

# OPIOID USE AMONG FIRST NATIONS PEOPLE IN ONTARIO:

A report prepared by ICES for The Chiefs of Ontario and The Chiefs in Assembly

**Chiefs of Ontario Research Symposium**

**Opioid Research**

**February 25 2019**



**CHIEFS  
OF ONTARIO**

**ODPRN**

ONTARIO  
DRUG POLICY  
RESEARCH NETWORK



Data  
Discovery  
Better Health

## BACKGROUND

- The **rising use of opioids** has become a major concern in Ontario and a public health crisis in First Nations communities.
- The **limited high-quality data** on prescription opioid use and related adverse events among First Nations people in Ontario is a **barrier** to effective planning of services and supports that could target these issues.

### Resolution 13/10 (Prescription Opioid Surveillance)

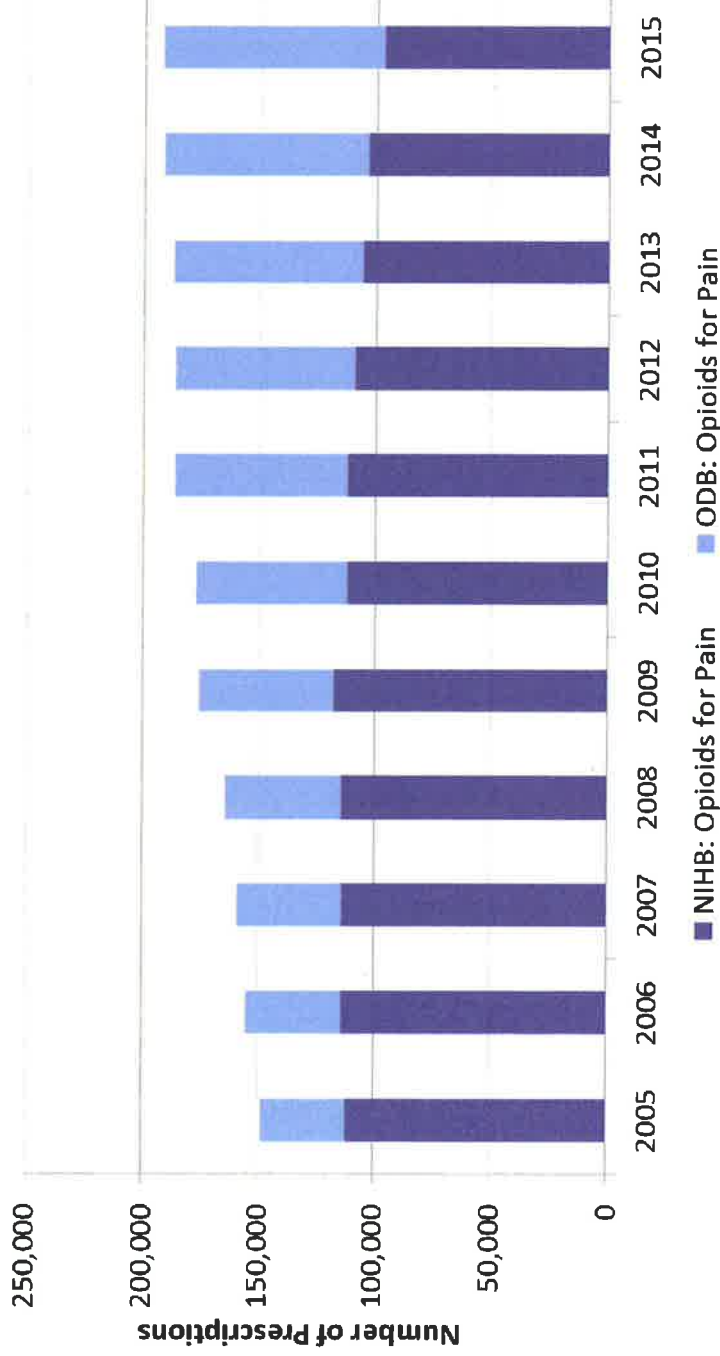
1. The Chiefs of Ontario to work with ICES and the Non-Insured Health Benefits (NIHB) Program to develop research that is relevant and appropriate to the needs of First Nations
2. Conduct work aimed at reducing the harms related to opioid use in First Nation communities in Ontario



# HOW ARE OPIOIDS PRESCRIBED AMONG FIRST NATIONS PEOPLE?

Data sources:  
ODB and NIHB

Number of Prescriptions for First Nations People through ODB and NIHB



- Increase in the number of opioid prescriptions dispensed for the treatment of pain.
- Increase driven by increased prescribing through ODB in recent years.

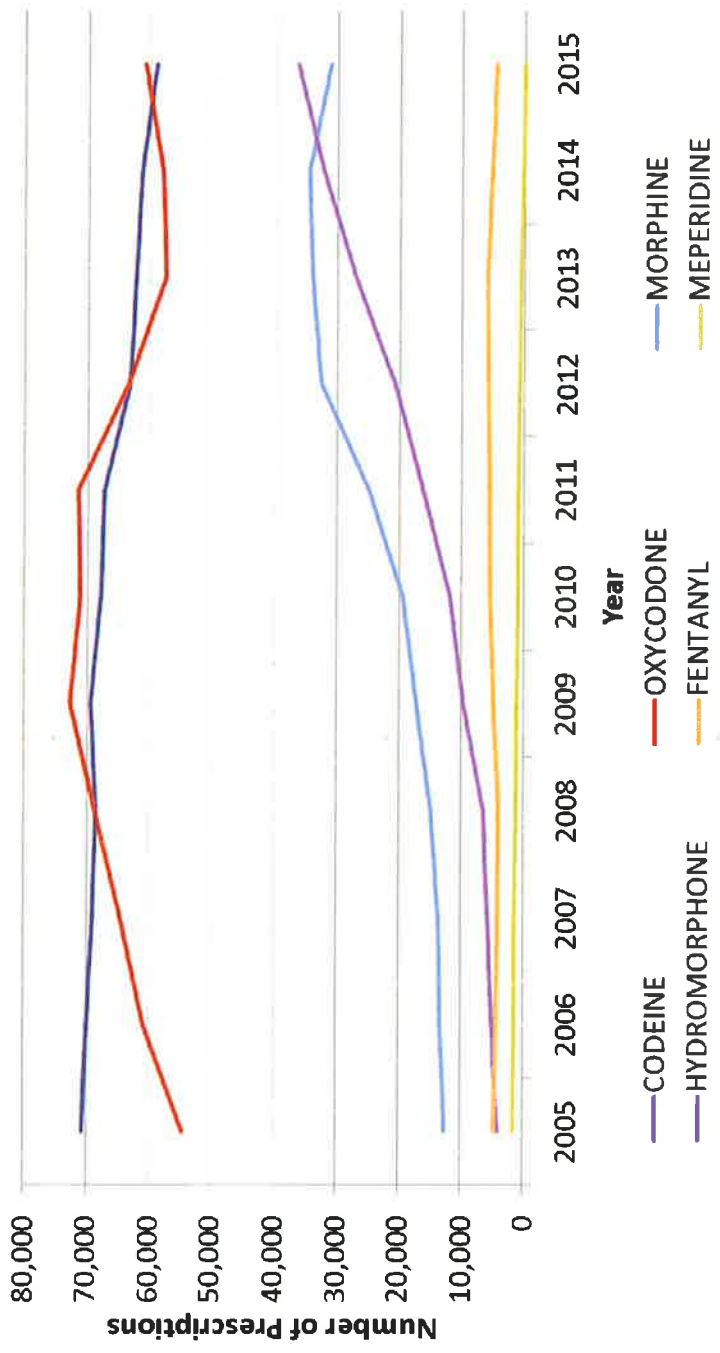
**NOTE:** Opioid prescription results do **not** include illicit opioid use, opioids used to treat addiction (i.e. methadone, buprenorphine), or prescriptions that are not funded through the NIHB or ODB programs (e.g. private payments, cash payments).



# HOW ARE OPIOIDS PRESCRIBED AMONG FIRST NATIONS PEOPLE?

Data sources:  
ODB and NIHB

Number of Prescriptions for First Nations People through ODB and NIHB, by Type of Opioid



- Codeine and oxycodone are the most commonly prescribed opioids, largely driven by use of combination agents that are prescribed more often for short term use (e.g. Tylenol No. 2 and 3; Percocet).
- Increase in morphine and hydromorphone prescriptions in recent years.

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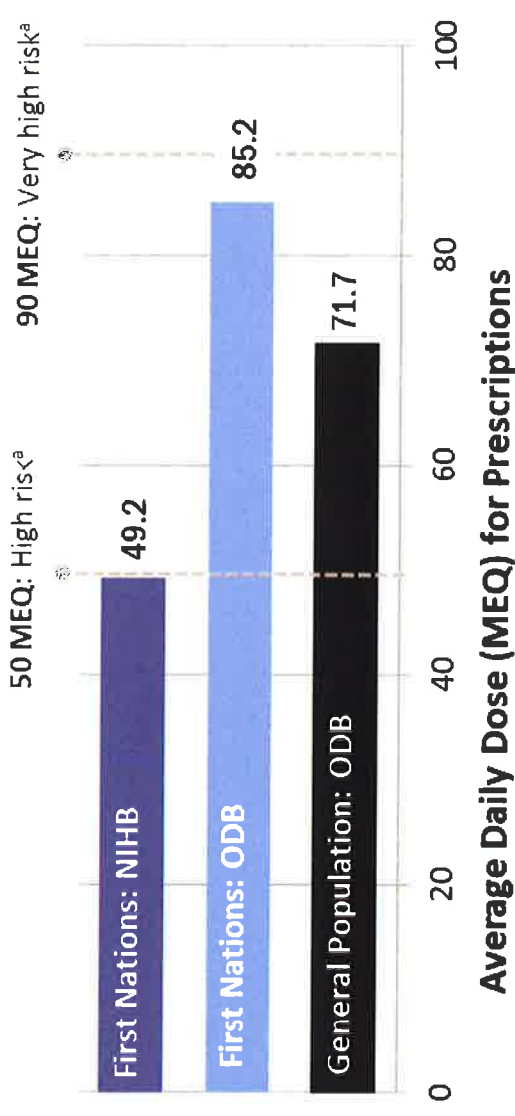


# HOW ARE OPIOIDS PRESCRIBED AMONG FIRST NATIONS PEOPLE?

Data sources:  
ODB and NIHB



Morphine Equivalents (MEQ) in 2015

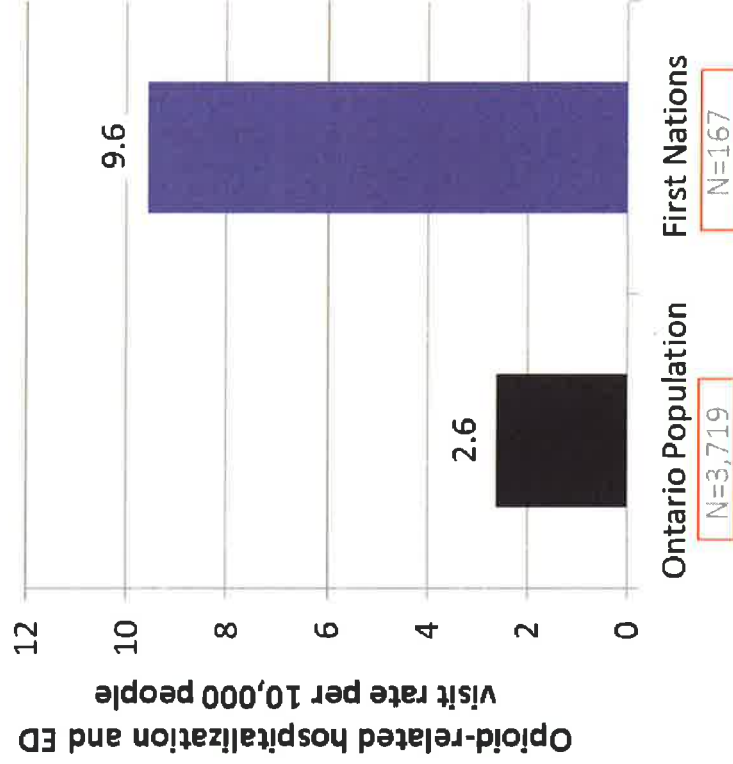


- The average daily opioid dose dispensed to First Nations people through ODB is higher than the general population, and higher than that dispensed to First Nations people through NIHB.
- This is concerning given the higher risk of toxicities associated with higher doses of opioids.

# IMPLICATIONS OF OPIOID USE: OPIOID-RELATED TOXICITY

Data sources:  
CIHI-DAD,  
CIHI-NACRS

## Rate of Opioid-Related Hospitalizations and Emergency Department Visits in 2015



### In 2015:

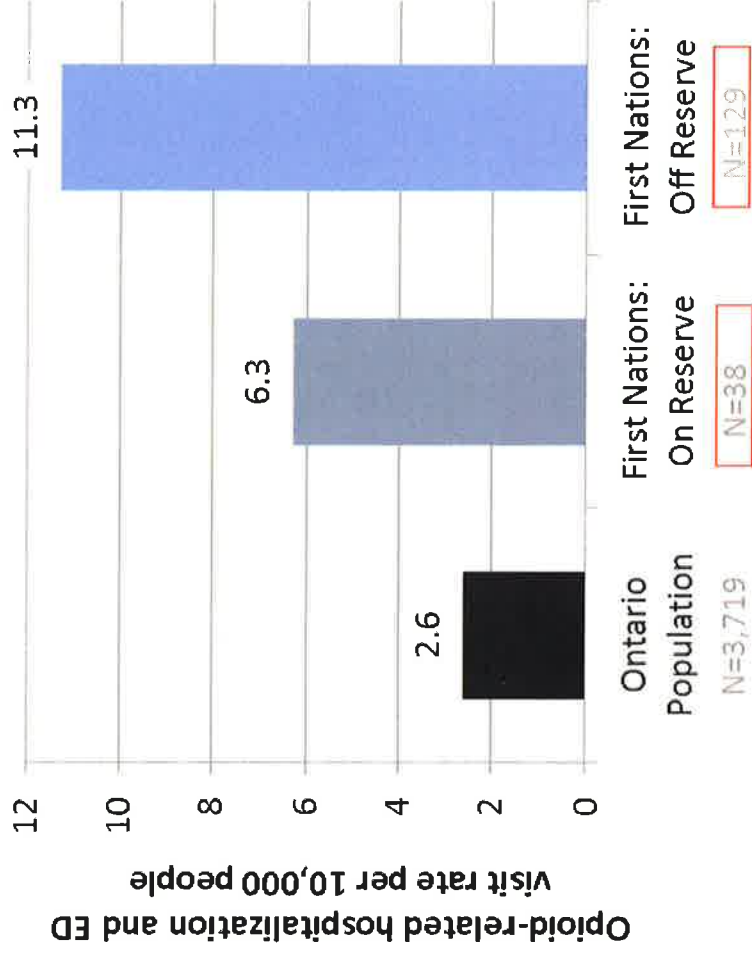
- Rates of opioid-related hospitalizations and emergency department visits are nearly **4 times** higher among First Nations people compared to the general population.
- **First Nations: 167** opioid-related hospitalizations
- **General Population: 3,179** opioid-related hospitalizations

**LIMITATION:** Opioid-related toxicity may not be well-captured in emergency department and hospitalization data; therefore we are likely underestimating the true number of events in this report. Emergency Department visits and hospitalizations will not capture opioid-related toxicities that occur in nursing stations or in remote communities, which may underestimate events among First Nations.

# IMPLICATIONS OF OPIOID USE: OPIOID-RELATED TOXICITY

Data sources:  
CIHI-DAD,  
CIHI-NACRS

Rate of Opioid-Related Hospitalizations and Emergency Department Visits in 2015



**In 2015:**

- Rates of opioid-related hospitalizations and emergency department visits are nearly **2 times** higher among First Nations people **off reserve** compared to First Nations people **on reserve**.
- First Nations (on reserve): 38** opioid-related hospitalizations
- First Nations (off reserve): 129** opioid-related hospitalizations

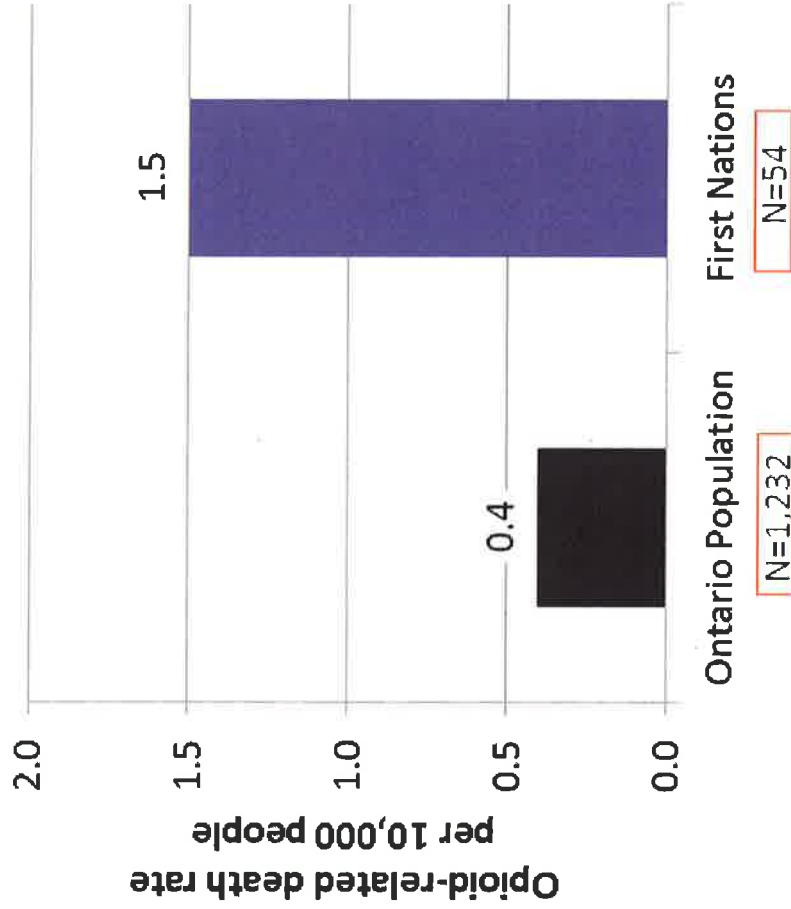
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# IMPLICATIONS OF OPIOID USE: OPIOID-RELATED MORTALITY

Data source:  
Coroner  
Death Data

Average Rate of Opioid-Related Deaths in 2014-2015



## Between 2014-2015:

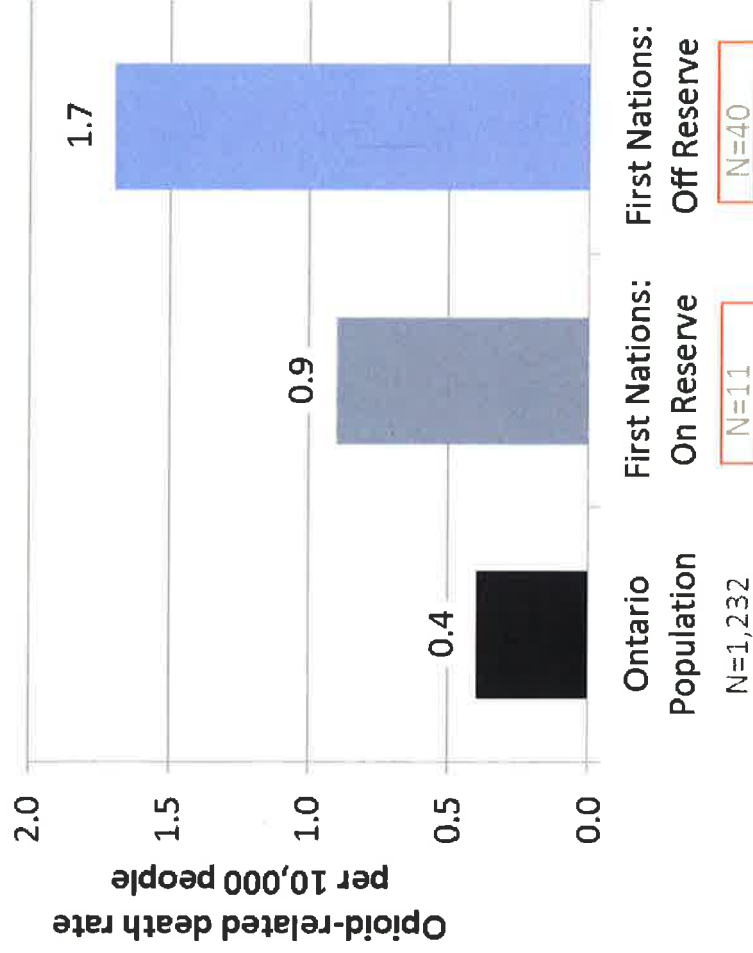
- Average rates of opioid-related deaths are nearly **4 times** higher among First Nations people compared to the general population.
- **First Nations: 54** opioid-related deaths
- **General Population: 1,232** opioid-related deaths



# IMPLICATIONS OF OPIOID USE: OPIOID-RELATED MORTALITY

Data source:  
Coroner  
Death Data

Average Rate of Opioid-Related Deaths in 2014-2015



## Between 2014-2015:

- Rates of opioid-related deaths are **nearly 2 times** higher among First Nations people **off reserve** compared to First Nations people **on reserve**.
- **First Nations (on reserve): 11** opioid-related deaths
- **First Nations (off reserve): 40** opioid-related deaths

# OVERVIEW AND NEXT STEPS

## Resolution 20/18 (Prescription Opioid Surveillance)

In June 2018, the Chiefs in Assembly passed Resolution 20/18 (Prescription Opioid Surveillance), mandating:

1. Release of the report “Opioid Use among First Nations”
2. Continue mandate from **Resolution 13/10** to conduct future work aimed at reducing the harms related to opioid use in First Nation communities in Ontario



**OPIOID USE AMONG FIRST NATIONS IN ONTARIO**  
A REPORT OF CURRENT FINDINGS

PREPARED BY:  
IC/ES  
THE ONTARIO INDIAN FEDERATION  
INDIAN HEALTH SERVICES  
ONTARIO FIRST NATIONS

**HOW ARE OPIOIDS PRESCRIBED AMONG FIRST NATIONS PEOPLE?**

Number of Prescriptions for First Nations People through OPI and IIRP

Year	Number of Prescriptions
2010	~100,000
2011	~100,000
2012	~100,000
2013	~100,000
2014	~100,000
2015	~100,000
2016	~100,000
2017	~100,000
2018	~100,000
2019	~100,000
2020	~100,000
2021	~100,000
2022	~100,000
2023	~100,000
2024	~100,000

■ Health Ontario for First Nations (OPI and IIRP) (2010-2024)  
■ Health Ontario for First Nations (OPI and IIRP) (2010-2024)

NOTE: Data on prescriptions for opioids is available in the annual reports for each year. For more information on the data, please refer to the annual reports.

When we look at different data sources, we see that the number of prescriptions for opioids in First Nations communities is increasing. This is a concern because opioids are a powerful painkiller, but they can also be addictive and can lead to overdose and death. We need to find ways to reduce the number of prescriptions for opioids in First Nations communities.

**Metaphase Equivalents (MEC) in 2015**

Category	Value
First Nations MEC	42.3
Ontario Population MEC	73.1

NOTE: The Ontario MEC is based on the number of prescriptions for opioids in Ontario. The First Nations MEC is based on the number of prescriptions for opioids in First Nations communities. The difference between the two MECs is 30.8.

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# QUESTIONS?

## Contact:

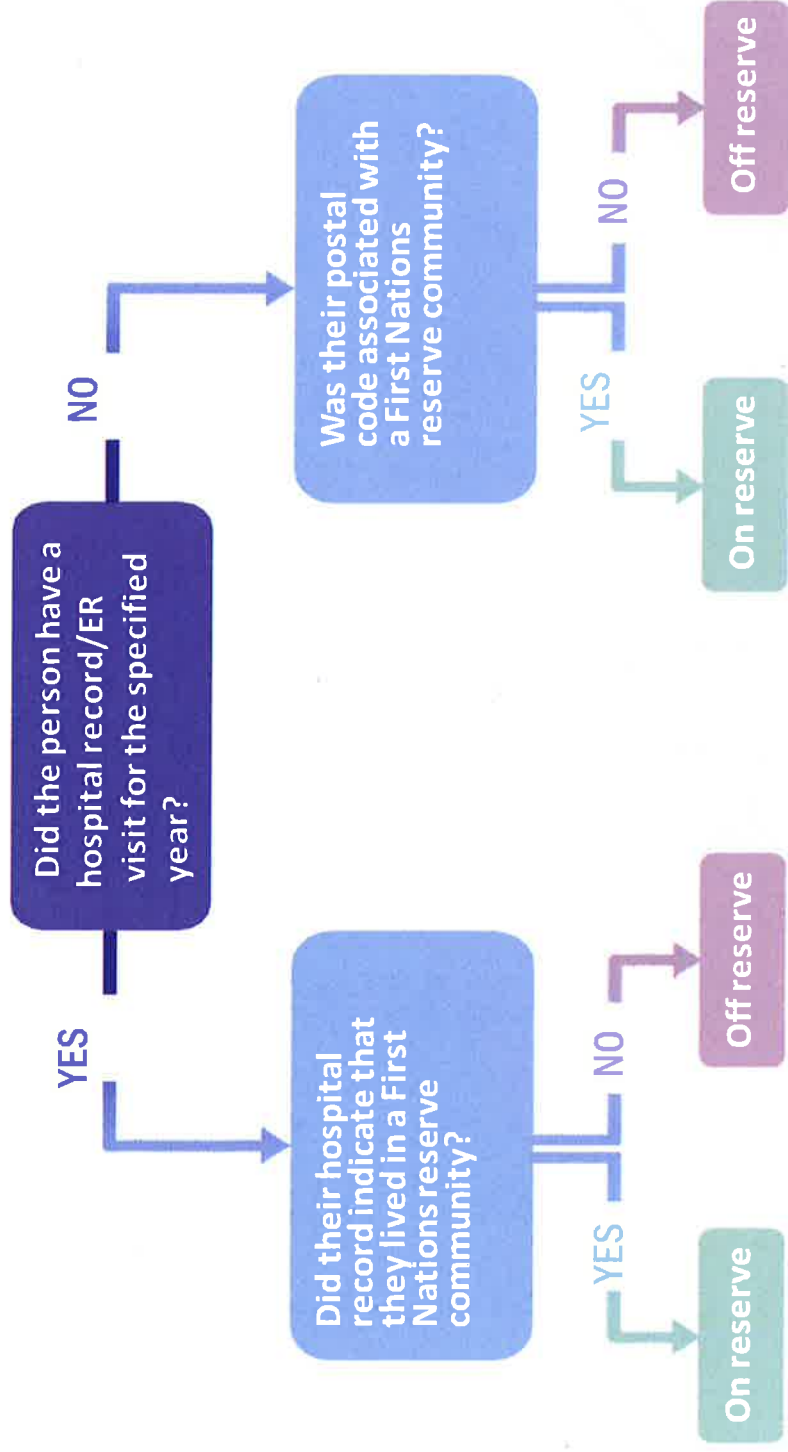
- Indigenous Portfolio Team, ICES: [indigenous@ices.on.ca](mailto:indigenous@ices.on.ca)
- Diana Martins, ODPRN: [MartinsDi@smh.ca](mailto:MartinsDi@smh.ca)

## METHODS

- **Study:** Cross-sectional analysis, between 2005 to 2015
- **Measures:**
  - Opioid prescribing (*ODB and NIHB*)
  - Opioid-related hospitalizations and emergency department visits (*CIHI DAD and CIHI NACRS*)
  - Opioid-related deaths (*Office of the Chief Coroner*)
- **Population:**
  - Registered First Nations in Ontario (*IRS*)
  - General population in Ontario (*RPDB*)
- **Stratification**
  - Year
  - Residence (on reserve or off reserve)



# How did we determine if someone lived on reserve or off reserve?



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## CONTRIBUTERS

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**COO:** Tracy Antone, Laurie Carr, Bernadette deGonzague, Carmen Jones, Emily King, Alexander Yurkewich

**COO Opioid Surveillance Steering Committee:** Natalie Binguis, Yvonne Corbiere, Lori Davis Hill, Judy Desmoulin, Penny Hill, Megan Logan, Noella Mandamin, Suzanne Nicholas, Shirley Williams (Elder)

# SOURCES OF DATA

ICES Dataset	Details
Indian Registry System (IRS) file	First Nations living in Ontario, including non-Ontario Band members up to 2010
Registered Persons Database (RPDB)	Individuals living in Ontario who are eligible for the Ontario Health Insurance Plan. Includes demographic details (sex, age etc.)
Canadian Institute for Health Information Discharge Abstract Database (CIHI-DAD)	Inpatient hospitalization records with reason for visit
Canadian Institute for Health Information National Ambulatory Care Reporting System (CIHI-NACRS)	Emergency department visit records with reason for visit
Office of the Chief Coroner Death Data	Opioid-related deaths in Ontario
Ontario Drug Benefit (ODB) Database	To be eligible for the ODB program, an individual must have a valid Ontario health card and be aged 65+. Individuals under the age of 65 can also qualify if they have low socio-economic status, receive disability support or home care, have high drug costs relative to household income, or reside in a long-term care home. Details on medications, dose form, strength etc.
NIHB Dataset	Details
Non-Insured Health Benefits (NIHB) first payer prescription data	National program that provides a range of drug coverage for registered First Nations individuals in Ontario. NIHB is 'first payer' for those who are not eligible for ODB.



# Eligibility for the Prescription Drug Programs

