



Northwestern  
Health Unit

[www.nwhu.on.ca](http://www.nwhu.on.ca)

**Northwestern Health Unit**  
**Syphilis Epidemiologic Summary**  
**December 10, 2020**

## **Purpose**

This report describes recent epidemiologic statistics on confirmed cases of syphilis that have occurred in the Northwestern Health Unit (NWHU) catchment area since August 2018, with a particular focus on cases that have occurred in 2020.. The report highlights the incidence and epidemiologic curve of recent cases, demographics of cases and risk factors for infection.

## **Background**

The 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, the NWHU does ongoing collection, analysis and reporting of the incidence of all reportable diseases occurring in the catchment area.

In October 2018 the NWHU detected a statistically significant increase in reported cases of syphilis in the catchment area, and particularly in the Kenora region, beginning August 1, 2018. As part of the investigation into this increase in cases, epidemiologic trends are being monitored and reported on frequently.

## **Methods**

Data for reported cases of all types of syphilis within the NWHU catchment area dating back to August 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 December 10, 2020. Accurate Episode Date was the field used to assign a date to when the cases were reported. Analysis case counts, demographics, geography and risk factors was carried out using Microsoft Excel.

## Report Highlights

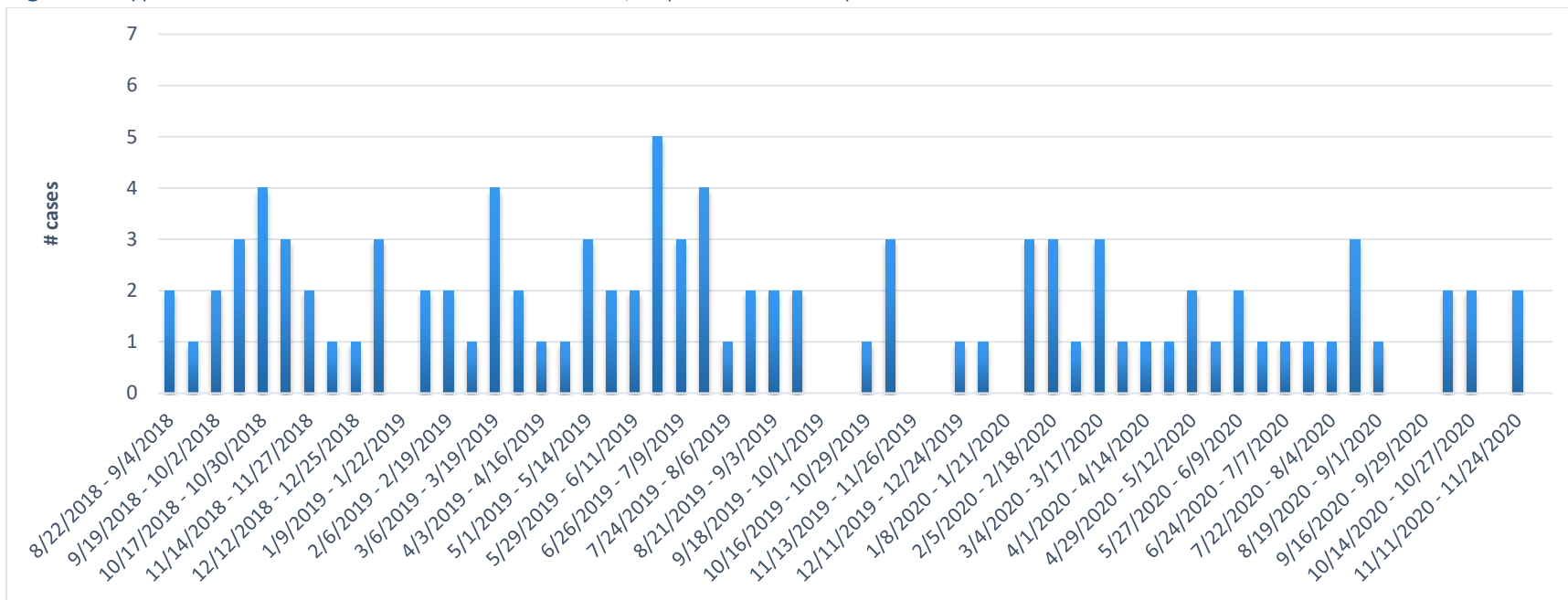
- There have been 33 confirmed cases of syphilis in the NWHU catchment area in 2020 to date
  - o Incidence of 37.7 per 100,000 people. Incidence in 2019 was 50.2 per 100,000.
  - o Typical incidence in the region is 2.9 per 100,000 per year, historically.
- Median age of 31, 22 females and 11 males
- 26 of these cases (78.8%) have been in the Kenora Local Health Hub (LHH) area. Incidence in the Kenora LHH in 2020 was
- Most common risk factors for cases include not using a condom, injection drug use, multiple sex partners and being underhoused/homeless.
- The main reasons for testing of cases was contact tracing, symptoms being present, and routine screening

## Results

### Incidence

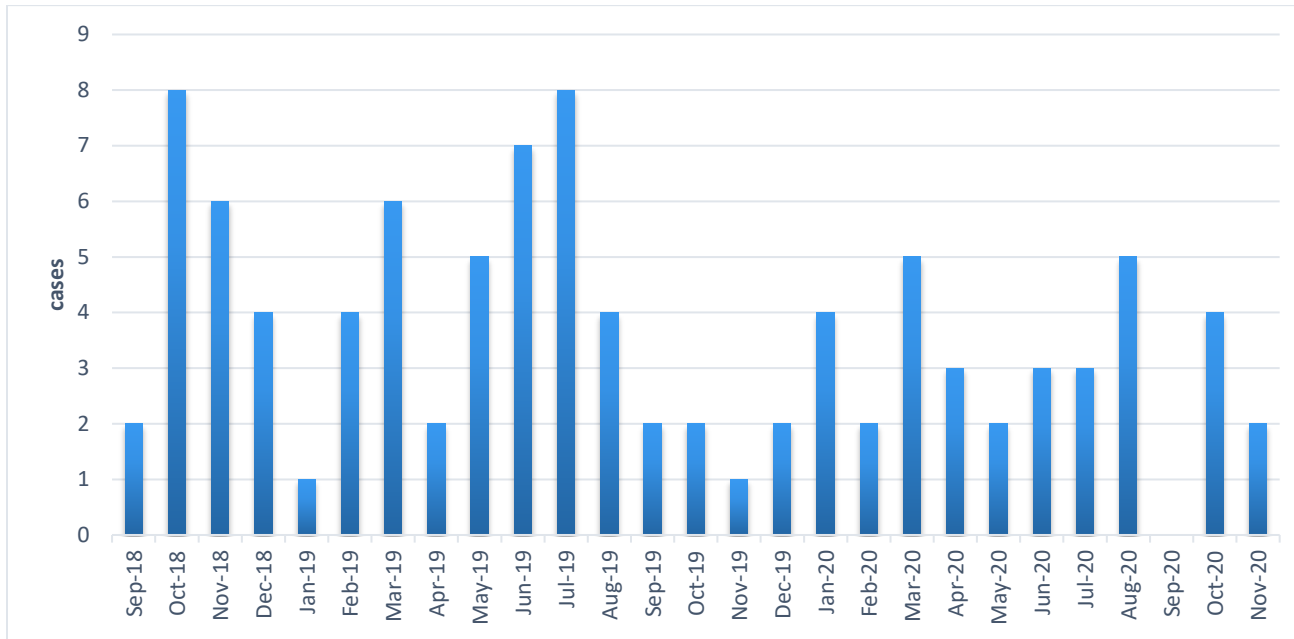
- 33 confirmed cases of syphilis in 2020, an incidence rate of 37.7 per 100,000 people in the NWHU catchment area
- The average annual incidence of syphilis in the NWHU catchment area between 2013 and 2017 was 2.9 per 100,000 per year, which serves as a historical baseline.

Figure 1: Syphilis cases in the NWHU catchment area, September 2018-present



Source: iPHIS, extracted December 10, 2020  
 Case dates are based on the field Accurate Episode Date in iPHIS

Figure 2: Syphilis cases in the NWHU catchment area by month, September 2018-September 2020

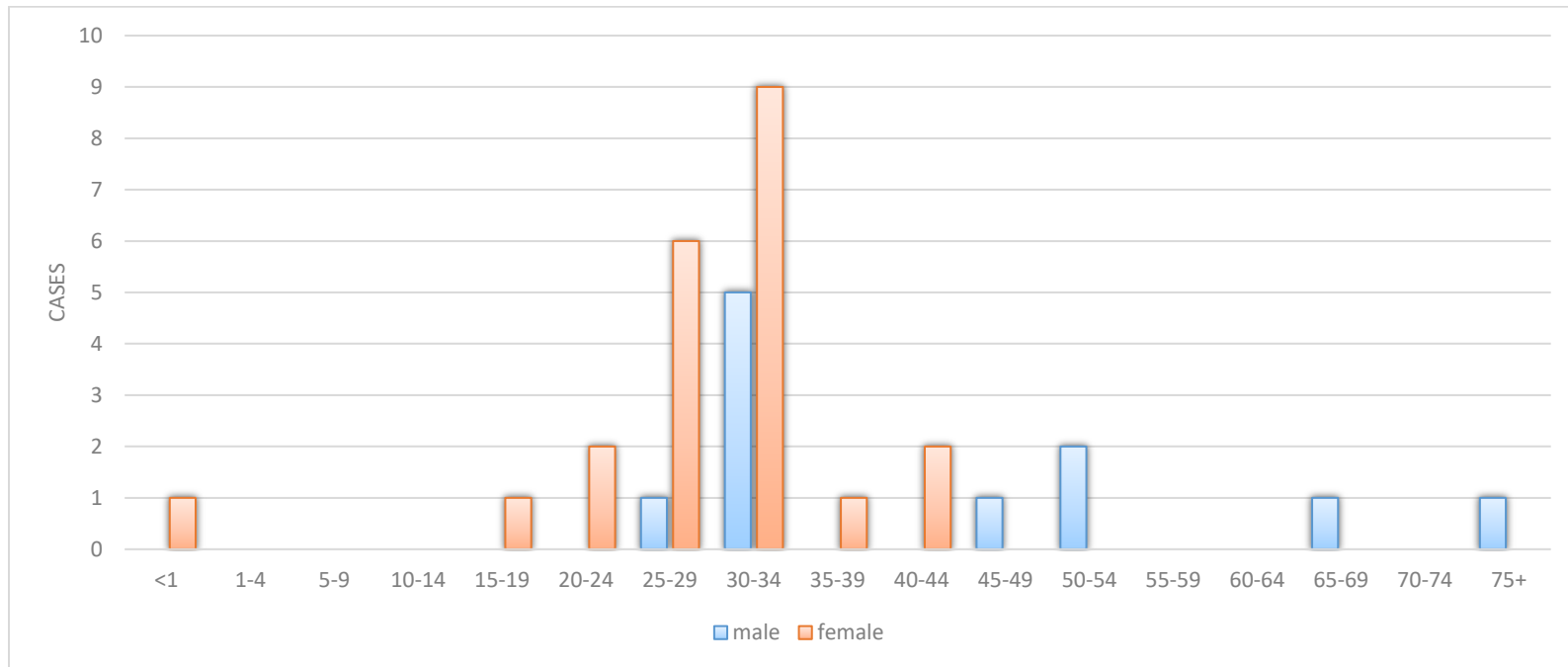


Source: iPHIS, extracted December 10, 2020  
Case dates are based on the field Accurate Episode Date in iPHIS

### Cases by Age Group and Sex

- Median age of 31 years old in 2020
- 22 females and 11 males

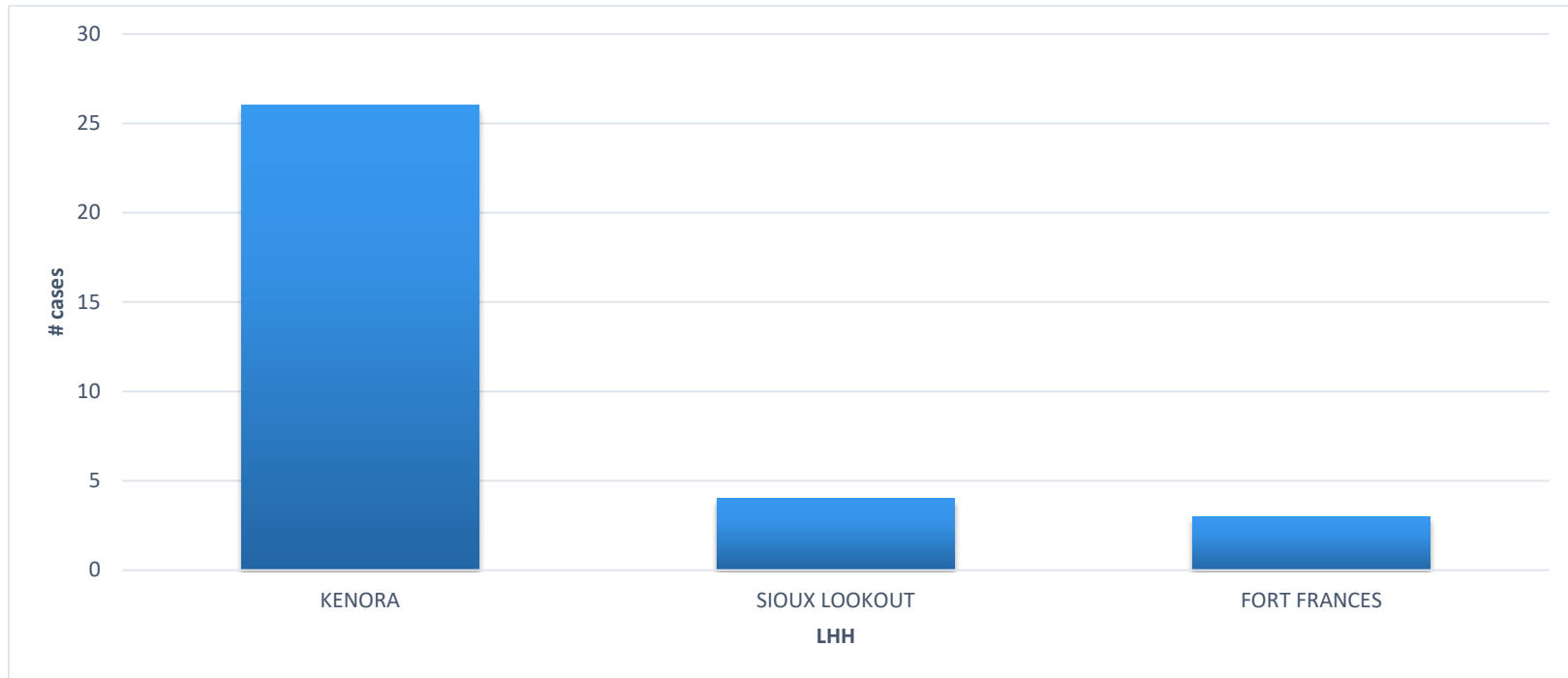
Figure 3: Syphilis cases in the NWHU catchment area by age group and sex, 2020 (YTD)



Source: iPHIS, extracted December 10, 2020

## Cases by Geographic Location

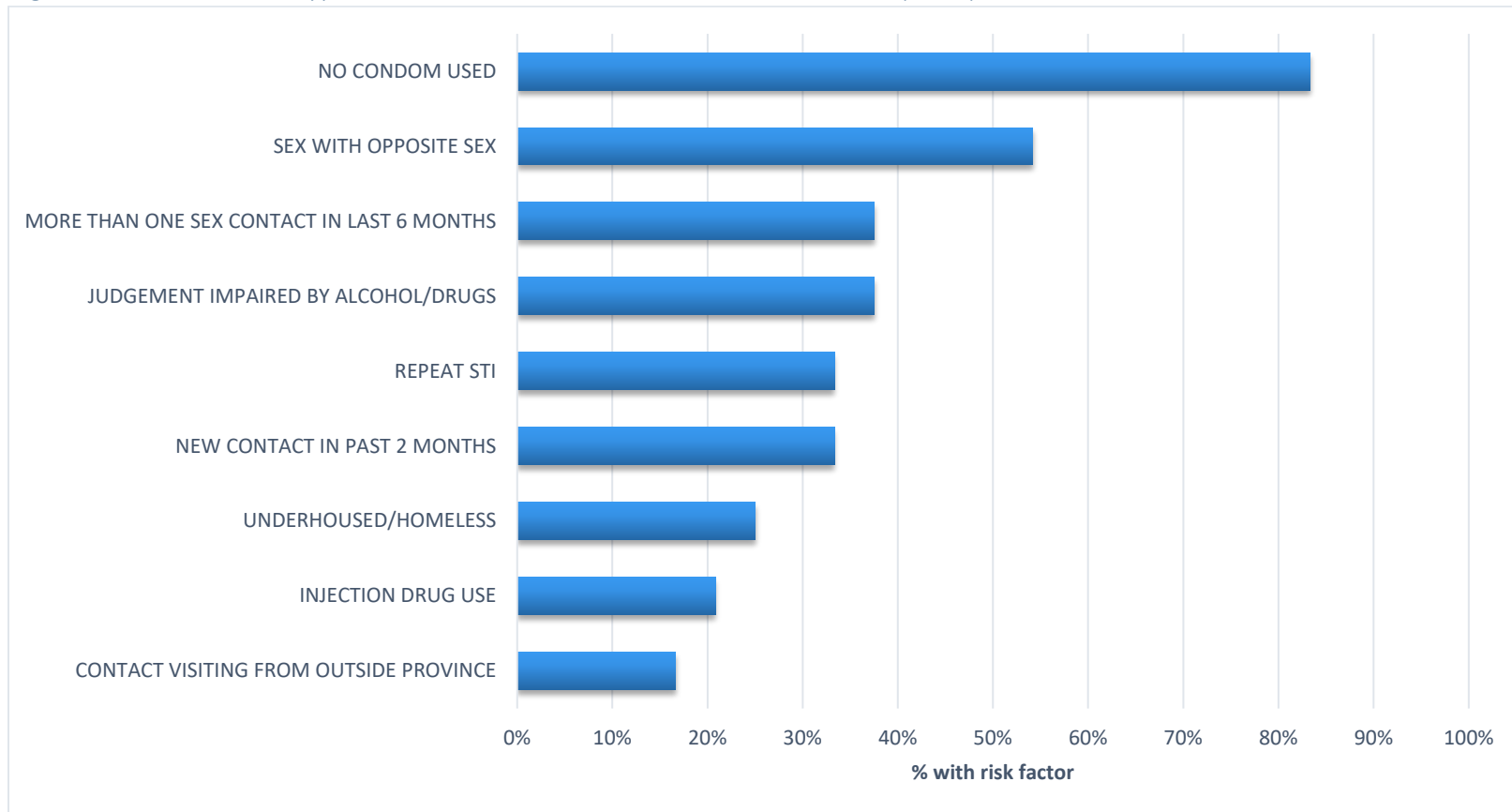
Figure 4: Syphilis cases in the NWHU catchment area by Local Health Hub (LHH), 2020 (YTD)



Source: iPHIS, extracted December 10, 2020

## Risk Factors

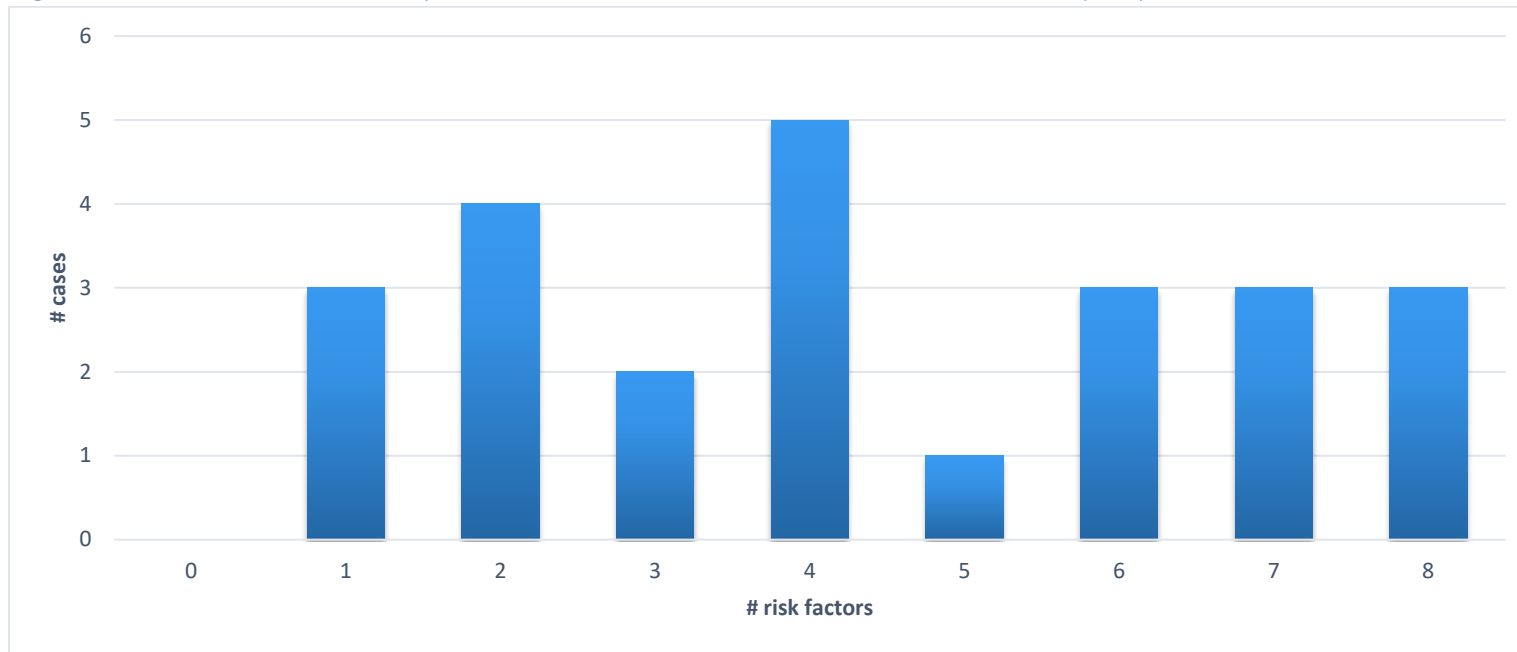
Figure 5: Risk factors of syphilis cases in the NWHU catchment area, 2020 (n=24)



Source: iPHIS, extracted December 10, 2020



Figure 6: Number of risk factors per case in the NWHU catchment area, 2019-2020 (YTD)



Source: iPHIS, extracted December 10, 2020

## Reason for Testing

Figure 7: Reason for testing of syphilis cases in the NWHU catchment area, 2020



Source: iPHIS, extracted December 10, 2020

## 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 December 10, 2020.

## Conclusion

The NWHU has experienced a surge in syphilis incidence in the region since August 1, 2018, extending into late summer of 2019. Incidence began to decrease in fall of 2019, and has been relatively stable since then throughout 2020, albeit still higher than historical averages. The NWHU will continue to periodically monitor and report on the situation as it develops.