



LHIN 1

# Erie St. Clair

# 1. Erie St. Clair LHIN

## Key Findings

### Top three priority risk factor population estimates, by sex (see Table 1.1 below):

#### Females

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

#### Males

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

### Risk factor summary

#### Alcohol—current consumption

##### *Priority areas:*

- Females: areas towards the northern and southern tip of the LHIN
- Males: areas towards the southwest tip of the LHIN
- Adolescent females: areas towards the northern tip of the LHIN
- Adolescent males: areas in the northern end of the LHIN and dispersed throughout the southern half of the LHIN

#### Alcohol—consumption exceeding cancer prevention recommendations

##### *Priority areas:*

- Females: areas in Sarnia
- Males: many areas across the LHIN

#### Excess body weight

##### *Priority areas:*

- Females: most areas throughout the LHIN
- Males: most areas throughout the LHIN
- Adolescent females: areas near Wallaceburg, Chatham, Tilbury, Merlin and Bothwell



### Inadequate vegetable and fruit consumption

#### *Priority areas:*

- Females: areas throughout the central and southern part of the LHIN, near Sarnia, Wallaceburg, Bothwell, Chatham, Tilbury, Leamington, Windsor, LaSalle and Amherstburg
- Males: areas throughout most of the LHIN, with the exception of the southwestern boundary
- Adolescent females: areas throughout the central part of the LHIN, near Wallaceburg, Chatham, Tilbury, Merlin and throughout parts of Sarnia and Windsor
- Adolescent males: many areas throughout the LHIN

### Physical activity

#### *Priority areas:*

- Females: areas throughout Windsor and Chatham, and near Leamington and Wallaceburg
- Males: areas throughout Windsor and Chatham, and many areas surrounding Wallaceburg

### Sedentary behaviour

#### *Priority areas:*

- Females: areas through Sarnia and Windsor, and many areas in the central part of the LHIN surrounding Chatham
- Males: very few areas in Chatham and Sarnia

### Smoking—current status

#### *Priority areas:*

- Females: many areas throughout Chatham, Sarnia and Windsor, and near Corunna, Wallaceburg, Tilbury, Merlin and Blenheim
- Males: many areas throughout Chatham, Sarnia and Windsor, and near Wallaceburg, Blenheim and Leamington
- Adolescent females: many areas throughout the central parts of the LHIN, and many areas in and around Sarnia and Chatham
- Adolescent males: areas dispersed throughout the central and northern parts of the LHIN, and areas in and around Chatham and Sarnia

### Smoking—ever-smoked status

#### *Priority areas:*

- Females: many areas in the northern end of the LHIN around Sarnia and Forest, and many areas around Chatham and Blenheim, Belle River, Kingsville and throughout Windsor
- Males: many areas throughout the central and northern parts of the LHIN, as well as in Chatham, Sarnia and some areas throughout Windsor



## 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 Erie St. Clair LHIN include:

- excess body weight (overweight/obese) among adolescent males;
- physical activity among adolescent females and adolescent males; and
- sedentary behaviour among adolescent females and adolescent males.

## Notes

Risk factor prevalence could not be estimated for several areas in the Erie St. Clair LHIN (e.g., suppressed census populations or institutionalized populations), which are shown as “insufficient data” on the maps. These areas include Aamjiwnaang First Nation, Walpole Island (west of Wallaceburg), Moraviantown (south of Bothwell), and Kettle and Stony Point First Nations. Additionally, areas with unavailable population data are shown as “insufficient data.” See [Appendix C](#) for a complete list of areas 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 1.1 (page 30) presents the estimated priority populations for each risk factor by sex and age group in the Erie St. Clair 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 priority population estimates.





**Table 1.1** Estimated priority populations among higher prevalence\*\* dissemination areas compared to Ontario by risk factor, sex and age group, Erie St. Clair Local Health Integration Network (LHIN), using 2006 census populations

Risk factor	Female priority population**†	% of female population in the LHIN† (n=274,030)	Male priority population**†	% of male population in the LHIN† (n=260,070)	Adolescent female priority population**‡	% of adolescent female population in the LHIN‡ (n=29,610)	Adolescent male priority population**‡	% of adolescent male population in the LHIN‡ (n=30,780)
Alcohol: current consumption	73,660	27%	50,220	19%	2,380	8%	1,530	5%
Alcohol: consumption exceeding cancer prevention recommendations	1,100	0%	13,190	5%	NM	—	NM	—
Excess body weight	77,520	28%	110,470	42%	720	2%	NE	—
Inadequate vegetable and fruit consumption	129,680	47%	138,880	53%	5,130	17%	11,270	37%
Physical activity**	10,290	4%	4,900	2%	NE	—	NE	—
Sedentary behaviour	43,200	16%	1,320	1%	NE	—	NE	—
Smoking: current status	30,900	11%	23,680	9%	990	3%	400	2%
Smoking: ever-smoked status	81,510	30%	68,930	27%	NM	—	NM	—

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

\* 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](#)

There were more areas that had a higher prevalence of current alcohol consumption than the Ontario average among females (n=366; Figure 1.1), compared to males (n=215; Figure 1.2). For females, higher prevalence areas were located northeast of Sarnia and in the northern part of the LHIN around Brights Grove. Other higher prevalence areas included east of Sarnia, the central part of the LHIN surrounding Chatham, Blenheim and Merlin, and in the southwest part of the LHIN near LaSalle, Amherstburg, Essex and Kingsville. For males, higher prevalence areas were located mostly in the central and southwestern parts of the LHIN west of Chatham, and surrounding Belle River, Essex, Amherstburg and Kingsville.

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

For females, areas with a lower prevalence of current alcohol consumption (n=87; Figure 1.1) were primarily located throughout Windsor and near Wallaceburg. For males, lower prevalence areas (n=114; Figure 1.2) were located throughout Windsor and dispersed throughout the northern half of the LHIN.

### Adolescents

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

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

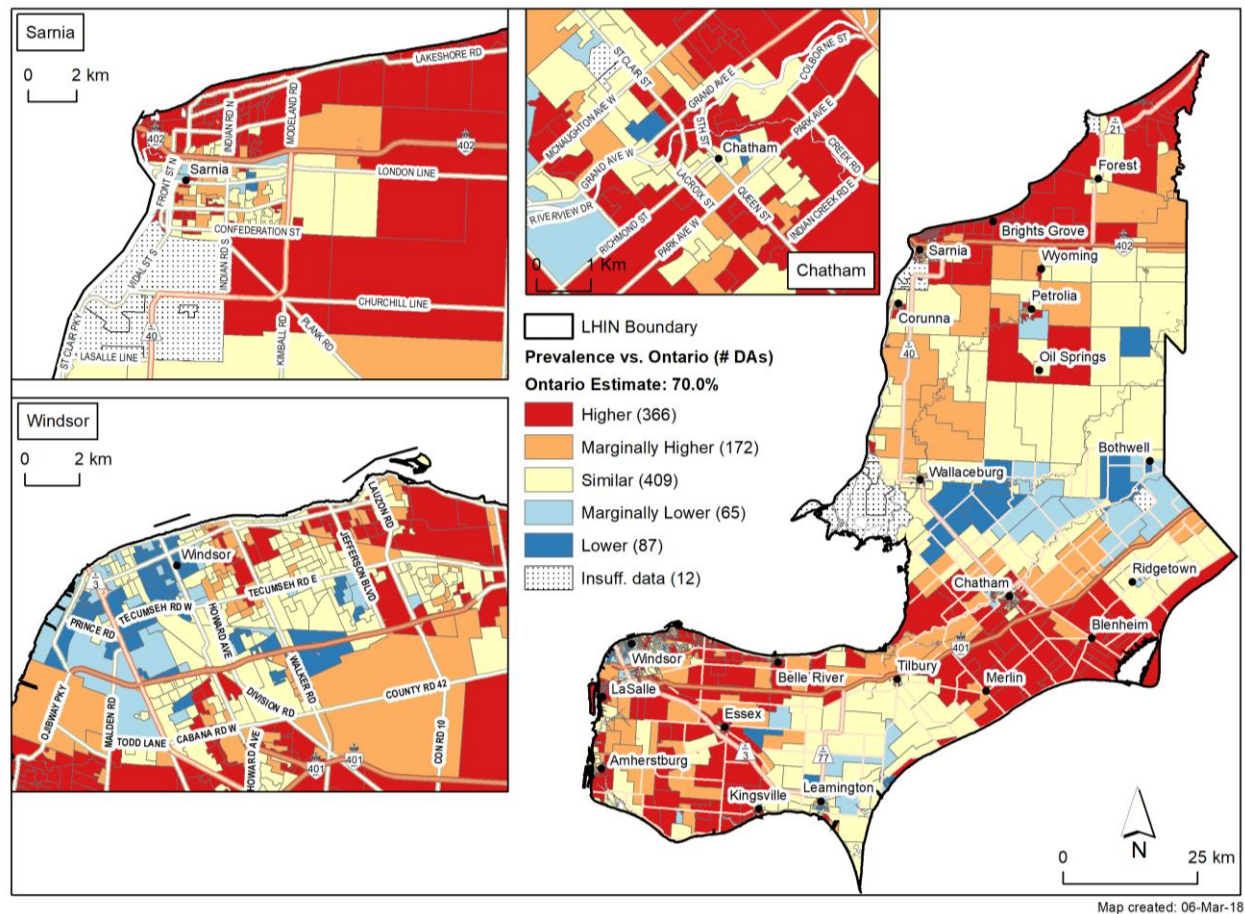
Areas with a higher prevalence of current alcohol consumption than the Ontario average were more common among adolescent females (n=202; Figure 1.3), compared to adolescent males (n=129; Figure 1.4) and their geographic patterns were different. For adolescent females, higher prevalence areas were dispersed throughout the middle and northern parts of the LHIN, particularly throughout Sarnia and in many areas surrounding Chatham. For adolescent males, higher prevalence areas were located northeast of Chatham and dispersed throughout the southern half of the LHIN, with additional areas throughout Sarnia and around Forest.

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

For adolescent females (n=342; Figure 1.3), areas with a lower prevalence of current alcohol consumption than the Ontario average were mostly located in the southwest part of the LHIN, including many parts of Windsor. Among adolescent males (n=236; Figure 1.4), areas of lower prevalence were scattered throughout the LHIN and located throughout Sarnia, Chatham and Windsor.

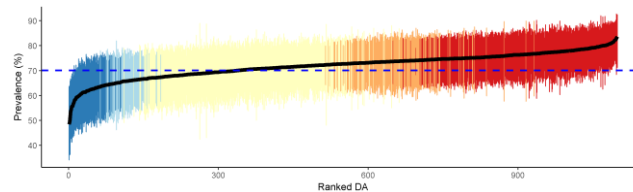


**Figure 1.1** Current alcohol consumption among females (age 12 and older), 2000–2014, Erie St. Clair Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



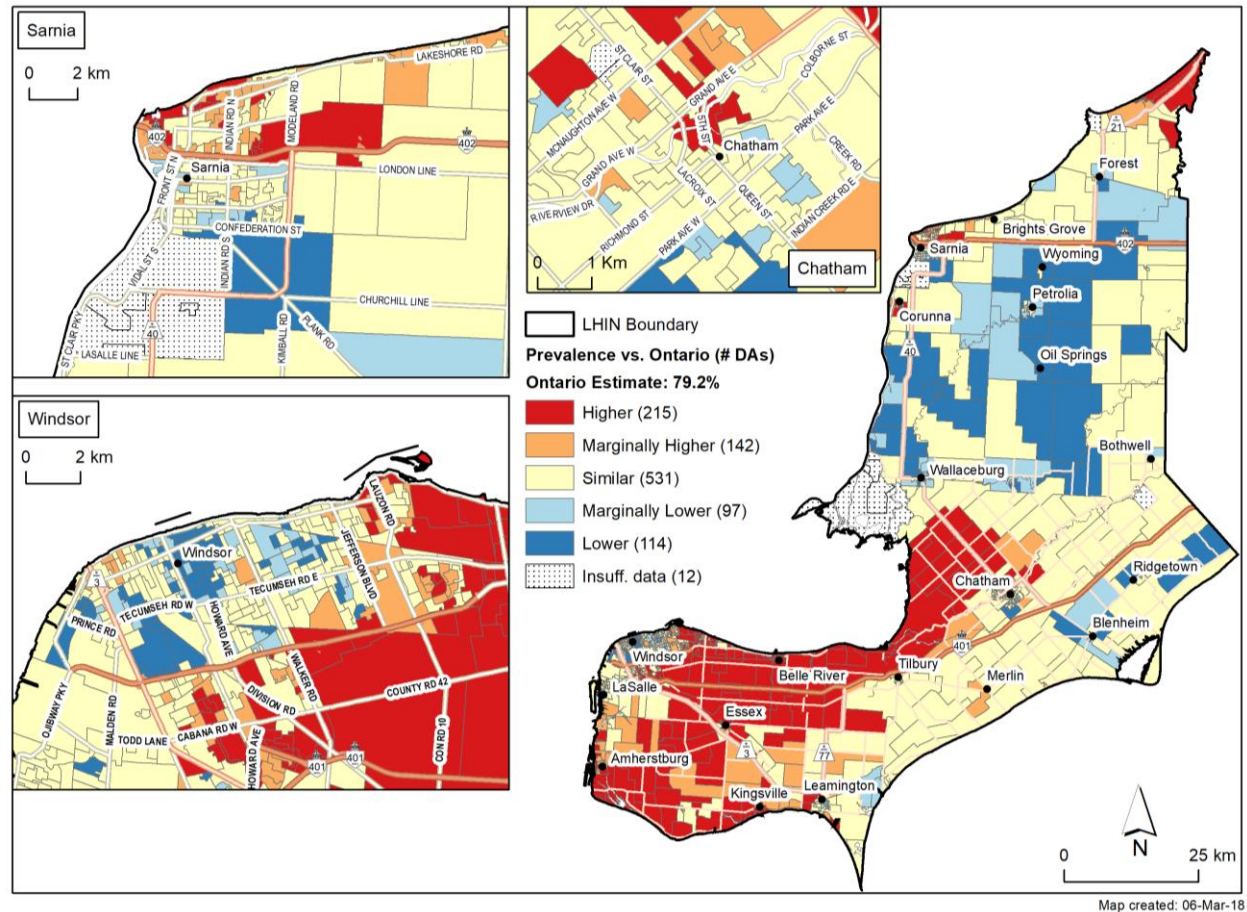
Category	Mean prevalence % (range)
Overall	72.0
Higher	76.9 (73.7, 83.6)
Marginally Higher	73.7 (72.3, 76.8)
Similar	70.2 (65.7, 73.8)
Marginally Lower	65.8 (63.5, 67.4)
Lower	61.4 (48.4, 65.5)

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



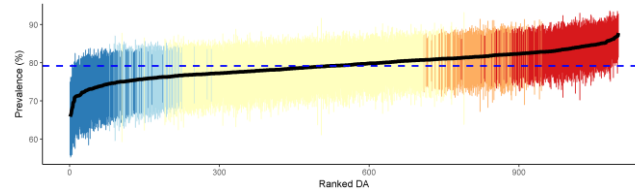
Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario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

**Figure 1.2** Current alcohol consumption among males (age 12 and older), 2000–2014, Erie St. Clair Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	79.3
Higher	83.8 (81.3, 87.8)
Marginally Higher	81.6 (80.8, 82.9)
Similar	78.8 (75.1, 81.4)
Marginally Lower	75.9 (74.5, 77.2)
Lower	73.3 (65.9, 76.3)

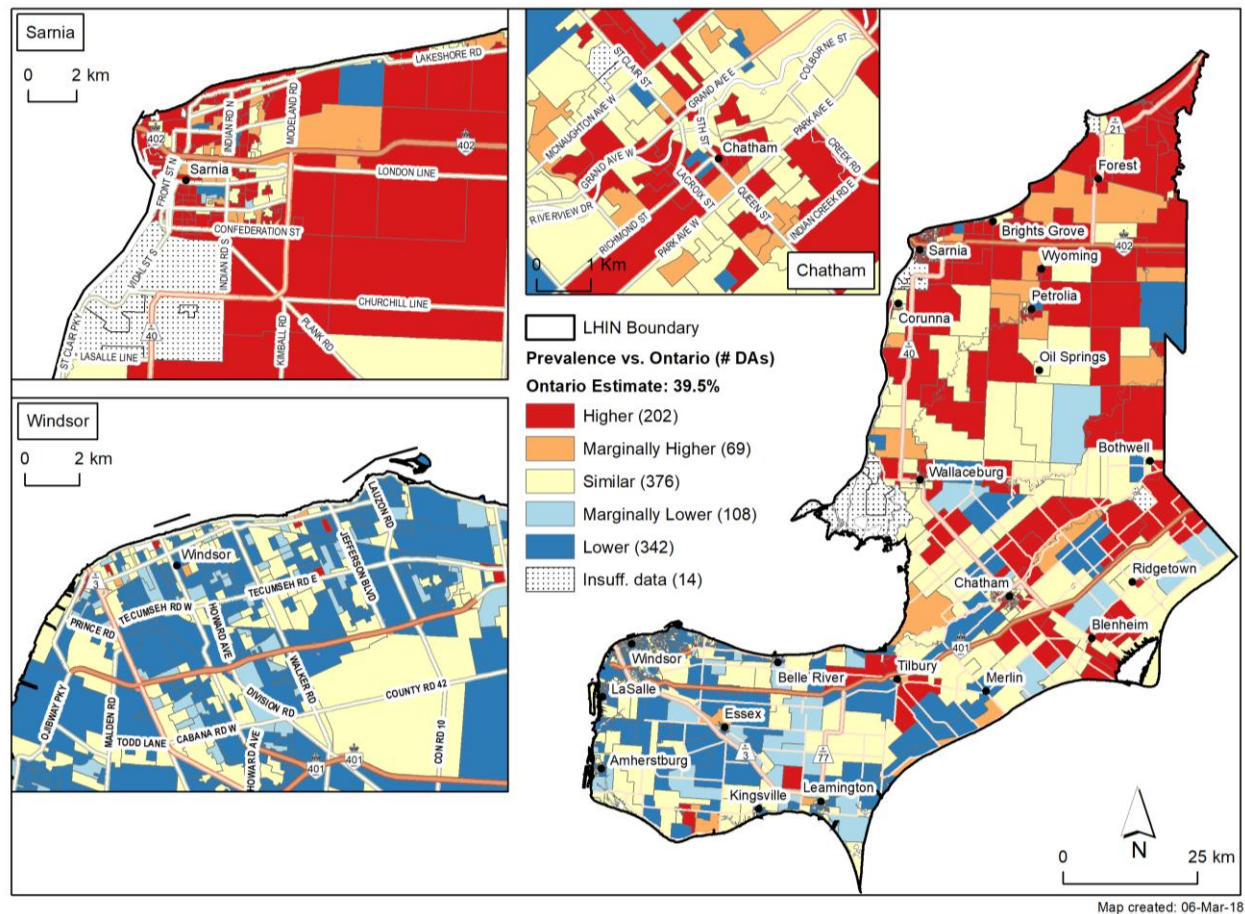
Prevalence by 2006 dissemination area (DA) and 95% credibility intervals



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.

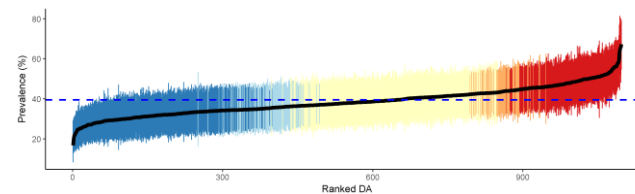


**Figure 1.3** Current alcohol consumption among adolescent females (ages 12 to 18), 2000–2014, Erie St. Clair Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	38.6
Higher	49.1 (44.0, 67.3)
Marginally Higher	43.8 (42.3, 46.1)
Similar	39.5 (35.5, 43.3)
Marginally Lower	35.4 (33.5, 37.1)
Lower	31.2 (16.8, 35.6)

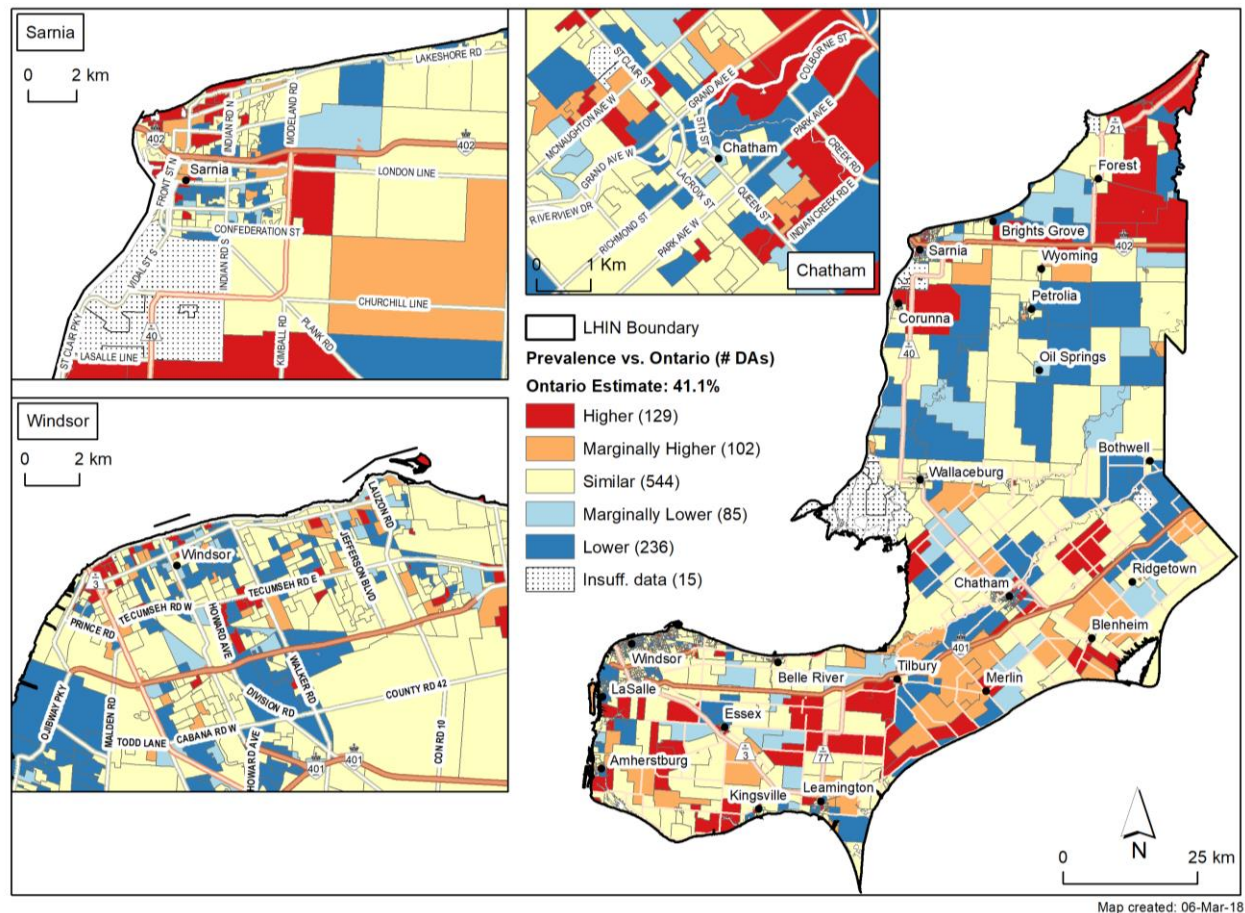
Prevalence by 2006 dissemination area (DA) and 95% credibility intervals



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.

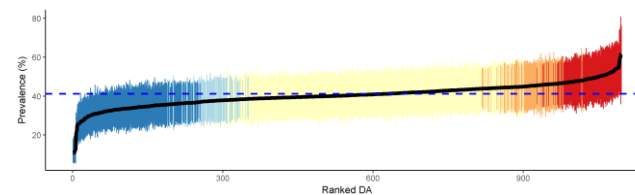


**Figure 1.4** Current alcohol consumption among adolescent males (ages 12 to 18), 2000–2014, Erie St. Clair Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	40.4
Higher	49.7 (45.6, 61.4)
Marginally Higher	45.4 (43.9, 48.1)
Similar	41.1 (37.4, 45.7)
Marginally Lower	37.5 (35.8, 38.6)
Lower	32.8 (10.8, 37.0)

Prevalence by 2006 dissemination area (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: 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

For females (n=45; Figure 1.5) in the Erie St. Clair LHIN, there were very few areas with a higher prevalence of alcohol consumption in excess of the recommended limits for cancer prevention than the Ontario average. Most of these areas were located throughout Sarnia. For males, many areas throughout the LHIN had a higher prevalence (n=462; Figure 1.6), including most of Sarnia and Chatham; Windsor had very few higher prevalence areas.

#### Lower prevalence than Ontario

For females (n=126; Figure 1.5), many areas with a lower prevalence of alcohol consumption in excess of the recommended limits for cancer prevention were located in and around Windsor, and south of Chatham. There were very few lower prevalence areas for males (n=5; Figure 1.6).

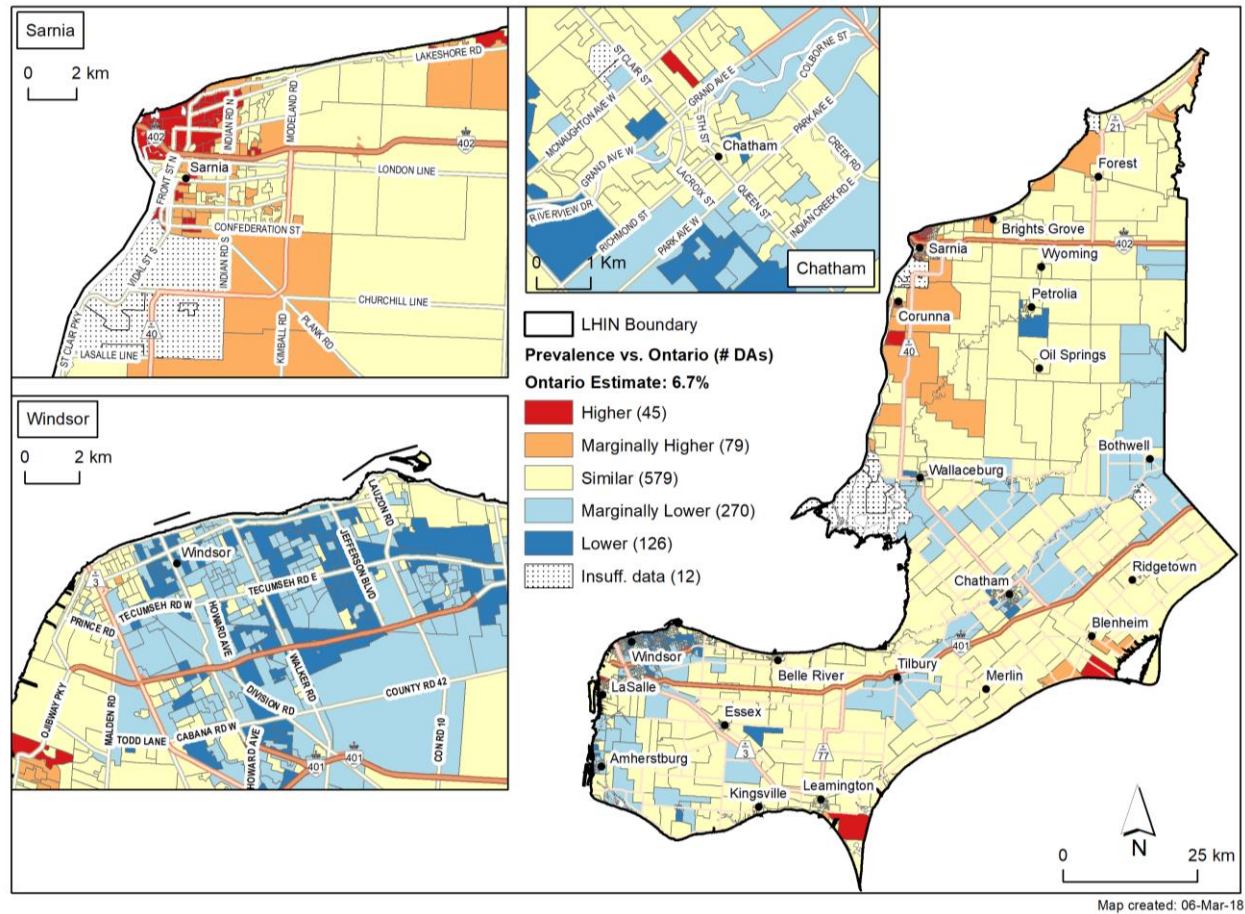
### Adolescents

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



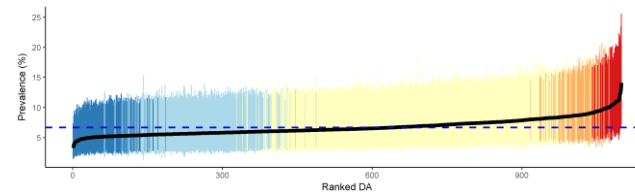


**Figure 1.5** Alcohol consumption exceeding cancer prevention recommendations among females (age 12 and older), 2000–2014, Erie St. Clair Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	6.7
Higher	10.4 (9.1, 14.1)
Marginally Higher	8.8 (8.0, 10.0)
Similar	7.0 (5.9, 9.1)
Marginally Lower	5.7 (5.2, 6.2)
Lower	5.1 (3.3, 5.5)

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

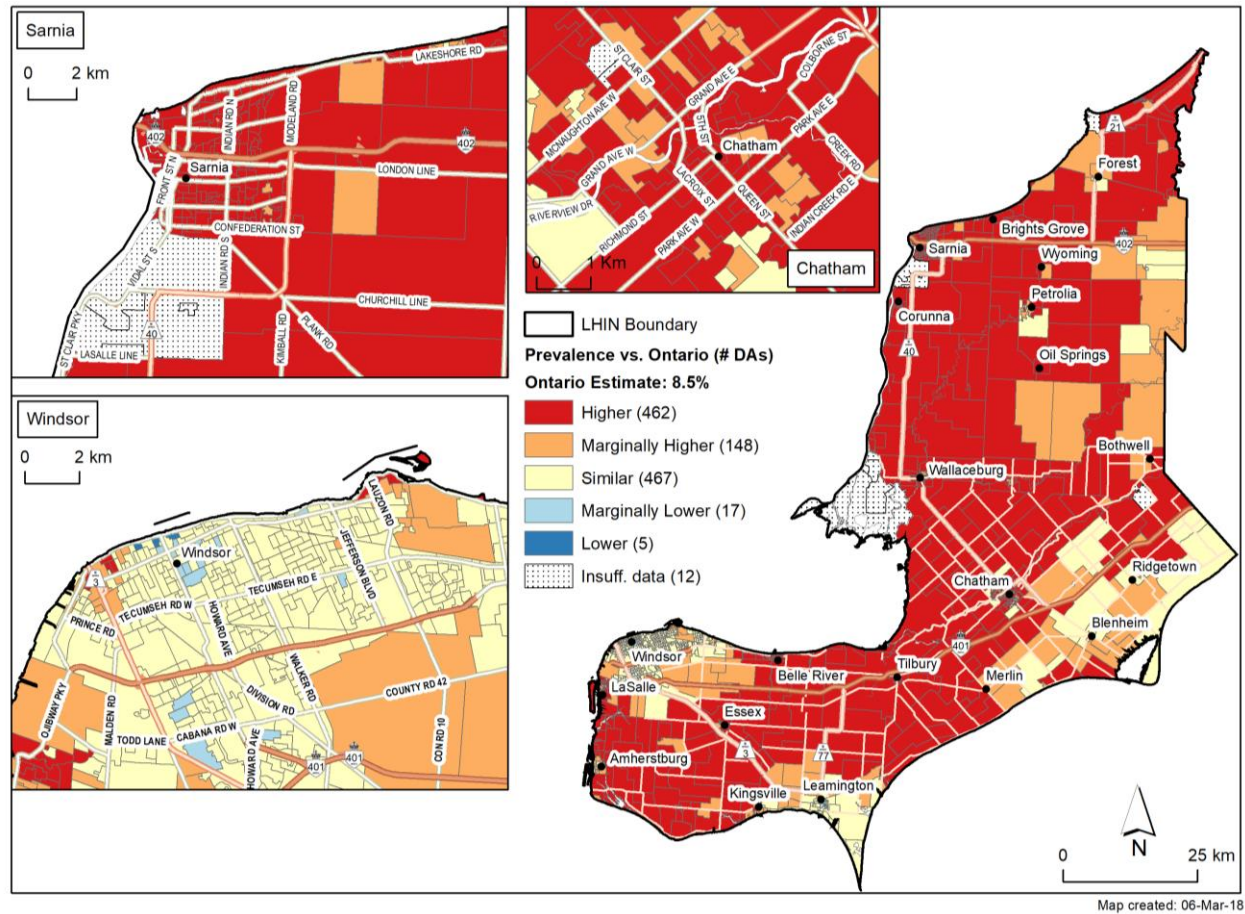


Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario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



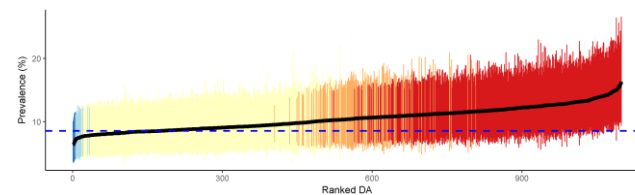


**Figure 1.6** Alcohol consumption exceeding cancer prevention recommendations among males (age 12 and older), 2000–2014, Erie St. Clair Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	10.5
Higher	12.2 (10.2, 16.3)
Marginally Higher	10.5 (9.5, 11.6)
Similar	8.9 (7.7, 10.7)
Marginally Lower	7.5 (7.2, 7.8)
Lower	6.6 (6.3, 7.0)

Prevalence by 2006 dissemination area (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) among females was 41% and among males was 56%.

#### Higher prevalence than Ontario

For females (n=644; Figure 1.7) and males (n=712; Figure 1.8), most areas across the LHIN had a higher prevalence of excess body weight than the Ontario average. For both sexes, many higher prevalence areas were located throughout Sarnia, Chatham and Windsor; however, Sarnia and Chatham had a greater concentration of higher prevalence areas for females than males.

Among females, higher prevalence areas occurred consistently throughout the LHIN, whereas among males, areas of higher prevalence were not detected around Oil Springs, Petrolia, Wyoming and Forest.

#### Lower prevalence than Ontario

There were very few areas with a lower prevalence of excess body weight than the Ontario average for either females (n=9; Figure 1.7) or males (n=13; Figure 1.8). For males, the areas tended to be located west of Windsor.

### Adolescents

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

#### Higher prevalence than Ontario

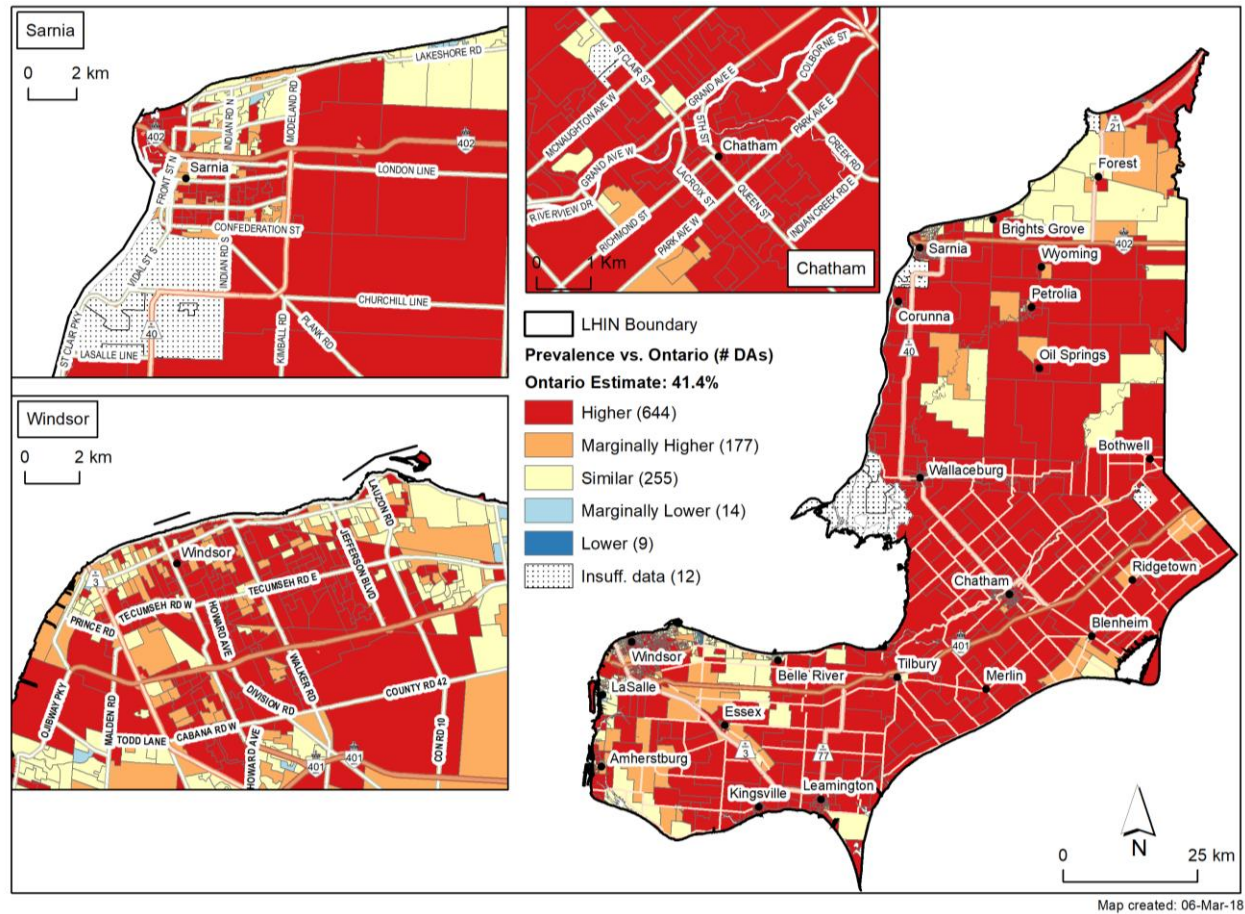
For adolescent females (n=137; Figure 1.9), higher prevalence areas were located in the central part of the LHIN south of Oil Springs, including most areas throughout Chatham. There were no areas with a higher prevalence of excess body weight for adolescent males, which is why that map is not shown.

#### Lower prevalence than Ontario

Across the LHIN, there were no areas with lower prevalence estimates among adolescents.

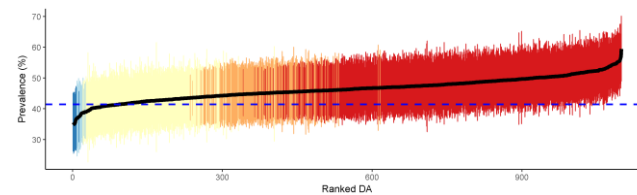


**Figure 1.7** Excess body weight (overweight/obese) among females (age 12 and older), 2000–2014, Erie St. Clair Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	46.4
Higher	48.7 (44.7, 59.5)
Marginally Higher	45.0 (43.5, 46.8)
Similar	42.3 (38.7, 45.2)
Marginally Lower	38.1 (36.9, 39.0)
Lower	35.9 (34.8, 37.5)

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

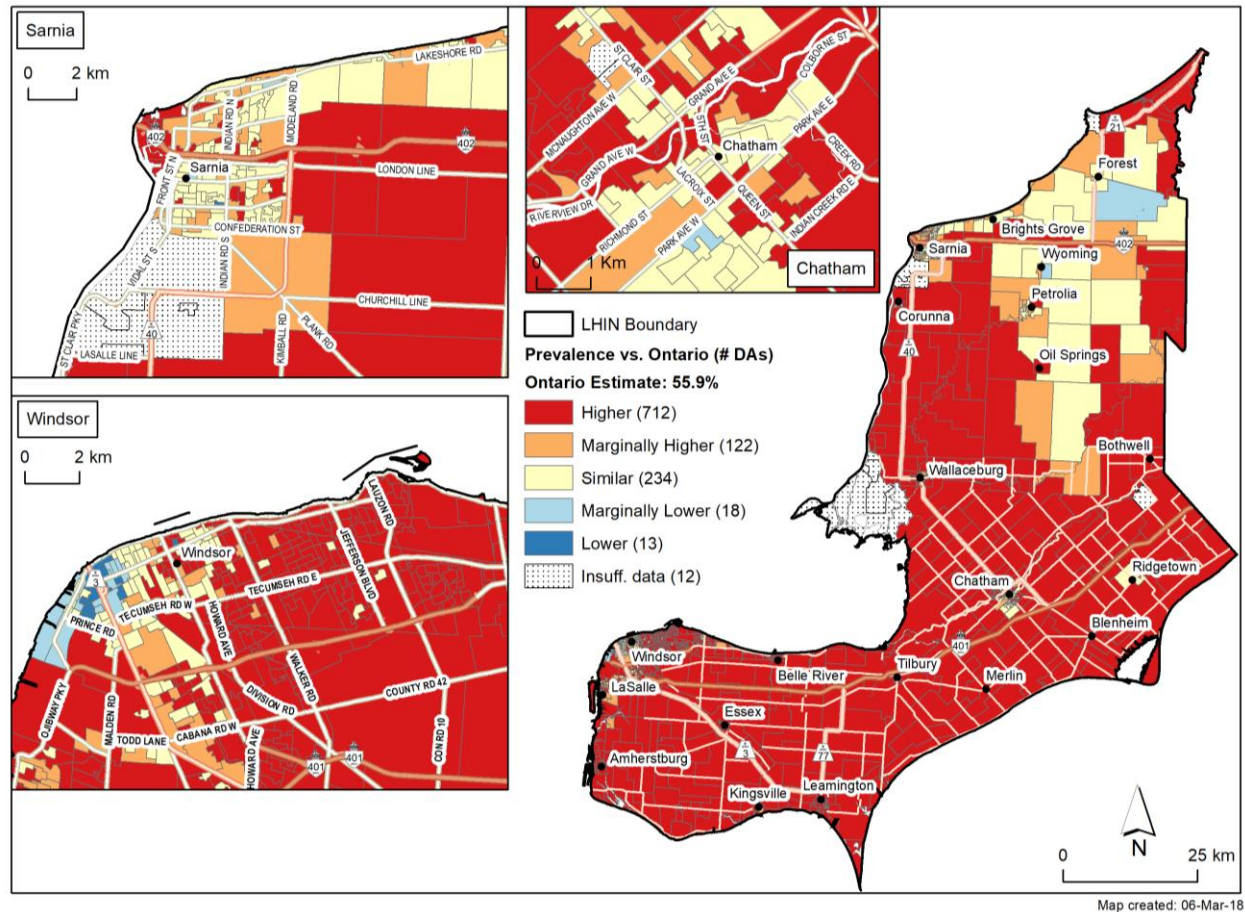


Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario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



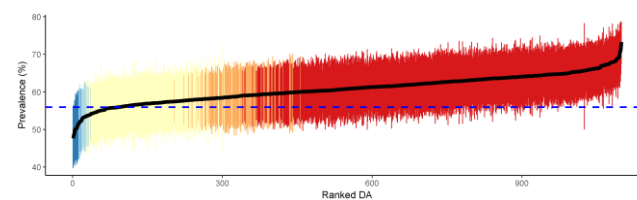


**Figure 1.8** Excess body weight (overweight/obese) among males (age 12 and older), 2000–2014, Erie St. Clair Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	60.7
Higher	62.8 (59.0, 73.3)
Marginally Higher	58.8 (57.4, 60.0)
Similar	56.7 (53.6, 58.9)
Marginally Lower	53.0 (51.8, 53.9)
Lower	50.1 (47.6, 52.2)

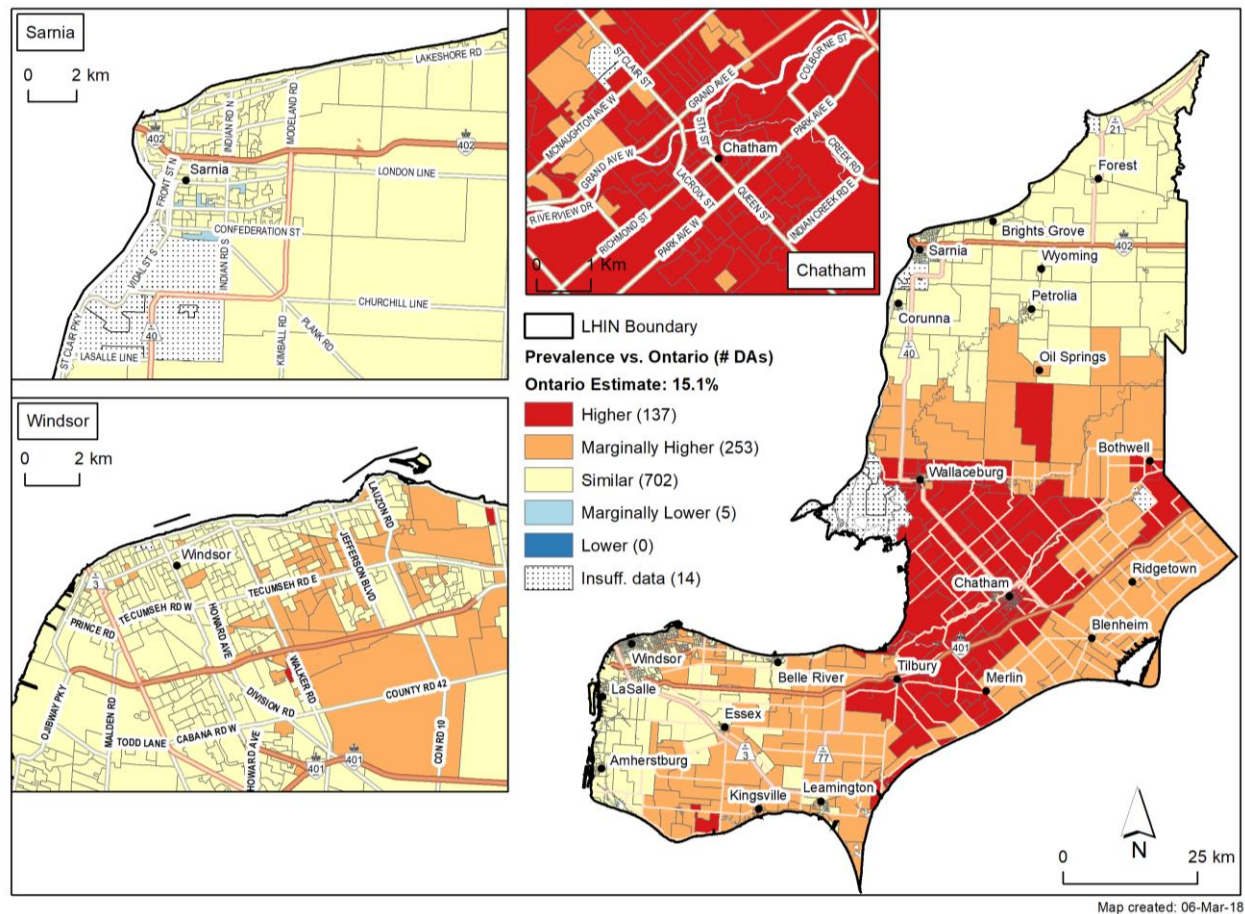
Prevalence by 2006 dissemination area (DA) and 95% credibility intervals



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.



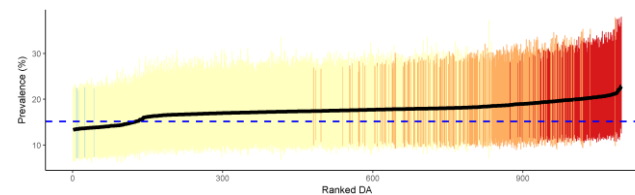
**Figure 1.9** Excess body weight (overweight/obese) among adolescent females (ages 12 to 18), 2000–2014, Erie St. Clair Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	17.6
Higher	20.3 (18.8, 22.8)
Marginally Higher	18.6 (17.4, 21.3)
Similar	16.7 (13.3, 18.5)
Marginally Lower	13.6 (13.5, 13.8)
Lower	N/A

N/A = no estimates in the category

Prevalence by 2006 dissemination area (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 LHIN, most areas had a higher prevalence of inadequate vegetable and fruit consumption than the Ontario average among females (n=750; Figure 1.10) and males (n=742; Figure 1.11). Generally, the pattern of higher prevalence areas was similar for females and males, with many located throughout most of Sarnia, Chatham and Windsor. Higher prevalence areas for females were less prominent along the eastern boundary of the LHIN.

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

Areas of adequate consumption (low prevalence) were uncommon for females (n=17; Figure 1.10) and males (n=3; Figure 1.11).

### 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](#)

There were fewer areas with a higher prevalence of inadequate vegetable and fruit consumption than the Ontario average among adolescent females (n=272; Figure 1.12) compared to adolescent males (n=542; Figure 1.13). For adolescent females, many higher prevalence areas were located around Chatham, in parts of Sarnia and Windsor, and towards the southern part of the LHIN. For adolescent males, many of these areas were located throughout Sarnia and Windsor, and throughout the central part of the LHIN.

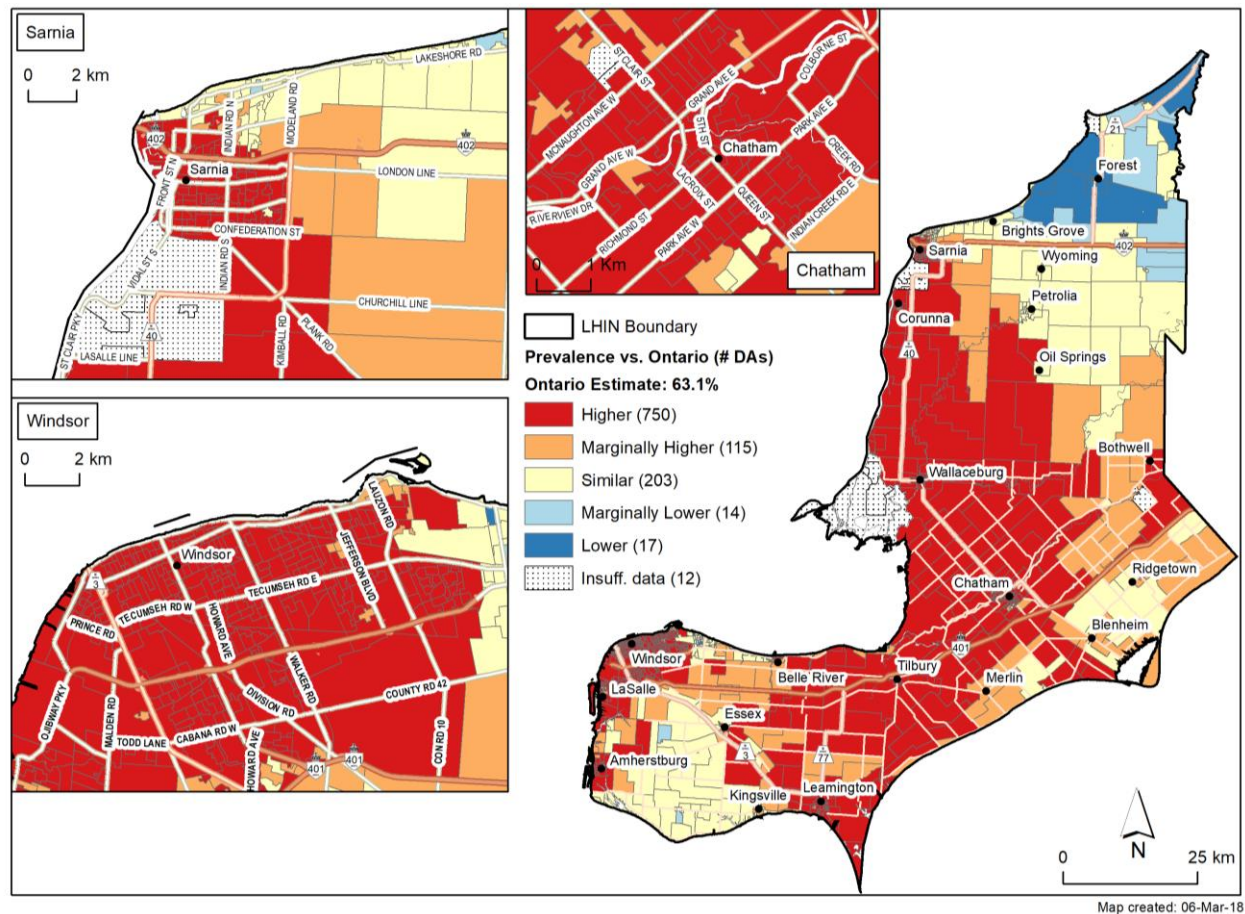
#### [Lower prevalence than Ontario](#)

Similar to the findings for people age 12 and older, there were no areas of adequate consumption among adolescents in the Erie St. Clair LHIN (Figure 1.12 and Figure 1.13).



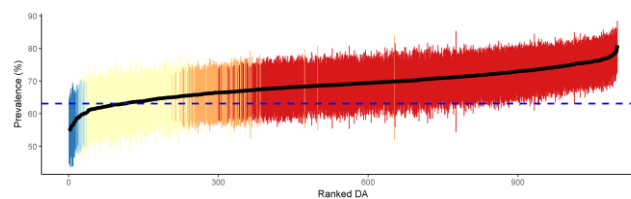


**Figure 1.10** Inadequate vegetable and fruit consumption among females (age 12 and older), 2000–2014, Erie St. Clair Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	68.9
Higher	71.2 (66.5, 81.0)
Marginally Higher	66.4 (65.0, 69.9)
Similar	63.5 (59.7, 66.7)
Marginally Lower	59.5 (58.5, 60.3)
Lower	56.8 (54.7, 59.0)

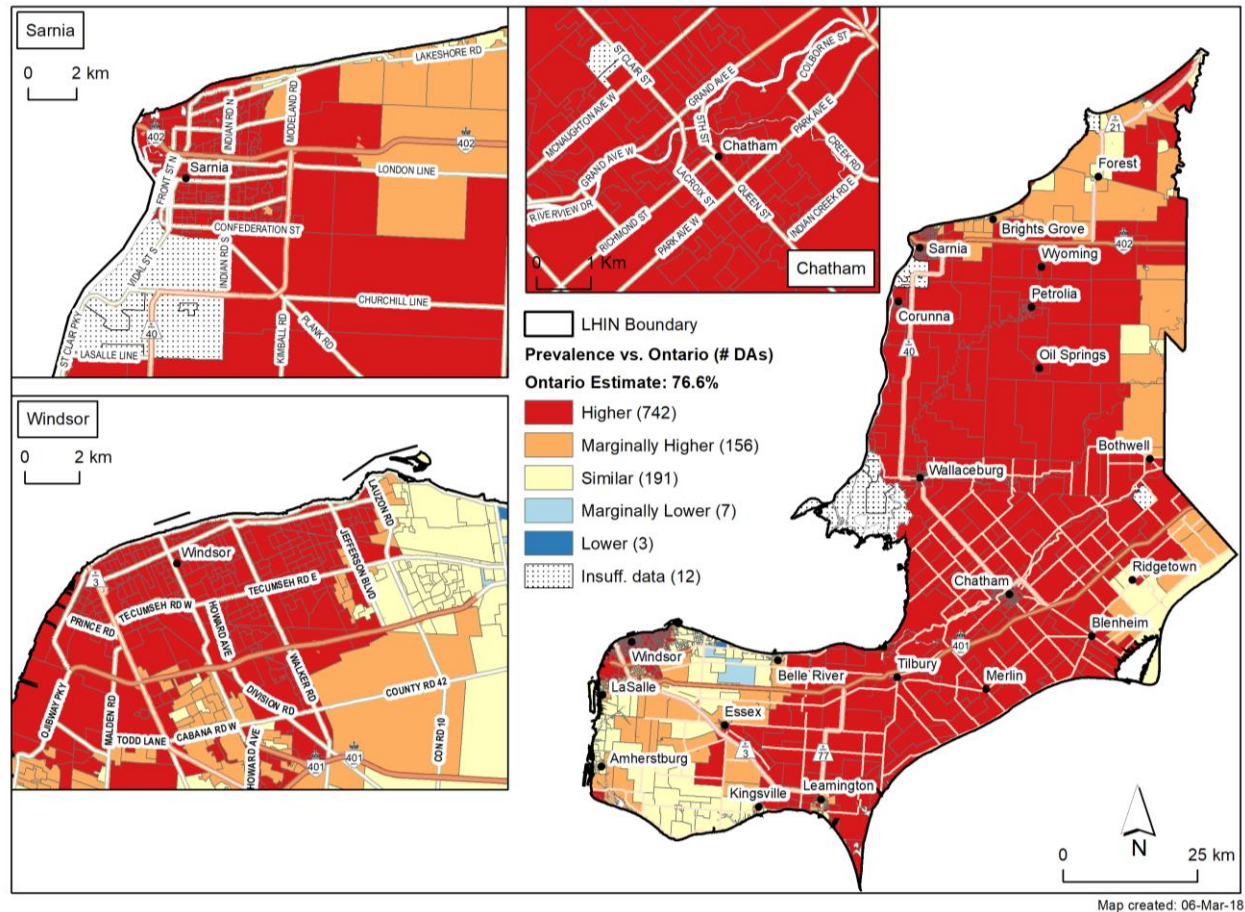
Prevalence by 2006 dissemination area (DA) and 95% credibility intervals



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.

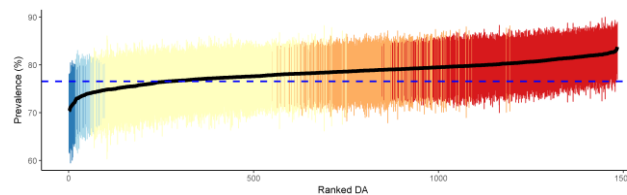


**Figure 1.11** Inadequate vegetable and fruit consumption among males (age 12 and older), 2000–2014, Erie St. Clair Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	81.0
Higher	82.6 (78.9, 89.9)
Marginally Higher	78.9 (78.0, 79.9)
Similar	76.9 (73.7, 78.7)
Marginally Lower	73.8 (72.2, 74.2)
Lower	72.8 (72.4, 73.1)

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

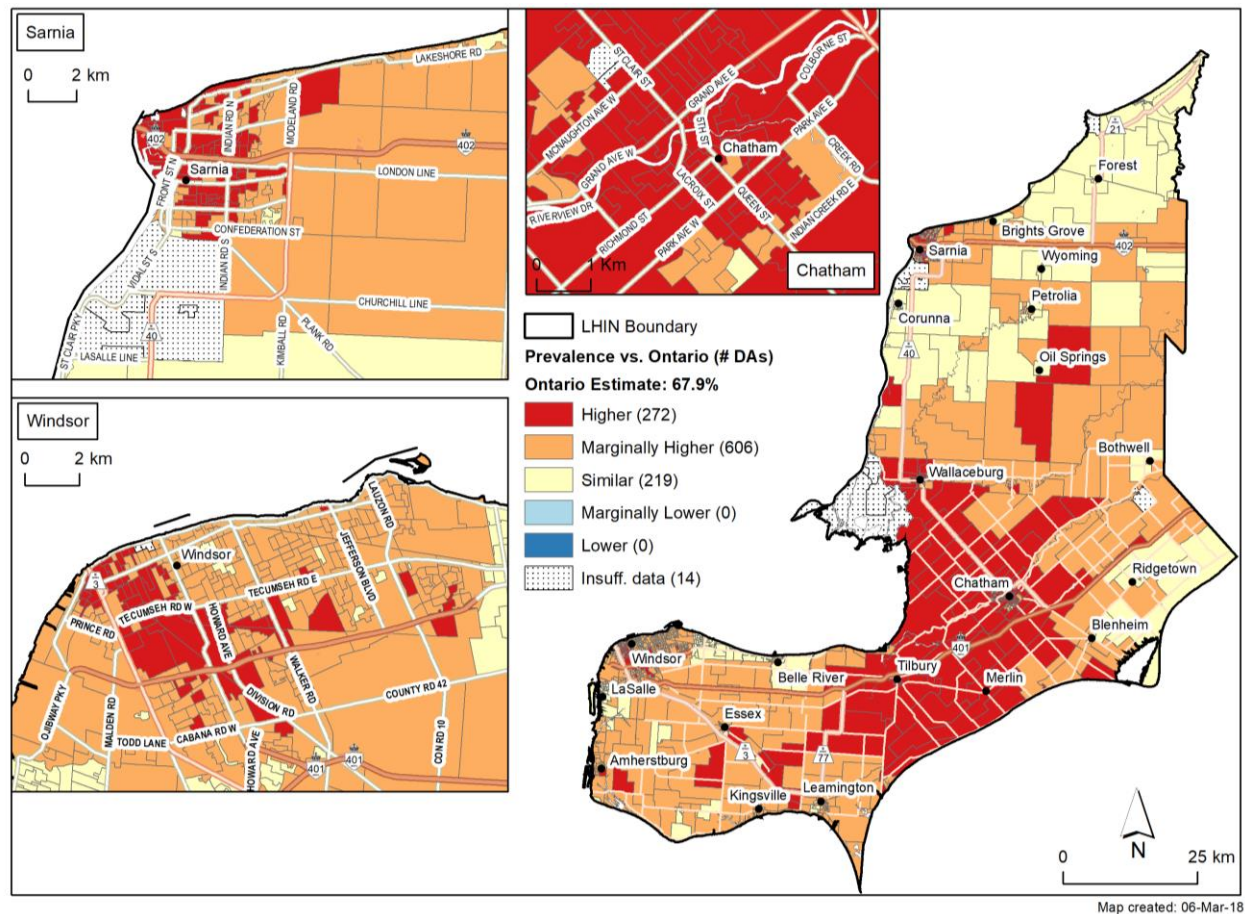


Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario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





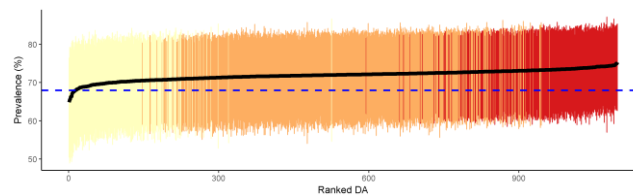
**Figure 1.12** Inadequate vegetable and fruit consumption among adolescent females (ages 12 to 18), 2000–2014, Erie St. Clair Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	71.9
Higher	73.4 (72.1, 75.3)
Marginally Higher	72.0 (70.5, 73.3)
Similar	69.9 (64.9, 72.0)
Marginally Lower	N/A
Lower	N/A

N/A = no estimates in the category

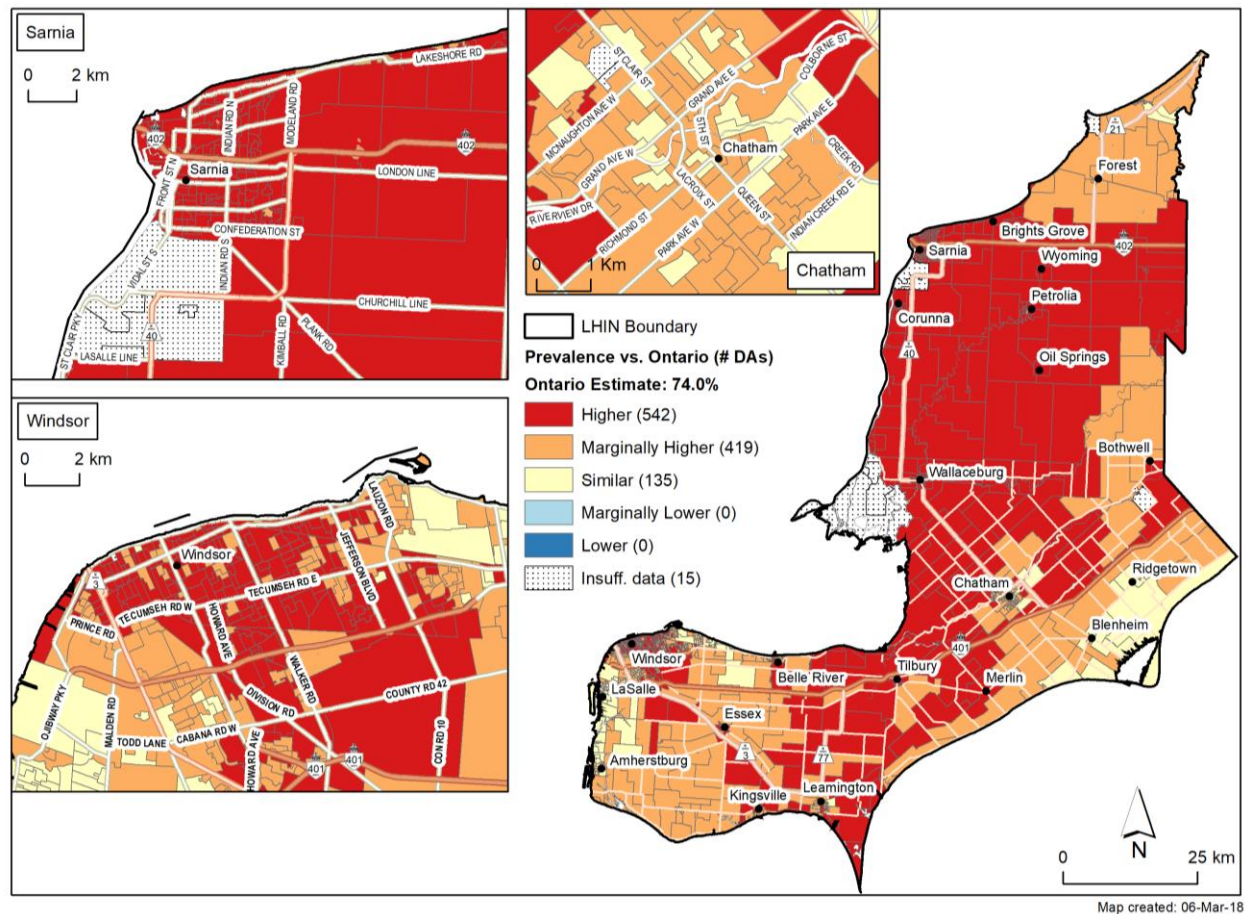
Prevalence by 2006 dissemination area (DA) and 95% credibility intervals



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.



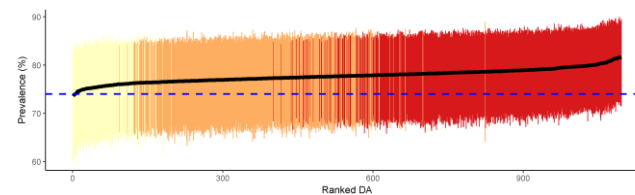
**Figure 1.13** Inadequate vegetable and fruit consumption among adolescent males (ages 12 to 18), 2000–2014, Erie St. Clair Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	77.8
Higher	78.8 (77.3, 81.7)
Marginally Higher	77.1 (76.1, 78.7)
Similar	75.6 (73.6, 76.6)
Marginally Lower	N/A
Lower	N/A

N/A = no estimates in the category

Prevalence by 2006 dissemination area (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

There were many more areas with a lower prevalence of physical activity than the Ontario average among females (n=238; Figure 1.14), compared to males (n=94; Figure 1.15). For females, these areas tended to occur throughout Windsor, parts of Sarnia and Chatham, and around Leamington and Wallaceburg. For males, there were many areas located around Wallaceburg, and throughout parts of Windsor and Chatham.

#### Higher prevalence than Ontario

For females (n=203; Figure 1.14), areas with a higher prevalence of physical activity were typically located in the northern half of the LHIN, including many areas throughout Sarnia and along the eastern boundary of the LHIN. For males (n=225; Figure 1.15), these areas were located at the northern and southwestern tips of the LHIN, with many areas throughout Sarnia. Fewer higher prevalence areas were detected throughout Windsor or Chatham for females and males.

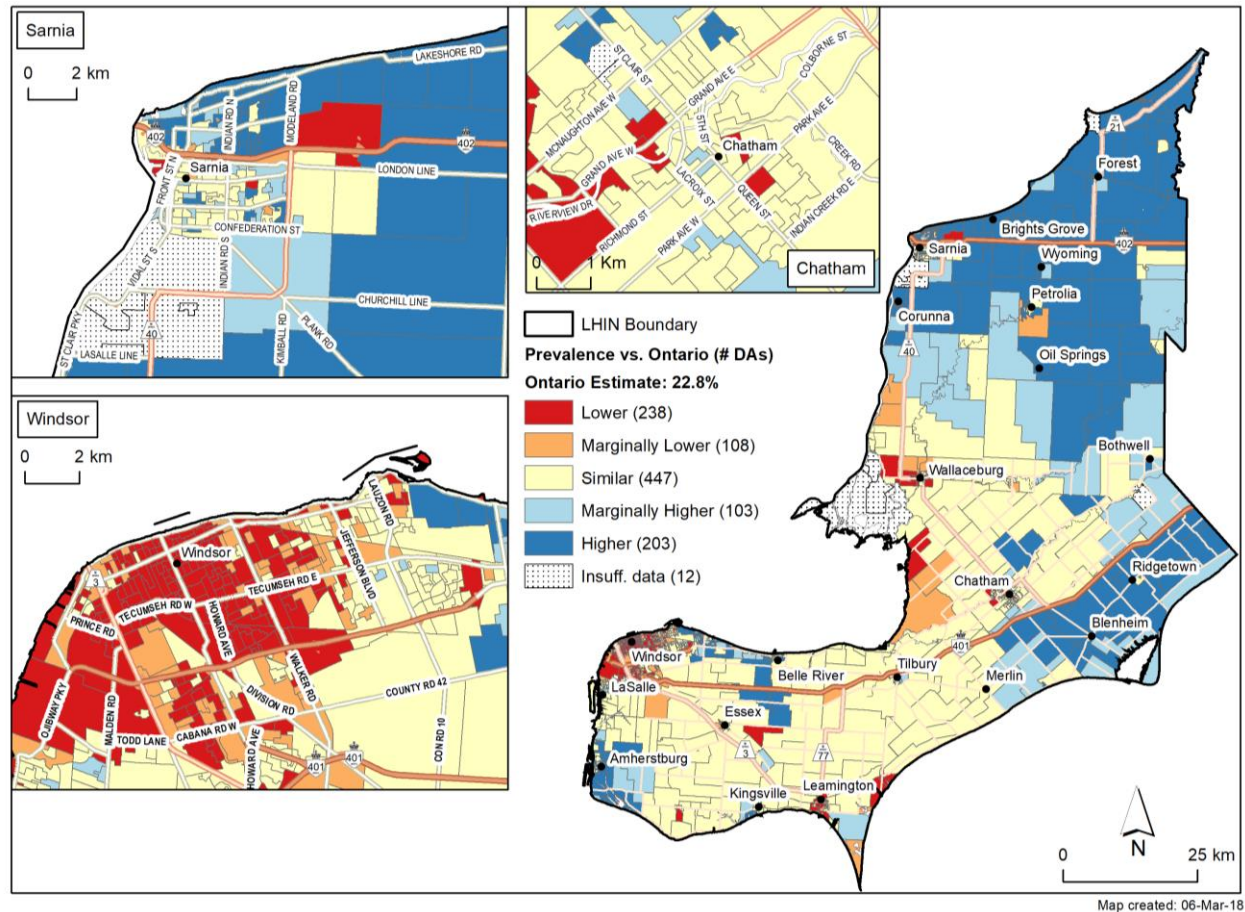
### Adolescents

Adolescents were more physically active than adults, with approximately 40% of adolescent females and 57% of adolescent males being active. In the Erie St. Clair LHIN, there were no areas of lower physical activity prevalence in the adolescent population, which is why those maps are not shown.



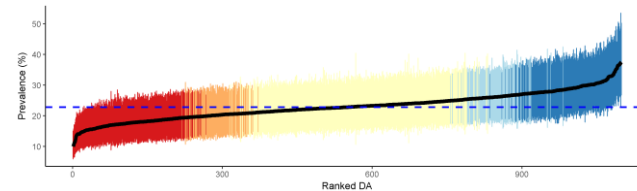


**Figure 1.14** Physical activity among females (age 12 and older), 2000–2014, Erie St. Clair Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



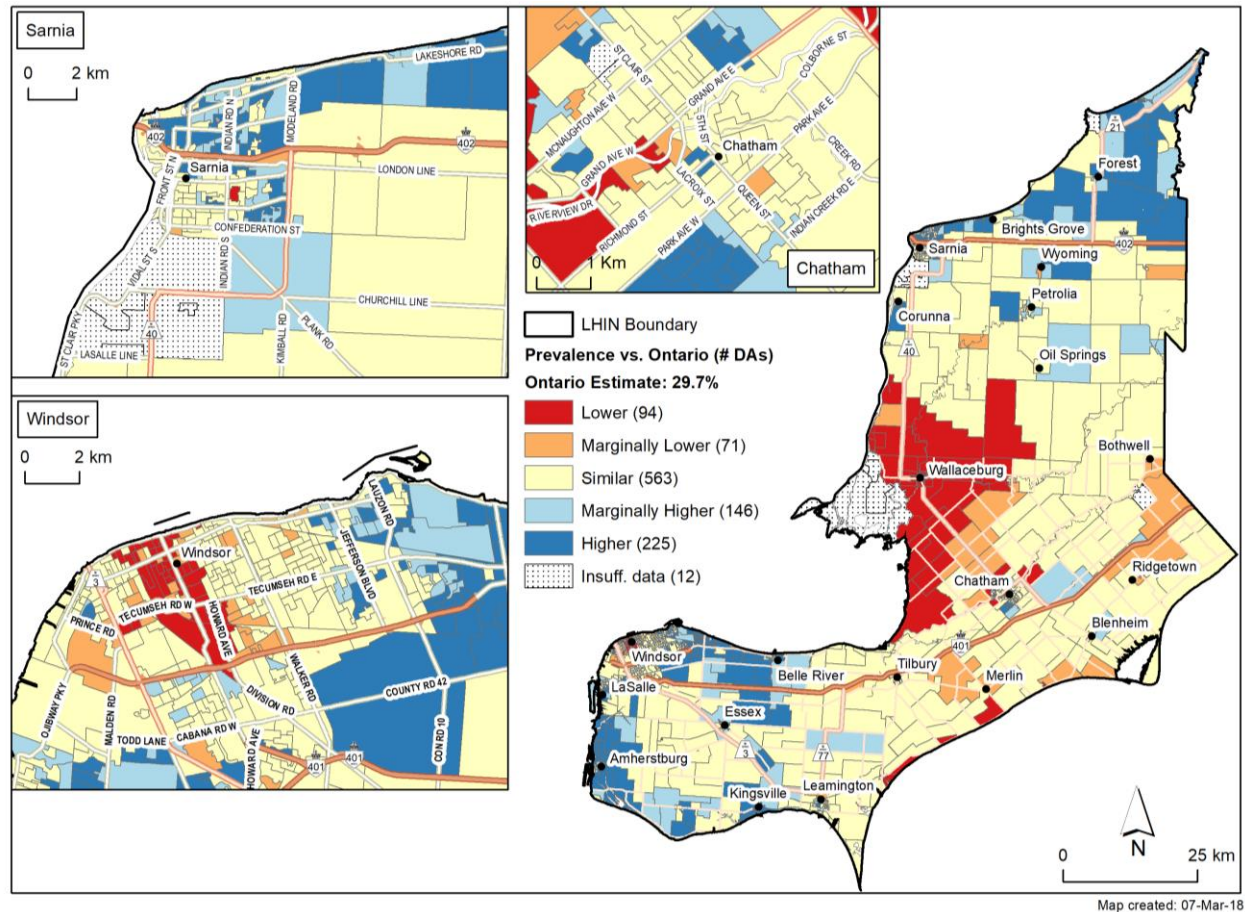
Category	Mean prevalence % (range)
Overall	23.1
Lower	17.4 (10.0, 19.9)
Marginally Lower	20.3 (19.4, 21.2)
Similar	23.1 (20.6, 26.0)
Marginally Higher	26.2 (25.0, 28.5)
Higher	29.6 (26.0, 37.6)

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



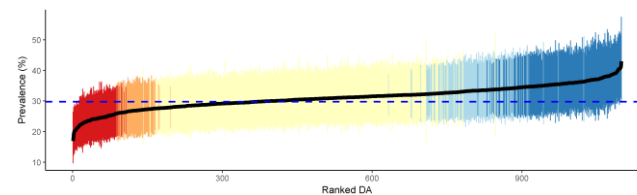
Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario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

**Figure 1.15** Physical activity among males (age 12 and older), 2000–2014, Erie St. Clair Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	31.1
Lower	23.9 (16.9, 26.4)
Marginally Lower	26.9 (25.9, 27.9)
Similar	30.3 (27.2, 33.8)
Marginally Higher	33.3 (31.8, 36.3)
Higher	36.0 (33.4, 43.0)

Prevalence by 2006 dissemination area (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

Many areas with a higher prevalence of sedentary behaviour than the Ontario average among females (n=300; Figure 1.16) were detected, but few were detected among males (n=78; Figure 1.17). For females, these areas were located throughout most of Chatham and Sarnia, and throughout parts of Windsor. For males, the few areas with higher prevalence were located in Chatham, Sarnia, parts of Windsor and near Wallaceburg.

#### Lower prevalence than Ontario

There were few areas with a lower prevalence of sedentary behaviour than the Ontario average among females (n=9; Figure 1.16). For males, there were a few areas with lower prevalence (n=26; Figure 1.17) located in the northeastern part of the LHIN (e.g., Wyoming, Petrolia), and near Chatham and Ridgetown.

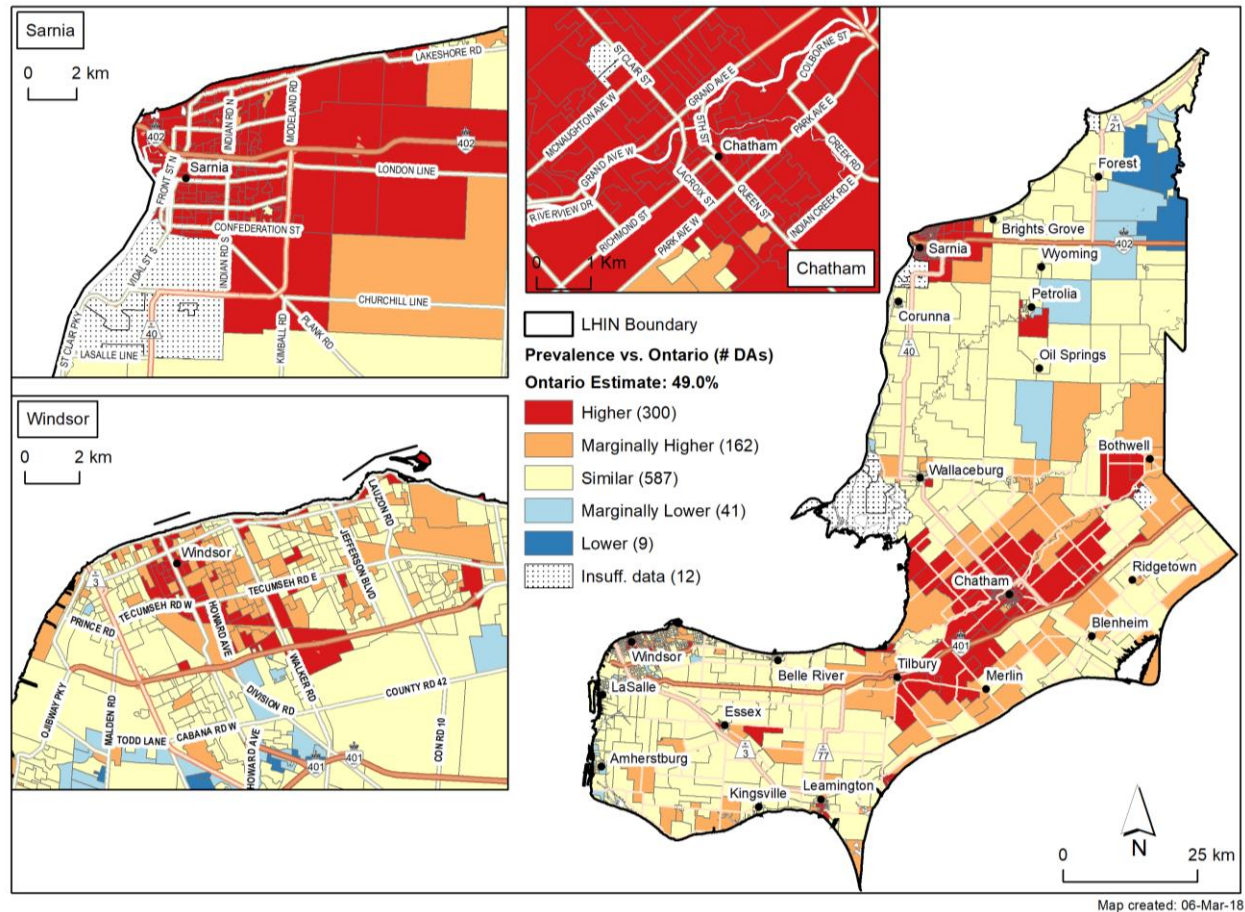
### Adolescents

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 Erie St. Clair LHIN, there were no areas that had a higher prevalence than the Ontario average among adolescents, which is why those maps are not shown.



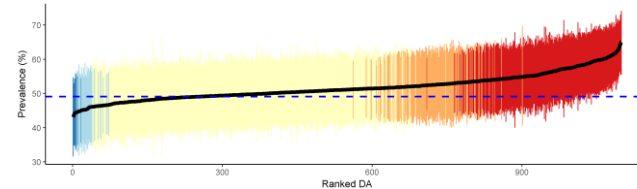


**Figure 1.16** Sedentary behaviour among females (age 12 and older), 2000–2014, Erie St. Clair Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	51.7
Higher	56.6 (52.4, 65.0)
Marginally Higher	52.5 (51.2, 54.8)
Similar	49.6 (46.1, 52.8)
Marginally Lower	45.6 (44.5, 46.7)
Lower	44.2 (43.1, 45.0)

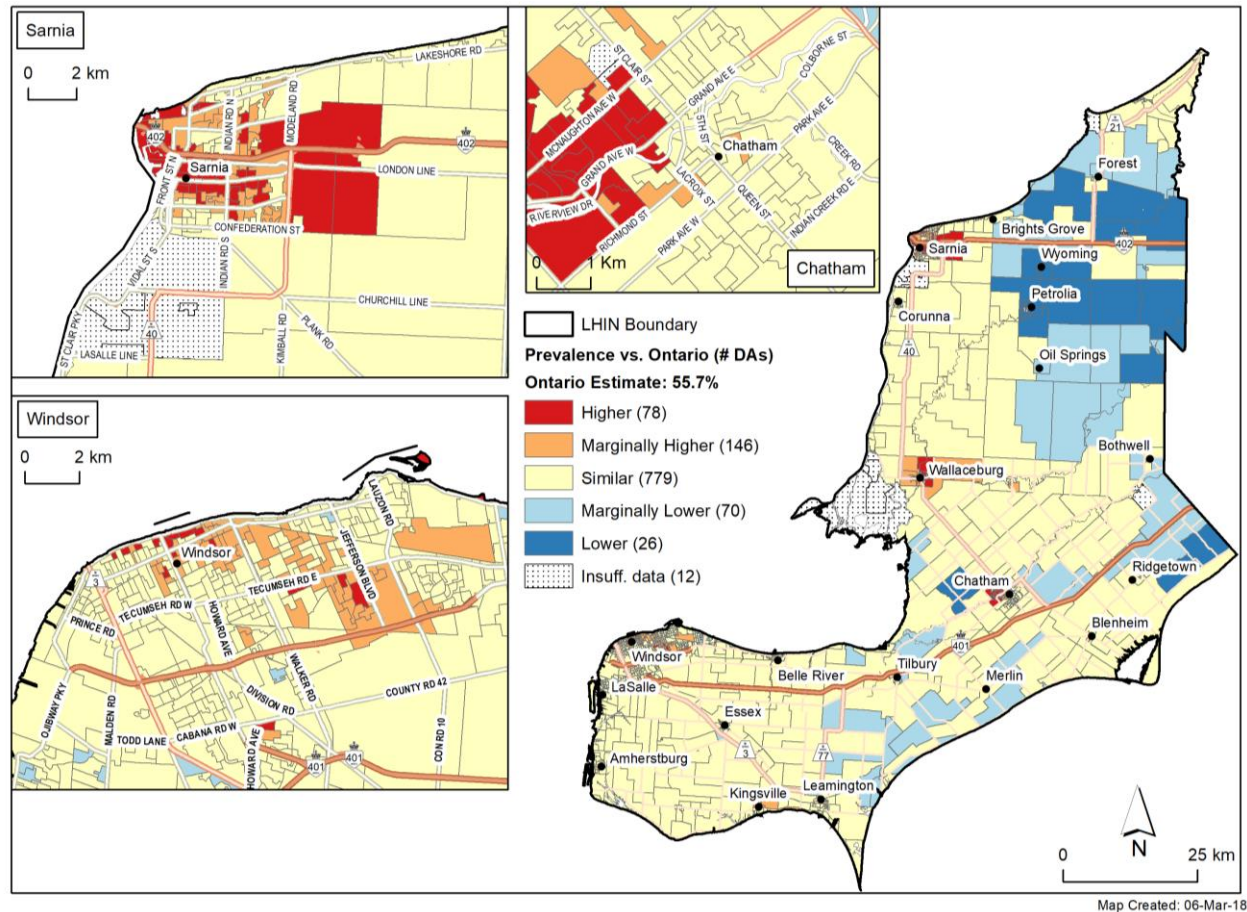
Prevalence by 2006 dissemination area (DA) and 95% credibility intervals



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.

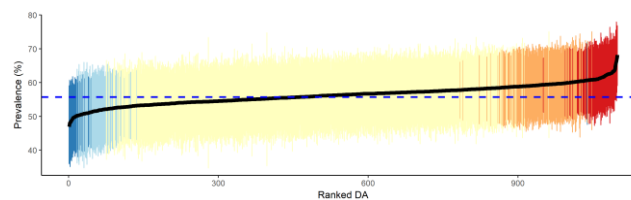


**Figure 1.17** Sedentary behaviour among males (age 12 and older), 2000–2014, Erie St. Clair Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	56.3
Higher	61.7 (59.4, 68.2)
Marginally Higher	59.3 (57.8, 60.8)
Similar	55.8 (52.1, 59.5)
Marginally Lower	51.7 (50.2, 53.2)
Lower	49.7 (47.0, 51.3)

Prevalence by 2006 dissemination area (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](#)

There were more areas with a higher prevalence of current smoking than the Ontario average among females (n=506; Figure 1.18), compared to males (n=325; Figure 1.19). For both sexes, many of these areas were located throughout Sarnia, Windsor and Chatham, south of Chatham, and near Leamington. For females, additional areas were located south of Sarnia. For males, additional areas were located along the eastern boundary of the LHIN, northeast of Oil Springs.

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

Areas of lower prevalence of current smoking among females (n=37; Figure 1.18) and males (n=129; Figure 1.19) tended to be located north of Sarnia, south of Windsor and around Chatham.

### Adolescents

Approximately 8% of adolescent females and adolescent males in Ontario reported that they currently smoked tobacco.

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

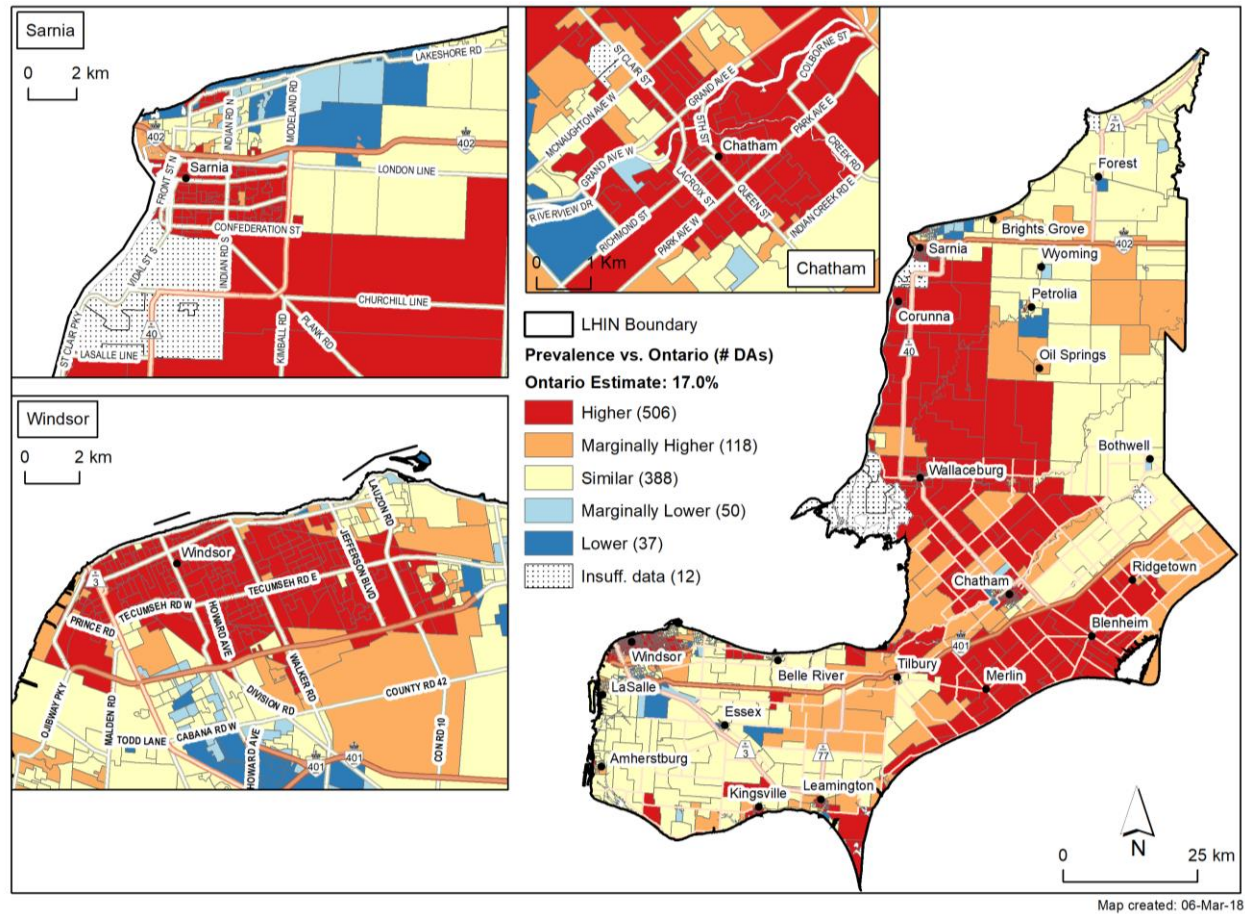
For adolescent females (n=277; Figure 1.20) and adolescent males (n=120; Figure 1.21), many areas with a higher prevalence of current smoking than the Ontario average were located in the central part of the LHIN, in and around Sarnia, and near Chatham. For adolescent females, additional areas were located throughout most of Chatham and surrounding Tilbury, Merlin and Blenheim.

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

Areas with a lower prevalence of current smoking among adolescent females (n=65; Figure 1.20) and adolescent males (n=254; Figure 1.21) were primarily located throughout Windsor. For adolescent males, additional areas were located near Amherstburg, Essex and Chatham.

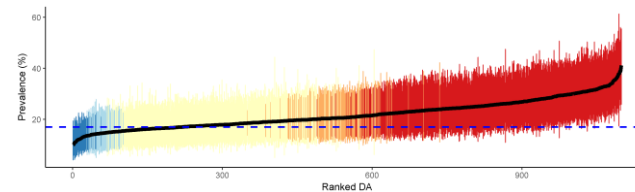


**Figure 1.18** Current smoking among females (age 12 and older), 2000–2014, Erie St. Clair Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	21.8
Higher	26.6 (20.2, 41.1)
Marginally Higher	20.7 (18.5, 23.9)
Similar	17.8 (14.9, 21.7)
Marginally Lower	14.7 (13.6, 15.5)
Lower	12.7 (10.0, 14.6)

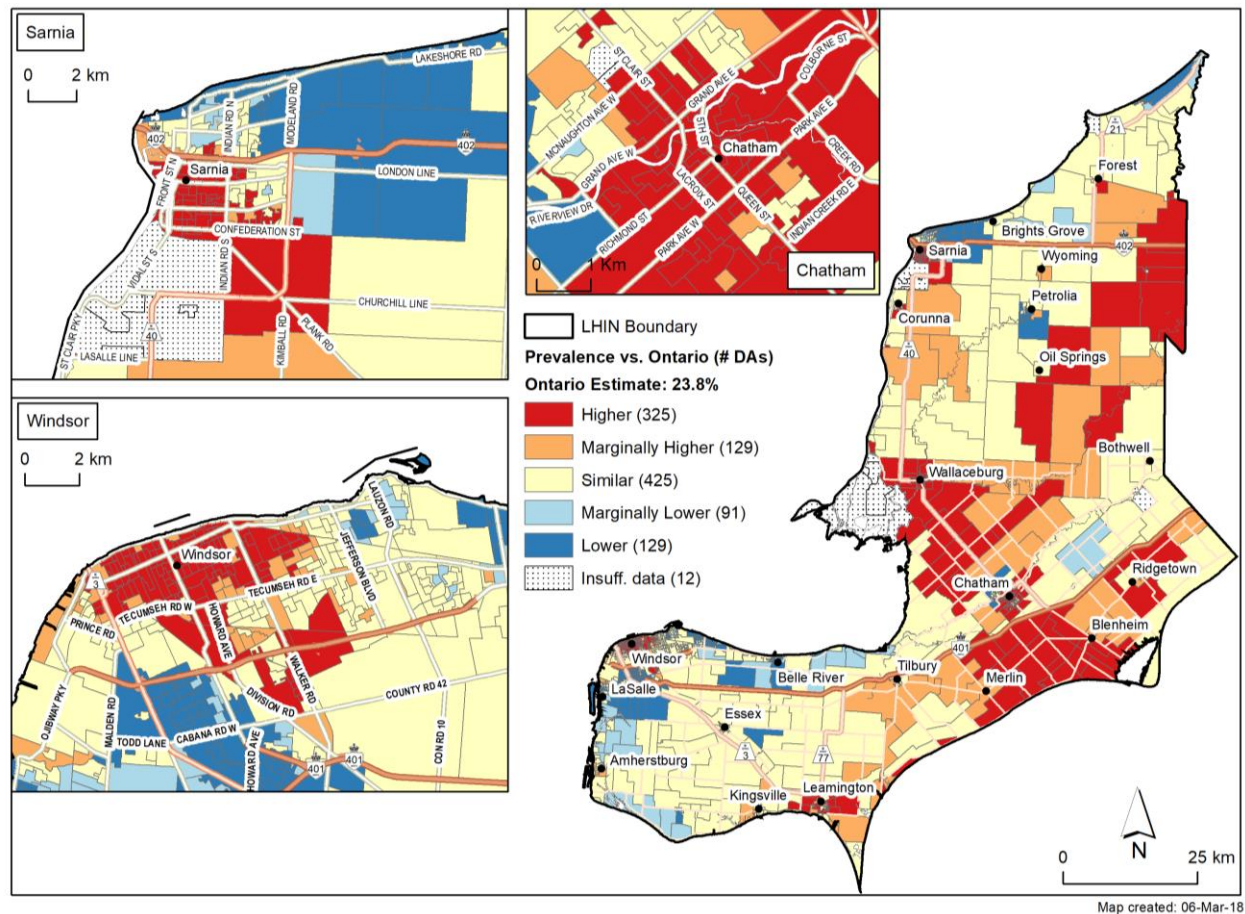
Prevalence by 2006 dissemination area (DA) and 95% credibility intervals



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.

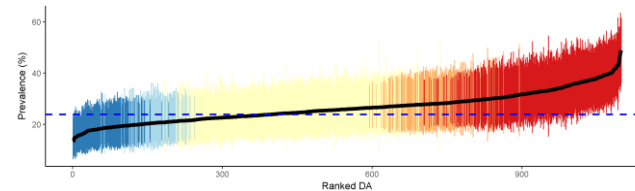


**Figure 1.19** Current smoking among males (age 12 and older), 2000–2014, Erie St. Clair Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	26.5
Higher	33.7 (27.8, 48.9)
Marginally Higher	28.0 (26.5, 31.6)
Similar	24.4 (20.8, 28.2)
Marginally Lower	20.6 (18.3, 21.8)
Lower	18.2 (13.4, 21.0)

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

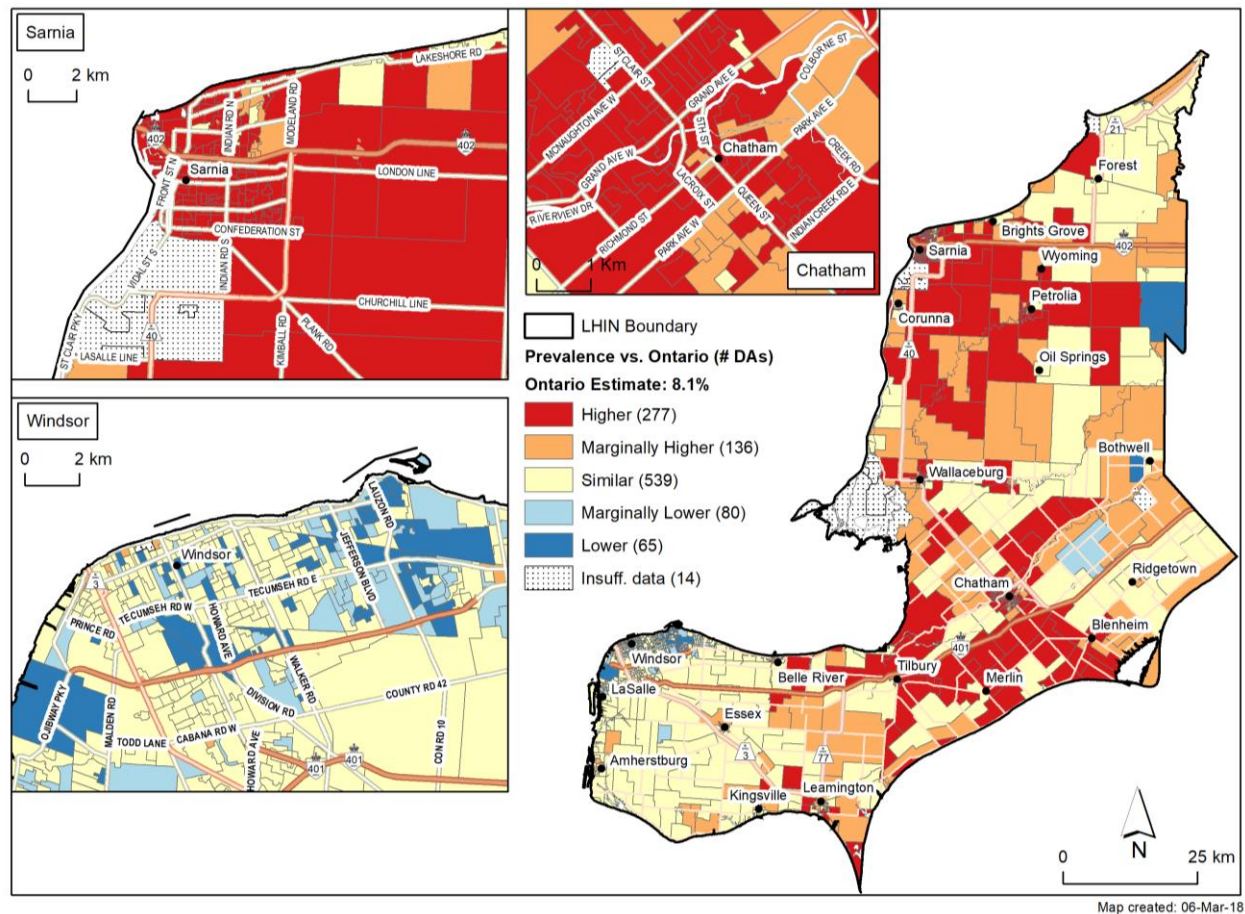


Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario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



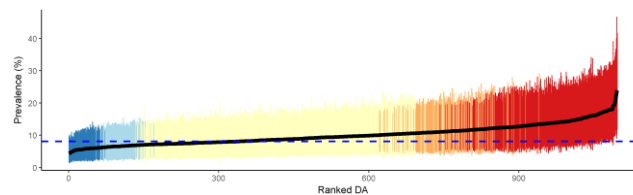


**Figure 1.20** Current smoking among adolescent females (ages 12 to 18), 2000–2014, Erie St. Clair Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	10.1
Higher	14.2 (11.1, 23.9)
Marginally Higher	11.2 (10.1, 13.4)
Similar	8.7 (6.9, 11.4)
Marginally Lower	6.7 (6.0, 7.2)
Lower	5.7 (4.3, 6.3)

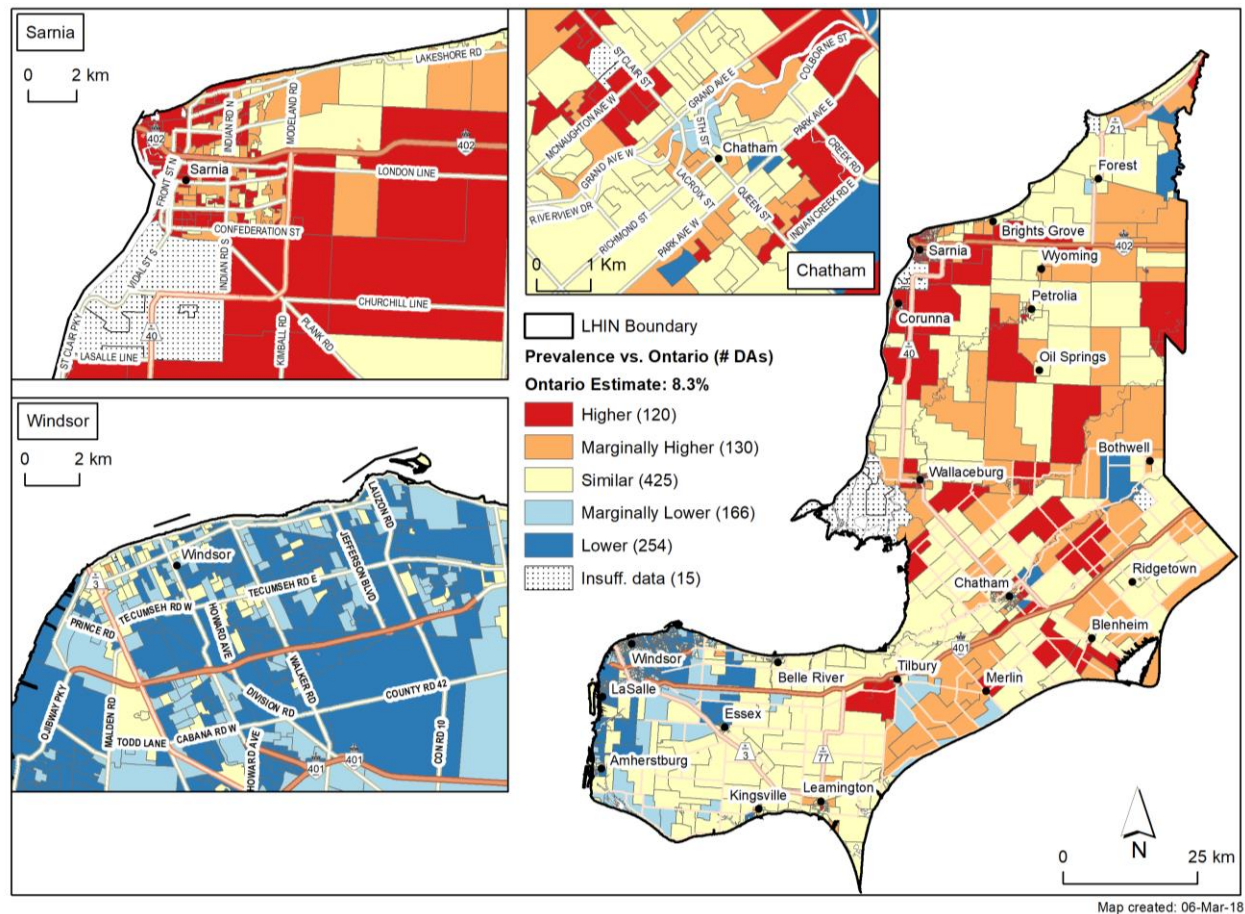
Prevalence by 2006 dissemination area (DA) and 95% credibility intervals



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.

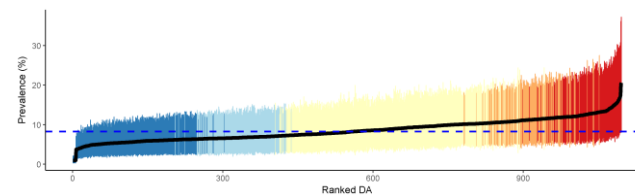


**Figure 1.21** Current smoking among adolescent males (ages 12 to 18), 2000–2014, Erie St. Clair Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	8.5
Higher	13.2 (11.1, 20.6)
Marginally Higher	11.2 (10.1, 13.2)
Similar	8.9 (7.1, 11.5)
Marginally Lower	6.8 (6.2, 7.3)
Lower	5.5 (0.9, 6.6)

Prevalence by 2006 dissemination area (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

Among females, areas with higher ever-smoked prevalence than the Ontario average (n=589; Figure 1.22) tended to be located in northern (north of Wallaceburg), southeastern (around Blenheim) and southwestern parts (Kingsville) of the LHIN. Higher prevalence areas among females were common in the three main urban areas of the LHIN (Chatham, Sarnia, and Windsor). The pattern of areas of higher prevalence among males (n=446; Figure 1.23) differed from that of females, with more extensive geographic coverage of the eastern part of the LHIN and in Chatham. However, higher prevalence areas were less extensive in and south of Windsor. In Windsor, groups of higher prevalence are located east of Walker Road or in the downtown core.

#### Lower prevalence than Ontario

For females and males, areas with lower ever-smoked prevalence than Ontario (n=12; Figure 1.22, and n=83; Figure 1.23, respectively) tended to occur in the southeastern part of the LHIN, generally south of Belle River.

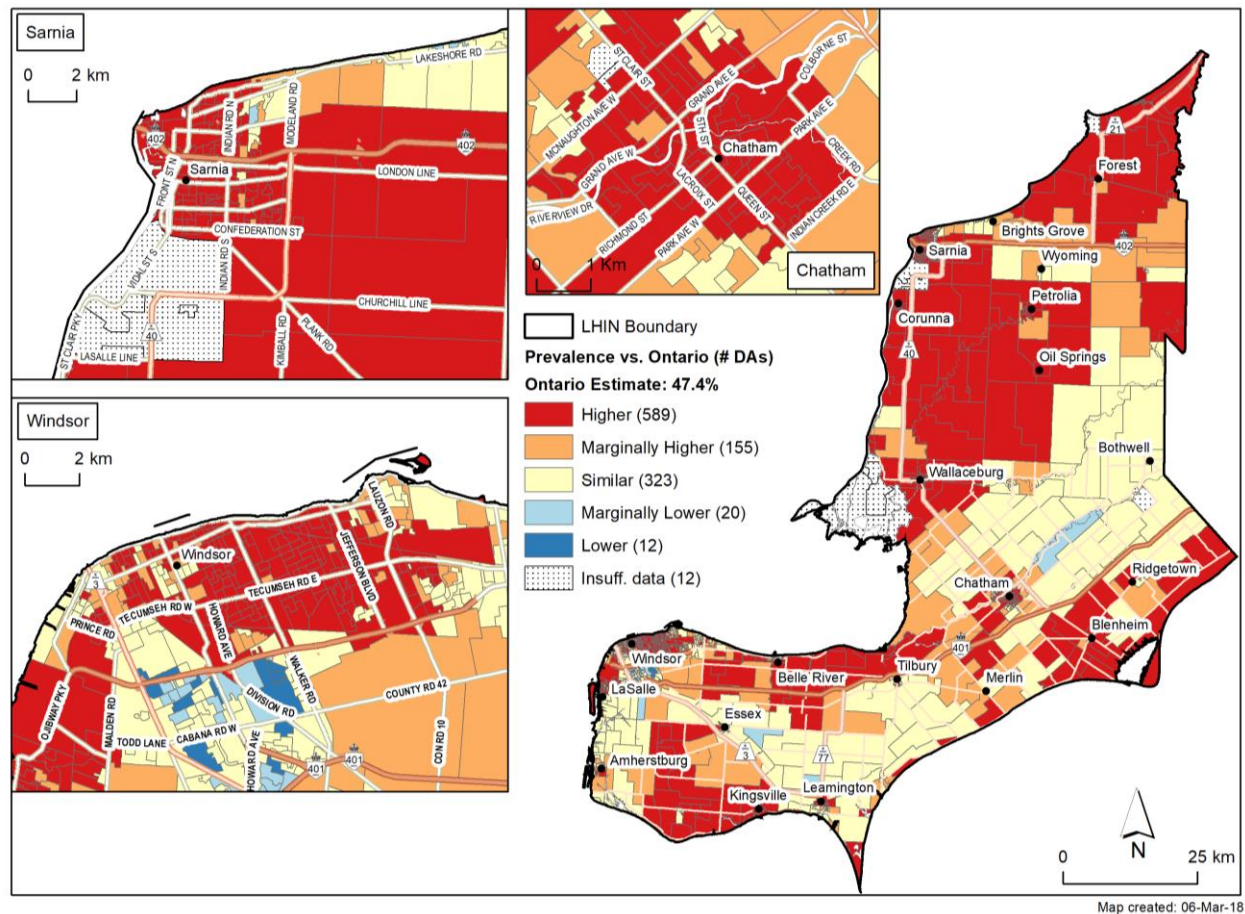
### Adolescents

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



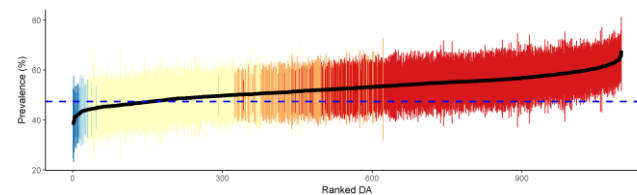


**Figure 1.22** Ever-smoked status among females (age 12 and older), 2000–2014, Erie St. Clair Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	52.7
Higher	56.1 (50.2, 67.8)
Marginally Higher	51.3 (49.7, 53.5)
Similar	47.9 (43.6, 51.6)
Marginally Lower	43.7 (41.8, 44.8)
Lower	41.1 (38.1, 42.6)

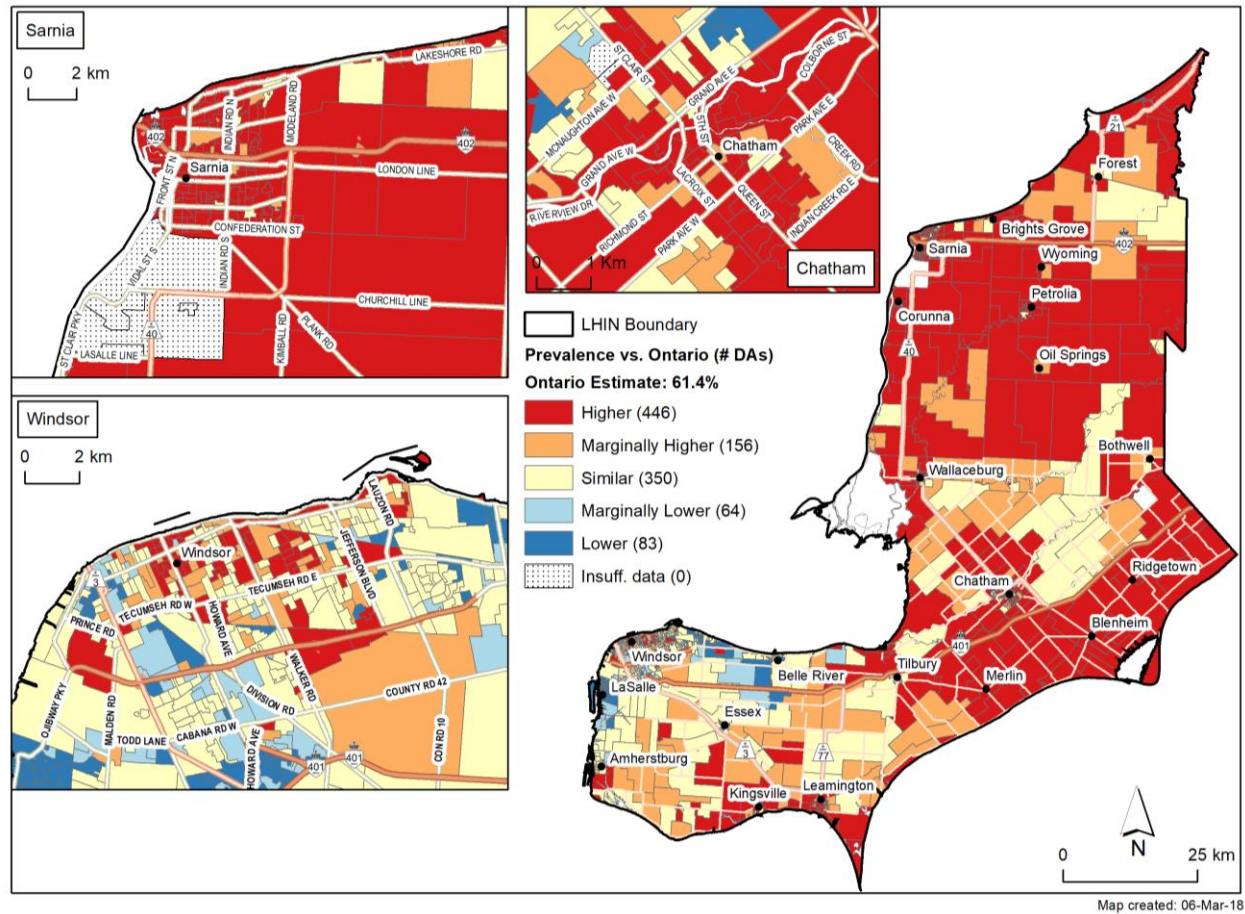
Prevalence by 2006 dissemination area (DA) and 95% credibility intervals



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.

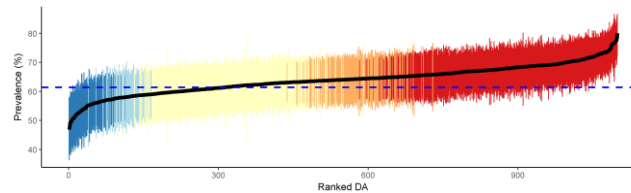


**Figure 1.23** Ever-smoked status among males (age 12 and older), 2000–2014, Erie St. Clair Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	63.9
Higher	68.4 (64.3, 80.1)
Marginally Higher	64.3 (63.1, 65.8)
Similar	61.5 (57.7, 64.4)
Marginally Lower	58.0 (55.3, 59.0)
Lower	54.5 (46.8, 58.0)

Prevalence by 2006 dissemination area (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.