

Northwestern Health Unit  
**RRFSS 2018**  
**Food Access and Security**  
**Module Results**  
March 2019



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Northwestern  
Health Unit

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

# Background

In September 2017 the Northwestern Health Unit (NWHU) decided to participate in the Rapid Risk Factor Surveillance System (RRFSS) in 2018 to measure some priority statistics from our general population. RRFSS is a telephone-based survey of adults aged 18 and older designed to collect and measure a wide variety of health risk factor information and other public health-related indicators. RRFSS is used by many public health units across Ontario obtain timely, local public health indicators that support program planning and evaluation and help advocate for public policy development.

RRFSS is conducted by the Institute for Social Research (ISR) at York University across three data collection cycles per year (January-April, May-August, and September-December). Health Units can customize their survey design by selecting from a large repository of modules or even designing their own modules to obtain specific information about their population.

The NWHU signed up to participate in RRFSS in 2018 in order to measure some key population health indicators that otherwise would not be available from other data sources. This included information relating to public perception of the social determinants of health (SDOH), social media use, prevalence of dental insurance, positive parenting habits, food security, amongst other indicators.

# Methodology

RRFSS uses a combination of landline and cell phone calls to administer the survey. ISR recommends that health units select a survey plan that includes a minimum of 10-15% cell phone calls, in order to reach as much of the population as possible. ISR uses computer-assisted telephone interviewing (CATI) to conduct the interviews.

The Foundations Team at the NWHU, along with the Leadership Council, worked together to prioritize the modules to be included in our survey tool. Due to our relatively low budget, our tool was limited to around a 50-question survey that would take approximately 10-15 minutes. In addition, data would be collected only during the first cycle of the year (January-April).

The final survey tool consisted of a total of 54 questions, comprised of three mandatory core modules and an additional 6 optional modules:

**Figure 1: RRFSS modules selected by the NWHU in 2018**

<b>Module</b>	<b>Number of questions</b>
Age (core module)	2
Gender (core module)	1
Children (core module)	3
Ethnicity	5
Social Determinants of Health (SDOH)	10
Positive Parenting	10
Social Media Use	12
Dental Insurance	4
Food Access and Security	6
<b>Total</b>	<b>53</b>

The NWHU opted for a survey option that would yield a total sample of 575 responses; 490 landline respondents and 85 cell phone respondents. The ISR administered the survey in cycle 1 of 2018 between January and April, prepared the data and delivered it to the NWHU in early August.

Analysis of the data was done using STATA Version 15. To adjust for survey design a household weight variable provided by ISR was used for all calculations. In addition, a new variable was created which equaled the population for a particular age-sex and indigenous status sub demographic in the NWHU area. Each survey participant was assigned a value equaling the population in their sub demographic (e.g. for a male aged 20-29 who was indigenous, this variable equaled the total population of 20-29 year-old indigenous males in the NWHU area). This variable was used as a post-stratification weight in all estimations to adjust for under- or over-representation of age-sex groups in the sample, as well as the under-representation of Indigenous respondents. The exact population of Indigenous people in the NWHU catchment area was not available at the time of analysis, so it was estimated by using the proportion of the population in the Kenora and Rainy River Districts that is Indigenous in each age group, and using those proportions to estimate the number of Indigenous people in the NWHU area in the corresponding age groups.

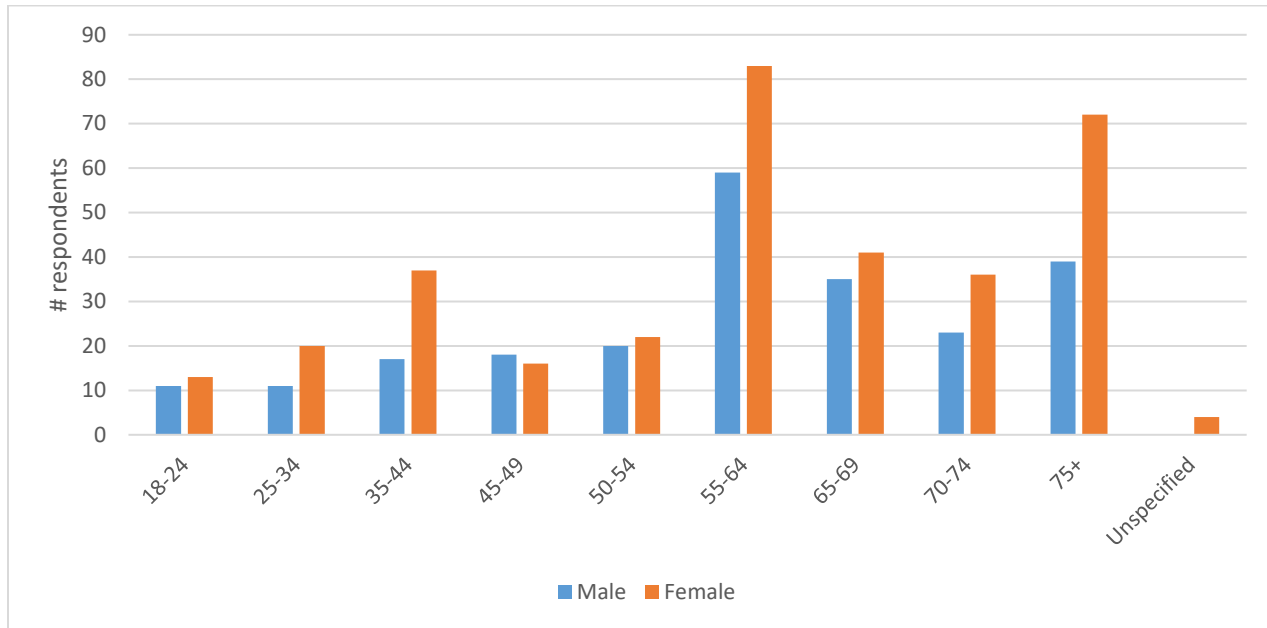
Proportions and accompanying 95% confidence intervals (CIs) were calculated for all variables. 95% CIs were calculated using a logit transform so that the endpoints were between 0 and 1.

This report outlines results obtained through the Food Access and Security module, in which participants were asked a number of questions on whether they have experienced a lack of adequate food over the past year and the factors that caused it. The Food Access and Security module questionnaire can be found in Appendix 1.

## Results

The survey yielded a total sample of 577 respondents within the NWHU catchment area. 344 of the respondents (59.6%) were female and 233 (40.4%) were male. The sample consisted disproportionately of the older population, with 74.5% of respondents being 50 years of age or older. 11.1% of respondents self-identified as Indigenous (First Nations, Inuit or Métis).

**Figure 2: Survey respondents by age group and sex**

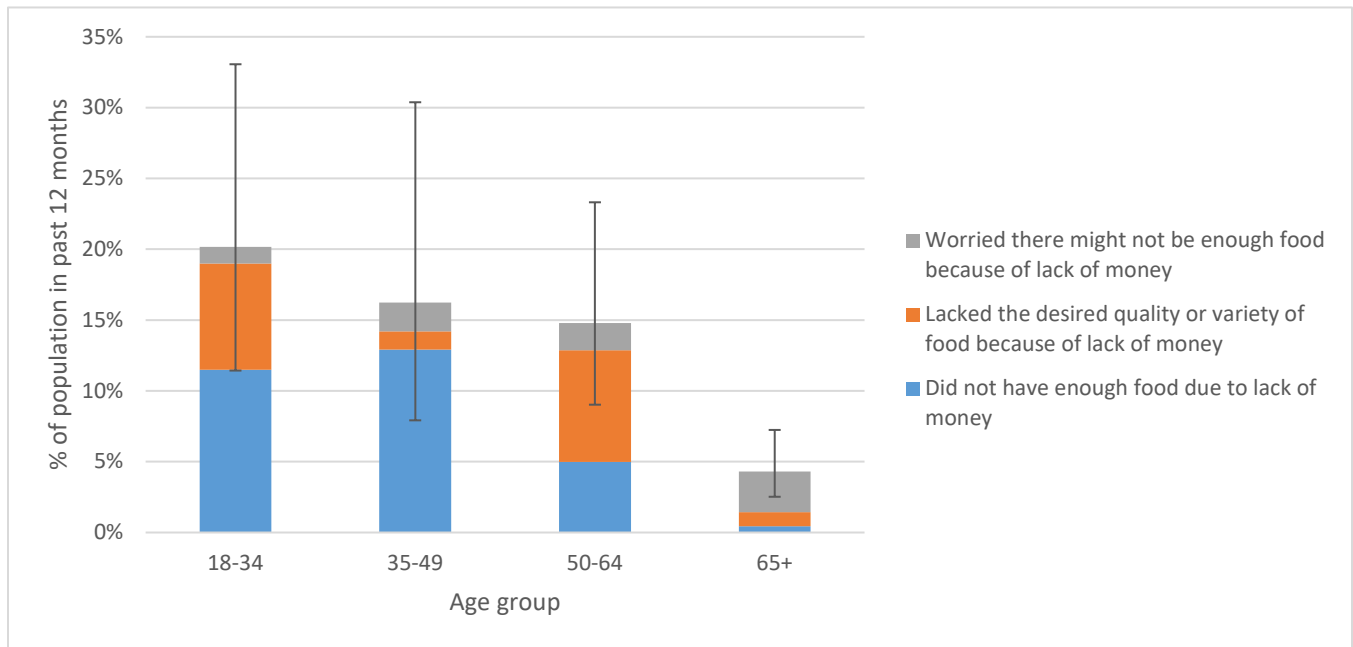


Respondents were asked if they or anyone else in their household had at any point in the previous year not had enough food to eat because of a lack of money. Overall, 7.6% of the population in the NWHU catchment area reported not having enough food because of a lack of money.

Respondents who claimed they had not had this experience were asked two follow-up questions, one asking if anyone in their household had not been able to have the quality or variety of food they wanted because of a lack of money in the past year, and one asking if anyone in their household had ever worried about having enough to eat because of a lack of money in the past year.

In addition to the 7.6% who reported not having enough to eat due to lack of money, an additional 4.8% reported that they did not have the quality or variety of food that they wanted due to lack of money, and a further 1.9% said they worried that there might not be enough to eat because of a lack of money. Combining these three questions together, a total of 14.3% of the population either did not have enough to eat, lacked the quality or variety of food they wanted, or worried that there might not be enough to eat because of a lack of money. This translates to about 11,700 people in the NWHU catchment area. Only 4.3% of the 65 and older population reported any kind of food insecurity, statistically lower than all the other age groups (Figure 3).

**Figure 3: Food insecurity over the past 12 months in the NWHU catchment area, by age group, 2018**



Respondents who stated that they had not had enough food due to lack of money at some point in the past year were asked a follow-up question on whether they had a place to go if they did not have enough to eat (e.g. a friend’s place, food bank, etc.). Just over half of this population (51.6%) said that they did not have a place to go.

For respondents who said that they did not have the quality or variety of food they wanted, they were asked if they had someplace to go to have better food or have more variety. Of this population, 47.2% said that they did not have a place to go.

## Discussion

The questions asked in this module help to provide a picture of food insecurity and its prevalence in the NWHU catchment area. Over 1 in 7 households in the region (14.3%) experienced food insecurity in the past year (answered “yes” to any of the three initial questions asked in the module). The last time food security was measured provincially in Ontario, 11.9% of households were food insecure (either marginally, moderately or severely) as measured by the Canadian Community Health Survey (CCHS)<sup>1</sup>.

When interpreting these statistics it is important to note that neither RRFSS nor the CCHS captures populations that reside in First Nation communities, and can be considered only representative of the off-reserve population. Were the entire NWHU population to be captured by a survey, the resulting statistic could potentially change significantly. Also, results from the CCHS and RRFSS are not directly comparable due to differences in how the indicators are measured. The NWHU opted to use this

<sup>1</sup> PROOF. Food Insecurity Policy Research. *Household Food Insecurity in Canada*. Accessed January 10, 2019 from <https://proof.utoronto.ca/food-insecurity/>

module as an alternative data source for food insecurity as it had not been implemented in Ontario through the CCHS since 2014, and we wanted to obtain more updated statistics for our region for that topic area.

## Limitations

Although phone calls made by ISR in conducting this survey were done randomly, the demographic makeup of the respondents in the final sample indicate that some groups were more likely to participate than others. For example, older respondents and women were over-represented in the sample, and Indigenous people were under-represented. As such, the sample obtained was not representative of the overall population of the NWHU catchment area. To mitigate this, post stratification methods were used in the analysis which should have greatly minimized the effects of having a non-representative sample.

First Nations reserves were not proportionally represented in the sample; only 6 respondents were from a reserve in the area. Because of this, the sample can generally only be considered to be representative of our off-reserve population.

Questions relating to socioeconomic status (e.g. income, education, employment, etc.) were not asked in this survey, so the socioeconomic makeup of the sample is not known. As such, it is unknown whether the sample is representative of the entire population within the catchment area with regard to socioeconomic variables.

## Conclusion

The food security module provides useful local information on the prevalence and nature of household food insecurity in the NWHU catchment area that is not available from other data sources at this time. As previously mentioned, the CCHS has not included questions on food security for a number of years, so RRFSS provided an alternative means to obtain this type of information. The NWHU uses this type of data to inform public health program planning and service delivery.

# Appendix 1: Food Security Module Questionnaire

## Food Access and Security

### food\_a1

We have a few questions about food.

In the past 12 months, did you or anyone else in your household NOT HAVE enough food to eat because of a lack of money?

- 1 yes
- 5 no
- 8 don't know
- 9 refused

if <1> [goto food\_a4]

### food\_a2

In the past 12 months, did you or anyone else in your household not eat the QUALITY OR VARIETY of foods that you wanted to eat because of a lack of money?

- 1 yes
- 5 no
- 8 don't know
- 9 refused

if <1> [goto food\_a5]

### food\_a3

In the past 12 months, did you or anyone else in your household WORRY that there might not be enough to eat because of a lack of money?

- 1 yes
- 5 no
- 8 don't know
- 9 refused

if <1> [goto food\_a6]

if <5,8,9>[goto exit\_fooda]

### food\_a4

[if food\_a1 ne <1>][goto food\_a5]

Do you have a place to go if you don't have enough to eat?

Interviewer: This could be to a family member or friends place, a food bank, or any other place.

- 1 yes
- 5 no
- 8 don't know

9 refused

if <1,5,8,9>[goto exit\_fooda]

**food\_a5**

[if food\_a2 ne <1>][goto food\_a6]

Do you have a place to go if you need to have better food or more variety in your food?

- 1 yes
- 5 no
- 8 don't know
- 9 refused

if <1,5,8,9>[goto exit\_fooda]

**food\_a6**

[if food\_a3 ne <1>][goto exit\_fooda]

If you did not actually have enough to eat, do you have a place to go?

- 1 yes
- 5 no
- 8 don't know
- 9 refused