



HIV Epidemiologic Summary

February 28 2023



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Northwestern Health Unit

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February 28, 2023

Purpose

This report describes recent epidemiologic statistics on confirmed cases of HIV that have occurred in the Northwestern Health Unit (NWHU) catchment area over the past number of years, with a particular focus on cases that have occurred in 2022 and early 2023. The report highlights the incidence and epidemiologic curve of recent cases, demographics of cases, and risk factors for infection.

Background

NWHU provides programming related to reportable diseases in Ontario as per the Infectious Disease Protocol published by the Ministry of Health and Long-Term Care (MOHLTC). As part of this programming, NWHU does ongoing collection, analysis and reporting of the incidence of all reportable diseases occurring in the catchment area.

In December 2022, NWHU detected a significant increase in reported cases of HIV in the catchment area, particularly in the Kenora area, that had occurred throughout 2022. Cases in the area are continued to be reported into early 2023. As part of the investigation into this increase in cases, epidemiologic trends are being monitored and reported on periodically in order to guide mitigation efforts.

Methods

Data for reported cases of all types of HIV within the NWHU catchment area dating back to 2013 were extracted from the Integrated Public Health Information System (iPHIS), the provincial database used by public health units to collect and store all communicable disease data, on February 27, 2023. Analysis of incidence, demographics, geography and risk factors was carried out using Microsoft Excel.

Report Highlights

There were 10 cases of HIV reported in 2022 in the NWHU catchment area, 9 of which were in Kenora. This was a significant spike compared to previous annual trends. 7 more cases have been reported so far in 2023, of which 5 were in Kenora

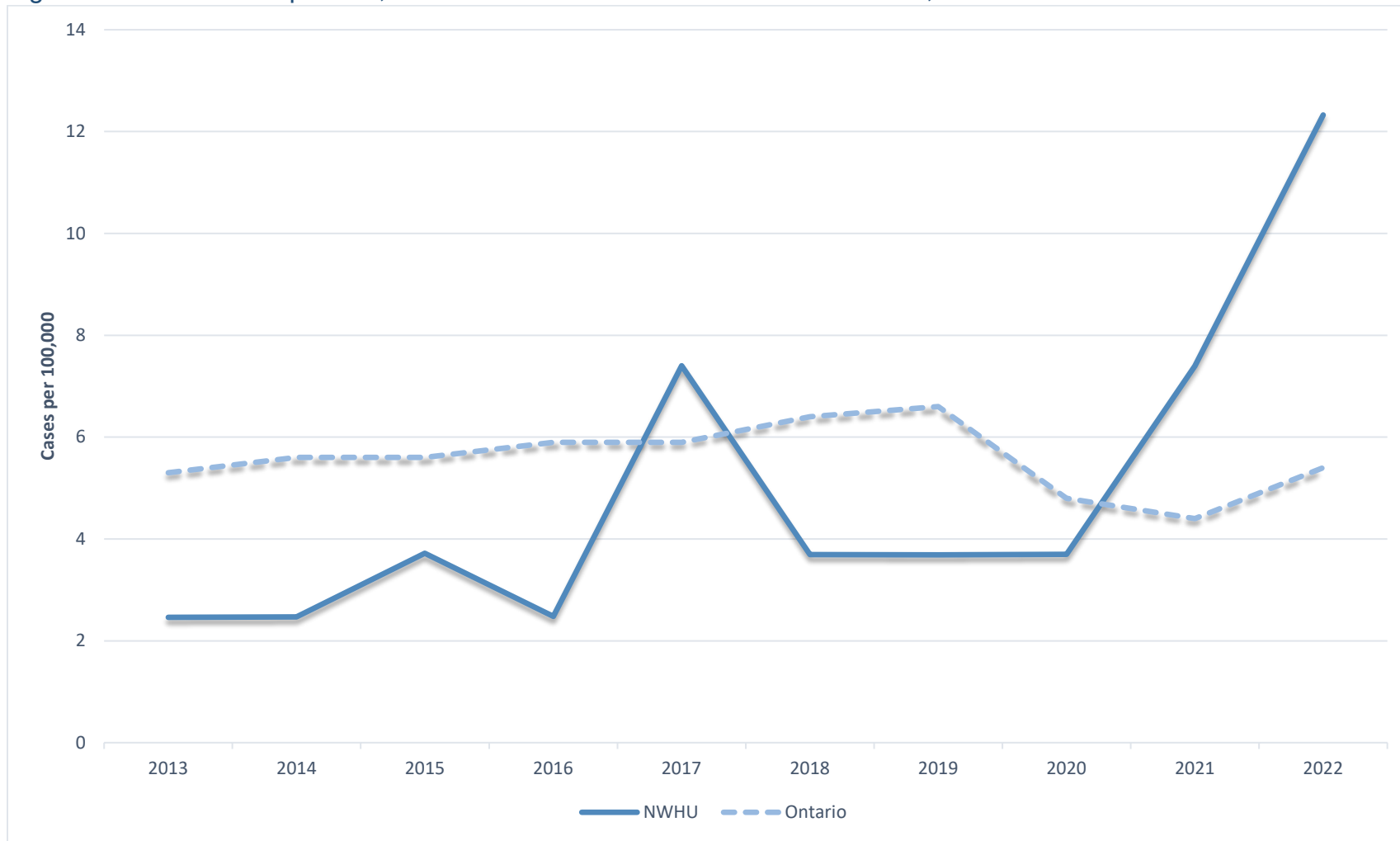
- Incidence rate in 2022 of 12.3 per 100,000 in the NWHU catchment area, a 10-year high. The average annual incidence between 2013 and 2021 was 4.1 per 100,000 per year.
- In the Kenora area specifically in 2022, the incidence rate was 37.7 per 100,000. Including cases reported early in 2023, the incidence is up to 58.6 per 100,000.
- Recent cases have been spread across the age spectrum, with cases between 18 and 53 being reported. There is no significant difference between males and females, and the median age of recent cases is 32 years old.
- Provincial incidence rates of HIV have been around 5-6 cases per 100,000 per year, over the past decade.

Results

Incidence

- 10 cases were reported in 2022 in the NWHU catchment area, which is an incidence of 12.3 per 100,000 people (Figure 1).
- The average annual incidence prior to 2022 in the catchment area was 4.1 per 100,000. Provincially the average annual incidence over the past decade has been around 5-6 per 100,000.
- The increase began in the second half of 2022; since July, 9 cases have been reported, while only 3 cases were reported in the first half of 2022 (Figure 2). 7 cases have been reported so far in 2023, 5 of which are in the Kenora area.
- 9 of the 10 cases in 2022 were in the Kenora area, where the incidence was equal to 37.7 per 100,000 in 2022. If we extend into early 2023 when there have been 5 additional cases, the incidence in Kenora is 58.6 per 100,000 since the beginning of 2022 (Figure 3).

Figure 1: HIV incidence per 100,000 in the NWHU catchment area and Ontario, 2013-2022



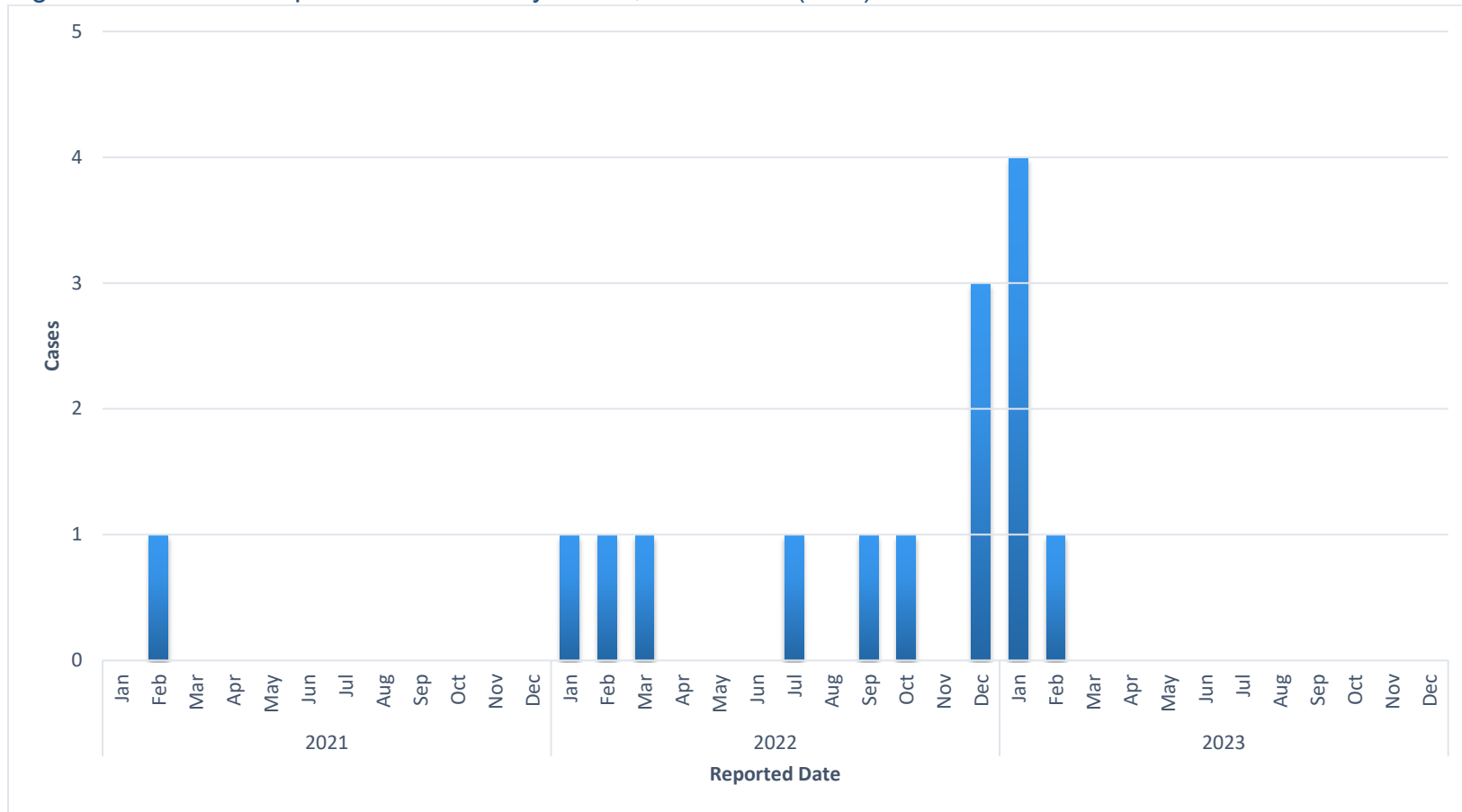
Source: iPHIS, extracted February 27, 2023

Figure 2: HIV cases reported in the NWHU catchment area by month, 2021-2023 (YTD)



Source: iPHIS, extracted February 27, 2023

Figure 3: HIV cases reported in Kenora by month, 2021-2023 (YTD)

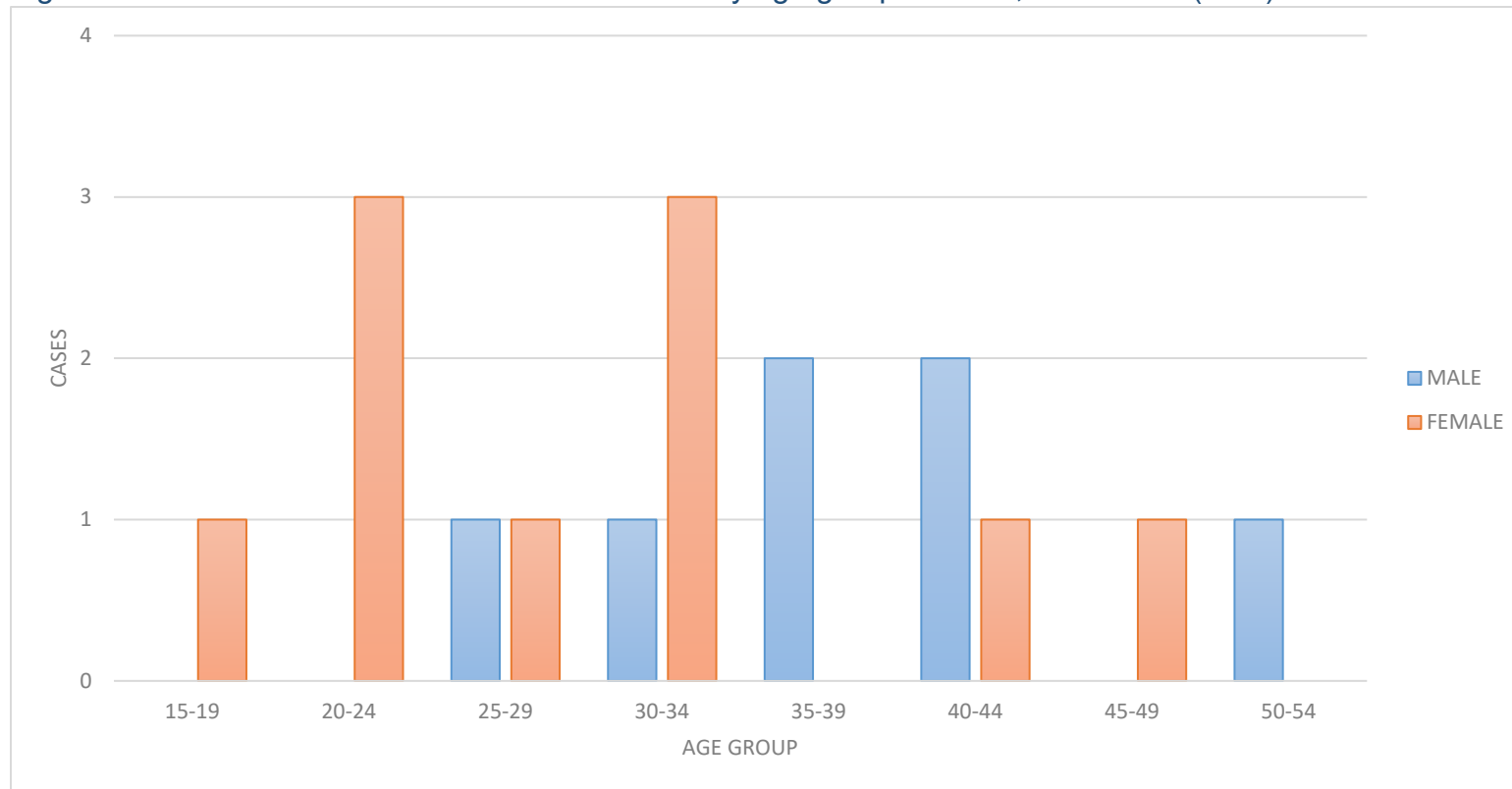


Source: iPHIS, extracted February 27, 2023

Cases by Age Group and Sex

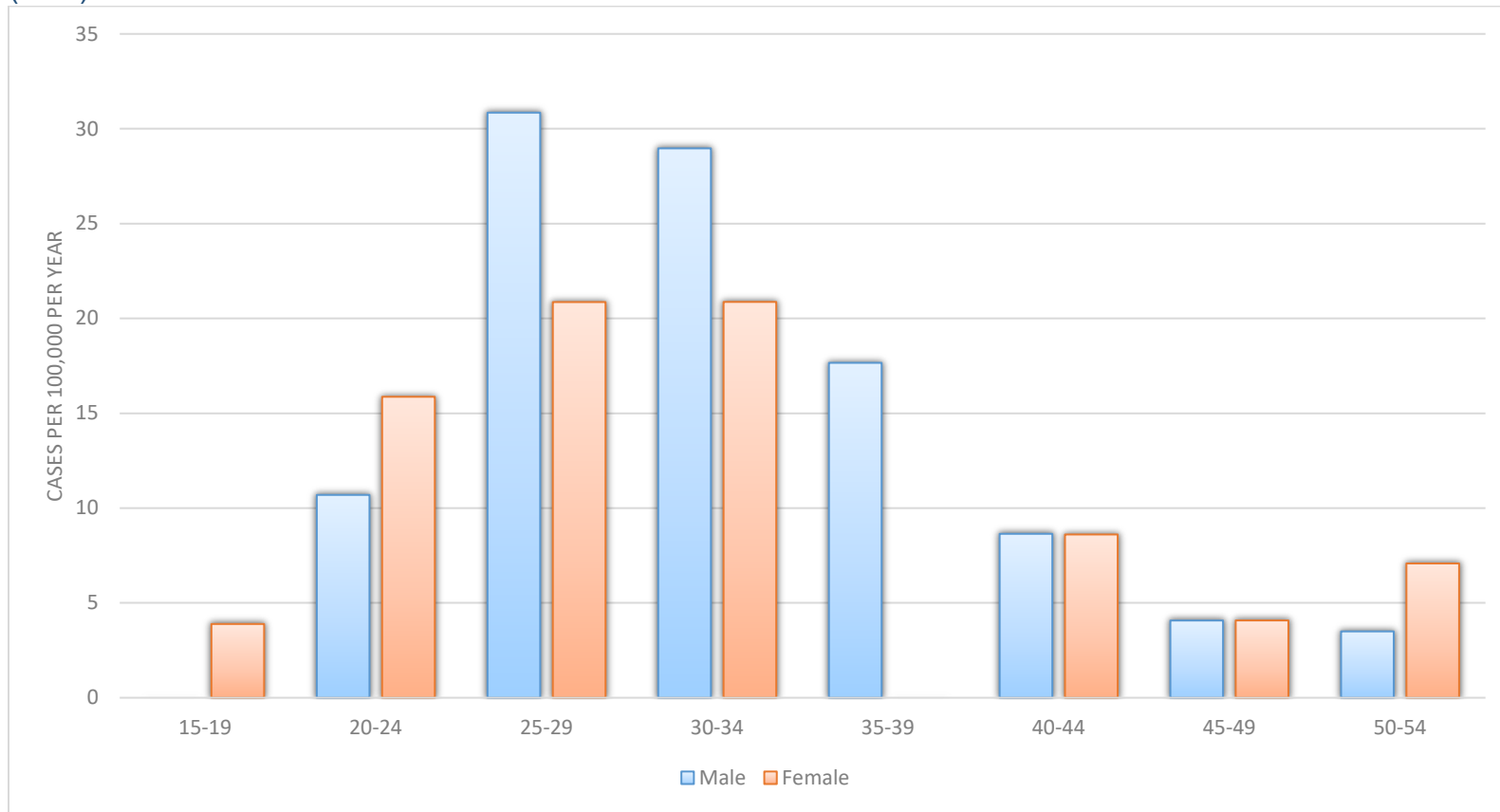
- In 2022 into early 2023, cases were reported across a wide age spectrum, ranging from 18 to 53. The median age of cases was 32 years old, and were fairly evenly spread across men and women (Figure 4).
- Combining the last 10 years of data (back to 2013), the highest incidence has been in males in their late twenties and early thirties. Both demographics have incidence rates of around 30 per 100,000 per year. (Figure 5).

Figure 4: HIV cases in the NWHU catchment area by age group and sex, 2022-2023 (YTD)



Source: iPHIS, extracted February 27, 2023

Figure 5: HIV incidence in the NWHU catchment area by age group and sex, rates per 100,000 per year, 2013-2023 (YTD)

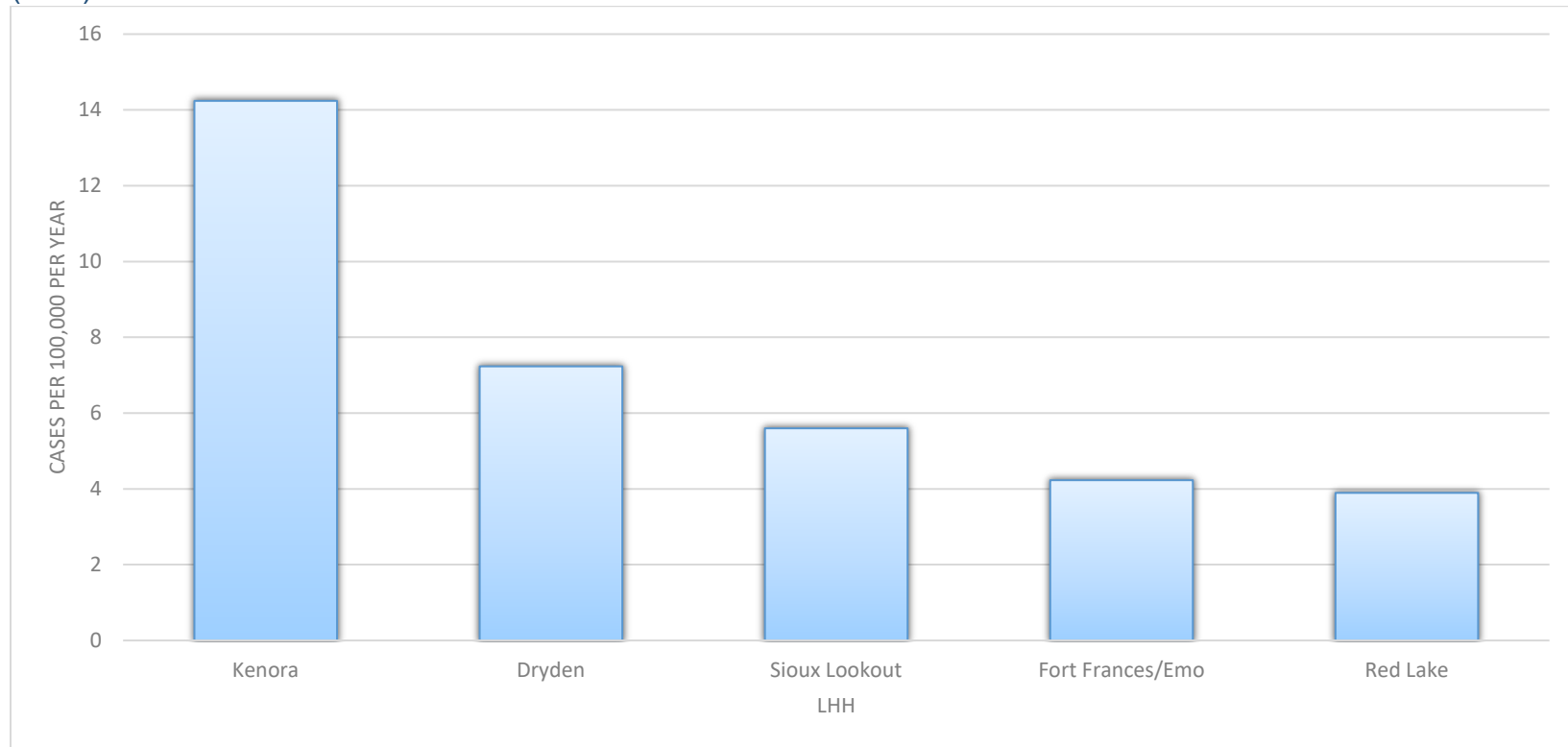


Source: iPHIS, extracted February 27, 2023

Cases by Geographic Location

- The majority of cases since the beginning of 2022 have been in the Kenora local health hub (LHH) area. 14 cases have been reported in the Kenora area out of a total of 17 over this period.
- Combining data over the past 5 years, Kenora has the highest incidence rate at just under 12 cases per 100,000 per year (Figure 6).

Figure 6: HIV incidence in the NWHU catchment area by Local Health Hub (LHH), rates per 100,000 per year, 2018-2023 (YTD)



Source: iPHIS, extracted February 27, 2023

Risk Factors

Due to the relatively small absolute number of HIV cases being reported in the NWHU over the years, risk factor data is sparse and somewhat limited. The NWHU has risk factor information for fifteen cases going back to 2016, and the most common risk factors reported for these cases include:

- Injection drug use
- Not using a condom
- Being underhoused or homeless
- Having impaired judgment from alcohol or other drugs
- Sharing needles

Limitations

Case follow-up, data collection and entering into iPHIS is an ongoing process, and the statistics in this report are only reflective of the situation as of February 27, 2023. Risk factor information for some cases is incomplete or missing.

Conclusion

NWHU has experienced a recent spike in confirmed cases of HIV, especially in the Kenora region, since the second half of 2022. 10 cases were reported in 2022, 9 of which were in Kenora, and cases continue to be reported in early 2023. Northwestern Health Unit will continue to monitor HIV trends and encourage testing and treatment across the region in our ongoing efforts to mitigate the impact of the disease.