



Report 5: Tobacco Use, Dependence and Smoke in the Home

June 2017

Summary

- The 2016 Oxford Health Matters Survey (OHMS) was conducted for Oxford County Public Health (Public Health) to inform public health program development in new and emerging areas based on the needs and concerns of the community.
- Smoking tobacco is the leading cause of preventable death in Canada and has been linked to over 24 different diseases and conditions.¹ Even brief exposure to second-hand tobacco smoke in the home can lead to health problems in non-smokers.²
- Less than one fifth of residents (14.6%) were current smokers (10.2% daily, 4.4% occasional), 35.0% were former smokers and 50.4% never smoked. Females (57.6%) and younger adults (18 to 34 years) (67.6%) were more likely to have never smoked. Urban residents were more likely to be daily smokers than rural residents (13.2% versus 4.5%).
- Daily smokers with a low household income (less than \$40,000) smoked more cigarettes per day on average than daily smokers with a high household income (\$100,000 or more) (21.9 versus 11.9 cigarettes).
- Among daily smokers, 41.6% had low dependence and 40.7% had moderate dependence on tobacco.
- Most households (85.3%) were totally smoke-free homes. Higher income households (\$100,000 or more) were more likely to be smoke-free homes than lower income households (less than \$40,000) (93.4% versus 75.0%).

Background

One of the goals of public health is to reduce the burden of chronic diseases. There is well-established medical evidence that smoking tobacco is a major contributor to chronic disease and smoking tobacco is the leading cause of preventable death in Canada.¹ Smoking tobacco is strongly linked to several types of cancer. In particular, it is a preventable cause of 85% of all new lung cancer cases and can also lead to cancers of the mouth, throat (pharynx), voice box (larynx), esophagus, bladder, stomach, kidney, pancreas, cervix and blood (leukemia).¹ Smoking tobacco is also a cause of respiratory diseases such as chronic obstructive pulmonary disease (COPD), which includes chronic bronchitis and emphysema, and cardiovascular diseases such as heart attacks, angina and strokes.¹ If there is tobacco smoke in the home, residents that are non-smokers may be exposed to second-hand smoke; even brief exposure to second-hand smoke can cause health problems.² For example, second-hand smoke can increase the frequency and severity of asthma attacks, respiratory infections, ear infections and sudden infant death syndrome (SIDS) in infants and children.² In adults, second-hand smoke can lead to coronary artery disease, stroke and lung cancer.²

A requirement of Public Health is to assess the health status of the population, examine if there are inequities in health outcomes based on personal and social factors (i.e., socio-demographic characteristics) such as gender, income and education and work to reduce the population health inequities related to chronic diseases. Socio-demographic characteristics are important to consider when assessing tobacco use as research has shown that, for example, people with low household incomes are more likely to smoke tobacco.³ This report provides an overview of the smoking status of residents in Oxford County as well as the level of dependence among daily smokers and the smoke-free status of households, while considering various socio-demographic characteristics. This information may be used to help inform public health programs that aim to increase public awareness of risk factors associated with chronic diseases (such as smoking tobacco) and increase healthy behaviours in the population. This data may also help inform tobacco cessation programs within Public Health.

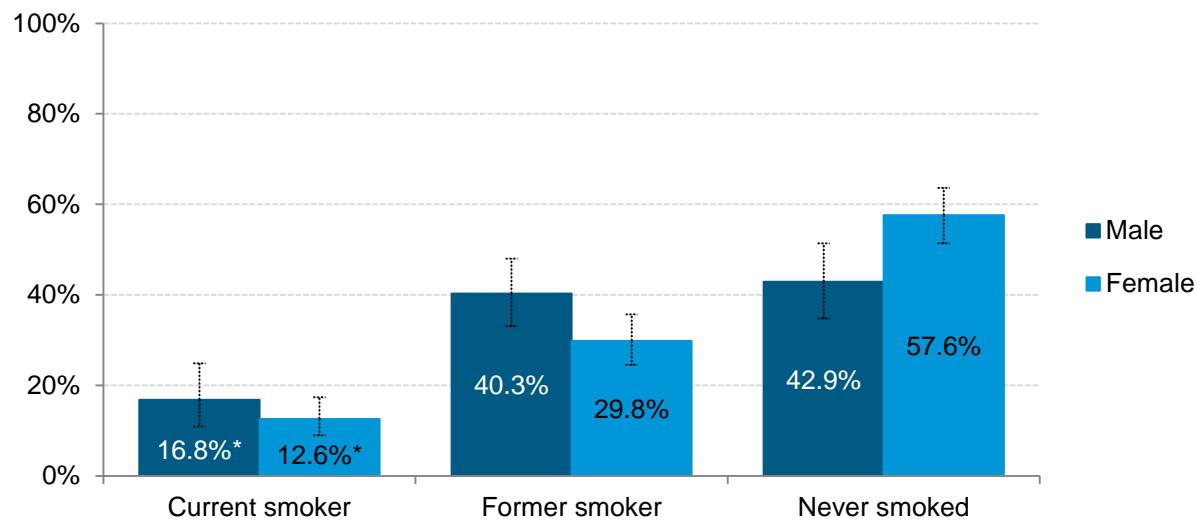
Please see methods in the Data Notes for more information about the survey, sample, and how the numbers are calculated and displayed.

Results

Tobacco Use

Less than one fifth of residents (14.6%) were current smokers (10.2% daily, 4.4% occasional), 35.0% were former smokers and 50.4% never smoked (Appendix, Table 1). Females were more likely to have never smoked than males (57.6% versus 42.9%) (Figure 1; Appendix, Table 1).

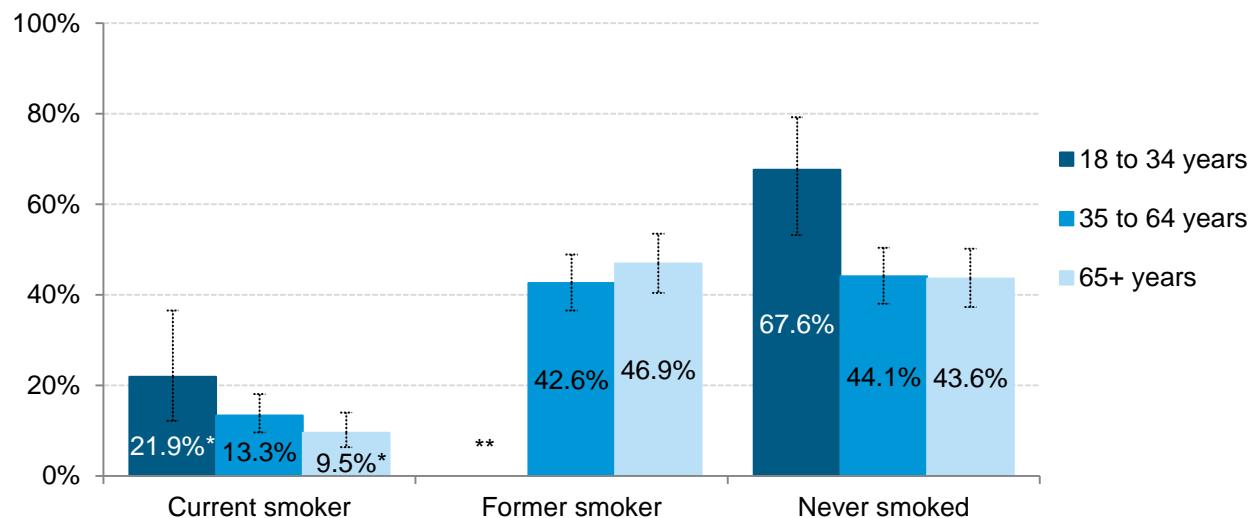
Figure 1. Smoking status by sex, Oxford County, 2016



* These per cents should be used with caution due to their variability.

Residents aged 18 to 34 years (67.6%) were more likely to have never smoked than residents aged 35 to 64 years (44.1%) and residents aged 65 years and older (43.6%) (Figure 2; Appendix, Table 2).

Figure 2. Smoking status by age group, Oxford County, 2016

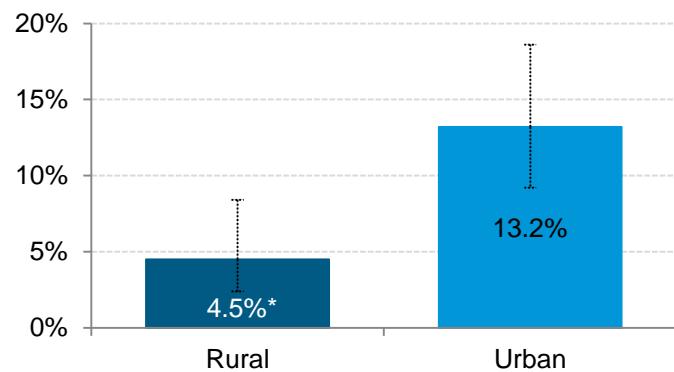


* These per cents should be used with caution due to their variability.

** Extremely high variability results, data suppressed.

Residents in urban areas (13.2%) were more likely to be daily smokers than residents in rural areas (4.5%) (Figure 3; Appendix, Table 6). Please see definitions in the Data Notes for more information about rural versus urban comparisons.

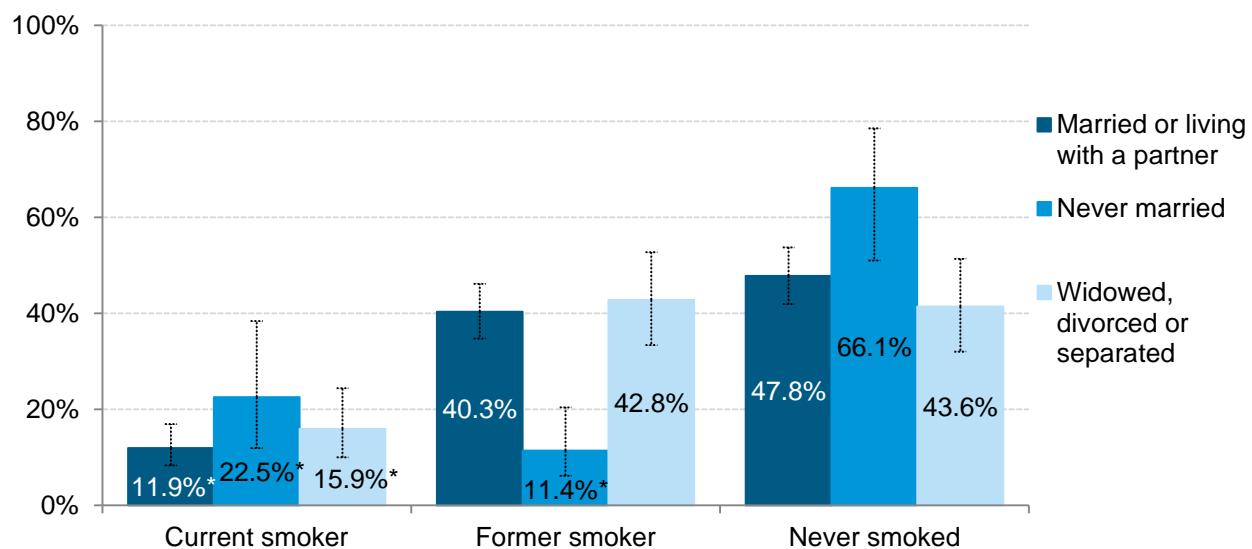
Figure 3. Smoke cigarettes daily by rural or urban residence, Oxford County, 2016



* This per cent should be used with caution due to its variability.

Residents who were widowed, divorced or separated (42.8%) and residents who were married or living with a partner (40.3%) were more likely to be former smokers than residents who were never married (11.4%) (Figure 4; Appendix, Table 7).

Figure 4. Smoking status by marital status, Oxford County, 2016



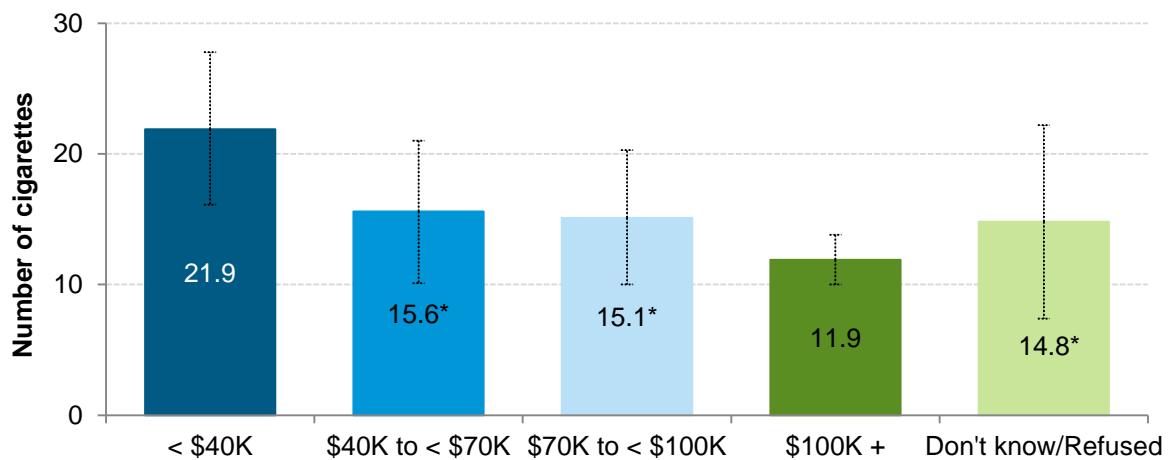
* These per cents should be used with caution due to their variability.

** Extremely high variability results, data suppressed.

Tobacco Dependence

One measure of tobacco dependence among daily smokers ($n=49$) was the average number of cigarettes smoked per day, which was 15.2 cigarettes (Appendix, Table 1). Daily smokers with a household income less than \$40,000 smoked more cigarettes per day on average than daily smokers with a household income of \$100,000 or more (21.9 versus 11.9) (Figure 5; Appendix, Table 3). Research has shown that people who reduce the number of cigarettes smoked per day are more likely to attempt to quit smoking and achieve smoking cessation.⁴

Figure 5. Average number of cigarettes smoked per day by household income, Oxford County, 2016



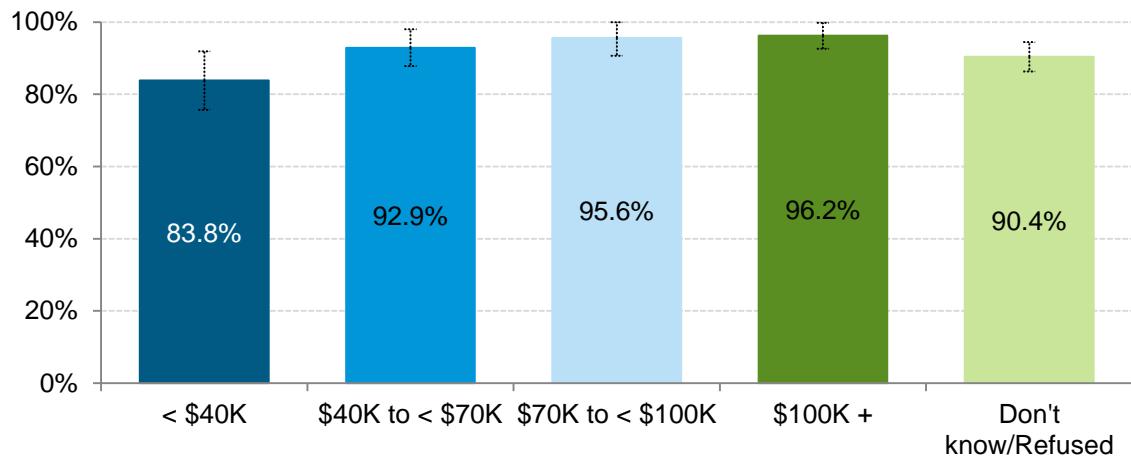
* These per cents should be used with caution due to their variability.

The number of cigarettes smoked per day was combined with how soon the respondent smokes their first cigarette after waking up in the morning to create the Heaviness of Smoking Index (HSI). Based on the HSI, daily smokers were fairly evenly distributed between low dependence (41.6%) and moderate dependence (40.7%) (Appendix, Table 1). The remainder were high dependence, although the per cent of daily smokers who were high dependence was not reportable due to extremely high sampling variability. Research has shown that smokers with low dependence are more likely to quit smoking after two years than smokers with moderate dependence.⁵ Additionally, high dependence smokers may find it harder to maintain cessation but also may be more motivated to quit smoking than those with moderate dependence.⁵ Due to the small number of daily smokers ($n=49$) and extremely high sampling variability, comparisons of tobacco dependence by socio-demographic characteristics were often not reportable.

Tobacco Smoke in the Home

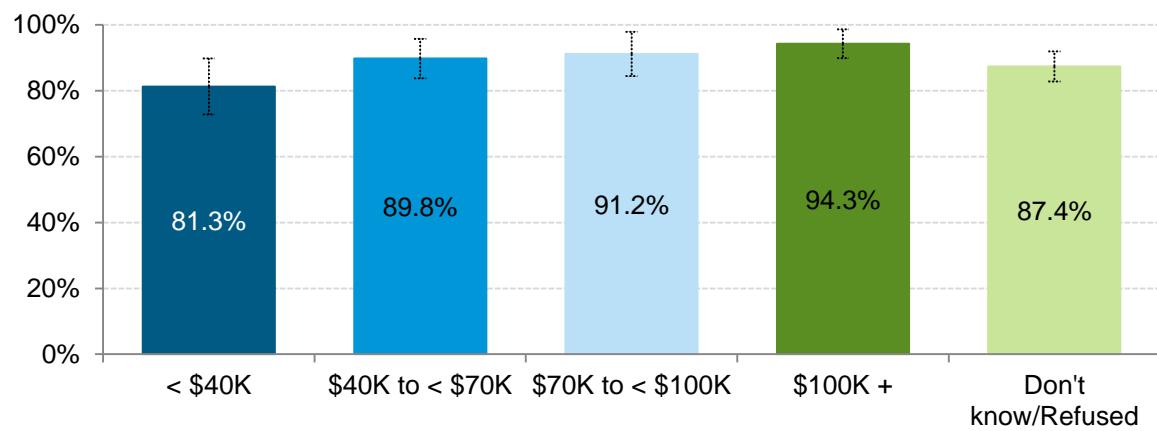
The majority of households (91.6%) were homes where no one regularly smokes inside (Appendix, Table 3). However, households with an income of \$100,000 or more (96.2%) were more likely to be homes where no one regularly smokes inside than households with an income of less than \$40,000 (83.8%) (Figure 6; Appendix, Table 3).

Figure 6. No one regularly smokes inside the home by household income, Oxford County, 2016



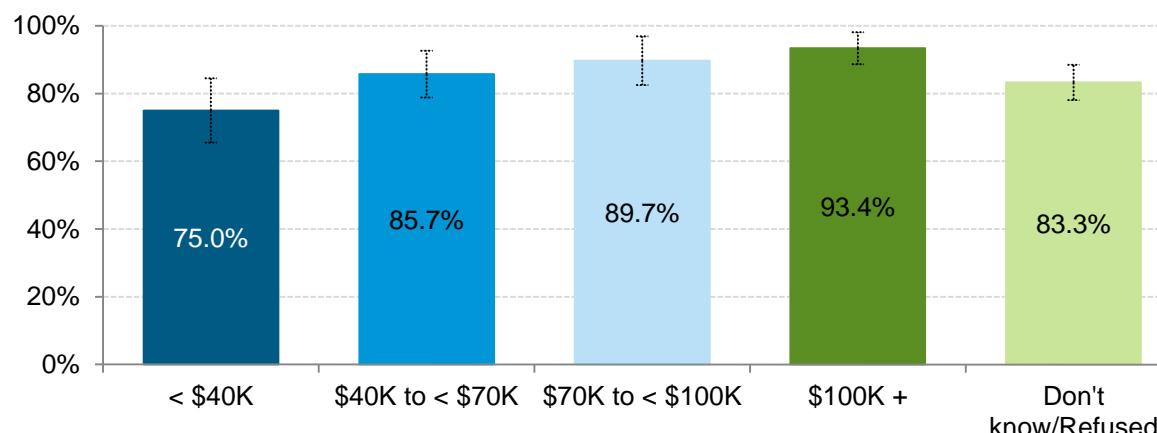
Similarly, 88.7% of households were homes where visitors are not allowed to smoke inside (Appendix, Table 3). Households with an income of \$100,000 or more were more likely to be homes where visitors are not allowed to smoke inside than households with an income of less than \$40,000 (94.3% versus 81.3%) (Figure 7; Appendix, Table 3).

Figure 7. Visitors are not allowed to smoke inside the home by household income, Oxford County, 2016



A totally smoke-free home is a home where no one regularly smokes inside and where visitors are not allowed to smoke inside. Most households (85.3%) were totally smoke-free homes (Appendix, Table 3). Households with an income of \$100,000 or more were more likely to be totally smoke-free homes than households with an income of less than \$40,000 (93.4% versus 75.0%) (Figure 8; Appendix, Table 3).

Figure 8. Totally smoke-free homes by household income, Oxford County, 2016



Considerations

These findings suggest that it may be important to consider targeting urban residents and lower income residents when conducting health promotion programs and initiatives that aim to reduce tobacco smoking. Less than one fifth of residents (14.6%) were current smokers (10.2% smoked daily and 4.4% smoked occasionally) and among the residents that were current smokers, urban residents were more likely to be daily smokers than rural residents (13.2% versus 4.5%). Overall, daily smokers smoked on average 15.2 cigarettes per day and those with a low household income (less than \$40,000) smoked more cigarettes per day on average than daily smokers with a high household income (\$100,000 or more) (21.9 versus 11.9 cigarettes). According to the Heaviness of Smoking Index (HSI), 41.6% of daily smokers are low dependence and may be good candidates for smoking cessation programs.

The majority of households were homes where no one regularly smokes inside (91.6%) and most households did not allow visitors to smoke inside (88.7%). Households that met both of these criteria were considered totally smoke-free (85.3%). Household income was related to all three of these indicators. Specifically, higher income households (\$100,000 or more) were more likely to be smoke-free homes than lower income households (less than \$40,000). Considering the income of households may be important in health promotion strategies that aim to promote smoke-free homes and reduce health inequities.

Appendix: Tables

Table 1. Tobacco use and dependence, by sex, Oxford County, 2016

| Indicator | Responses | Per cent of residents (95% CI) | | |
|-------------------------------------------------------------------------------------------|-----------------------------------------|-----------------------------------|-------------------------|-------------------------|
| | | Overall | Male | Female |
| Smoking status | Current smoker (daily or occasional) | 14.6% (11.0%-19.2%) | 16.8%* (10.9%-24.9%) | 12.6%* (9.0%-17.4%) |
| | Daily smoker | 10.2% (7.4%-14.0%) | 11.7%* (7.2%-18.6%) | 8.7%* (5.9%-12.8%) |
| | Former smoker | 35.0% (30.5%-39.7%) | 40.3% (33.1%-48.0%) | 29.8% (24.5%-35.7%) |
| | Never smoked | 50.4% (45.3%-55.5%) | 42.9%‡ (34.8%-51.4%) | 57.6%‡ (51.4%-63.6%) |
| Average number of cigarettes smoked per day (asked of daily smokers only, n=49) | | 15.2 (12.5-17.8) | 17.9 (14.4-21.4) | 11.4 (8.3-14.6) |
| Heaviness of Smoking Index (HSI) (asked of daily smokers only, n=49) | Low dependence | 41.6%* (25.7%-59.4%) | ** | 67.0% (45.9%-82.9%) |
| | Moderate dependence | 40.7%* (25.1%-58.5%) | 52.3%* (27.2%-76.2%) | ** |
| | High dependence | ** | ** | ** |

* High variability results, interpret with caution.

** Extremely high variability results, data suppressed.

‡ Statistically significant difference between groups based on a 95% confidence interval.

Table 2. Tobacco use and dependence, by age group, Oxford County, 2016

| Indicator | Responses | Per cent of residents (95% CI) | | | |
|----------------------------------------------------------------------------------------|-----------------------------------------|-----------------------------------|--------------------------|-------------------------|-------------------------|
| | | Overall | 18 to 34 years | 35 to 64 years | 65+ years |
| Smoking status | Current smoker (daily or occasional) | 14.7% (11.1%-19.3%) | 21.9%* (12.1%-36.5%) | 13.3% (9.6%-18.1%) | 9.5%* (6.3%-14.0%) |
| | Daily smoker | 10.3% (7.4%-14.1%) | ** | 11.1%* (7.7%-15.8%) | 7.5%* (4.7%-11.8%) |
| | Former smoker | 35.0% (30.5%-39.7%) | ** | 42.6% (36.5%-48.9%) | 46.9% (40.4%-53.5%) |
| | Never smoked | 50.3% (45.1%-55.4%) | 67.6%†† (53.2%-79.2%) | 44.1%† (38.0%-50.4%) | 43.6%‡ (37.3%-50.2%) |
| Average number of cigarettes smoked per day (asked of daily smokers only, n=49) | | 15.2 (12.5-17.8) | 12.8* (5.8-19.9) | 15.3 (12.8-17.8) | 19.0 (13.6-24.3) |
| Heaviness of Smoking Index (HSI) (asked of daily smokers only, n=49) | Low dependence | 41.6%* (25.7%-59.4%) | ** | 35.7%* (20.0%-55.2%) | 43.9%* (21.7%-68.7%) |
| | Moderate dependence | 40.7%* (25.1%-58.5%) | ** | 49.6%* (31.1%-68.2%) | 39.8%* (18.4%-66.0%) |
| | High dependence | ** | ** | ** | ** |

* High variability results, interpret with caution.

** Extremely high variability results, data suppressed.

‡, † Statistically significant difference between groups based on a 95% confidence interval.

Table 3. Tobacco use, dependence and smoke in the home, by household income, Oxford County, 2016 (continued on next page)

| Indicator | Responses | Per cent (95% CI) | | | | | |
|----------------------------------------------------------------------------------------|--------------------------------------|-------------------------|-------------------------|--------------------------|-------------------------|-------------------------|-------------------------|
| | | Overall | <\$40K | \$40K to < \$70K | \$70K to < \$100K | \$100K + | Don't know/ Refused |
| Smoking status | Current smoker (daily or occasional) | 14.6% (11.0%-19.2%) | 12.7%* (6.9%-22.3%) | 17.0%* (10.2%-27.1%) | ** | 13.3%* (6.8%-24.5%) | 16.0%* (9.4%-25.8%) |
| | Daily smoker | 10.2% (7.4%-14.0%) | 11.6%* (6.1%-20.9%) | 12.9%* (6.9%-22.8%) | ** | ** | ** |
| | Former smoker | 35.0% (30.5%-39.7%) | 48.1% (35.4%-61.0%) | 49.5%‡ (38.5%-60.5%) | 32.1%* (21.5%-44.9%) | 30.8% (22.2%-41.0%) | 28.4%‡ (21.7%-36.3%) |
| | Never smoked | 50.4% (45.3%-55.5%) | 39.2%* (26.6%-53.3%) | 33.4%*‡ (23.5%-45.1%) | 55.7% (42.5%-68.2%) | 55.9% (44.8%-66.4%) | 55.6%‡ (46.4%-64.4%) |
| Average number of cigarettes smoked per day (asked of daily smokers only, n=49) | | 15.2 (12.5-17.8) | 21.9‡ (16.1-27.8) | 15.6* (10.1-21.0) | 15.1* (10.0-20.3) | 11.9‡ (10.0-13.8) | 14.8* (7.4-22.2) |
| Heaviness of Smoking Index (HSI) (asked of daily smokers only, n=49) | Low dependence | 41.6%* (25.7%-59.4%) | ** | ** | ** | ** | ** |
| | Moderate dependence | 40.7%* (25.1%-58.5%) | ** | ** | ** | ** | ** |
| | High dependence | ** | ** | ** | ** | ** | ** |
| Per cent of households where no one regularly smokes inside | Yes | 91.6% (89.3%-93.9%) | 83.8%‡ (75.7%-91.9%) | 92.9% (87.8%-98.0%) | 95.6% (90.7%-100%) | 96.2%‡ (92.6%-99.8%) | 90.4% (86.3%-94.5%) |
| | No | 8.4% (6.1%-10.7%) | 16.3%* (8.2%-24.4%) | ** | ** | ** | 9.6%* (5.5%-13.7%) |

| Indicator | Responses | Per cent (95% CI) | | | | | |
|------------------------------------------------------------------------------|-----------|------------------------|-------------------------|------------------------|------------------------|-------------------------|------------------------|
| | | Overall | <\$40K | \$40K to < \$70K | \$70K to < \$100K | \$100K + | Don't know/ Refused |
| Per cent of households where visitors are not allowed to smoke inside | Yes | 88.7% (86.1%-91.3%) | 81.3%‡ (72.8%-89.8%) | 89.8% (83.8%-95.8%) | 91.2% (84.5%-97.9%) | 94.3%‡ (89.9%-98.7%) | 87.4% (82.8%-92.0%) |
| | No | 11.3% (8.7%-13.9%) | 18.8%* (10.2%-27.4%) | 10.2%* (4.2%-16.2%) | ** | ** | 12.6%* (8.0%-17.2%) |
| Per cent of households that are totally smoke-free | Yes | 85.3% (82.3%-88.3%) | 75.0%‡ (65.5%-84.5%) | 85.7% (78.8%-92.6%) | 89.7% (82.5%-96.9%) | 93.4%‡ (88.7%-98.1%) | 83.3% (78.1%-88.5%) |
| | No | 14.7% (11.7%-17.7%) | 25.0%* (15.5%-34.5%) | 14.3%* (7.4%-21.2%) | ** | ** | 16.7% (11.5%-21.9%) |

* High variability results, interpret with caution.

** Extremely high variability results, data suppressed.

‡ Statistically significant difference between groups based on a 95% confidence interval.

Table 4. Tobacco use and dependence, by education level, Oxford County, 2016

| Indicator | Responses | Per cent of residents (95% CI) | | | |
|----------------------------------------------------------------------------------------|-----------------------------------------|-----------------------------------|-------------------------|-------------------------------------------|----------------------------|
| | | Overall | < High school | High school or some post- secondary | Post-secondary graduate |
| Smoking status | Current smoker (daily or occasional) | 14.7% (11.0%-19.3%) | 13.7%* (7.4%-24.0%) | 20.2%* (13.0%-30.0%) | 11.0%* (7.1%-16.7%) |
| | Daily smoker | 10.2% (7.3%-14.0%) | 13.7%* (7.4%-24.0%) | 12.8%* (7.6%-20.8%) | 7.5%* (4.3%-12.7%) |
| | Former smoker | 34.8% (30.4%-39.5%) | 46.4% (35.5%-57.6%) | 30.0% (23.1%-38.0%) | 35.2% (29.0%-41.9%) |
| | Never smoked | 50.5% (45.3%-55.6%) | 39.8% (29.4%-51.3%) | 49.7% (40.4%-59.1%) | 53.8% (46.7%-60.7%) |
| Average number of cigarettes smoked per day (asked of daily smokers only, n=49) | | 15.2 (12.5-17.8) | 19.5 (14.6-24.5) | 14.5 (11.9-17.1) | 13.9* (8.1-19.7) |
| Heaviness of Smoking Index (HSI) (asked of daily smokers only, n=49) | Low dependence | 41.6%* (25.7%-59.4%) | ** | 45.6%* (21.3%-72.2%) | 52.4%* (24.8%-78.7%) |
| | Moderate dependence | 40.7%* (25.1%-58.5%) | 70.7%* (37.4%-90.7%) | 44.2%* (20.1%-71.4%) | ** |
| | High dependence | ** | ** | ** | ** |

* High variability results, interpret with caution.

** Extremely high variability results, data suppressed.

Table 5. Tobacco use and dependence, by employment status, Oxford County, 2016

| Indicator | Responses | Per cent of residents (95% CI) | | |
|-------------------------------------------------------------------------------------------|--------------------------------------|-----------------------------------|---------------------------|-----------------------------------------------------------|
| | | Overall | Employed or self-employed | Taking care of family, student, retired or unable to work |
| Smoking status | Current smoker (daily or occasional) | 14.8% (11.1%-19.3%) | 17.4%* (12.0%-24.4%) | 9.4%* (6.2%-14.0%) |
| | Daily smoker | 10.3% (7.4%-14.1%) | 11.7%* (7.5%-17.8%) | 8.0%* (5.1%-12.6%) |
| | Former smoker | 35.0% (30.6%-39.7%) | 31.2% (25.3%-37.8%) | 41.6% (35.0%-48.5%) |
| | Never smoked | 50.2% (45.1%-55.4%) | 51.5% (44.2%-58.7%) | 49.0% (41.9%-56.2%) |
| Average number of cigarettes smoked per day (asked of daily smokers only, n=49) | | 15.2 (12.5-17.8) | 16.2 (12.8-19.5) | 13.4 (9.0-17.7) |
| Heaviness of Smoking Index (HSI) (asked of daily smokers only, n=49) | Low dependence | 41.6%* (25.7%-59.4%) | 35.3%* (16.6%-59.9%) | 53.1%* (29.1%-75.7%) |
| | Moderate dependence | 40.7%* (25.1%-58.5%) | 42.4%* (22.0%-65.9%) | 37.0%* (17.3%-62.2%) |
| | High dependence | ** | ** | ** |

* High variability results, interpret with caution.

** Extremely high variability results, data suppressed.

Table 6. Tobacco use, dependence and smoke in the home, by rural or urban residence, Oxford County, 2016 (continued on next page)

| Indicator | Responses | Per cent (95% CI) | | |
|-------------------------------------------------------------------------------------------|-----------------------------------------|-------------------------|-------------------------|-------------------------|
| | | Overall | Rural | Urban |
| Smoking status | Current smoker (daily or occasional) | 14.6% (11.0%-19.2%) | 10.5%* (5.6%-18.8%) | 16.8% (12.3%-22.6%) |
| | Daily smoker | 10.2% (7.4%-14.0%) | 4.5%*‡ (2.4%-8.4%) | 13.2%*‡ (9.2%-18.6%) |
| | Former smoker | 35.0% (30.5%-39.7%) | 29.5% (22.4%-37.7%) | 37.9% (32.4%-43.6%) |
| | Never smoked | 50.4% (45.3%-55.5%) | 60.1% (50.9%-68.6%) | 45.3% (39.3%-51.4%) |
| Average number of cigarettes smoked per day (asked of daily smokers only, n=49) | | 15.2 (12.5-17.8) | 17.6 (12.7-22.4) | 14.7 (11.7-17.7) |
| Heaviness of Smoking Index (HSI) (asked of daily smokers only, n=49) | Low dependence | 41.6%* (25.7%-59.4%) | ** | 43.0%* (25.0%-63.0%) |
| | Moderate dependence | 40.7%* (25.1%-58.5%) | 57.9%* (27.7%-83.2%) | 37.6%* (20.9%-57.8%) |
| | High dependence | ** | ** | ** |
| Per cent of households where no one regularly smokes inside | Yes | 91.6% (89.3%-93.9%) | 92.2% (88.1%-96.3%) | 91.4% (88.6%-94.2%) |
| | No | 8.4% (6.1%-10.7%) | 7.8%* (3.7%-11.9%) | 8.6%* (5.8%-11.4%) |
| Per cent of households where visitors are not allowed to smoke inside | Yes | 88.7% (86.1%-91.3%) | 89.8% (85.2%-94.4%) | 88.3% (85.1%-91.5%) |
| | No | 11.3% (8.7%-13.9%) | 10.2%* (5.6%-14.8%) | 11.7% (8.5%-14.9%) |

| Indicator | Responses | Per cent (95% CI) | | |
|-----------------------------------------------------------|-----------|------------------------|------------------------|------------------------|
| | | Overall | Rural | Urban |
| Per cent of households that are totally smoke-free | Yes | 85.3% (82.3%-88.3%) | 86.2% (81.0%-91.4%) | 84.9% (81.3%-88.5%) |
| | No | 14.7% (11.7%-17.7%) | 13.8%* | 15.1% (11.5%-18.7%) |

* High variability results, interpret with caution.

** Extremely high variability results, data suppressed.

‡ Statistically significant difference between groups based on a 95% confidence interval.

Table 7. Tobacco use and dependence, by marital status, Oxford County, 2016

| Indicator | Responses | Per cent of residents (95% CI) | | | |
|----------------------------------------------------------------------------------------|-----------------------------------------|-----------------------------------|-------------------------------------|--------------------------|--------------------------------------|
| | | Overall | Married or living with a partner | Never married | Widowed, divorced or separated |
| Smoking status | Current smoker (daily or occasional) | 14.7% (11.1%-19.3%) | 11.9%* (8.3%-16.9%) | 22.5%* (11.9%-38.4%) | 15.9%* (10.0%-24.4%) |
| | Daily smoker | 10.2% (7.4%-14.0%) | 8.1%* (5.5%-11.8%) | ** | 12.7%* (7.4%-20.8%) |
| | Former smoker | 34.8% (30.3%-39.5%) | 40.3%‡ (34.7%-46.1%) | 11.4%*†† (6.1%-20.4%) | 42.8%† (33.4%-52.7%) |
| | Never smoked | 50.5% (45.4%-55.7%) | 47.8% (41.9%-53.7%) | 66.1% (51.0%-78.5%) | 41.4% (32.0%-51.3%) |
| Average number of cigarettes smoked per day (asked of daily smokers only, n=49) | | 15.2 (12.5-17.8) | 15.1 (12.0-18.3) | 14.2* (7.8-20.6) | 16.8 (12.9-20.8) |
| Heaviness of Smoking Index (HSI) (asked of daily smokers only, n=49) | Low dependence | 41.6%* (25.7%-59.4%) | 43.6%* (25.3%-63.8%) | ** | ** |
| | Moderate dependence | 40.7%* (25.1%-58.5%) | 46.0%* (27.3%-65.9%) | ** | 51.9%* (24.3%-78.4%) |
| | High dependence | ** | ** | ** | ** |

* High variability results, interpret with caution.

** Extremely high variability results, data suppressed.

‡, † Statistically significant difference between groups based on a 95% confidence interval.

Data Notes

Definitions

Never smoked included residents that never smoked at least 100 cigarettes in their life.

Heaviness of Smoking Index (HSI) is a scale used by the Ontario Tobacco Research Unit (OTRU) that combines how soon the respondent smokes their first cigarette after waking up in the morning and the number of cigarettes smoked per day to measure tobacco dependence.

Rural versus Urban Comparisons: Results are presented for Oxford County as a whole, and where possible, reported by whether the resident lives in a 'rural' or 'urban' area within the County. Although there are a mixture of rural and (sub)urban areas even within the municipalities, for the purposes of this report, they were subdivided as follows:

1. **Rural:** Zorra, East Zorra-Tavistock, Blandford-Blenheim, Norwich and South-West Oxford.
2. **Urban:** Woodstock, Ingersoll and Tillsonburg.

Methods

The 2016 Oxford Health Matters Survey (OHMS) was conducted for Oxford County Public Health by the Institute for Social Research (ISR) at York University. The purpose of the survey was to collect data to help shape public health programs in new and emerging areas based on the needs and concerns of the community. The survey interviewed by telephone a total of 550 randomly selected households from September to December 2016 with Oxford County residents aged 18 years or older. This resulted in an overall response rate of 44%, which is comparable to other recent Canadian health surveys. If the household included a person aged 18-30 years old, they were selected to answer the survey to increase the number of young people in the sample, as they are typically harder to reach with this type of survey. Otherwise, the person with the first birthday in the household was asked to complete the survey. The number of responses for various questions may not total 550 due to survey skip patterns and differing amounts of non-response to each question. Responses to questions relevant to individuals are weighted by age and sex to adjust for fewer males and younger individuals completing the survey. This weighting allows the sample to more closely represent the population of Oxford County.

Confidence Intervals

The per cents in brackets that follow each per cent estimate in the tables are the confidence intervals (CIs). Each estimate is based on the survey sample, and a CI is a range of values that describes the uncertainty surrounding an estimate.⁶ The 95% CI shows a range of values that have a 95% chance of including the true estimate in the population if the survey was repeated. The larger a 95% CI, the more caution should be used when using the estimate. In graphs, the 95% CI is shown by an error bar. Error bars and CIs that don't overlap show statistically significant differences between groups (e.g., when comparing males and females). Statistically significant results indicate the finding is unlikely to be due to chance alone.

Variability

Throughout the report, some numbers may be suppressed because they are unstable due to high variability, as measured by the coefficient of variation (CV). The CV indicates how precise an estimate is. Higher CVs indicate more variability, which often occurs when there is a small sample size. When the CV is between 16.6 and 33.3, the estimate should be interpreted with caution because of high variability. In tables, this is shown with an asterisk (*). Estimates with a CV of 33.3 or more are not reportable and the estimates are replaced with double asterisks (**). Estimates may also not be reportable if they are based on an unweighted denominator of less than 30 or a numerator of less than 5.

Missing Responses

“Don’t know” and “Refused” responses are usually removed from the analysis, unless they account for over 5% of the responses. Then they are included as a separate category. Responses are self-reported and may be subject to recall bias (trouble remembering) and social desirability bias (answering in the “expected” or socially acceptable way).

References

1. Health Canada. Health effects of smoking [Internet]. 2011 [cited 2017 May 9]. Available from: <http://www.hc-sc.gc.ca/hc-ps/tobac-tabac/body-corps/index-eng.php>
2. Centers for Disease Control and Prevention. Secondhand smoke (SHS) facts [Internet]. 2017 [cited 2017 May 9]. Available from: https://www.cdc.gov/tobacco/data_statistics/fact_sheets/secondhand_smoke/general_facts/
3. World Health Organization. Poverty [Internet]. Tobacco Free Initiative (TFI). 2017 [cited 2017 May 9]. Available from: <http://www.who.int/tobacco/research/economics/rationale/poverty/en/>
4. Begh R, Lindson-Hawley N, Aveyard P. Does reduced smoking if you can't stop make any difference? BMC Med. 2015;13(257).
5. Ontario Tobacco Research Unit. Who's quitting now? Dependence and smoking cessation among Canadians. 2006.
6. United States Census Bureau. A basic explanation of confidence intervals. [Internet]. Washington DC, USA: United States Census Bureau; 2013. [cited April 18, 2017]. Available from: <https://www.census.gov/did/www/saipe/methods/statecounty/ci.html>.



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