Report 6: E-cigarette Use & Tobacco Cessation

July 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.

- E-cigarette use is an emerging public health issue, both in terms of understanding its health risk and value as a cessation aid. This report provides the first look at how many people are using e-cigarettes in Oxford County.

- Overall, most residents (91.0%) have never smoked an e-cigarette. However, some differences in age were notable: while 83.7% of residents aged 18 to 34 years hadn't tried an e-cigarette, 95.9% of residents aged 65 years and older had never tried one.

- More than half of residents judged the health risk of smoking e-cigarettes compared to not using e-cigarettes to be risky; 35.4% felt it was high risk and an additional 22.7% felt it was medium risk.

- Public Health offers smoking cessation clinics, including providing counselling and free nicotine replacement therapy (including nicotine patches or nicotine gum) to smokers interested in quitting, to help reduce the burden of smoking-related illness and death.

- Almost one-half (46.8%) of smokers had considered quitting in the near future and more than one-third of smokers (37.9%) actually made a quit attempt (stopped smoking for at least one day) in the past year.

- Among former smokers nearly all (92.5%) had quit smoking more than two years ago.

Background

This report focuses on e-cigarette use and risk perceptions of e-cigarette use, as well as the quitting behaviour of current and former smokers. To date, there has been little information on e-cigarette use, particularly at the local public health unit level, because they are a relatively recent development, and many tobacco use monitoring systems have not yet evolved to include e-cigarette use.[1] The 2016 Oxford Health Matters Survey (OHMS) provided a unique opportunity to quantify and understand e-cigarette use (i.e., vaping) in Oxford County, and help shape Public Health programs and services accordingly to the unique needs of Oxford County residents.

E-cigarette use is an emerging issue of public health importance, having first appeared in 2006.[2] Research has shown that e-cigarette use is becoming more common over time, especially among adolescents and young adults: as many as 33% of young adults aged 18-24 in Ontario used an e-cigarette in 2015.[3] Scientific understanding of e-cigarettes and their health risks, as well as their efficacy (or value) as a cessation aid, is still evolving as research continues.[2] Many researchers have argued that among non-smokers, e-cigarette use acts as a gateway to smoking tobacco.[1] E-cigarette vapour may also contain a variety of toxic chemicals, in addition to uncontrolled amounts of nicotine.[4]

Some high-quality research reviews that combined the results of several studies found that e-cigarettes containing nicotine can help some users quit smoking in certain circumstances.[2,5] However, their effectiveness compared to traditional NRT, like nicotine patches, is not yet known.[2] Unfortunately, the current quality of evidence related to both health risks and efficacy is low because there have not yet been enough longer-term, well-designed clinical trials of e-cigarette use.[5] Many studies are now underway in Canada and abroad to help determine the long-term health effects of e-cigarettes and their efficacy in tobacco cessation. Oxford County Public Health encourages residents to make an informed choice regarding smoking cessation methods while more and better research is conducted about the effectiveness of e-cigarettes as a cessation aid.

One of the goals of public health is to reduce the burden of chronic diseases, and tobacco use is one of the key contributors to many chronic diseases.[6] To address this, Oxford County Public Health offers smoking cessation clinics, including providing counselling and free nicotine replacement therapy (NRT) to smokers interested in quitting. Nicotine replacement therapy has

been shown to be an effective tobacco cessation aid.[7] Quitting smoking is the best thing a person can do to reduce their risk of serious health problems and premature death.[8]

Please see definitions in the Data Notes for explanations of e-cigarette and smoking cessation terms, and methods in the Data Notes for more information about the survey, sample, and how the numbers are calculated and displayed.

## Results

E-cigarette Use and Perceived Risk

Overall, 8.4% of residents had used an e-cigarette, whereas a very high per cent of residents (91.0%) have never used an e-cigarette. A very small per cent never heard of an e-cigarette (Appendix, Table 1). Residents aged 65 years and older were more likely to have never used an e-cigarette (95.9%) compared to residents aged 18 to 34 years (83.7%) (Figure 1; Appendix, Table 2).

Figure 1. Never tried an e-cigarette by age group, Oxford County, 2016
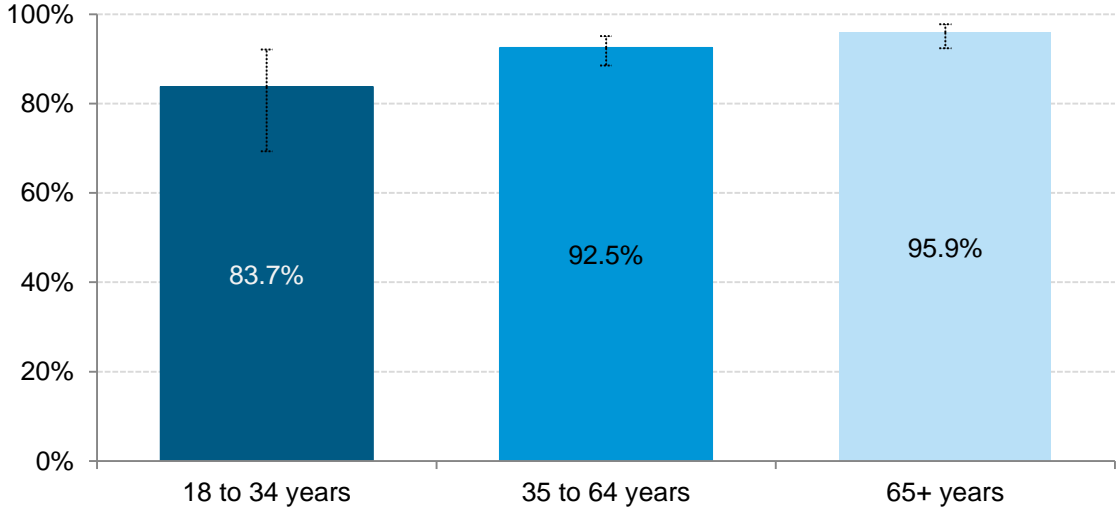
Further, married and individuals living with a partner were more likely to have never used an e-cigarette (94.8%) than never married individuals (78.8%) (Figure 2; Appendix, Table 3).

Figure 2. Never tried an e-cigarette by marital status, Oxford County, 2016
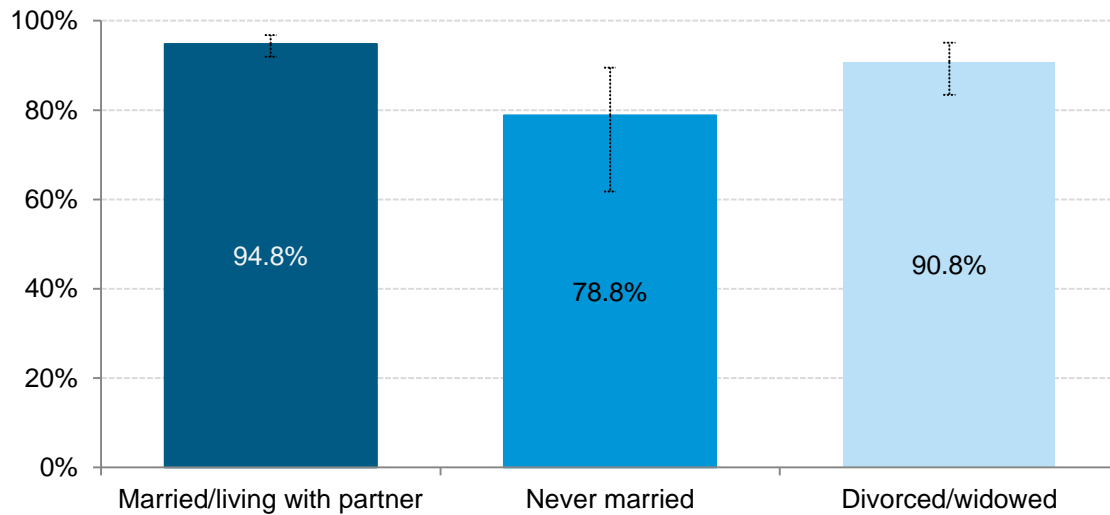

Additional information about characteristics of residents and e-cigarette use is available in the Appendix, Tables 4-7.

Of those who had ever used an e-cigarette (n=33), 41.2% used one in the past year (Appendix, Table 8). Residents that used e-cigarettes were also asked about the main reason they used e-cigarettes. The most frequently cited reason (by 64.1% of e-cigarette users) was out of simple curiosity. Other reasons mentioned included: to help quit tobacco smoking, to cut back on tobacco smoked and even as a long-term replacement for tobacco (Appendix, Table 8).

Over one-third of respondents felt that using e-cigarettes compared to not using e-cigarettes posed a high risk to their health, and just under one-quarter felt it was a medium risk to their health (Figure 3; Appendix, Tables 1-7). To ensure that residents were considering the health risks of using e-cigarettes alone, surveyors reinforced with residents that e-cigarette risk should not be compared to tobacco smoking risk, but rather to not using e-cigarettes at all.

Figure 3. Perceived health risk of e-cigarettes, Oxford County, 2016
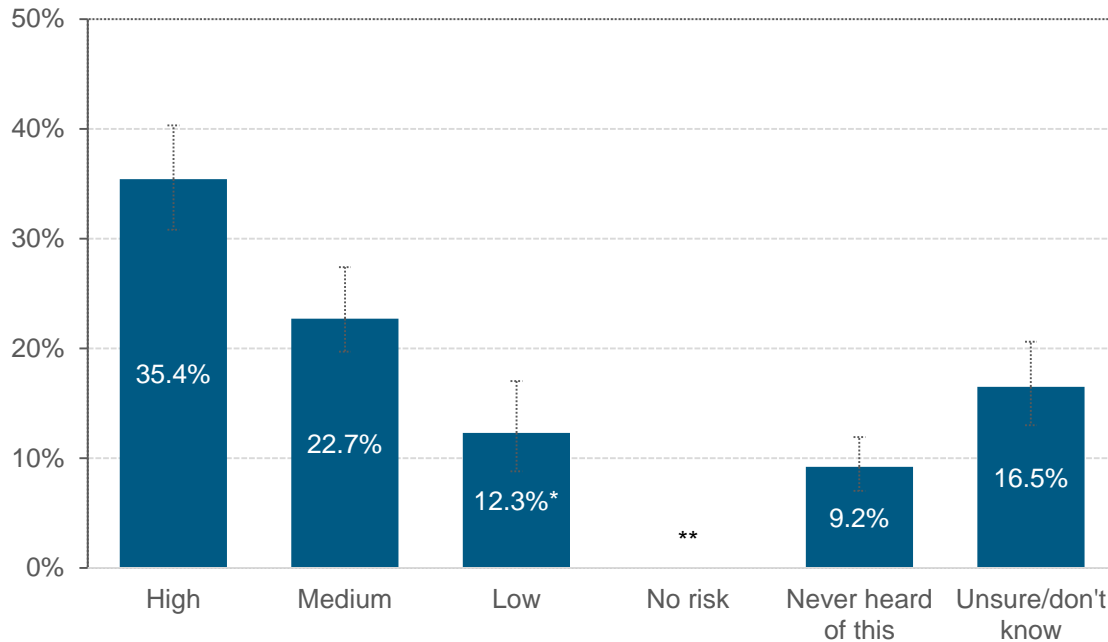
* This per cent should be used with caution due to its variability.
** Extremely high variability results, data suppressed.

Tobacco Cessation

Current smokers (n=67) were asked about their quitting status and attempts. Almost one-half (46.8%) of smokers had considered quitting in the near future, but another 45.0% had not thought of quitting, while a small per cent was actually prepared to quit in the next month (Appendix, Table 9). Among current smokers, 37.9% actually made a quit attempt, or stopped smoking for at least one day in the past year.

Former smokers (n=214) were asked how long it has been since they have quit smoking. Almost all former smokers (92.5%) had quit smoking for more than two years, while the remaining 7.5% had quit smoking for two years or less. Former smokers aged 65 years and

older (99.3%) were more likely than former smokers aged 35 to 64 years (90.0%) to have quit smoking more than two years ago (Figure 4; Appendix, Table 10).

Figure 4. Quit smoking for more than two years by age group, Oxford County, 2016
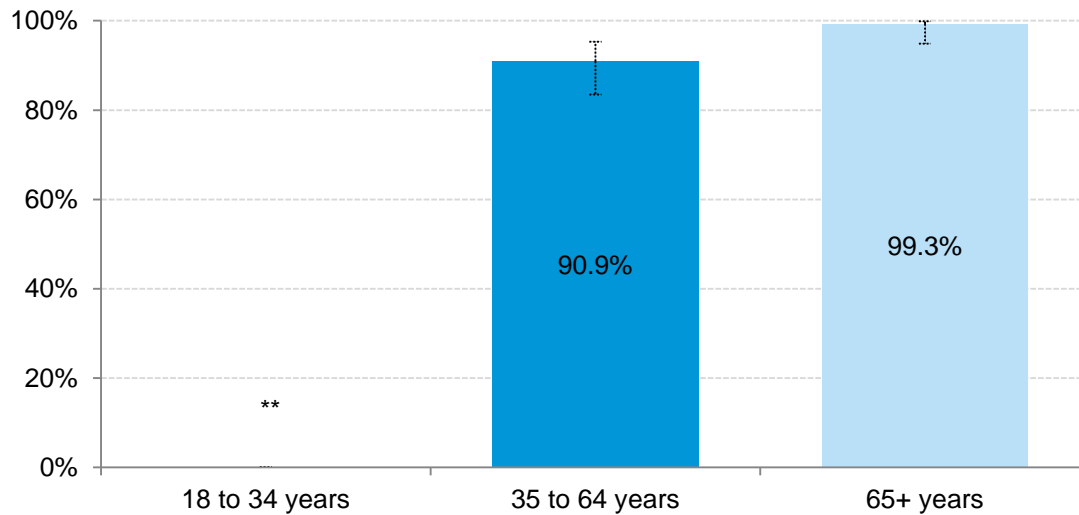
** Extremely high variability results, data suppressed.

Additional information about characteristics of smokers and quitting behaviour is available in the Appendix, Tables 11-15).

Fifty-eight per cent of residents that had recently tried or successfully quit smoking [†] (n=40) used at least one of four cessation methods to quit smoking, including: nicotine patches, nicotine gum, prescription medications and e-cigarettes (Appendix, Table 16).

[†] Defined as current smokers that made a quit attempt in the past year and former smokers that quit within the past two years.

Considerations

Overall, just under 1 in 10 residents have used e-cigarettes, some as a smoking cessation aid. Rates of e-cigarette use in younger residents was higher, as only 83.7% of those aged 18 to 34 years had never used an e-cigarette, compared to 95.9% of those aged 65 years and older. Among those who had tried an e-cigarette, nearly two-thirds (64.1%) said they tried them out of curiosity. Focused effort may best be directed to the younger age groups to avoid increased use of e-cigarettes, as they can contain harmful nicotine, may be addictive, and may act as a gateway to tobacco smoking.[1] Moreover, most residents were aware that there are health risks to smoking e-cigarettes, with 35.8% judging them to be high and 22.7% judging them to be medium health risk.

Many smokers in Oxford County have considered (46.8%) or actually tried (37.9%) quitting smoking. More than half (58.0%) of those residents that recently tried or successfully quit did use at least one type of cessation aid (nicotine patches, nicotine gum, prescription drugs or e-cigarettes) to quit smoking. This is encouraging, as it may indicate that nearly half of current smokers are ready to quit and may be a group that could benefit from targeted cessation efforts. Public Health currently provides a variety of evidence-based NRT cessation aids to clients, which have been found to be useful to people that have recently tried or successfully quit smoking.

Many socio-demographic comparisons of e-cigarette users were not possible due to the overall survey sample size. There may be effects due to characteristics other than age (like income or education) that were not detectable. However, as this is one of the few sources of local information on e-cigarette use and cessation behaviours in Oxford County, it can help inform local chronic disease prevention and health promotion programming in an evolving e-cigarette and tobacco use landscape.

Appendix: Tables

Table 1. E-cigarette use and perceived risk, by sex, Oxford County, 2016

Indicator	Responses	Per cent of residents (95% CI)		
		Overall	**Male**	**Female**
Never used an e-cigarette		91.0% (86.8%-93.9%)	89.2% (81.2%-94.0%)	92.7% (88.7%-95.4%)
Have used an e-cigarette		8.4%* (5.5%-12.6%)	**	**
Never heard of an e-cigarette		**	**	**
Perceived risk of e-cigarette use, compared to not using e-cigarettes	High	35.4% (30.8%-40.3%)	32.5% (25.7%-40.1%)	38.2% (32.3%-44.4%)
	Medium	22.7% (18.7%-27.4%)	21.2% (15.2%-28.7%)	24.2% (19.1%-30.2%)
	Low	12.3%* (8.8%-17.0%)	14.1%* (8.5%-22.4%)	10.7%* (7.0%-15.8%)
	No risk	**	**	**
	Never heard of this	9.2% (7.0%-11.9%)	7.2%* (4.4%-11.5%)	11.1% (8.1%-15.0%)
	Unsure/don't know	16.5% (13.0%-20.6%)	18.5%* (13.0%-25.6%)	14.6% (10.7%-19.5%)

* High variability results, interpret with caution.

** Extremely high variability results, data suppressed.

Table 2. E-cigarette use and perceived risk, 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**
Never used an e-cigarette		91.0% (86.8%-93.9%)	83.7%‡ (69.3%-92.1%)	92.5% (88.5%-95.1%)	95.9%‡ (92.4%-97.8%)
Perceived risk of e-cigarette use, compared to not using e-cigarettes	High	35.4% (30.8%-40.3%)	26.0%* (15.8%-39.6%)	37.2% (31.3%-43.4%)	43.0% (36.6%-49.6%)
	Medium	22.7% (18.7%-27.4%)	25.6%* (15.4%-39.5%)	22.4% (17.6%-28.1%)	19.6% (14.9%-25.5%)
	Low	12.3%* (8.8%-17.0%)	24.9%* (14.5%-39.4%)	9.4%* (6.3%-13.7%)	4.4%* (2.3%-8.1%)
	No risk	**	**	**	**
	Never heard of this	9.2% (7.0%-11.9%)	**	11.0%* (7.7%-15.6%)	14.5% (10.6%-19.6%)
	Unsure/don't know	16.5% (13.0%-20.6%)	**	18.2% (13.8%-23.6%)	16.2% (11.9%-21.7%)

* High variability results, interpret with caution.

** Extremely high variability results, data suppressed.

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

Table 3. E-cigarette use and perceived risk, 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**
Never used an e-cigarette		91.0% (86.8%-93.9%)	94.8% ‡ (91.9%-96.8%)	78.8% ‡ (61.8%-89.5%)	90.8% (83.4%-95.1%)
Perceived risk of e-cigarette use, compared to not using e-cigarettes	High	35.4% (30.8%-40.3%)	37.2% (31.7%-43.0%)	24.6%* (14.4%-38.9%)	42.7% (33.3%-52.7%)
	Medium	22.7% (18.7%-27.4%)	23.2% (18.5%-28.7%)	22.2%* (12.1%-37.1%)	22.1%* (14.8%-31.6%)
	Low	12.3%* (8.8%-17.0%)	9.0%* (5.7%-13.8%)	24.8%* (13.6%-40.9%)	**
	No risk	**	**	**	**
	Never heard of this	9.2% (7.0%-11.9%)	10.8% (7.9%-14.6%)	**	10.2%* (5.9%-17.1%)
	Unsure/don't know	16.5% (13.0%-20.6%)	18.0% (13.8%-23.1%)	**	13.3%* (7.9%-21.4%)

* 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. E-cigarette use and perceived risk, by household income, Oxford County, 2016

Indicator	Responses	Per cent (95% CI)					
		Overall	<$40K	$40K to < $70K	$70K to < $100K	$100K +	Don't know/ Refused
Never used an e-cigarette		91.0% (86.8%-93.9%)	88.0% (69.1%-96.0%)	93.2% (86.1%-96.8%)	96.3% (88.2%-98.9%)	89.1% (77.5%-95.1%)	90.2% (81.8%-94.9%)
Perceived risk of e-cigarette use, compared to not using e-cigarettes	High	35.4% (30.8%-40.3%)	41.6% (29.7%-54.5%)	41.5% (30.9%-52.9%)	32.6%* (22.0%-45.4%)	34.5% (25.1%-45.2%)	32.4% (24.7%-41.1%)
	Medium	22.7% (18.7%-27.4%)	25.7%* (14.8%-40.7%)	20.1%* (12.7%-30.3%)	18.9%* (10.6%-31.4%)	28.2%* (19.2%-39.3%)	20.7%* (14.3%-29.0%)
	Low	12.3%* (8.8%-17.0%)	**	**	**	16.3% (9.1%-27.6%)	12.6% (6.7%-22.3%)
	No risk	**	**	**	**	**	**
	Never heard of this	9.2% (7.0%-11.9%)	**	**	**	**	12.2% (8.3%-17.4%)
	Unsure/don't know	16.5% (13.0%-20.6%)	12.9%* (6.6%-23.6%)	19.2%* (11.8%-29.8%)	24.7%* (15.0%-37.9%)	14.2%* (7.9%-24.1%)	14.8%* (9.4%-22.6%)

* High variability results, interpret with caution.

** Extremely high variability results, data suppressed.

Table 5. E-cigarette use and perceived risk, 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
Never used an e-cigarette		91.0% (86.8%-93.9%)	95.3% (87.3%-98.3%)	86.1% (75.8%-92.4%)	93.8% (89.6%-96.4%)
Perceived risk of e-cigarette use, compared to not using e-cigarettes	High	35.4% (30.8%-40.3%)	40.7% (30.0%-52.3%)	29.5% (22.1%-38.1%)	38.5% (32.0%-45.4%)
	Medium	22.7% (18.7%-27.4%)	15.3%* (8.7%-25.6%)	26.6% (19.2%-35.6%)	22.1% (16.8%-28.6%)
	Low	12.3%* (8.8%-17.0%)	**	**	13.9% (9.0%-20.9%)
	No risk	**	**	**	**
	Never heard of this	9.2% (7.0%-11.9%)	13.9%* (8.5%-22.1%)	9.8%* (6.3%-14.9%)	7.7%* (4.9%-11.7%)
	Unsure/don't know	16.5% (13.0%-20.6%)	18.3%* (11.1%-28.6%)	17.7%* (11.4%-26.6%)	14.8% (10.7%-20.1%)

* High variability results, interpret with caution.

** Extremely high variability results, data suppressed.

Table 6. E-cigarette use and perceived risk, 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**
Never used an e-cigarette		91.0% (86.8%-93.9%)	89.5% (82.6%-93.8%)	93.4% (88.6%-96.3%)
Perceived risk of e-cigarette use, compared to not using e-cigarettes	High	35.4% (30.8%-40.3%)	32.4% (26.2%-39.3%)	41.0% (34.2%-48.1%)
	Medium	22.7% (18.7%-27.4%)	25.3% (19.5%-32.1%)	20.5% (15.1%-27.2%)
	Low	12.3%* (8.8%-17.0%)	13.4%* (8.7%-20.1%)	10.3%* (6.0%-17.1%)
	No risk	**	**	**
	Never heard of this	9.2% (7.0%-11.9%)	6.8%* (4.4%-10.6%)	12.4%* (8.8%-17.2%)
	Unsure/don't know	16.5% (13.0%-20.6%)	17.0%* (12.3%-23.1%)	13.3%* (9.4%-18.4%)

* High variability results, interpret with caution.

** Extremely high variability results, data suppressed.

Table 7. E-cigarette use and perceived risk, by rural or urban residence, Oxford County, 2016

Indicator	Responses	Per cent of residents (95% CI)		
		Overall	**Rural**	**Urban**
Never used an e-cigarette		91.0% (86.8%-93.9%)	92.0% (83.1%-96.4%)	90.4% (85.3%-93.9%)
Perceived risk of e-cigarette use, compared to not using e-cigarettes	High	35.4% (30.8%-40.3%)	33.4% (25.4%-42.5%)	36.4% (30.9%-42.2%)
	Medium	22.7% (18.7%-27.4%)	21.0%* (14.8%-29.0%)	23.6% (18.6%-29.5%)
	Low	12.3%* (8.8%-17.0%)	17.2%* (9.9%-28.0%)	9.8%* (6.6%-14.3%)
	No risk	**	**	**
	Never heard of this	9.2% (7.0%-11.9%)	10.5%* (6.7%-16.2%)	8.5%* (6.1%-11.7%)
	Unsure/don't know	16.5% (13.0%-20.6%)	14.1%* (8.9%-21.8%)	17.7% (13.5%-22.9%)

* High variability results, interpret with caution.

** Extremely high variability results, data suppressed.

Table 8. E-cigarette use, Oxford County, 2016

Indicator	Responses	Per cent of residents (95% CI)
		Overall
Used an e-cigarette in the past year (asked only of those who answered they ever used an e-cigarette n=33)		41.2%* (22.5%-62.8%)
Main reasons used e-cigarettes (asked only of those who answered they ever used an e-cigarette n=33)	Curiosity	64.1% (44.4%79.9%)
	Help quit tobacco smoking	**
	Cut back on tobacco smoked	**
	Long term replacement for tobacco	**
	Use where can't smoke tobacco	**
	Recommended by someone	**
	Safer than tobacco	**

* High variability results, interpret with caution.

** Extremely high variability results, data suppressed.

Table 9. Tobacco cessation behaviours, by sex, Oxford County, 2016

Indicator	Responses	Per cent of residents (95% CI)		
		Overall	**Male**	**Female**
Quitting status (asked of current smokers only, n=67)	Not considered quitting in next six months	45.0%* (30.5%-60.5%)	40.2%* (19.9%-64.5%)	51.1%* (34.0%-68.1%)
	Considered quitting in next six months	46.8%* (32.0%-62.1%)	52.2%* (29.5%-74.0%)	39.9%* (24.1%-58.2%)
	Prepared to quit in next 30 days	**	**	**
Stopped smoking for at one day in past 12 months because trying to quit (asked of current smokers only, n=67)		37.9%* (24.8%-53.1%)	**	32.5*% (19.2%-49.3%)
Length of time former smoker has quit for (n=214)	In past two years	7.5%* (4.3%-12.8%)	**	**
	More than two years ago	92.5% (87.2%-95.7%)	95.1% (87.7%-98.2%)	89.1% (79.3%-94.5%)

* High variability results, interpret with caution.

** Extremely high variability results, data suppressed.

Table 10. Tobacco cessation behaviours, 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
Quitting status (asked of current smokers only, n=67)	Not considered quitting in next six months	45.0%* (30.5%-60.5%)	50.0%* (21.7%-78.3%)	37.4%* (22.7%-54.9%)	54.4%* (33.8%-73.6%)
	Considered quitting in next six months	46.8%* (32.0%-62.1%)	50.0%* (21.7%-78.3%)	49.8%* (33.1%-66.6%)	**
	Prepared to quit in next 30 days	**	**	**	**
Stopped smoking for at one day in past 12 months because trying to quit (asked of current smokers only, n=67)		37.9%* (24.8%-53.1%)	**	50.6%* (34.0%-67.0%)	**
Length of time former smoker has quit for (n=214)	In past two years	7.5%* (4.3%-12.8%)	**	**	**
	More than two years ago	92.5% (87.2%-95.7%)	**	90.0%‡ (82.6%-94.4%)	99.3%‡ (94.9%-99.9%)

* High variability results, interpret with caution.

** Extremely high variability results, data suppressed.

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

Table 11. Tobacco cessation behaviours, by household income, Oxford County, 2016

Indicator	Responses	Per cent (95% CI)					
		Overall	<$40K	$40K to < $70K	$70K to < $100K	$100K +	Don't know/ Refused
Quitting status (asked of current smokers only, n=67)	Not considered quitting in next six months	45.0%* (30.5%-60.5%)	**	**	**	**	**
	Considered quitting in next six months	46.8%* (32.0%-62.1%)	**	**	**	**	**
	Prepared to quit in next 30 days	**	**	**	**	**	**
Stopped smoking for at one day in past 12 months because trying to quit (asked of current smokers only, n=67)		37.9%* (24.8%-53.1%)	**	**	**	**	**
Length of time former smoker has quit for (n=214)	In past two years	7.5%* (4.3%-12.8%)	**	**	**	**	**
	More than two years ago	92.5% (87.2%-95.7%)	95.2% (81.4%-98.9%)	88.4% (74.7%-95.2%)	**	93.5% (77.5%-98.4%)	92.8% (78.3%-97.9%)

* High variability results, interpret with caution.

** Extremely high variability results, data suppressed.

Table 12. Tobacco cessation behaviours, 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**
Quitting status (asked of current smokers only, n=67**)**	Not considered quitting in next six months	45.0%* (30.5%-60.5%)	**	**	**
	Considered quitting in next six months	46.8%* (32.0%-62.1%)	**	**	**
	Prepared to quit in next 30 days	**	**	**	**
Stopped smoking for at one day in past 12 months because trying to quit (asked of current smokers only, n=67)		37.9%* (24.8%-53.1%)	**	**	**
Length of time former smoker has quit for (n=214)	In past two years	7.5%* (4.3%-12.8%)	**	**	**
	More than two years ago	92.5% (87.2%-95.7%)	97.2% (82.7%-99.6%)	93.7% (84.3%-97.6%)	90.0% (80.5%-95.1%)

* High variability results, interpret with caution.

** Extremely high variability results, data suppressed.

Table 13. Tobacco cessation behaviours, 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
Quitting status (asked of current smokers only, n=67)	Not considered quitting in next six months	45.0%* (30.5%-60.5%)	35.9%* (19.5%-56.5%)	**
	Considered quitting in next six months	46.8%* (32.0%-62.1%)	**	**
	Prepared to quit in next 30 days	**	**	**
Stopped smoking for at one day in past 12 months because trying to quit (asked of current smokers only, n=67)		37.9%* (24.8%-53.1%)	**	**
Length of time former smoker has quit for (n=214)	In past two years	7.5%* (4.3%-12.8%)	**	**
	More than two years ago	92.5% (87.2%-95.7%)	92.5% (84.9%-96.5%)	93.5% (83.9%-97.5%)

* High variability results, interpret with caution.

** Extremely high variability results, data suppressed.

Table 14. Tobacco cessation behaviours, by rural or urban residence, Oxford County, 2016

Indicator	Responses	Per cent (95% CI)		
		Overall	Rural	Urban
Quitting status (asked of current smokers only, n=67)	Not considered quitting in next six months	45.0%* (30.5%-60.5%)	**	51.5%* (34.6%-68.1%)
	Considered quitting in next six months	46.8%* (32.0%-62.1%)	**	39.9%* (24.7%-57.3%)
	Prepared to quit in next 30 days	**	**	**
Stopped smoking for at one day in past 12 months because trying to quit (asked of current smokers only, n=67)		37.9%* (24.8%-53.1%)	**	36.5%* (22.3%-53.5%)
Length of time former smoker has quit for (n=214)	In past two years	7.5%* (4.3%-12.8%)	**	**
	More than two years ago	92.5% (87.2%-95.7%)	83.3% (68.4%-92.0%)	96.3% (91.8%-98.4%)

* High variability results, interpret with caution.

** Extremely high variability results, data suppressed.

Table 15. Tobacco cessation behaviours, 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
Quitting status (asked of current smokers only, n=67)	Not considered quitting in next six months	45.0%* (30.5%-60.5%)	34.3%* (18.5%-54.5%)	**	**
	Considered quitting in next six months	46.8%* (32.0%-62.1%)	54.5%* (35.5%-72.2%)	**	**
	Prepared to quit in next 30 days	**	**	**	**
Stopped smoking for at one day in past 12 months because trying to quit (asked of current smokers only, n=67)		37.9%* (24.8%-53.1%)	49.2%* (30.9%-67.8%)	**	**
Length of time former smoker has quit for (n=214)	In past two years	7.5%* (4.3%-12.8%)	**	**	**
	More than two years ago	92.5% (87.2%-95.7%)	95.2% (89.6%-97.9%)	**	86.1% (70.7%-94.1%)

* High variability results, interpret with caution.

** Extremely high variability results, data suppressed.

Table 16. Tobacco cessation methods used, Oxford County, 2016

Indicator	Per cent of residents (95% CI)
	Overall
Used any one of cessation methods including nicotine patch, gum, prescription medicine or e-cigarettes to quit smoking	58.0%
(asked only of current smokers that made a quit attempt in past year and former smokers that quit in past two years, n=40)	(39.6%-74.5%)

Data Notes

Definitions

e-Cigarette: This is the short form for "electronic cigarette" (or electronic nicotine delivery system.)[9] They may also be called: e-cigs, e-smokes, e-hookah, hookah pens, e-cigars, vapes, vape pipes/pens, personal vapourizers, and personal inhalers.[10] These devices are battery-operated and are made to deliver nicotine with flavors and other chemicals in vapor instead of smoke.[9]

Nicotine Replacement Therapy (NRT): This is a treatment that helps to lower withdrawal symptoms that happen when people stop smoking by replacing the nicotine in cigarettes. It comes in several forms; skin patches, for example, deliver nicotine slowly. Chewing gum, nasal and oral sprays, inhalers, and lozenges/tablets, deliver nicotine to the brain more quickly than skin patches, but not as quickly as smoking cigarettes.[7]

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.[11] 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 interpeted 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).

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