



LHIN 14

# North West

## 14. North West LHIN

### Key Findings

#### Top three priority risk factor population estimates by sex (see Table 14.1 below):

##### Females

- Smoking—ever-smoked status
- Alcohol—current consumption
- Excess body weight

##### Males

- Inadequate fruit and vegetable consumption
- Smoking—ever-smoked status
- Excess body weight

#### Risk factor summary

##### Alcohol—current consumption

###### *Priority areas:*

- Females: areas in the northern and western parts of the LHIN and in Thunder Bay
- Males: areas in the northern part of the LHIN and in Thunder Bay
- Adolescent females and adolescent males: areas throughout the LHIN and in Thunder Bay

##### Alcohol—consumption exceeding cancer prevention recommendations

###### *Priority areas:*

- Females: areas in the northern part of the LHIN, west of Thunder Bay and areas in Thunder Bay
- Males: areas throughout the LHIN and in Thunder Bay

##### Excess body weight:

###### *Priority areas:*

- Females and males: areas throughout the LHIN and in Thunder Bay
- Adolescent females: areas across the LHIN; a few areas in Thunder Bay
- Adolescent males: few areas in Thunder Bay



### Inadequate vegetable and fruit consumption

#### *Priority areas:*

- Females: areas in the northern and southeastern parts of the LHIN and in and around Thunder Bay
- Males: areas throughout the LHIN and in Thunder Bay
- Adolescent females: few areas dispersed across the southern part of the LHIN (e.g., Fort Frances, Marathon)
- Adolescent males: areas in southeastern (e.g., Geraldton, Marathon) and southwestern (e.g., Fort Frances) parts of the LHIN

### Physical activity:

#### *Priority areas:*

- Females: few areas clustered in Thunder Bay

### Sedentary behaviour:

#### *Priority areas:*

- Females: a few areas in Thunder Bay

### Smoking—current status:

#### *Priority areas:*

- Females: areas throughout the majority of the LHIN and in Thunder Bay
- Males: areas throughout northern and southeastern parts of the LHIN and in and around Thunder Bay
- Adolescent females: areas throughout the LHIN and in Thunder Bay
- Adolescent males: areas throughout the northern, western and southeastern parts of the LHIN and in and around Thunder Bay

### Smoking—ever-smoked status:

#### *Priority areas:*

- Females and males: majority of areas throughout the LHIN



## Introduction

This section describes the estimated local prevalence of risk factors across the LHIN compared to the Ontario prevalence estimates from 2000 to 2014. These comparisons are always relative to Ontario with respect to the level of statistical evidence for the underlying prevalence estimate and often the number of areas meeting specific criteria are presented in parentheses (e.g., n=40). Risk factor maps are presented for females and males age 12 and older, and for adolescent females and adolescent males ages 12 to 18 inclusive. Throughout the text, the terms “area(s)” and “local” refer to the 2006 census dissemination areas (see the [Data and Methods](#) section, page 3).

## Exclusions

As discussed in the [Interpretation](#) section (page 7), maps are shown only for risk factor estimates in the LHIN where one or more local estimates were higher than Ontario (or lower than Ontario for physical activity). Therefore, the risk factor maps not displayed for North West LHIN include:

- physical activity among males and adolescents for both sexes; and
- sedentary behaviour among males and adolescents for both sexes.

## Notes

Risk factor prevalence could not be estimated for several areas in the North West LHIN (e.g., suppressed census populations or institutionalized populations), which are shown as “insufficient data” on the maps. These areas include many First Nations located in the LHIN. Additionally, areas with unavailable population data are shown as “insufficient data.” See [Appendix C](#) for a full list of DAs in the insufficient data category.

## Priority population estimates

Priority population estimates may be helpful in prioritizing health promotion and planning efforts for potential populations affected by certain modifiable risk factors. Table 14.1 (page 478) presents the estimated priority populations for each risk factor by sex and age group in the North West LHIN. Priority populations are defined as those living in areas with a higher risk factor prevalence (or lower prevalence for physical activity) than Ontario. These estimates were produced by summing the population from all higher (or lower for physical activity) prevalence small areas (2006 dissemination areas) after taking into account the risk factor prevalence of each area. For example, if among females 100 areas had a higher prevalence of current alcohol consumption than Ontario, the female 2006 census populations in each of these areas were multiplied by the prevalence of current alcohol consumption for each area and then summed across the 100 areas to produce an estimate of the female “priority population.” These calculations are intended to provide a measure to prioritize the risk factors rather than a population estimate.

According to the [Methods](#) (page 4) and [Interpretation](#) (page 7) sections, these higher prevalence areas had strong statistical evidence of elevated prevalence compared to Ontario (posterior probabilities  $\geq 80\%$ ). An exception is physical activity, which had strong statistical evidence of lower prevalence estimates than Ontario (posterior probabilities  $\leq 20\%$ ). Therefore, the population estimates for each risk factor are likely undercounted because areas with less statistical certainty (posterior probabilities  $< 80\%$  and physical activity posterior probabilities  $> 20\%$ ) are not included in the population estimates.



**Table 14.1** Estimated priority populations among higher prevalence\*\* dissemination areas compared to Ontario by risk factor, sex and age group, North West Local Health Integration Network (LHIN), using 2006 census populations

Risk factor	Female priority population**†	% of female population in the LHIN† (n=92,600)	Male priority population**†	% of male population in the LHIN† (n=88,980)	Adolescent female priority population**‡	% of adolescent female population in the LHIN† (n=9,630)	Adolescent males priority population**‡	% of adolescent male population in the LHIN† (n=10,240)
Alcohol—current consumption	50,630	55%	16,860	19%	4,180	43%	2,920	28%
Alcohol—consumption exceeding cancer prevention recommendations	2,060	2%	6,120	7%	NM	—	NM	—
Excess body weight	38,880	42%	53,970	61%	930	10%	20	0%
Inadequate vegetable and fruit consumption	34,940	38%	64,990	73%	170	2%	330	3%
Physical activity	280	0%	NE	—	NP	—	NP	—
Sedentary behaviour	3,930	4%	1,960	2%	NE	—	NE	—
Smoking—current status	16,450	18%	8,260	9%	1,060	11%	920	9%
Smoking—ever-smoked status	55,970	60%	59,330	67%	NM	—	NM	—

NE = no estimates within the “higher” prevalence categories\*\*; NM = not modelled; NP = census population estimates not available

\* Estimates rounded to multiples of 10

\*\* For physical activity, priority populations are those living in areas with a lower risk factor prevalence compared to Ontario

† Population age 12 and older

‡ Population ages 12 to 18

— Value not applicable



## Alcohol—current consumption

### People age 12 and older

An estimated 70% of females and 79% of males in Ontario reported current alcohol consumption.

#### [Higher prevalence than Ontario](#)

Across the North West LHIN, more areas with a higher prevalence of alcohol consumption than the Ontario average were detected for females (n=275; Figure 14.1) compared to males (n=85; Figure 14.2). For females, these areas were located throughout the northern (e.g., Pikangikum and Fort Hope) and central (e.g., Red Lake Road, Dryden and Sioux Lookout) parts of the LHIN and in and around Thunder Bay. For males, higher prevalence areas occurred mainly in the northern parts of the LHIN (e.g., Pikangikum and Fort Hope), as well as in Thunder Bay.

#### [Lower prevalence than Ontario](#)

Few areas with a lower prevalence of current alcohol consumption than the Ontario average were found for females (n=9; Figure 14.1) or males (n=15; Figure 14.2). These areas were located in the southwestern part of the LHIN.

### Adolescents

Among the adolescent population in Ontario, approximately 40% of females and males reported current alcohol consumption.

#### [Higher prevalence than Ontario](#)

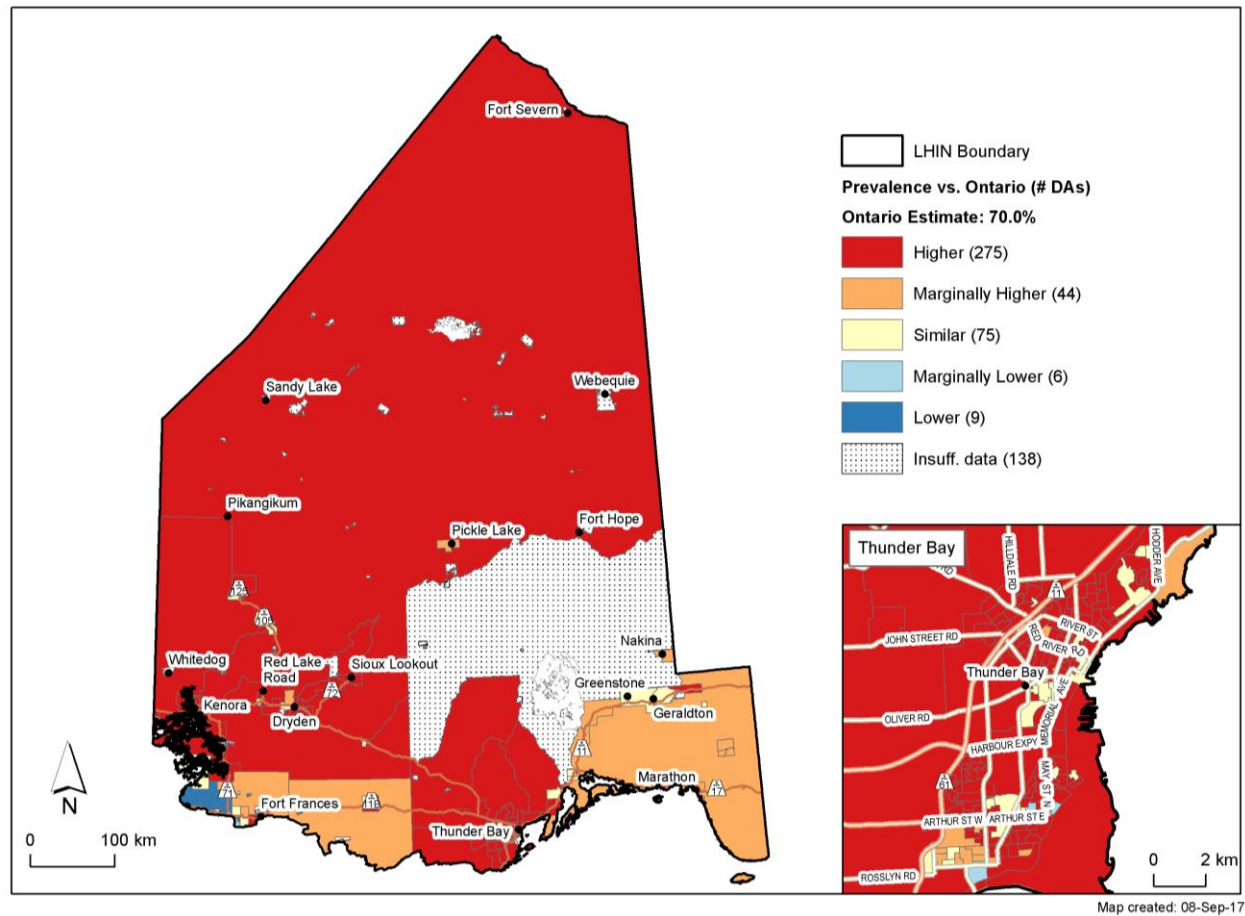
Areas with a higher prevalence of current alcohol consumption than the Ontario average were more numerous for adolescent females (n=328; Figure 14.3) compared to adolescent males (n=225; Figure 14.4). For both sexes, higher prevalence areas occurred throughout the LHIN, but were more common in Thunder Bay for adolescent females than adolescent males.

#### [Lower prevalence than Ontario](#)

Most areas with a lower prevalence of current alcohol consumption for adolescent females (n=5; Figure 14.3) and adolescent males (n=26; Figure 14.4) were located in and around Thunder Bay.

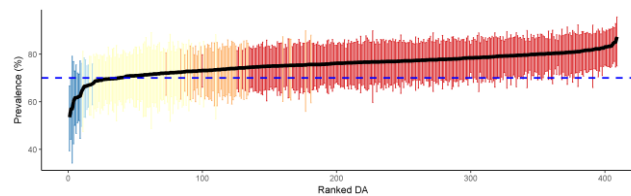


**Figure 14.1** Current alcohol consumption among females (age 12 and older), 2000–2014, North West Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	75.7
Higher	78.0 (73.1, 87.3)
Marginally Higher	73.7 (72.1, 75.6)
Similar	70.9 (65.4, 73.4)
Marginally Lower	66.4 (64.3, 67.6)
Lower	59.8 (53.6, 62.4)

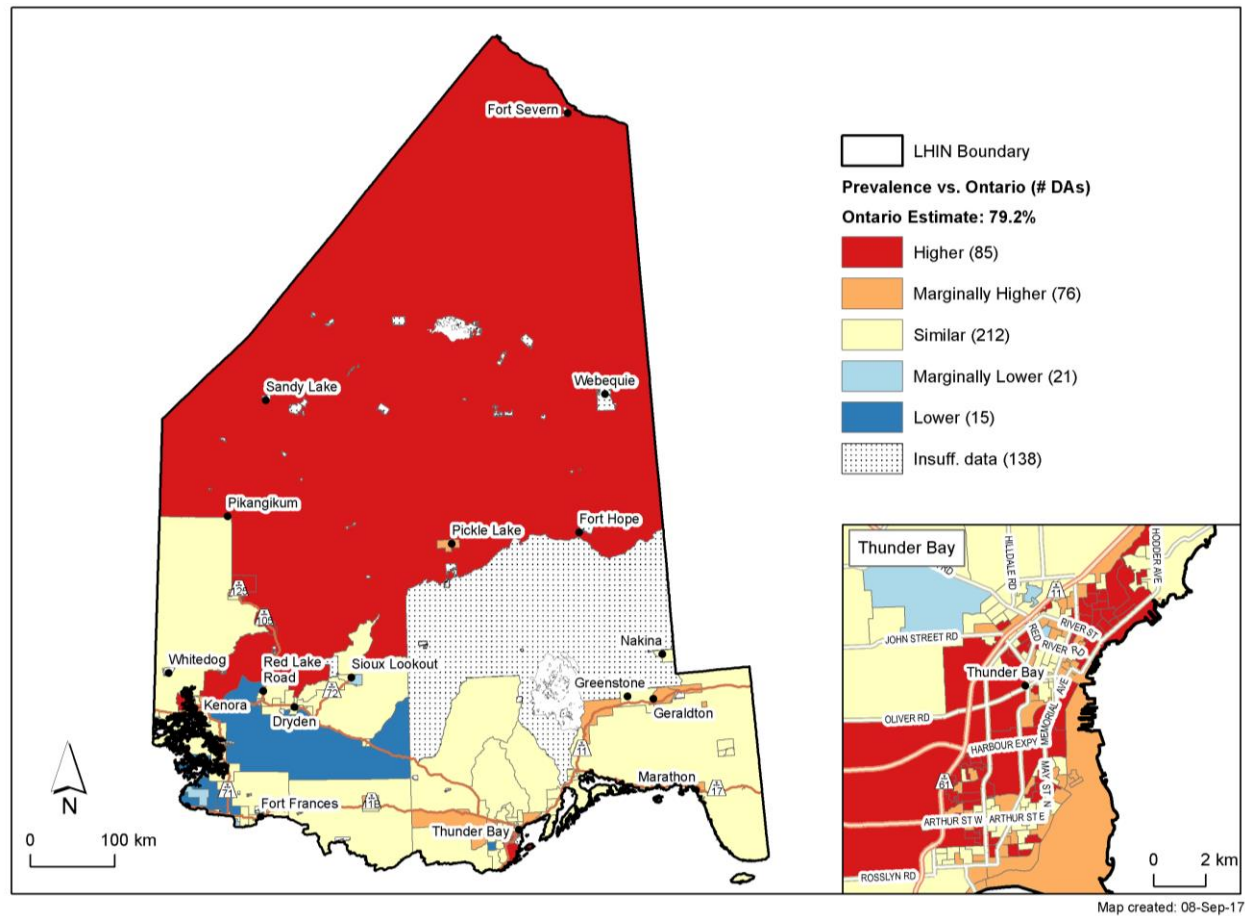
Prevalence by 2006 dissemination areas (DA) and 95% credibility intervals



Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario estimate.

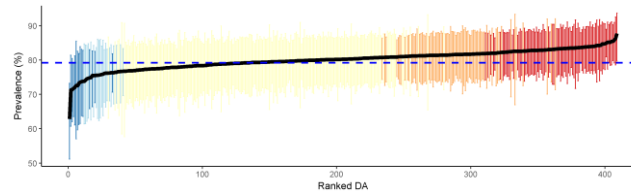


**Figure 14.2** Current alcohol consumption among males (age 12 and older), 2000–2014, North West Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	80.1
Higher	83.4 (81.9, 87.7)
Marginally Higher	81.6 (80.7, 83.2)
Similar	79.1 (76.2, 81.4)
Marginally Lower	75.7 (73.8, 76.7)
Lower	72.7 (62.8, 76.3)

Prevalence by 2006 dissemination areas (DA) and 95% credibility intervals

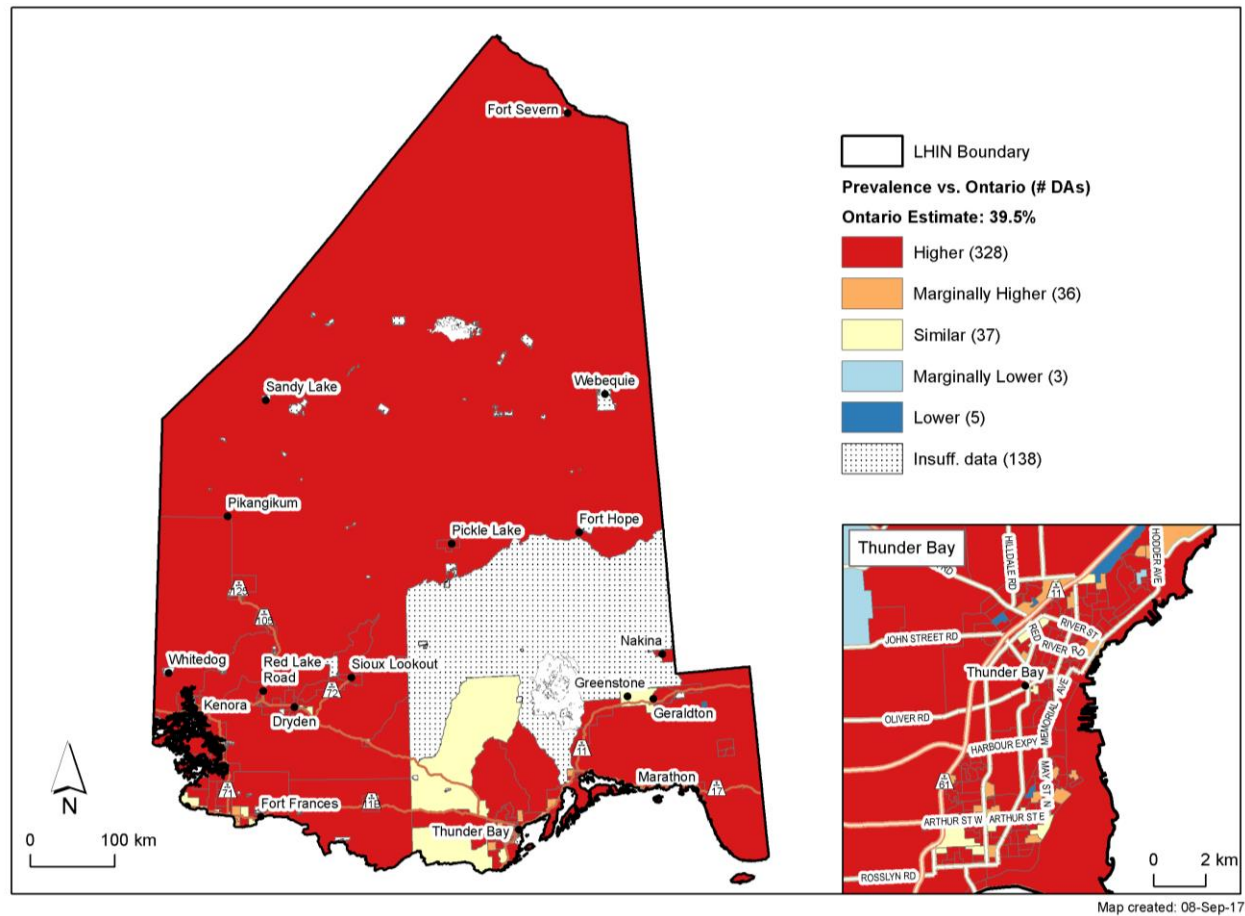


Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario estimate.



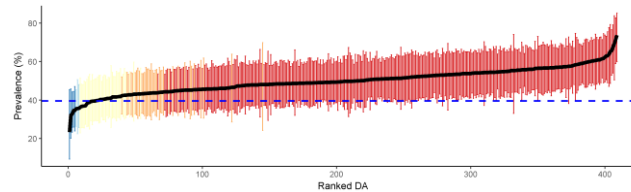


**Figure 14.3** Current alcohol consumption among adolescent females (ages 12 to 18), 2000–2014, North West Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	49.9
Higher	52.1 (43.9, 73.7)
Marginally Higher	44.0 (42.3, 48.1)
Similar	40.3 (36.3, 43.2)
Marginally Lower	35.6 (35.5, 35.7)
Lower	31.5 (23.3, 34.6)

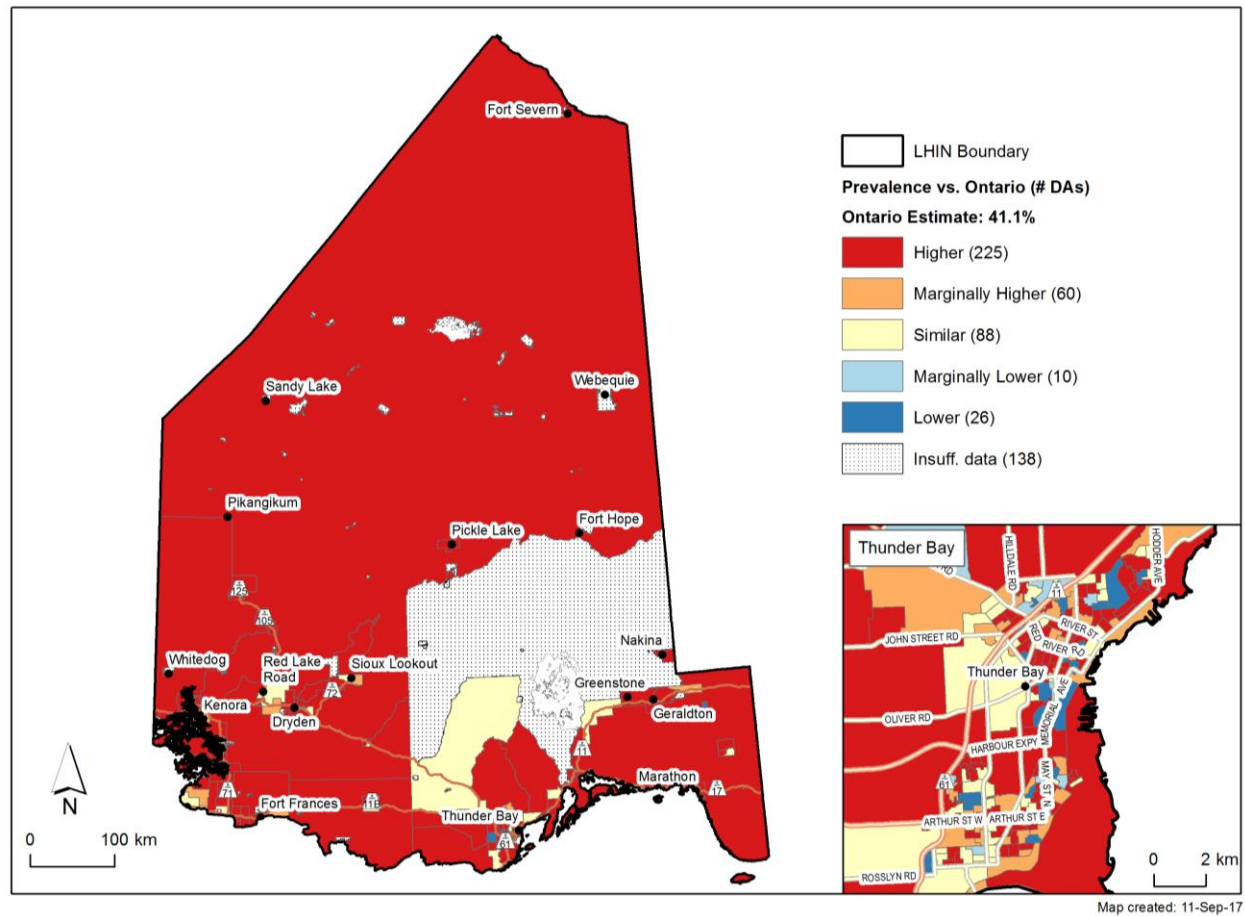
Prevalence by 2006 dissemination areas (DA) and 95% credibility intervals



Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario estimate.

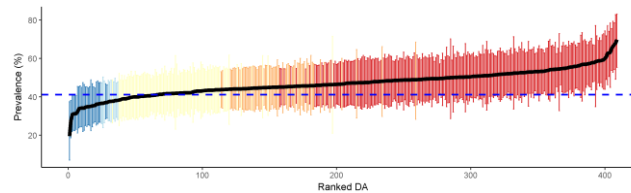


**Figure 14.4** Current alcohol consumption among adolescent males (ages 12 to 18), 2000–2014, North West Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	47.0
Higher	51.5 (45.2, 69.9)
Marginally Higher	45.2 (43.8, 49.0)
Similar	41.9 (37.8, 46.4)
Marginally Lower	37.6 (36.7, 38.3)
Lower	33.7 (19.6, 37.2)

Prevalence by 2006 dissemination areas (DA) and 95% credibility intervals



Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario estimate.



## Alcohol—consumption exceeding cancer prevention recommendations

### People age 12 and older

Almost 7% of the female population in Ontario drank alcohol in excess of the recommended limits for cancer prevention. Among males, the Ontario prevalence of exceeding the recommended limits was 8.5%.

#### Higher prevalence than Ontario

Areas with a higher prevalence than the Ontario average of alcohol consumption in excess of cancer prevention recommended limits for females (n=92; Figure 14.5) were located mainly in the northern part of the LHIN (e.g., Pikangikum, Sioux Lookout) and areas west of and in Thunder Bay. Higher prevalence areas were more common for males (n=227; Figure 14.6) than females, and were located throughout the LHIN.

#### Lower prevalence than Ontario

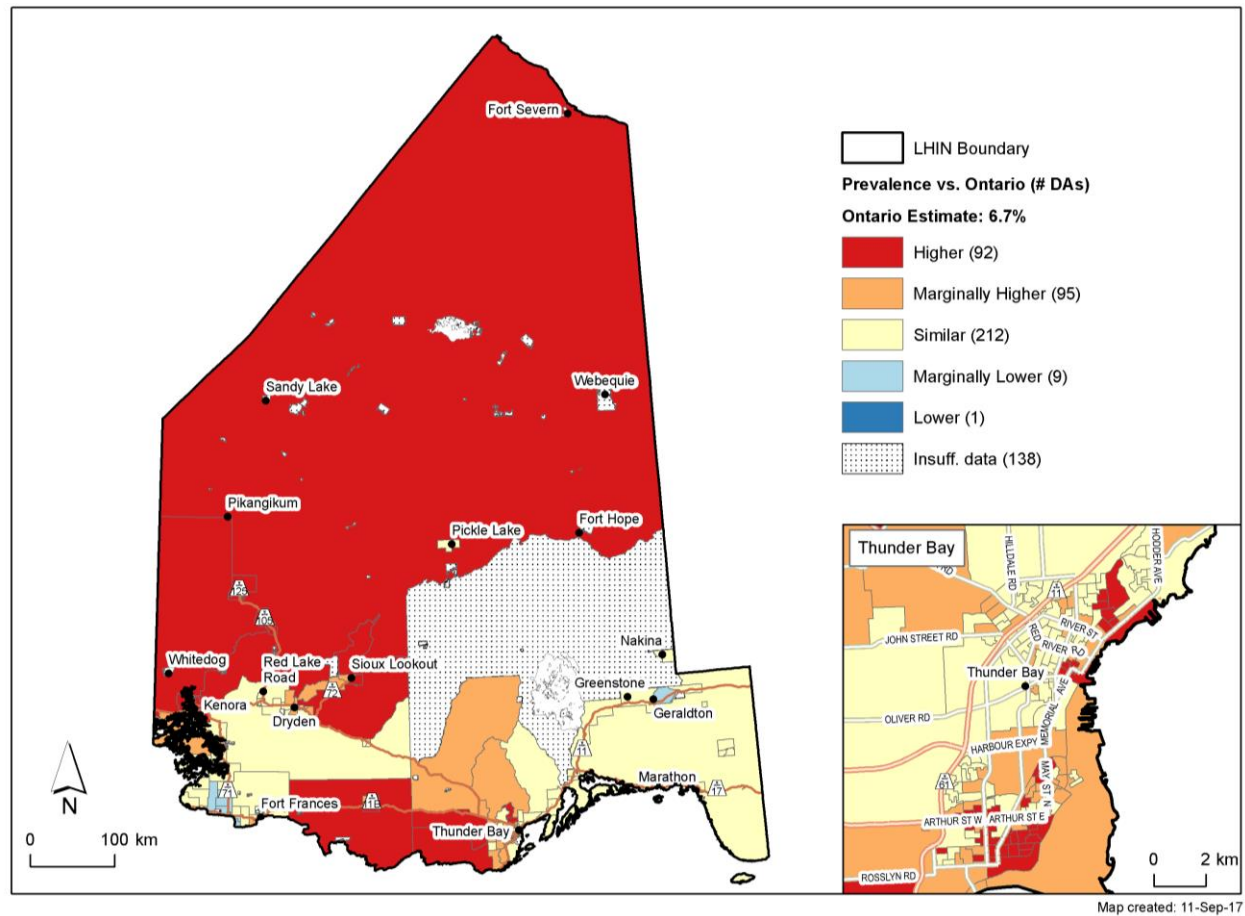
Few areas had a lower prevalence than the Ontario average of alcohol consumption in excess of cancer prevention recommended limits for females (n=1; Figure 14.5) or males (n=1; Figure 14.6).

### Adolescents

The area-based prevalence of exceeding cancer prevention recommendations was not estimated for adolescent populations.

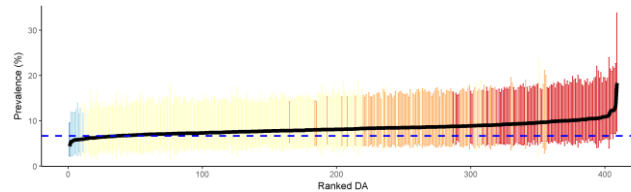


**Figure 14.5** Alcohol consumption exceeding cancer prevention recommendations among females (age 12 and older), 2000–2014, North West Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	8.3
Higher	10.0 (8.8, 18.3)
Marginally Higher	8.7 (7.9, 9.7)
Similar	7.4 (5.9, 9.6)
Marginally Lower	5.8 (5.4, 6.0)
Lower	4.4 (4.4, 4.4)

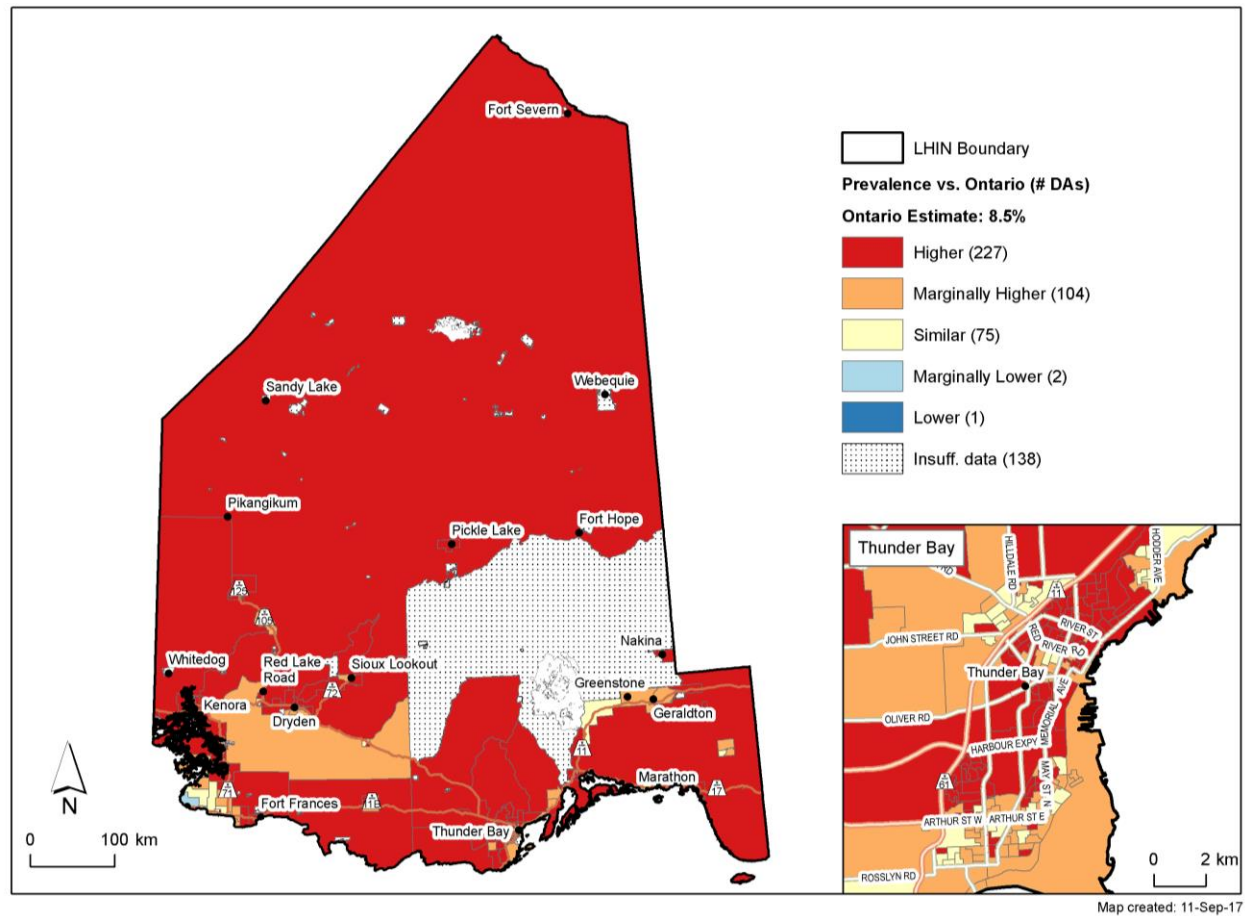
Prevalence by 2006 dissemination areas (DA) and 95% credibility intervals



Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario estimate.

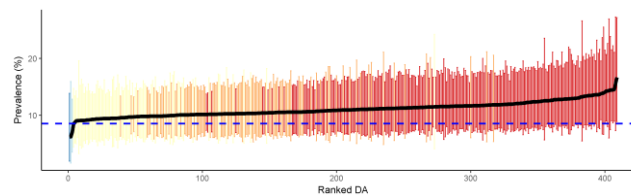


**Figure 14.6** Alcohol consumption exceeding cancer prevention recommendations among males (age 12 and older), 2000–2014, North West Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	11.1
Higher	11.9 (10.2, 16.7)
Marginally Higher	10.4 (9.6, 11.8)
Similar	9.6 (8.5, 11.5)
Marginally Lower	6.7 (6.2, 7.1)
Lower	6.2 (6.2, 6.2)

Prevalence by 2006 dissemination areas (DA) and 95% credibility intervals



Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario estimate.



## Excess body weight

### People age 12 and older

The estimated Ontario prevalence of excess body weight (overweight or obese) was 41% among females and 56% among males.

#### [Higher prevalence than Ontario](#)

Areas with a higher prevalence of excess body weight than the Ontario average were common across the LHIN for females (n=343; Figure 14.7) and males (n=385; Figure 14.8). In Thunder Bay, higher prevalence areas were more extensive for males than females.

#### [Lower prevalence than Ontario](#)

No areas with prevalence estimates lower than the Ontario average were found for females (Figure 14.7) or males (Figure 14.8).

### Adolescents

Among Ontario adolescents, an estimated 15% of females and 25% of males were overweight or obese.

#### [Higher prevalence than Ontario](#)

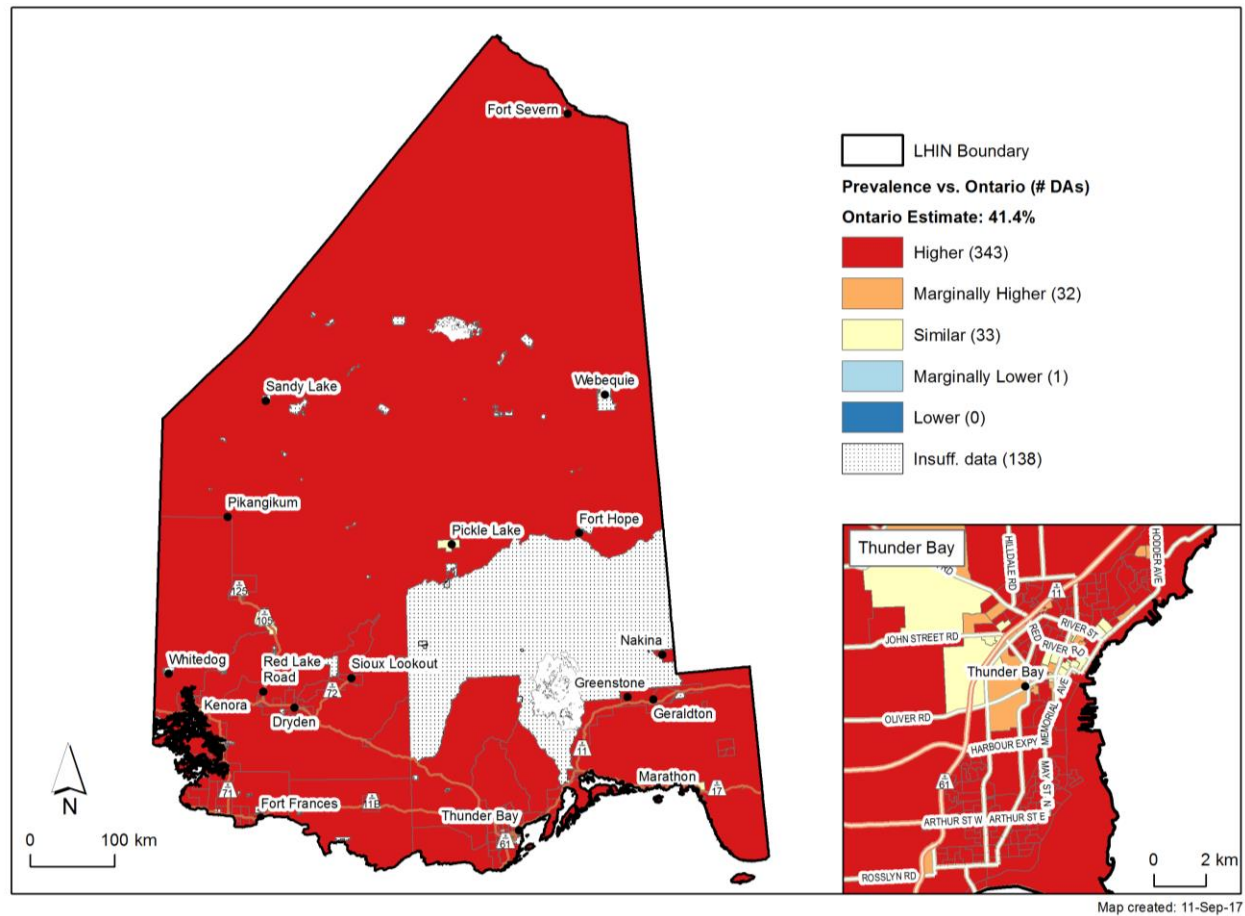
Areas with a higher prevalence of excess body weight (overweight or obese) than the Ontario average for adolescent females (n=173; Figure 14.9) were located throughout the LHIN except for some areas in and around Thunder Bay. For adolescent males, higher prevalence areas were far less common (n=2; Figure 14.10) compared to adolescent females.

#### [Lower prevalence than Ontario](#)

Lower prevalence areas were not identified for adolescents (Figure 14.9 and Figure 14.10).



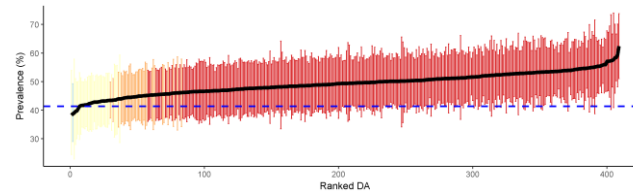
**Figure 14.7** Excess body weight (overweight/obese) among females (age 12 and older), 2000–2014, North West Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	49.3
Higher	50.4 (45.2, 62.5)
Marginally Higher	44.9 (43.4, 46.2)
Similar	42.3 (38.3, 44.0)
Marginally Lower	38.8 (38.8, 38.8)
Lower	N/A

N/A = no estimates in the category

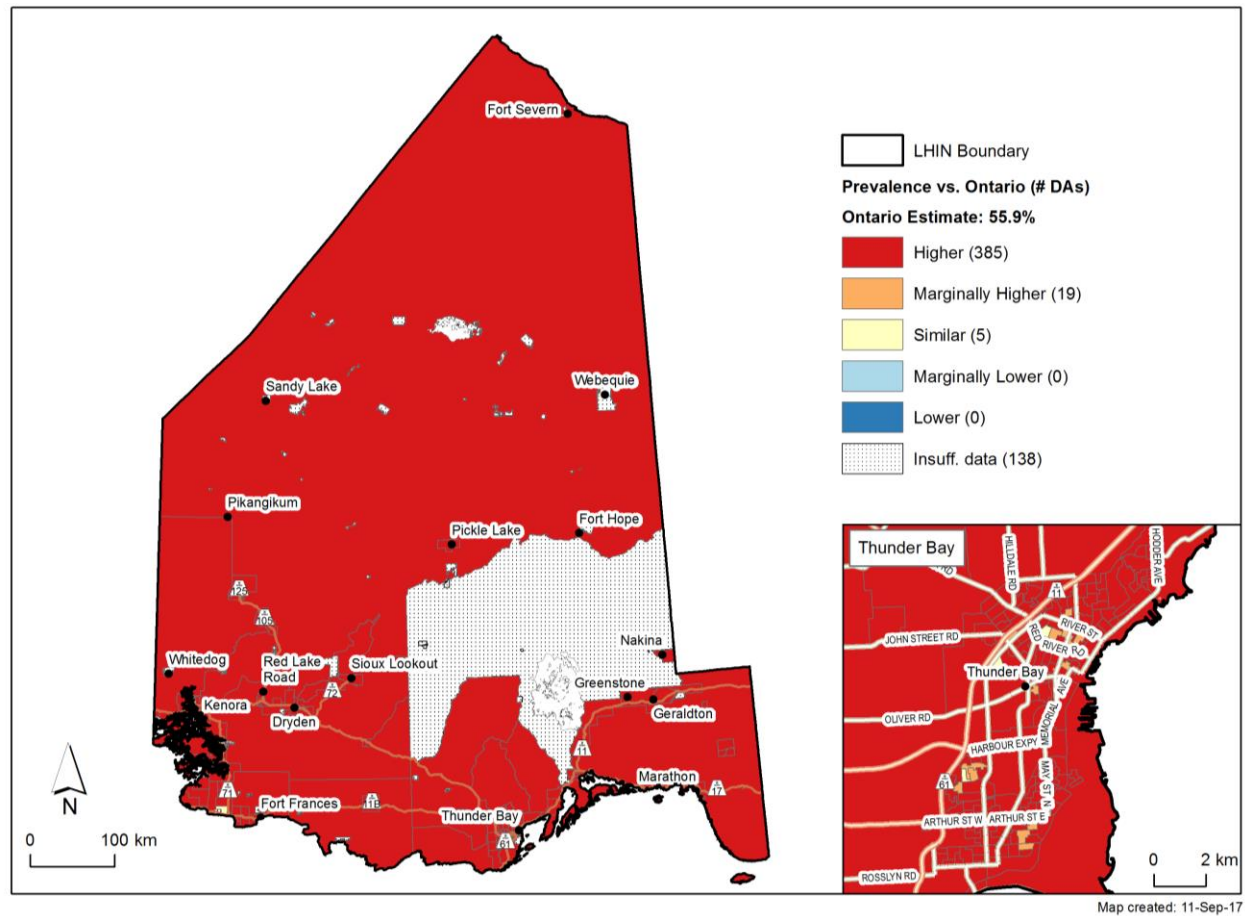
Prevalence by 2006 dissemination areas (DA) and 95% credibility intervals



Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario estimate.



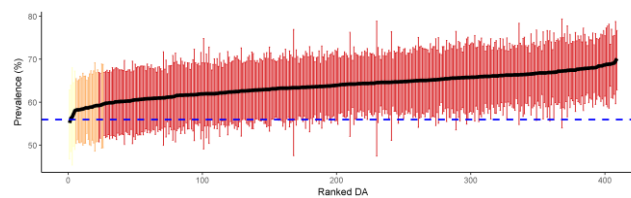
**Figure 14.8** Excess body weight (overweight/obese) among males (age 12 and older), 2000–2014, North West Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	63.9
Higher	64.2 (59.2, 70.2)
Marginally Higher	58.8 (58.2, 59.6)
Similar	56.7 (55.2, 58.0)
Marginally Lower	N/A
Lower	N/A

N/A = no estimates in the category

Prevalence by 2006 dissemination areas (DA) and 95% credibility intervals

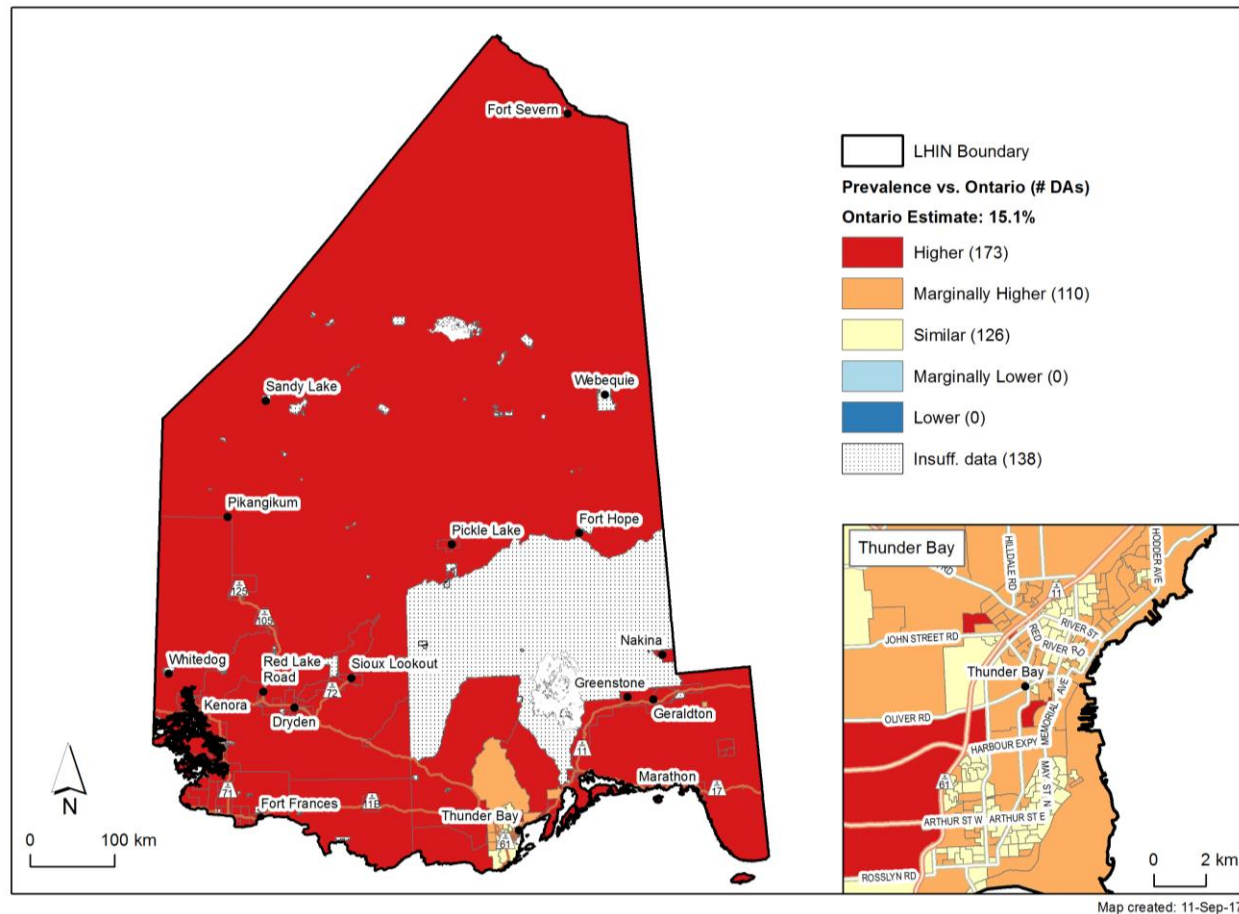


Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario estimate.





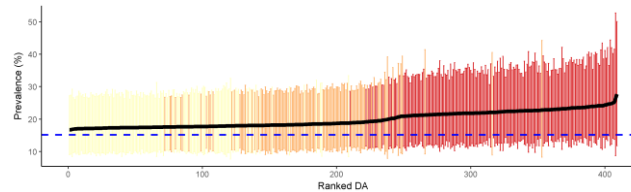
**Figure 14.9** Excess body weight (overweight/obese) among adolescent females (ages 12 to 18), 2000–2014, North West Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	19.8
Higher	22.3 (18.8, 27.7)
Marginally Higher	18.6 (17.6, 22.8)
Similar	17.6 (16.7, 18.8)
Marginally Lower	N/A
Lower	N/A

N/A = no estimates in the category

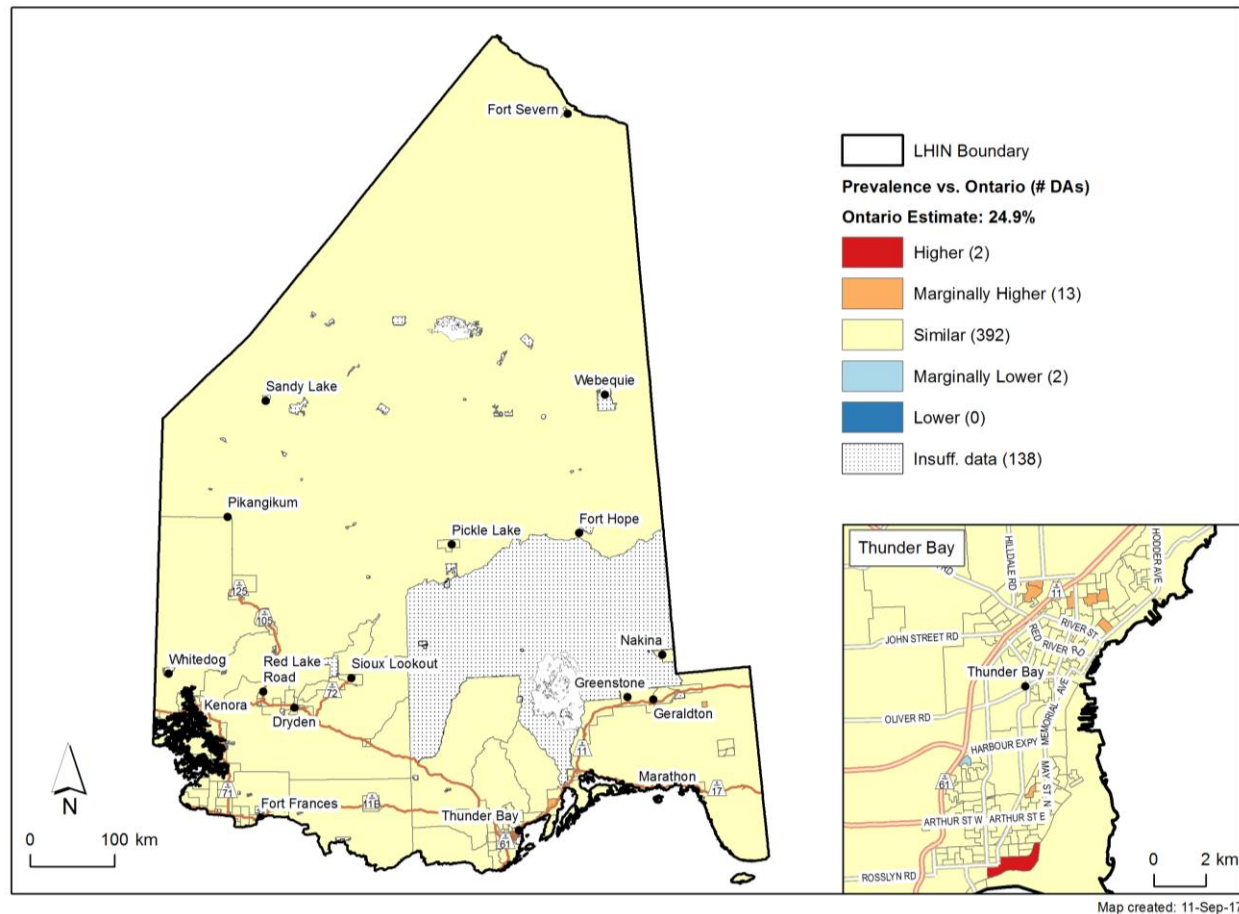
Prevalence by 2006 dissemination areas (DA) and 95% credibility intervals



Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario estimate.



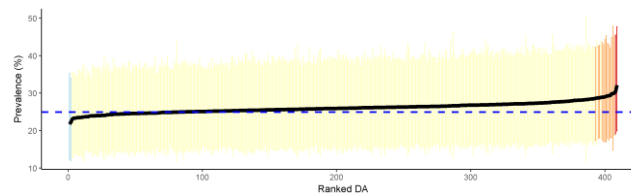
**Figure 14.10** Excess body weight (overweight/obese) among adolescent males (ages 12 to 18), 2000–2014, North West Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	26.0
Higher	31.3 (30.6, 32.1)
Marginally Higher	29.2 (28.7, 30.0)
Similar	25.9 (23.1, 28.9)
Marginally Lower	22.0 (21.7, 22.2)
Lower	N/A

N/A = no estimates in the category

Prevalence by 2006 dissemination areas (DA) and 95% credibility intervals



Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario estimate.



## Inadequate vegetable and fruit consumption

### People age 12 and older

Inadequate consumption of vegetables and fruits was common across Ontario, with approximately 63% of females and 77% of males reporting inadequate consumption.

#### [Higher prevalence than Ontario](#)

Across the North West LHIN, fewer areas with a higher prevalence of inadequate vegetable and fruit consumption than the Ontario average were found for females (n=221; Figure 14.11) compared to males (n=367; Figure 14.12). For females, higher prevalence areas occurred throughout the northern (e.g., Pikangikum and Fort Hope) and southeastern (e.g., Nakina, Greenstone, Geraldton and Marathon) parts of the LHIN, and in Thunder Bay. Higher prevalence areas for males were located also throughout the LHIN, except in central parts of Thunder Bay.

#### [Lower prevalence than Ontario](#)

Few areas with a lower prevalence of inadequate vegetable and fruit consumption than the Ontario average were identified for females (n=3; Figure 14.11). No areas with adequate consumption (lower prevalence) were identified for males (Figure 14.12).

### Adolescents

More than two-thirds of the adolescent Ontario population had inadequate vegetable and fruit consumption, at approximately 68% for females and 74% for males.

#### [Higher prevalence than Ontario](#)

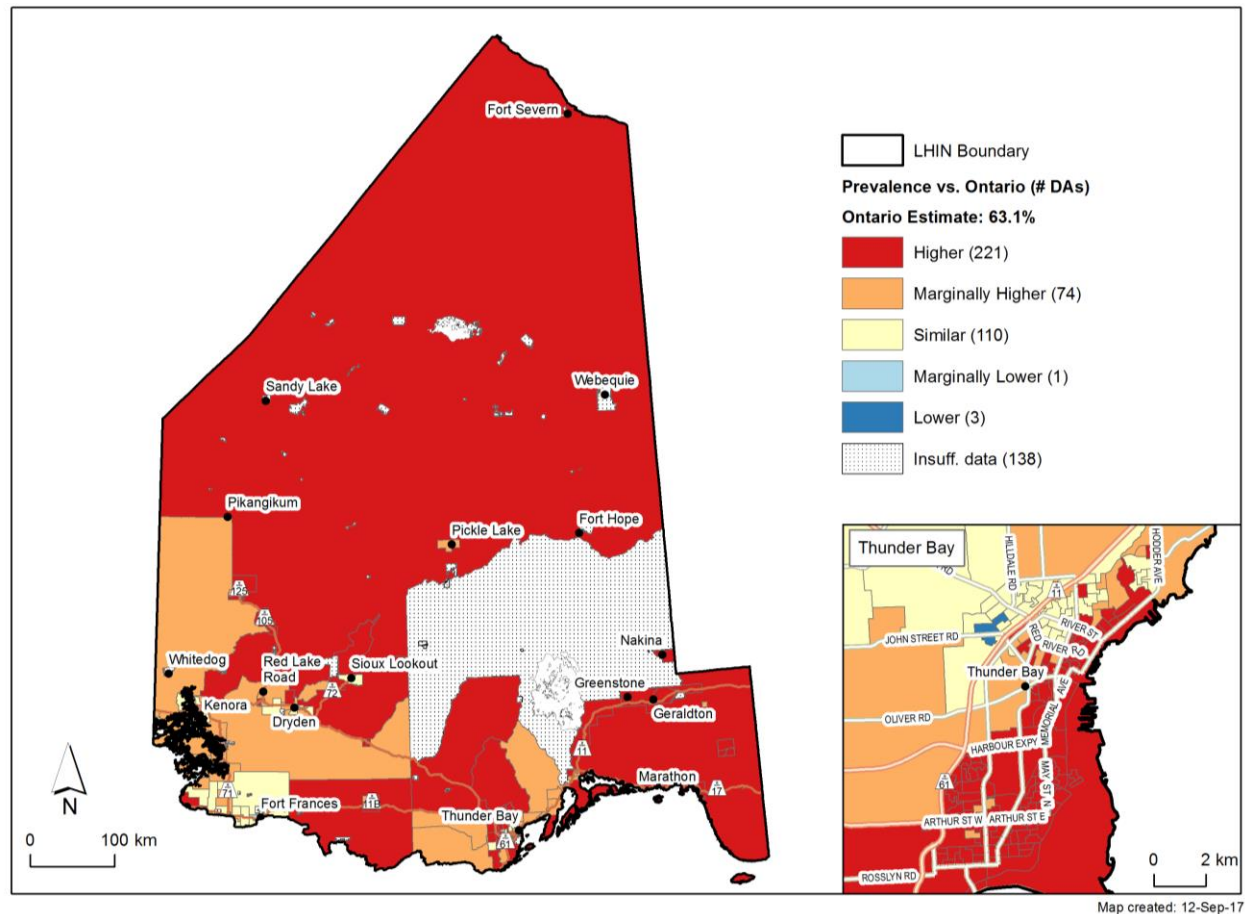
Across the LHIN, areas with a higher prevalence of inadequate vegetable and fruit consumption than the Ontario average were not common for adolescent females (n=7; Figure 14.13). These areas were located in the southeastern and southwestern parts of the LHIN. Higher prevalence areas were more common for adolescent males (n=19; Figure 14.14) compared to adolescent females and were also located in the southeastern and southwestern parts of the LHIN.

#### [Lower prevalence than Ontario](#)

Areas of adequate vegetable and fruit consumption for adolescents were not detected in the North West LHIN (Figure 14.13 and Figure 14.14).

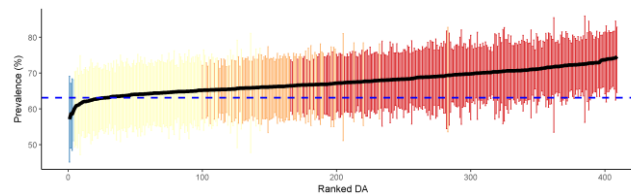


**Figure 14.11** Inadequate vegetable and fruit consumption among females (age 12 and older), 2000–2014, North West Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	67.6
Higher	69.9 (66.5, 74.7)
Marginally Higher	66.3 (65.2, 69.4)
Similar	64.0 (60.3, 66.0)
Marginally Lower	59.6 (59.6, 59.6)
Lower	58.1 (57.2, 58.6)

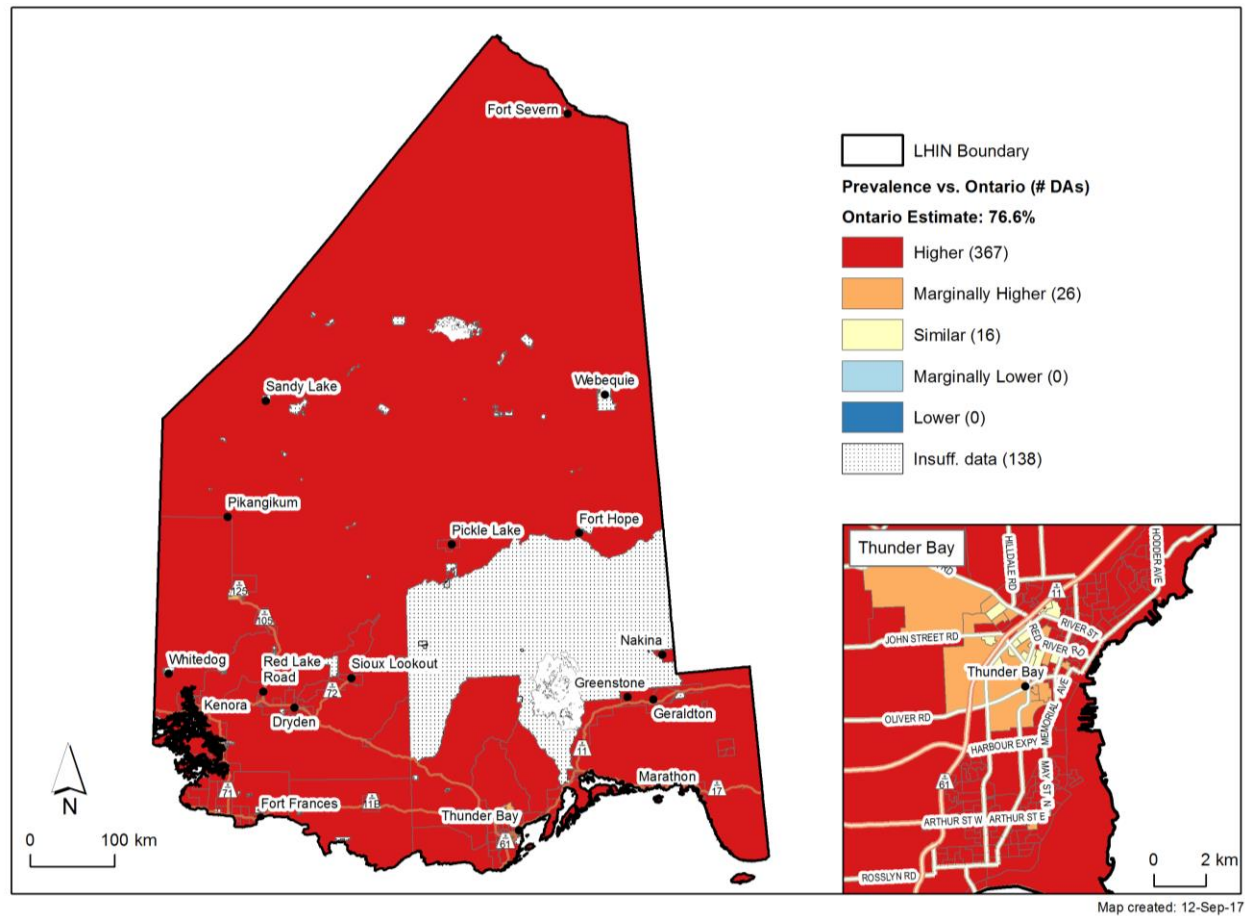
Prevalence by 2006 dissemination areas (DA) and 95% credibility intervals



Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario estimate.



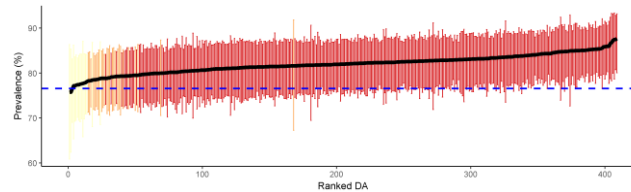
**Figure 14.12** Inadequate vegetable and fruit consumption among males (age 12 and older), 2000–2014, North West Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	82.0
Higher	82.4 (78.8, 87.7)
Marginally Higher	79.1 (78.3, 81.6)
Similar	77.4 (75.7, 78.8)
Marginally Lower	N/A
Lower	N/A

N/A = no estimates in the category

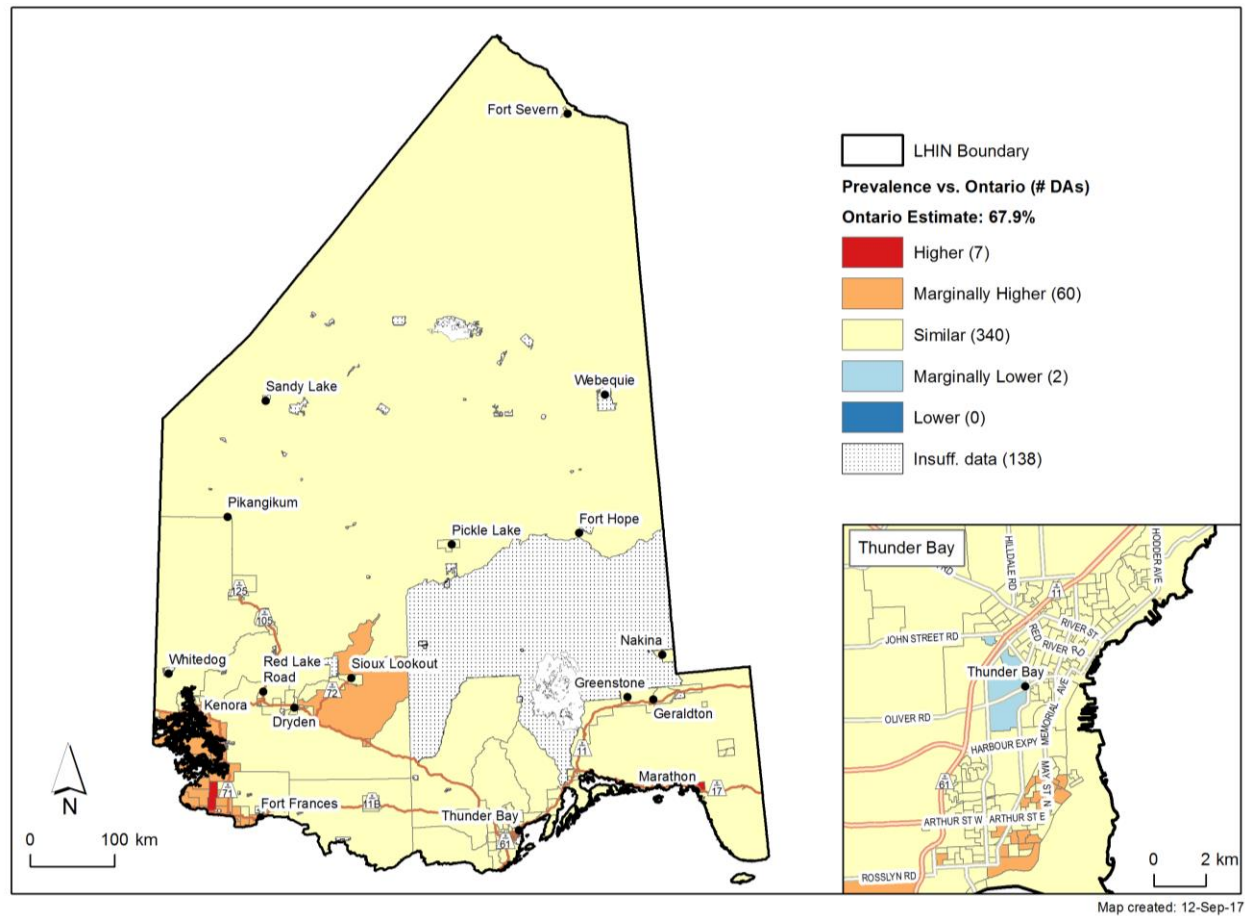
Prevalence by 2006 dissemination areas (DA) and 95% credibility intervals



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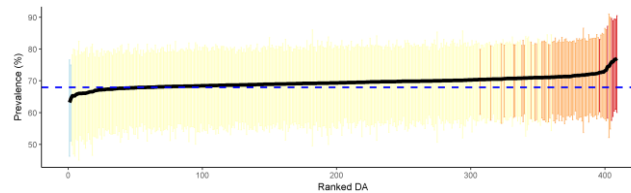
**Figure 14.13** Inadequate vegetable and fruit consumption among adolescent females (ages 12 to 18), 2000–2014, North West Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	69.5
Higher	75.7 (72.6, 77.1)
Marginally Higher	71.7 (70.4, 75.3)
Similar	69.0 (65.3, 71.2)
Marginally Lower	63.8 (63.2, 64.4)
Lower	N/A

N/A = no estimates in the category

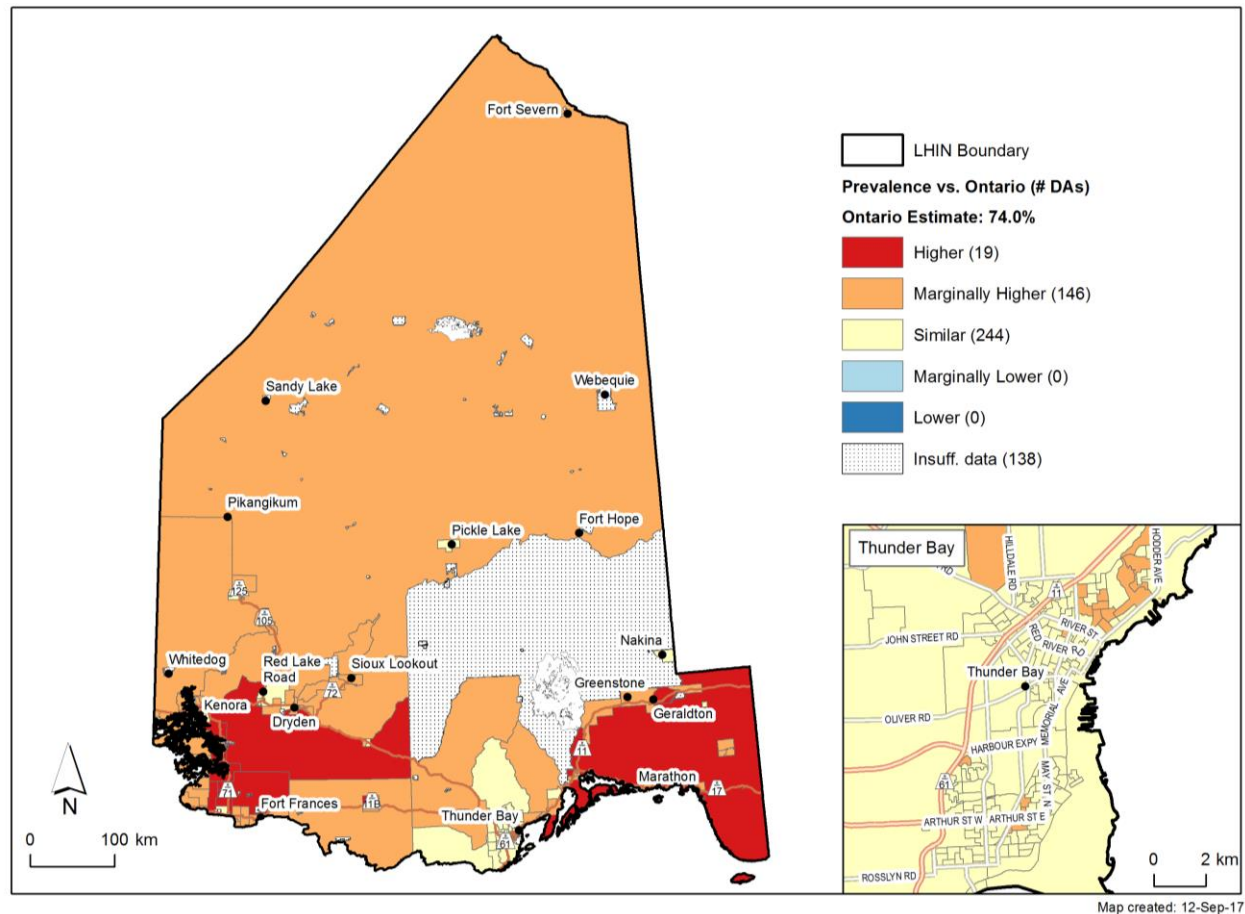
Prevalence by 2006 dissemination areas (DA) and 95% credibility intervals



Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario estimate.



**Figure 14.14** Inadequate vegetable and fruit consumption among adolescent males (ages 12 to 18), 2000–2014, North West Local Health Integration Network (LHIN) by 2006 dissemination area (DA)

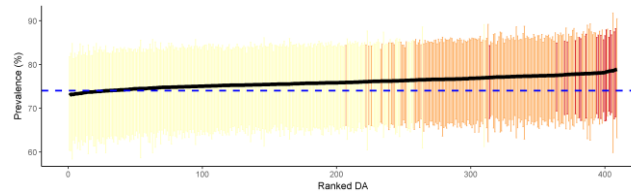


Map created: 12-Sep-17

Category	Mean prevalence % (range)
Overall	76.0
Higher	78.1 (77.1, 78.8)
Marginally Higher	77.1 (75.9, 78.9)
Similar	75.1 (72.9, 77.0)
Marginally Lower	N/A
Lower	N/A

N/A = no estimates in the category

Prevalence by 2006 dissemination areas (DA) and 95% credibility intervals



Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario estimate.



## Physical activity

Because physical activity reduces cancer risk, lower prevalence estimates of this risk factor are of interest. The colour scheme of the maps was inverted so that the “lower than Ontario” estimates are displayed in red.

### People age 12 and older

Most of the Ontario population was not physically active, with approximately one in five (23%) females and one in three (30%) males being physically active.

#### Lower prevalence than Ontario

Across the LHIN, areas with a lower prevalence of physical activity than the Ontario average for females (n=5; Figure 14.15) were located in some parts of Thunder Bay. No lower prevalence areas were detected for males in the North West LHIN.

#### Higher prevalence than Ontario

Areas with a higher prevalence of physical activity than the Ontario average for females (n=289; Figure 14.15) were located throughout the LHIN in areas near Pikangikum, Pickle Lake, Fort Hope, Kenora, Dryden, Sioux Lookout, Nakina, Geraldton and Marathon, and in Thunder Bay.

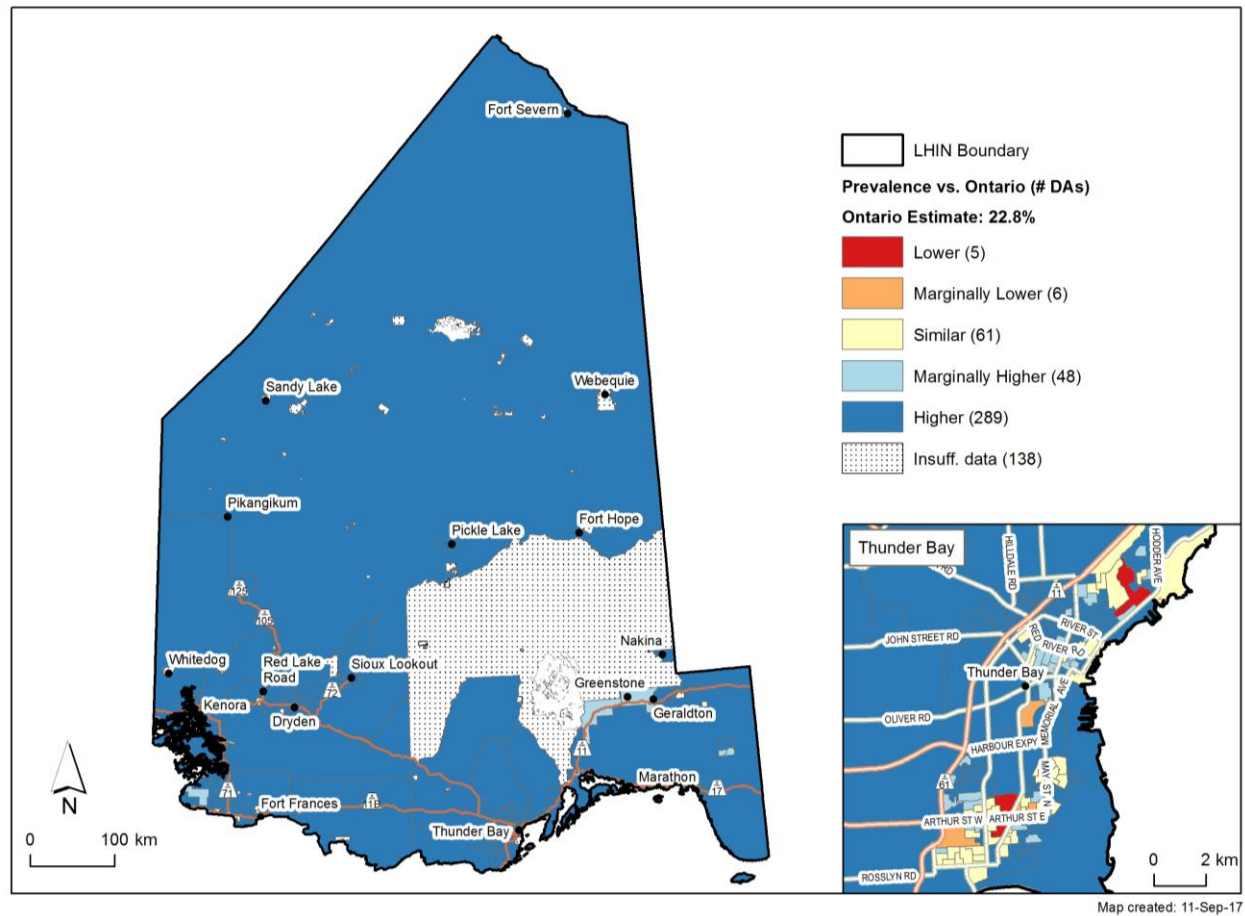
### Adolescents

Adolescents were more physically active than adults, with approximately 40% of adolescent females and 57% of adolescent males being active. There were no areas with a lower prevalence than the Ontario average for adolescents in the North West LHIN, which is why those maps are not shown.



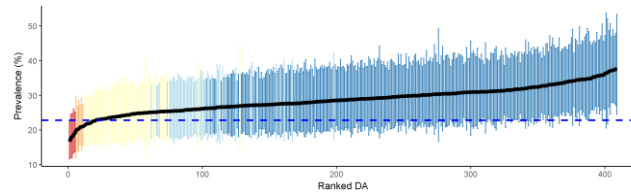


**Figure 14.15** Physical activity among females (age 12 and older), 2000–2014, North West Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	28.7
Lower	18.1 (16.7, 19.0)
Marginally Lower	20.6 (19.9, 21.0)
Similar	24.1 (21.3, 27.0)
Marginally Higher	26.2 (25.1, 28.5)
Higher	30.4 (26.3, 37.7)

Prevalence by 2006 dissemination areas (DA) and 95% credibility intervals



Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario estimate.



## Sedentary behaviour

### People age 12 and older

Approximately half of the Ontario population reported sedentary behaviour during leisure time (females, 49%; males, 56%).

#### Higher prevalence than Ontario

There were 27 areas with a higher prevalence of sedentary behaviour than the Ontario average for females (Figure 14.16). These areas were located in Thunder Bay. For males (Figure 14.17), there were 15 higher prevalence areas located in Thunder Bay.

#### Lower prevalence than Ontario

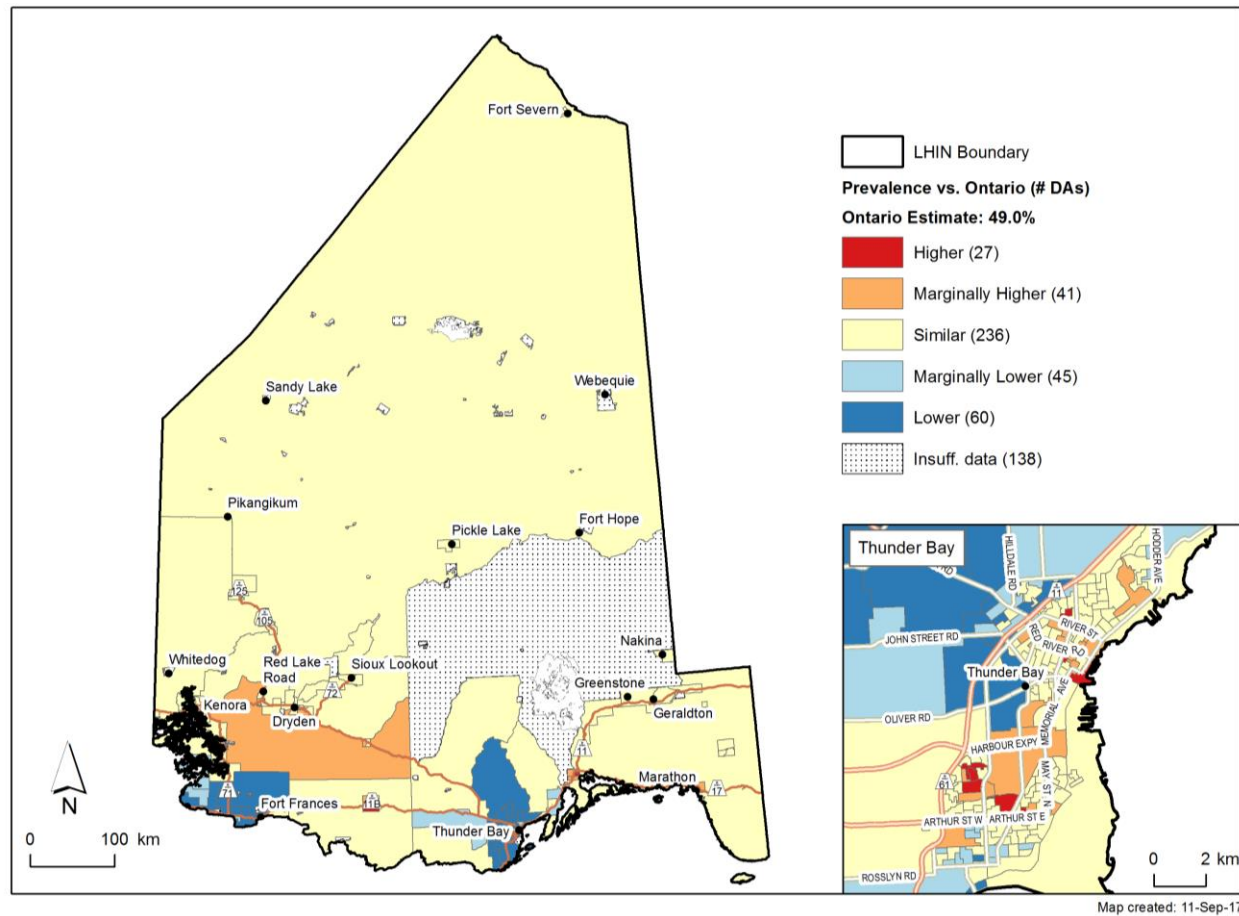
Areas with a lower prevalence of sedentary behaviour than the Ontario average for females were located in the southern part of the LHIN (n=60; Figure 14.16). These areas were mainly clustered around Fort Frances and in and around Thunder Bay. For males, many lower prevalence areas (n=32, Figure 14.17) were clustered in the western part of the LHIN, around Red Lake Road, Dryden, Sioux Lookout, and around Thunder Bay.

### Adolescents

More than half of the Ontario adolescent population reported sedentary behaviour during leisure time, at approximately 55% for females and 60% for males. In the North West LHIN, no areas with a higher prevalence than Ontario were detected for adolescents, which is why those maps are not shown.

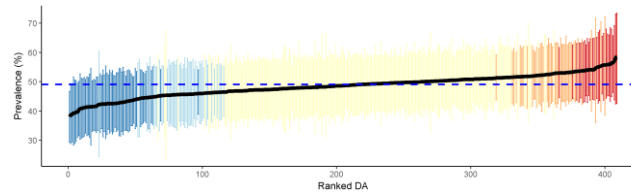


**Figure 14.16** Sedentary behaviour among females (age 12 and older), 2000–2014, North West Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	48.5
Higher	55.1 (53.0, 58.6)
Marginally Higher	52.8 (51.3, 55.7)
Similar	49.1 (45.1, 52.8)
Marginally Lower	45.6 (42.3, 46.5)
Lower	42.4 (38.1, 46.0)

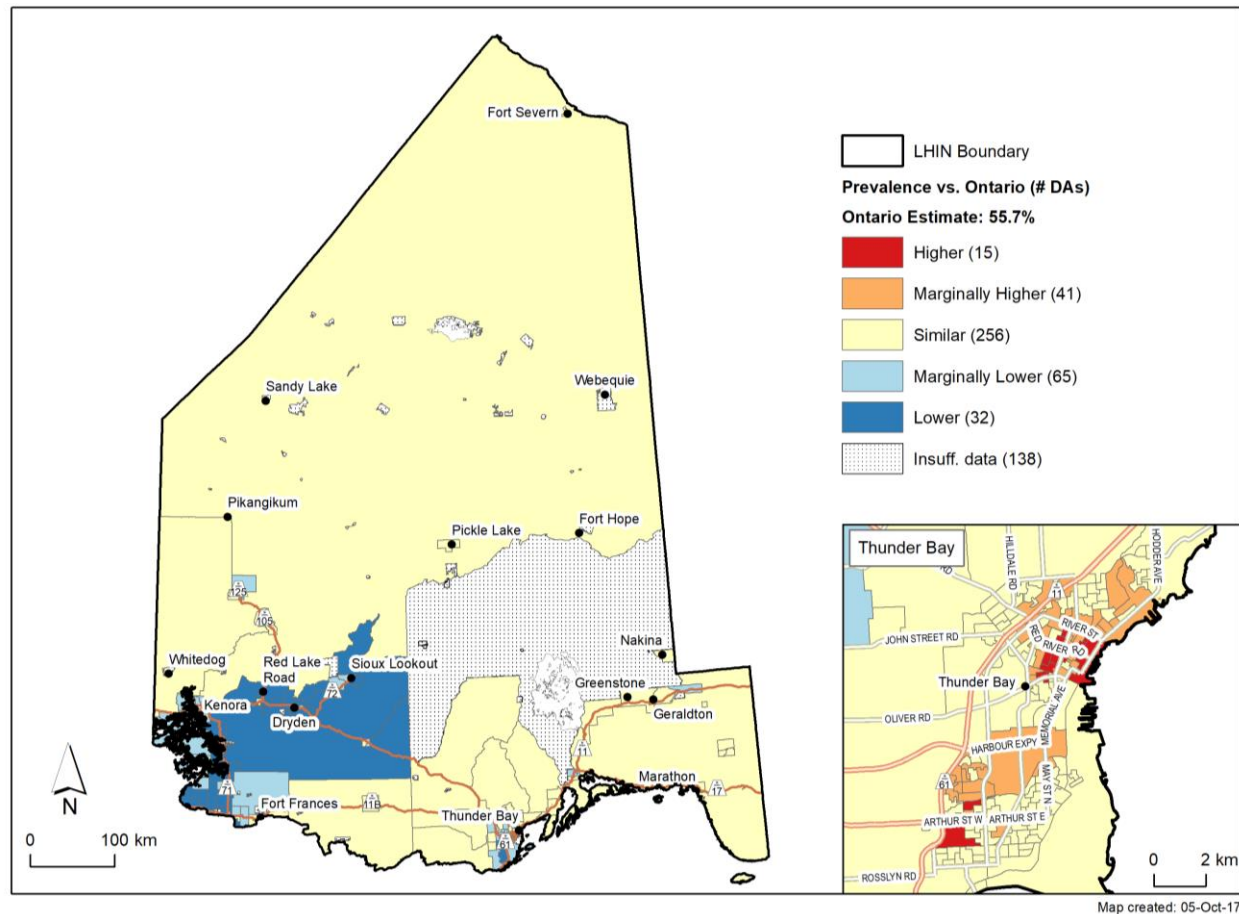
Prevalence by 2006 dissemination areas (DA) and 95% credibility intervals



Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario estimate.

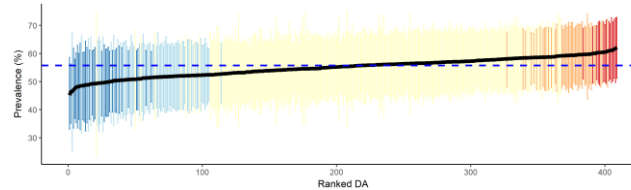


**Figure 14.17** Sedentary behaviour among males (age 12 and older), 2000–2014, North West Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	55.0
Higher	60.8 (59.7, 62.1)
Marginally Higher	59.3 (58.1, 60.8)
Similar	55.6 (49.3, 59.2)
Marginally Lower	51.3 (46.5, 52.7)
Lower	49.3 (45.2, 51.5)

Prevalence by 2006 dissemination areas (DA) and 95% credibility intervals



Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario estimate.



## Smoking—current status

### People age 12 and older

Current tobacco smoking was reported by 17% of Ontario females and 24% of males.

#### [Higher prevalence than Ontario](#)

Across the LHIN, most areas with a higher prevalence of current smoking compared to the Ontario average for females (n=272; Figure 14.18) were located across the LHIN, except in areas near Fort Frances and in parts of Thunder Bay. For males, higher prevalence areas (n=117; Figure 14.19) were located in the northern and southeastern parts of the LHIN, near Pikangikum, Pickle Lake, Fort Hope, Kenora, Red Lake Road, Nakina, Geraldton and Marathon. For males, additional higher prevalence areas were located in and around Thunder Bay.

#### [Lower prevalence than Ontario](#)

For females, few lower prevalence areas were detected (n=6; Figure 14.18). These were located near Fort Frances. Areas with a lower prevalence of current smoking for males (n=15; Figure 14.19) were also located near Fort Frances and in parts of Thunder Bay.

### Adolescents

Approximately 8% of adolescent females and adolescent males reported smoking tobacco.

#### [Higher prevalence than Ontario](#)

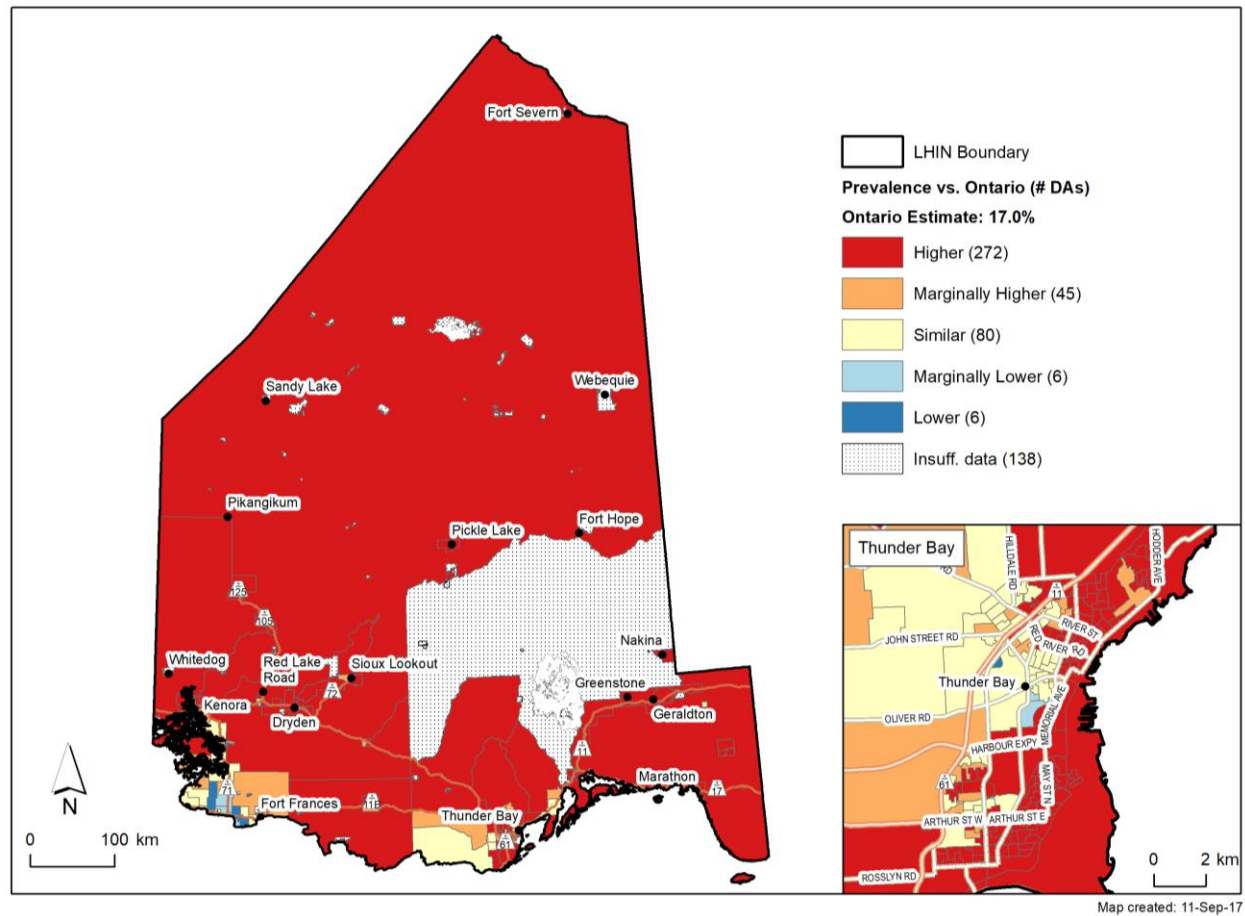
Areas with a higher prevalence of current smoking than Ontario were slightly more common for adolescent females (n=307; Figure 14.20) than adolescent males (n=262; Figure 14.21). For adolescent females, higher prevalence areas occurred throughout the LHIN, including areas near Pikangikum, Fort Hope, Kenora, Red Lake Road, Sioux Lookout, Dryden and Fort Frances. Higher prevalence areas were also located in the southeastern part of the LHIN, in Thunder Bay and around Nakina, Greenstone, Geraldton and Marathon. For adolescent males, areas with a higher prevalence of current smoking also occurred around Pikangikum, Fort Hope, Kenora, Dryden, Fort Frances, Geraldton and Marathon, as well as areas in and around Thunder Bay, but were less common near Thunder Bay and Red Lake Road.

#### [Lower prevalence than Ontario](#)

Across the LHIN, lower prevalence areas were uncommon for adolescent females (n=1; Figure 14.20) and adolescent males (n=2; Figure 14.21).

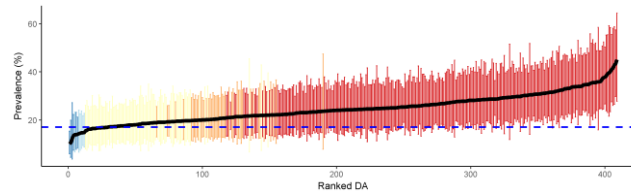


**Figure 14.18** Current smoking among females (age 12 and older), 2000–2014, North West Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	24.6
Higher	27.6 (20.9, 45.1)
Marginally Higher	20.7 (18.9, 23.7)
Similar	18.3 (15.5, 22.1)
Marginally Lower	14.5 (13.9, 14.9)
Lower	12.5 (10.1, 14.1)

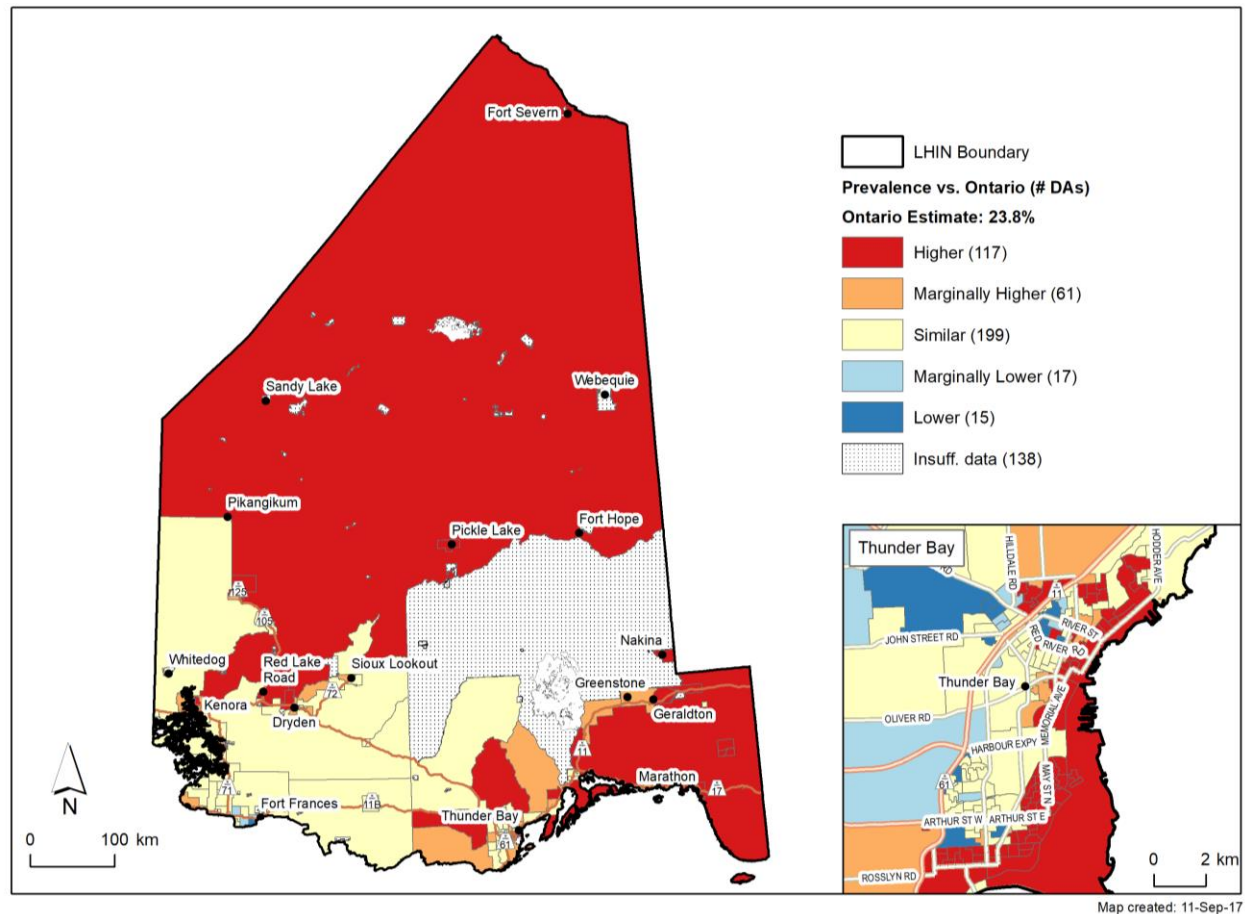
Prevalence by 2006 dissemination areas (DA) and 95% credibility intervals



Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario estimate.

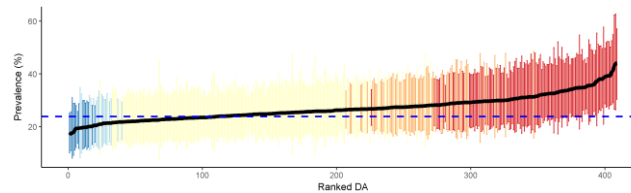


**Figure 14.19** Current smoking among males (age 12 and older), 2000–2014, North West Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	27.0
Higher	32.7 (26.7, 44.1)
Marginally Higher	28.0 (26.4, 31.3)
Similar	24.4 (21.0, 28.1)
Marginally Lower	20.8 (19.5, 21.8)
Lower	19.1 (16.8, 20.5)

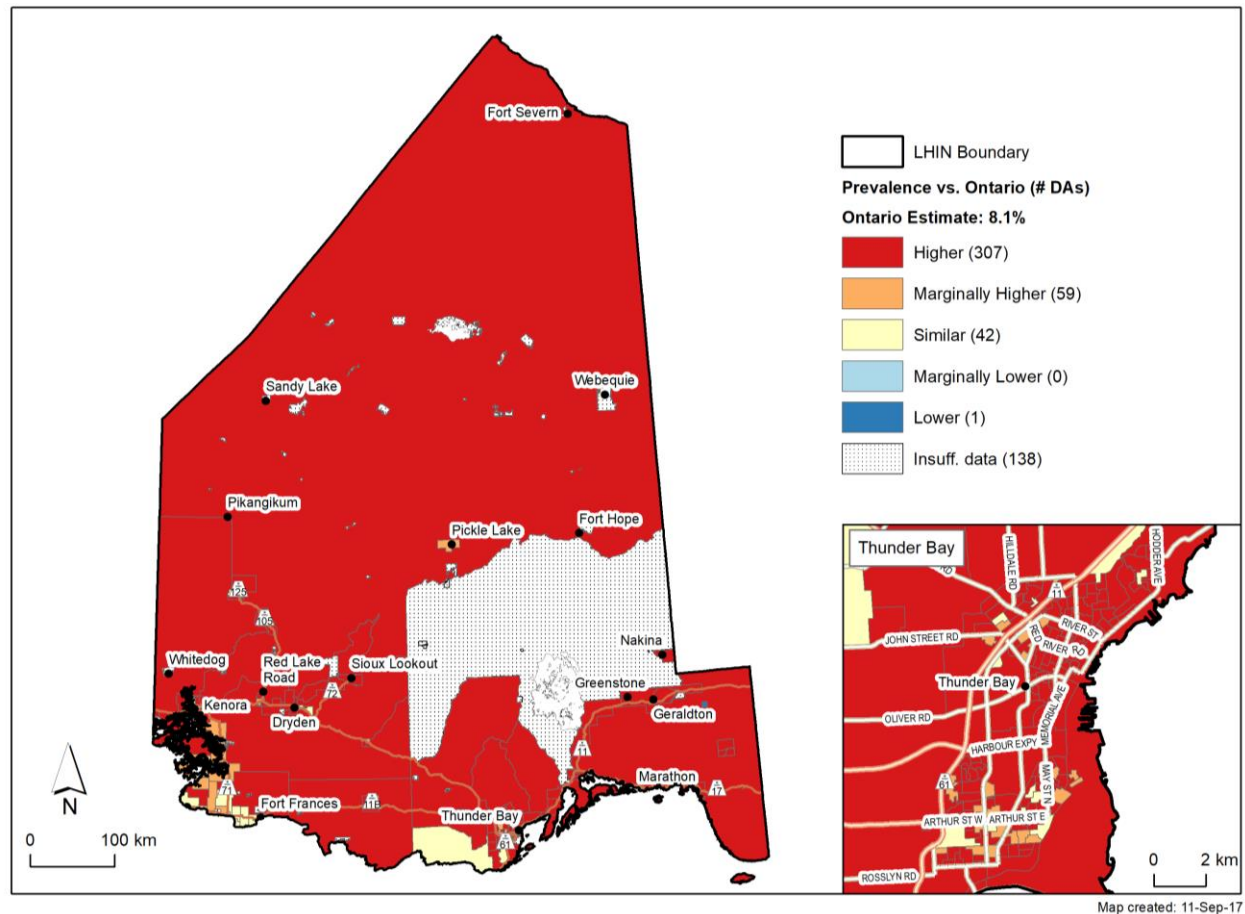
Prevalence by 2006 dissemination areas (DA) and 95% credibility intervals



Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario estimate.



**Figure 14.20** Current smoking among adolescent females (ages 12 to 18), 2000–2014, North West Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	13.4
Higher	14.3 (11.1, 22.9)
Marginally Higher	11.5 (10.3, 14.0)
Similar	9.4 (7.2, 11.3)
Marginally Lower	N/A
Lower	4.3 (4.3, 4.3)

N/A = no estimates in the category

Prevalence by 2006 dissemination areas (DA) and 95% credibility intervals

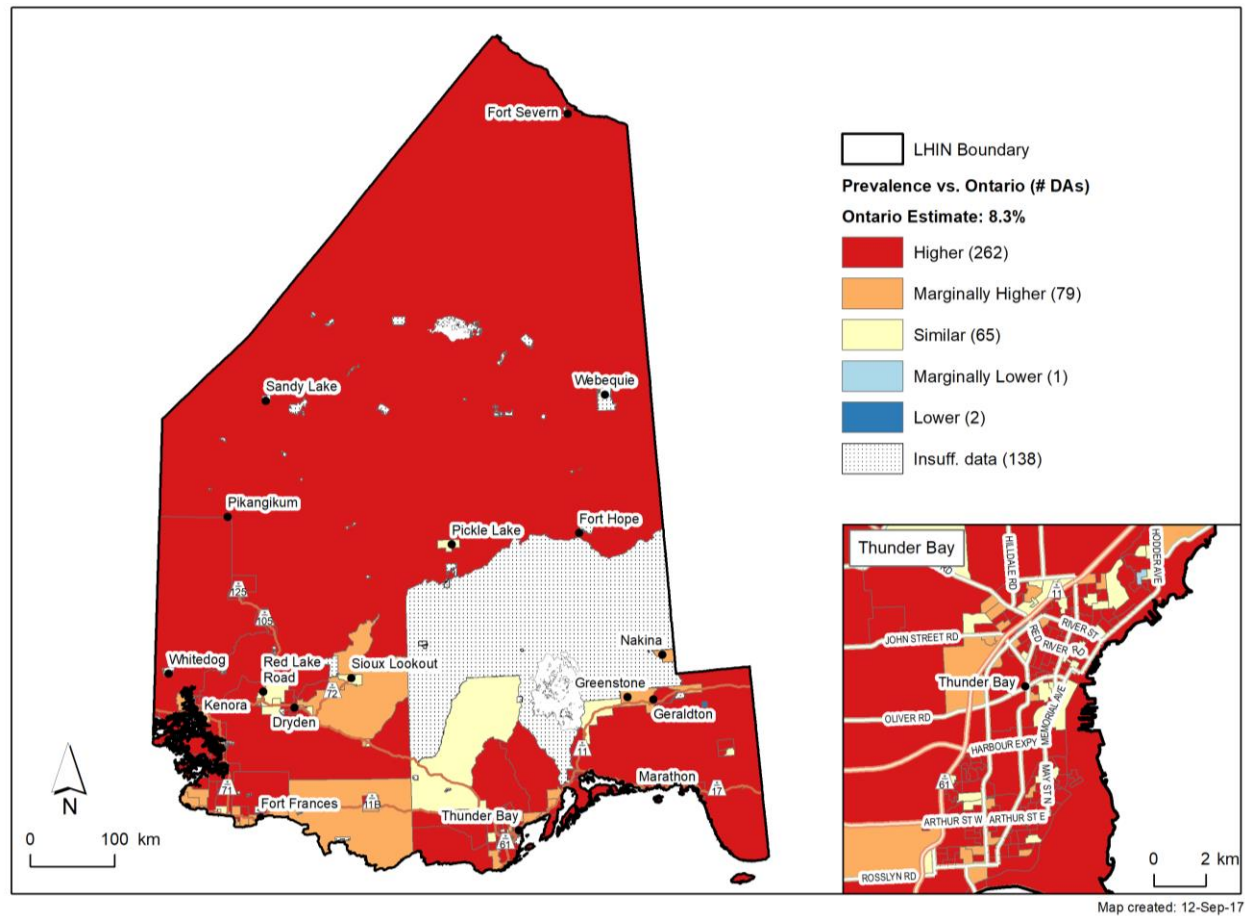


Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario estimate.



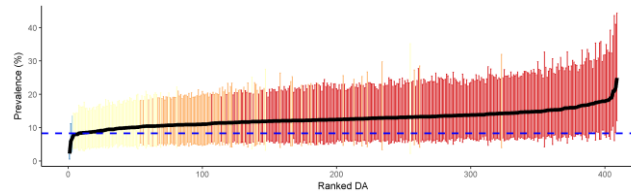


**Figure 14.21** Current smoking among adolescent males (ages 12 to 18), 2000–2014, North West Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	12.7
Higher	13.9 (11.3, 25.0)
Marginally Higher	11.4 (10.3, 14.3)
Similar	9.6 (7.8, 13.1)
Marginally Lower	6.9 (6.9, 6.9)
Lower	4.1 (2.2, 6.0)

Prevalence by 2006 dissemination areas (DA) and 95% credibility intervals



Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario estimate.



## Smoking—ever-smoked status

### People age 12 and older

Approximately one in two Ontario females and three in five Ontario males reported having ever-smoked.

#### Higher prevalence than Ontario

Across the North West LHIN, most areas had a higher prevalence of ever-smokers than the Ontario average, for females (n=394; Figure 14.22) and males (n=387; Figure 14.23). These areas were located throughout the LHIN. However, areas of higher prevalence than the Ontario average were slightly more common in Thunder Bay for females compared to males.

#### Lower prevalence than Ontario

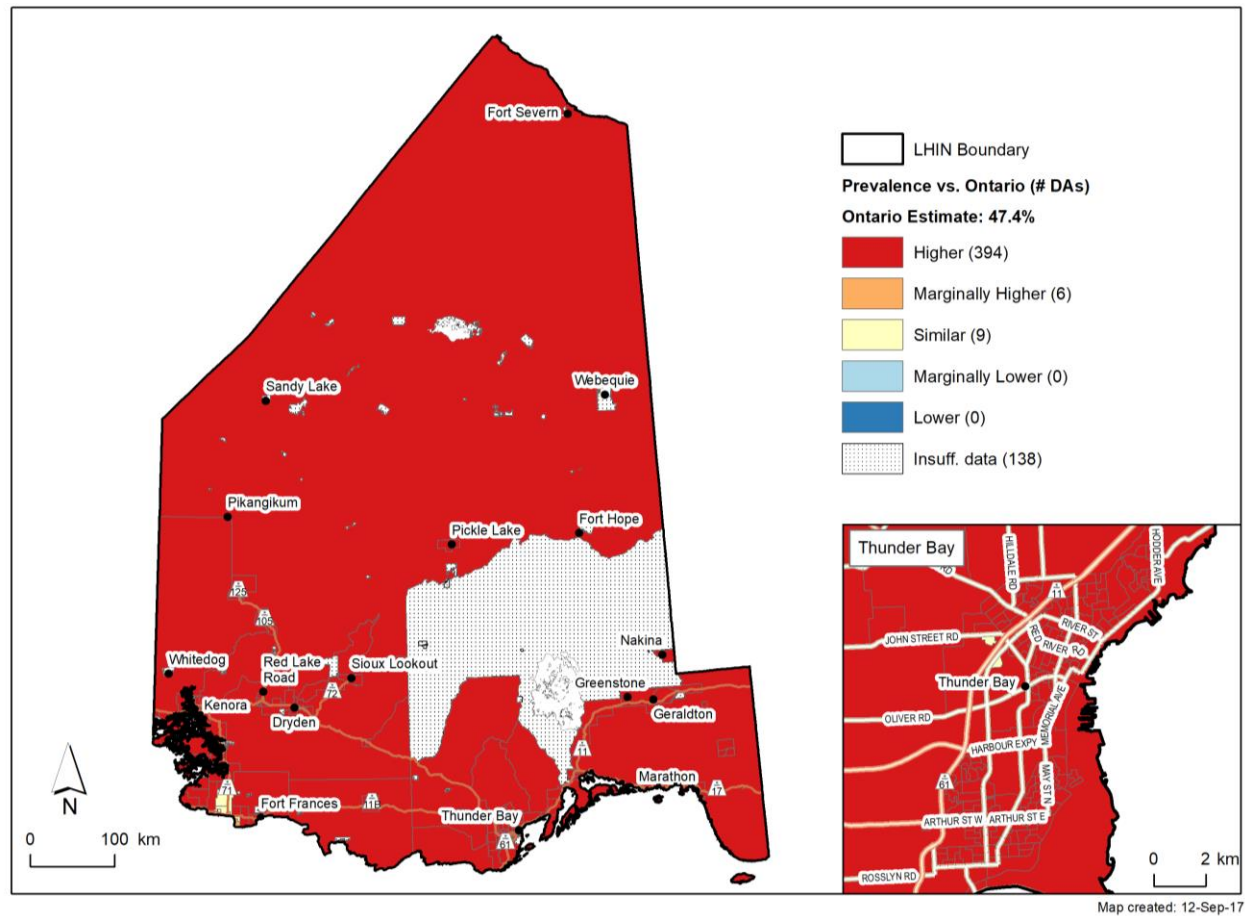
Areas with a lower prevalence of ever-smoking status than the Ontario average were not detected in the North West LHIN for females or males (Figure 14.22; Figure 14.23, respectively).

### Adolescents

The area-based prevalence of ever-smoked status was not estimated for adolescent populations.



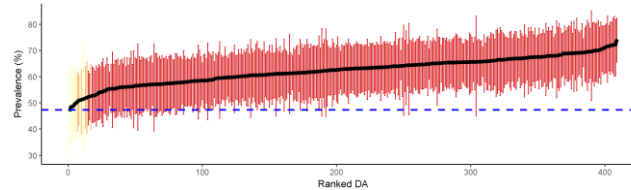
**Figure 14.22** Ever-smoked status among females (age 12 and older), 2000–2014, North West Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	62.3
Higher	62.8 (52.3, 74.4)
Marginally Higher	51.5 (50.5, 52.5)
Similar	49.6 (46.8, 51.7)
Marginally Lower	N/A
Lower	N/A

N/A = no estimates in the category

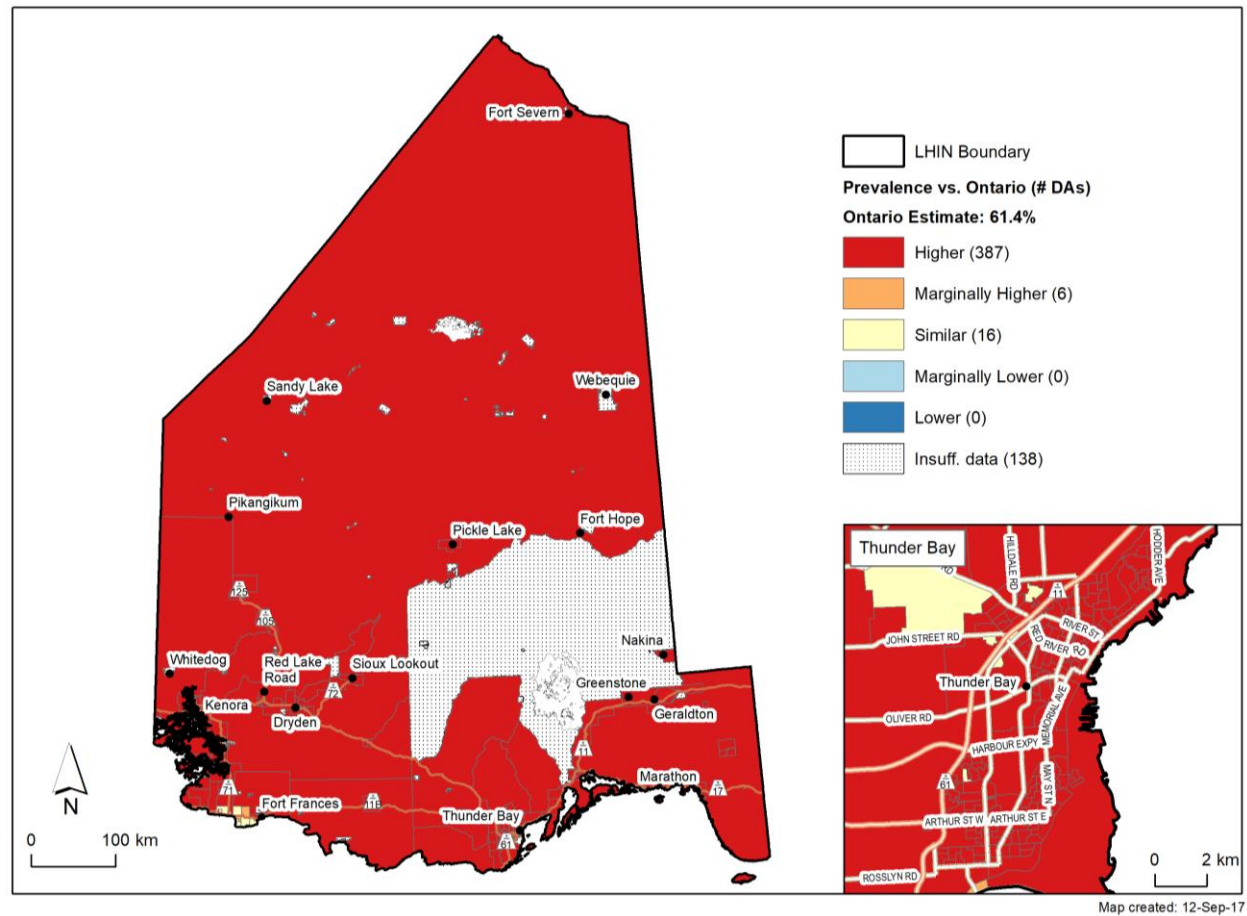
Prevalence by 2006 dissemination areas (DA) and 95% credibility intervals



Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario estimate.



**Figure 14.23** Ever-smoked status among males (age 12 and older), 2000–2014, North West Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	70.1
Higher	70.5 (64.7, 78.6)
Marginally Higher	64.5 (63.6, 65.7)
Similar	62.2 (59.0, 63.8)
Marginally Lower	N/A
Lower	N/A

N/A = no estimates in the category

Prevalence by 2006 dissemination areas (DA) and 95% credibility intervals



Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario estimate.

