



Smoke-free Housing

Views of Residents Living in Multi-unit
Dwellings in Oxford County-owned Housing

Research Report
Oxford County Public Health
February 2018

About Oxford County

Located in the heart of southwestern Ontario at the crossroads of Highways 401 and 403, Oxford County has a population of approximately 114,000 people across eight municipalities that are “growing stronger together” through a partnership-oriented, two-tier municipal government incorporated as the County of Oxford. Oxford County is emerging as a leader in sustainable growth through the [Future Oxford Community Sustainability Plan](#) and County Council’s commitment to becoming a [zero waste](#) community and achieving [100% renewable energy](#) by 2050. Situated in one of Ontario’s richest areas for farmland, agriculture is a key industry that serves as a springboard for some of the sustainable industries that are steadily diversifying the local economy. Oxford County offers a thriving local arts, culture and culinary community, as well as conservation parks, natural areas and more than 100 kilometres of scenic trails.

Oxford County Public Health provides programs and services to improve and protect the health and well-being of the population of Oxford County and reduce health inequities. Public Health’s office is located in Woodstock, Ontario. Visit www.oxfordcounty.ca or follow our social media sites at www.oxfordcounty.ca/social. Oxford County’s Strategic Plan is at oxfordcounty.ca/strategicplan.

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Summary

Smoking in multi-unit dwellings poses a specific public health concern because tenants may have little control over their exposure to harmful second-hand smoke originating from adjacent units. Oxford County Public Health (Public Health) and Oxford County Human Services (Human Services) collaborated to administer a survey to understand tenants' behaviours, experiences and knowledge related to second-hand smoke and to determine the level of support for implementing smoke-free housing in Oxford County-owned multi-unit dwellings (i.e., Social Housing).

More than two-thirds of respondents (68.6%) were exposed to second-hand smoke in their home. Approximately half of respondents were supportive of having parts of Social Housing be smoke-free (51.9%) and establishing a policy for smoke-free Social Housing (46.6%). Those who never smoked (76.3%) and those who used to smoke (69.9%) were more likely than those who currently smoke (17.6%) to support making some parts of Social Housing smoke-free.

Respondents in favour of smoke-free Social Housing cited that second-hand smoke affected their breathing or exacerbated existing health-related issues such as asthma. Respondents who were not in favour of smoke-free Social Housing reported that such a policy was a violation of their "right" to be able to smoke in their own home. However, the right to smoke is not protected by Canadian law.

The findings from this study highlight the level of support and related concerns of exposure to second-hand smoke in Social Housing. We recommended that Oxford County implement smoke-free housing policies in Social Housing that consider the following:

1. how tenants may be affected differently by the policy and ways to prevent these differences
2. phasing in the policy by grandfathering tenants' leases
3. starting with parts of housing communities going smoke-free and then move to 100% smoke-free housing

Smoke-free Housing

Background and Rationale

Oxford County owns and operates 24 multi-unit dwellings. These multi-unit dwellings include 934 tenants living in 627 units or households. The majority of Oxford County-owned multi-unit dwellings (i.e., Social Housing) are subsidized by the County; these dwellings are primarily rent-geared-to-income housing^a and therefore may be home to those who experience health and social inequities.

Smoking in multi-unit dwellings poses a specific public health concern because tenants may have little control over their exposure to harmful second-hand smoke originating from adjacent units. Second-hand smoke derives from burning tobacco products or via the exhalation of smoke by individuals engaged in this activity.¹⁻³ A third of Ontarians who lived in multi-unit dwellings in 2011 (38%) and 2012 (33%) reported exposure to second-hand smoke originating from outside their unit.⁴ However, some populations living in multi-unit dwellings are at more risk than others, as those who reside in rent-geared-to-income housing may have difficulties moving or are limited in terms of other housing options and can be particularly vulnerable to second-hand smoke exposure.⁵ Currently, smoking is prohibited in common areas, such as laundry rooms, elevators, hallways and lobbies of Oxford County's multi-unit dwellings, but is permitted inside individual units and on balconies and patios.

Second-hand smoke contains thousands of chemicals, some of which are toxic and can increase the risk for respiratory diseases, cardiovascular diseases and cancer.¹ In addition, second-hand smoke exposure is particularly troubling for children and seniors because they are more vulnerable to harms caused by exposures to second-hand smoke.^{1,6} For example, children who are exposed to second-hand smoke are more at risk for developing acute respiratory

^a The frequency and types of Social Housing multi-unit dwellings include:

- 21 rent-geared-to-income
- 1 rent-geared-to-income and market-value rental (combination)
- 1 affordable housing and market-value rental (combination)

infections, ear infections and severe asthma.⁷ Second-hand smoke also increases a newborn's risk for sudden infant death syndrome.⁷ Seniors and those with chronic health conditions who are exposed to second-hand smoke are at risk of exacerbating illnesses such as pneumonia, cancer and cardiovascular disease.⁸

In May 2006, the *Smoke-Free Ontario Act*⁹ was created to protect Ontarians from second-hand smoke exposure by prohibiting, among other things, smoking in all enclosed workplaces,^{9,10} public places^{9,10} and common areas (i.e., elevators, stairwells, hallways and lobbies) of multi-unit dwellings.¹¹ In addition to this provincial legislation, several municipalities have introduced bylaws to further reduce second-hand smoke exposure in their respective multi-unit dwellings.¹² For example, over 70 social housing providers across Ontario, such as those situated in Leeds and Grenville, Ottawa, Belleville and the Region of Waterloo, have instituted smoke-free policies within their multi-unit dwellings.

Public support for smoke-free multi-unit dwellings in Ontario has increased in recent years.¹³ Findings from a 2 provincial report show that four out of five Ontarians believe smoking should be banned in multi-unit dwellings.¹³ Oxford County Public Health (Public Health) receives roughly 10-15 calls annually to the tobacco tip line from tenants of multi-unit dwellings who are concerned about second-hand smoke drifting into their homes. However, Public Health has little recourse or action to take as there are currently no laws or legislation within the *Smoke-Free Ontario Act*⁹ that explicitly prohibits tenants from smoking in their own apartments or condominiums. To address these concerns, Public Health refers all complainants to Smoke-Free Housing Ontario¹⁴ for additional resources on how to talk to their landlords about issues regarding second-hand smoke exposure.

Supporting the development of smoke-free multi-unit dwellings is a priority for the Ministry of Health and Long-Term Care and Public Health. Smoke-free policies reduce second-hand smoke exposure and associated health outcomes.¹⁵ Furthermore, introducing smoke-free housing policies reduces fire risks, maintenance costs (e.g., cleaning and renovation costs) and resident turnover^{16,17} and can potentially increase both smoking cessation attempts and smoking cessation.^{16,18,19} Indeed, evidence suggests that there are benefits to smoke-free housing policies beyond those related to the health of the population.

Currently, little is known about Oxford County Social Housing tenants' behaviours, experiences and knowledge about second-hand smoke. Thus, prior to considering smoke-free multi-unit

dwelling policies in Oxford County, Oxford County Human Services (Human Services) and Public Health wanted to understand the level of support that exists for smoke-free policies among tenants of Social Housing multi-unit dwellings.

Purpose

The goal of this study is to assess the level of support for smoke-free multi-unit dwellings among tenants living in Social Housing. We expect the results of the study will inform future collaboration between Public Health and Human Services departments to consider how best to protect the health of residents living in multi-unit dwellings (apartments, townhouses, semi-detached homes) from second-hand smoke exposure. The objectives of this study are to (hereafter, tenants refer to those specifically residing in Social Housing):

1. understand tenants' behaviours, experiences and knowledge related to second-hand smoke
2. identify opportunities to implement smoke-free housing policies in Social Housing

The project team set out to answer six research questions:

1. What per cent of tenants (16+) support smoke-free housing policies?
2. What per cent of Social Housing households are homes where someone smokes inside?
3. What per cent of Social Housing households are smoke-free?
4. What per cent of tenants are exposed to second-hand smoke in their home?
5. What experiences do tenants (16+) have with second-hand smoke exposure in their homes?
6. What do tenants (16+) know about the health effects of second-hand smoke exposure?

Study Design

This project was a joint collaboration between two Oxford County departments: Human Services and Public Health. Public Health was the lead department for this study, designing the data collection and analysis strategies, creating data collection tools, delivering and collecting the surveys, analyzing survey data and leading the report creation. Human Services supported the

promotion, delivery, facilitation and collection of the survey. Human Services granted Public Health access to the multi-unit dwellings study sites and provided Public Health with expertise with regards to conducting surveys with this population as they had conducted studies with Social Housing tenants in the past. To mitigate the potential effects of a power differential between study participants and Human Services employees, the project team made it clear to potential participants in the letter of information and during recruitment that their housing status would not be affected by their decision to participate or not participate in the study. We also explained to potential participants that at no time would Human Services staff have access to individual responses.

In order to obtain stable estimates and be able to detect differences between groups, we originally calculated that a sample size of 300 households would be needed. The sample size calculation was based on the Standardized Monitoring and Assessment of Relief and Transitions (SMART) methodology, which takes into account the clustering of households within multi-unit dwellings²⁰ and estimates from the Waterloo Region Housing and Region of Waterloo Community Housing Inc. report.²¹ Given that there are only 628 units or households in Social Housing (anticipating a response rate under 50%), and to avoid tenants' confusion about eligibility to participate within Social Housing, the census design was employed.

This project was an observational study and consisted of administering a cross-sectional, census survey to collect information from tenants living in all Social Housing households. The sampling units for this study included both households and individuals. A census design was used because it is one of the most robust methods available to gather information about a population. For this survey, there was the opportunity for tenants from all Social Housing households to be represented. This eliminates the need for researchers to generalize findings from a sample of households to describe all households, which may not be representative of their experiences or support for smoke-free policies. When a 100% response rate is achieved, a census provides a true measure of an indicator in the population (i.e., with no sampling error).

Prior to full implementation of the project, we engaged tenants to provide feedback (on readability, clarity and comfort level of the survey and information letter. Ethical approval for this study was obtained from Public Health Ontario's Ethics Review Board (# 2017-043.01).

Methods

Data Collection

The data collection activities were carried out over three weeks in Fall 2017. Public Health staff hand-delivered one envelope containing an information letter (Appendix A), paper survey (Appendix B) and a small incentive (\$2 Tim Hortons gift card) to each Social Housing household at the beginning of the study period. Providing prepaid incentives or non-contingent incentives has been shown to increase response rates in comparison to providing contingent-based incentives (e.g., after the completion of a survey) or not providing any incentives at all.^{22–25} The envelopes (marked “Research”) were slipped under tenants’ doors and if it were not possible to slip envelopes under tenants’ doors, they were placed on their door handles.

The information letter explained that:

- the survey was voluntary
- the survey was to be completed by the person with the next birthday who is 16 years or older (this reduces the potential for bias by randomly assigning people in households to complete the survey)
- respondents did not have to respond to any questions they felt uncomfortable answering
- by completing and submitting the survey, participants implied or indicated that they knowingly agreed to participate in this study

The information letter also provided instructions about where to submit the completed survey upon completion; tenants from 14 multi-unit dwelling buildings were instructed to submit their surveys into an enclosed, locked box located in the common room of their Social Housing site. Public Health staff visited the participating Social Housing multi-unit dwellings periodically to collect the completed surveys. Even though Human Services staff helped facilitate the collection of the surveys, the investigators from Public Health were the only individuals who were permitted to access the surveys from the locked boxes and the individual responses from the completed surveys.

Ten smaller Social Housing sites, such as townhouses, did not have common rooms onsite for respondents to drop off their surveys. Thus, tenants from these sites received postage-paid envelopes with their survey, so that they could return their survey to Public Health via mail.

The survey questions selected for this study were standard questions adapted from the Institute of Social Research's Rapid Risk Factor Surveillance System (RRFSS)^{26,27} and the Region of Waterloo's Survey on Second-hand Smoke in Regionally Owned Community Housing.²⁸

Second-hand smoke was defined as smoke that comes from the burning end of a lit cigarette, cigar or pipe and from smoke blown into the air by a smoker, which can come into one's home from outside or from other units within their building.

Individuals who met the following criteria were eligible to participate in this study:

- at least 16 years of age
- a tenant of Social Housing

In terms of exclusion criteria, this research was limited to English-speaking participants. Given that Oxford County is 97% English-speaking,²⁹ we did not anticipate this would be a barrier for those wishing to participate. In addition, those who already completed the survey prior to full implementation, or had someone in their household already complete the survey, were excluded from completing the survey again.

The strategies used to recruit participants for this study included direct recruitment by Human Services staff, distributing recruitment advertisements (Appendix C) to each multi-unit dwelling household (via Public Health and Human Services staff) and posting recruitment advertisements at the Social Housing sites, Oxford County Administration Building (i.e., resource room and client services office) and local community agencies (e.g., Ontario Disability Support Program office).

Data Analysis Plan

Each survey was marked with a unique building ID number that included a global code for each Social Housing site (but not specific unit). The building ID numbers and their corresponding Social Housing site codes were stored on a password protected Excel file that was only accessible to those project team members from Public Health specifically involved in the

analysis. Once the surveys were returned to Public Health, they were entered into an electronic data collection tool. The paper surveys were then stored in a locked cabinet at Public Health.

Analysis included both household-level indicators and individual-level indicators. Descriptive statistics, including per cents and confidence intervals will be used to determine:

- the per cent of tenants (16+) who support smoke-free housing policies
- the per cent of Social Housing households where someone smokes inside the home
- the per cent of Social Housing households that are smoke-free
- the per cent of tenants who are exposed to second-hand smoke in their home
- tenants' (16+) experiences with second-hand smoke exposure in their homes
- tenants' (16+) knowledge about the effect of second-hand smoke on health

In order to calculate the per cent of tenants for individual-level indicators, a household weight was created using the procedure commonly used by public health units to analyze similar data from the Rapid Risk Factor Surveillance System (RRFSS). A household weight was used to adjust for the unequal probability of respondent selection within the household (i.e., any one adult in a four person household is less likely to be selected to complete the survey compared to a one person household; therefore, responses from larger households have a higher weight because they are representing more people in the household). The per cent of tenants' responses to any one question were calculated using this household weight. Responses related to households were not weighted.

Data were also adjusted for clustered and subsequently aggregated across all Social Housing multi-unit dwelling sites. Outcomes were reported by age group, building size (i.e., small (<10 units), medium (11-30 units) and large (31-56 units) multi-unit dwellings), sex and smoking status. Additionally, responses to open ended questions were analyzed using content analysis.

The survey was distributed to all 627 Oxford County-owned multi-unit dwelling households and 233 surveys were returned, equalling a 37.2% overall response rate, which is comparable to other recent local health surveys. For example, the 2016 Oxford Health Matters Survey had an overall response rate of 44%³⁰ and the Oxford County Community Wellbeing Survey had an overall response rate of 12%.³¹ A higher per cent of respondents living in apartment buildings (40.9%) completed the survey in comparison to respondents living in townhouses (23.7%) and a higher per cent of those living in large multi-unit dwellings (41.1%) completed the survey in

comparison to those living in small-to-medium sized multi-unit dwellings (32.4%). See Limitations section for more information.

Further breakdowns of the response rates by municipality (Table 1), dwelling type (Table 2), dwelling size (Table 3) are shown in Appendix D.

Results

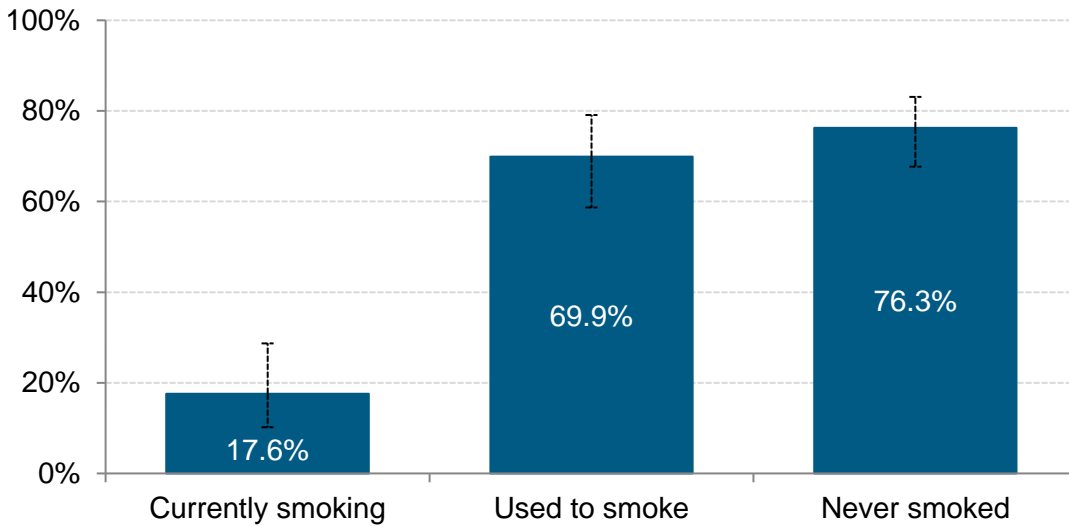
Smoking Behaviour

More than a third of respondents (39.4%) were currently smoking (daily or occasionally), 28.1% used to smoke and 32.4% never smoked.

Support for Smoke-free Multi-unit Dwellings

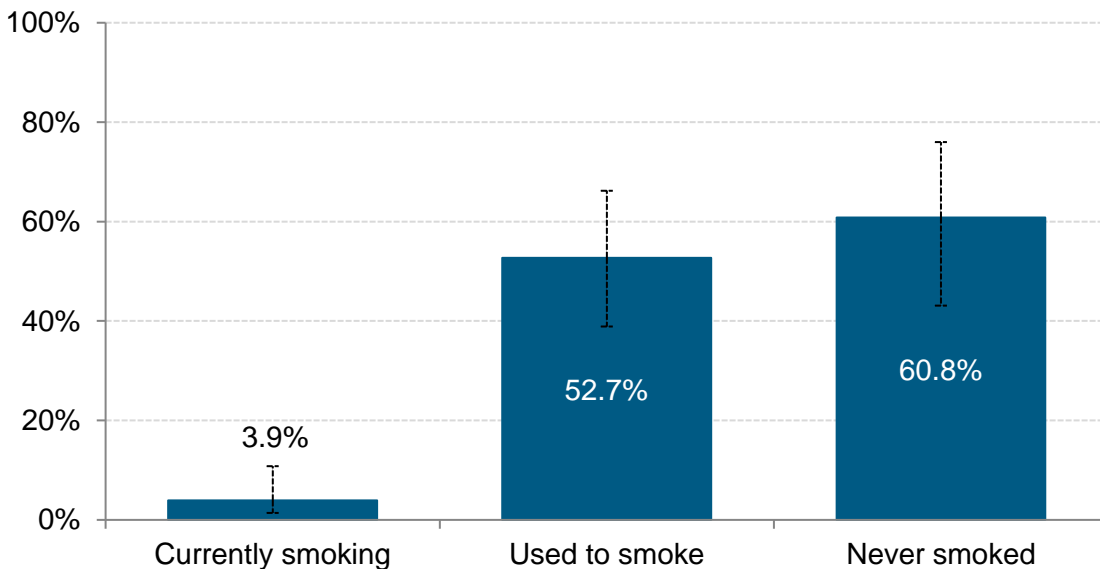
Approximately half of respondents (51.9%) indicated they wanted some parts of their housing community to be smoke-free, 34.7% did not want their housing community to be smoke-free and 13.4% did not know whether they wanted their housing community to be smoke-free. Those who never smoked (76.3%) and those who used to smoke (69.9%) were more likely than those who currently smoke (17.6%) to support some parts of Social Housing to be smoke-free (Figure 1; Appendix D, Table 4).

Figure 1. Support for partial smoke-free multi-unit dwellings by smoking status



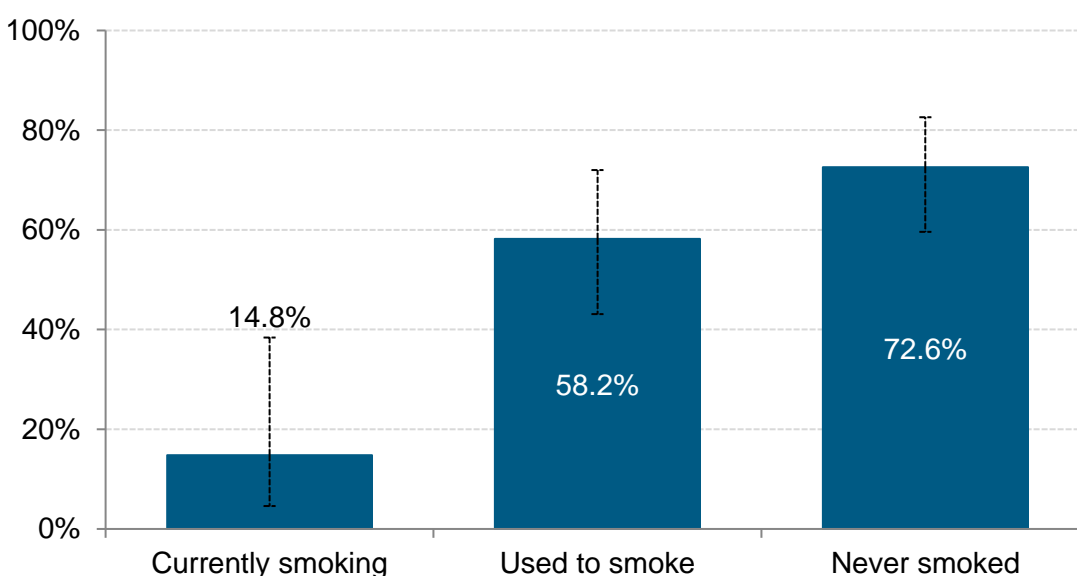
Half of respondents (50.8%) reported that they did not want their housing to be 100% smoke-free, 37.4% wanted their housing to be 100% smoke-free and 11.8% did not know whether they wanted their housing to be 100% smoke-free. Those who never smoked (60.8%) and those who used to smoke (52.7%) were more likely than those who currently smoke (3.9%) to support 100% smoke-free Social Housing (Figure 2; Appendix D, Table 4).

Figure 2. Support for 100% smoke-free multi-unit dwellings by smoking status



Respondents' answers were nearly equally distributed when asked about their preference for Oxford County to create a smoke-free policy for Social Housing; 46.6% were in favour, 44.6% were not in favour and 8.8% did not know whether they wanted a smoke-free policy for Social Housing. Those who never smoked (72.6%) and those used to smoke (58.2%) were more likely than those who currently smoke (14.8%) to support a smoke-free policy for Social Housing (Figure 3; Appendix D, Table 4).

Figure 3. Support for a smoke-free policy for County-owned multi-unit dwellings by smoking status



Tobacco Smoke in the Home

More than half of households (54.5%) reported that no one in the household regularly smokes inside. Slightly more households (61.4%) reported that visitors were not allowed to smoke inside (Appendix D, Table 5). A total smoke-free home is a home where no one, including visitors, regularly smokes inside the home. More than half of households (55.8%) were totally smoke-free homes (Appendix D, Table 5).

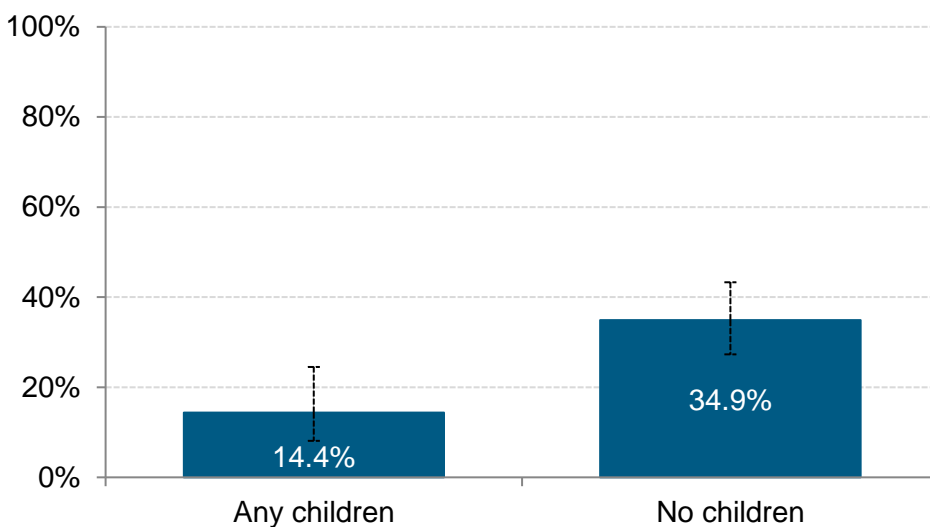
More than half of households (58.6%) reported that someone in the household or a visitor smoked on the balcony or patio. A third of households (35.8%) reported that someone in the

household or a visitor did not smoke on the balcony or patio. A small per cent of households (5.6%) did not have a balcony or patio (Appendix D, Table 5).

Exposure to Second-hand Smoke in the Home

Respondents' answers were nearly equally distributed when asked how often they were exposed to second-hand smoke in their homes: 31.0% reported they were often exposed, 38.6% reported they were sometimes exposed and 30.4% reported they were never exposed to second-hand smoke in their homes (Appendix D, Table 6). Households with no children were more likely than households with any children to report often being exposed to second-hand smoke in their homes (34.9% versus 14.4%) (Figure 4; Appendix D, Table 6).

Figure 4. Exposure to second-hand smoke by children regularly living in the household



A third of households (33.5%) reported that someone in the household has health problems that get worse when breathing in second-hand smoke. In contrast, more than half of households (55.2%) reported that someone in the household does not have health problems that get worse when breathing in second-hand smoke (Appendix D, Table 5).

Over half of respondents (59.4%) reported that if they were exposed to second-hand smoke in their homes, they would be bothered by it (Appendix D, Table 7). Females (67.6%) were more likely than males (37.4%) (Figure 5; Appendix D, Table 7) and those who never smoked (84.5%)

and those who used to smoke (71.1%) were more likely than those who currently smoke (29.7%) to respond this way (Figure 6; Appendix D, Table 4).

Figure 5. Bothered by second-hand smoke among those exposed by sex

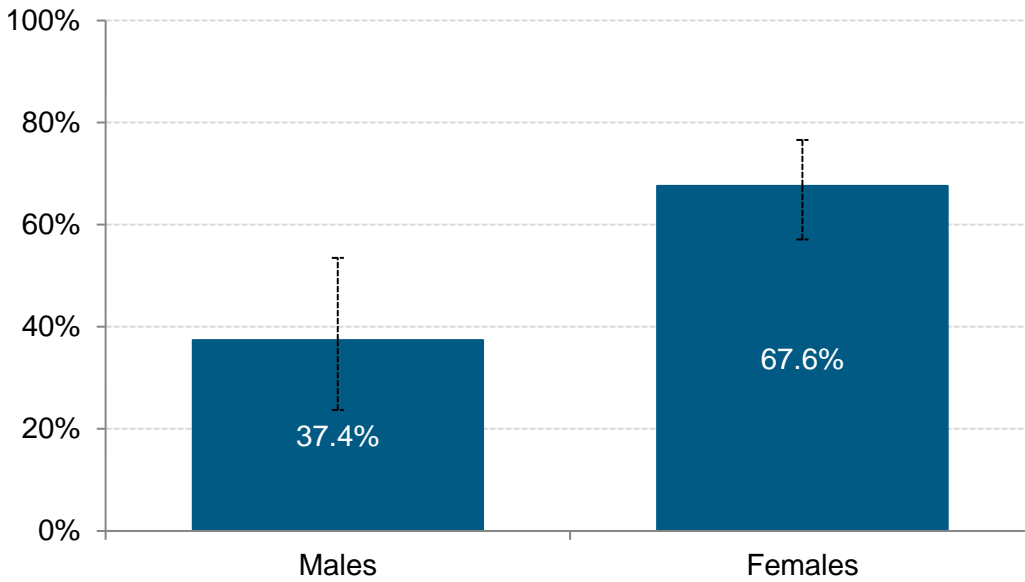
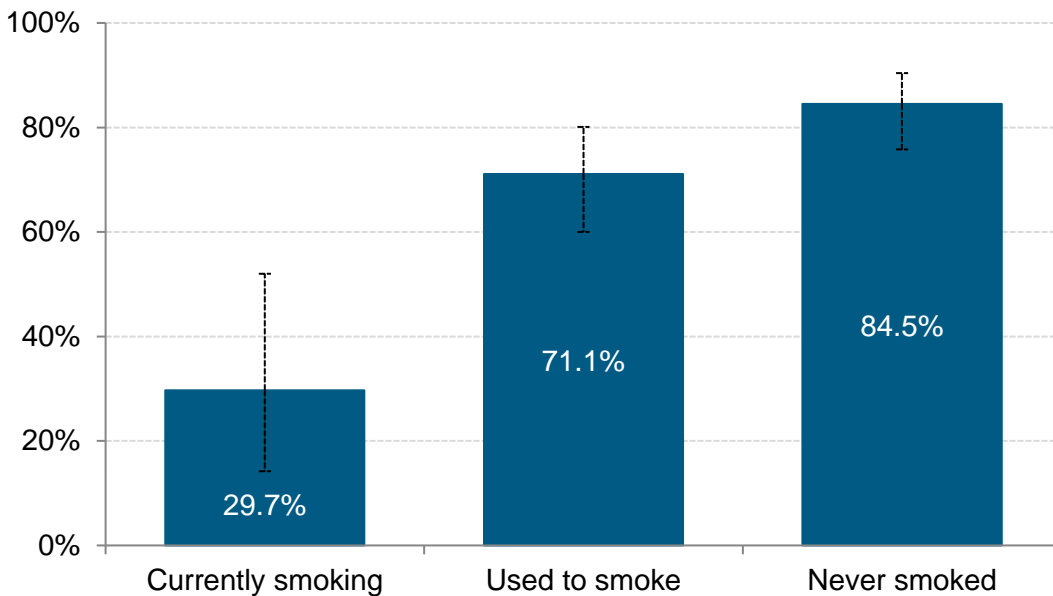


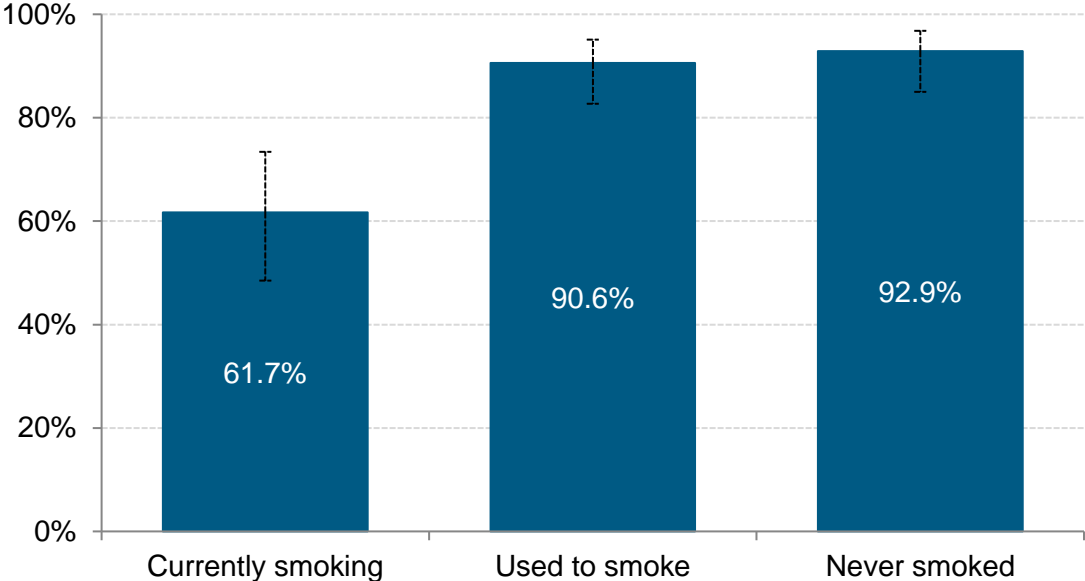
Figure 6. Bothered by second-hand smoke among those exposed by smoking status



Knowledge about Second-hand Smoke Exposure in the Home

The majority of respondents (79.7%) believe second-hand smoke is harmful to one’s health (Appendix D, Table 7). However, those who never smoked (92.9%) and those who used to smoke (90.6%) were more likely than those who currently smoke (61.7%) to believe second-hand smoke is harmful to one’s health (Figure 5; Appendix D, Table 4).

Figure 7. Believe that second-hand smoke is harmful to one’s health by smoking status



Additional information on responses concerning smoke-free multi-unit dwellings, grouped by age groups, can be found in Table 8 (Appendix D).

Respondents' Comments

Many respondents had comments relating to smoke-free housing and the possibility of instituting a policy in Social Housing. Respondents were divided in their support for smoke-free Social Housing and they offered various reasons for why they were supportive or not supportive of this strategy. Two themes were evident in the responses and their encompassing sub-themes are presented accordingly below.

Favour smoke-free Social Housing

The most frequent responses from respondents supporting smoke-free Social Housing was related to tenants' desire not to be exposed to drug-related odours in the halls of their buildings and within their units. As one respondent commented:

There are some problems with renters smoking illegal substances in the building. The smell and smoke on occasion gets into the hall and if my windows are open, into my unit. Even if they became legal, it would be nice not to have to deal with that.

Respondents further noted that the odour originating from tenants' drug use affected their well-being. In particular, respondents described how the smell of marijuana made them nauseated, aggravated their allergies, gave them headaches and/or negatively affected their breathing.

Odour, air quality and health-related issues were also among the more frequent tobacco-related themes that respondents cited as reasons why they wanted to live in a smoke-free housing environment. Respondents noted how the smell of tobacco was prevalent throughout their home, emanating from the paint on their walls and their cupboards. They also described the poor air quality that exists in their home and as one respondent commented, even opening up windows in the home was not helpful: "I wish I can open my window and breathe fresh air, but I can't...because I smell cigarette smoke from my neighbours." Many described that exposure to second-hand smoke affected their breathing or exacerbated existing health-related issues such as asthma.

An additional theme among those who favoured smoke-free Social Housing included ideas surrounding bans to smoking, such as prohibiting tenants from smoking in their homes, but enabling them to smoke on their patios or only prohibiting smoking in homes where children

reside. One respondent suggested implementing a policy supporting smoke-free Social Housing, but with a grandfather clause for existing tenants who smoke to continue smoking in their home for a specified period of time.

Not in favour of smoke-free Social Housing

The most prevalent theme observed from respondents opposed to having a smoke-free housing in Social Housing was related to respondents' belief that such a policy was a violation of their "right" to be able to smoke in their own home. Many respondents felt that the act of smoking, inside and outside their home, was their choice. One respondent remarked: "I think that smoking should be left to individuals, not municipalities or the government. Tobacco is a legal product and I feel that any bans on smoking is a violation of my charter [sic] rights." Others shared similar sentiments, commenting that government interventions restricting smoking in the home were "inappropriate" and that tenants should be free to make decisions about smoking in their home on their own. Respondents also noted that hallways were already smoke-free.

The notion of prohibiting smoking in the home had some respondents feeling as though they were being isolated simply for being smokers. As one respondent stated:

Why do you people keep picking on smokers? [...] Smokers aren't even suppose[d] to smoke outside, this is crazy! They should have equal rights as non-smokers. Non-smokers can move to smoke-free premises, they seem to be the coming thing. I'm sick and tired of the government dictating all the rights of smokers. There should be equal rights for smokers!

An additional theme that was prevalent among respondents who were not in favour of smoke-free Social Housing was the notion that "the government" or the County should focus its attention and resources elsewhere. For example, respondents expressed that other issues, such as alcohol and drug abuse, assault and emission of other air pollutants (e.g., car exhaust), are of more concern in Oxford County than smoking in multi-unit dwellings. Many tenants commented that if a policy were to be established to prohibit smoking in the home, then a similar policy to prohibit drinking alcohol in the home should also be instituted.

Lastly, a couple of respondents highlighted concerns about smoking among those who have disabilities; they felt it was 'cruel' or unfair to force those who had disabilities to smoke outside.

Discussion

This study was conducted with Oxford County tenants who live in Social Housing to assess their level of support for smoke-free Social Housing, determine the per cent of households in which someone smokes inside the home and to better understand tenants' knowledge and experiences concerning second-hand smoke exposure in their home.

The per cent of smokers aged 16 years and older (39.4%) completing this survey was higher than the per cent of adult (18+) smokers in Oxford County (14.6%).³⁰ A high prevalence of smokers among Social Housing tenants was expected, as smoking has been widely shown to be associated with low income.^{1,32,33} Therefore, the results of this survey incorporate perspectives proportional to what one would expect when surveying those living in Social Housing.

Findings from our survey indicate that respondents were more supportive for having parts of Social Housing be smoke-free (51.9%) and the County establishing a smoke-free policy (46.6%) in comparison to having 100% smoke-free Social Housing (37.4%). The Region of Waterloo conducted a survey using similar questions²⁸ prior to introducing smoke-free housing policies in their regionally-owned multi-unit dwellings. Their findings showed that respondents from their survey similarly supported partial smoke-free housing (57%) and establishing a smoke-free housing policy (52%); however, in contrast to our findings, half of their respondents (50%) supported 100% smoke-free Social Housing in comparison to 37.4% of Oxford County respondents.³⁴

A lower per cent of Social Housing households were totally smoke free homes in comparison to households across Oxford County. A 2016 survey³⁰ of households across Oxford County indicated that 85.3% of homes were totally smoke-free; in comparison, 55.8% of Oxford County Social Housing households were totally smoke-free. This difference could be due to the high prevalence of those who smoke and live in Social Housing. This may also explain why more than two-thirds of respondents (68.6%) were sometimes or often exposed to second-hand smoke in their home; findings from the Waterloo survey showed 57% of respondents were exposed to second-hand smoke in their homes.³⁴

The findings also suggest it is likely that there are households where someone living in or visiting a home smokes despite respondents' awareness of the harmful health effects of

second-hand smoke. The majority of respondents noted they were aware of the harmful health effects of second-hand smoke. However, a higher per cent of respondents who never smoked or used to smoke were more likely to report awareness of the harmful health effects of second-hand smoke than those currently smoking. In addition to the inverse relationship between smoking status and knowledge of the effects of second-hand smoke, relationships between smoking status and other measures from the survey were also present; respondents who never smoked or used to smoke were more likely to support smoke-free Social Housing and be bothered by second-hand smoke, if exposed, in comparison to those who currently smoke.

Many respondents who did not support smoke-free Social Housing cited that they felt that they were being isolated and that it was their right to be able to smoke in their own home. However, even though the act of smoking is legal, the right to smoke is not protected in Canadian law.³⁵ In other words, one does not have the right to smoke however they choose³⁵, hence why smoking bans in public places and workplaces continue to exist throughout Canada.³⁶

It is important to recognize how those living in Social Housing are affected by the social determinants of health. Therefore, proposed strategies to improve the health of those living in Social Housing, such as smoke-free housing policies, need to consider possible unintended consequences of these strategies prior to implementation.³⁷

Limitations

The survey was distributed to all tenants of Social Housing; however, tenants were instructed to submit their survey, via different methods, based on the type of multi-unit dwelling respondents resided in (i.e., buildings or townhouses). Respondents living in buildings were instructed to drop off their survey in a locked box located in their common room, while respondents living in townhouses were provided with postage-paid envelopes and were instructed to mail the survey to Public Health. The different submission methods may have resulted in different response rates between building residents (40.9%) and townhouse residents (23.7%) and therefore a lower representation of townhouse residents' beliefs in the findings.

During data entry, we discovered that many respondents who answered the first question in the survey did not include themselves in their count of how many people (16+) lived in their household, as respondents often stated "0" in their response. In these instances, we changed

respondents' answers to "1." Unfortunately, we were unable to discern whether those who responded to this question with an answer other than "0" included themselves in their count, so we kept their answers as recorded. This may have limited our ability to correctly weight the sample when analyzing individual-level items, and in turn, may have underestimated their responses to these items.

After the survey period concluded, tenants notified Public Health on separate occasions that surveys were taken from doors of particular multi-unit dwellings. Public Health did not investigate the matter in detail, so we are unsure if this resulted in a systematic difference in those who completed the survey and those who did not complete the survey.

Since our study did not reach our anticipated sample size (300), we were unable to obtain high enough power to detect many statistically significant differences. A larger sample size would have enabled us to detect more differences by narrowing the confidence intervals. Lastly, findings concerning smoking status may have been underreported as respondents may have been subjected to social desirability bias (i.e., answering questions in the "expected" or socially acceptable way).

Conclusion

More than two-thirds of respondents (68.6%) were exposed to second-hand smoke in their home and approximately half of respondents were supportive of parts of Social Housing being smoke-free (51.9%) and establishing a policy for smoke-free Social Housing (46.6%).

Therefore, the findings from this study highlight the importance of targeted strategies that aim to reduce second-hand smoke in Social Housing to prevent disease and premature death.

Implementing smoke-free housing policies is one strategy that has been adopted by over 70 social housing providers across Ontario. We recommend that Oxford County implement smoke-free housing policies in Social Housing that consider the following:

1. how tenants may be affected differently by the policy and ways to prevent these differences
2. phasing in the policy by grandfathering tenants' leases
3. starting with parts of housing communities going smoke-free and then moving to 100% smoke-free housing

References

1. United States Department of Health and Human Services. The health consequences of smoking—50 years of progress: a report of the surgeon general [Internet]. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention.; 2014 [cited 2017 Apr 24]. p. 1081. Available from: <https://www.surgeongeneral.gov/library/reports/50-years-of-progress/full-report.pdf>
2. Institute of Medicine (US) Committee on Secondhand Smoke Exposure and Acute Coronary Events. Secondhand smoke exposure and cardiovascular effects: making sense of the evidence. Washington, DC: The National Academics Press; 2010.
3. National Toxicology Program. Report on carcinogens, fourteenth edition [Internet]. Research Triangle Park, NC: US Department of Health and Human Services, Public Health Services; 2016 [cited 2017 Apr 24]. Available from: <https://ntp.niehs.nih.gov/pubhealth/roc/index-1.html>
4. Ontario Tobacco Research Unit. Tobacco smoke entering homes in multi-unit dwellings. OTRU update. [Internet]. Toronto, ON: Ontario Tobacco Research Unit; 2014 [cited 2017 Apr 24]. Available from: http://otru.org/wp-content/uploads/2014/10/update_aug2014_v2.pdf
5. Centers for Disease Control and Prevention. Smoke-free multi-unit housing policies [Internet]. Atlanta, GA: U.S. Department of Health and Human Services; [cited 2017 Apr 24]. Available from: <https://www.cdc.gov/nccdphp/dch/pdfs/health-equity-guide/health-equity-guide-sect-2-2.pdf>
6. Simoni M, Jaakkola MS, Carrozzi L, Baldacci S, Di Pede F VG. Indoor air pollution and respiratory health in the elderly. *European Respir J*. 2003;21(40 suppl):15s–20s.
7. U.S. Department of Health and Human Services. Children and secondhand smoke exposure. Excerpts from the health consequences of involuntary exposure to tobacco smoke: a report of the surgeon general. [Internet]. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Coordinating Center for Health Promotion, National Center for Chronic Disease Prevention and Health

- Promotion, Office on Smoking and Health; 2007 [cited 2017 Apr 24]. Available from: https://www.cdc.gov/tobacco/data_statistics/sgr/2006/pdfs/childrens-excerpt.pdf
8. Helburn A. A case for smoke free housing [Internet]. Dorchester, MA: Asthma Regional Council of New England; 2007 [cited 2017 Apr 24]. Available from: http://asthmaregionalcouncil.org/wp-content/uploads/2014/02/2007_CaseSmokefreeHousing.pdf
 9. Smoke-free Ontario Act. S.O. 1994, c. 10 1994.
 10. Non-Smokers' Rights Association. The smoke-free Ontario act: workplace compliance with the law [Internet]. Toronto, ON: Non-Smokers' Rights Association; 2014 [cited 2017 Apr 24]. Available from: http://nsra-adnf.ca/wp-content/uploads/2016/08/Workplace_Compliance_2014-FINAL.pdf
 11. Ontario Tobacco Research Unit. Protection from secondhand smoke: monitoring update [Internet]. Toronto, ON: Ontario Tobacco Research Unit; 2012 [cited 2017 Apr 24]. Available from: <http://otru.org/2012-monitoring-report-protection-secondhand-smoke/>
 12. Non-Smokers' Rights Association. NSRA's smoke-free laws database [Internet]. Toronto, ON: Non-Smokers' Rights Association; 2017 [cited 2017 Apr 24]. Available from: <http://database.nonsmokersrights.ca/>
 13. Ontario Tobacco Research Unit. Smoke-free Ontario strategy monitoring report [Internet]. Toronto, ON: Ontario Tobacco Research Unit; 2017 [cited 2017 Apr 24]. Available from: http://otru.org/wp-content/uploads/2017/03/2016_SMR_Front.pdf
 14. Smoke-Free Housing Ontario. Smoke-free housing Ontario: tenants tools and resources [Internet]. Ontario: Smoke-free Housing Ontario; 2017 [cited 2017 Apr 24]. Available from: <https://smokefreehousingon.ca/tenants/tools-resources/>
 15. International Agency for Research on Cancer, World Health Organization. Evaluating the effectiveness of smoke-free policies [Internet]. Geneva, SUI: International Agency for Research on Cancer, World Health Organization; 2009 [cited 2017 Apr 24]. Available from: <https://www.iarc.fr/en/publications/pdfs-online/prev/handbook13/handbook13.pdf>
 16. National Center for Environmental Health (U.S.), Division of Emergency and

- Environmental Health HH and LPPB. Healthy homes manual: smoke-free policies in multiunit housing [Internet]. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. Atlanta, GA; 2011 [cited 2017 Apr 24]. Available from: <https://stacks.cdc.gov/view/cdc/26185>
17. The Clean Air Coalition of BC. The case for smoke-free multi-unit housing: why BC government cannot wait [Internet]. The Clean Air Coalition of BC. BC; 2016 [cited 2017 Apr 24]. Available from: http://www.cleanaircoalitionbc.com/database/files/library/Smoke_Free_Housing_2016_Report_FINAL___June_8_2016.pdf
 18. Mills Alice L, Messer Karen, Gilpin Elizabeth A PJP. The effect of smoke-free homes on adult smoking behavior: a review. *Nicotine & Tobacco Res.* 2009;11(10):1131–41.
 19. Borland R, Yong HH, Cummings KM, Hyland A, Anderson S, Fong GT. Determinants and consequences of smoke-free homes: findings from the international tobacco control (ITC) Four country survey. *Tob Control.* 2006;15(SUPPL. 3):42–51.
 20. Standardized Monitoring and Assessment of Relief and Transitions. Sampling Methods and Sample Size Calculation for the SMART Methodology [Internet]. Toronto, ON: Standardized Monitoring and Assessment of Relief and Transitions; 2012 [cited 2017 Apr 24]. Available from: https://www.humanitarianresponse.info/system/files/documents/files/Sampling_Paper_June_2012.pdf
 21. Kennedy RD. Smoke-Free housing policy evaluation: findings of the 2010 Waterloo Region Housing and Region of Waterloo Community Housing Inc. household tenant survey [Internet]. Propel Centre for Population Health Impact, University of Waterloo. Waterloo, ON; 2010 [cited 2017 Apr 24]. p. 1–31. Available from: https://uwaterloo.ca/propel/sites/ca.propel/files/uploads/files/smoke-free_housing_eval_2010_accessible20160316.pdf
 22. Schewe C, Cournoyer N. Prepaid vs. promised monetary incentives to questionnaire response: further evidence. *Public Opin Q.* 1976;40(1):105–7.
 23. Church A. Estimating the effect of incentives on mail surveys rates: a meta-analysis. *Public Opin Q.* 1993;57(1):62–79.

24. Hopkins K, Guilickson A. Response rates in survey research: a meta-analysis of the effects of monetary gratuities. *J Exp Educ.* 1992;61(1):52–62.
25. Hawley K, Cook J. Do noncontingent incentives increase survey response rates among mental health providers? A randomized trial comparison. *Adm Policy Ment Heal Ment Heal Serv Res.* 2009;36(5):343–8.
26. Institute for Social Research. Rapid risk factor surveillance system: tobacco home module. Toronto, ON: York University; 2004.
27. Institute for Social Research. Rapid risk factor surveillance system: tobacco use by respondent module. Toronto, ON: York University; 2013.
28. Region of Waterloo Public Health. Survey on second-hand smoke in regionally owned community housing [Internet]. Waterloo, ON: Region of Waterloo; 2008 [cited 2017 Apr 24]. Available from: http://smokefreehousingon.ca/wp-content/uploads/2015/11/Waterloo_MUDs_survey_tool.pdf
29. Statistics Canada. 2011 Census of Population [Internet]. Statistics Canada. 2016 [cited 2017 Jul 6]. Available from: <http://www12.statcan.gc.ca/census-recensement/2011/dp-pd/prof/details/page.cfm?Lang=E&Geo1=CD&Code1%0A=3532&Geo2=PR&Code2=01&Data=Count&SearchText=oxford&SearchType=Begins&SearchPR=01&B1=All&Custom=&TABID=1%0A>
30. Oxford County Public Health. Tobacco use, dependence and smoke in the home. Oxford health matters, report 5 [Internet]. Woodstock, ON: Oxford County; 2017 [cited 2017 Dec 18]. Available from: [http://www.oxfordcounty.ca/Portals/15/Documents/PublicHealth/Partners and Professionals/Reports and Publications/2017/OHMS Report 5 - Tobacco Use Dependence Smoke in Home.pdf](http://www.oxfordcounty.ca/Portals/15/Documents/PublicHealth/PartnersandProfessionals/ReportsandPublications/2017/OHMSReport5-TobaccoUseDependenceSmokeinHome.pdf)
31. Hilbrecht M, Smale B. Oxford County community wellbeing survey : a comparison of Oxford residents on selected aspects of their wellbeing [Internet]. Woodstock, ON: Canadian Index of Wellbeing and the University of Waterloo; 2016 [cited 2017 Dec 18]. Available from: [http://www.oxfordcounty.ca/Portals/15/Documents/SpeakUpOxford/2016/CIW Survey/CIW_WellbeingProfile_Pub20160714.pdf](http://www.oxfordcounty.ca/Portals/15/Documents/SpeakUpOxford/2016/CIWSurvey/CIW_WellbeingProfile_Pub20160714.pdf)

32. Canadian Institute for Health Information. Trends in income-related health inequalities in Canada: technical report [Internet]. Ottawa, ON: Canadian Institute for Health Information; 2015 [cited 2017 Dec 18]. Available from: https://secure.cihi.ca/free_products/trends_in_income_related_inequalities_in_canada_2015_en.pdf
33. Ciapponi A. Systematic review of the link between tobacco and poverty [Internet]. Geneva, SUI: Institute for Clinical Effectiveness and Health Policy; 2011 [cited 2017 Dec 18]. p. 227. Available from: http://apps.who.int/iris/bitstream/10665/44453/1/9789241500548_eng.pdf
34. Region of Waterloo Public Health, Region of Waterloo Planning H and CSH. Smoke-free policy for new leases and transfers in regionally owned community housing (Waterloo Region housing) [Internet]. Waterloo, ON: Region of Waterloo; 2009 [cited 2017 Dec 18]. Available from: https://smokefreehousingon.ca/wp-content/uploads/2015/11/Region_of_Waterloo_recommendations.pdf
35. Non-Smokers' Rights Association. Canadian case law on drifting second-hand smoke in multi-unit dwellings [Internet]. Toronto, ON: Non-Smokers' Rights Association; 2007 [cited 2017 Dec 18]. Available from: https://nsra-adnf.ca/key-issue/cdn_case_muds/
36. Smoke-free Housing Canada. What tenants need to know [Internet]. Smoke-free Housing Canada. 2007 [cited 2017 Dec 18]. Available from: http://www.smokefreehousing.ca/what_tenants_need_to_know.html
37. Non-Smokers' Rights Association. Smoke-free affordable housing: picking on poor people or a case for social justice? [Internet]. Toronto, ON: Non-Smokers' Rights Association; 2010 [cited 2017 Dec 18]. Available from: <https://nsra-adnf.ca/key-issue/smoke-free-affordable-housing-picking-poor-people-case-social-justice/>

Appendix A: Letter of Information

Research Project

Smoke-free Housing: Views of Residents of Multi-unit Dwellings in Oxford County-owned Housing.

Introduction

You are invited to take part in a research project led by Rob Haile and Gemma Urbani from Oxford County Public Health. This letter explains the project. If you have any questions, please call Rob Haile (phone # above). Everyone in Oxford County-owned housing units is being asked to take part. It's your choice to take part or not. Your decision will not affect your Oxford County services in any way.

What is the purpose of this project?

This study is to find out what people living in Oxford County-owned housing think about second-hand smoke ("second hand smoke" is described on page 2 if you aren't sure what this is).

What will taking part in this project involve?

This project involves filling out the survey in this package.

One person in your home who is 16 or older should do the survey. If more than one person is 16, the person with the next birthday should do the survey. Please return the survey to the locked drop box in the common room of your unit/building. If there's no common room, mail the survey back for free. Please return the survey by November 15, 2017.

The survey will take 10-15 minutes. You can skip any questions you want. You can also decide not to hand in the survey. If you hand in the survey, you cannot take it back because your name won't be on it.

Are there any benefits to taking part?

No, but your answers will help us know the views in our community.

Will I get anything for participating?

There is a \$2.00 Tim Horton's gift card in your envelope as a thank you. You can keep the gift card even if you do not complete the survey.

Are there any burdens, risks or costs involved?

Some of the questions may make you feel uncomfortable because they ask about smoking. Please know that this survey is not asking you to quit smoking. There is no cost apart from your time and effort.

How will your information be kept safe?

We will keep all your answers confidential (see below if you want to know how).

How will project results be shared?

You can see a summary of the results at your housing unit or call Rob Haile for a copy. We may also share the results at conferences.

Questions about this project?

If you have questions about this project, you may call Rob Haile at 519-539-9800 ext. 3429 or 1-800-755-0394 ext. 3429.

If you have questions about ethical issues in this project, contact the Research Ethics Coordinator at Public Health Ontario at ethics@oahpp.ca or 647-260-7206. When you agree to take part, you keep all your legal rights.

If you hand in this survey, it will tell us that you consent to take part in this research.

Please keep this letter.

Some more details:

What is second-hand smoke?

Second-hand smoke: smoke that is blown into the air by a smoker. It can be inside your own home or it can come into your home from outside your home.

How will your information be kept safe?

Your name will not be asked for in this survey. Your answers will not be linked back to you. Only Public Health staff will collect the locked box with the surveys. Only Public Health staff will see the survey answers. Human Services staff will see the overall results of the survey, but not any individual answers. We will put the information from the surveys into a computer program. This program meets our Privacy Officer's standards and is considered secure. It poses little risk to you.

We will store all project files safely at Oxford County Public Health for 5 years. After 5 years, they will be destroyed.

Appendix B: Survey Questions

Building ID 001

Smoke-free Housing Survey

Views of Residents of Multi-unit Dwellings in Oxford County-owned Housing

1. How many people 16 years and older live in your household?

(Choose only one response)

- 1
- 2
- 3
- 4
- 5
- 6
- Other, please specify: _____

2. How many children aged 15 and under regularly live in your household? Regularly means four days or more per month (Choose only one response)

- 0
- 1
- 2
- 3
- 4
- 5
- 6
- Other, please specify: _____

3. Have you smoked at least 100 cigarettes in your life? (Choose only one response)

- Yes
- No (Skip to question 5)
- Don't know

4. Currently do you smoke cigarettes every day, some days or not at all?
(Choose only one response)

- Every day
- Some days (occasionally/sometimes)
- Not at all
- Don't know

5. Does anyone in this household smoke regularly inside the home?
(Choose only one response)

- Yes
- No
- Don't know

6. Which of the following best describes the rules or understandings about smoking inside your home for VISITORS. Would you say: (Choose only one response)

- Smoking is not allowed at all
- Smoking is allowed for some visitors or sometimes
- Smoking is allowed in certain areas of the home
- Smoking is allowed except when children are present
- Don't know

7. Does anyone (residents or visitors) smoke on your balcony or patio?
(Choose only one response)

- Yes
- No
- Don't know
- I don't have a balcony or patio

8. If you were exposed to second-hand smoke in your home, would it bother you? (Choose only one response)

- Yes
- No
- Don't know

9. How often are you exposed to second-hand smoke in your home? Second-hand smoke comes from the burning end of a lit cigarette, cigar or pipe and from smoke blown into the air by a smoker. It can come from within your own home, or it come into your home from the outside or from other units in your building.
(Choose only one response)

- Often
- Sometimes
- Never

10. Do you or others in your home have health problems that get worse when you breathe in second-hand smoke? (Choose only one response)

- Yes
- No
- Don't know

11. Do you believe that breathing in second-hand smoke is harmful to a person's health?
(Choose only one response)

- Yes
- No
- Don't know

12. Would you like some parts of your housing community to be smoke-free? For example, not allowing smoking in one wing or floor in apartment buildings, or in a row of townhouses or semi-detached units? (Choose only one response)

- Yes
- No
- Don't know

13. Would you like your building to be 100% smoke-free, including no smoking on balconies and patios? (Choose only one response)

- Yes
- No
- Don't know

14. Do you think that Oxford County should make a smoke-free policy for County-owned housing units? (Choose only one response)

- Yes
- No
- Don't know

15. Would you be interested in learning more about: (Check all that apply)

- Quitting smoking
- Second-hand smoke
- Not interested

16. What is your gender? (Choose only one response)

- Female
- Male
- I do not identify with either of these options

17. What is your age? (Choose only one response)

- 16-24 years old
- 25-34 years old
- 35-44 years old
- 45-54 years old
- 55-64 years old
- 65+ years old

18. Do you have any other comments related to smoke-free homes?

Appendix C: Recruitment Advertisement

Let's
hear from
YOU



We want to hear your opinions about experiences with second-hand smoke in your home.

The survey will be delivered to each household in Oxford County-owned housing units in the fall of 2017.

- It will take about 10-15 minutes to complete
- Instructions are provided for returning the survey

For more information please contact:

Rob Haile at 519-539-9800 ext. 3429
or 1-800-755-0394 ext. 3429



Appendix D: Tables

Table 1. Response rate by municipality (N=627)

Municipality	Responses (count)	Total households (count)	Response rate (per cent)
Ingersoll	42	123	34.1
Norwich*	17	30	56.7
East Zorra-Tavistock*	10	27	37.0
Zorra*	6	24	25.0
Tillsonburg	49	139	35.3
Woodstock	109	284	38.4

*Survey was distributed to one multi-unit dwelling in respective municipality

Table 2. Response rate by type of multi-unit dwelling (N=627)

Type of multi-unit dwelling	Responses (count)	Total households (count)	Response rate (per cent)
Building	201	492	40.9
Townhouse	32	135	23.7

Table 3. Response rate by size of multi-unit dwelling* (N=627)

Size of multi-unit dwelling	Responses (count)	Total households (count)	Response rate (per cent)
Small-to-medium (2-30 units)	92	284	32.4
Large (31-56 units)	141	343	41.1

*Small and medium-sized multi-unit dwellings were combined because there were few responses from tenants living in small-sized multi-unit dwellings

Table 4. Smoke-free multi-unit dwellings, by smoking status, Oxford County, 2017

Indicator	Responses	Per cent of residents (95% CI)			
		Overall	Current smoker (daily or occasional)	Former smoker	Never smoked
Would like some parts of housing community to be smoke-free	Yes	51.9% (45.8%-57.9%)	17.6% ^{††} (10.2%-28.7%)	69.9% [‡] (58.7%-79.1%)	76.3% [†] (67.7%-83.1%)
	No	34.7% (28.9%-41.0%)	64.7% ^{††} (51.0%-76.3%)	15.1% [‡] (8.1%-26.2%)	16.7% [†] (9.5%-27.5%)
	Don't know	13.4% (8.4%-20.7%)	17.7% (9.7%-30.1%)	15.1% (5.9%-33.5%)	7.1% (2.9%-16.0%)
Would like 100% of building to be smoke- free, including balconies and patios	Yes	37.4% (29.8%-45.6%)	3.9% ^{††} (1.4%-10.8%)	52.7% [‡] (38.9%-66.2%)	60.8% [†] (43.1%-76.0%)
	No	50.8% (42.6%-59.0%)	91.2% ^{††} (79.6%-96.5%)	29.8% [‡] (19.3%-43.1%)	23.7% [†] (12.2%-41.0%)
	Don't know	11.8% (7.3%-18.6%)	4.9% (1.1%-18.7%)	17.4% (10.0%-28.7%)	15.5% (5.5%-36.6%)
Thinks that Oxford County should make a smoke-free policy for County-owned housing units	Yes	46.6% (38.5%-54.9%)	14.8% ^{††} (4.6%-38.4%)	58.2% [‡] (43.1%-72.0%)	72.6% [†] (59.6%-82.6%)
	No	44.6% (36.8%-52.6%)	78.4% ^{††} (58.6%-90.3%)	28.4% [‡] (16.8%-43.7%)	20.2% [†] (11.8%-32.4%)
	Don't know	8.8% (5.3%-14.5%)	6.8% (2.2%-19.4%)	13.4% (6.4%-26.0%)	7.2% (2.8%-17.2%)

Indicator	Responses	Per cent of residents (95% CI)			
		Overall	Current smoker (daily or occasional)	Former smoker	Never smoked
Would be bothered by second-hand smoke exposure in home	Yes	59.4% (51.1%-67.2%)	29.7% ^{††} (14.2%-52.0%)	71.1% [‡] (60.0%-80.1%)	84.5% [†] (75.8%-90.4%)
	No	40.6% (32.8%-48.9%)	70.3% ^{††} (48.0%-85.8%)	28.9% [‡] (19.9%-40.0%)	15.5% [†] (9.6%-24.2%)
How often exposed to second-hand smoke in home	Often	31.0% (24.6%-38.2%)	33.0% (20.8%-48.1%)	25.7% (15.1%-40.3%)	33.8% (20.2%-50.6%)
	Sometimes	38.6% (29.9%-48.0%)	33.4% (22.4%-46.6%)	43.2% (25.4%-63.0%)	41.0% (28.0%-55.4%)
	Never	30.4% (24.3%-37.2%)	33.5% (21.7%-47.9%)	31.1% (18.9%-46.5%)	25.2% (16.0%-37.3%)
Believe second-hand smoke is harmful to health	Yes	79.7% (73.8%-84.6%)	61.7% ^{††} (48.5%-73.4%)	90.6% [‡] (82.7%-95.1%)	92.9% [†] (85.0%-96.8%)
	No	10.7% (7.1%-15.8%)	19.6% [‡] (10.4%-34.0%)	4.0% [‡] (1.6%-9.6%)	4.8% (1.7%-12.9%)
	Don't know	9.6% (6.3%-14.2%)	18.7% [‡] (12.3%-27.4%)	5.4% (2.0%-13.4%)	2.3% [‡] (0.5%-10.3%)
Interested in learning more about...	Quitting smoking	5.8% (3.2%-10.1%)	13.7% (7.2%-24.8%)	1.4% (0.2%-11.2%)	--
	Second-hand smoke	10.1% (5.4%-17.9%)	--	11.5% (3.2%-34.1%)	22.1% (10.3%-41.2%)
	Not interested	84.2% (76.3%-89.8%)	86.3% (75.2%-92.8%)	87.1% (65.8%-95.9%)	77.9% (58.8%-89.7%)

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

Table 5. Smoke-free multi-unit dwellings, by dwelling size, Oxford County, 2017

Indicator	Responses	Per cent of residents (95% CI)		
		Overall	Small/Medium (2-30 units)	Large (31-56 units)
Would like some parts of housing community to be smoke-free	Yes	51.9% (45.8%-57.9%)	51.1% (39.5%-62.7%)	52.5% (47.4%-57.4%)
	No	34.7% (28.9%-41.0%)	34.8% (23.5%-48.0%)	34.7% (30.8%-38.8%)
	Don't know	13.4% (8.4%-20.7%)	14.1% (7.2%-25.8%)	12.9% (6.7%-23.2%)
Would like 100% of building to be smoke-free, including balconies and patios	Yes	37.4% (29.8%-45.6%)	36.4% (23.0%-52.2%)	38.2% (31.3%-45.6%)
	No	50.8% (42.6%-59.0%)	52.1% (39.1%-64.8%)	49.8% (39.6%-59.9%)
	Don't know	11.8% (7.3%-18.6%)	11.5% (4.6%-26.1%)	12.0% (7.5%-18.8%)
Thinks that Oxford County should make a smoke-free policy for County-owned housing units	Yes	46.6% (38.5%-54.9%)	53.8% (40.4%-66.6%)	40.6% (33.4%-48.2%)
	No	44.6% (36.8%-52.6%)	39.0% (27.0%-52.3%)	49.3% (41.3%-57.3%)
	Don't know	8.8% (5.3%-14.5%)	7.3% (2.7%-18.1%)	10.1% (5.7%-17.4%)
Residents that smoke regularly in the home	Yes	22.3% (16.1%-30.0%)	18.1% (10.5%-29.5%)	25.7% (17.5%-36.1%)
	No	77.7% (70.0%-83.9%)	81.9% (70.5%-89.5%)	74.3% (63.9%-82.5%)
		Overall	Small/Medium (2-30 units)	Large (31-56 units)

Indicator	Responses	Per cent of residents (95% CI)		
Households where no one regularly smokes inside	Yes	54.5% (44.7%-64.0%)	43.5% (30.8%-57.1%)	61.7% (49.8%-72.3%)
	No	45.5% (36.0%-55.3%)	56.5% (42.9%-69.2%)	38.3% (27.7%-50.2%)
Households where visitors are not allowed to smoke inside	Yes	61.4% (54.5%-67.8%)	68.5% (57.3%-77.9%)	56.7% (48.8%-64.3%)
	No	38.6% (32.2%-45.5%)	31.5% (22.1%-42.7%)	43.3% (35.7%-51.2%)
Households that are totally smoke-free	Yes	55.8% (49.3%-62.1%)	62.0% (52.1%-70.9%)	51.8% (43.6%-59.8%)
	No	44.2% (37.9%-50.7%)	38.0% (29.1%-47.9%)	48.2% (40.2%-56.4%)
Residents or visitors smoke on balcony or patio	Yes	58.6% (51.9%-65.1%)	53.3% (42.1%-64.1%)	62.1% (54.8%-69.0%)
	No	35.8% (30.1%-41.8%)	33.7% (24.3%-44.6%)	37.1% (30.5%-44.4%)
	Don't have a balcony or patio	5.6% (2.5%-12.3%)	13.0%‡ (6.8%-23.7%)	0.7%‡ (0.1%-6.1%)
Smoked at least 100 cigarettes in life	Yes	67.9% (60.3%-74.8%)	69.9% (57.2%-80.1%)	66.3% (57.1%-74.4%)
	No	32.1% (25.2%-39.7%)	30.1% (19.9%-42.8%)	33.7% (25.6%-42.9%)

Indicator	Responses	Per cent of residents (95% CI)		
		Overall	Small/Medium (2-30 units)	Large (31-56 units)
Currently smoke... (only asked of those that smoked at least 100 cigarettes in lifetime, n=152)	Every day	53.9% (43.2%-64.2%)	64.0% (46.8%-78.2%)	45.4% (37.2%-53.8%)
	Some days	4.5% (2.1%-9.4%)	4.9% (1.4%-15.5%)	4.1% (1.6%-10.3%)
	Not at all	41.7% (32.5%-51.4%)	31.1% (19.7%-45.4%)	50.5% (42.4%-58.6%)
Smoking status	Current smoker (daily or occasional)	39.4% (30.7%-48.9%)	47.6% (33.2%-62.4%)	32.8% (25.7%-40.8%)
	Former smoker	28.1% (22.7%-34.3%)	21.5% (14.7%-30.3%)	33.5% (27.6%-39.9%)
	Never smoked	32.4% (25.6%-40.1%)	30.9% (20.5%-43.7%)	33.7% (25.6%-42.9%)
Would be bothered by second-hand smoke exposure in home	Yes	59.4% (51.1%-67.2%)	62.8% (49.1%-74.6%)	56.5% (46.9%-65.7%)
	No	40.6% (32.8%-48.9%)	37.2% (25.4%-50.9%)	43.5% (34.3%-53.1%)
How often exposed to second-hand smoke in home	Often	31.0% (24.6%-38.2%)	26.6% (18.8%-36.3%)	34.7% (26.1%-44.6%)
	Sometimes	38.6% (29.9%-48.0%)	39.2% (30.1%-49.1%)	38.1% (24.7%-53.5%)
	Never	30.4% (24.3%-37.2%)	34.2% (24.7%-45.1%)	27.2% (20.6%-34.9%)

Indicator	Responses	Per cent of residents (95% CI)		
		Overall	Small/Medium (2-30 units)	Large (31-56 units)
Someone in household has health problems that get worse when breathing in second-hand smoke	Yes	33.5% (28.3%-39.1%)	33.7% (25.3%-43.2%)	33.3% (27.0%-40.3%)
	No	55.2% (47.7%-62.5%)	53.3% (41.9%-64.3%)	56.5% (46.5%-66.0%)
	Don't know	11.3% (7.5%-16.6%)	13.0% (6.9%-23.3%)	10.1% (6.0%-16.6%)
Believe second-hand smoke is harmful to health	Yes	79.7% (73.8%-84.6%)	81.5% (69.3%-89.5%)	78.3% (73.2%-82.7%)
	No	10.7% (7.1%-15.8%)	7.3% (2.8%-17.4%)	13.6% (9.5%-19.1%)
	Don't know	9.6% (6.3%-14.2%)	11.3% (5.7%-21.0%)	8.1% (5.3%-12.1%)
Interested in learning more about...	Quitting smoking	5.8% (3.2%-10.1%)	7.5% (3.3%-16.2%)	4.3% (2.0%-8.8%)
	Second-hand smoke	10.1% (5.4%-17.9%)	9.3% (3.0%-25.1%)	10.7% (5.3%-20.4%)
	Not interested	84.2% (76.3%-89.8%)	83.2% (69.9%-91.4%)	85.0% (74.6%-91.6%)

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

Table 6. Smoke-free multi-unit dwellings, by number of children (15 years and younger) regularly living in the household, Oxford County, 2017

Indicator	Responses	Per cent of residents (95% CI)		
		Overall	No children	Any children
How often exposed to second-hand smoke in home	Often	31.0% (24.6%-38.2%)	34.9%‡ (27.3%-43.3%)	14.4%‡ (8.1%-24.5%)
	Sometimes	38.6% (29.9%-48.0%)	37.1% (26.7%-48.9%)	43.9% (24.1%-65.8%)
	Never	30.4% (24.3%-37.2%)	28.0% (21.3%-35.8%)	41.7% (24.7%-60.9%)

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

Table 7. Smoke-free multi-unit dwellings, by sex, Oxford County, 2017

Indicator	Responses	Per cent of residents (95% CI)		
		Overall	Female	Male
Would like some parts of housing community to be smoke-free	Yes	51.9% (45.8%-57.9%)	53.5% (44.7%-62.1%)	50.7% (40.4%-60.9%)
	No	34.7% (28.9%-41.0%)	33.9% (25.8%-43.0%)	35.6% (25.3%-47.4%)
	Don't know	13.4% (8.4%-20.7%)	12.5% (7.2%-20.8%)	13.8% (7.3%-24.4%)
Would like 100% of building to be smoke-free, including balconies and patios	Yes	37.4% (29.8%-45.6%)	36.6% (26.0%-48.7%)	40.0% (29.2%-52.0%)
	No	50.8% (42.6%-59.0%)	50.4% (39.4%-61.4%)	53.3% (41.5%-64.8%)
	Don't know	11.8% (7.3%-18.6%)	13.0% (7.2%-22.6%)	6.6% (3.0%-14.2%)
Thinks that Oxford County should make a smoke-free policy for County-owned housing units	Yes	46.6% (38.5%-54.9%)	50.7% (40.5%-60.8%)	38.7% (28.1%-50.5%)
	No	44.6% (36.8%-52.6%)	40.7% (31.9%-50.1%)	53.3% (39.7%-66.5%)
	Don't know	8.8% (5.3%-14.5%)	8.7% (4.6%-15.7%)	8.0% (3.9%-15.7%)
Residents that smoke regularly in the home	Yes	22.3% (16.1%-30.0%)	18.0% (12.4%-25.6%)	33.3% (22.0%-46.9%)
	No	77.7% (70.0%-83.9%)	82.0% (74.4%-87.6%)	66.7% (53.1%-78.0%)

Indicator	Responses	Per cent of residents (95% CI)		
		Overall	Female	Male
Smoked at least 100 cigarettes in life	Yes	67.9% (60.3%-74.8%)	64.2% (53.2%-73.9%)	79.7% (70.3%-86.7%)
	No	32.1% (25.2%-39.7%)	35.8% (26.1%-46.8%)	20.3% (13.3%-29.7%)
Currently smoke... (only asked of those that smoked at least 100 cigarettes in lifetime, n=152)	Every day	53.9% (43.2%-64.2%)	58.7% (43.1%-72.7%)	45.7% (32.7%-59.3%)
	Some days	4.5% (2.1%-9.4%)	2.6% (0.9%-7.7%)	8.4% (3.8%-17.7%)
	Not at all	41.7% (32.5%-51.4%)	38.7% (25.4%-53.8%)	45.9% (34.9%-57.2%)
Smoking status	Current smoker (daily or occasional)	39.4% (30.7%-48.9%)	39.0% (27.1%-52.4%)	43.2% (33.2%-53.7%)
	Former smoker	28.1% (22.7%-34.3%)	24.6% (16.9%-34.4%)	36.6% (27.7%-46.4%)
	Never smoked	32.4% (25.6%-40.1%)	36.4% (26.7%-47.4%)	20.3% (13.3%-29.7%)
Would be bothered by second-hand smoke exposure in home	Yes	59.4% (51.1%-67.2%)	67.6%‡ (57.1%-76.6%)	37.4%‡ (23.7%-53.5%)
	No	40.6% (32.8%-48.9%)	32.4%‡ (23.4%-42.9%)	62.6%‡ (46.5%-76.3%)

Indicator	Responses	Per cent of residents (95% CI)		
		Overall	Female	Male
How often exposed to second-hand smoke in home	Often	31.0% (24.6%-38.2%)	28.5% (21.2%-37.2%)	36.6% (25.9%-48.7%)
	Sometimes	38.6% (29.9%-48.0%)	40.6% (31.3%-50.7%)	33.7% (23.6%-45.6%)
	Never	30.4% (24.3%-37.2%)	30.8% (22.4%-40.7%)	29.7% (20.8%-40.5%)
Believe second-hand smoke is harmful to health	Yes	79.7% (73.8%-84.6%)	84.9% (78.6%-89.5%)	69.5% (56.5%-79.9%)
	No	10.7% (7.1%-15.8%)	9.2% (5.1%-16.0%)	11.9% (6.7%-20.4%)
	Don't know	9.6% (6.3%-14.2%)	6.0% (3.0%-11.6%)	18.6% (11.0%-29.6%)
Interested in learning more about...	Quitting smoking	5.8% (3.2%-10.1%)	4.4% (1.8%-10.3%)	9.7% (5.1%-17.5%)
	Second-hand smoke	10.1% (5.4%-17.9%)	10.4% (4.9%-20.8%)	9.8% (4.3%-20.9%)
	Not interested	84.2% (76.3%-89.8%)	85.2% (75.4%-91.5%)	80.5% (69.5%-88.2%)

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

Table 8. Smoke-free multi-unit dwellings, by age group, Oxford County, 2017

Indicator	Responses	Per cent of residents (95% CI)			
		Overall	16 to 34 years	35 to 64 years	65 years and older
Would like some parts of housing community to be smoke-free	Yes	51.9% (45.8%-57.9%)	58.8% (43.2%-72.8%)	46.6% (37.9%-55.5%)	64.5% (53.9%-73.9%)
	No	34.7% (28.9%-41.0%)	32.3% (18.3%-50.4%)	40.1% (31.0%-49.9%)	23.2% (13.7%-36.4%)
	Don't know	13.4% (8.4%-20.7%)	8.9% (1.6%-37.3%)	13.4% (8.0%-21.6%)	12.3% (5.9%-23.9%)
Would like 100% of building to be smoke-free, including balconies and patios	Yes	37.4% (29.8%-45.6%)	23.2%‡ (11.6%-41.2%)	32.9% (25.2%-41.7%)	56.6%‡ (47.4%-65.4%)
	No	50.8% (42.6%-59.0%)	62.1% (40.9%-79.4%)	55.0% (44.6%-65.0%)	37.4% (26.3%-50.0%)
	Don't know	11.8% (7.3%-18.6%)	14.7% (5.6%-33.6%)	12.1% (6.3%-21.9%)	6.0% (1.9%-16.9%)
Thinks that Oxford County should make a smoke-free policy for County-owned housing units	Yes	46.6% (38.5%-54.9%)	56.2% (37.3%-73.4%)	41.9% (32.1%-52.4%)	56.0% (46.5%-65.0%)
	No	44.6% (36.8%-52.6%)	38.1% (24.4%-54.0%)	49.2% (38.2%-60.3%)	36.4% (25.6%-48.8%)
	Don't know	8.8% (5.3%-14.5%)	5.7% (1.2%-23.5%)	8.9% (4.2%-17.6%)	7.6% (3.0%-17.8%)
Residents that smoke regularly in the home	Yes	22.3% (16.1%-30.0%)	15.0% (5.2%-36.2%)	24.6% (16.0%-35.9%)	19.8% (10.4%-34.5%)
	No	77.7% (70.0%-83.9%)	85.0% (63.8%-94.8%)	75.4% (64.1%-84.0%)	80.2% (65.5%-89.6%)
		Overall	16 to 34 years	35 to 64 years	65 years and older

Indicator	Responses	Per cent of residents (95% CI)			
Smoked at least 100 cigarettes in life	Yes	67.9% (60.3%-74.8%)	63.9% (39.8%-82.5%)	70.5% (60.8%-78.5%)	64.2% (49.9%-76.4%)
	No	32.1% (25.2%-39.7%)	36.1% (17.5%-60.2%)	29.5% (21.5%-39.2%)	35.8% (23.6%-50.1%)
Currently smoke... (only asked of those that smoked at least 100 cigarettes in lifetime, n=152)	Every day	53.9% (43.2%-64.2%)	76.5% (51.9%-90.7%)	55.6% (42.5%-68.0%)	38.2% (22.5%-56.8%)
	Some days	4.5% (2.1%-9.4%)	--	6.4% (2.7%-14.3%)	2.4% (0.3%-14.9%)
	Not at all	41.7% (32.5%-51.4%)	23.5% (9.3%-48.1%)	38.0% (26.7%-50.7%)	59.4% (42.2%-74.6%)
Smoking status	Current smoker (daily or occasional)	39.4% (30.7%-48.9%)	48.9% (25.1%-73.2%)	43.5% (33.5%-54.0%)	25.9% (16.5%-38.2%)
	Former smoker	28.1% (22.7%-34.3%)	15.0% (7.0%-29.4%)	26.6% (18.6%-36.5%)	37.8% (24.3%-53.5%)
	Never smoked	32.4% (25.6%-40.1%)	36.1% (17.5%-60.2%)	29.9% (21.9%-39.5%)	36.3% (23.6%-51.3%)
Would be bothered by second-hand smoke exposure in home	Yes	59.4% (51.1%-67.2%)	65.8% (49.6%-79.0%)	59.0% (47.9%-69.4%)	56.2% (45.2%-66.6%)
	No	40.6% (32.8%-48.9%)	34.2% (21.0%-50.4%)	41.0% (30.6%-52.1%)	43.8% (33.4%-54.8%)

Indicator	Responses	Per cent of residents (95% CI)			
		Overall	16 to 34 years	35 to 64 years	65 years and older
How often exposed to second-hand smoke in home	Often	31.0% (24.6%-38.2%)	11.5% (3.5%-31.7%)	32.7% (26.2%-39.9%)	35.4% (19.2%-55.7%)
	Sometimes	38.6% (29.9%-48.0%)	61.9% (45.4%-76.1%)	34.0% (22.9%-47.2%)	38.2% (25.4%-52.8%)
	Never	30.4% (24.3%-37.2%)	26.6% (12.5%-47.9%)	33.3% (24.2%-43.9%)	26.4% (14.9%-42.5%)
Believe second-hand smoke is harmful to health	Yes	79.7% (73.8%-84.6%)	94.3% (74.1%-99.0%)	78.4% (70.8%-84.5%)	79.1% (68.5%-86.9%)
	No	10.7% (7.1%-15.8%)	--	11.4% (6.5%-19.3%)	11.9% (6.4%-21.2%)
	Don't know	9.6% (6.3%-14.2%)	5.7% (1.0%-25.9%)	10.1% (6.7%-15.1%)	8.9% (3.5%-20.9%)
Interested in learning more about...	Quitting smoking	5.8% (3.2%-10.1%)	8.6% (1.5%-37.1%)	6.4% (3.2%-12.5%)	3.0% (0.7%-11.8%)
	Second-hand smoke	10.1% (5.4%-17.9%)	11.5% (3.4%-32.4%)	9.2% (4.0%-19.6%)	12.1% (6.6%-21.1%)
	Not interested	84.2% (76.3%-89.8%)	79.8% (59.4%-91.5%)	84.4% (73.3%-91.4%)	84.9% (74.9%-91.3%)

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



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