



HIV Epidemiologic Summary

January 2024



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Northwestern Health Unit

HIV Epidemiologic Summary

January 31, 2024

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 2023, when incidence has been elevated. 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. Incidence continued to increase into 2023, still predominantly in the Kenora area. 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 January 10, 2024. 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. In 2023, 19 cases were reported in the catchment area, another significant increase. 15 of these cases were in the Kenora area.

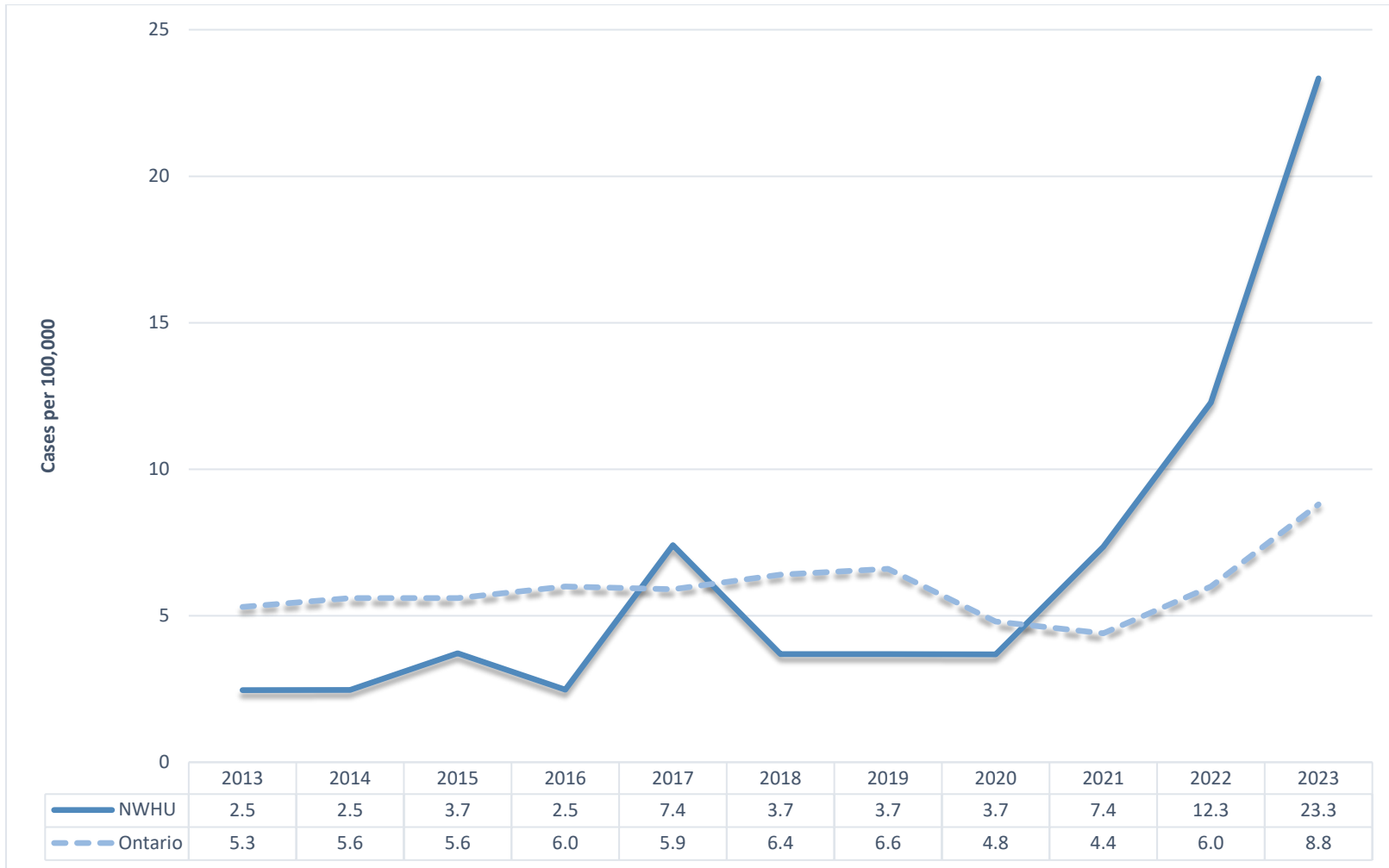
- Incidence rate in 2023 of 23.3 per 100,000, nearly twice as high as the previous high in 2022. The average annual incidence between 2013 and 2021 was 4.1 per 100,000 per year.
- In the Kenora area specifically in 2023, the incidence rate was 62.2 per 100,000.
- Cases in 2022 and 2023 have been spread across the age spectrum, with cases between 18 and 53 being reported. 62% of the cases over this time have been female, and the median age cases is 31 years old.
- Provincial incidence rates of HIV have been around 5-6 cases per 100,000 per year, over the past decade.

Results

Incidence

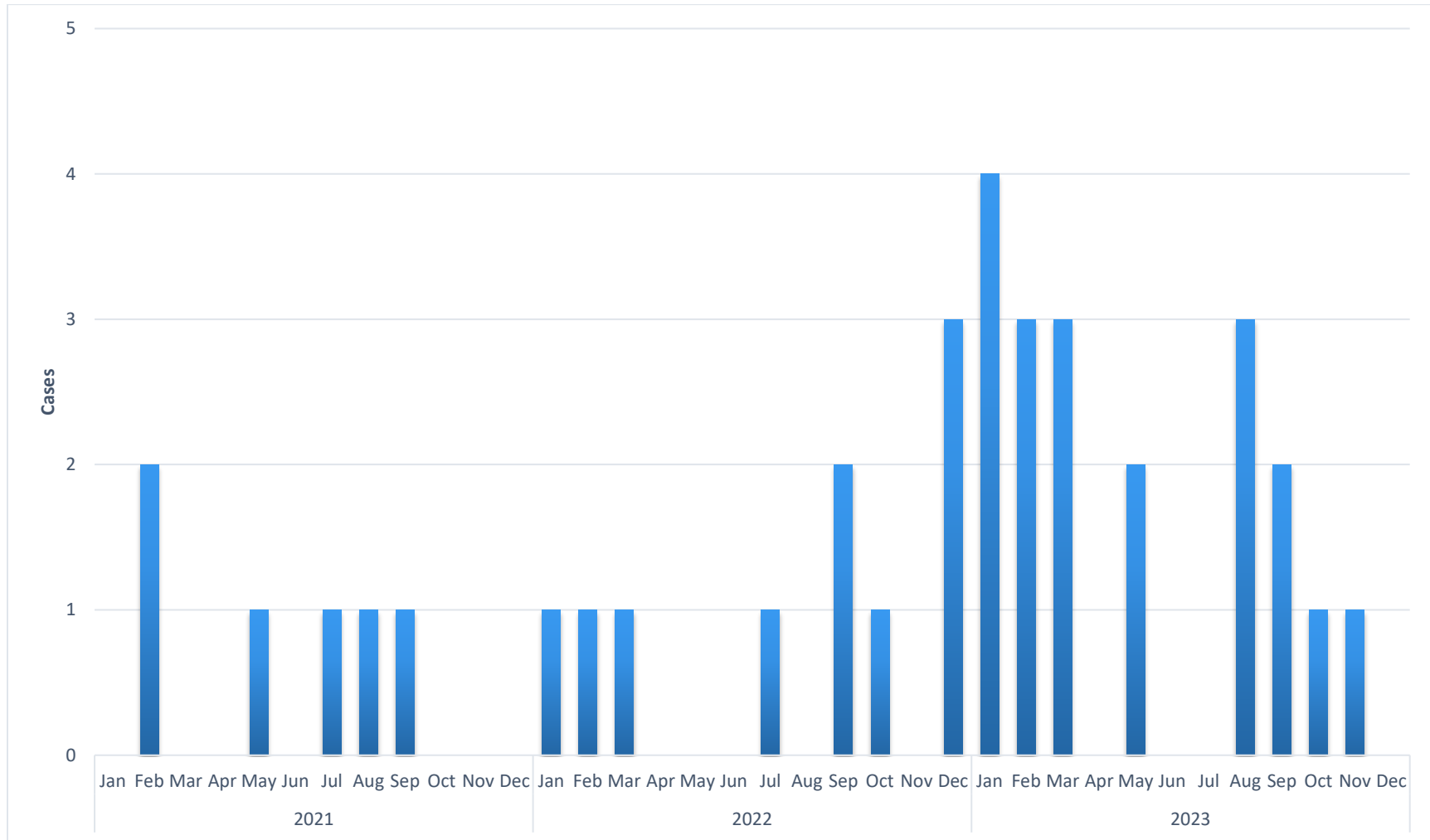
10 cases were reported in 2022 in the NWHU catchment area, which is an incidence of 12.3 per 100,000 people. 19 additional cases were reported in 2023, an incidence of 23.3 per 100,000 (Figure 1). The average annual incidence prior to 2022 in the catchment area was 4.1 per 100,000. Provincially the average annual incidence over the past decade has been around 5-6 per 100,000. The period with the highest incidence was December 2022-March 2023, when 13 cases were reported (Figure 2). 9 of the 10 cases in 2022 were in the Kenora area, and 15 of the 19 cases in 2023 (Figure 3).

Figure 1: HIV incidence per 100,000 in the NWHU catchment area and Ontario, 2013-2023



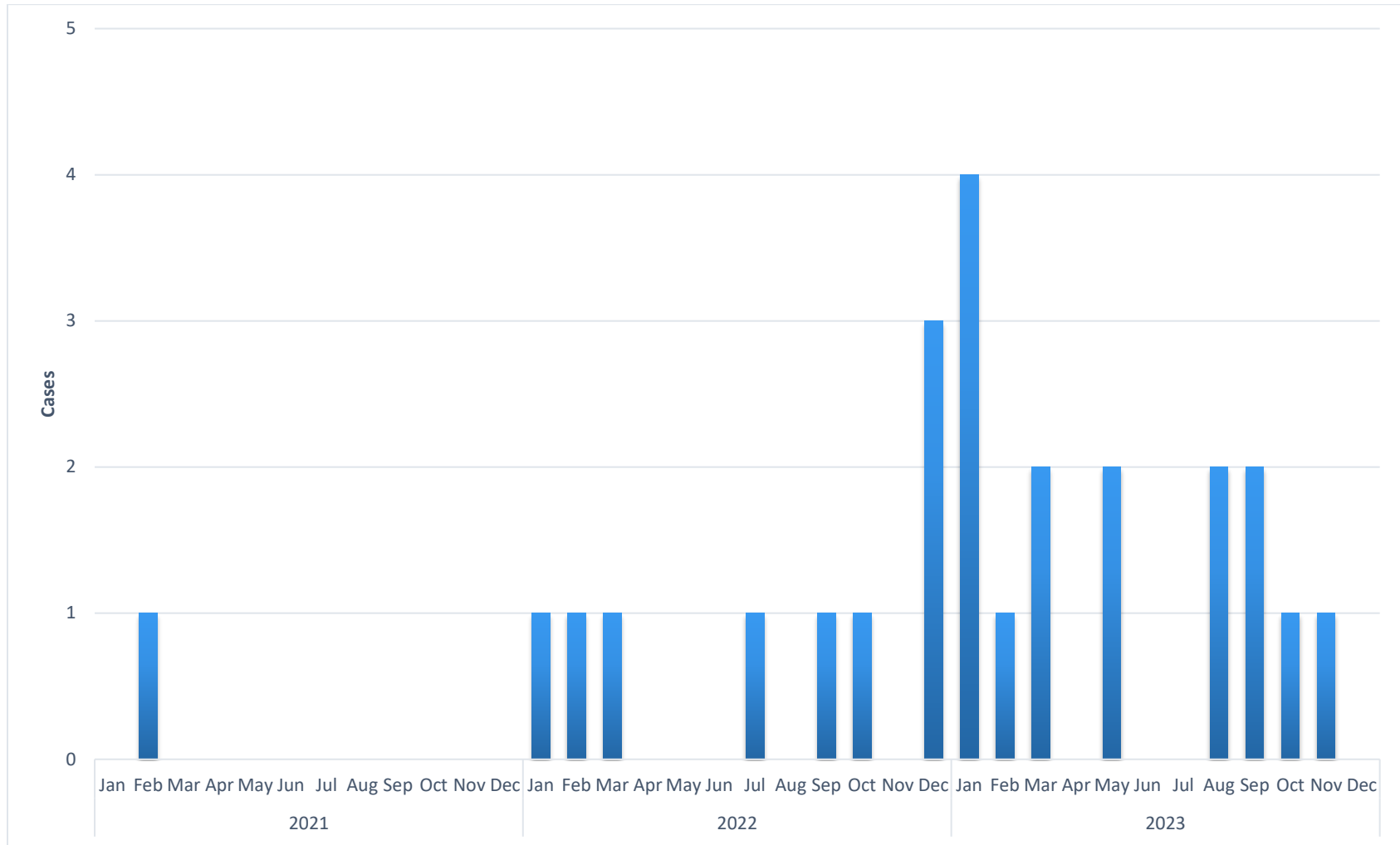
Source: iPHIS, extracted January 10, 2024

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



Source: iPHIS, extracted January 10, 2024

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

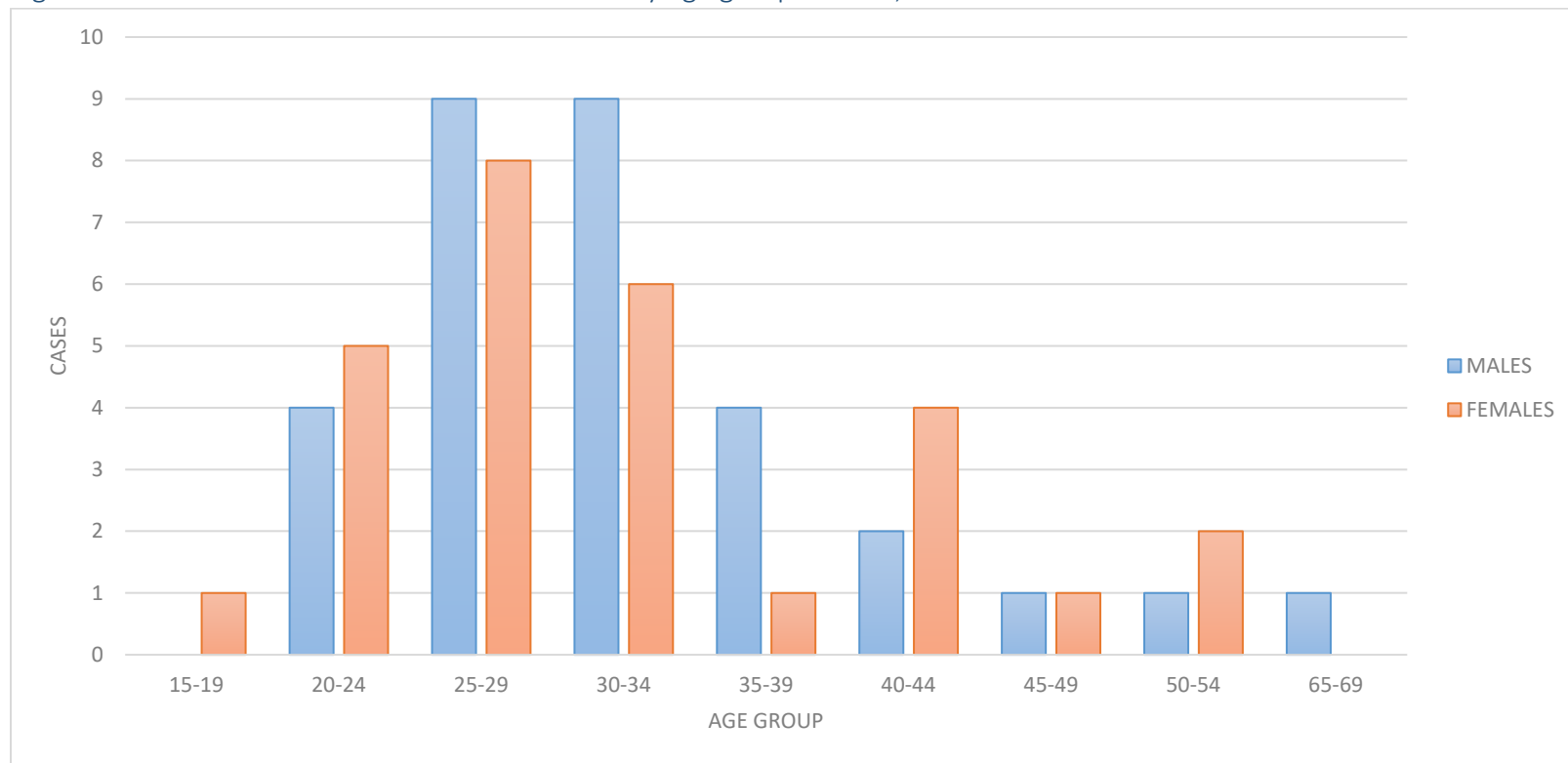


Source: iPHIS, extracted January 10, 2024

Cases by Age Group and Sex

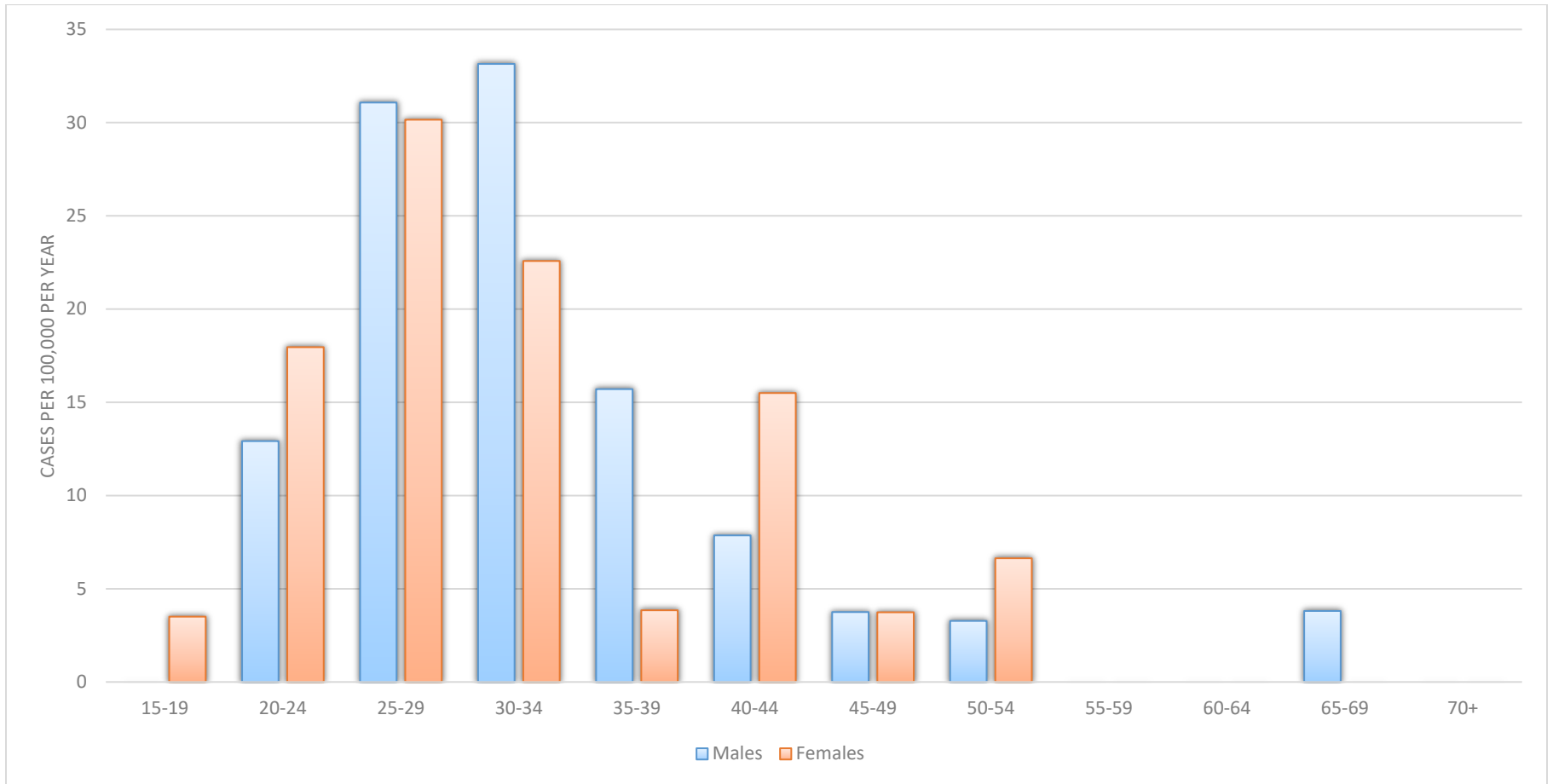
In 2022 and 2023, cases were reported across a wide age spectrum, ranging from 18 to 53. The median age of cases was 31 years old, and 62% of cases were women (Figure 4). Combining the last 10 years of data (back to 2013), the highest incidence has been in males in their late twenties and early thirties. Both demographics have incidence rates of around 30 per 100,000 per year, though overall there is no significant difference between males and females in terms of incidence over this longer period (Figure 5).

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



Source: iPHIS, extracted January 10, 2024

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

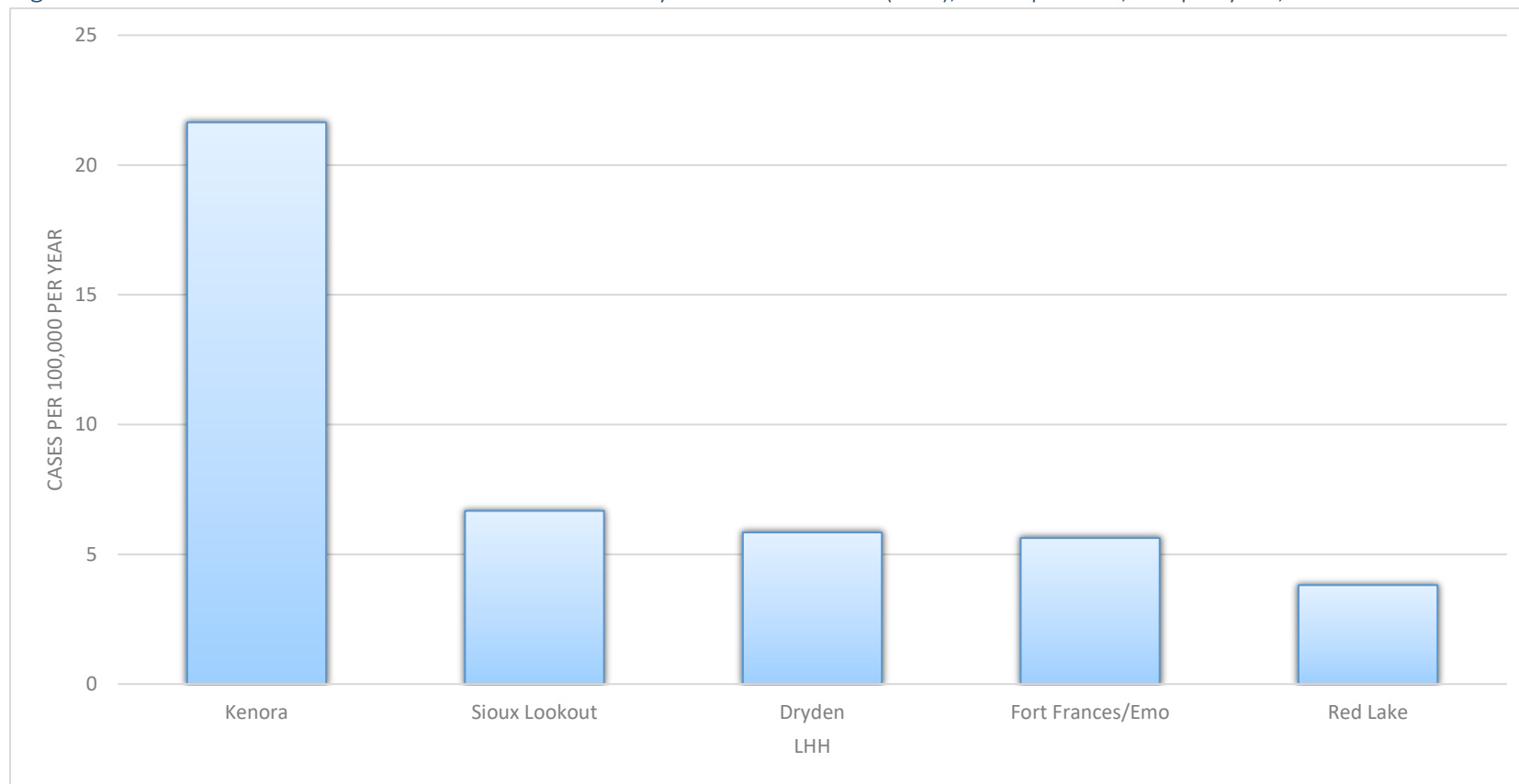


Source: iPHIS, extracted January 10, 2024

Cases by Geographic Location

The majority of cases in 2022 and 2023 have been in the Kenora local health hub (LHH) area. 24 cases have been reported in the Kenora area out of a total of 29 over this period. Combining data over the past 5 years, Kenora has the highest incidence rate at 21.6 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, 2019-2023

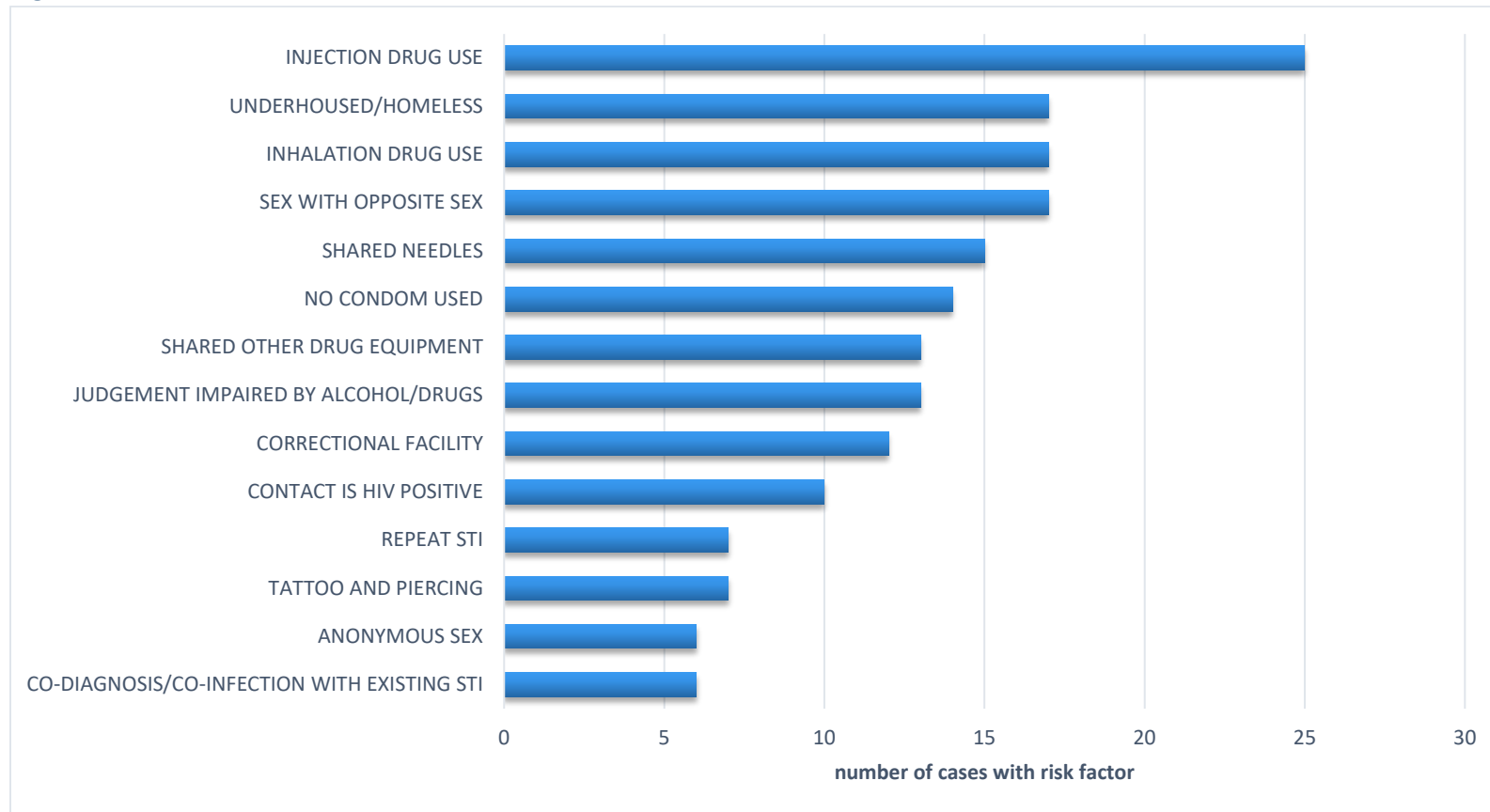


Source: iPHIS, extracted January 10, 2024

Risk Factors

For cases reported in 2022 and 2023, the most common risk factor was using injection drugs, with 25 cases having this risk factor. Other common risk factors include being homeless/underhoused, inhalation drug use, sharing needles and other drug equipment, not using a condom, having impaired judgment by alcohol or other drugs, having been in a correctional facility, and having an HIV-positive contact (Figure 7).

Figure 7: Most common risk factors for HIV cases in the NWHU catchment area, 2022-2023



Source: iPHIS, extracted January 10, 2024

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 January 10, 2024. 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, and 19 more reported in 2023. Cases have been primarily in the Kenora area, with 25 of 29 cases since 2022 being reported in the area. NWHU 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.