# LHIN 12 North Simcoe Muskoka • ••••••••••• ••••••••• ••••• 000000000 •••••• ...........

# 12. North Simcoe Muskoka LHIN

# **Key Findings**

# Top three priority risk factor population estimates by sex (see Table 12.1 below):

#### Females

Alcohol—current consumption Smoking—ever-smoked status Smoking—current status

#### Males

Smoking—ever-smoked status Inadequate vegetable and fruit consumption Alcohol—current consumption

# **Risk factor summary**

#### Alcohol—current consumption

# Priority areas:

- Females: most parts of the LHIN
- Males: areas in Barrie and areas along Highway 11 and Highway 26 and in the western part of the LHIN
- Adolescent females and adolescent males: most parts of the LHIN

# Alcohol—consumption exceeding cancer prevention recommendations

#### Priority areas:

- Females: areas in the northern part of the LHIN and parts of Collingwood and Barrie
- Males: most areas throughout the LHIN

# Excess body weight:

#### Priority areas:

- Females: areas in the northern half of the LHIN, in and around Orillia and near Wasaga Beach and Barrie
- Males: areas across the LHIN in all cities and towns
- Adolescent females: areas north of Huntsville and Bracebridge, in and around Penetanguishene, Midland and Orillia

# Inadequate vegetable and fruit consumption

# Priority areas:

- Females: areas in and around Midland, Wasaga Beach, Barrie and Orillia
- Males: areas across the LHIN in all cities and towns except Collingwood

# Physical activity:

### Priority areas:

• Females and males: few areas in Orillia and Barrie

# <u>Sedentary</u> behaviour:

# Priority areas:

- Females: areas around Penetanguishene, Midland and Wasaga Beach and in Orillia and Barrie
- Males: few areas southeast of Barrie

#### Smoking—current status:

#### Priority areas:

- Females: areas throughout the LHIN and in Orillia and Barrie
- Males: areas in the eastern part of the LHIN, areas around Midland and in Orillia and Barrie
- Adolescent females: areas across the northern and central parts of the LHIN and in Orillia and Barrie
- Adolescent males: areas dispersed across the northern part of the LHIN

# Smoking—ever-smoked status:

#### Priority areas:

• Females and males: most areas throughout the LHIN and in Orillia and Barrie

#### 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 <u>Data and Methods</u> section, page 3).

#### **Exclusions**

As discussed in the <u>Interpretation</u> 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 Simcoe Muskoka LHIN include:

- excess body weight (overweight/obese) among adolescent males;
- inadequate vegetable and fruit consumption among adolescent females and 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 North Simcoe Muskoka LHIN (e.g., suppressed census populations or institutionalized populations), which are shown as "insufficient data" on the maps. These areas include the Indian River, Christian Island, Moose Point, Wahta Mohawk and Mnjikaning First Nations. Additionally, areas with unavailable population data are shown as "insufficient data." See <u>Appendix C</u> 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 12.1 (page 408) presents the estimated priority populations for each risk factor by sex and age group in the North Simcoe Muskoka 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

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because areas with less statistical certainty (posterior probabilities < 80% and physical activity posterior probabilities > 20%) are not included in the priority population estimates.

Table 12.1 Estimated priority populations among higher prevalence\*\* dissemination areas compared to Ontario by risk factor, sex and age group, North Simcoe Muskoka Local Health Integration Network (LHIN), using 2006 census populations

Risk factor	Female priority population*†	% of female population in the LHIN <sup>†</sup> (n=183,010)	Male priority population*†	% of male population in the LHIN <sup>†</sup> (n=174,070)	Adolescent female priority population**	% of adolescent female population in the LHIN <sup>‡</sup> (n=20,200)	Adolescent males priority population* <sup>‡</sup>	% of adolescent male population in the LHIN <sup>‡</sup> (n=21,270)
Alcohol—current consumption	107,590	59%	53,810	31%	4,710	23%	5,680	27%
Alcohol—consumption exceeding cancer prevention recommendations	7,710	4%	20,750	12%	NM	_	NM	_
Excess body weight	26,970	15%	41,550	24%	430	2%	NE	
Inadequate vegetable and fruit consumption	16,680	9%	65,470	38%	NE	_	NE	_
Physical activity	380	0%	40	0%	NP	_	NP	
Sedentary behaviour	16,780	9%	11,020	6%	NE	_	NE	_
Smoking—current status	28,830	16%	10,310	6%	1,180	6%	60	0%
Smoking—ever-smoked status	106,070	58%	90,220	52%	NM	_	NM	_

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

<sup>\*</sup> Estimates rounded to multiples of 10

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

<sup>†</sup> Population age 12 and older

<sup>&</sup>lt;sup>‡</sup>Population ages 12 to 18

<sup>—</sup> 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 Simcoe Muskoka LHIN, more areas had a higher prevalence of current alcohol consumption than the Ontario average for females (n=577; Figure 12.1) compared to males (n=265; Figure 12.2). For females, higher prevalence areas were located in and around Huntsville, Bracebridge, Gravenhurst, Midland, Orillia, Collingwood, Wasaga Beach and Barrie. For males, higher prevalence areas tended to be located along Highway 11 and Highway 12 and in and around Collingwood, Wasaga Beach, Barrie and Orillia.

#### Lower prevalence than Ontario

Areas with a lower prevalence of current alcohol consumption than Ontario were distributed across Barrie and Orillia for females (n=8; Figure 12.1) and located near Penetanguishene and Midland for males (n=5; Figure 12.2).

#### **Adolescents**

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

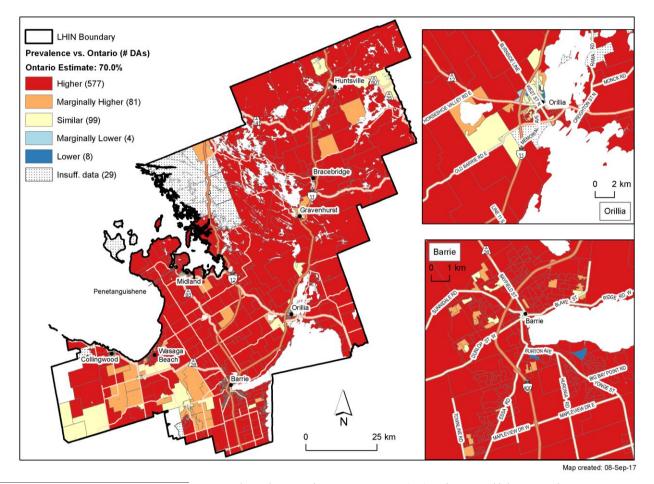
# Higher prevalence than Ontario

There were fewer areas with a higher prevalence of current alcohol consumption than the Ontario average for adolescent females (n=366; Figure 12.3) compared to adolescent males (n=406; Figure 12.4). For adolescent females, higher prevalence areas occurred throughout the northeastern, western and southeastern parts of the LHIN. Higher prevalence areas were common in Orillia and Barrie. For adolescent males, higher prevalence areas tended to cluster more than for adolescent females, particularly in the southern part of the LHIN. Higher prevalence areas were also located in Barrie and Orillia

# Lower prevalence than Ontario

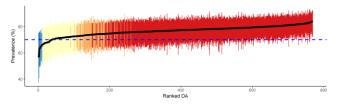
Areas with a lower prevalence of current alcohol consumption than Ontario for adolescent females (n=32; Figure 12.3) and adolescent males (n=35; Figure 12.4) were located in Barrie and Orillia, but were uncommon across the rest of the LHIN.

Figure 12.1 Current alcohol consumption among females (age 12 and older), 2000–2014, North Simcoe Muskoka Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



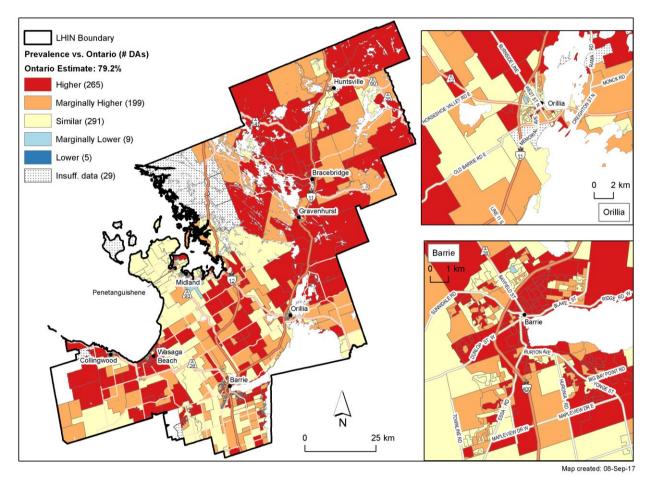
Category	Mean prevalence		
	% (range)		
Overall	76.6		
Higher	78.2 (73.9, 84.3)		
Marginally Higher	73.9 (72.3, 75.7)		
Similar	70.8 (66.5, 73.1)		
Marginally Lower	65.8 (64.8, 66.2)		
Lower	62.4 (56.6, 65.0)		

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



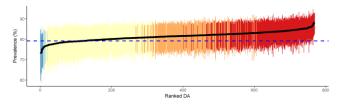
Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario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

Figure 12.2 Current alcohol consumption among males (age 12 and older), 2000–2014, North Simcoe Muskoka Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



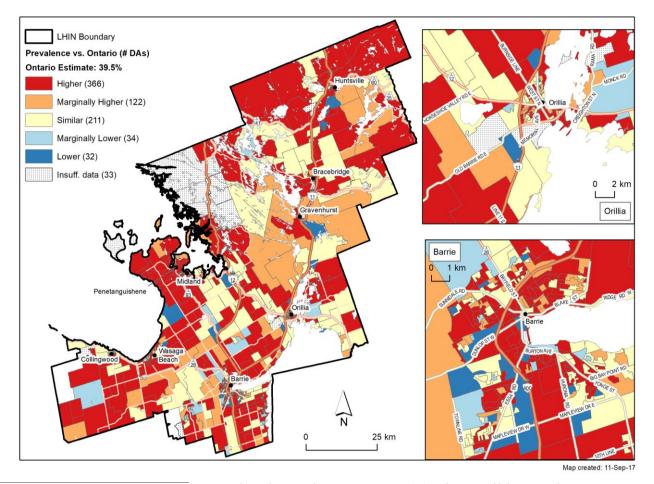
Category	Mean prevalence % (range)		
Overall	81.4		
Higher	83.7 (81.6, 88.2)		
Marginally Higher	81.7 (80.7, 83.1)		
Similar	79.5 (76.2, 81.4)		
Marginally Lower	76.0 (74.0, 77.0)		
Lower	74.1 (73.0, 75.2)		

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



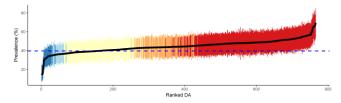
Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario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

Figure 12.3 Current alcohol consumption among adolescent females (ages 12 to 18), 2000–2014, North Simcoe Muskoka Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)		
Overall	44.4		
Higher	49.3 (43.6, 69.4)		
Marginally Higher	43.5 (42.1, 45.2)		
Similar	39.9 (36.5, 43.5)		
Marginally Lower	35.9 (34.7, 36.9)		
Lower	30.1 (14.2, 35.5)		

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



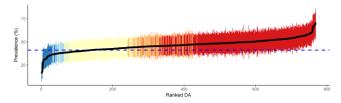
Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario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

Figure 12.4 Current alcohol consumption among adolescent males (ages 12 to 18), 2000–2014, North Simcoe Muskoka Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence		
Category	% (range)		
Overall	46.4		
Higher	50.8 (44.8, 71.0)		
Marginally Higher	45.4 (43.8, 47.4)		
Similar	41.6 (37.9, 45.2)		
Marginally Lower	37.7 (36.6, 38.9)		
Lower	32.3 (15.8, 37.3)		

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.

# 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=318; Figure 12.5) occurred mainly in the northern and eastern parts of the LHIN, and in Orillia and Barrie. Higher prevalence areas for females were also detected south of Barrie and in and around Penetanguishene. For males higher prevalence areas (n=707; Figure 12.6) were located across most of the LHIN.

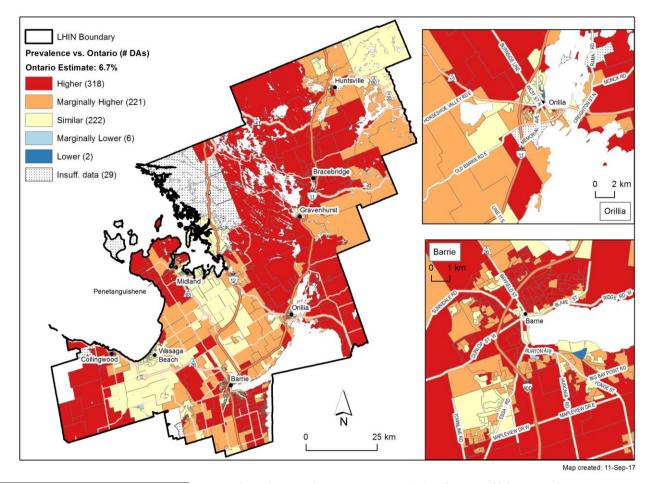
# Lower prevalence than Ontario

Few areas had a lower prevalence than Ontario of alcohol consumption in excess of cancer prevention recommendations for females (n=2; Figure 12.5). For males, lower prevalence areas were not detected in the LHIN (Figure 12.6).

#### **Adolescents**

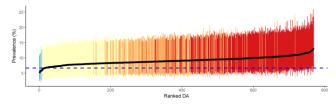
The area-based prevalence of exceeding cancer prevention recommendations was not estimated for adolescent populations.

Figure 12.5 Alcohol consumption exceeding cancer prevention recommendations among females (age 12 and older), 2000–2014, North Simcoe Muskoka Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



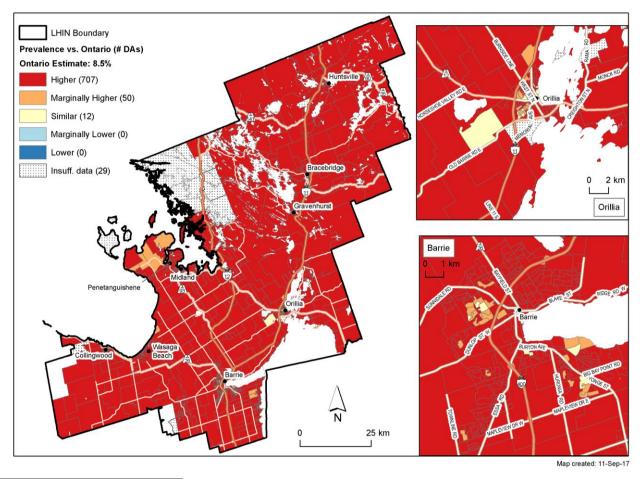
Category	Mean prevalence % (range)		
Overall	9.1		
Higher	10.1 (8.6, 13.2)		
Marginally Higher	8.9 (8.1, 10.9)		
Similar	7.8 (6.3, 9.1)		
Marginally Lower	5.8 (5.7, 5.9)		
Lower	5.3 (5.0, 5.6)		

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

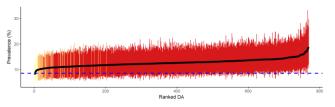


Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario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

Figure 12.6 Alcohol consumption exceeding cancer prevention recommendations among males (age 12 and older), 2000–2014, North Simcoe Muskoka Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)	
Overa	II 12.6	
Higher	12.8 (10.4, 18.8)	
Marginally Higher	10.8 (9.9, 11.7)	
Similar	9.4 (8.0, 10.4)	
Marginally Lower	N/A	
Lower	N/A	
N/A = no estimates in the category		



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

There were many areas with a higher prevalence excess body weight than the Ontario average for females (n=221; Figure 12.7) in the northern part of the LHIN. Higher prevalence areas for females were also located in Orillia, in and around Barrie and around Wasaga Beach. For males, higher prevalence areas (n=286; Figure 12.8) were located extensively throughout the southern and northeastern parts of the LHIN and in Orillia and Barrie.

# Lower prevalence than Ontario

A few areas, mainly in Barrie, had lower prevalence of excess body weight than the Ontario average for females (n=18; Figure 12.7). For males, the few areas of lower prevalence were scattered in the southern part of the LHIN (n=3; Figure 12.8).

#### **Adolescents**

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

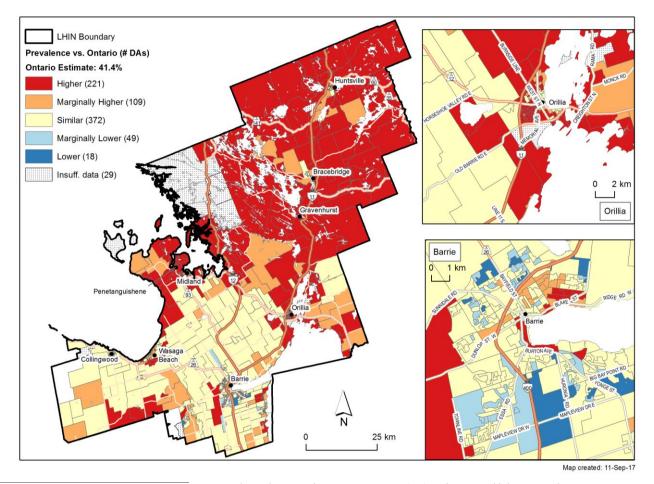
# Higher prevalence than Ontario

Across the LHIN, most areas with a higher prevalence of excess body weight (overweight or obese) than Ontario for adolescent females (n=81; Figure 12.9) were located in the northern part of LHIN, north of Huntsville and Bracebridge, northeast of Orillia and in and around Penetanguishene, Midland and Orillia. In the North Simcoe Muskoka LHIN, there were no areas with a higher prevalence than Ontario for adolescent males, which is why that map is not shown.

# Lower prevalence than Ontario

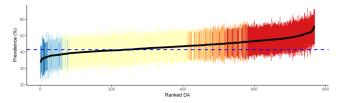
No areas of lower prevalence were identified for adolescent females (Figure 12.9).

Figure 12.7 Excess body weight (overweight/obese) among females (age 12 and older), 2000–2014, North Simcoe Muskoka Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



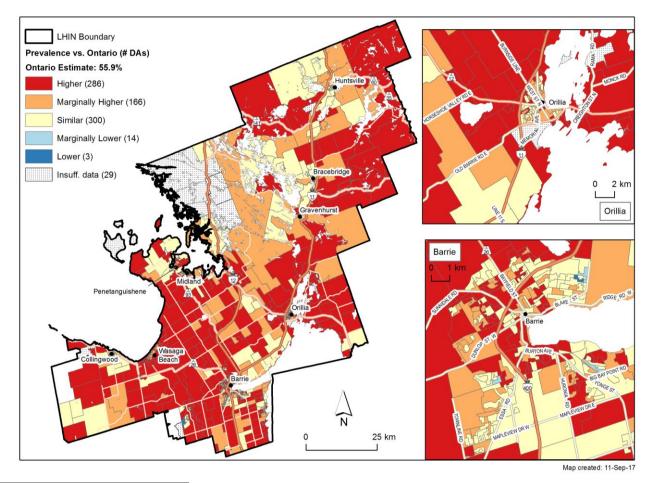
Category	Mean prevalence % (range)
Overall	43.6
Higher	48.2 (44.6, 55.8)
Marginally Higher	44.8 (43.7, 46.2)
Similar	41.6 (38.7, 44.7)
Marginally Lower	38.0 (35.4, 39.2)
Lower	36.3 (33.6, 38.3)

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



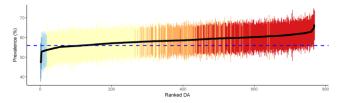
Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario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

Figure 12.8 Excess body weight (overweight/obese) among males (age 12 and older), 2000–2014, North Simcoe Muskoka Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



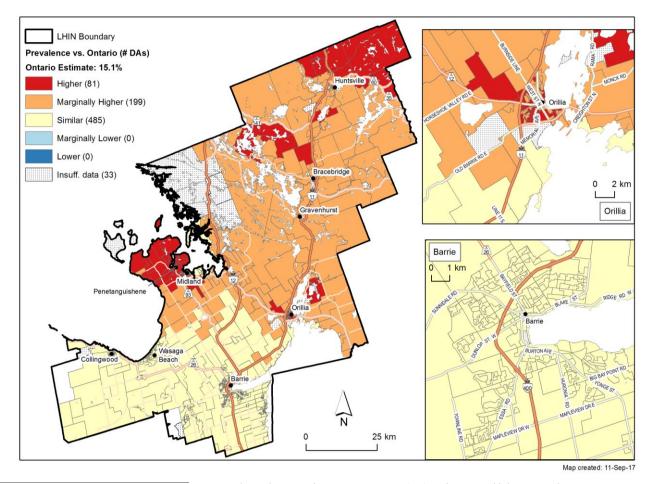
Category	Mean prevalence		
Category	% (range)		
Overall	58.5		
Higher	60.7 (58.5, 66.4)		
Marginally Higher	58.7 (57.7, 60.7)		
Similar	56.5 (53.5, 58.7)		
Marginally Lower	53.2 (52.9, 53.7)		
Lower	49.1 (47.1, 52.2)		

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

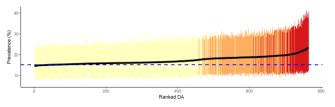


Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario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

Figure 12.9 Excess body weight (overweight/obese) among adolescent females (ages 12 to 18), 2000–2014, North Simcoe Muskoka Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)	
Overal	l 17.3	
Higher	20.7 (18.8, 23.3)	
Marginally Higher	18.8 (17.6, 20.6)	
Similar	16.1 (14.4, 18.8)	
Marginally Lower	N/A	
Lower	N/A	
N/A = no estimates in the category		



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 Simcoe Muskoka LHIN, there were fewer areas with a higher prevalence than Ontario of inadequate vegetable and fruit consumption for females (n=105; Figure 12.10) compared to males (n=339; Figure 12.11). For females, higher prevalence areas were located in and west of Orillia, south of Barrie and near Midland and Wasaga Beach. In contrast, higher prevalence areas for males were identified in many parts of the LHIN including in Orillia and Barrie.

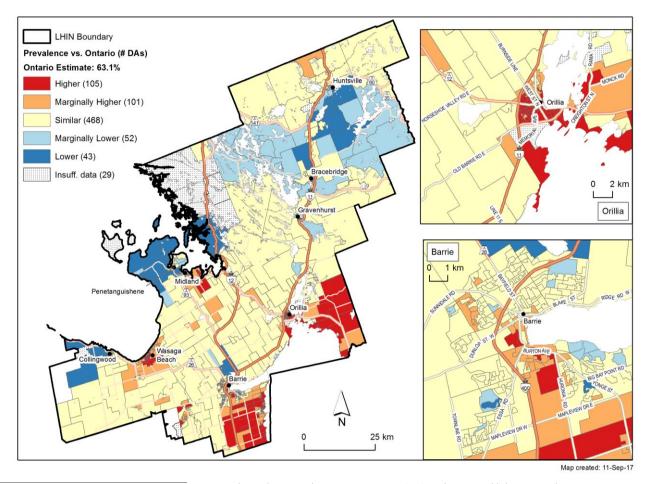
# Lower prevalence than Ontario

For females, there were 43 areas with a lower prevalence of inadequate vegetable and fruit consumption than Ontario (Figure 12.10). These areas were located between Huntsville and Bracebridge, around Penetanguishene and Midland, in the outskirts of Barrie and around Collingwood. Only one area with adequate consumption (lower prevalence) was found for males; this area was located in Barrie (Figure 12.11).

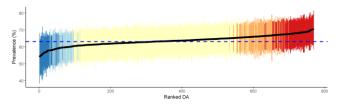
#### **Adolescents**

More than two-thirds of the adolescent Ontario population had inadequate vegetable and fruit consumption, at approximately 68% for females and 74% for males. In the North Simcoe Muskoka LHIN, there were no areas with a higher prevalence than Ontario for adolescent females or adolescent males, which is why those maps are not shown.

Figure 12.10 Inadequate vegetable and fruit consumption among females (age 12 and older), 2000–2014, North Simcoe Muskoka Local Health Integration Network (LHIN) by 2006 dissemination area (DA)

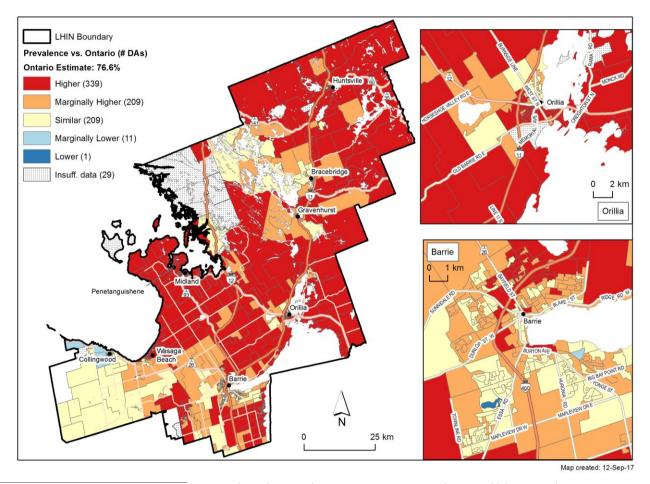


Category	Mean prevalence		
	% (range)		
Overal	ll 63.7		
Higher	68.2 (66.5, 70.8)		
Marginally Higher	66.3 (65.2, 67.6)		
Similar	63.2 (59.3, 66.6)		
Marginally Lower	59.6 (57.9, 60.9)		
Lower	57.2 (54.0, 59.7)		

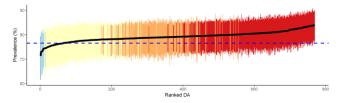


Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario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

Figure 12.11 Inadequate vegetable and fruit consumption among males (age 12 and older), 2000–2014, North Simcoe Muskoka Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence		
category	% (range)		
Overall	79.2		
Higher	80.8 (78.8, 84.1)		
Marginally Higher	78.9 (78.0, 80.1)		
Similar	77.2 (74.4, 78.9)		
Marginally Lower	73.7 (72.9, 74.5)		
Lower	71.3 (71.3, 71.3)		



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=7; Figure 12.12) and males (n=1; Figure 12.13) were uncommon. These areas were locatedin Barrie and, for females only, in Orillia.

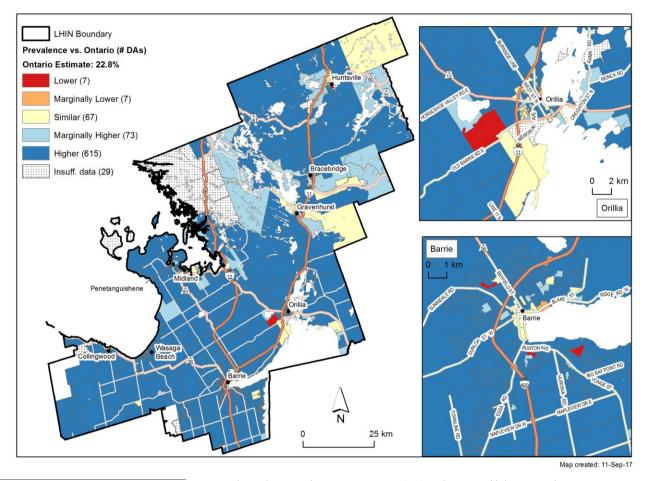
# Higher prevalence than Ontario

Overall, areas with a higher prevalence of physical activity than the Ontario average were common throughout the LHIN for females (n=615; Figure 12.12) and males (n=578; Figure 12.13), and the patterns were generally similar.

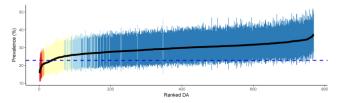
#### **Adolescents**

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 Ontario for adolescents in the North Simcoe Muskoka LHIN, which is why those maps are not shown.

Figure 12.12 Physical activity among females (age 12 and older), 2000–2014, North Simcoe Muskoka Local Health Integration Network (LHIN) by 2006 dissemination area (DA)

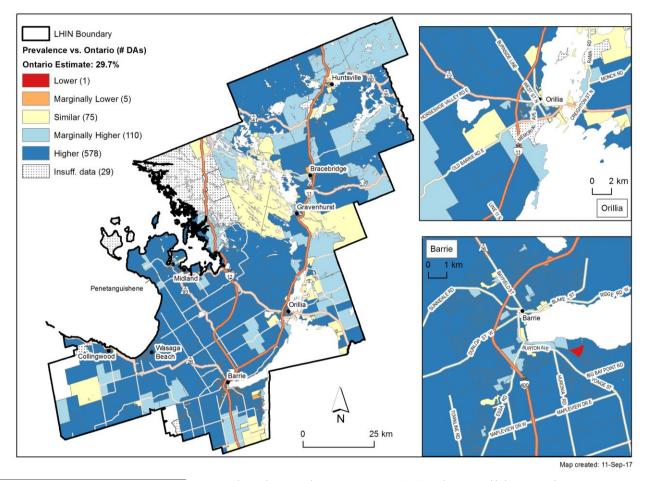


Category	Mean prevalence		
Category	% (range)		
Overall	29.3		
Lower	18.2 (15.7, 19.6)		
Marginally Lower	20.7 (20.3, 20.9)		
Similar	23.7 (21.1, 25.8)		
Marginally Higher	26.4 (25.2, 29.2)		
Higher	30.5 (26.4, 37.5)		

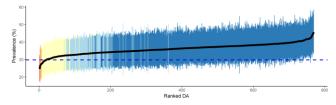


Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario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

Figure 12.13 Physical activity among males (age 12 and older), 2000–2014, North Simcoe Muskoka Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence		
Category	% (range)		
Overall	36.0		
Lower	24.6 (24.6, 24.6)		
Marginally Lower	27.0 (26.3, 27.5)		
Similar	31.1 (27.6, 33.6)		
Marginally Higher	33.5 (32.2, 35.8)		
Higher	37.2 (33.4, 45.7)		



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

For females, 121 areas (Figure 12.14) areas with a higher prevalence of sedentary behaviour than the Ontario average were identified., These areas were located in the southern part of the LHIN, around Penetanguishene, Midland, Wasaga Beach and Collingwood. Higher prevalence areas were also located in and around Orillia and Barrie. For males (n=78; Figure 12.15), areas with a higher prevalence than Ontario were also detected around Penetanguishene, Midland and Wasaga Beach.

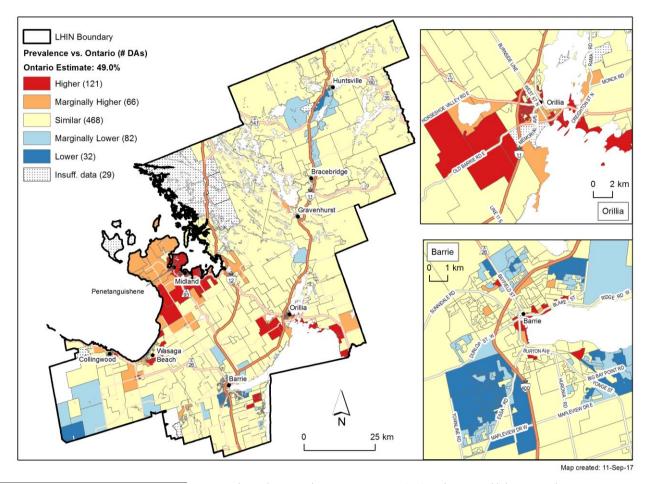
#### Lower prevalence than Ontario

Overall, there was similar number of areas with a lower prevalence of sedentary behaviour than the Ontario average for females (n=32; Figure 12.14) and males (n=26; Figure 12.15). ). These lower prevalence areas occurrred mainly in parts of Barrie. Additional lower prevalence areas were located near Huntsville for females and south of Collingwood and north of Highway 26 for males.

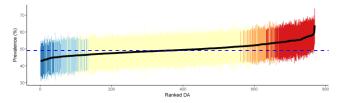
#### **Adolescents**

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 Simcoe Muskoka LHIN, there were no areas with a higher prevalence than Ontario for adolescents, which is why those maps are not shown.

Figure 12.14 Sedentary behaviour among females (age 12 and older), 2000–2014, North Simcoe Muskoka Local Health Integration Network (LHIN) by 2006 dissemination area (DA)

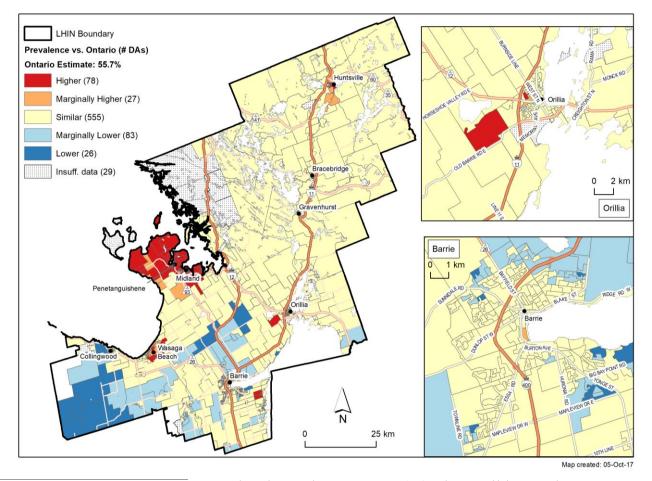


Category	Mean prevalence % (range)		
Overall	49.8		
Higher	55.4 (52.9, 64.0)		
Marginally Higher	52.5 (51.5, 53.8)		
Similar	49.0 (45.7, 52.3)		
Marginally Lower	45.6 (43.6, 46.6)		
Lower	44.1 (42.7, 45.4)		

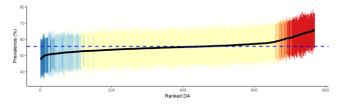


Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario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

Figure 12.15 Sedentary behaviour among males (age 12 and older), 2000–2014, North Simcoe Muskoka Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	55.6
Higher	63.0 (59.6, 65.9)
Marginally Higher	59.8 (58.5, 61.2)
Similar	55.2 (51.3, 59.1)
Marginally Lower	51.8 (50.2, 53.0)
Lower	49.9 (47.6, 51.7)



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 North Simcoe Muskoka LHIN, areas with a higher prevalence of current smoking than the Ontario average were more common for females compared to males. For females, higher prevalence areas (n=480; Figure 12.16) were located throughout the LHIN, near Bracebridge, Gravenhurst, Penetanguishene, Midland, Wasaga Beach, Collingwood and in Orillia and Barrie. For males, higher prevalence areas (n=146; Figure 12.17) were more common in the eastern parts of the LHIN, near Bracebridge, Gravenhurst, Orillia and Barrie, but were also located near Penetanguishene and Midland.

#### Lower prevalence than Ontario

For females, lower prevalence areas were uncommon (n=6; Figure 12.16), and were located in Barrie. Areas of lower prevalence for males (n=44; Figure 12.17) were typically located near Penetanguishene, Midland and Wasaga Beach and in Orillia and Barrie.

#### **Adolescents**

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

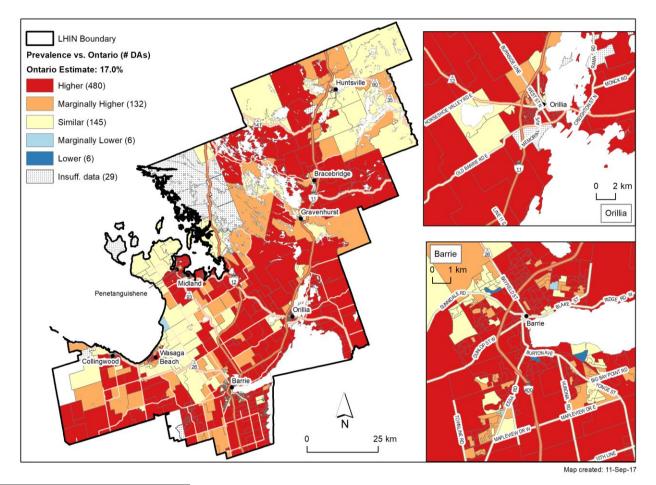
#### Higher prevalence than Ontario

Areas with a higher prevalence of current smoking than the Ontario average were much more common for adolescent females (n=351; Figure 12.18) compared to adolescent males (n=22; Figure 12.19). For adolescent females, higher prevalence areas were located in the northern and southeastern parts of the LHIN, near Huntsville, Bracebridge, Gravenhurst and Penetanguishene and Midland. Many higher prevalence areas for adolescent females were also located southeast of Barrie and in Orillia and Barrie. For adolescent males, areas with a higher prevalence of current smoking than Ontario were located in the northern part of the LHIN (e.g., around Huntsville and Gravenhurst), in and around Midland, and southeast of Collingwood and Barrie.

### Lower prevalence than Ontario

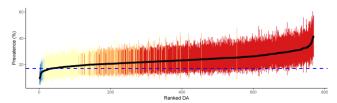
Areas with a lower prevalence of current smoking than the Ontario average for adolescent females (n=7; Figure 12.18) were located in the central part of the LHIN (e.g., south of Orillia, Barrie). Lower prevalence areas for adolescent males (n=55; Figure 12.19) were more common compared to adolescent females, and were located mainly in the southern part of the LHIN, particularly in Barrie and around Wasaga Beach and Collingwood.

Figure 12.16 Current smoking among females (age 12 and older), 2000–2014, North Simcoe Muskoka Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



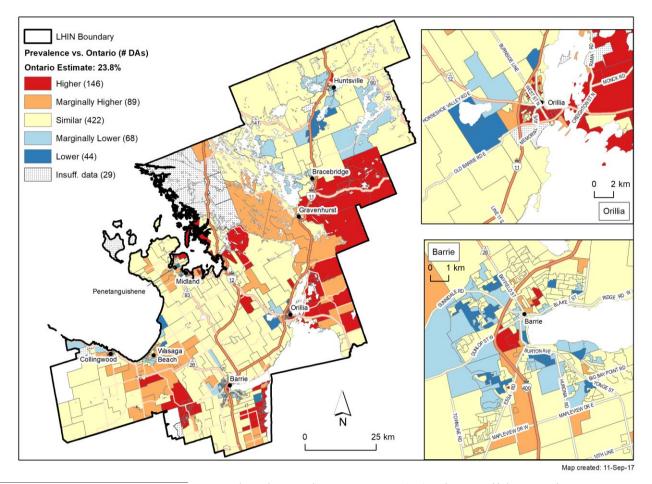
Category	Mean prevalence % (range)		
Overall	23.5		
Higher	25.9 (20.2, 41.8)		
Marginally Higher	21.1 (19.1, 25.3)		
Similar	18.5 (15.0, 22.3)		
Marginally Lower	14.6 (13.7, 15.3)		
Lower	11.8 (9.0, 14.1)		

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

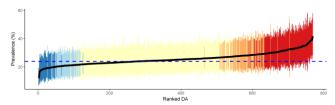


Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario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

Figure 12.17 Current smoking among males (age 12 and older), 2000–2014, North Simcoe Muskoka Local Health Integration Network (LHIN) by 2006 dissemination area (DA)

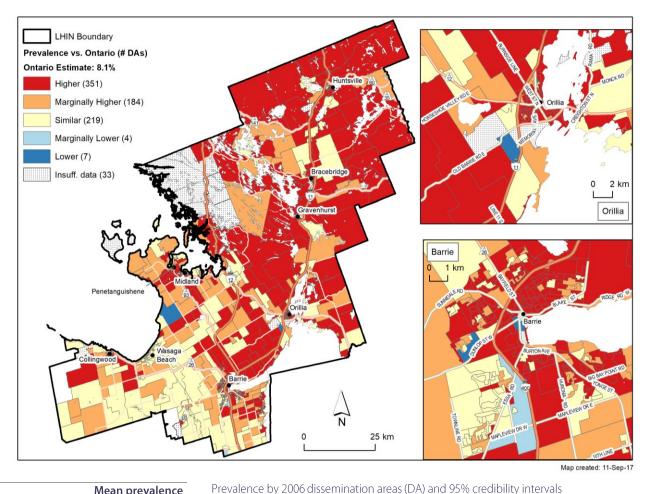


Category	Mean prevalence % (range)		
Overall	25.6		
Higher	32.3 (28.2, 41.7)		
Marginally Higher	28.0 (26.0, 32.4)		
Similar	24.3 (21.1, 28.5)		
Marginally Lower	20.8 (19.2, 21.8)		
Lower	18.5 (12.1, 20.5)		



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 12.18 Current smoking among adolescent females (ages 12 to 18), 2000–2014, North Simcoe Muskoka Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



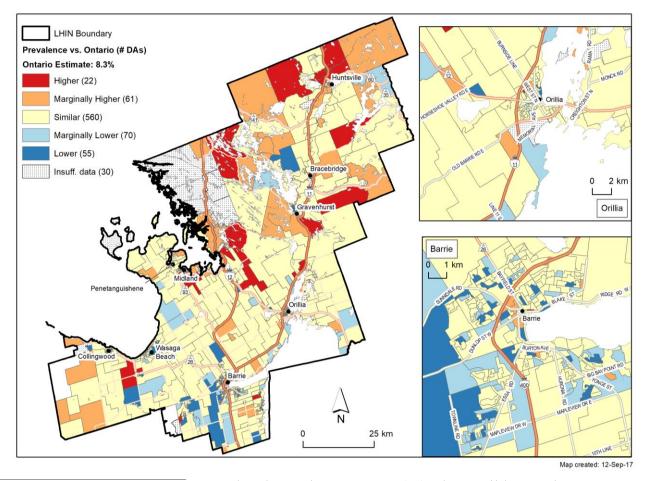
Prevalence b	ру 2006	dissemi	nation	areas (	(DA)	and	95%	credib	ility

Category	Mean prevalence % (range)
Overall	11.6
Higher	13.4 (10.9, 21.7)
Marginally Higher	11.2 (9.8, 13.2)
Similar	9.4 (7.2, 11.8)
Marginally Lower	6.7 (6.4, 6.9)
Lower	4.0 (3.0, 6.2)

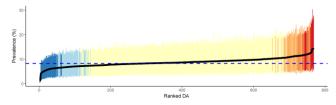
Ranked DA

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 12.19 Current smoking among adolescent males (ages 12 to 18), 2000–2014, North Simcoe Muskoka Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category Mean prevalen % (range)			
Overall	8.7		
Higher	12.6 (11.4, 14.5)		
Marginally Higher	11.2 (10.2, 12.7)		
Similar	8.8 (7.1, 11.3)		
Marginally Lower	6.9 (6.4, 7.4)		
Lower	5.5 (1.2, 6.6)		



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 LHIN, most areas had a higher prevalence of ever-smoked status than the Ontario average, for females (n=739; Figure 12.20) and males (n=565; Figure 12.21). The location of these areas was similar for females and males. However, there were more higher prevalence areas for females in Barrie compared to males.

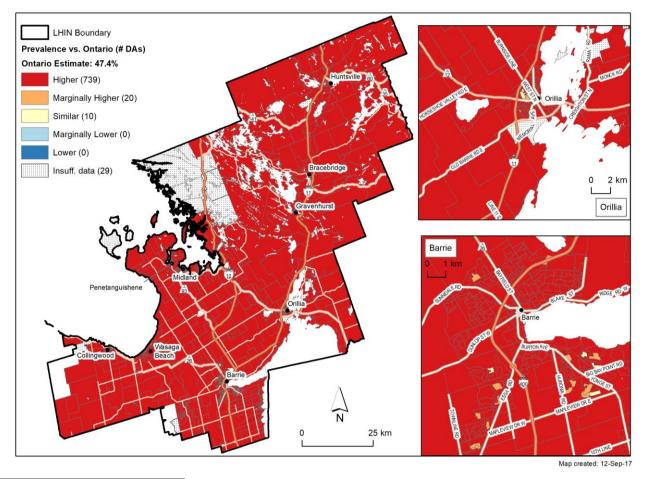
# Lower prevalence than Ontario

No areas with a lower prevalence of ever-smoked status than the Ontario average were identified for females (Figure 12.20). A few lower prevalence areas were identified for males (n=7; Figure 12.21).

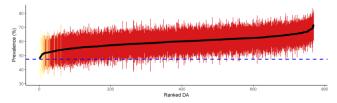
#### **Adolescents**

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

Figure 12.20 Ever-smoked status among females (age 12 and older), 2000–2014, North Simcoe Muskoka Local Health Integration Network (LHIN) by 2006 dissemination area (DA)

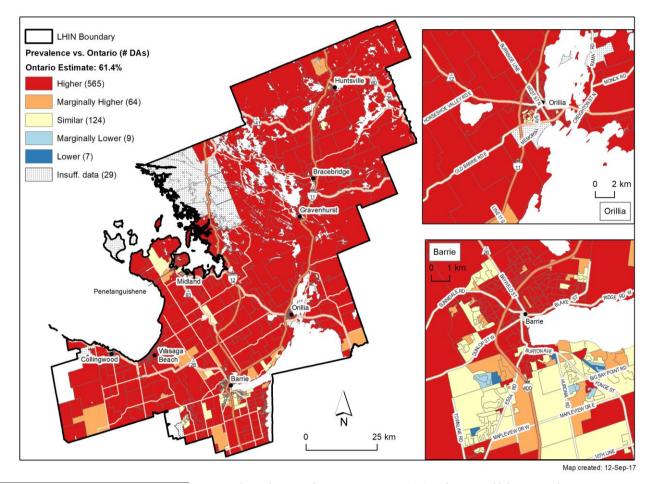


Category	Mean prevalence % (range)	
Overa	ll 59.7	
Higher	60.0 (52.0, 72.0)	
Marginally Higher	52.2 (50.9, 54.0)	
Similar	49.7 (47.7, 51.3)	
Marginally Lower	N/A	
Lower	N/A	
N/A = no estimates in the category		



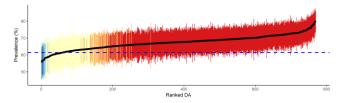
Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario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

Figure 12.21 Ever-smoked status among males (age 12 and older), 2000–2014, North Simcoe Muskoka Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)		
Overall	67.4		
Higher	69.2 (64.3, 80.2)		
Marginally Higher	64.5 (63.1, 66.7)		
Similar	61.9 (58.4, 64.3)		
Marginally Lower	58.2 (56.9, 58.9)		
Lower	56.6 (55.5, 57.0)		

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.