



2022 Opioid Report

February 2023



Introduction

This report outlines recent trends in opioid-related mortality and morbidity within the Northwestern Health Unit (NWHU) catchment area. Local and provincial statistics on deaths, hospitalizations, and emergency room visits are included in this report.

Opioid overdoses and deaths relating to opioid toxicity have increased significantly in recent years throughout the province, including in the NWHU area. It has become a priority public health issue provincially and nationally, and the ongoing surveillance and monitoring of the situation is critical in the efforts to provide effective mitigation strategies and public health programming.

Data Sources

NWHU and Ontario mortality, hospitalization, and ER visit data was obtained from Public Health Ontario via their Interactive Opioid Tool, accessible at: <https://www.publichealthontario.ca/en/data-and-analysis/substance-use/interactive-opioid-tool>.

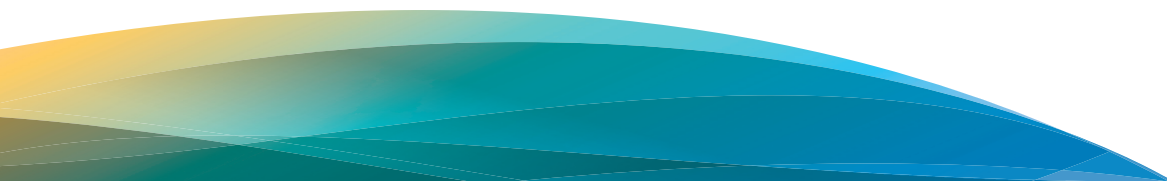
Local Health Hub-level ER visit data for the NWHU was obtained from the National Ambulatory Care Reporting System (NACRS). These data were obtained through IntelliHEALTH Ontario, a provincial data portal operated by the Ministry of Health and Long-Term Care (MOHLTC).

Limitations

Data is accurate as of the date it was extracted or accessed, and are subject to updates or changes. Data for 2022 is considered preliminary at the time of writing, and is particularly subject to change if accessed in the future. 2022 is partial-year data; mortality data covers January-July 2022, and emergency room data covers January-November 2022. Hospitalization data were available up to the end of 2021.

Opioid-related overdoses resulting in ER visits and hospitalizations only capture those who visited the ER/were hospitalized, and may not represent the total burden in the population.

Ontario residents who visited the ER, were hospitalized, or died outside of the province are not captured in the database and are therefore excluded from this analysis.



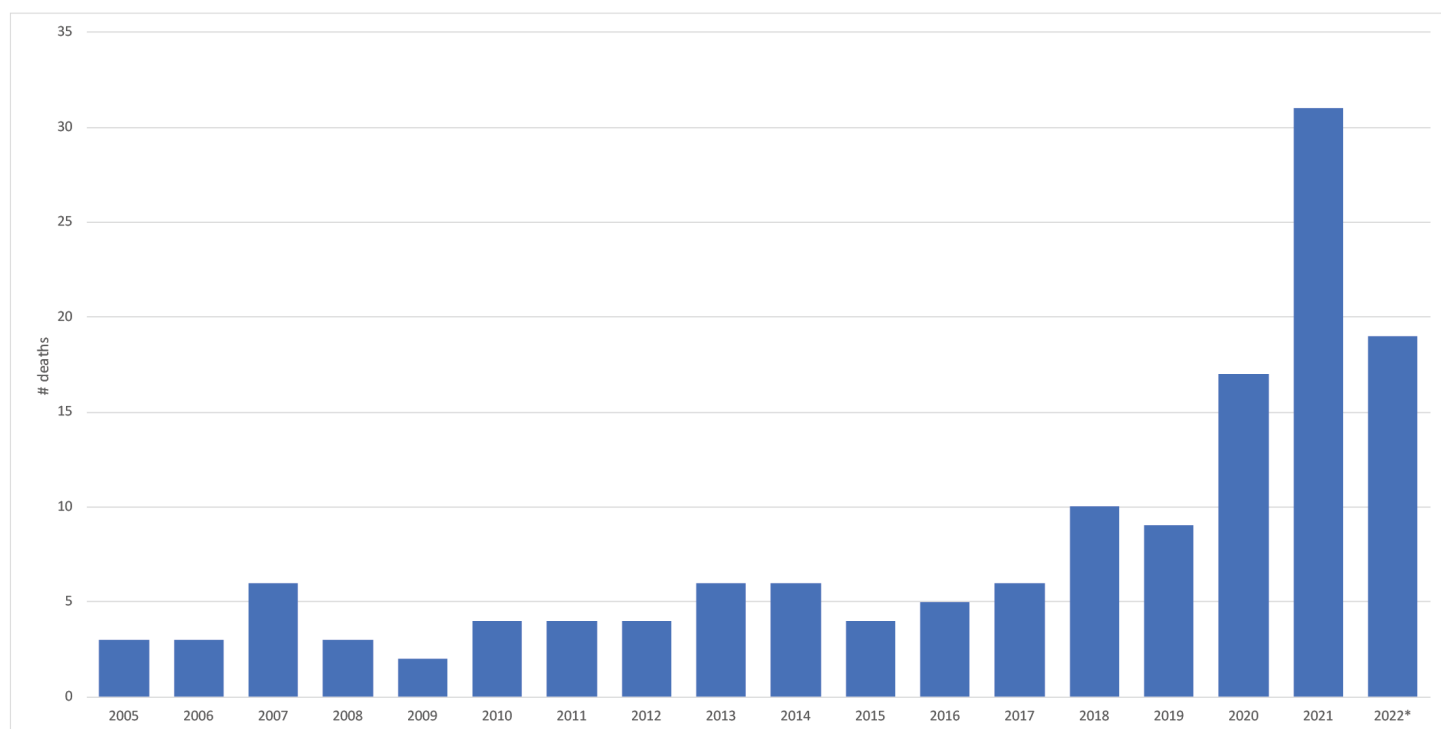
Opioid-related Deaths

These data refer to all deaths where opioid overdose was a contributing factor in the cause of death. Deaths may have occurred from the use of a single opioid, or from the use of more than one opioid in combination with other medications, drugs, alcohol, etc.

The number of deaths from opioid overdose in the NWHU area were steady between 2005 and 2017 at between one and six deaths per year. There has been a generally increasing trend since 2018, with 2020 and 2021 seeing huge increases. The increase between 2019 and 2020 was 89%, and in 2021 it increased by 88% again. Overall, since 2017, the number of deaths increased by 433% (Figure 1).

Provincially, rates have been increasing since 2015, with more pronounced increases seen since 2019. Provincial rates were comparable with NWHU rates until 2020; however, in 2021, the NWHU rate was more than twice as high as the provincial rate (Figure 2).

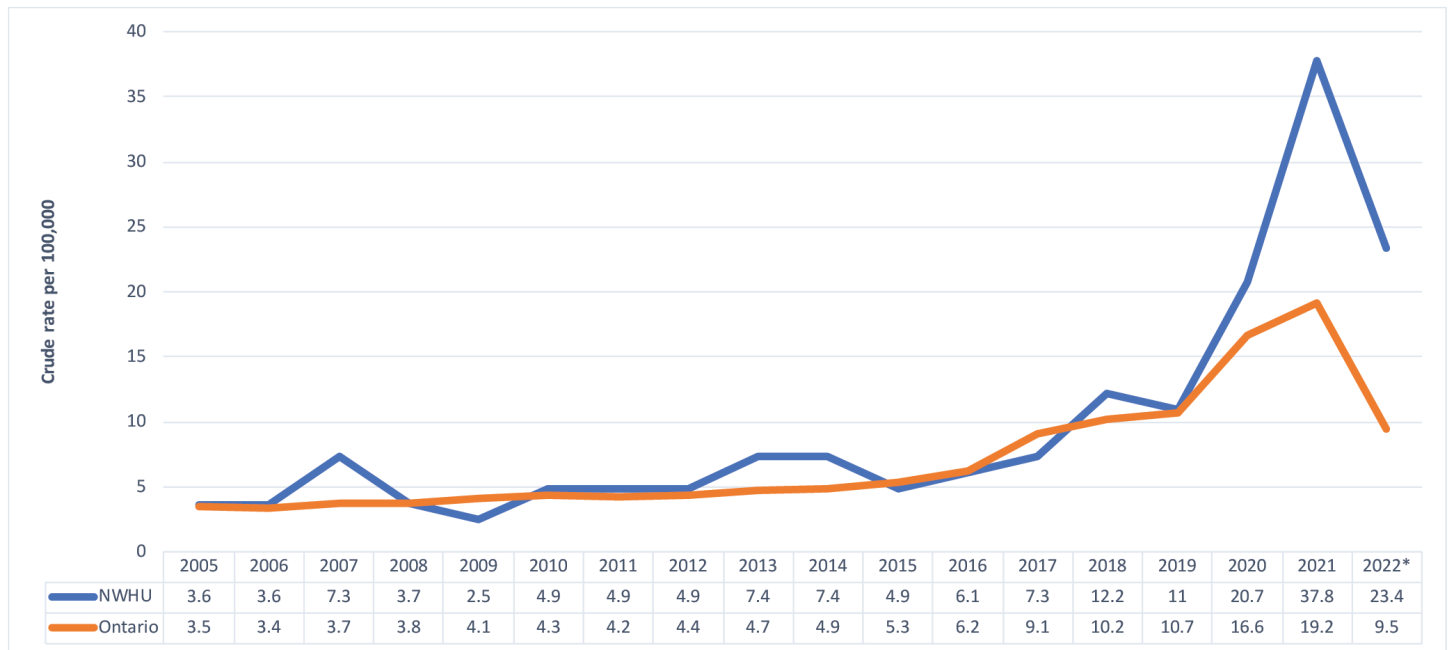
Figure 1: Number of deaths from opioid overdose by year, NWHU catchment area, 2005-2022*



*2022 estimates are preliminary and up to the end of July, and are subject to change

Source: Ontario Agency for Health Protection and Promotion (Public Health Ontario). Interactive Opioid Tool. Toronto, ON: Queen's Printer for Ontario; 2022. Available from: <https://www.publichealthontario.ca/en/dataandanalytics/pages/opioid.aspx>.

Figure 2: Deaths from opioid overdose per 100,000, NWHU and Ontario, 2005-2022*



*2022 estimates are preliminary and up to the end of July, and are subject to change
 Source: Ontario Agency for Health Protection and Promotion (Public Health Ontario). Interactive Opioid Tool. Toronto, ON: Queen’s Printer for Ontario; 2022. Available from: <https://www.publichealthontario.ca/en/dataandanalytics/pages/opioid.aspx>.

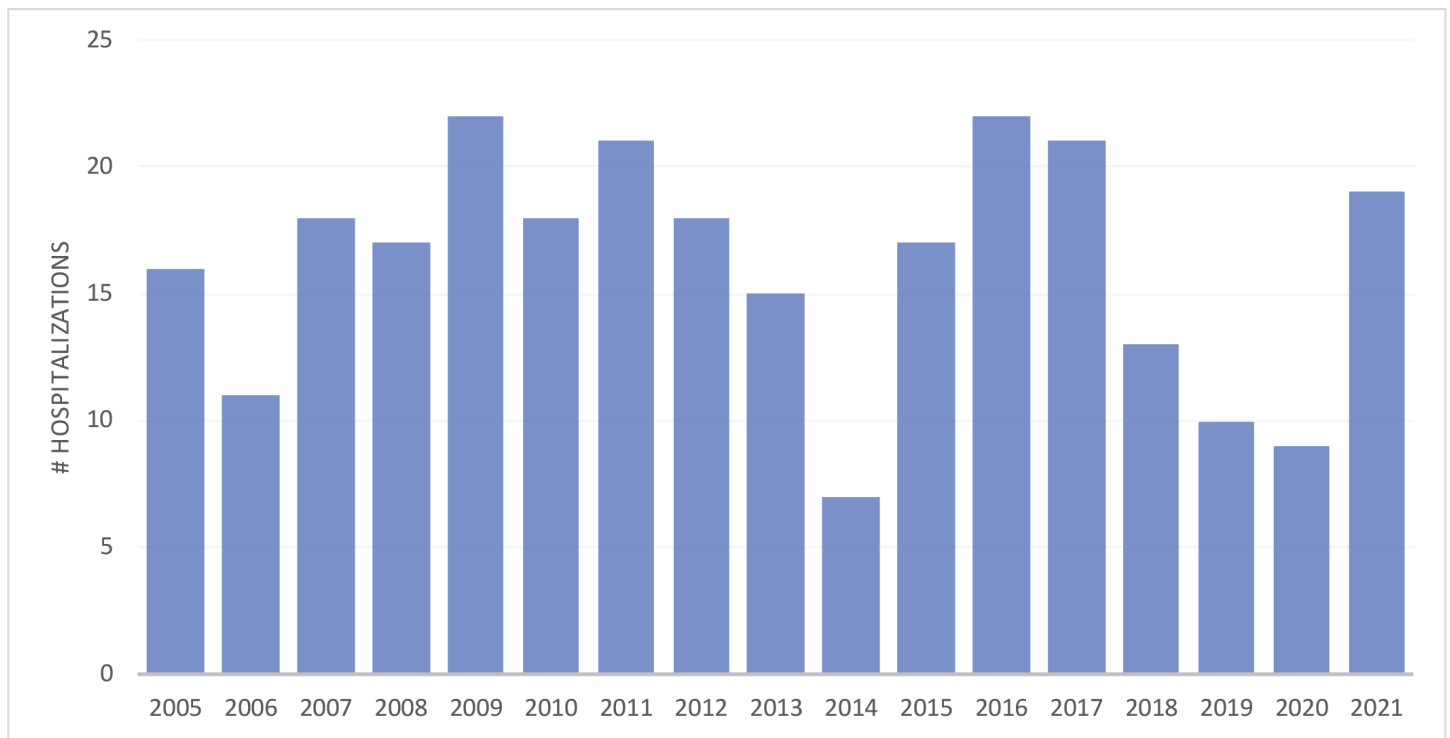
Opioid-related Hospitalizations

These data refer to all hospitalizations where opioid overdose was the main or contributing cause. Not all overdoses result in hospitalization, so these data most likely underrepresent the true volume of overdose in the area.

The number of hospitalizations in the NWHU area have fluctuated year to year, with an average since 2005 of 16 per year. The highest numbers were in 2009 and 2016 which each had 22 hospitalizations, while the fewest was 7 hospitalizations in 2014 (Figure 3).

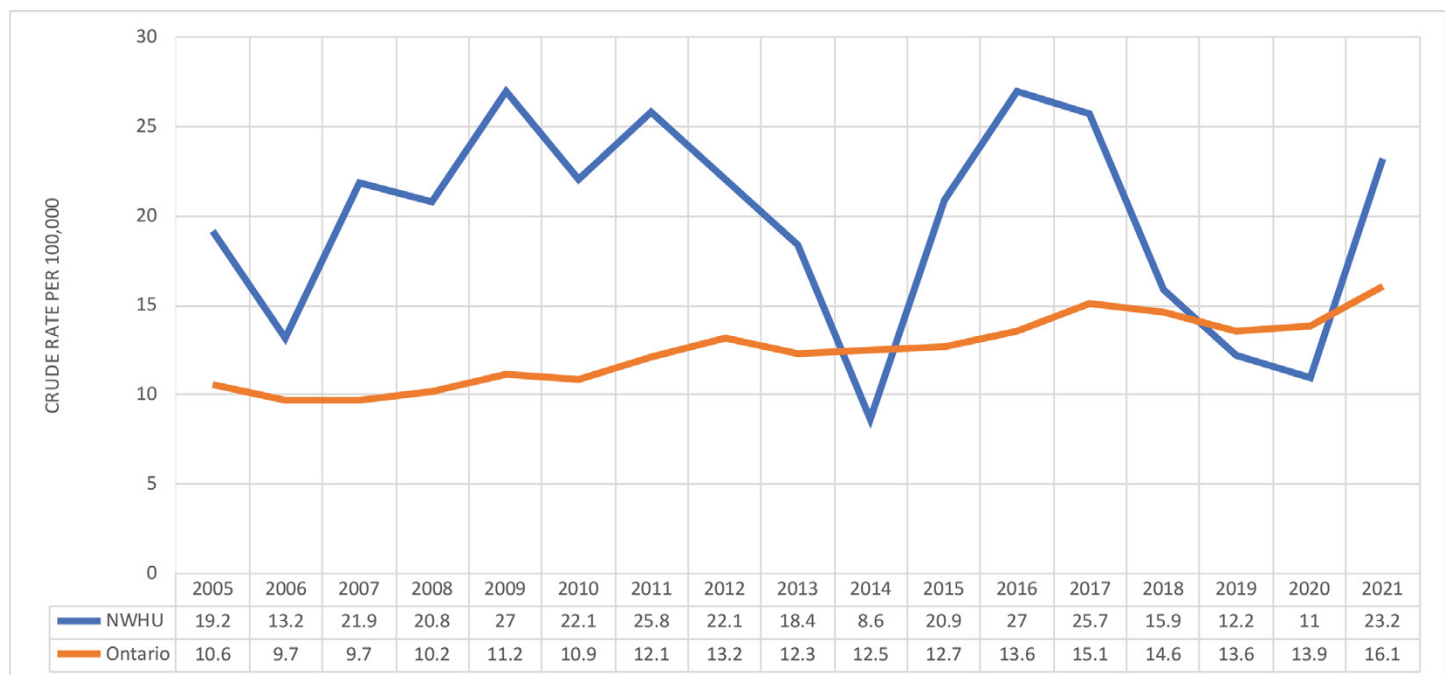
Hospitalization rates in the NWHU have usually been higher than those of the province as a whole, with the exception of a few years (2014 , 2019, and 2020) where it decreased to below provincial levels. The catchment area saw decreases between 2011 and 2014, then an increase until 2016. Rates declined again until 2020, and 2021 saw an increase once again. Provincially, there has been a slow but steady increase from 2005 until 2021; rates have increased by 60% over this time period (Figure 4).

Figure 3: Number of hospitalizations from opioid overdose by year, NWHU catchment area, 2005-2021



Interactive Opioid Tool. Toronto, ON: Queen's Printer for Ontario; 2022.
 Available from: <https://www.publichealthontario.ca/en/dataandanalytics/pages/opioid.aspx>.

Figure 4: Hospitalization from opioid overdose per 100,000, NWHU and Ontario, 2005-2021



Source: Ontario Agency for Health Protection and Promotion (Public Health Ontario). Interactive Opioid Tool. Toronto, ON: Queen's Printer for Ontario; 2022. Available from: <https://www.publichealthontario.ca/en/dataandanalytics/pages/opioid.aspx>.

Opioid-related Emergency Room (ER) Visits

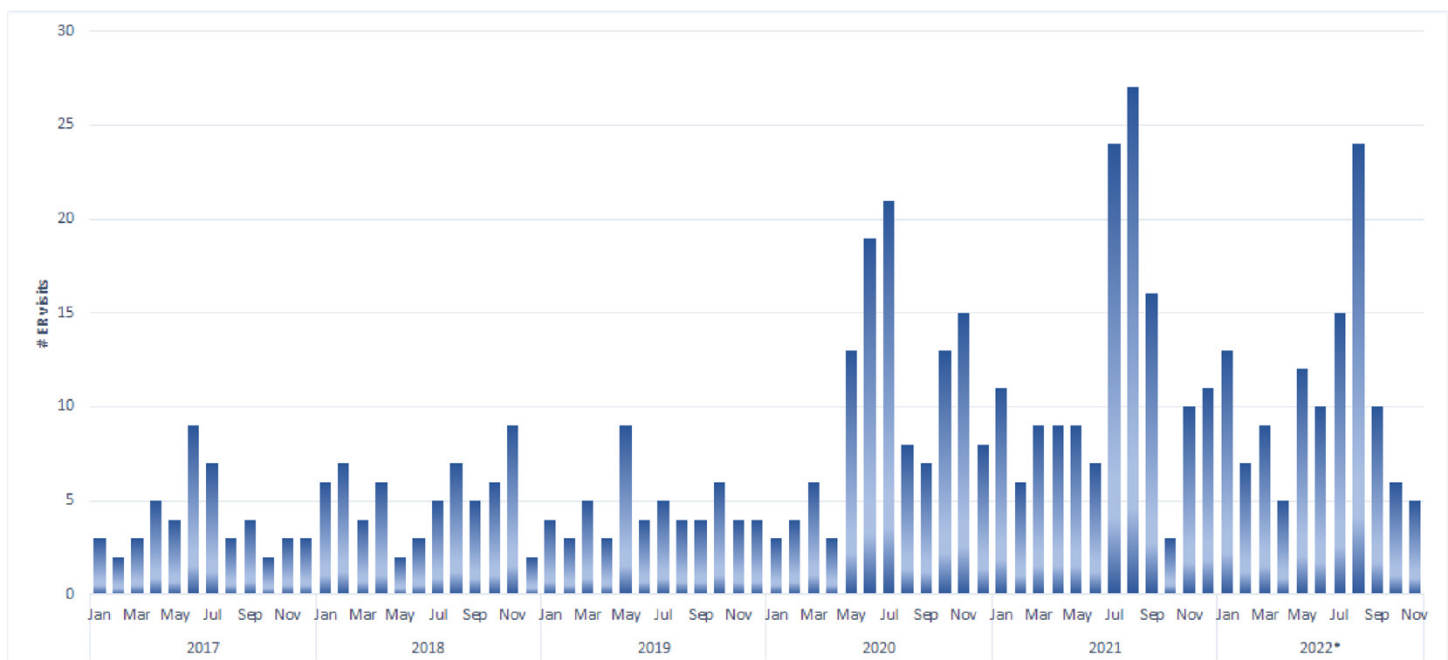
These data represent all unscheduled emergency room visits where opioid overdose was the main or contributing cause. Not all overdoses result in a visit to the ER, so these data most likely underrepresent the true volume of overdose in the area.

Between 2017 and 2019, ER visits from opioid overdose occurred sporadically from month to month, with no definite seasonality. Peaks and valleys were observed across different times of year, depending on the year. Larger increases were observed in 2020 and 2021; the summer of 2021 saw a spike in ER visits, and the largest peaks seen to date were in July and August of 2021 (Figure 5).

Incidence rates of ER visits in the catchment area have historically been slightly higher but often comparable to provincial rates. The rates per 100,000 in the NWHU area were fairly steady between 2005 and 2016, but since then there has been an increasing trend from 2017 onwards (Figure 6). The increase from 2017 to 2019 was similar to that observed in the province as a whole, but in 2020 and 2021 the rate in the NWHU increased well beyond the provincial rate. In 2021, the NWHU rate was 53% higher than that of the province. Between 2016 and 2021, the rate in the NWHU area increased by 408%.

Looking at combined annual rates of ER visits between 2017 and 2021 in the NWHU area at the local health hub (LHH) level, the highest rates per year were seen in the Fort Frances area, followed by Atikokan and Rainy River (Figure 7). Most areas within the NWHU have rates as high as or higher than provincial rates, with the exception of the Red Lake area. It is important to note that at this smaller level of geography, numbers are small in absolute terms and are subject to fluctuate year to year more than at larger geographies.

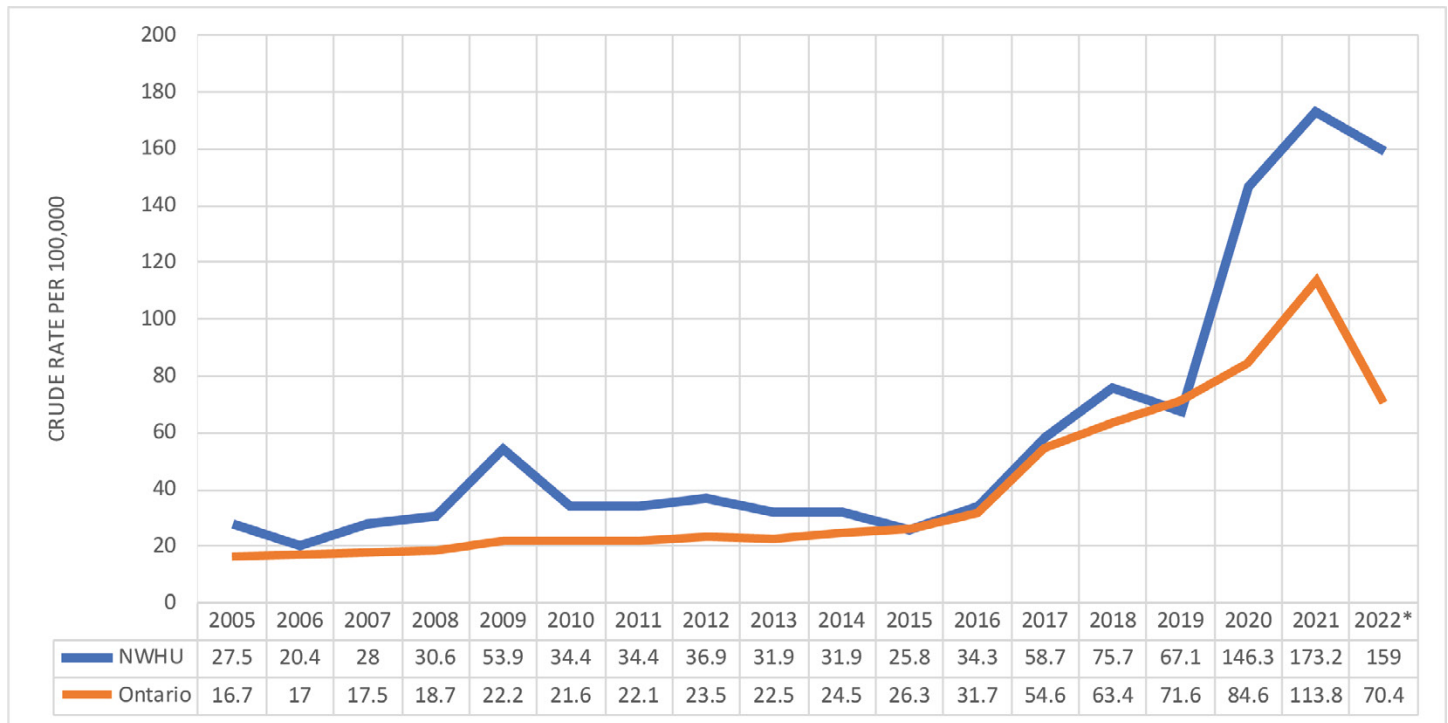
Figure 5: Number of ER visits from opioid overdose by month, NWHU catchment area, 2017-2022*



*2022 estimates are preliminary and up to the end of November, and are subject to change.

Source: Ontario Agency for Health Protection and Promotion (Public Health Ontario). Interactive Opioid Tool. Toronto, ON: Queen's Printer for Ontario; 2022. Available from: <https://www.publichealthontario.ca/en/dataandanalytics/pages/opioid.aspx>.

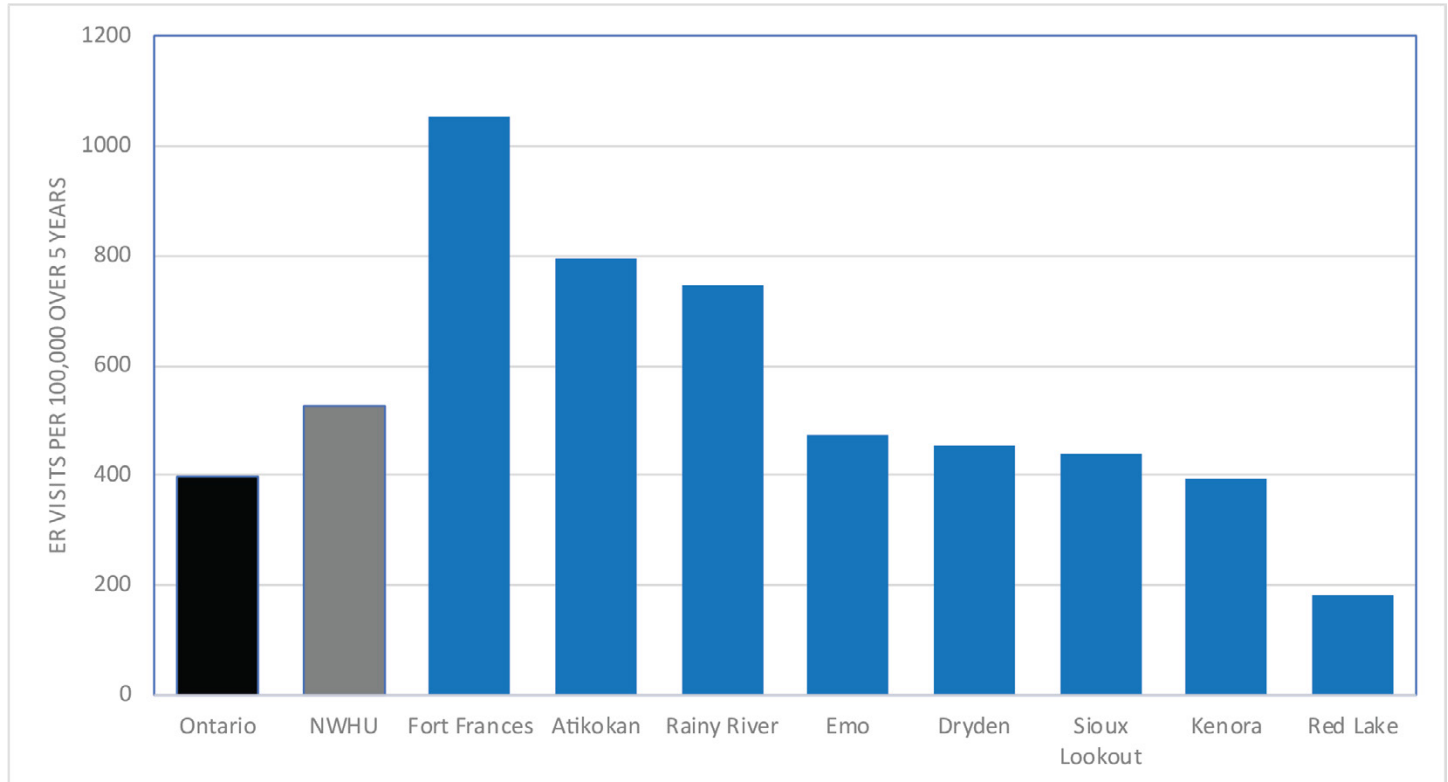
Figure 6: ER visits from opioid overdose per 100,000, NWHU and Ontario, 2005-2022*



*2022 estimates are preliminary and up to the end of November, and are subject to change.

Source: Ontario Agency for Health Protection and Promotion (Public Health Ontario). Interactive Opioid Tool. Toronto, ON: Queen's Printer for Ontario; 2022. Available from: <https://www.publichealthontario.ca/en/dataandanalytics/pages/opioid.aspx>.

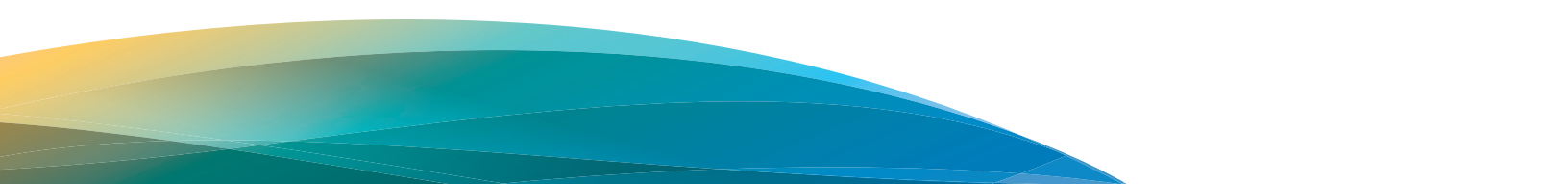
Figure 7: ER visits from opioid overdose per 100,000 by local health hub (LHH), 2017-2021 combined



Source: Ambulatory Visits [2017-2021]. Ontario Ministry of Health and Long-Term Care. IntelliHEALTH Ontario. Date Extracted. June 2, 2022.

Appendix 1: ICD-10-CA Codes

For ER visits, hospitalizations, and deaths, often multiple diagnoses are included for a patient. For these analyses, records are included if any of the diagnoses leading to an ER visit, hospitalization, or death are opioid-related. The following ICD-10-CA codes for opioid-related causes are included:

- T40.0 – poisoning by opium
 - T40.1 – poisoning by heroin
 - T40.20-T40.28 – poisoning by codeine and derivatives [T40.20], poisoning by morphine [T40.21], poisoning by hydromorphone [T40.22], poisoning by oxycodone [T40.23], poisoning by other opioids not elsewhere classified [T40.28]
 - T40.3 – poisoning by methadone
 - T40.40-T40.48 – poisoning by fentanyl and derivatives [T40.40], poisoning by tramadol [T40.41], poisoning by other synthetic narcotics not elsewhere classified [T40.48]
 - T40.6 – poisoning by other and unspecified narcotics
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Appendix 2: Local Health Hubs within the NWHU catchment area

Local Health Hub	Municipalities and Census Divisions
Atikokan	Atikokan, Seine River 23A, Seine River 23B, Neguaguon Lake 25D
Dryden	Dryden, Wabigoon Lake 27, Machin, Oxdrift, Vermilion Bay, Eagle River, Eton-Rugby, Minnitaki, Wabigoon, Melgund, Eagle Lake 27, Ignace
Emo	Emo, Sabaskong Bay (Part) 35C, Chapple, Barwick, Finland, Manitou Rapids 11
Fort Frances	Fort Frances, Alberton, La Vallee Township, Devlin, Couchiching 16A, Rainy Lake 17A, Rainy Lake 17B, Rainy Lake 18C, Rainy Lake 26A
Kenora	Kenora , Sioux Narrows-Nestor Falls, Keewatin, Norman, Jaffray-Mellick, Minaki, Redditt, Whitefish Bay 32A, Whitefish Bay 33A, Whitefish Bay 34A, Shoal Lake (Part) 39A, Shoal Lake (Part) 40, Shoal Lake 34B2, Rat Portage 38A, The Dalles 38C, Kenora 38B, Northwest Angle 33B, English River 21, Wabaseemoong, Lake Of The Woods 37, Sabaskong Bay (Part) 35C, Sabaskong Bay 35D
Rainy River	Rainy River, Big Grassy River 35G, Dawson, Morley, Sleeman, Stratton, Rainy River, Unorganized, Lake of the Woods, Morson, Big Island Mainland 93, Long Sault 12, Saug-a-Gaw-Sing 1
Red Lake	Red Lake, Ear Falls, Balmertown, Cochenour, Madsen, Mckenzie Island, Wabauskang 21
Sioux Lookout	Sioux Lookout, Pickle Lake, Hudson, Bearskin Lake, Cat Lake 63C, Deer Lake, Kee-Way-Win, Lac Seul 28, Neskantaga, MacDowell Lake, Muskrat Dam Lake, North Spirit Lake, Osnauburgh 63B, Pikangikum 14, Poplar Hill, Sachigo Lake 1, Sandy Lake 88, Slate Falls, Weagamow Lake 87