LHIN 3

Waterloo Wellington

3. Waterloo Wellington LHIN

Key Findings

Top three priority risk factor population estimates by sex (see Table 3.1 below):

Females

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

Males

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

Risk factor summary

Alcohol—current consumption

Priority areas:

- Females: most areas in the southeastern part of the LHIN, including most areas in Guelph, Kitchener-Waterloo and Cambridge
- Males: many areas in the southeastern part of the LHIN, including many areas throughout Guelph and Kitchener-Waterloo and some parts of Cambridge; and areas to the east of Fergus
- Adolescent females: areas dispersed across the LHIN and many areas throughout Guelph, Kitchener-Waterloo and Cambridge
- Adolescent males: areas dispersed across the LHIN and many areas throughout Guelph, Kitchener-Waterloo and Cambridge

Alcohol—consumption exceeding cancer prevention recommendations

Priority areas:

- Females: few areas across the LHIN; some parts of Guelph and Kitchener-Waterloo
- Males: areas throughout the northern and southern tips of the LHIN, as well as along the eastern boundary of the LHIN., and many parts of Guelph, Kitchener-Waterloo and Cambridge

Excess body weight

Priority areas:

- Females: many areas in the northern half of the LHIN, areas northwest of Cambridge and south of Kitchener
- Males: areas in the northern half of the LHIN, some areas southwest of Cambridge and south of Kitchener-Waterloo, and areas surrounding New Hamburg and Fergus

Inadequate vegetable and fruit consumption

Priority areas:

- Females: clusters of areas in Cambridge and Kitchener-Waterloo, and areas near Palmerston and Mount Forest
- Males: many areas throughout Cambridge towards the south of Kitchener-Waterloo and areas near Palmerston and north of Mount Forest

Physical activity

Priority areas:

- Females: few areas across the LHIN, with areas throughout Kitchener-Waterloo and northwest of Cambridge
- Males: many areas along the western boundary of the LHIN, Kitchener-Waterloo and Cambridge
- Adolescent males: some areas along the western boundary of the LHIN and southern Kitchener

Sedentary behaviour

Priority areas:

- Females: some parts of Guelph and Kitchener-Waterloo
- Males: one area near New Hamburg

Smoking—current

Priority areas:

- Females: many areas throughout Guelph, Cambridge and Kitchener-Waterloo, and areas in the northern tip of the LHIN near Mount Forest and Palmerston
- Males: many areas throughout Kitchener-Waterloo and clusters in Guelph and Cambridge
- Adolescent females: many areas throughout Guelph and surrounding Guelph, and some parts of Cambridge and Kitchener-Waterloo
- Adolescent males: areas dispersed across the LHIN and some parts of Kitchener-Waterloo

Smoking—ever-smoked status

Priority areas:

- Females: most areas in the eastern half of the LHIN, including most parts of Guelph, Cambridge and Kitchener-Waterloo
- Males: many areas in the northern and southern tips of the LHIN, most areas east of Fergus, and many parts of Guelph, Cambridge and Kitchener-Waterloo

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 Waterloo-Wellington LHIN include:

- excess body weight among adolescent females and adolescent males;
- inadequate vegetable and fruit consumption among adolescent females and adolescent males;
- physical activity among adolescent females; and
- sedentary behaviour among adolescent females and adolescent males.

Notes

Risk factor prevalence could not be estimated for several areas in the Waterloo Wellington LHIN (e.g., suppressed census populations or institutionalized populations), which are shown as "insufficient data" on the maps. See Appendix C for a full 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 3.1 (page 103) presents the estimated priority populations for each risk factor by sex and age group in the Waterloo Wellington 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 ≥ 80%). An exception is physical activity, which had strong statistical evidence of lower prevalence estimates than Ontario (posterior probabilities ≤ 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 3.1 Estimated priority populations among higher prevalence** dissemination areas compared to Ontario by risk factor, sex and age group, Waterloo Wellington Local Health Integration Network (LHIN), using 2006 census populations

Risk factor	Female priority population*†	% of Female population in the LHIN† (n=296,200)	Male priority population*†	% of male population in the LHIN† (n=284,410)	Adolescent female priority population*‡	% of adolescent female population in the LHIN‡ (n=32,850)	Adolescent male priority population*‡	% of adolescent male population in the LHIN‡ (n=34,470)
Alcohol—current consumption	140,790	48%	87,580	31%	5,270	16%	4,790	14%
Alcohol—consumption exceeding cancer prevention recommendations	1,190	0%	13,470	5%	NM	—	NM	—
Excess body weight	39,720	13%	23,230	8%	NE	—	NE	—
Inadequate fruit and vegetable consumption	10,680	4%	49,640	17%	NE	—	NE	—
Physical activity**	3,730	1%	14,320	5%	NP	—	1,660	5%
Sedentary behaviour	8,600	3%	160	0%	NE	—	NE	—
Smoking—current status	16,800	6%	19,660	7%	760	2%	220	1%
Smoking—ever-smoked status	80,130	27%	79,570	28%	NM	—	NM	—

NE = no estimates within the "higher" prevalence categories; NM = not modelled; NP = census population estimates not available
* Estimates rounded to multiples of 10
** For physical activity, priority populations are those living in areas with a lower risk factor prevalence compared to Ontario
† Population age 12 and older
‡ Population ages 12 to 18
— Value not applicable

Alcohol: current consumption

People age 12 and older

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

Higher prevalence than Ontario

For females (n=636, Figure 3.1) and males (n=352, Figure 3.2), most areas with a higher prevalence of current alcohol consumption than the Ontario average were located in the southeastern part of the LHIN. For both sexes, there were many higher prevalence areas throughout Guelph, Cambridge and Kitchener-Waterloo; however, higher prevalence areas were more common in these cities for females than males. For females, there were also many higher prevalence areas located north of Guelph and west of Cambridge and Kitchener-Waterloo.

Lower prevalence than Ontario

For females (n=42; Figure 3.1) and males (n=69; Figure 3.2), most lower prevalence areas were clustered in the central part of the LHIN, west and north of Elmira, and southwest of Arthur. For both sexes, there were a few additional lower prevalence areas located in the Kitchener-Waterloo area.

Adolescents

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

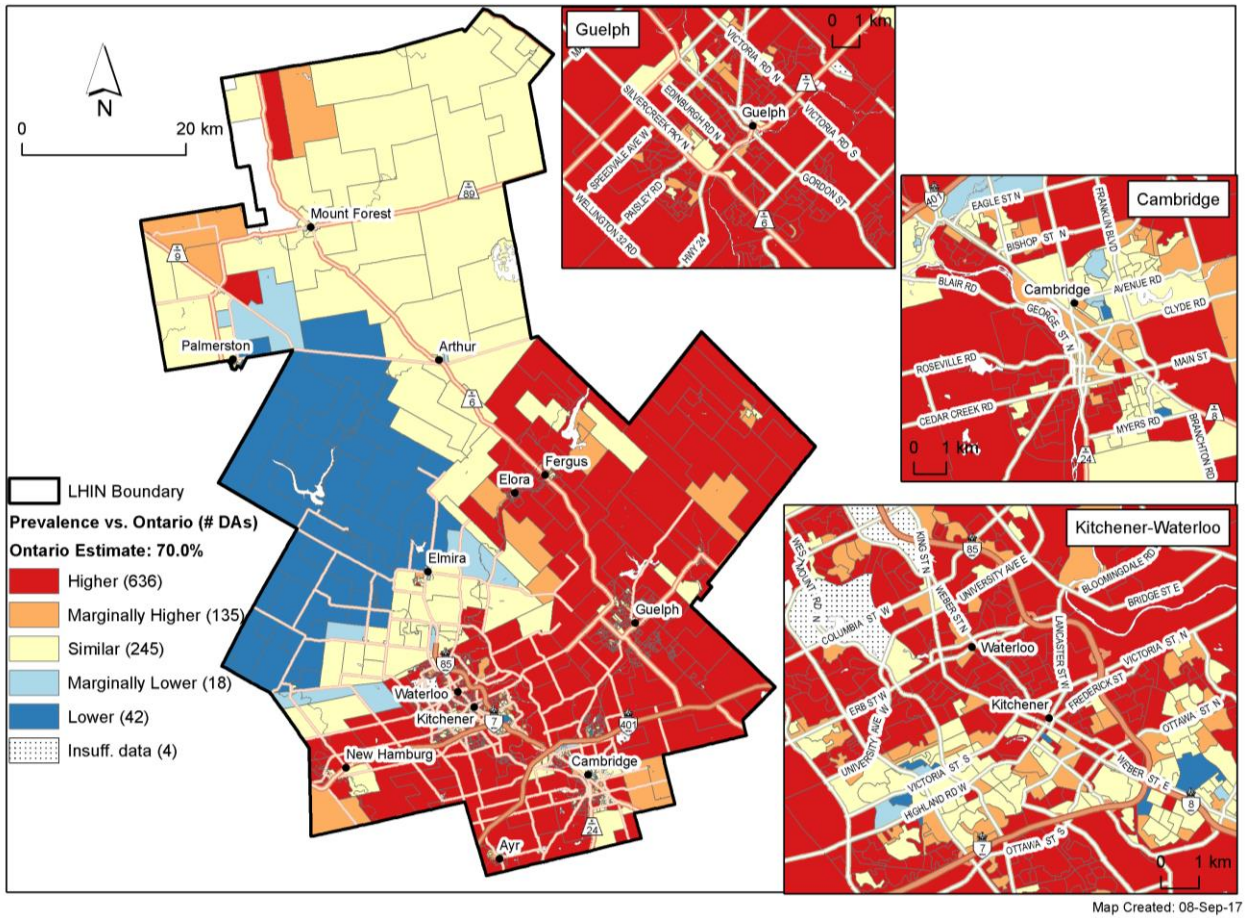
Higher prevalence than Ontario

Areas with a higher prevalence of current alcohol consumption than the Ontario average were scattered across the LHIN for adolescent females (n=398; Figure 3.3) and adolescent males (n=336; Figure 3.4). Many areas were located throughout Guelph, Cambridge and Kitchener-Waterloo for both sexes; however, higher prevalence areas in Guelph were more common for adolescent females than adolescent males. For both sexes, additional areas were located near Elora and Fergus, and in the northern tip of the LHIN around Mount Forest.

Lower prevalence than Ontario

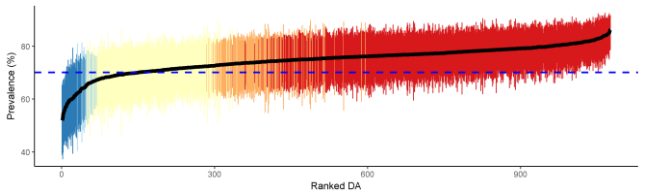
Areas with a lower prevalence of current alcohol consumption than the Ontario average were scattered across the LHIN for adolescent females (n=97; Figure 3.3) and adolescent males (n=118; Figure 3.4). For both sexes, many areas were dispersed throughout the Kitchener-Waterloo area.

Figure 3.1 Current alcohol consumption among females (age 12 and older), 2000–2014, Waterloo Wellington Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



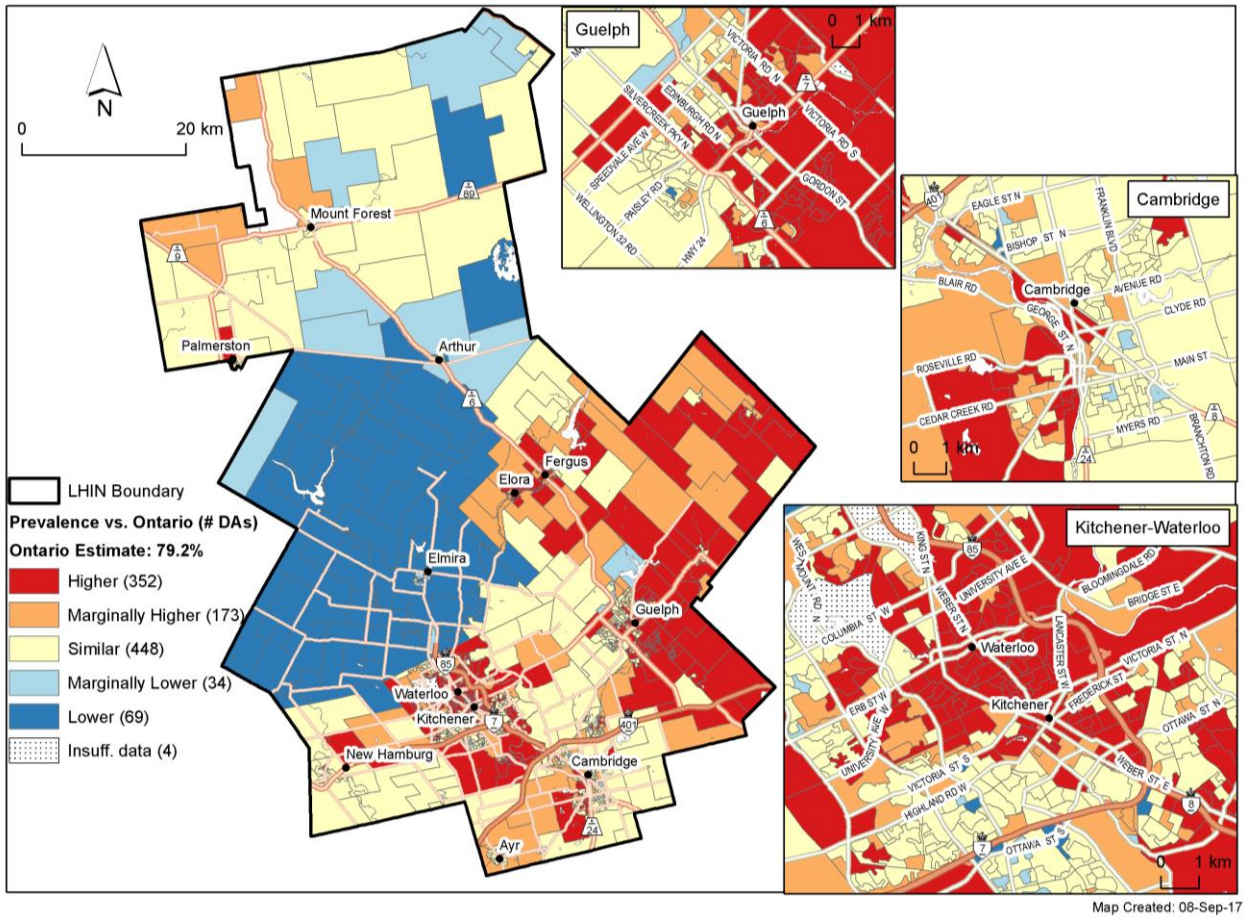
Category	Mean prevalence % (range)
Overall	74.9
Higher	78.0 (73.3, 86.2)
Marginally Higher	73.9 (72.4, 76.2)
Similar	70.5 (65.6, 73.5)
Marginally Lower	65.6 (62.3, 67.3)
Lower	60.0 (52.0, 64.8)

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



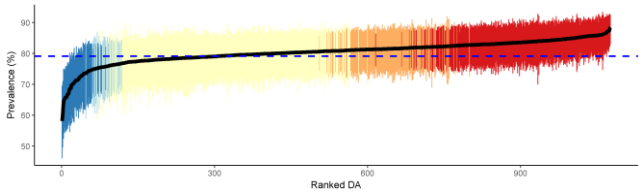
Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario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

Figure 3.2 Current alcohol consumption among males (age 12 and older), 2000–2014, Waterloo Wellington Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



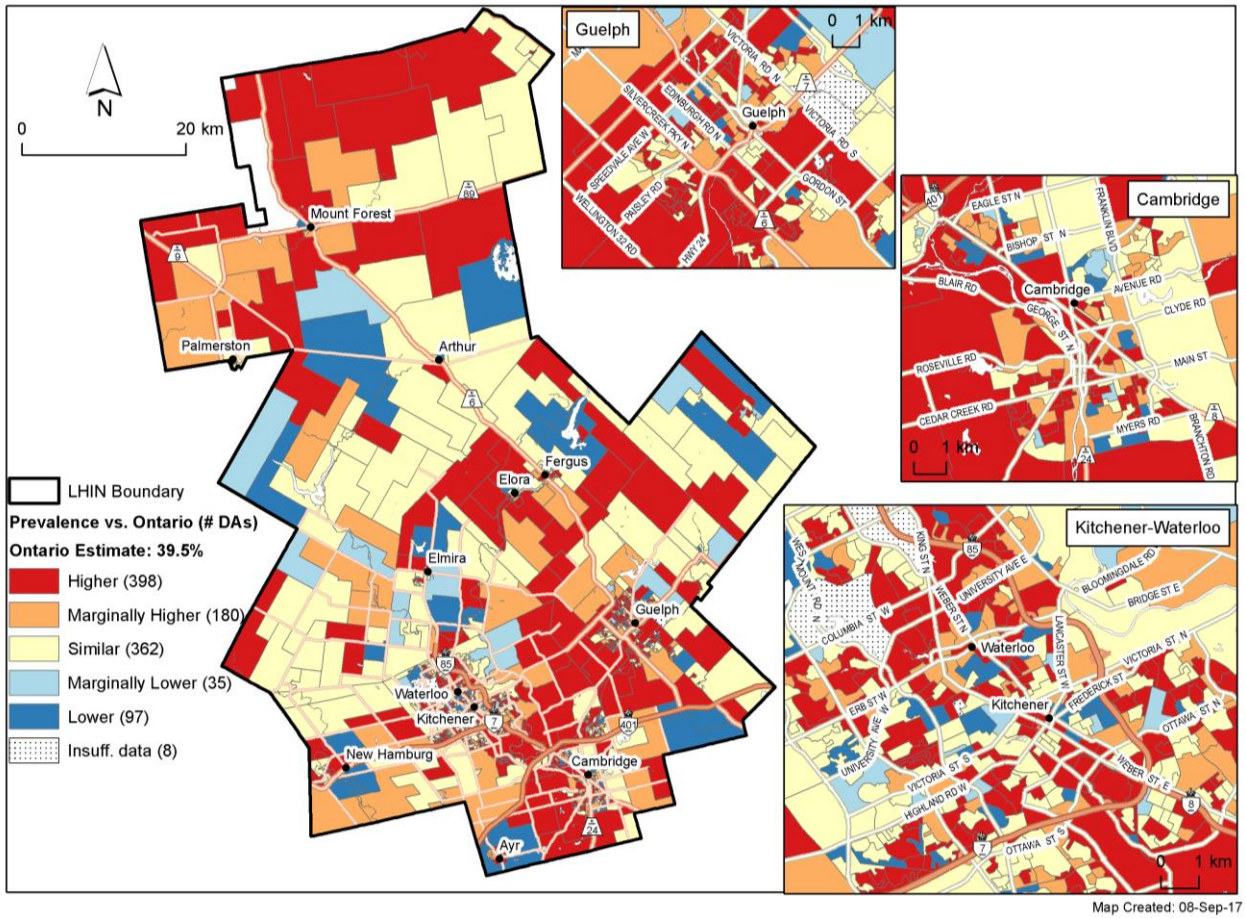
Category	Mean prevalence % (range)
Overall	80.5
Higher	83.9 (81.4, 88.5)
Marginally Higher	81.6 (80.6, 82.8)
Similar	79.2 (75.2, 81.3)
Marginally Lower	75.9 (73.7, 76.8)
Lower	71.2 (58.1, 75.8)

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



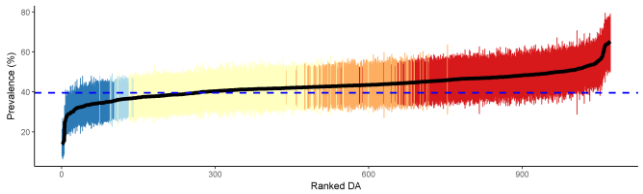
Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario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

Figure 3.3 Current alcohol consumption among adolescent females (ages 12 to 18), 2000–2014, Waterloo Wellington Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



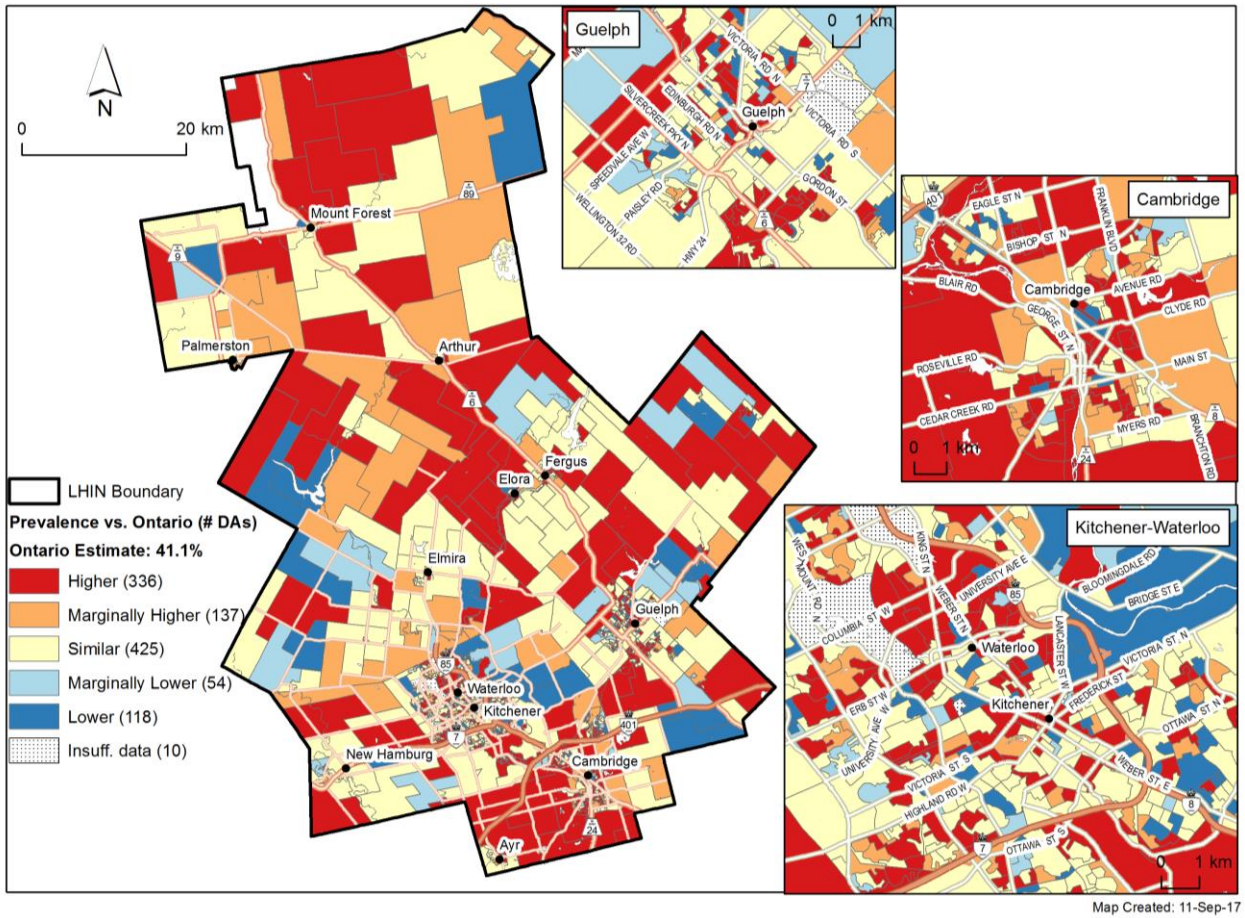
Category	Mean prevalence % (range)
Overall	43.0
Higher	48.8 (43.0, 65.2)
Marginally Higher	43.4 (41.9, 45.9)
Similar	40.2 (36.1, 43.5)
Marginally Lower	36.1 (34.4, 36.9)
Lower	31.7 (13.7, 35.5)

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



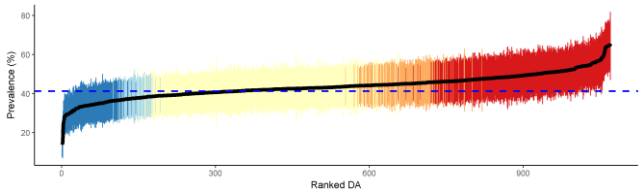
Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario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

Figure 3.4 Current alcohol consumption among adolescent males (ages 12 to 18), 2000–2014, Waterloo Wellington Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	43.7
Higher	50.4 (44.8, 65.6)
Marginally Higher	45.0 (43.6, 47.5)
Similar	41.6 (37.8, 44.9)
Marginally Lower	37.6 (36.3, 38.9)
Lower	33.4 (13.9, 37.7)

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



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

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

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 among females (n=51; Figure 3.5), compared to males (n=412; Figure 3.6). For females, these areas were predominantly located in Guelph and Kitchener-Waterloo, with an additional cluster of areas along the eastern boundary of the LHIN. For males, these areas were located throughout the northern, eastern and southern quadrants of the LHIN, including many parts of Guelph, the eastern half of Kitchener-Waterloo, and several parts of Cambridge.

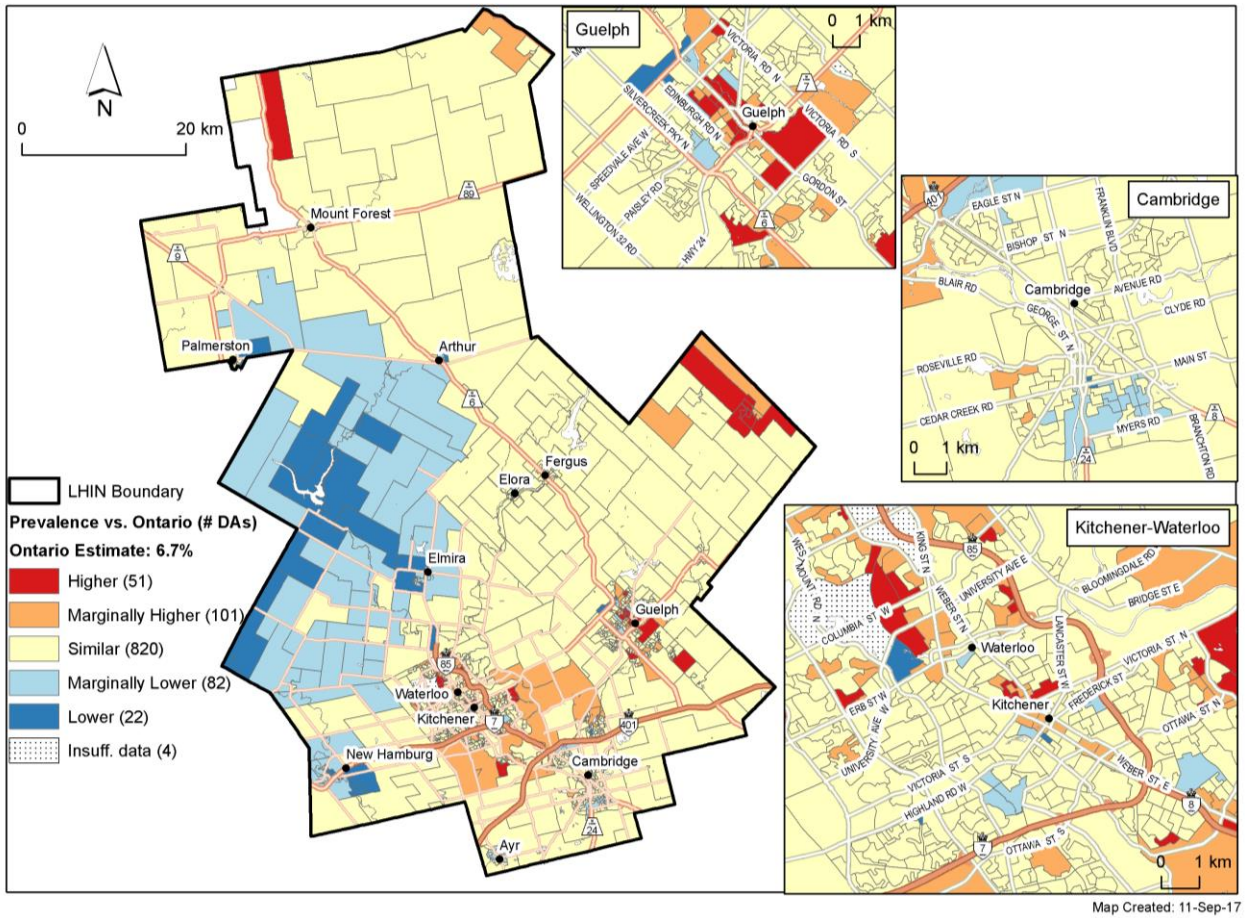
Lower prevalence than Ontario

Among females, most areas with a lower prevalence of alcohol consumption in excess of the recommended daily limits for cancer prevention (n=22; Figure 3.5) were located in the central part of the LHIN northwest of Elmira. For males (n=5; Figure 3.6) there were very few lower prevalence areas throughout the LHIN.

Adolescents

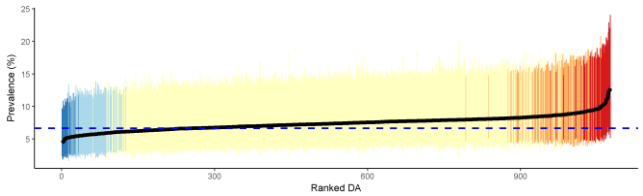
The area-based prevalence of exceeding cancer prevention recommendations was not estimated for adolescent populations.

Figure 3.5 Alcohol consumption exceeding cancer prevention recommendations among females (age 12 and older), 2000–2014, Waterloo Wellington Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



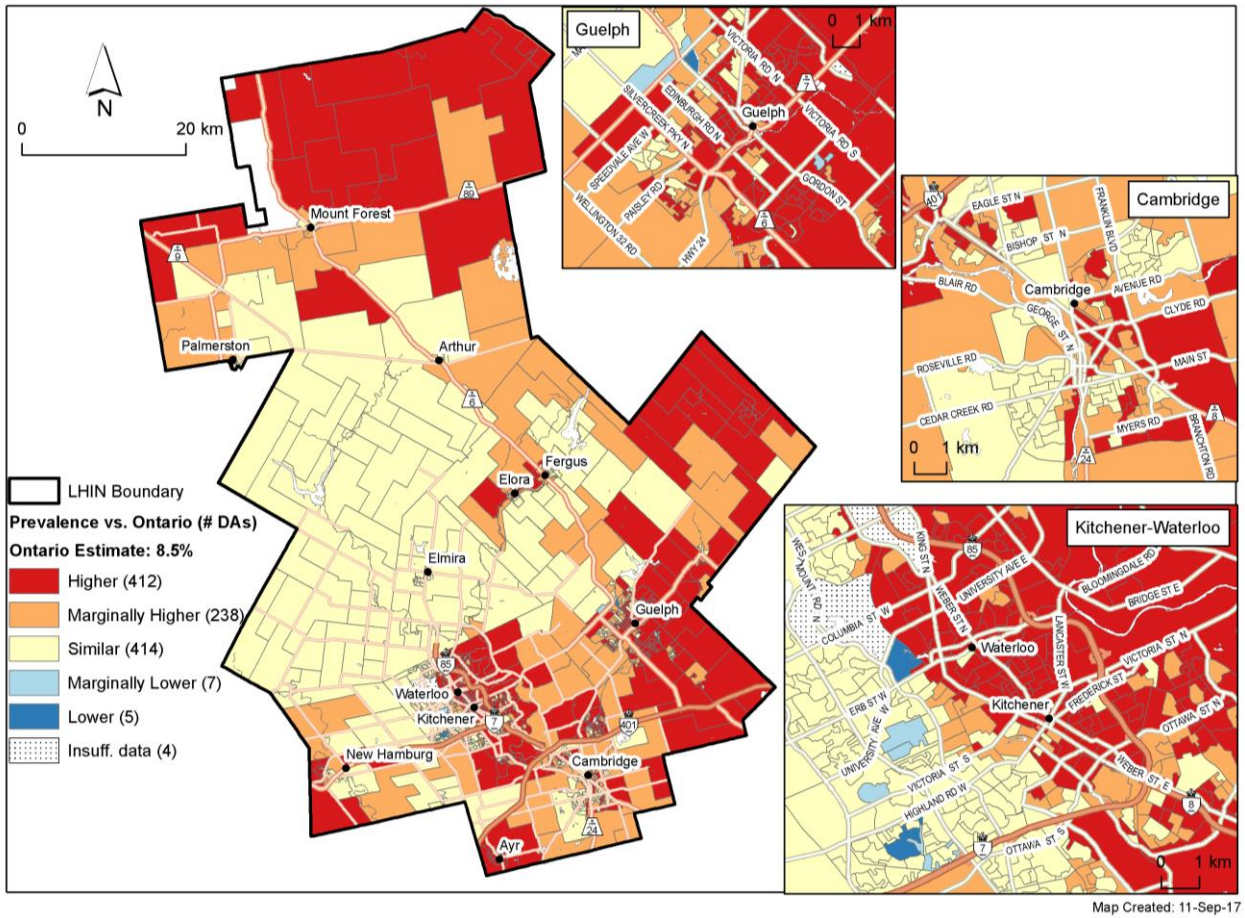
Category	Mean prevalence % (range)
Overall	7.4
Higher	10.0 (8.6, 12.8)
Marginally Higher	8.7 (8.0, 9.9)
Similar	7.3 (5.7, 9.1)
Marginally Lower	5.7 (5.2, 6.1)
Lower	5.1 (4.4, 5.5)

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



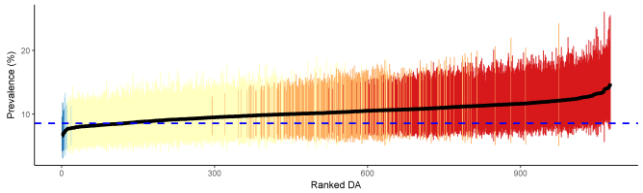
Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario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

Figure 3.6 Alcohol consumption exceeding cancer prevention recommendations among males (age 12 and older), 2000–2014, Waterloo Wellington Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	10.3
Higher	11.7 (10.2, 14.8)
Marginally Higher	10.3 (9.5, 12.1)
Similar	9.1 (7.7, 10.6)
Marginally Lower	7.5 (7.2, 7.8)
Lower	6.8 (6.6, 7.0)

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.

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 more areas with a higher prevalence of excess body weight than the Ontario average among females (n=311; Figure 3.7), compared to males (n=157; Figure 3.8). For females, most of the northern half of the LHIN comprised higher prevalence areas, with additional areas located in northwest Cambridge, southeast Kitchener-Waterloo, west of Cambridge and near New Hamburg. There were also some higher prevalence areas located in Guelph for females. For males, many higher prevalence areas were located in the northern half of the LHIN. Additional areas for males were located in Cambridge and Kitchener-Waterloo, southwest of Cambridge, south of Kitchener-Waterloo and around New Hamburg.

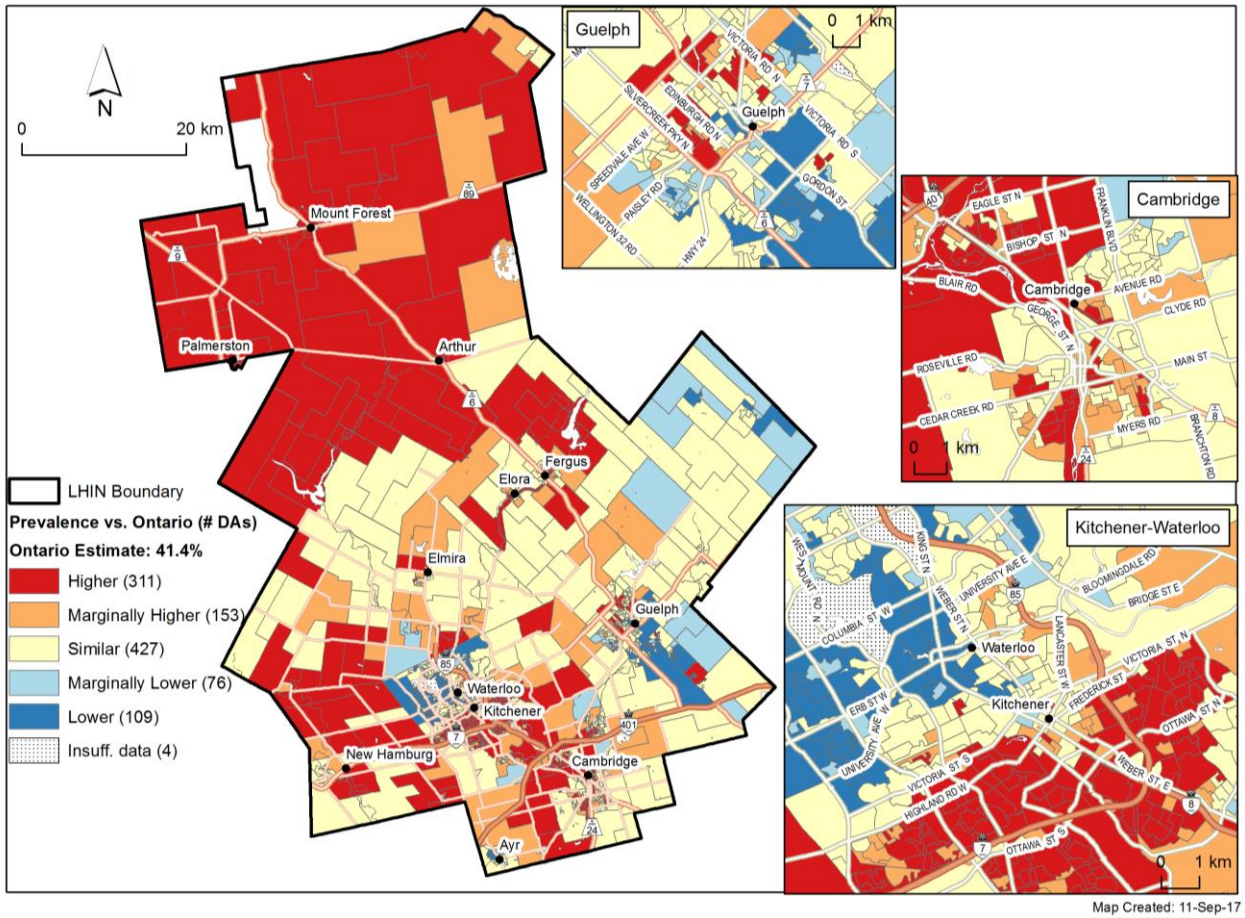
Lower prevalence than Ontario

For females (n=109; Figure 3.7) and males (n=125; Figure 3.8), areas with a lower prevalence of excess body weight were located in the southern half of the LHIN, with most areas located in Guelph and Kitchener-Waterloo.

Adolescents

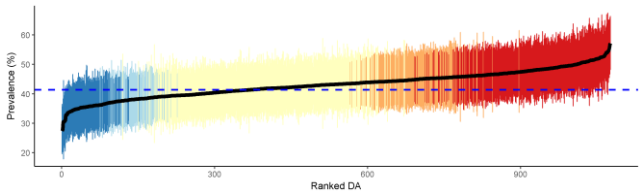
Among Ontario adolescents, an estimated 15% of females and 25% of males were overweight or obese. There were no areas of higher prevalence for adolescent females or adolescent males in the Waterloo Wellington LHIN, which is why those maps are not shown.

Figure 3.7 Excess body weight (overweight/obese) among females (age 12 and older), 2000–2014, Waterloo Wellington Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



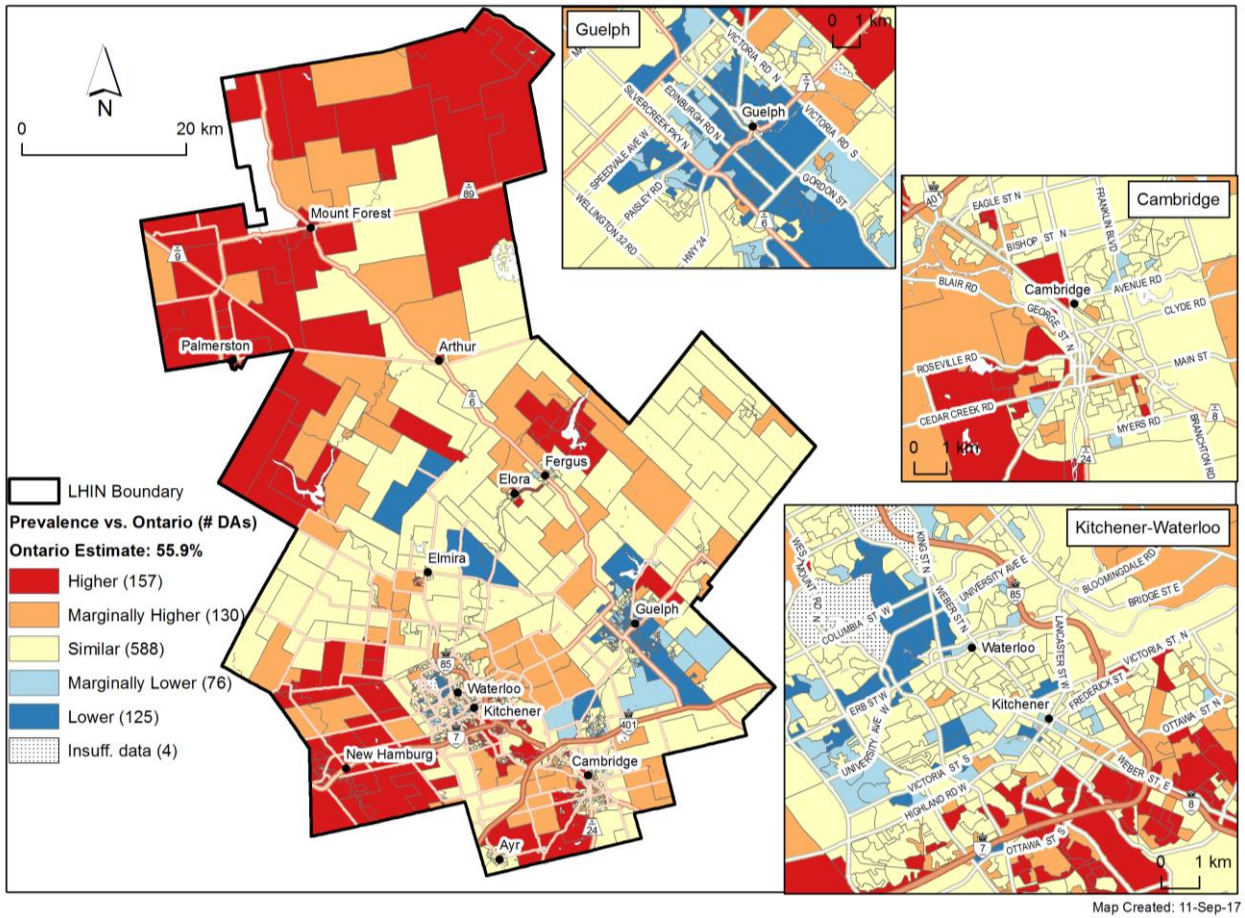
Category	Mean prevalence % (range)
Overall	43.2
Higher	48.4 (44.8, 57.1)
Marginally Higher	44.9 (43.5, 47.4)
Similar	41.6 (37.7, 44.6)
Marginally Lower	38.2 (36.3, 39.5)
Lower	35.4 (27.4, 38.3)

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



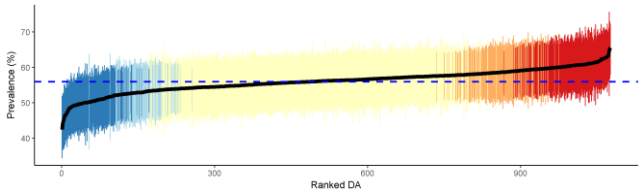
Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario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

Figure 3.8 Excess body weight (overweight/obese) among males (age 12 and older), 2000–2014, Waterloo Wellington Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	56.1
Higher	60.6 (58.7, 65.5)
Marginally Higher	58.6 (57.6, 60.0)
Similar	55.9 (53.3, 58.5)
Marginally Lower	53.1 (50.2, 54.2)
Lower	50.3 (42.4, 53.3)

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.

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

For females (n=53; Figure 3.9) and males (n=191; Figure 3.10), areas with a higher prevalence of inadequate vegetable and fruit consumption than the Ontario average were located in in the northern tip of the LHIN, near Palmerston and Mount Forest, in Kitchener-Waterloo near Highways 7 and 8, and in Cambridge, near Franklin Boulevard and Avenue Road. For males, additional areas were located in southern Kitchener, south of Kitchener-Waterloo and in Cambridge.

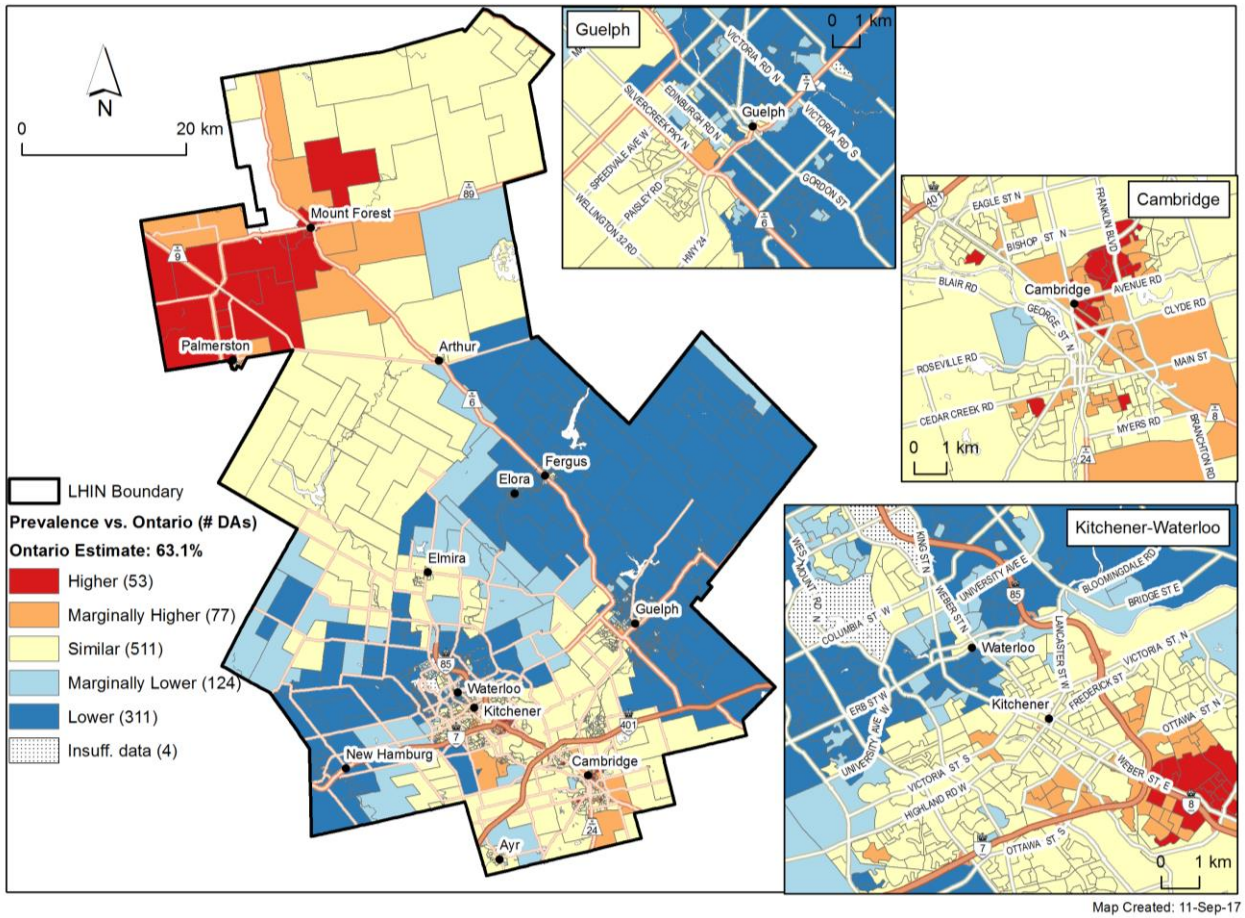
Lower prevalence than Ontario

For females (n=311; Figure 3.9) and males (n=171; Figure 3.10), areas with a lower prevalence of inadequate vegetable and fruit consumption were located in the southern half of the LHIN. For both sexes, these areas were located between Elora and Guelph, and in many parts of Guelph. For females, additional areas were located towards the north of Kitchener-Waterloo, as well as in almost all areas east of Arthur, Fergus and Guelph. Additional areas for females also included those surrounding New Hamburg and northwest of Kitchener-Waterloo.

Adolescents

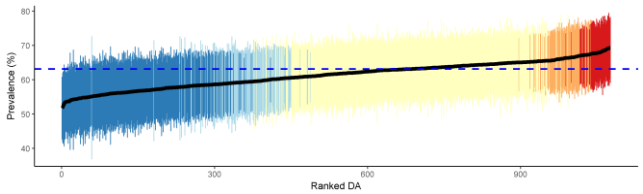
More than two-thirds of the adolescent Ontario population had inadequate vegetable and fruit consumption, at approximately 68% for females and 74% for males. For adolescent females and adolescent males, there were no areas with a higher prevalence of inadequate fruit and vegetable consumption than the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

Figure 3.9 Inadequate vegetable and fruit consumption among females (age 12 and older), 2000–2014, Waterloo Wellington Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



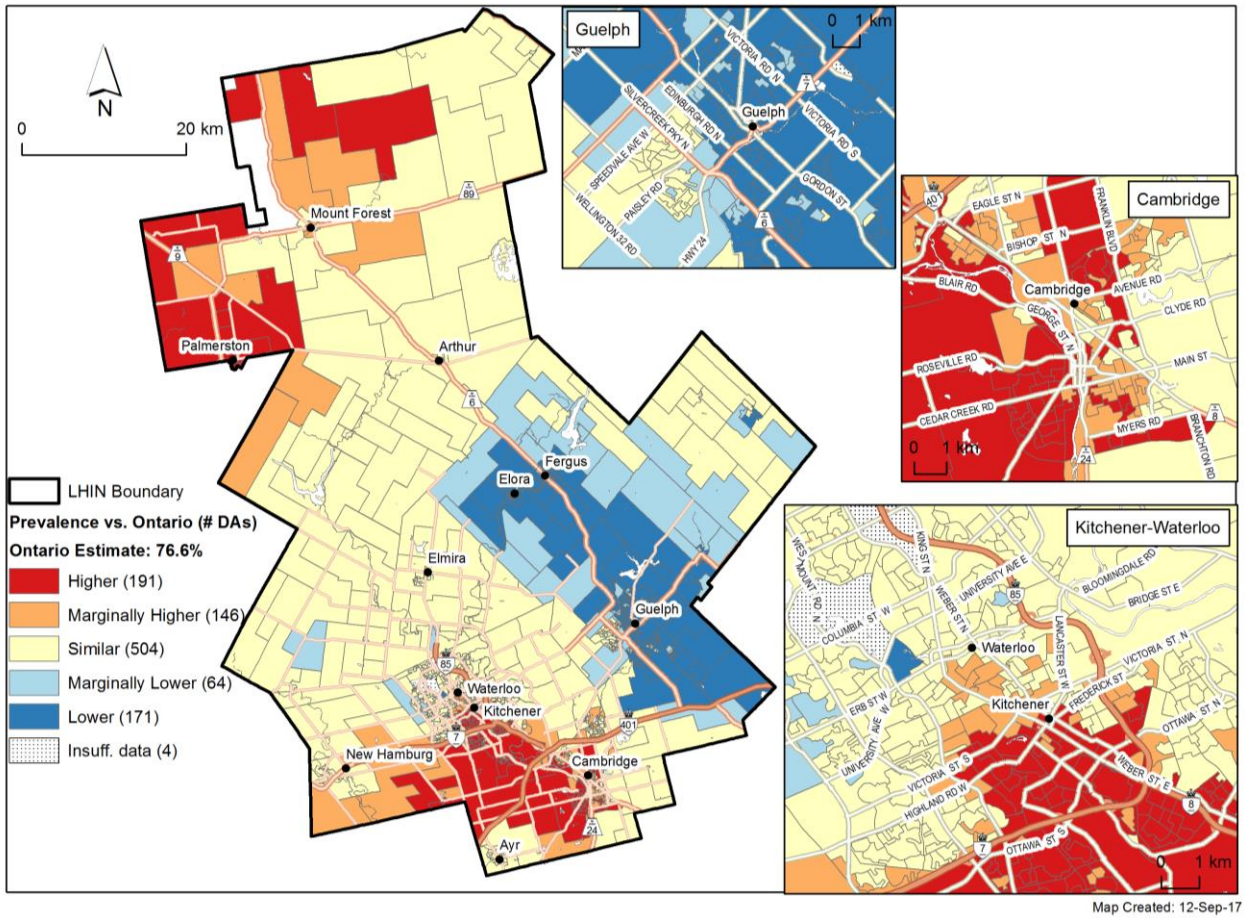
Category	Mean prevalence % (range)
Overall	61.3
Higher	67.9 (66.3, 69.3)
Marginally Higher	66.2 (65.0, 67.5)
Similar	63.1 (59.5, 66.4)
Marginally Lower	59.5 (55.1, 61.0)
Lower	56.7 (51.8, 60.1)

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



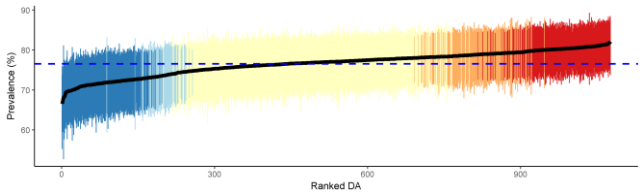
Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario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

Figure 3.10 Inadequate vegetable and fruit consumption among males (age 12 and older), 2000–2014, Waterloo Wellington Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	76.6
Higher	80.3 (78.9, 82.1)
Marginally Higher	78.8 (78.0, 80.0)
Similar	76.7 (73.6, 78.7)
Marginally Lower	73.7 (71.9, 74.8)
Lower	71.6 (66.6, 73.5)

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.

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, there were relatively few areas with a lower prevalence of physical activity than the Ontario average for females (n=56; Figure 3.11), compared to males (n=204; Figure 3.12). For females, these areas were scattered across the LHIN, with some located in Kitchener-Waterloo, as well as Guelph and Cambridge. For males, almost all lower prevalence areas were located in the western half of the LHIN from Mount Forest south to New Hamburg. There were also many lower prevalence areas among males in Kitchener-Waterloo and parts of Cambridge.

Higher prevalence than Ontario

Areas with a higher prevalence of physical activity among females (n=199; Figure 3.11) and males (n=109; Figure 3.12) were typically located in the eastern half of the LHIN. For both sexes, many of these areas were located around Guelph, Elora and Fergus. For females, additional areas were located east of Mount Forest and Arthur, north of Guelph, and in parts of Kitchener-Waterloo and Cambridge.

Adolescents

Adolescents were more physically active than adults, with approximately 40% of adolescent females and 57% of adolescent males being active.

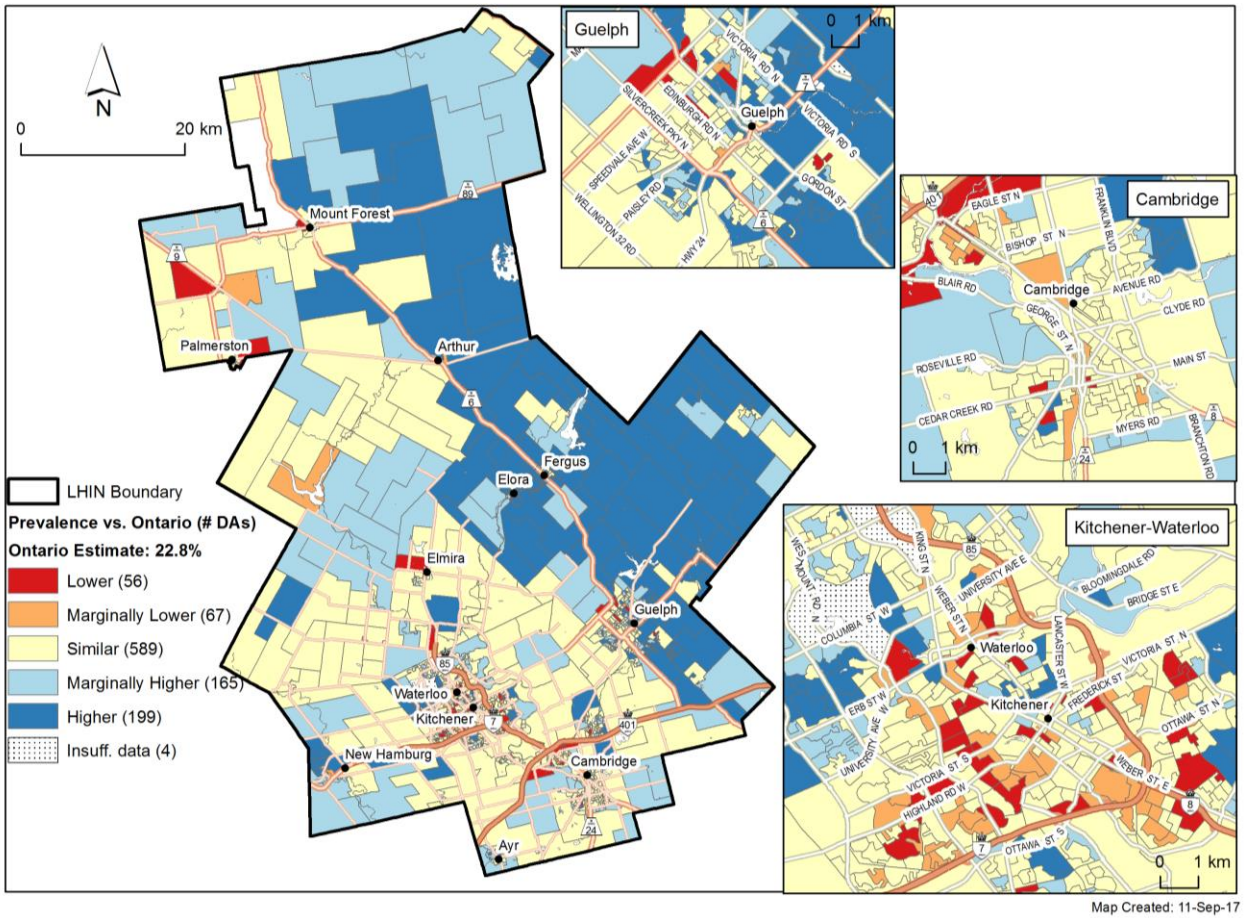
Lower prevalence than Ontario

For adolescent females in the Waterloo Wellington LHIN, there were no areas with a lower prevalence of physical activity than the Ontario average, which is why that map is not shown. For adolescent males (n=106; Figure 3.13), areas with a lower prevalence of physical activity than the Ontario average were typically located in the western half of the LHIN near Palmerston, west of Elmira, and in many areas in southern and south of Kitchener-Waterloo.

Higher prevalence than Ontario

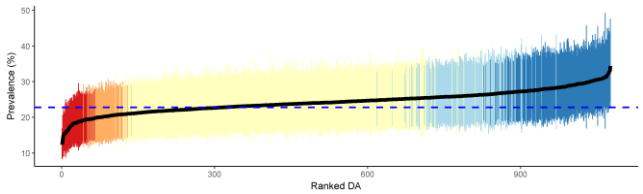
There were no areas with a higher prevalence of physical activity than the Ontario average for adolescent males.

Figure 3.11 Physical activity among females (age 12 and older), 2000–2014, Waterloo Wellington Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



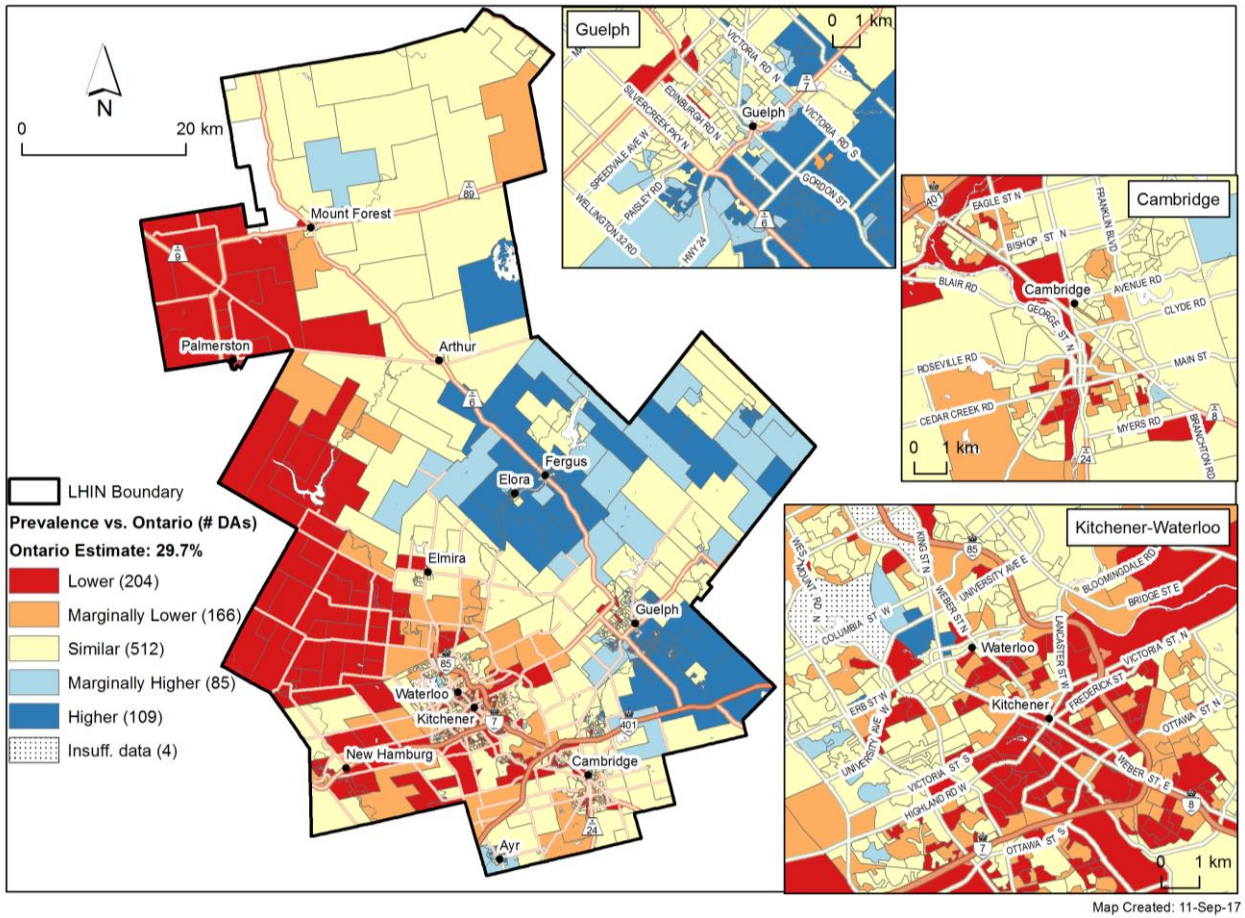
Category	Mean prevalence % (range)
Overall	24.4
Lower	17.9 (12.3, 19.9)
Marginally Lower	20.3 (19.2, 21.1)
Similar	23.5 (20.7, 26.3)
Marginally Higher	26.1 (24.8, 28.3)
Higher	28.7 (26.4, 34.5)

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



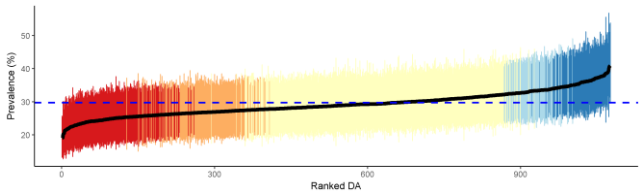
Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario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

Figure 3.12 Physical activity among males (age 12 and older), 2000–2014, Waterloo Wellington Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



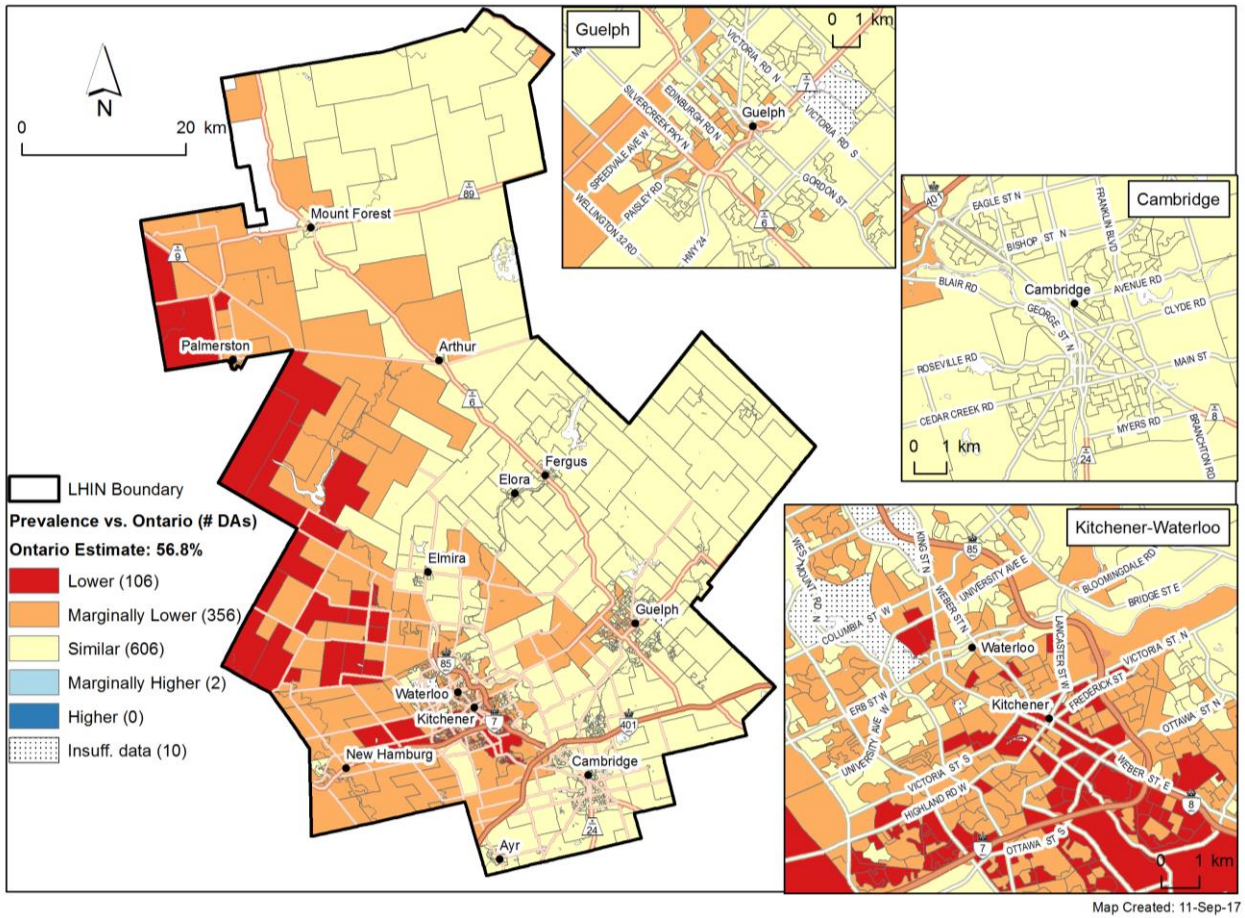
Category	Mean prevalence % (range)
Overall	29.2
Lower	24.6 (19.1, 26.7)
Marginally Lower	26.8 (25.4, 27.8)
Similar	29.7 (26.9, 33.3)
Marginally Higher	33.2 (32.2, 35.1)
Higher	36.1 (33.3, 40.9)

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.

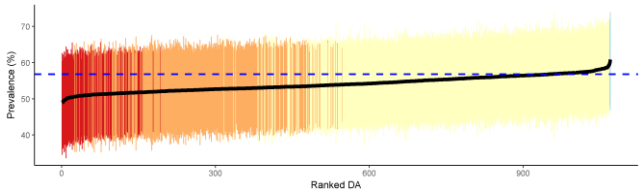
Figure 3.13 Physical activity among adolescent males (ages 12 to 18), 2000–2014, Waterloo Wellington Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	54.1
Lower	51.0 (48.9, 52.1)
Marginally Lower	52.5 (50.6, 53.9)
Similar	55.5 (52.8, 59.4)
Marginally Higher	60.5 (60.1, 60.9)
Higher	N/A

N/A = no estimates in the category

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



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

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 (n=45; Figure 3.14), there were very few areas with a higher prevalence of sedentary behaviour than the Ontario average. These areas were almost exclusively located in Guelph and Kitchener-Waterloo. In the Waterloo Wellington LHIN, there was no higher prevalence of sedentary behaviour than the Ontario average for males, which is why that map is not shown.

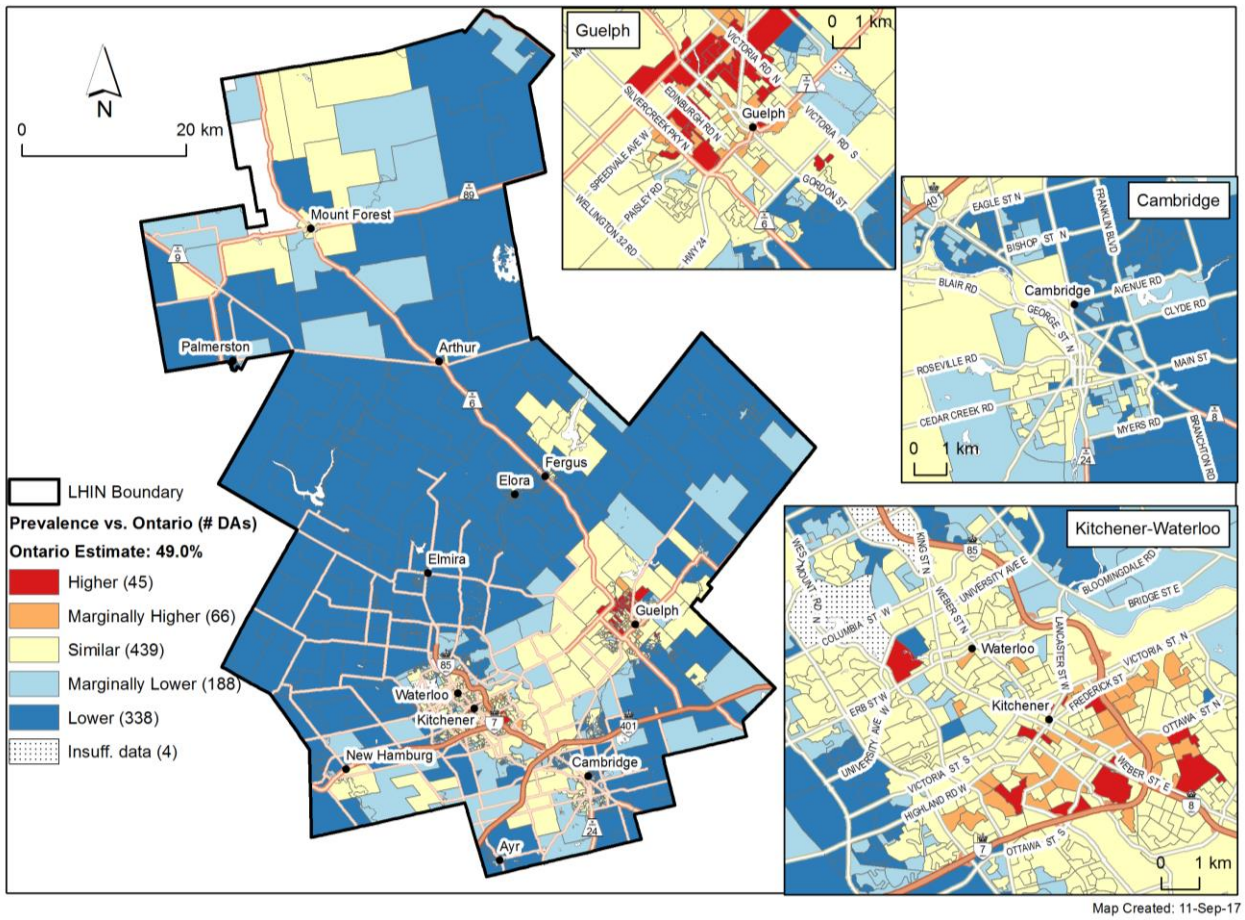
Lower prevalence than Ontario

Areas with a lower prevalence of sedentary behaviour than the Ontario average were very common among females (n=338; Figure 3.14) and were located across the LHIN, particularly surrounding Palmerston, Arthur, Elora and Elmira, and west of Kitchener-Waterloo.

Adolescents

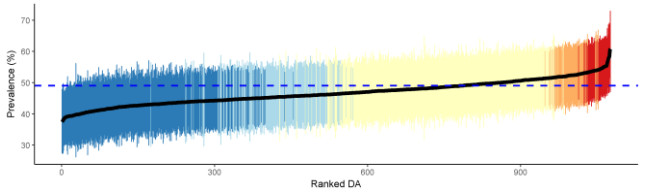
More than half of the Ontario adolescent population reported sedentary behaviour during leisure time, at approximately 55% for females and 60% for males. There were no areas with a higher prevalence of sedentary behaviour than the Ontario average among adolescents in the Waterloo Wellington LHIN, which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

Figure 3.14 Sedentary behaviour among females (age 12 and older), 2000–2014, Waterloo Wellington Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	46.7
Higher	54.8 (52.8, 60.9)
Marginally Higher	52.4 (51.4, 54.1)
Similar	48.7 (45.5, 52.0)
Marginally Lower	45.4 (43.1, 46.7)
Lower	42.6 (37.4, 45.7)

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



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

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

For females (n=260; Figure 3.15) and males (n=217; Figure 3.16), areas with a higher prevalence of current smoking than the Ontario average were more common in the southern half of the LHIN, with the majority of these areas located in Guelph, Cambridge and Kitchener-Waterloo. For females, additional areas were located in the northern part of the LHIN near Mount Forest and Palmerston.

Lower prevalence than Ontario

Areas with a lower prevalence of current smoking among females (n=146; Figure 3.15) and males (n=212; Figure 3.16) were located mainly west of Elmira and northwest of Kitchener-Waterloo, towards the west of Kitchener-Waterloo, and in a few parts of Guelph and Cambridge. For males, additional lower prevalence areas were located throughout the central part of the LHIN around Elora and Fergus.

Adolescents

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

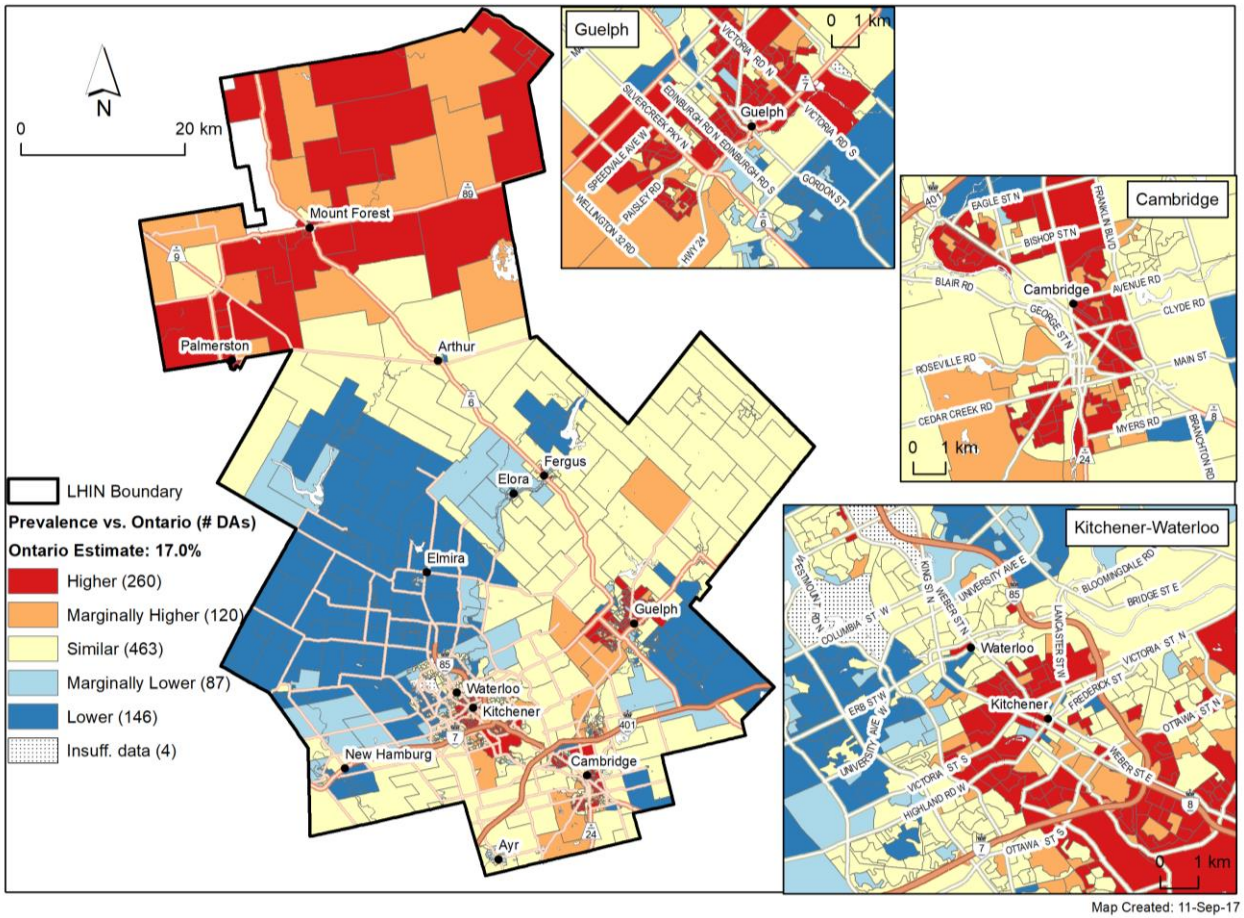
Higher prevalence than Ontario

There were more areas with a higher prevalence of smoking than the Ontario average for adolescent females (n=231; Figure 3.17), compared to adolescent males (n=69; Figure 3.18). For adolescent females, higher prevalence areas were typically located in the eastern half of the LHIN, in and surrounding Guelph, and scattered throughout Cambridge and Kitchener-Waterloo. Higher prevalence areas for adolescent males tended to be more dispersed throughout the LHIN, but were more prominent in the western half of the LHIN. But many of these areas were located in Kitchener-Waterloo.

Lower prevalence than Ontario

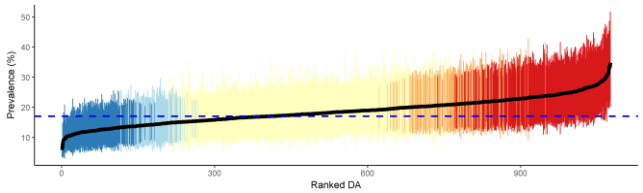
Areas with a lower prevalence of current smoking than the Ontario average were uncommon across the LHIN for adolescent females (n=16; Figure 3.17) and adolescent males (n=57; Figure 3.18). These areas were scattered across the LHIN.

Figure 3.15 Current smoking among females (age 12 and older), 2000–2014, Waterloo Wellington Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



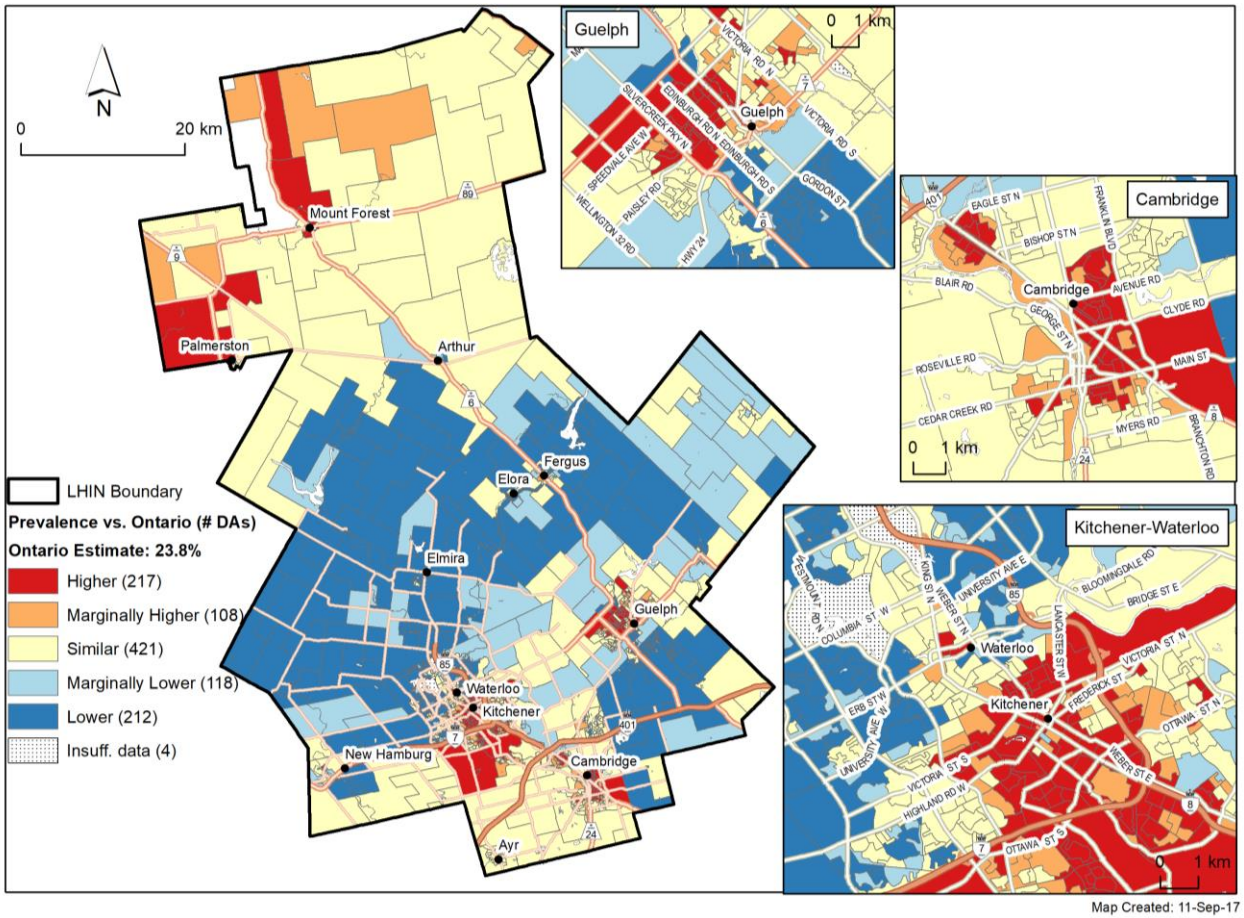
Category	Mean prevalence % (range)
Overall	18.6
Higher	24.3 (20.7, 34.9)
Marginally Higher	20.9 (19.2, 23.8)
Similar	17.7 (14.8, 21.5)
Marginally Lower	14.5 (13.4, 15.5)
Lower	12.3 (5.8, 14.4)

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



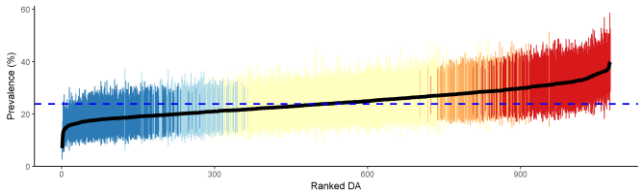
Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario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

Figure 3.16 Current smoking among males (age 12 and older), 2000–2014, Waterloo Wellington Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



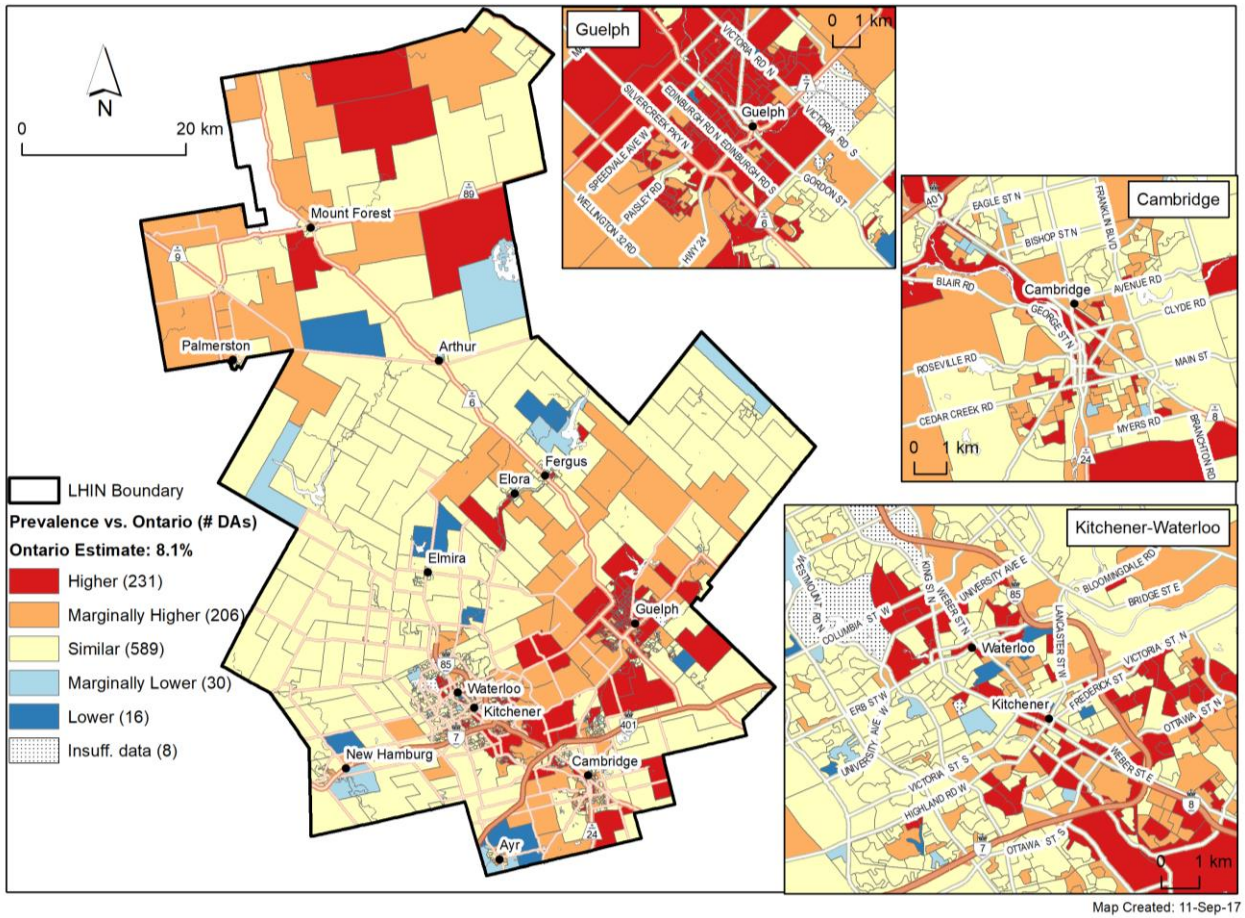
Category	Mean prevalence % (range)
Overall	24.6
Higher	31.9 (26.9, 39.9)
Marginally Higher	28.2 (26.5, 31.1)
Similar	24.3 (20.9, 28.6)
Marginally Lower	20.6 (18.6, 21.8)
Lower	18.1 (7.0, 20.6)

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



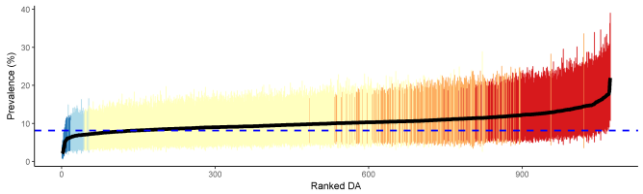
Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario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

Figure 3.17 Current smoking among adolescent females (ages 12 to 18), 2000–2014, Waterloo Wellington Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



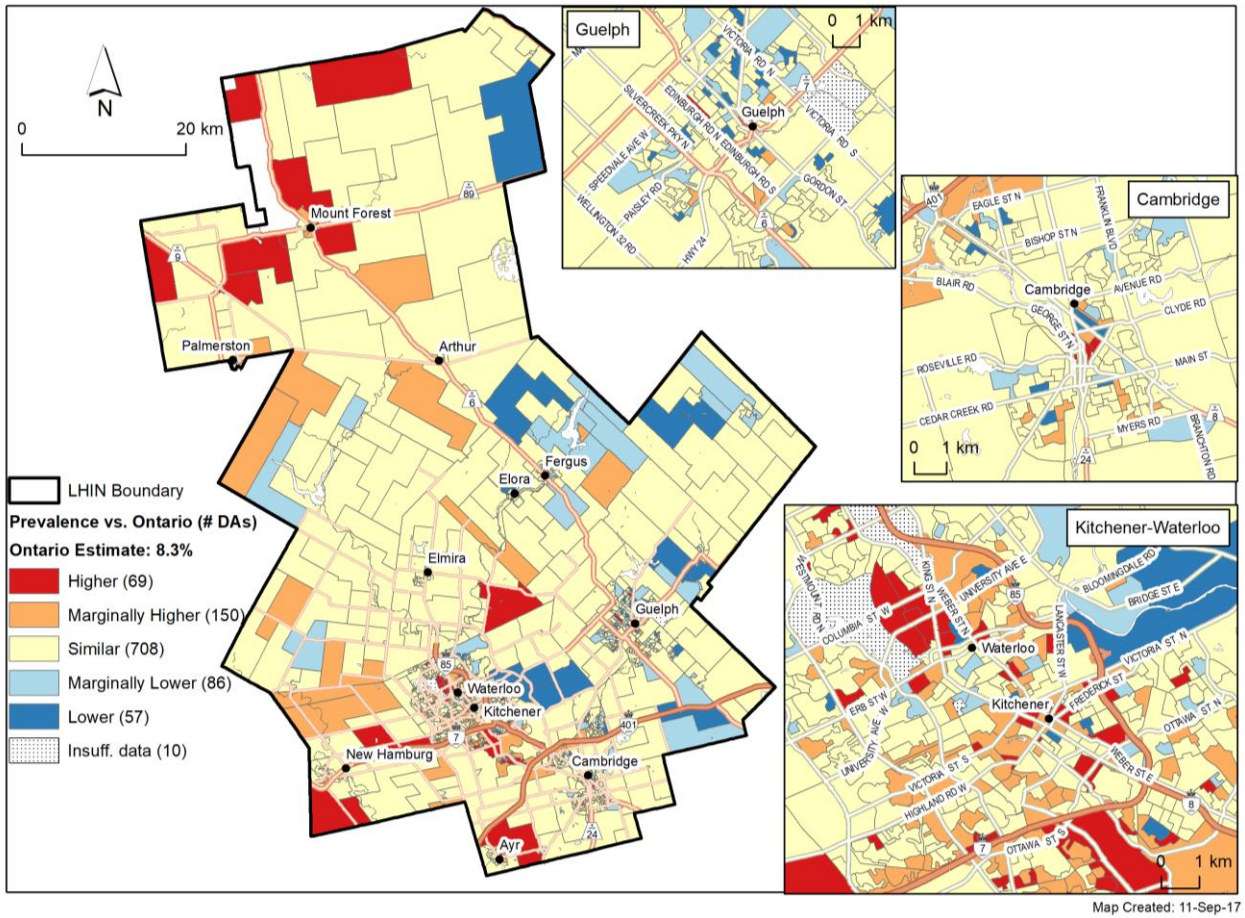
Category	Mean prevalence % (range)
Overall	10.3
Higher	13.4 (11.0, 22.0)
Marginally Higher	11.0 (9.8, 14.5)
Similar	9.1 (7.1, 11.5)
Marginally Lower	6.8 (6.1, 7.2)
Lower	4.9 (2.1, 6.3)

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



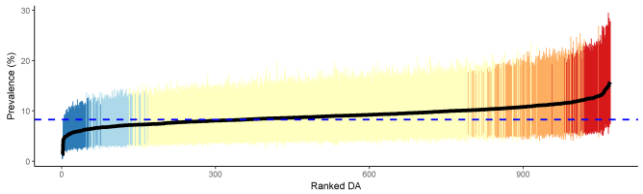
Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario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

Figure 3.18 Current smoking among adolescent males (ages 12 to 18), 2000–2014, Waterloo Wellington Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	9.1
Higher	12.9 (11.3, 15.7)
Marginally Higher	11.1 (10.1, 13.0)
Similar	8.9 (7.2, 11.1)
Marginally Lower	6.9 (6.3, 7.3)
Lower	5.6 (1.3, 6.7)

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



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

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, there were many areas with a higher prevalence of ever-smoked status than the Ontario average for females (n=544; Figure 3.19) and males (n=477; Figure 3.20). For both sexes, these areas tended to occur in the eastern half of the LHIN, with very few higher prevalence areas northwest of Kitchener-Waterloo and surrounding Elmira. Higher prevalence areas for females and males occurred in most areas of Guelph, Kitchener-Waterloo and Cambridge, east of Fergus and north of Mount Forest.

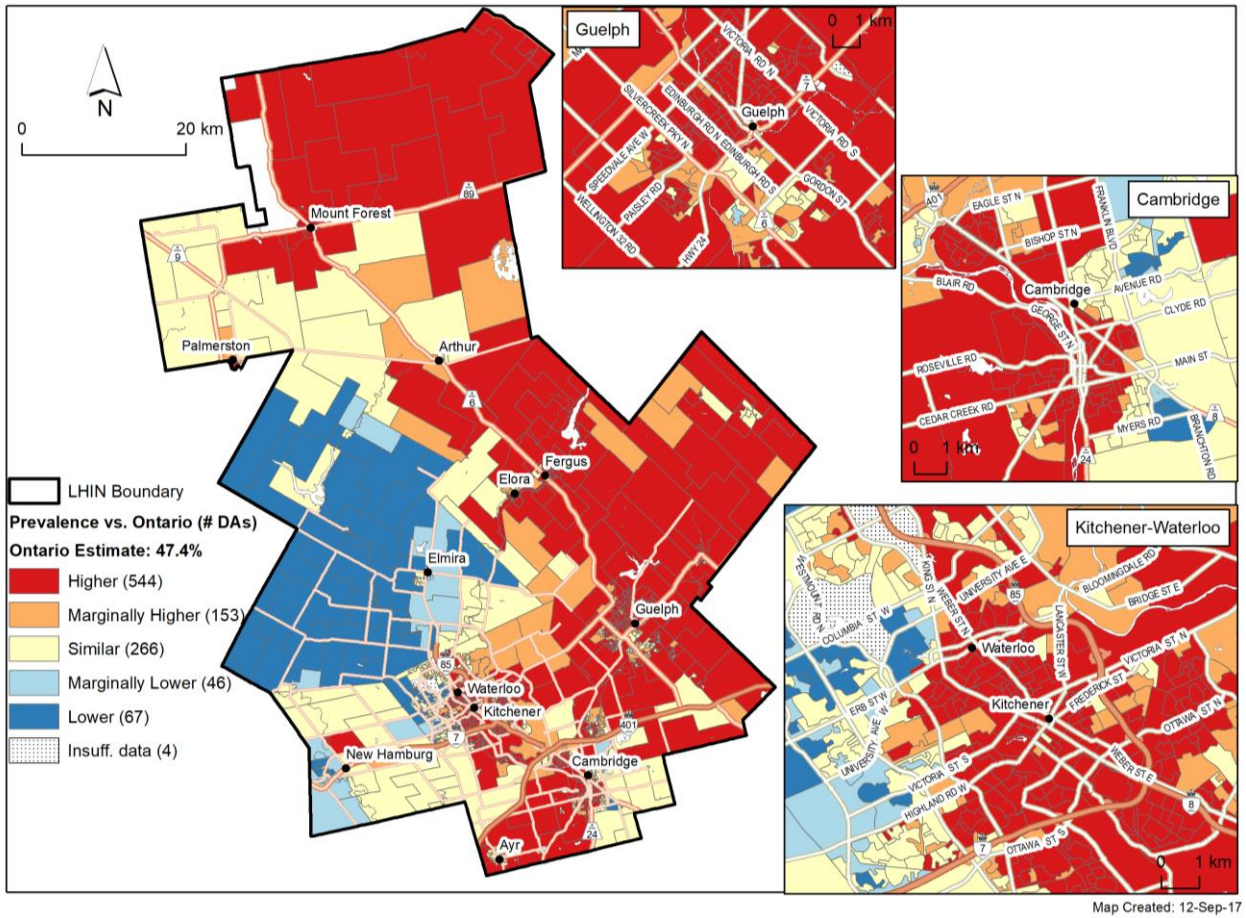
Lower prevalence than Ontario

For females (n=67; Figure 3.19) and males (n=69; Figure 3.20), areas of lower prevalence of ever-smoking status were typically located in the western half of the LHIN, northwest of Kitchener-Waterloo, and west of Elmira, with a few additional areas towards the west of Kitchener-Waterloo.

Adolescents

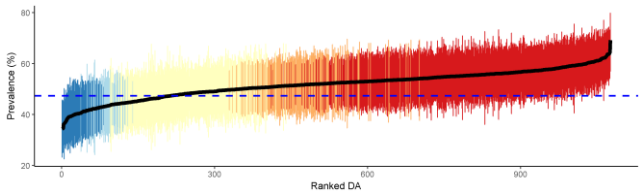
The area-based prevalence of ever-smoked status was not estimated for adolescent populations.

Figure 3.19 Ever-smoked status among females (age 12 and older), 2000–2014, Waterloo Wellington Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



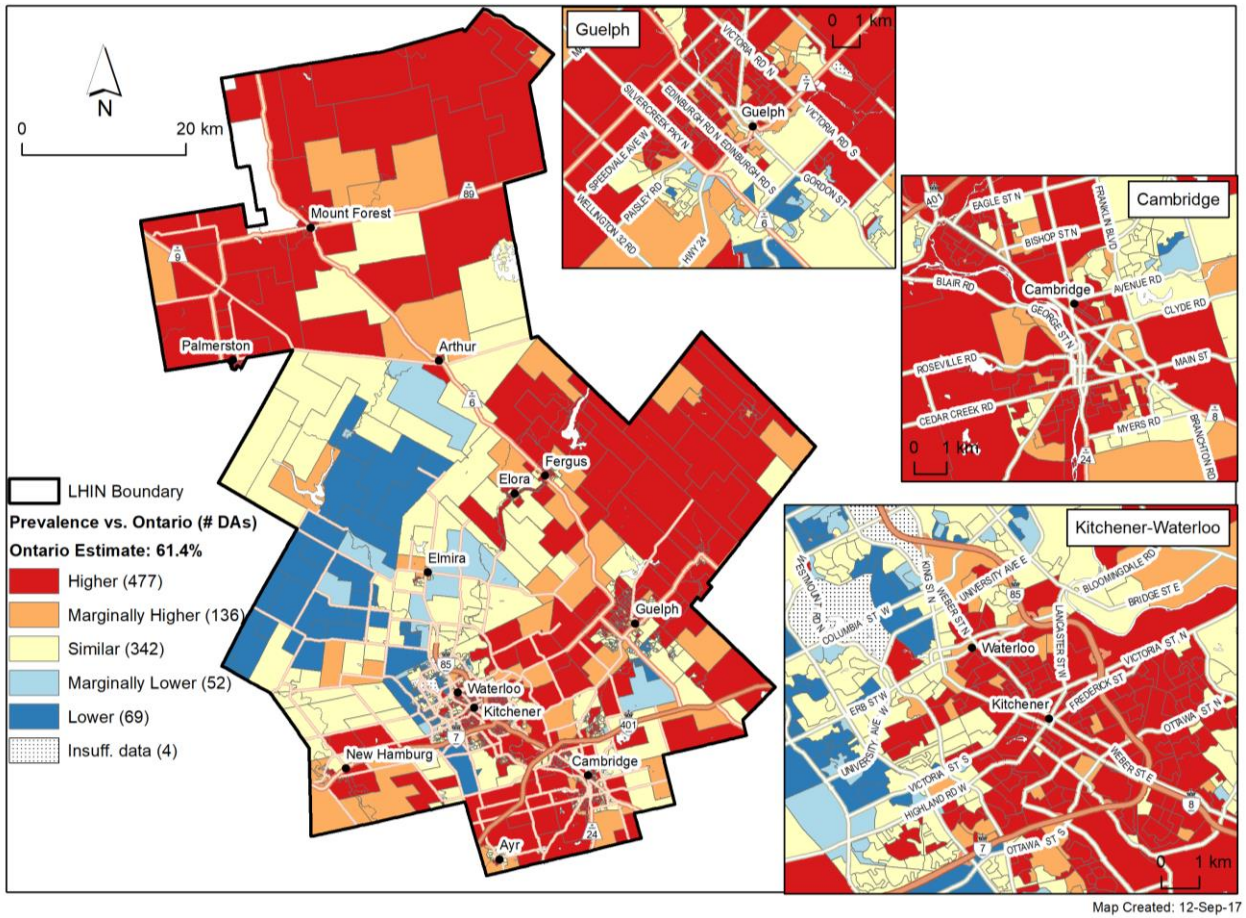
Category	Mean prevalence % (range)
Overall	51.8
Higher	55.9 (50.8, 69.2)
Marginally Higher	51.6 (49.7, 54.1)
Similar	47.9 (43.7, 51.3)
Marginally Lower	43.4 (40.6, 45.1)
Lower	40.2 (34.3, 43.1)

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



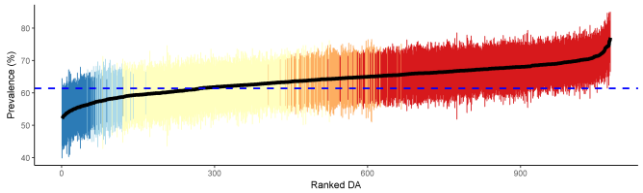
Note: The black solid line is the mean prevalence estimate for each DA ranked in ascending order. The colour coded vertical lines are the 95% credibility intervals around the mean estimate for each DA, coloured by the categories on the table (and map). The blue dotted line in the background is the Ontario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

Figure 3.20 Ever-smoked status among males (age 12 and older), 2000–2014, Waterloo Wellington Local Health Integration Network (LHIN) by 2006 dissemination area (DA)



Category	Mean prevalence % (range)
Overall	64.1
Higher	67.7 (64.3, 77.1)
Marginally Higher	64.3 (63.0, 65.6)
Similar	61.5 (57.6, 64.3)
Marginally Lower	58.1 (56.3, 59.6)
Lower	55.5 (52.1, 58.8)

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.