First Nations and non-First Nations are seen in the Northwest.

Across all regions, the percent of prenatal opioid exposure among First Nations infants exceeded that among non-First Nations infants, and ranged from 4% to 31%.

5B. Neonatal Abstinence Syndrome (NAS)

Key Findings:

Neonatal abstinence syndrome among First Nations infants:

- Affects more than 10% of all infants and more than 20% of those born in the North West.
- Is higher among First Nations infants living within the community (approximately 15%) than those living outside the community (approximately 8%) in more recent years (2015-2019).
- Is lower among babies born to teenage mothers than older mothers.
- Has more than doubled between 2009 and 2019.

POE and NAS Key Findings:

- While there have been increases over time in the number of First Nations infants with prenatal opioid exposure, this has stabilized at 25% yearly from 2017 to 2019 in Ontario.
- First Nations communities in Northwest Ontario have the highest numbers of mothers who take opioids during pregnancy.
- More mothers are now being treated for opioid use disorder
 - One consequence is that rates of infants born with NAS has increased
- NAS is treatable, but infants require a longer time in hospital at birth.

Figure 5B.1. Neonatal Abstinence Syndrome: Approximate annual estimates, 2017-2019

	First Nations	Non-First Nations
Annual number of infants born with neonatal abstinence syndrome	230	680
Total annual number of births	2,200	125,900
Annual percentage of infants with neonatal abstinence syndrome	11	1

Note: This is an approximate annual rate, the actual rate is listed in the key findings.

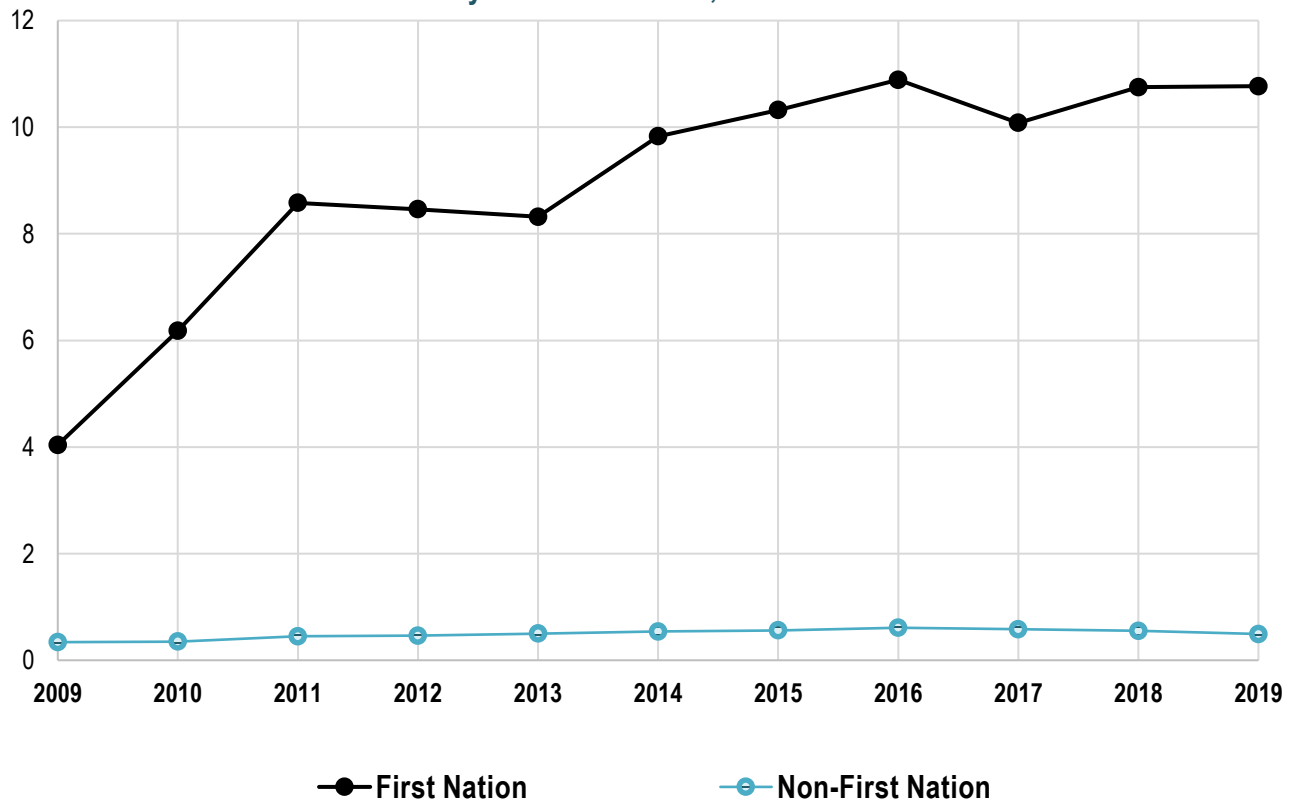
Neonatal Abstinence Syndrome

19x Higher

among First Nations infants compared to Non-First Nations infants.



Figure 5B.2. Percent of First Nations and non-First Nations with neonatal abstinence syndrome in Ontario, 2009 to 2019



From 2009 to 2019, the percent of First Nations infants born with neonatal abstinence syndrome has risen from 4% to nearly 11%, and increased among non-First Nations infants from 0.34% to 0.49%.

Neonatal Abstinence Syndrome (NAS) Among First Nation Infants

(2009-2019)

Neonatal Abstinence Syndrome
more than doubled
2009-2014



2015-2019
relatively stable
between
10%-11%

(2017-2019)

The percent of NAS was **1.6 times higher** among First Nations infants living **within First Nations community** compared to those living outside a First Nations community.

**WITHIN
FIRST NATION**

14%



**OUTSIDE
FIRST NATION**

9%

NOTE: The percentages have been rounded. Due to rounding, some totals may not correspond with the sum of the separate figures.

Neonatal Abstinence Syndrome (NAS) For First Nations, by Location, (2009-2019)

2009-2014
Similar for both
WITHIN and
OUTSIDE
FIRST NATION
COMMUNITIES



2015

DECREASING

**OUTSIDE
FIRST NATION
COMMUNITIES**

-

2019

INCREASING

**WITHIN
FIRST NATION
COMMUNITIES**



From 2009 to 2014, the percent of infants born with neonatal abstinence syndrome was quite similar between First Nations infants living within and outside the community.

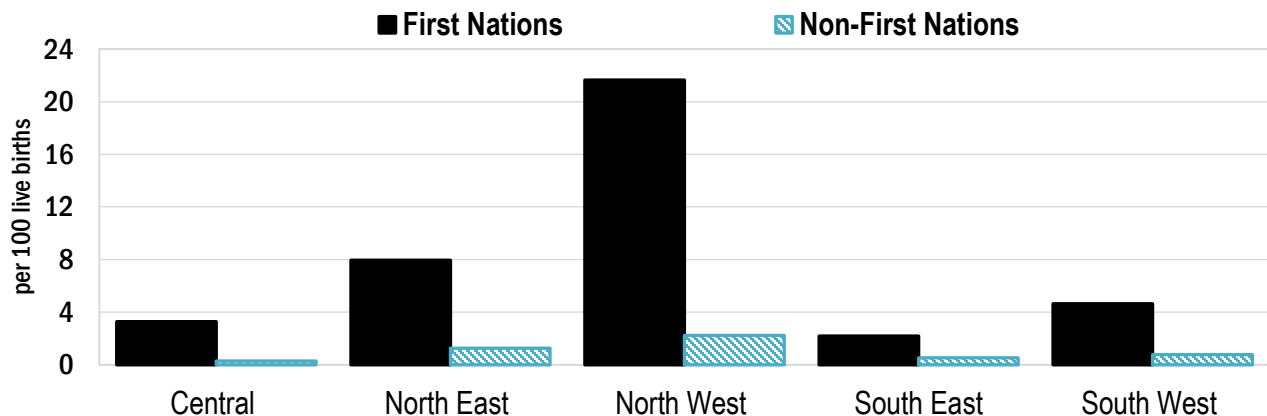
From 2015 to 2019, the percent of infants born with neonatal abstinence syndrome among those living within community increased compared to those living outside the community.



Neonatal Abstinence Syndrome is almost 4 times LESS likely in First Nation births among First Nation teenage mothers compared to First Nation mothers over 19 years of age

First Nations teenage mothers are far less likely to have infants born with neonatal abstinence syndrome than older First Nations mothers. This is the reverse for Non-First Nation mothers, where teenage mothers are twice as likely to have infants born with neonatal abstinence syndrome than older non-First Nations mothers.

Figure 5B.3. Percent of First Nations and non-First Nations infants with neonatal abstinence syndrome by region, in Ontario, 3-year average 2017-2019



The percentage of NAS varies greatly by region.

The highest rates of NAS among both First Nations and non-First Nations infants are seen in the Northwest.

Across all regions, the percent of NAS among First Nations infants exceeded that among non-First Nations infants and ranged from 2% to 22%.

Note: Due to small cells, the LHINs were combined and reported as larger regions.

6. Rates of death by suicide

This section of the report will be hard to read and may trigger uncomfortable emotional reactions at times and it is encouraged that you take breaks and moments to reflect on what the data are showing. Please read at your own comfort and pace.

If you need emotional support, please contact:

24 hour NAN Hope

Support line at 1-844-NAN-HOPE (1-844-626-4673)

The First Nations and Inuit Hope for Wellness Help Line

Call the toll-free Help Line at 1-855-242-3310 or connect to the online chat at hopeforwellness.ca *Service languages: Ojibway, Cree, Inuktitut, English, and French.*

Indian Residential School Support Line

Help is available 24/7 for people experiencing pain or distress as a result of their residential school experience. Call 1-800-464-8106 or the 24 Hour Crisis Line: 1-866-925-4419 (open 7 days a week).

Kids Help Phone

24/7 phone counselling service for children and youth, or their caregivers: Call 1 800 668 6868; Text CONNECT to 686868; or through Facebook Messenger: [KidsHelpPhone.ca/Messenger](https://www.facebook.com/KidsHelpPhone)

Key Findings:

- Between 2016 and 2018, First Nations people died by suicide at a rate nearly 3 times that of non-First Nations people (32.8 per 100,000 population vs 11.7 per 100,000 population).
- Among First Nations people living within and outside of a First Nations community, rates of suicide were similar.
- Among First Nations people, males had higher rates of death by suicide compared with females. However, the gap between males and females was less pronounced among First Nations people compared with the gap among non-First Nations people.
- Rates of death by suicide among First Nations people aged 10-17 and 18-24 years were considerably higher than non-First Nations people in the same age groups.

Figure 6.1. Deaths by Suicide: Approximate number of deaths, 2016-2018

	First Nations	Non-First Nations
Annual number of deaths by suicide	46	1,453
Total annual number of people per year	139,498	12,467,523
Annual rate of deaths by suicide (per 100,000 persons)	33	12

Note: This is an approximate annual rate, the actual rate is listed in the key findings.

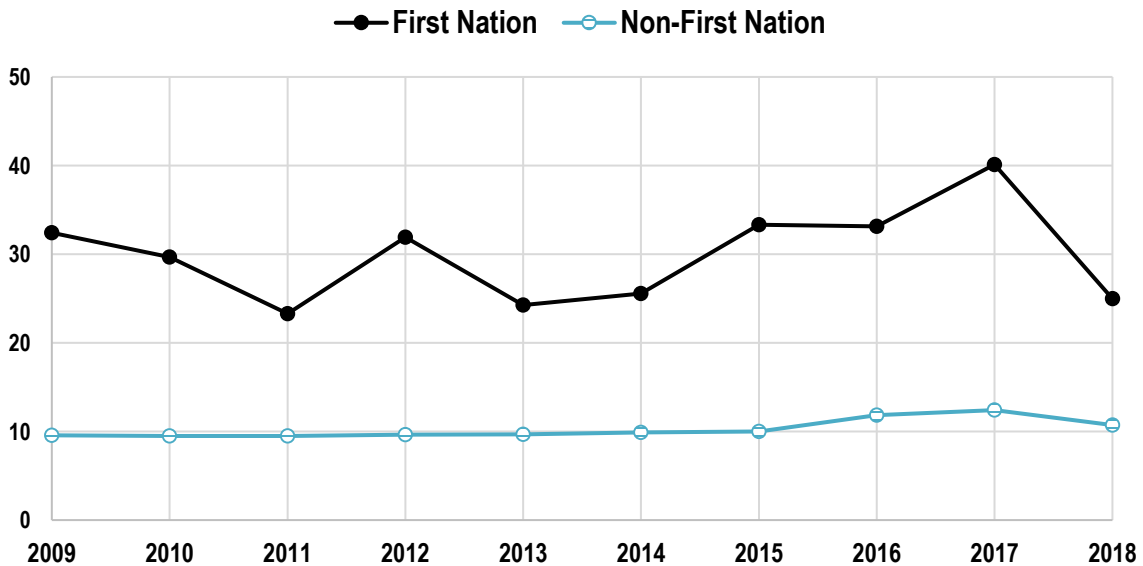
Deaths by Suicide

per 100,000 persons aged 10 to 105 years, 3-year average for 2016 to 2018



Nearly 3 times higher for First Nations people compared to Non First Nation people

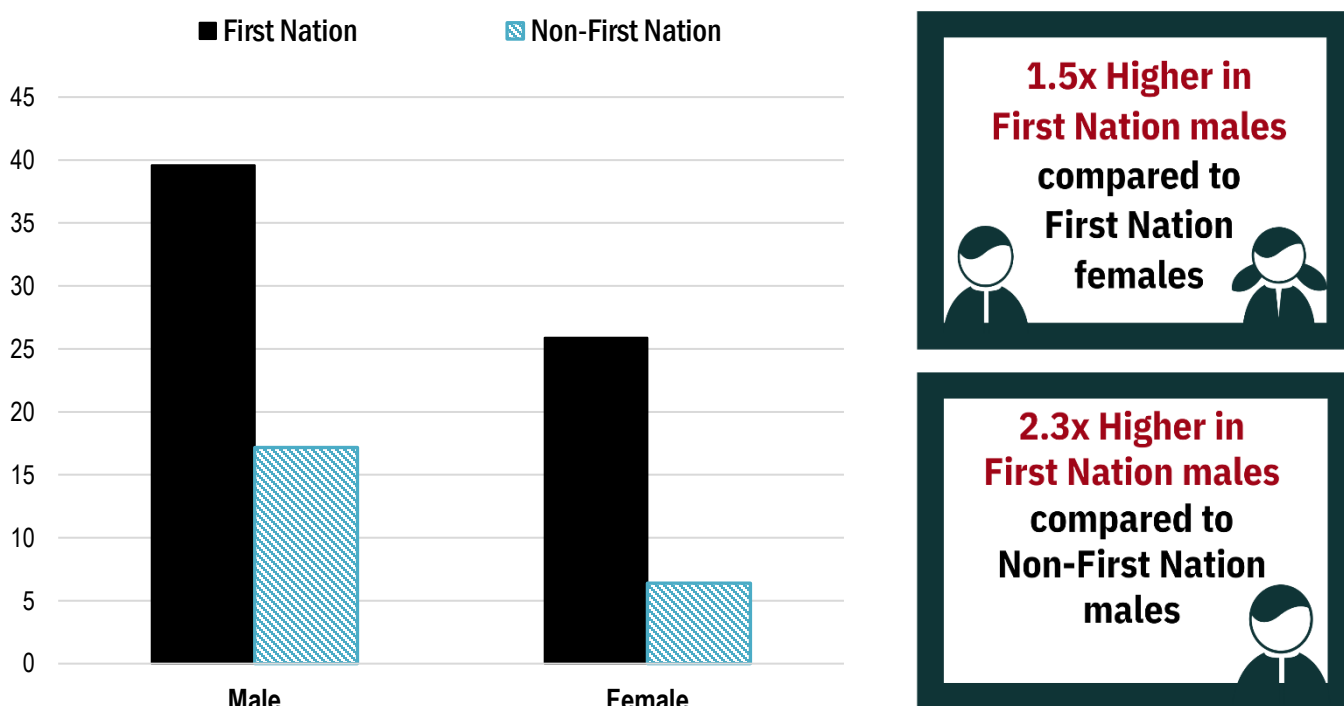
Figure 6.2. Number of deaths by suicide per 100,000 persons aged 10 to 105 years in Ontario, 2009 to 2018



Although there was year-to-year variation in the rate of deaths by suicide among First Nations people, no distinct trend over time was observed. The rate of deaths by suicide was similar between First Nations people who lived within and outside of a First Nations community. There was no observable trend over time for either those living within or outside of a community.

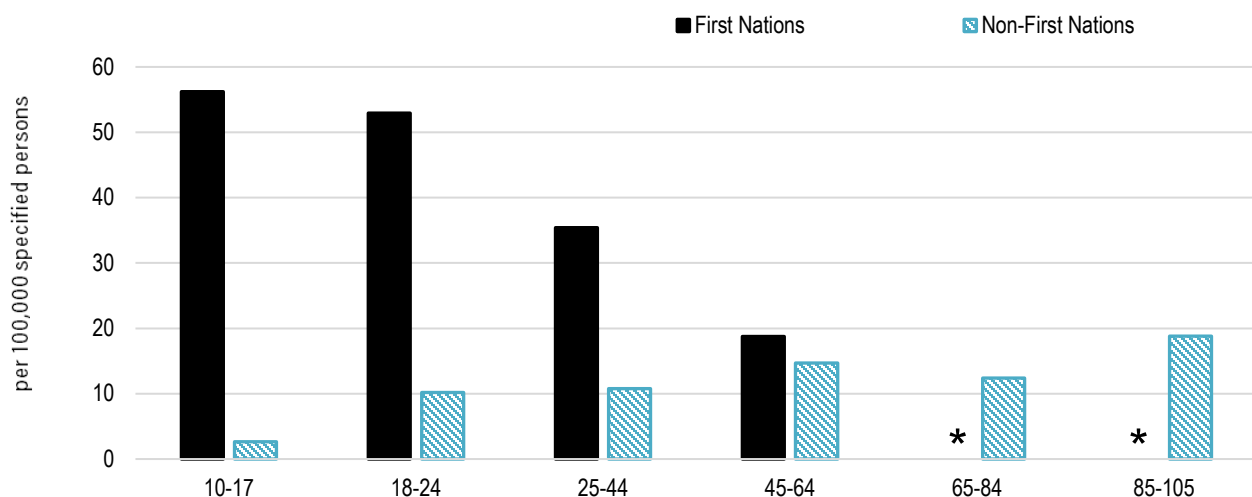


Figure 6.3. Number of deaths by suicide per 100,000 persons aged 10 to 105 years, by sex, in Ontario, 3-year average for 2016 to 2018



Among both First Nations and non-First Nations people, rates of deaths by suicide were higher among males compared with females. This gender difference was less pronounced among First Nations people (rate 1.5 times higher in males) than non-First Nations people (rate 2.7 times higher in males).

Figure 6.4. Number of deaths by suicide per 100,000 persons aged 10 to 105 years, by age group in Ontario, 3-year average for 2016 to 2018



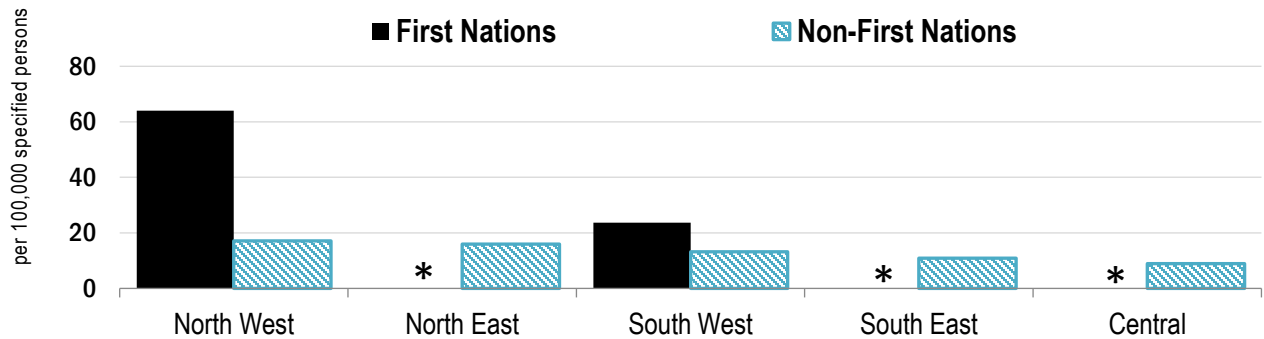
Note: For First Nations people aged 65-84 years, the rate was suppressed due to small cells (marked with an *)

The rates of deaths by suicide were higher among First Nations people compared with non-First Nations people across all age groups, but most notably for those aged 10-17 and 18-24 years. Among First Nations people aged 10-17 years, the rate of death by suicide was 56.2 deaths per 100,000 people (*21.4 times higher* compared with non-First Nations people in the same age category).

Among First Nations people:

- Those aged 18-24 years, the rate of death by suicide was 52.9 deaths per 100,000 people (5.2 times higher compared with non-First Nations people in the same age category).
- For the 2009-2019 period, there was year-to-year variation, but no observable trend over time, in the rate of deaths by suicide across all age groups. However, a large surge in the rate of deaths by suicide was observed in 2017 for those aged 10-17 years.

Figure 6.5. Number of deaths by suicide per 100,000 standardized persons aged 10 to 105 years, by Regions, in Ontario, 3-year average for 2016 to 2018



Among both First Nations and non-First Nations people, those living in North West region had the highest rate of death by suicide. In the North West region, the rate of death by suicide among First Nations people was 3.7 times higher compared with non-First Nations people. For First Nations people, nearly 50% of suicide deaths between 2016 and 2018 in Ontario occurred among those living in the North West region.

*Note: Rates of death by suicide were suppressed for North East, South East, and Central LHIN regions due to small cells (marked with *)*

7. Emergency Department Visits for Intentional Self-Injury

This section of the report will be hard to read and may trigger uncomfortable emotional reactions at times and it is encouraged that you take breaks and moments to reflect on what the data are showing. Please read at your own comfort and pace.

If you need emotional support, please contact:

24 hour NAN Hope

Support line at 1-844-NAN-HOPE (1-844-626-4673)

The First Nations and Inuit Hope for Wellness Help Line

Call the toll-free Help Line at 1-855-242-3310 or connect to the online chat at hopeforwellness.ca *Service languages: Ojibway, Cree, Inuktitut, English, and French.*

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24/7 phone counselling service for children and youth, or their caregivers: Call 1 800 668 6868; Text CONNECT to 686868; or through Facebook Messenger:

[KidsHelpPhone.ca/Messenger](https://www.kidshelpphone.ca/Messenger)

This indicator highlights individual visits to an emergency department (ED) for a nonfatal self-poisoning or self-injury. This indicator encompasses a wide range of behaviours carried out with at least some attempt to end one's life. The indicator considers all emergency department visits for intentional self-injury (ISI) regardless of whether a mental health or addictions diagnosis is present on the visit record and is presented as rates per population, which may include multiple visits per person per year.

Key Findings:

- Between 2017 and 2019, the rate of emergency department visits for intentional self-injury was over 6 times higher among First Nations people (108.1 per 10,000 population) compared with non-First Nations people (17.9 per 10,000 population).
- Among First Nations people:
 - Females had higher rates of emergency department visits for intentional self-injury compared with males and this gap has widened over time.
 - Those aged 14 to 24 years had the highest rates of emergency department visits for self-injury and those rates have been increasing over time.
 - Rates of emergency department visits for intentional self-injury were highest for those people living in North West, Toronto Central, South West, and Central West regions.

Figure 7.1. ED Visits for Intentional Self-Injury: Approximate number of visits, 2017-2019

	First Nations	Non-First Nations
Annual number of emergency department visits for intentional self-injury	1,500	22,600
Total annual number of people per year	140,000	12,617,000
Annual rate of emergency department visits for intentional self-injury (per 10,000 persons)	107	18

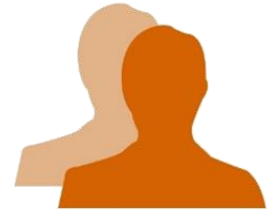
Note: This is an approximate annual rate, the actual rate is listed in the key findings.

Between 2017 and 2019, the crude rates of emergency department visits for intentional self-injury were notably higher among First Nations people compared with non-First Nations people.

Emergency Department Visits for Intentional Self-Injury (2017-2019)

**6x
Higher**

Intentional self-injury was over 6 times higher for First Nation people compared to Non-First Nation people



Among First Nations people, the rate of emergency department visits for intentional self-injury increased from 81 per 10,000 persons in 2009 to a peak of 110 per 10,000 persons in 2017, and remained stable through to 2019.

Among non-First Nations people, the rate of emergency department visits for intentional self-injury remained relatively stable over this same time frame.

EMERGENCY DEPARTMENT VISITS INTENTIONAL SELF-INJURY - FIRST NATION RATES (PER 10,000)

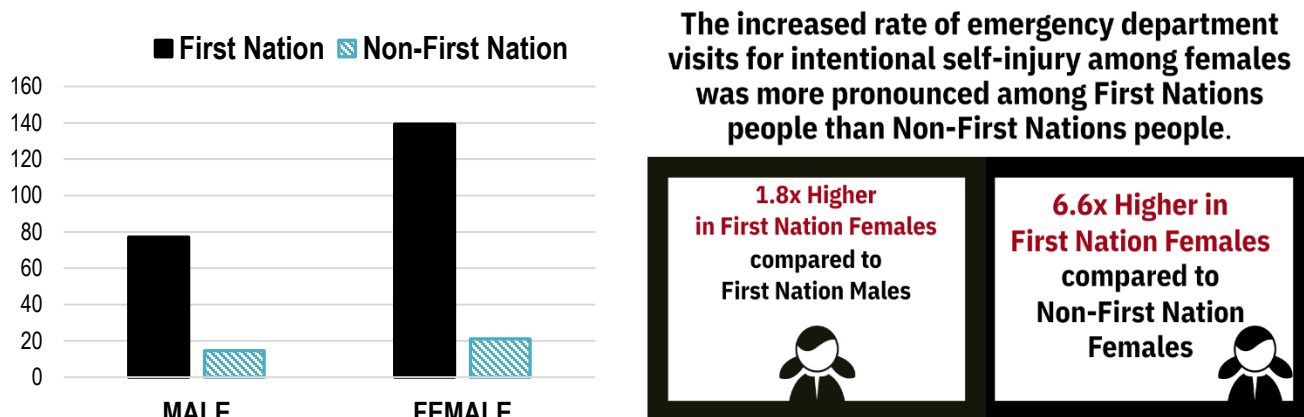


INCREASED
2013
81 ↑ 2017
110

STABILIZED
2017 - 2019
.....→

Over time, the rate of emergency department visits for intentional self-injury increased among First Nations people living within and outside the community. The rate of emergency department visits for intentional self-injury increased over time to a greater extent among First Nations people living within the community compared with those living outside the community. By 2019, rates were similar regardless of location.

Figure 7.2. ED visits for intentional self-injury, per 10,000 population, aged 10 to 105 years, overall and by location, in Ontario, 2017 to 2019

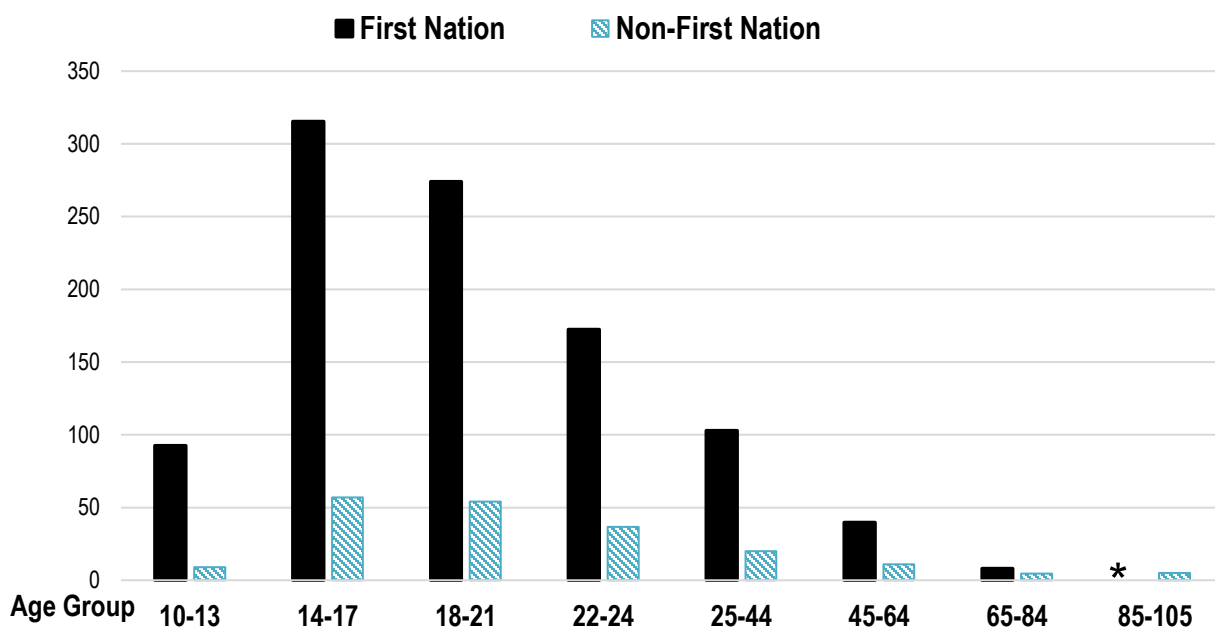


Among First Nations and non-First Nations people, rates of emergency department visits for intentional self-injury was higher for females compared with males. This difference was more pronounced among First Nations people (rate 1.8 times higher in females) than non-First Nations people (rate 1.5 times higher in females).

For the 10 year period, 2009-2019, among First Nations people, the rate of emergency department visits for intentional self-injury has increased for both females and males. However, the rate has increased over time to a greater extent among females compared with males.

Over time, among non-First Nations people, the rate of emergency department visits for intentional self-injury was relatively stable for both females and males.

Figure 7.3. ED visits for intentional self-injury, per 10,000 population, aged 10 to 105 years, in Ontario, 3-year average for 2017 to 2019



The rates of emergency department visits for intentional self-injury were higher among First Nations people compared with non-First Nations people across all age groups, with rates highest among First Nations people aged 14-21 years.

*Note: For First Nations people aged 85-105 years, the rate was suppressed due to small cells (marked with an *).*

Among First Nations people, the rates of emergency department visits for intentional self-injury increased notably between 2009 and 2019 for those aged 14-24 years, but remained relatively stable, over time, for those aged 25 years and older.

EMERGENCY DEPARTMENT VISITS INTENTIONAL SELF-INJURY FOR FIRST NATIONS (PER 10,000) BY METHOD (2017-2019)

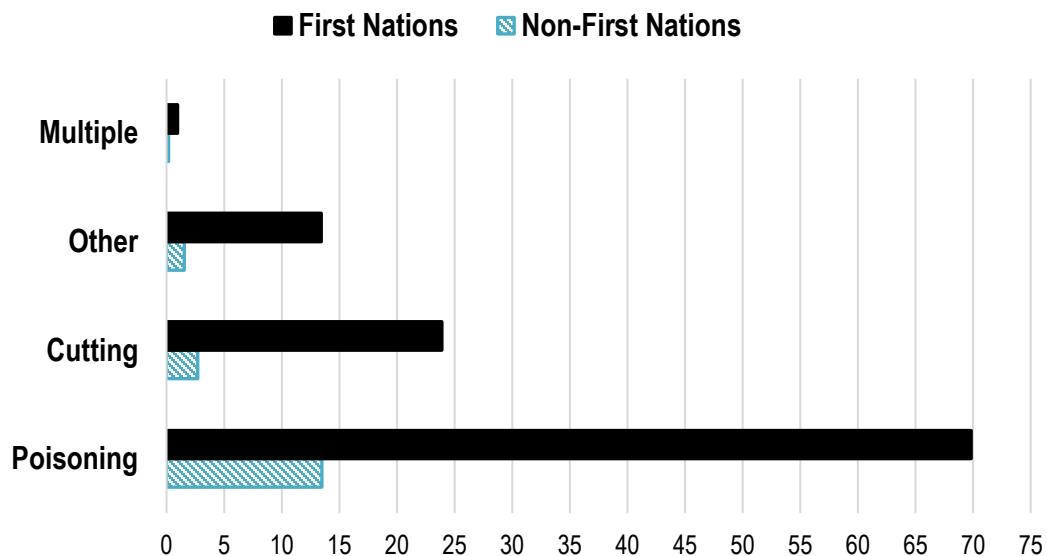
2 in 3
due to poisoning

1 in 5
due to cutting



Poisoning represented 65% and 75% of all emergency department visits for intentional self-injury among First Nations and non-First Nations people.

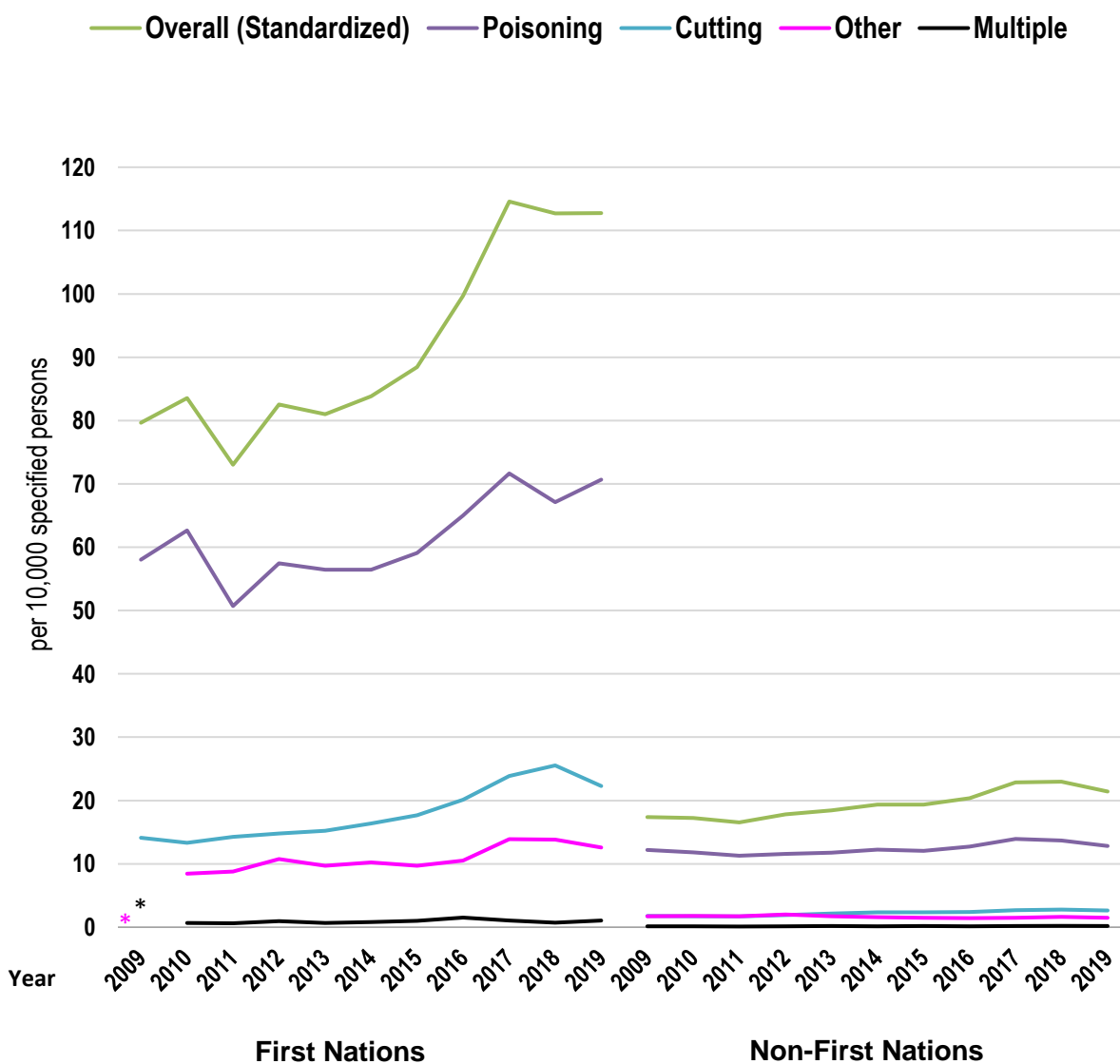
Figure 7.4. Number of emergency department visits for intentional self-injury, per 10,000 population, age 10 to 105 years, by method, in Ontario, 3-year average for 2017 to 2019



Poisoning represented 65% and 75% of all emergency department visits for intentional self-injury among First Nations and non-First Nations people, respectively. Emergency department visits for poisoning can result from exposure to a number of agents, including: non-opioid analgesics, sedatives, narcotics, alcohol, and organic solvents. While there was an attempt to determine and report rates of emergency department visits for intentional self-injury from exposure to organic solvents, there were a limited number of events that were coded as such, and suppression of those rates would have been required. It is also possible that solvent-related events are assigned diagnostic codes which are not specific enough to identify them.

Notes: The 'Other' category captures all other less common methods of intentional self-injury, such as injuries due to hanging. The 'Multiple' category captures ED visits where two distinct methods of self-injury were identified (e.g., Poisoning and Cutting).

Figure 7.5. Number of emergency department visits for intentional self-injury, per 10,000 population, aged 10 to 105 years, by method, in Ontario, 2009 to 2019



Among First Nations people, the rate of emergency department visits for intentional self-injury due to poisoning and cutting has notably increased over time.

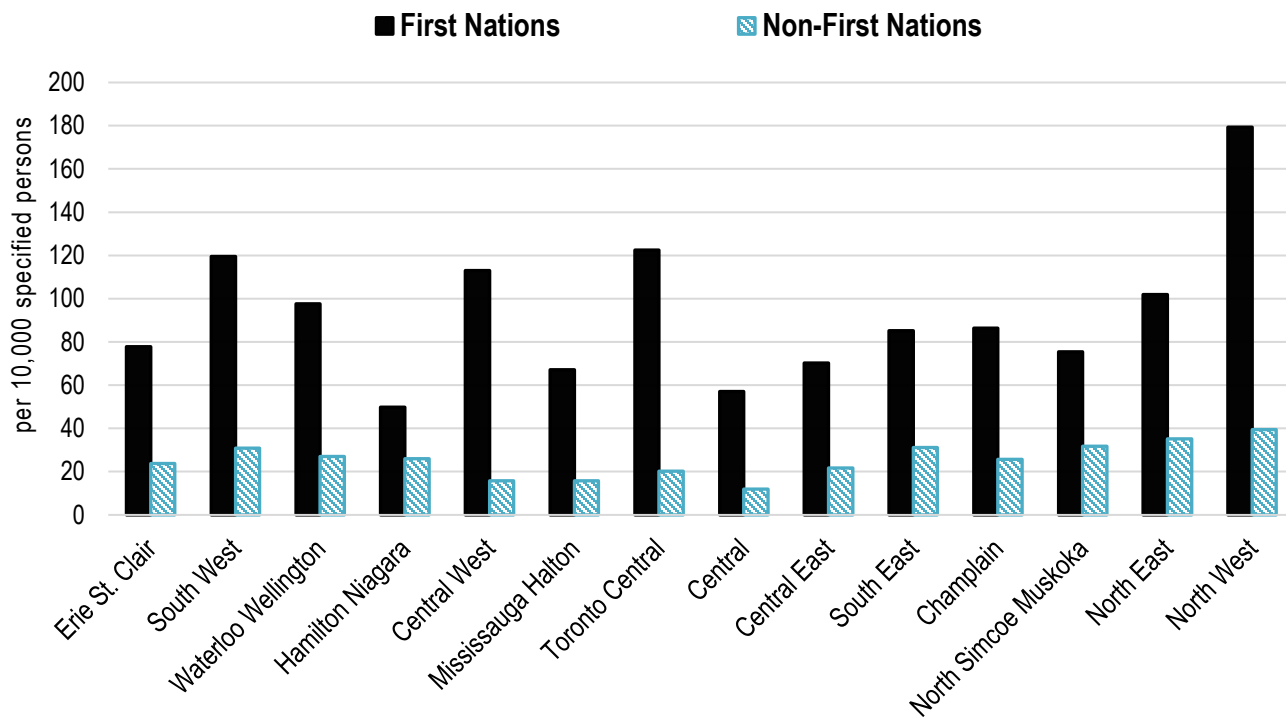
Among non-First Nations people, the rate of emergency department visits for intentional self-injury was stable over time for all methods.

EMERGENCY DEPARTMENT VISITS INTENTIONAL SELF-INJURY FOR FIRST NATIONS (PER 10,000) BY METHOD (2009-2019)



*Note: For First Nations people, the rate due to multiple methods was suppressed in 2009 due to small cells (marked with an *).*

Figure 7.6. ED visits for intentional self-injury, per 10,000 population, aged 10 to 105 years, by Local Health Integration Network, in Ontario, 3-year average for 2017 to 2019



Among First Nations people, those living in North West region had the highest rates of emergency department visits for intentional self-injury (179 per 10,000 persons). In addition, among First Nations people, those living in Toronto Central, South West, and Central West regions also had high rates of emergency department visits for intentional self-injury (122 per 10,000 persons, 119 per 10,000 persons, and 113 per 10,000 persons, respectively). Rates of ED visits for ISI were higher among FN than non-FN people across all LHINs.

8. Use of Physical Restraints during psychiatric hospitalizations

When caring for individuals with severe mental illness who are in acute crisis, reducing the risk for harm to self or others is a priority for hospital staff. It is hoped that the practice of using physical restraints (external devices, materials or equipment that are attached to or near a person's body to hinder freedom of movement) may prevent suicide or aggressive acts. Other, less restrictive forms of reducing agitation are preferred whenever possible and that psychiatric hospitals have been strongly encouraged to minimize the use of restraints.

Key Findings:

- First Nations people had similar rates of use of physical restraints during psychiatric hospitalizations compared to non-First Nations.
- Over time, the rates of use of physical restraints during psychiatric hospitalizations' decreased among First Nations followed by a slight increase.
- Rates of physical restraint use were slightly higher among First Nations females compared to non-First Nations females. Differences in rates were not found between First Nations and non-First Nations males.
- Rates of physical restraint use were similar between First Nations people living outside of a First Nations community and First Nations people living within a First Nations community.
- The rates of physical restraint use among 16-44 year-olds, in both First Nations and non-First Nations groups, are similar.
- Rates of use of physical restraints during psychiatric hospitalizations' were highest for people diagnosed with schizophrenia among First Nations and non-First Nations people. Rates were also high for First Nations people with substance use disorders.

Figure 8.1. Use of Physical Restraints during psychiatric hospitalizations, 2017-2019

	First Nations	Non-First Nations
Total number of psychiatric hospitalizations where restraints were used	280	7,400
Total number of psychiatric hospitalizations	6,000	160,000
Rate of psychiatric hospitalizations where restraints were used (per 100 population)	5	5



Physical Restraints use during Psychiatric Hospitalizations
16 to 105 years - 2017 to 2019



Rates of use of physical restraints during psychiatric hospitalizations were similar between First Nations and Non-First Nations people.

Rates of use of physical restraints during psychiatric hospitalizations among both First Nations people living within and First Nations people living outside a First Nations community decreased between 2009 and 2013, followed by an increase thereafter (between 2014 and 2019).

Physical Restraints use during Psychiatric Hospitalizations
For First Nations (2009-2019)



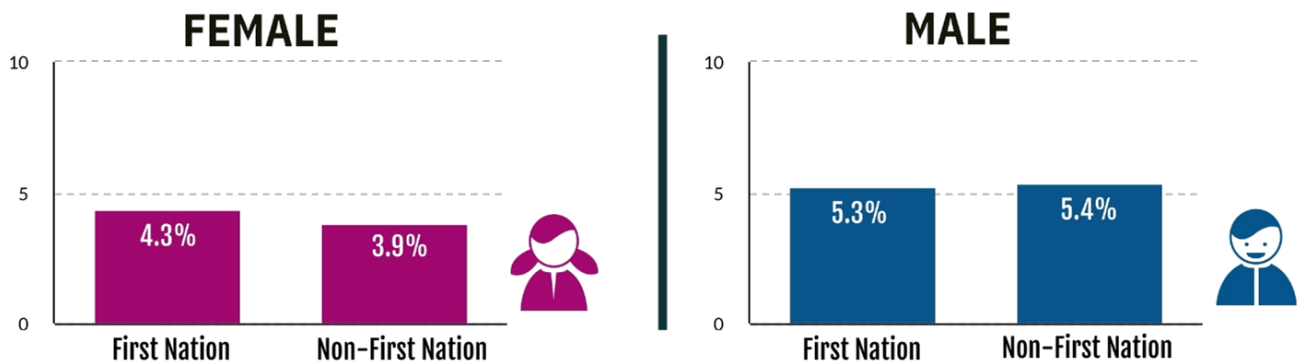
DECREASE
2009-2013



INCREASE
2014-2019

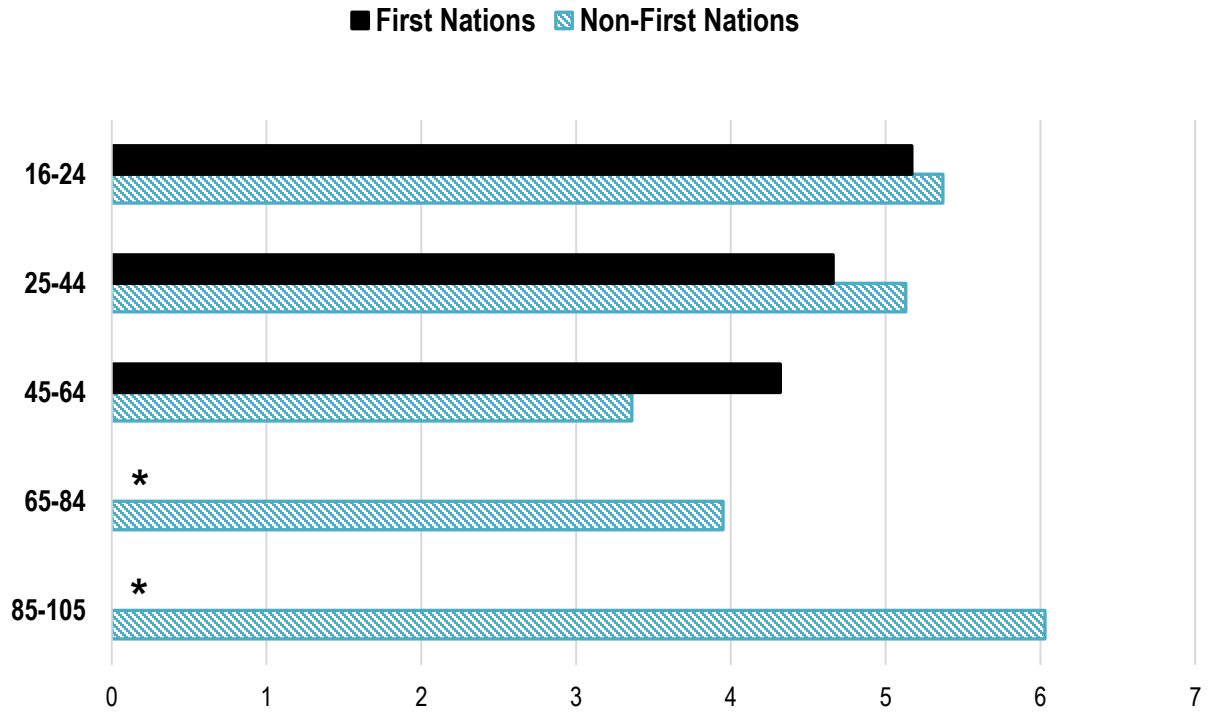


Figure 8.2. Use of Physical Restraints during psychiatric hospitalizations per 100 psychiatric-related hospitalizations among persons aged 16 to 105 years, by sex, in Ontario 3-year average for 2017 to 2019



Rates of use of physical restraints during psychiatric hospitalizations were higher among males compared to females for both First Nations and non-First Nations people; however, this difference was greater among non-First Nations people.

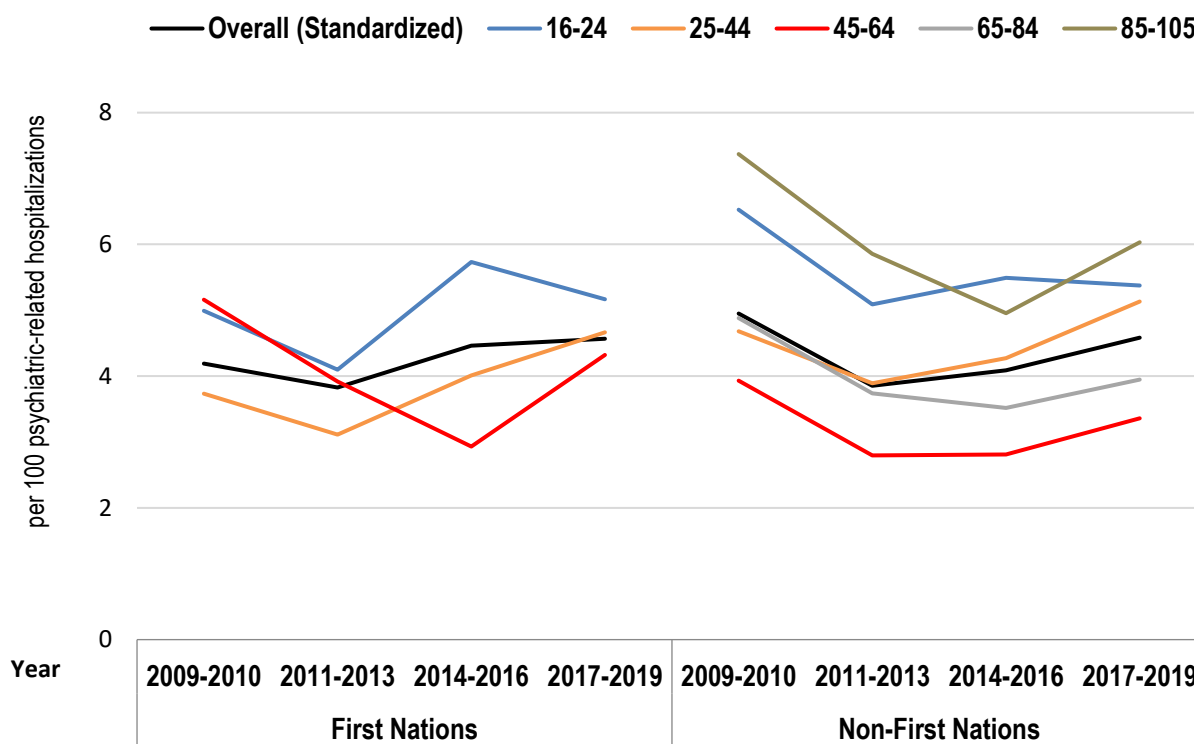
Figure 8.3. Number of psychiatric hospitalizations where physical restraints were used per 100 psychiatric-related hospitalizations among persons aged 16 to 105 years, by age group, in Ontario, 3-year average for 2017-2019



Rates of use of physical restraints during psychiatric hospitalizations were similar among 16-44 year-olds in both First Nations and non-First Nations groups.

*Note: Some rates for First Nations people aged 65-84 and 85-105 years were suppressed due to small cells (marked with an *)*

Figure 8.4. Number of psychiatric hospitalizations where physical restraints were used per 100 psychiatric-related hospitalizations among persons aged 16 to 105 years, by age, in Ontario, 2009 to 2019



From 2009 to 2019, there were some differences in rates of use of physical restraints during psychiatric hospitalizations across all age groups over time.

Among First Nations 45-64 year-olds, the rates decreased from 2009 to 2016 and then increased thereafter.

*Note: Rates for ages 65-84 years and 85-105 years were suppressed due to small cells (marked with an *) or not presented due to the sparse data (zeros).*

Rates of use of physical restraints during psychiatric hospitalizations were the highest among people diagnosed with schizophrenia spectrum and other psychotic disorders followed by personality and substance-related and addictive disorders.

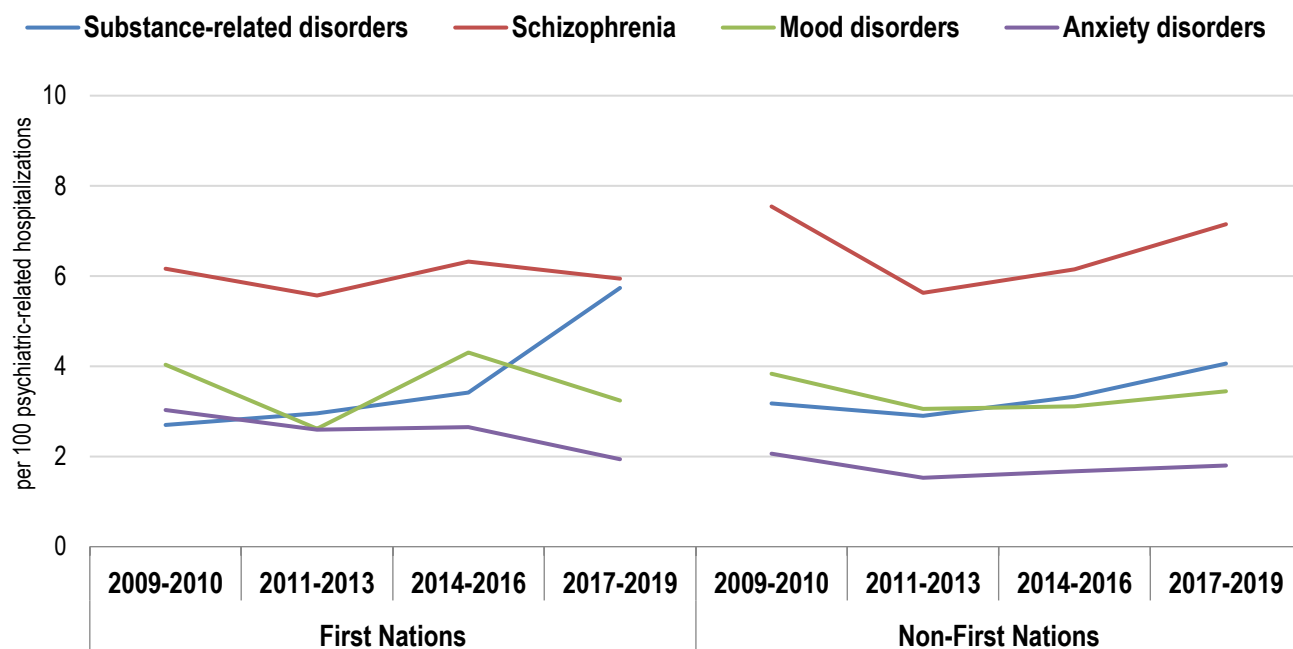
Physical Restraints use during Psychiatric Hospitalizations (2017-2019)



TOP DIAGNOSES

**Schizophrenia/
psychotic disorders**

Figure 8.5. Number of psychiatric hospitalizations where physical restraints were used per 100 psychiatric-related hospitalizations among persons aged 16 to 105 years, by type of diagnosis, in Ontario, 2009 to 2019



From 2009-2019, rates of use of physical restraints during psychiatric hospitalizations for schizophrenia were unchanged over time in First Nations people, but in non-First Nations people, the rates decreased and then increased over time.

Note: Rates of use of physical restraints during psychiatric hospitalizations for deliberate self-harm are not presented due to small numbers.

Physical Restraints use during Psychiatric Hospitalizations Rates (2009-2019)

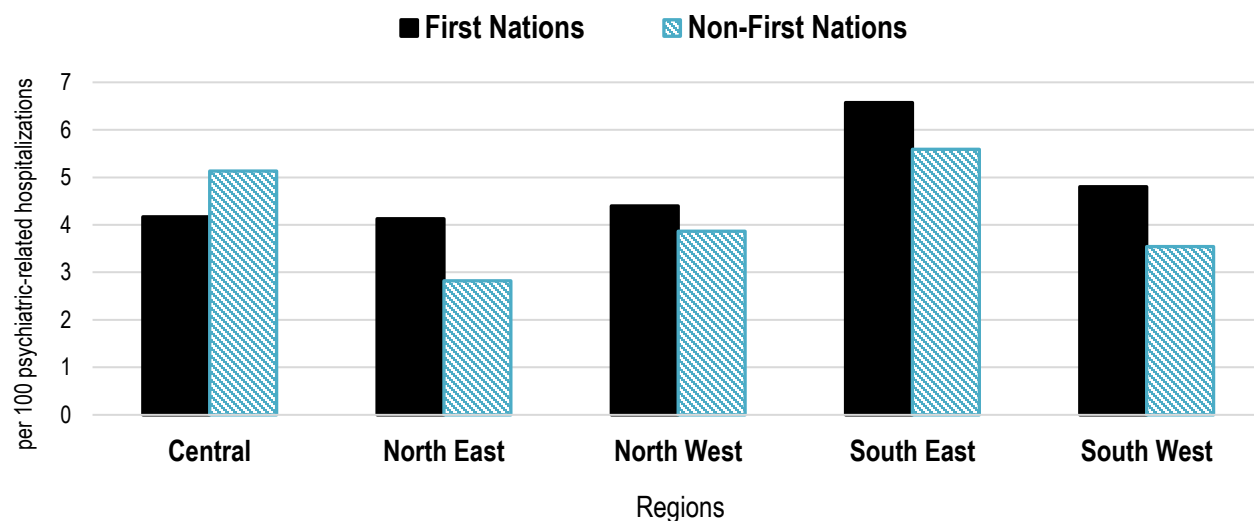


Rates of use of physical restraints during psychiatric hospitalizations for substance-related disorders increased in First Nations people.

Rates for non-First Nations people slightly increased overtime.



Figure 8.6. Number of psychiatric hospitalizations where physical restraints were used per 100 psychiatric-related hospitalizations among persons aged 16 to 105 years, by regions, in Ontario 3-year average for 2017 to 2019



Among First Nations people, the rates of physical restraint use were highest in 4 of the 5 regions, however the rates were similar when taken at the provincial level.

Note: LHINs are where people live, not where healthcare providers are located.

Conclusions/Recommendations

This report is the second in the overall project on Mental Health and Addictions System Performance among First Nations in Ontario. The first (Interim) report presented indicators related to System Use and are available at <https://chiefs-of-ontario.org/priorities/health/>.

Access to care in the community for mental health services is reflected by measuring the use of a hospital for Mental Health and Addictions care, by individuals who need services but cannot find them in the community. A high rate of use of the emergency department (ED) as a first point of contact and for unscheduled return visits for MHA care after a hospitalization or ED visit, can be a signal that there is inadequate access to outpatient physician- and community-based follow-up care. Individuals who need services may use the ED as their first point of contact with the health system for a variety of reasons, including long wait times, lack of services in their immediate area, or a lack of safe or culturally appropriate services. We are unable to measure these reasons within the scope of this study, but the results indicate an overall need for additional community-based supports along the continuum of care in prevention and early intervention, as well as follow-up treatment and wraparound supports. Hospital readmissions can be prevented with improved outpatient follow-up. The gaps in outpatient care are also evidenced by the low rates of follow-up for outpatient visits after a psychiatric hospital discharge. First Nations people had lower rates of 7-day outpatient follow-up with any care provider, particularly with psychiatrists, compared with non-First Nations people. In the years since the analysis conducted in this report, closures of EDs across Ontario have been necessitated by impacts of the COVID-19 pandemic, worsening an already fragile Mental Health service system.

While the rates of First Nations people and Non-First Nations people are near similar, ~1/3 of people visiting the ED as a first point of contact for MHA care is concerning. Of note, higher rates for First Nations people presenting at the ED without any prior help for deliberate self-harm/suicide attempts means that our health care system is failing to respond to their needs and is not accessible to people in crisis. Young people (e.g. 10-17 year-olds) seem to be using the ED as a first point of contact more than older people, suggesting that there is poor access for young people to early intervention and preventative care; they should not be having their first experience with mental health care through the ED.

Prenatal Opioid Exposure (POE) among First Nations infants affects approximately 16% of infants overall. Rates vary from approximately 4% in Central and South West, to 31% of those in the North West⁸ and is mostly due to opioid agonist therapy for the treatment of opioid use disorders. There was a large shift towards the prescription of Suboxone® versus methadone between 2013 and 2019, with Suboxone® prescribing surpassing methadone in 2016. This shift was influenced largely by the advocacy of First Nations leaders and health care providers to add Suboxone® to public provincial and NIHB formularies in order to improve access to effective treatments for First Nations, with less severe withdrawal symptoms for the infant. Although we see an increase of POE over time from 15% in 2013 to approximately 18% in 2015, which then decreased and stabilized afterwards, the rate reflects an increase of women accessing treatment for opioid use disorder. POE is higher among infants born to older mothers and lower among those born to teenage mothers and may indicate improved prenatal care among younger mothers. First Nations communities in North West Ontario have the highest numbers of mothers who take opioids during pregnancy, with the majority of those mothers being treated for opioid use disorder. One consequence is that rates of infants born with

⁸ The 14 LHINs were clustered into five “Ontario Health Interim and Transitional Regions” (the “Interim Regions”). The 14 LHINS were organized under five Interim Regions. Northwest region formally known as the North West LHIN. https://www.osler.com/en/resources/regulations/2019/ontario-taking-next-steps-to-integrate-health-care-system#_ftnref3

Neonatal Abstinence Syndrome (NAS) has increased, requiring longer hospital stays for infants for treatment of their symptoms. While NAS is not, in and of itself, a risk factor for poor infant/child outcomes (such as development) it is far safer for the pregnancy (mother and fetus) to be treated for opioid use disorder than to either discontinue in pregnancy or be taking diverted prescriptions or illicit drugs (i.e. to not be treated for opioid use disorder).

There is little research on POE and NAS to determine the long-term effects of opioid exposure, and on the negative outcomes associated with the presence of withdrawal at birth. More work is needed to better understand the longer-term trajectories and treatment of mothers throughout their pregnancies, as well as the effect of integrated programming for a holistic approach with mothers and infants within the family context. Fear of child apprehension and poor access to services are strong deterrents of treatment. Funding to support improved access to culturally safe, equitable pre- and postnatal care among mothers of all ages may contribute significantly to better outcomes in terms of opioid use during pregnancy now and in generations to come. Additionally, support for First Nations midwifery as an integral component of the health care system would improve outcomes with follow up for wholistic culturally appropriate post-pregnancy follow-up care as an option with doctor-supported hospital births.

Death by suicide

The data on deaths by suicide are the most tragic and indicative of failure of the mental health system to support First Nations, especially our youth, in the time of life when supports are most needed. It is important to note that there are limitations to the data resulting from the way causes of death are recorded. The method of suicide is not consistently reported when the cause of death is recorded, and there may be lack of clinical detail. Data regarding intentional self-injury do not always indicate if the intent was suicidal or not. Therefore, the data presented are likely an underestimate of the reality.

The rate of death by suicide is three times higher among First Nations than among non-First Nations, and is **very high in young First Nations individuals** aged 10-24 years, and higher among females than males. For non-First Nations in Ontario, the opposite is typically observed - deaths by suicide are rare in youth, and rates start to increase in adults. Data on death by suicide must be considered as a symptom of inequities and other social determinants of health, such as inadequate housing, poverty, intergenerational trauma, poor access or multiple barriers to services, and systemic racism in health care. As seen in other indicators in this study, ED visits among First Nations people for intentional self-injury are much higher than for non-First Nations; those living in the North West region had the highest rates of ED visits for intentional self-injury; and First Nations females had higher rates of ED visits for intentional self-injury compared to First Nations males and non-First Nations females. Current policies and programming may be missing the target for First Nations youth and females.

In a recent report⁹ more frequent follow-up was not associated with better outcome. Timely access to mental health care after intentional self-injury was poor at 31%. Follow-up care had virtually no association with subsequent risk; treatment “as usual” was insufficient. Care after an intentional self-injury event must include evidence-based wraparound care and other healing modalities founded in First Nations culture, based on the First Nations Mental Wellness Continuum Framework (ref).

⁹ Jon Hunter, Robert Maunder, Paul Kurdyak, Andrew S. Wilton, Andrea Gruneir, Simone Vigod, Mental health follow-up after deliberate self-harm and risk for repeat self-harm and death, Psychiatry Research, Volume 259, 2018, Pages 333-339.
<https://www.sciencedirect.com/science/article/pii/S016517811730879X>

Taken together with results from the Interim report on System Use, the recommendations are as follows:

- Provision for adequate health human resources within communities as has been identified as a need by leadership.
- Policy and programming need to focus on supporting prevention and crisis management
- Adequate sustainable funding is needed to allow First Nations to access critical, culturally relevant services in a timely manner close to home such as “wrap-around” services including more culturally appropriate care such as traditional healers, counsellors, and the ongoing need for treatment for alcohol use disorder.
- Ontario is generally under-serviced to meet the needs of First Nations patients at the community level, and the gap between services provided and actual need is not measured.
- Supports for provision of First Nations midwifery would provide a benefit to families with supportive care for the mother and baby through traditional methods of birthing and childcare.
- Funding to support improved access to culturally safe, equitable pre- and postnatal care among mothers of all ages may contribute significantly to better outcomes in terms of opioid use during pregnancy now and in generations to come. Additionally, support for First Nations midwifery as an integral component of the health care system would improve outcomes with follow up for wholistic culturally appropriate post-pregnancy follow-up care as an option with doctor-supported hospital births. Further attention to a number of factors influencing these results can make effective changes with program and policy planning.
- The effect of the Truth and Reconciliation process which began in 2009 increased the needs for First Nations to seek Mental Health supports due to the trauma experienced by survivors.
- Systemic racism within the health care system must be addressed as stigma and discrimination prevents many individuals from seeking medical care or harm-reduction programs.
- Changes made to drug formularies, public drug funding, and prescribing limits, may have unintended consequence of more dangerous street-sourced drugs being inserted into the supply; harm reduction policies are needed to reduce these risks.
- Timely and accessible mental health services to reduce the long waitlists for services for children/youth especially for psychiatrist services is critical as evidenced by the high use of EDs and rates of death by suicide.
- Access to specialists by virtual care could improve care for those living in rural/remote areas.

Glossary

Anxiety disorders: Anxiety disorders are characterized by excessive fear or worry. It is a classification of mental disorders that are generated during emergency department and hospital visits.

Death by Suicide: Suicide is death caused by the act of injuring oneself with the intent to die. A suicide attempt is when an individual harms themselves with the intent to end their life but does not die as a result of their actions. Our indicator only captures deaths by suicide and not suicide attempts.

Deliberate self-harm or Intentional self-injury: Non-fatal self-poisoning or self-injury carried out with an intent to end one's life, including a wide range of behaviours from non-suicidal acts to attempted suicide.

Diagnosis: Classification of an individual's mental health or addiction disorder by a physician (e.g. anxiety disorders).

- All mental health disorders were included in the analysis. An 'other' group that captured other less common disorders was also included.

Emergency Department Visit: When an individual receives unscheduled services from an emergency department for MHA care.

Emergency department as first point of contact for MHA care: When an individual visits an emergency department (ED) for MHA care with no MHA care in the two years prior. A higher rate of use of the ED as a first point of contact for MHA care may be a useful indicator of inadequate access to outpatient physician- and community-based care.

Emergency department visits for intentional self-injury: When an individual visits an emergency department (ED) for a nonfatal self-poisoning or self-injury. This indicator encompasses a wide range of behaviours carried out with at least some attempt to end one's life. The indicator considers all emergency department visits for intentional self-injury (ISI) regardless of whether a mental health or addictions diagnosis is present on the visit record. (Sources of poisoning: non-opioid analgesics, sedatives, narcotics, alcohol, and organic solvents.)

30-day MHA-related ED revisits: When a patient visits an emergency department (ED) for mental health and addictions care within 30 days of a previous ED visit for mental health and addictions care.

30-day MHA-related hospital readmissions: When a patient is readmitted to the hospital for mental health and addictions care within 30 days of a previous hospitalization for mental health and addictions care.

Federal Nursing Station: Nursing stations are set up as primary health care for remote First Nations in Canadian provinces. They help provide such services where hospitals and other medical facilities do not exist.

Indicator or Performance Measure: Measurement of a specific result or outcome that can be used to evaluate how well the mental health care system is performing.

Length of Stay: The number of nights spent in hospital care, from the day of admission to the day of discharge. The length of stay indicator is calculated as the median number of days for all hospitalizations in a given month.

Median: In a set of numbers arranged from lowest to highest, the median is the middle number where at most 50% of the values are above that number, and at most 50% are below that number. For example, if the lengths of stay for 5 patients are 2,4,5,7 and 9 days, the median length of stay is the middle number, which is 5 days.

MHA Hospitalization: When an individual is admitted into inpatient care for mental health and addictions-related disorders.

MHA-related Outpatient Visit: When an individual visits either a psychiatrist, a family physician/general practitioner, a paediatrician, or visits to a community health centre for mental health-related disorders. The use of outpatient services for MHA problems provides a measure of service needs.

Mood disorders: Mood disorders, such as depressive or bipolar disorders, are characterized by disturbance in mood, motivation, and general functioning. It is a classification of mental disorders that are generated during emergency department and hospital visits.

Neonatal abstinence syndrome (NAS): Neonatal abstinence syndrome is a set of withdrawal symptoms experienced when a newborn is exposed to certain substances in the womb before birth. Neonatal abstinence syndrome most commonly occurs when an infant is exposed to opioids, but can also occur from a pregnant person's use of antidepressants, benzodiazepines, nicotine, caffeine, alcohol, methamphetamine and inhalants.

Obsessive compulsive and related disorders (OCD): Obsessive compulsive and related disorders are characterized by repetitive, uncontrollable thoughts and associated compulsive behaviours that cause distress or anxiety. It is a classification of mental disorders that are generated during emergency department and hospital visits.

Opioid agonist therapy (OAT): Opioid agonist therapy (OAT) involves taking medications like oral buprenorphine/naloxone, methadone, or injectable extended-release buprenorphine to treat opioid use disorder.

Outpatient visits within 7 days after discharge: When an individual visits a psychiatrist, a family physician/general practitioner, or a paediatrician within 7 days after being discharged from a hospital after receiving mental health and addictions care.

Prenatal Opioid Exposure (POE): When mothers use opioids or are treated for opioid dependence during pregnancy or when babies are exposed to opioids in utero. For this analysis, prenatal opioid exposure included the following types of exposure: Opioid agonist therapy such as methadone or suboxone, significant opioid use for pain control (duration of use totaling more than 10 days), and indications that illegally produced or obtained opioids were likely used.

Primary care provider: A family physician or a general practitioner billing through the Ontario Health Insurance Plan or a physician or nurse practitioner that sees patients in Community Health Centers.

Provider specialty: The medical area of focus and expertise of the physician seen by a patient at a given visit. MHA-related services can be provided by psychiatrists, primary care providers such as family physicians or general practitioners, and paediatricians.

Physical Restraint: Control or confinement of an individual who may pose a risk to themselves or their care providers during an episode of care.

Psychiatric hospitalization: When an individual is admitted into inpatient care for mental health and addictions-related disorders where at least part of their stay is in a designated mental health bed.

Rate: How often a health event or disease occurs in a specific group or population over a specific period of time.

- **Age and Sex-Standardized Rate:** Compares and describes how often a health event or disease occurs in a specific group or population over a specific period of time, after accounting for how the health event or disease affects people of different ages and/or sexes. In other words, standardization is a useful tool for comparing rates between populations that differ significantly by age and/or sex (e.g. 80 mental health hospitalizations per 10,000 people per year after adjusting for age and sex).
- **Crude:** total number of cases in a given period of time by total population

Schizophrenia spectrum and other psychotic disorders: Individuals with schizophrenia spectrum and other psychotic disorders often appear to have lost touch with reality because of the impact of these disorders on how people think, feel and behave. It is a classification of mental disorders that are generated during emergency department and hospital visits.

Small Cells: Values or numbers used to calculate rates of events that are less than or equal to five, which result in a rate that is too small to be reported. Rates calculated using small cells are not reported to avoid potential re-identification of individuals.

Suboxone®: Buprenorphine/naloxone, sold under the brand name Suboxone® among others, is a fixed-dose combination medication that includes buprenorphine and naloxone. It is used to treat opioid use disorder.

Substance-related and addictive disorders: A classification of mental disorders that are generated during emergency department and hospital visits. Substance-related and addictive disorders are characterized by the dependence and/or abuse of substances. It is a classification of mental disorders that are generated during emergency department and hospital visits.

Trauma and stressor-related disorders: Trauma and stressor-related disorders are characterized by symptoms similar to those experienced in anxiety or mood disorders, as a result of a traumatic life event. It is a classification of mental health disorders that are generated during emergency department and hospital visits.

Project Data Sources

Data Sources	What does this database contain?
Indian Register (IR)	Demographic and administrative information on all Registered/Status First Nations, both living within and outside of a First Nations community.
Ontario Health Insurance Plan (OHIP)	Patient-level data for outpatient services, by physicians, provided to Ontario residents eligible for OHIP including details of services provided and associated diagnoses.
Community Health Centre (CHC)	Patient-level data for outpatient services at a community health centre provided by a physician, nurse practitioner, or other health professional.
Postal Code Conversions File (PCCF)	Information on various geographic identifiers, including postal codes.
Registered Person's Database (RPDB)	The central population registry that enables linkage across health-administrative datasets. Contains age, sex, and postal code for every resident covered under Ontario's universal health insurance.
Discharge Abstract Database (DAD)	Patient-level data for acute, rehab, chronic and day surgery institutions in Ontario.
Ontario Mental Health Reporting System (OMHRS)	Patient-level data on adult designated inpatient mental health beds including beds in General, Provincial, Psychiatric, and Specialty Psychiatric facilities.
Office of the Registrar General – Deaths (ORGD) Vital Statistics	Information on all deaths registered in Ontario including the causes of death (immediate, antecedent, and underlying), and manner of death (natural, homicide, accident, suicide, etc.) from 2013 onwards, as captured on the death certificate.
National Ambulatory Care Reporting System (NACRS)	Most emergency department visits paid for by the Ontario Health Insurance Plan.
Narcotics Monitoring System (NMS)	Collects data on dispensed prescriptions for narcotics, controlled substances and other monitored drugs, regardless of whether the prescriptions are paid for by a publicly funded program, private insurance, or cash.
MOMBABY	Database contains records of mothers and their newborns, each record corresponds to a mother-child pair. This is only for in-hospital births in Ontario.