



DURHAM
REGION
HEALTH
DEPARTMENT



Trends In: Tobacco Use

June 2019

Key Findings

- In 2018, 14% ($\pm 2\%$) of Durham Region adults were current smokers, representing over 74,300 adult smokers in the region. This was a significant decline from 21% ($\pm 2\%$) in 2009.
- The percentage of Durham Region adults who never smoked increased significantly from 48% ($\pm 3\%$) in 2009 to 54% ($\pm 3\%$) in 2018.
- Durham Region adults aged 25-44 years had the highest smoking rate in 2018 at 21% ($\pm 6\%$), followed by adults aged 45-64 years at 16% ($\pm 3\%$). There was a significant decrease in the smoking rate for young adults aged 18-24 years, from 24% ($\pm 8\%$) in 2009 to 15% ($\pm 6\%$) in 2018.
- The smoking rate for males continues to remain higher at 19% ($\pm 4\%$), compared to the rate for females of 11% ($\pm 2\%$).
- Smoking rates decreased in all Durham Region municipalities since 2009. Oshawa had the highest smoking rate in the region, at 19% ($\pm 4\%$).

Figure 1. Smoking status, adults 18 years and older, Durham Region, 2009-2018

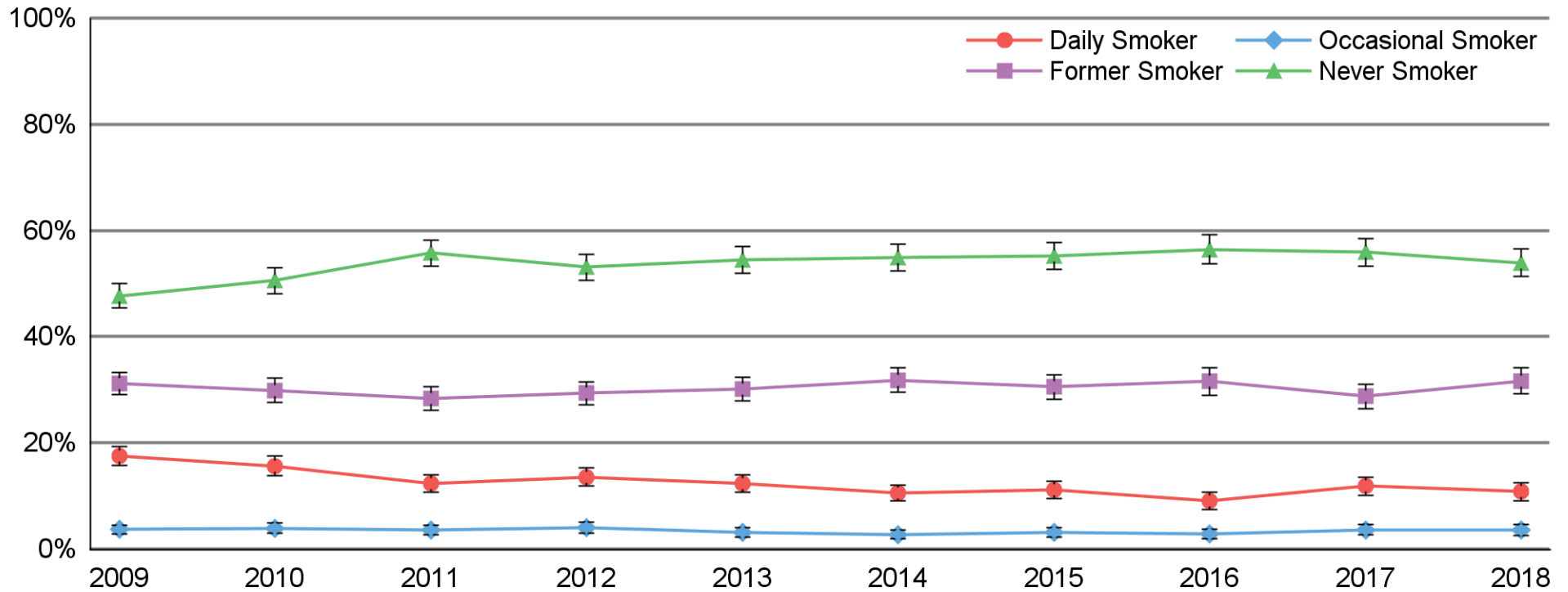


Table 1. Smoking status, adults 18 years and older, Durham Region, 2009-2018

Smoking Status	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Change from 2017-2018 ^a	Change from 2009-2018 ^b
Daily Smoker	17%	16%	12%	14%	12%	11%	11%	9%	12%	11%	No change	Decreased
95% CI	16-19%	14-17%	11-14%	12-15%	11-14%	9-12%	10-13%	7-11%	10-13%	9-12%		
Occasional Smoker	4%	4%	4%	4%	3%	3%	3%	3%	4%	4%	No change	No change
95% CI	3-5%	3-5%	3-5%	3-5%	2-4%	2-4%	2-4%	2-4%	3-5%	3-5%		
Former Smoker	31%	30%	28%	29%	30%	32%	31%	32%	29%	32%	No change	No change
95% CI	29-33%	28-32%	26-31%	27-32%	28-32%	29-34%	28-33%	29-34%	26-31%	29-34%		
Never Smoker	48%	51%	56%	53%	54%	55%	55%	56%	56%	54%	No change	Increased
95% CI	45-50%	48-53%	53-58%	51-56%	52-57%	52-57%	53-58%	54-59%	53-58%	51-57%		

* Interpret with caution, due to high variability: Coefficient of variation (CV) is between 16.6% and 33.3% inclusive.

a: See Data Notes for analyses performed to determine trend

Figure 2. Proportion who report daily or occasional smoking by age group, adults 18 years and older, Durham Region, 2009-2018

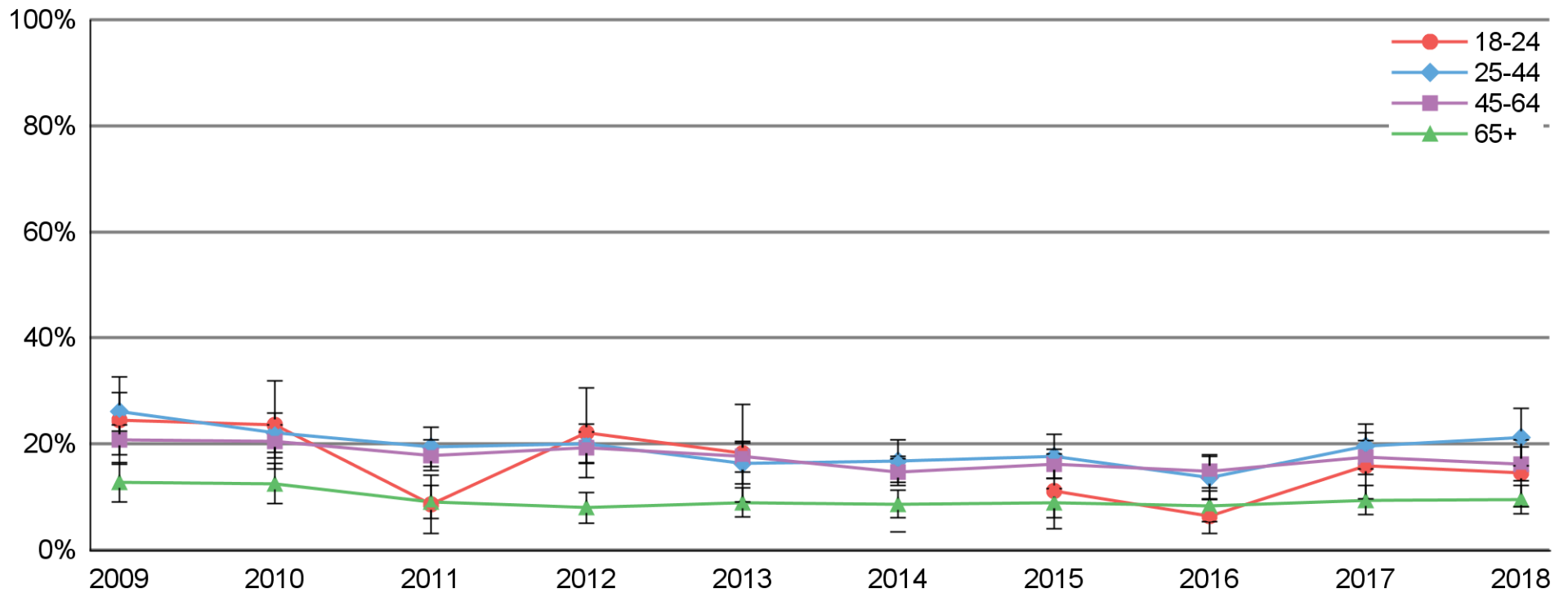


Table 2. Proportion who report daily or occasional smoking by age group, adults 18 years and older, Durham Region, 2009-2018

Age group	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
18-24†	24%*	24%*	9%*	22%*	18%*	NR	11%*	6%*	16%*	15%*
95% CI	16-33%	15-32%	3-14%	14-31%	9-27%	NR	4-18%	3-10%	10-22%	8-21%
25-44†	26%	22%	19%	20%	16%	17%	18%	14%	20%	21%
95% CI	22-30%	18-26%	16-23%	16-24%	12-20%	13-21%	14-22%	10-18%	15-24%	16-27%
45-64†	21%	21%	18%	19%	18%	15%	16%	15%	17%	16%
95% CI	18-24%	17-24%	15-21%	16-22%	15-20%	12-17%	13-19%	12-18%	14-21%	13-19%
65+	13%	13%	9%*	8%*	9%	9%	9%	8%*	9%	9%
95% CI	9-16%	9-16%	6-12%	5-11%	6-12%	6-11%	6-12%	5-11%	7-12%	7-12%

* Interpret with caution, due to high variability: Coefficient of variation (CV) is between 16.6% and 33.3% inclusive.

† p<0.05 (see data notes).

NR refers to an estimate that is “not releasable” due to high variability.

Figure 3. Proportion who report daily or occasional smoking by sex, adults 18 years and older, Durham Region, 2009-2018

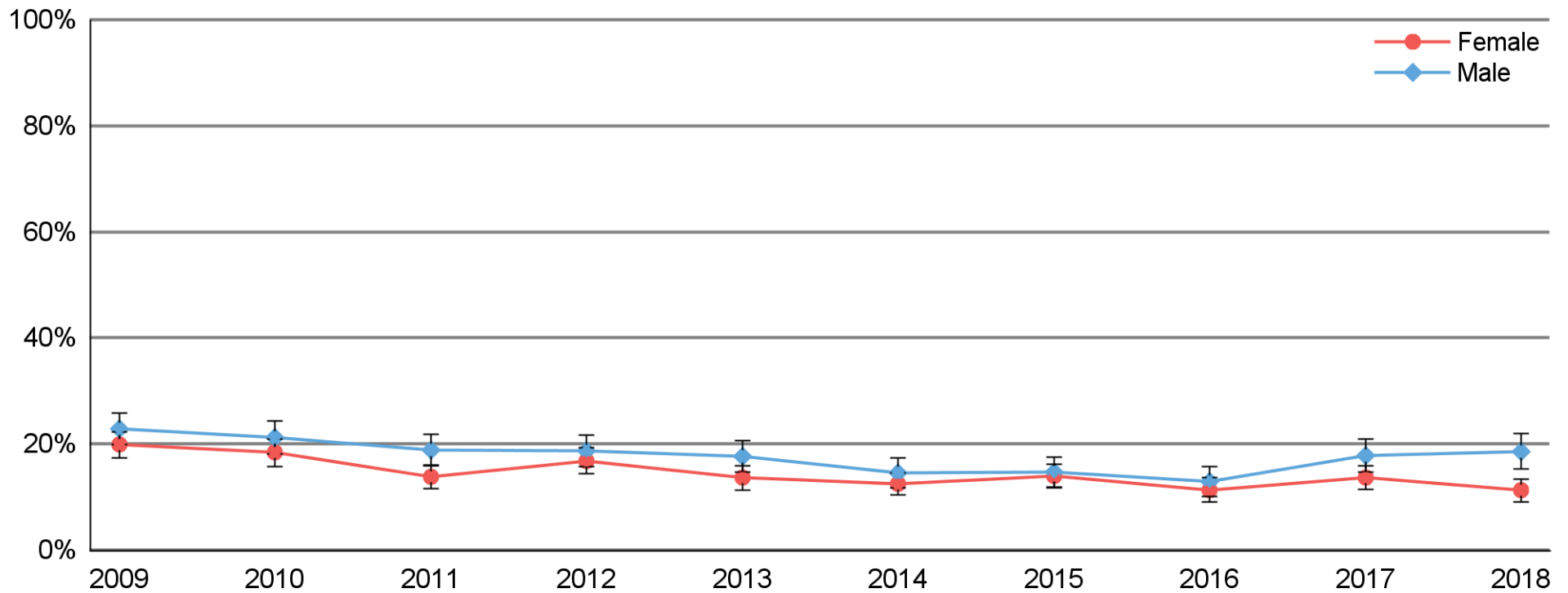


Table 3. Proportion who report daily or occasional smoking by sex, adults 18 years and older, Durham Region, 2009-2018

Sex	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Female†	20%	18%	14%	17%	14%	12%	14%	11%	14%	11%
95% CI	17-22%	16-21%	12-16%	14-19%	11-16%	10-15%	12-16%	9-14%	11-16%	9-13%
Male†	23%	21%	19%	19%	18%	15%	15%	13%	18%	19%
95% CI	20-26%	18-24%	16-22%	16-22%	15-21%	12-17%	12-18%	10-16%	15-21%	15-22%

* Interpret with caution, due to high variability: Coefficient of variation (CV) is between 16.6% and 33.3% inclusive.

† p<0.05 (see data notes).

Figure 4. Proportion of daily or occasional smokers, adults 18 years and older, Pickering and Durham Region, 2009-2018

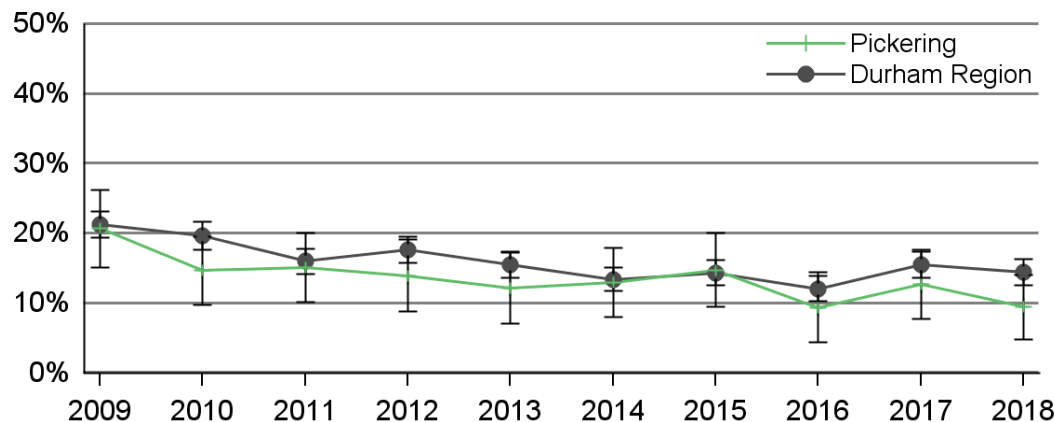


Figure 5. Proportion of daily or occasional smokers, adults 18 years and older, Ajax and Durham Region, 2009-2018

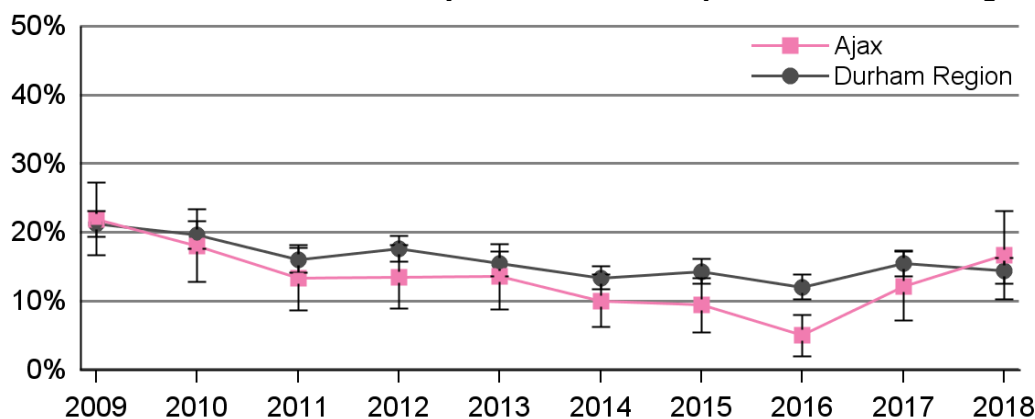


Table 4. Proportion of daily or occasional smokers by municipality, adults 18 years and older, 2009-2018

Municipality	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Pickering	21%	15%*	15%*	14%*	12%*	13%*	15%*	9%*	13%*	9%*
95% CI	15-26%	10-19%	10-20%	9-19%	7-17%	8-18%	9-20%	4-14%	8-18%	5-14%
Ajax†	22%	18%	13%*	13%*	13%*	10%*	9%*	5%*	12%*	17%*
95% CI	17-27%	13-23%	9-18%	9-18%	9-18%	6-14%	5-13%	2-8%	7-17%	10-23%
Durham Region	21%	20%	16%	18%	15%	13%	14%	12%	15%	14%
95% CI	19-23%	18-22%	14-18%	16-19%	14-17%	12-15%	13-16%	10-14%	14-17%	12-16%

* Interpret with caution, due to high variability: Coefficient of variation (CV) is between 16.6% and 33.3% inclusive.

† p<0.05 (see data notes).

Figure 6. Proportion of daily or occasional smokers, adults 18 years and older, Whitby and Durham Region, 2009-2018

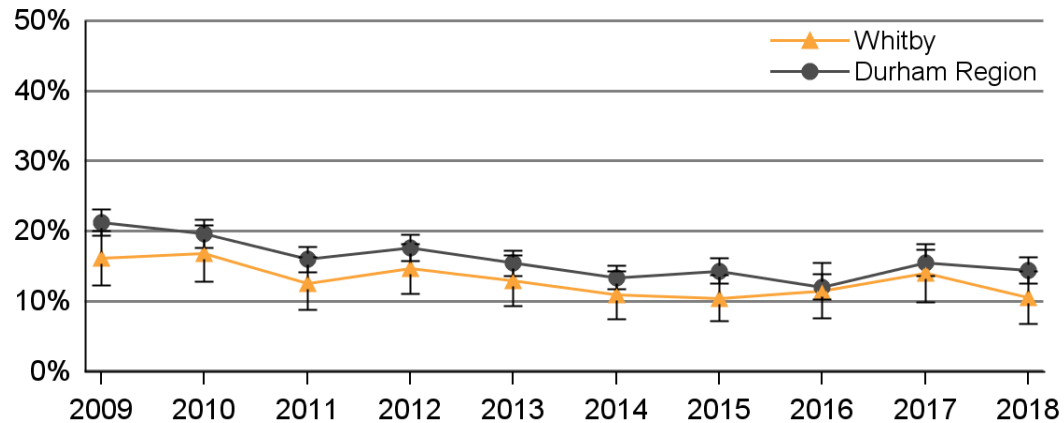


Figure 7. Proportion of daily or occasional smokers, adults 18 years and older, Oshawa and Durham Region, 2009-2018

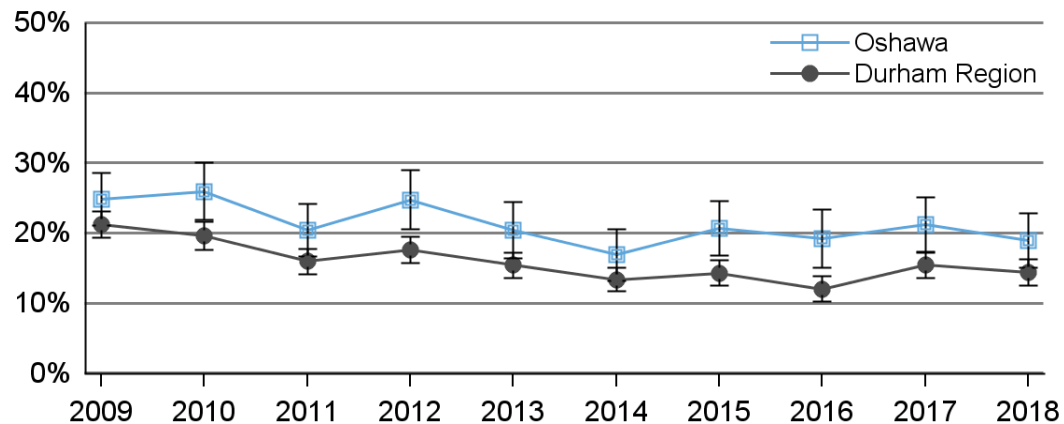


Table 5. Proportion who report daily or occasional smoking by municipality, adults 18 years and older, 2009-2018

Municipality	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Whitby	16%	17%	13%	15%	13%	11%	10%	11%*	14%	10%*
95% CI	12-20%	13-21%	9-16%	11-18%	9-17%	7-14%	7-14%	7-15%	10-18%	7-14%
Oshawa†	25%	26%	20%	25%	20%	17%	21%	19%	21%	19%
95% CI	21-29%	22-30%	17-24%	20-29%	16-24%	13-20%	17-25%	15-23%	17-25%	15-23%
Durham Region	21%	20%	16%	18%	15%	13%	14%	12%	15%	14%
95% CI	19-23%	18-22%	14-18%	16-19%	14-17%	12-15%	13-16%	10-14%	14-17%	12-16%

* Interpret with caution, due to high variability: Coefficient of variation (CV) is between 16.6% and 33.3% inclusive.

† p<0.05 (see data notes).

Figure 8. Proportion of daily or occasional smokers, adults 18 years and older, Clarington and Durham Region, 2009-2018

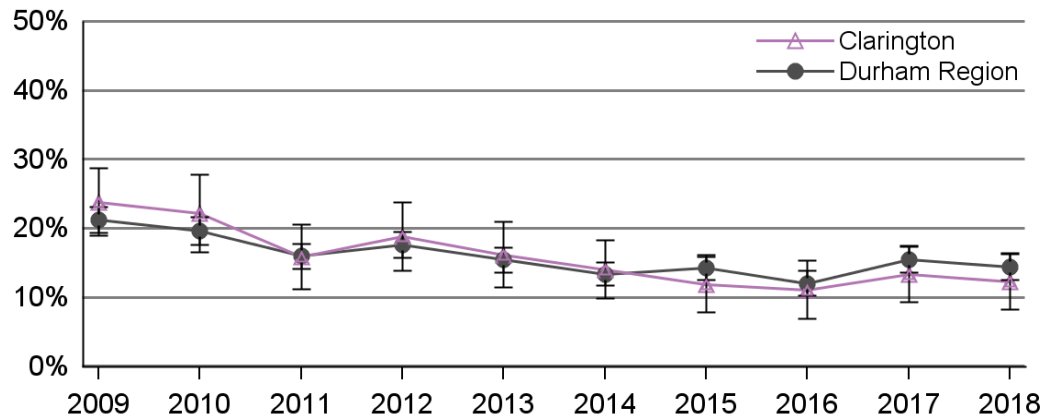


Figure 9. Proportion of daily or occasional smokers, adults 18 years and older, North Durham and Durham Region, 2009-2018

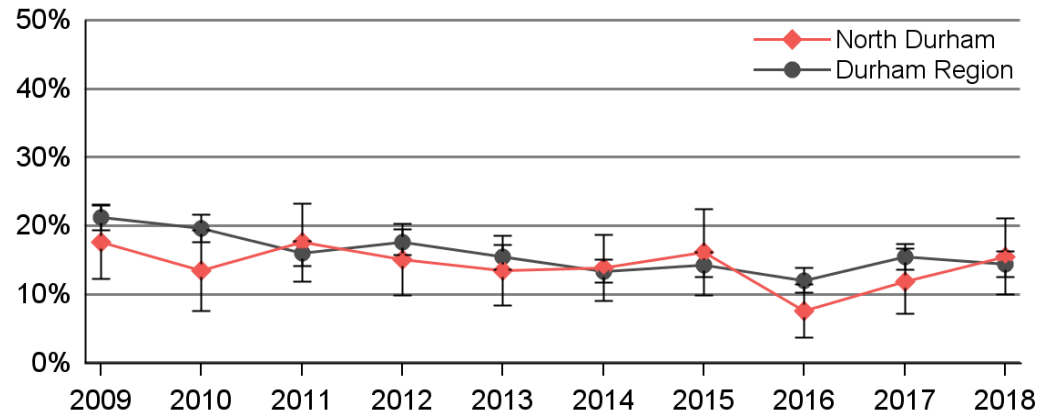


Table 6. Proportion who report daily or occasional smoking by municipality, adults 18 years and older, 2009-2018

Municipality	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Clarington†	24%	22%	16%	19%	16%	14%	12%*	11%*	13%	12%*
95% CI	19-29%	17-28%	11-21%	14-24%	11-21%	10-18%	8-16%	7-15%	9-17%	8-16%
North Durham	18%	13%*	18%	15%*	13%*	14%*	16%*	8%*	12%*	15%*
95% CI	12-23%	8-19%	12-23%	10-20%	8-18%	9-19%	10-22%	4-11%	7-17%	10-21%
Durham Region	21%	20%	16%	18%	15%	13%	14%	12%	15%	14%
95% CI	19-23%	18-22%	14-18%	16-19%	14-17%	12-15%	13-16%	10-14%	14-17%	12-16%

* Interpret with caution, due to high variability: Coefficient of variation (CV) is between 16.6% and 33.3% inclusive.

† p<0.05 (see data notes).

Indicator Definitions

Durham Region residents aged 18 and older were asked, “Have you smoked at least 100 cigarettes in your life?” and “Currently, do you smoke cigarettes every day, some days, or not at all?”. The following indicators were derived using the information collected:

Current smoker – smokes daily or occasionally

Former smoker – smoked daily or occasionally but has quit

Never smoker – never smoked daily or occasionally

Rapid Risk Factor Surveillance System (RRFSS)

RRFSS was piloted in Durham Region in 1999 and is used to collect information about the health knowledge, attitudes and behaviours of Durham Region residents routinely since 2001. The information collected is used to support the planning and evaluation of public health programs and services.

RRFSS is conducted by the Institute for Social Research at York University on behalf of Ontario public health units. RRFSS is an ongoing telephone survey of adults aged 18 and over who live in private households. In 2016, RRFSS began interviewing Durham residents using cell phone numbers in addition to landline telephone numbers. The annual response rate for Durham Region has ranged from 41% to 61% and was 25% in 2017.

Analysis Notes

Analyses were conducted using SAS software version 9.4. The recent and overall trends were estimated using logistic regression (see Table 1). Recent trend was defined as the change in the indicator from the previous survey and is identified in the table as either an increase, decrease, or no change. Overall trend was defined as the presence of a consistent change in the indicator across all years and is identified in the table as increasing, decreasing, or no difference. Percentages are expressed as a point estimate with 95% confidence intervals (CI) around the estimate, indicating that the true or actual percentage falls within the range of values, 95 out of 100 times. In charts, the 95% CI is represented by an error bar (I). All analyses used a significance level of $p < 0.05$, as indicated by the † symbol.

More Information

For more information, or if you require this information in an accessible format, please contact the Durham Health Connection Line at 905-666-6241 or 1-800-841-2729. You can also visit our [Durham Region Health Department website](#).

For information about RRFSS, visit the [RRFSS website](#).