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# Preventive Medicine Reports



journal homepage: www.elsevier.com/locate/pmedr

# Impact of smoke-free housing policy lease exemptions on compliance, enforcement and smoking behavior: A qualitative study

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#### ARTICLE INFO

Keywords: Smoke-free policy Housing Tobacco smoke pollution Smoking cessation Qualitative research

# ABSTRACT

This paper investigates the impacts of smoke-free housing policies on compliance, enforcement and smoking behavior. From 2012 to 2014, we studied two affordable housing providers in Canada with comprehensive smoke-free policies: Waterloo Regional Housing that required new leases to be non-smoking and exempted existing leases, and Yukon Housing Corporation that required all leases (existing and new) to be non-smoking. Focus groups and key informant interviews were conducted with 31 housing and public health staff involved in policy development and implementation, and qualitative interviews with 56 tenants. Both types of smoke-free policies helped tenants to reduce and quit smoking. However, exempting existing tenants from the policy created challenges for monitoring compliance and enforcing the policy, and resulted in ongoing tobacco smoke exposure. Moreover, some new tenants were smoking in exempted units, which undermined the policy and maintained smoking behavior. Our findings support the implementation of complete smoke-free housing policies that do not exempt existing leases to avoid many of the problems experienced by staff and tenants. In jurisdictions where exempting existing leases is still required by law, adequate staff resources for monitoring and enforcement, along with consistent and clear communication (particularly regarding balconies, patios and outdoor spaces) will encourage compliance.

# 1. Introduction

There is no safe level of exposure to secondhand smoke (SHS) (U.S. Department of Health and Human Services, 2006), and homes are a major source, especially for children (Mbulo et al., 2016; Wilson et al., 2011). This is particularly relevant in multi-unit housing (e.g., apartment buildings and townhouses) where tobacco smoke can travel between living units (Kraev et al., 2009; King et al., 2010).

In Canada, almost all provinces and territories ban smoking in indoor common areas of multi-unit housing, but there is no legislation that addresses smoking in individual units or adjacent outdoor spaces, such as balconies and patios. Owners of residential buildings and condominiums, and homeowners who rent out self-contained apartments may, however, legally include "no-smoking" clauses in all new tenancy agreements by banning smoking in individual living units, including outdoor patios and balconies, or any areas of the residential property (Beck and Tilson, 2006).

Housing providers who implement a smoke-free housing policy are

required to manage existing tenancies in accordance with applicable provincial or territorial residential tenancy legislation. In Ontario, for example, existing leases or agreements must be exempted indefinitely from a new smoke-free housing policy, unless the tenant agrees to sign a new lease. However, Yukon legislation allows a housing provider to implement a new policy that applies to all tenants, whether they hold an existing or new lease. This has resulted in a range of smoke-free housing policies across Canada, from partial policies that cover only designated units within a tenant building to comprehensive policies that cover all units in a tenant building.

Several provincial housing authorities have adopted, or are in the process of adopting, smoke-free housing policies, including Yukon Housing Corporation, Newfoundland and Labrador Housing Corporation, and the Nova Scotia Department of Community Services (Reid et al., 2015). As of December 2017, 322 housing providers across 96 municipalities in Ontario had adopted or were in the process of adopting a 100% smoke-free policy including a few large Ontario jurisdictions (Waterloo and Ottawa) (Smoke-Free Housing Ontario, 2017).

Abbreviations: SHS, Secondhand smoke; WRH, Waterloo Region Housing; YHC, Yukon Housing Corporation

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https://doi.org/10.1016/j.pmedr.2018.01.011

Received 18 September 2017; Received in revised form 2 January 2018; Accepted 20 January 2018 Available online 08 February 2018

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There is little empirical knowledge on how different smoke-free housing policies impact the experiences and behaviors of housing providers and tenants. Our study investigated the impact of smoke-free policies in affordable housing with and without lease exemptions on policy compliance, enforcement and smoking behavior.

In Canada, affordable or subsidized housing (including social, public, community, non-profit or cooperative housing) refers to housing where rent is kept at an affordable level for residents, including subsidies targeted to reduce rents to less than 30% of before-tax household income (CMHC, n.d). An estimated 14% (557,435) of tenant households in Canada live in subsidized housing (CMHC, 2015). Housing affordability problems disproportionately affect seniors, recent immigrants, people who live alone, female lone-parent families, people who have experienced recent family changes (marriage, divorce, and the arrival of children), and people with a disability (CMHC, 2015). Studies suggest that exposure is higher among affordable housing tenants because smoking prevalence is generally higher among socio-economically deprived groups (Winickoff et al., 2010). Low socio-economic status households are also less likely to have smoke-free homes (Borland et al., 2006; Pizacani et al., 2004). Results from a nationally representative U.S. study showed that non-smokers with an annual household income of less than \$20,000 were 36% more likely to have elevated serum cotinine levels (a marker of SHS exposure) compared to those with an annual household income of \$20,000 or more (Ellis et al., 2009).

#### 2. Methods

Two medium to large (500 or more units) affordable housing providers with comprehensive smoke-free housing policies were purposively selected: one that exempted existing leases and the other that did not. At the time of the study, Waterloo Region Housing (WRH) situated in Southwestern Ontario, was the only housing provider in Canada that had implemented a comprehensive smoke-free policy that applied to all new leases and that exempted existing leases. In 2012, WRH administered and maintained 2722 regionally-owned affordable housing units (about 150 properties) in five communities in the Region of Waterloo. The smoke-free policy was developed by Region of Waterloo Public Health (ROWPH) and WRH. In 2010, all new leases signed with WRH, in all buildings and properties, including living spaces, balconies and patios, were designated non-smoking. In accordance with Ontario's Residential Tenancies Act, 2006, existing leases were exempted indefinitely, meaning these tenants were permitted to smoke in their units and outside on their own balconies or patios for as long as they lived there. In partnership with ROWPH, free cessation support services were offered to tenants. (McCammon-Tripp and Stitch, 2010; Kennedy et al., 2015).

At the time of the study, Yukon Housing Corporation (YHC) was the only medium to large housing provider in Canada that had implemented a smoke-free housing policy in all of its buildings with no lease exemptions. YHC administered and maintained 615 social housing units in ten communities across Yukon, the majority of the units (397) were located in Whitehorse (YHC, 2013). The smoke-free policy was developed by YHC using a phased-in approach; all new tenants and new buildings were designated non-smoking in May 2011. Existing buildings and leases were given a grace period of about seven months before being designated non-smoking on January 1, 2012 (YHC, n.d). Private outdoor balconies and patios were exempted from the policy. This approach was permitted under Yukon's *Residential Landlord and Tenant Act, 2012.* YHC provided limited cessation resources on request for people who wanted to quit smoking, but did not offer coordinated cessation services.

#### 2.1. Data collection

All research protocols were approved by the University of Toronto's Office of Research Ethics, and informed consent was obtained for all participants. To ensure high quality and comprehensive reporting of focus group and interview methods, where possible, we applied the Consolidated Criteria and Checklist for Reporting Qualitative Research (Tong et al. (2007).

## 2.1.1. Tenant interviews

Face-to-face in-depth interviews with 56 tenants were conducted across both housing portfolios. A purposive sampling approach was used to target apartment-style buildings, and a balance of smoking and non-smoking tenants, across different housing communities. In WRH, we recruited tenants from five properties: three seniors buildings in Cambridge; an adult with no dependents building and a family building in Kitchener-Waterloo; and a seniors building in the Township of Waterloo. For YHC, we focused recruitment on the City of Whitehorse where most of the housing was located. We recruited from three properties: two for seniors and one for families.

Tenants were recruited primarily through flyers posted in housing buildings inviting current adult tenants to call a recruitment line. To increase the number of participants who smoked, some tenants were also recruited through postings in housing administrative offices, and word of mouth from front-line housing staff and other tenants. The number of interviews was based on data saturation (i.e., no new relevant knowledge was being obtained from new participants) (Tong et al., 2007), and feasibility. Overall, just over half (57%) of the tenants interviewed identified as non-smoking (Table 1), and most interview participants (70%) lived in buildings that primarily housed seniors (Table 2).

Interviews were conducted in meeting rooms within housing buildings, participants' units (on request), or local public spaces. Interviews were typically 45–60 min in length and were digitally recorded. A \$25 grocery gift card was offered to tenants as an incentive. Interview guides were pilot tested and customized for smoking status and policy type. Question areas included: lease type (i.e., smoking or nonsmoking for Waterloo tenants), smoking behaviour, perspectives about the smoke-free housing policy, experiences with compliance and enforcement; and impacts of the policy on smoking behaviour, tobacco smoke exposure, and social interactions.

#### 2.1.2. Key informant focus groups and interviews

Focus groups were conducted with key informants involved in the development and administration of the smoke-free housing policies for WRH and YHC. Key informants were identified in collaboration with housing providers to ensure a full range of roles were represented, including housing directors, senior managers, building managers, facilities maintainers, community relations workers, and public health workers. An initial focus group invitation was sent to staff by email and the researchers followed up by phone to confirm participation. Focus groups were conducted during staff time in a convenient central location either at the housing offices or local health unit. Each focus group was 3 h long, conducted by two members of the research team using a discussion guide. Topics included challenges and enabling factors for policy development and implementation, experiences with enforcement, observations of tenant smoking behaviour, handling of complaints, benefits of the policy, and lessons learned. The focus groups were digitally recorded and one researcher took supplementary notes. No incentives were offered to key informants.

#### Table 1

Tenant interview participants by housing provider and smoking status, Canada (2012–14).

Smoking status	Waterloo region housing, ON $N = 30$	Yukon housing corporation, YT $N = 26$	Total $N = 56$
Smoking	12	12	24 (43%)
Non-smoking	18	14	32 (57%)

#### Table 2

Tenant interview participants by housing provider and building type, Canada (2012-14).

Building type	Waterloo region housing, ON N = 30	Yukon housing corporation, YT N = 26	Total N = 56
Senior	18	21	39 (70%)
Family	9	5	14 (25%)
Adulta	3	0	3 (5%)

<sup>a</sup> Adult buildings primarily house tenants who do not have children or other dependants living with them.

Two focus groups were conducted for WRH: one for housing administration and public health staff, and one for frontline staff. The administration focus group included six senior housing administrators and two public health practitioners who were involved with development and implementation of the smoke-free policy. The frontline focus group included ten staff responsible for property management, community relations and facilities maintenance. Due to the smaller size of the housing portfolio, geographic distances and the timeframe of the research, only one focus group (n = 8) was conducted for YHC that consisted of both housing administration and front-line staff. YHC had not worked with public health on development or implementation of their policy, so public health practitioners were not invited to participate in the focus group.

Five key informant interviews (three in Waterloo; two in Yukon) were conducted to gather additional information about protocols and processes and to speak with people who had been involved in the smoke-free housing policy development process but were unable to attend a focus group. A semi-structured key informant interview guide was based on the focus group discussion guide.

#### 2.2. Analysis

Digital recordings of tenant interviews, and key informant focus groups and interviews were transcribed and transferred into QSR NVIVO 10, along with interview notes. A Framework Approach was used to identify themes, patterns and differences between the two policy cases for key informant and tenant data (Ritchie and Spencer, 2002). This approach, developed for applied or policy relevant qualitative research, specifically allows for a priori issues and questions based on the purpose of the research to be incorporated into the thematic framework, in addition to the iterative development of emerging themes from experiential interview data.

Analyses were conducted separately for each data source (tenant interviews, and key informant focus groups/interviews) following the five stages of the Framework Approach (Ritchie and Spencer, 2002): Familiarization, Identifying a Thematic Framework, Indexing, Charting, and Mapping and Interpretation. To increase reliability, two researchers independently coded randomly selected text from four transcripts (two from each case study). The inter-coder agreement was moderate to high (range: 75% to 85%). Differences in coding interpretation were discussed and the thematic framework was revised where necessary. Once each data source was analyzed, key dimensions of each theme were summarized and compared for similarities or differences within and across each of the two policy types.

# 3. Results

Findings are drawn primarily from tenant interviews. Insights from focus groups and key informant interviews have been added where relevant to triangulate data and provide additional insights. Results are organized by three main topic areas: compliance, enforcement and smoking behaviour. Under each topic, we have identified key themes. See Table 3 for a summary of themes and subthemes by major topic area, and illustrative quotes.

#### 3.1. Policy compliance

Most non-smoking tenants in both case studies said they were still regularly exposed to SHS in their units, hallways and building entrances, and in outdoor areas such as balconies and benches since implementation of the smoke-free policy. However, some Waterloo tenants found it difficult to determine whether the exposure they experienced was attributed to non-compliance with the policy because they were not sure whether the tobacco smoke was coming from a unit with a non-smoking lease.

#### 3.1.1. Knowledge of policy provisions

In Waterloo, some tenants who smoked and lived in smoke-free units (including balconies) indicated that they smoked or allowed others to smoke on their balconies. However, a few were uncertain about whether balconies were included in the policy, suggesting that their knowledge of the policy provisions were limited.

#### 3.1.2. Visitor smoking

Some non-smoking tenants also indicated that they would not jeopardize their relationships with guests by asking them to smoke outside; even if that meant they were not complying with the policy.

#### 3.1.3. Barriers to smoking outdoors

Some senior tenants in both housing cases were long-time smokers with health or mobility issues that made it more challenging for them to smoke outdoors. In particular, a few YHC tenants explained how they smoked inside, next to an open window or balcony door, even though smoking was permitted on balconies. This was attributed to harsh weather (e.g., extreme cold or strong winds) and heavy snow that made it difficult to access the balcony.

#### 3.1.4. Mixed policy environment

In general, WRH staff were pleased with the level of compliance; however, they felt that their ability to address complaints about SHS emanating from lease exempted units and outdoor spaces (e.g., benches) that were beyond the 5 m smoke-free zone around buildings, was limited. YHC staff attributed poor compliance following the initial 7-month grace period, during which only new buildings were designated smoke-free, to the fact that some tenants who lived in the new buildings felt it was unfair that the policy affected only them.

# 3.2. Policy enforcement

#### 3.2.1. Complaints, warnings and eviction

In both WRH and YHC, enforcement was primarily complaintsbased, although YHC was moving towards a verification model that would require confirmation of a smoking incident. The general response to complaints in both cases was to provide two warnings before an eviction notice was issued. In WRH, complaints were handled differently, depending on whether they concerned a unit with an exempted lease or a smoke-free lease.

Staff in both housing cases said they considered eviction only as a last resort, and staff worked with tenants as much as possible to avoid it. Nevertheless, tenants in both case expressed concerns about eviction. This theme was stronger among YHC tenants, possibly due to the limited availability of affordable housing in Yukon. A few tenants mentioned that receiving a warning letter caused them stress; however, some tenants felt that the warning letters positively influenced their intention to comply with the policy.

#### 3.2.2. Peer-to-peer enforcement and staff presence

Housing staff who participated in the WRH focus groups referred to peer-to-peer 'tenant policing' as a notable component of policy enforcement. They also felt that word of mouth about policy enforcement among tenants had a positive impact on compliance. However, tenants

# Table 3

Themes, sub-themes and illustrative quotes by major topic area, Canada (2012-14).

Topic: compliance with the policy		
Theme	Sub-themes	Illustrative quote
Knowledge of policy provisions	Smoking outdoors	Tenant INT: "What about balconies in the building? Do you know if you can smoke on those?" RES: "I think you can. Because everyone does, but yeah I don't know – I go on my balcony sometimes at night but it's really cold on my feet though. I don't think you can though." (WRH27; smoker) Staff "There's a lot ofdiscrepancy as to what the policy means. Is it 5 m from the building? Or 5 m from the door? It's not all that clear It's taken awhile for some of us to figure it out." (WRH)
Visitor smoking	Jeopardize relationships	Tenant "I don't give a darn. If you want to come in here and have a cigarette I'll just open the windows when you're gone I'd rather have good company than they're miserable not smoking." (YHC23; non-smoker)
Barriers to smoking outdoors	Weather, mobility and health	Tenant "We can smoke on our balconies but who's going out in windy weather when it can just about blow you off the balcony and your health out there in the cold. That concerns me so I sit with my window open a bit." (YHC22; smoker) "I don't know it's just, that'd be hard in the wintertime. I mean that guy that lives just across the hall and like he's honest. He literally does go out winter or whatever. He goes to that bench and smokes over there; that green bench you know so he's actually keeping the rules and I think he's the only one that is." (WRH30; smoker) Staff "Some of the complaints we used to have is people would open the door and just stand right at the door Or people just opening the door and smoking right in the entrance. Mostly again in the winter, you know on the
Mixed policy environment	Grace period	cold days." (YHC) "is some of the new buildings some of the seniors were saying: well they can smoke, I'm still smoking, I don't care if I'm in a new building or not, that should have nothing to do with this." (YHC)
	Lease exemptions Smoking in lease exempted	Tenant "I have a grandfathered in smoker right below me and I open up my balcony door in the morning and I get a face full of smoke coming up cause he must smoke out on his balcony, and the next door neighbour who is a new tenant I've seen him out on his balcony smoking; and in a way I can't blame him because he sees the guy down below me smoking." (WRH06; non-smoker) Tenant
	units	"But the way they're going about it, well some of the new tenants who moved in they made friends with some of the older tenants and they go sit in their apartment and smoke." (WRH 06; non-smoker) Staff "everybody goes to that grandfathered unit to hang out and smoke on their back patioor in their unitI guess they could be building friendshipsbut it's also causing social problems." (WRH)

Topic: enforcement of the policy

Theme	Sub-Themes	Illustrative quote
Warnings	Different approaches for lease exemptions	Staff "For a new tenantthey're going to get a letter, a second letter, and all of that. For a grandfathered tenant, we'll talk to them and ask them to move outside, or further from the building." (WRH) "For a grandfathered tenant we would be willing to be less forcefuland the [new lease tenant] would be a more forceful approach. We'd need some written documentation behind it. Mediation might be requested too, if it was a grandfathered case." (WRH)
	Impact on compliance	Tenant "Yeah I've had a letter given to me and I thought well you can only get 2 or 3 of those so better dummy up otherwise I'd be under pressure all the time of being on the verge of being evicted you know and I really don't need that." (YHC16; smoker) Staff
Tenant stress		"the message got out to the tenants that we're taking this seriouslywe had these tenants that had moved in and the smoke was just almost billowing out of their unit They were there with cigarettes in their hands– and they're not even trying to hide it and they were more in shock, "you're really enforcing that?"and then the letter goes out and then they stopped they probably told their neighbours, who told their neighbours" (WRH)
	Tenant stress	Tenants "I mean they could walk those hallways anytime and if they smell smoke they'll knock on your door and the first thing they're going to say [is] you get three warnings; you get two warnings that is stressful on somebody that's you know, that can't take the stress" (YHC17; smoker)
		"I've been smoking since I'm about 15 years old and when housing sent the letter around and said we have 6 months to quit smoking the stress that that created I can't tell you what happened to me you know doctor's visits and just for the stress because I know I don't want to quit and I thought that was my choice." (YHC20; smoker)
		"And if you can quit the more power to you. But if you can't then don't have somebody standing over you like with a whip saying you have to do this. It's too hard on a person. It's stressful. And there's enough stress in this world, let me tell you." (WRH05; non-smoker) (continued on next page

# Table 3 (continued)

Topic: enforcement of the policy

Theme	Sub-Themes	Illustrative quote
Complaints	Lease exemptions	Tenants "I'm a busysole parentand you know like as much as I try to maintain my home I mean you are constant busy, so [it's difficult] for me to try and analyze or figure out where the smoke's coming from" (WRH20; nor smoker) Staff
		" I think a lot of the complaints didn't happen because they said well I'm only 1 of the 10% in this buildin that are smoke-free. There's still a bunch of smokers here. Okay I just have to accept it for 10 more years ar then the smoke will be gone." (WRH)
		"If somebody complains, then we have to deal with it, but we have to do research. We have to find out – d they move in before, did they move in after? Is it really a complaint? Or is it a grandfathered case?" (WRF
	Perceived effectiveness of	Tenants
	complaints process	"Obviously my doors and windows are closed but I have not complained about it because I really don't thir that under the current regulations there's anything that I can do about it" (YHC_19; non-smoker) "They [housing staff] make an effort after somebody complains They go and speak to the person and nothing more is doneunless you complain again." (WRH06; non-smoker) Staff
		" you start describing [to] them this process that's going to take six months to two years and they all bac off." (WRH)
Eviction	Last resort	Staff " I mean we're certainly not in the business of evictingwe work with them [tenants] as much as we can. do you need to get help, you know, do you need to go to a stop smoking program here are the people that you can contact to help you here are the steps that we can take to help them, but if they don't want the help they you know here's the consequence." (WRH)
Peer-to-peer enforcement	Perceived positive impacts	Staff
		"Now that we have the policy in placethey [tenants] have that and they know it. They know the policy bette than we do at times and they are doing the policing on our behalf so that was a bit of a shocker too that the would do that." (WRH)
		"We all hear about what somebody does, when they do it and everything else so in that respect that staff time not really staff time- that's tenant time- and they're taking the time to bring to our attention what is going on because let's face it we're only here from 8 till 5 so there're things that do happen after hours." (WRH)
	Perceived negative impacts	Tenants "The only way it's enforceable is for everybody to be tattling on everybody else. That's not what we do here an we're not going to do it. It's just not right." (YHC15; non-smoker)
		"I kind of wish that there was a way that we could anonymously report people more because usually what happens is if you tell they try to get you involved in the actual fixing of the problem. They want you to go the person and ask them to stop first" (WRH20; non-smoker)
Staff presence		Staff " some people don't want to complain, they don't want to squeal on their neighbourthey might casual mention it, but they'll never put it in writing." (WRH) Tenant
Start presence		"Well they need people from housing assigned periodically to come aroundmaybe once or twice or a coup of times a week or somethingjust to hang around the building, go here go there, walk around and just pop you know unexpectedly" (WRH05; non-smoker)

# Topic: impacts of the policy on smoking behavior

Theme	Sub-themes	Illustrative quote
Difficulty quitting	Motivation	Tenants "the non-smokers say you know just tell yourself that you're not going to smoke anymore and I said I've told myself that many, many times" (YHC21, smoker) "Well what I find with some [smokers is that] they really can't, they don't seem to be able to quit or they say they have tried and they can't; whether that's true or not who knows but I mean my heart goes out to them." (YHC26; non-smoker)
Quit attempts	New start, saving money	Tenant INT: "Did moving here affect your decision [to quit]?" RES: "That's why I quit." INT: "Because you knew you were coming into a new place?" RES: "Yeah and I knew that I'd have more bills and stuff so I use the money now for that." (WRH19; non-smoker)
Smoking reduction	Smoking reduction	Tenant "Well I was smoking two and a half packs a day so for the past year I'm a half; maybe down to 10, 12 cigarettes a day" (YHC16; smoker)
	Inconvenience	Tenants "so far it hasn't been too bad and I have cut back quite a bit which is a good thing but I don't knowI keep darting out, I just don't stay long. I take 3 or 4 puffs and I come back in and I'll do something and then I'll go out and I'll have another couple I still smoke a good dealbut I think if it keeps like this it might be cut back quite a bit." (YHC21; smoker) "actually since I moved here it's better for me because when I go outside to have a smoke I take in the fresh air, I take a moment to breathe and look around and it's cut back a lot I started thinking you know I don't think I've been smoking as much since I moved here I would go up and down, up and down [the stairs]" (WRH26; smoker)
	Fewer tenants to smoke with	Tenant "Before there was another smoker and every time he'd call for a cigarette break I'd follownow that I'm the only smoker it's like I just don't call for a cigarette break. It doesn't bother me and like I said I could last 2, 3 h no problem which I think is good. Before I don't think I could have done that." (WRH30; smoker) (applied on part parce)

#### Table 3 (continued)

Theme	Sub-themes	Illustrative quote
Cessation support	Interest in cessation support	Tenant "I think that it would have been a lot smarter to have had a non-smoking program for the residents of this building prior to implementing that [non-smoking policy]they could have sent people in, they could have provided people with the patch or you know things like that, given them you know a peer support group or whatever to help each other quit most of the people that are in here like me don't have much money or anything" (YHC24; non-smoker)
	Access to cessation support	Tenant "most of the people that are in here like me don't have much money or anything you know and they [housing] need to do proactive things like have a non-smoking class you know here or a support group for people that want to quit if there's an issue with people that don't want to quit, why is that? Maybe they can't quit, you know." (YHC24; non-smoker) Staff "We had a few resources in our office for people who wanted to quit smoking if they wanted to ask for it. We didn't have a lot though because again we didn't want our policy to be perceived as us telling people how to live their lives and we didn't want our policy to be about us making a judgment or a decision on peoples' choice to smoke or not smoke." (YHC)

felt there was a need for greater staff presence, and a few non-smoking tenants said their complaints about SHS exposure had not been addressed. These tenants had either lodged multiple complaints or lost confidence in the process.

## 3.3. Policy impacts on tenant smoking behavior

# 3.3.1. Difficulty quitting

In both housing portfolios, tenants talked about how difficult it was to quit smoking. This was particularly notable among older tenants living in seniors' housing. Tenants spoke about making multiple quit attempts and having a difficult time maintaining abstinence.

#### 3.3.2. Quit attempts and smoking reduction

A few WRH tenants said they had successfully quit smoking in preparation for moving into a new unit where smoking was prohibited. Reasons for quitting offered by tenants included making a new start, concerns about smoking around children or grandchildren, and saving money. Tenants who smoked in both WRH and YHC also felt the policy helped them take steps to reduce their smoking and contemplate quitting. For example, one tenant's (YHC) daily cigarette consumption was reduced by about three quarters since the policy was implemented.

A main reason provided for reduced smoking in both cases included the time and effort required to go outside to smoke, resulting in fewer and shorter smoke breaks, and smoking less during a smoke break. A few tenants also said they reduced smoking because there were fewer tenants to smoke with since the policy was implemented, which resulted in taking fewer smoke breaks.

#### 3.3.3. Cessation support

Cessation support services were provided free of charge to WRH tenants through ROWPH. However, many of the tenants who smoked told us they were not aware of the services and had not accessed them. YHC provided only limited resources on request for people who wanted to quit smoking, in line with their focus on reducing fire risk, rather than cessation. However, some YHC tenants were dismayed that a cessation support program was not provided before the policy was implemented, particularly since affordable housing tenants may have limited access to quit support services in their communities.

# 4. Discussion

Compliance issues were identified in both cases. In YHC, there were specific issues regarding tenants smoking indoors, adjacent to open balconies, doors or windows, especially during poor weather. This suggests the need for additional support to enforce the policy during winter and shoulder seasons, reinforce communications about where one can and cannot smoke, and provide support for tenants who may have difficulty going outside to smoke. These findings are supported by Pizacani who found that compliance in subsidized multiunit housing was significantly related to tenants' knowledge of the policy and noncompliance was higher among mobility-limited smokers (Pizacani et al., 2012). Another study of residents' reactions to a smoke-free policy implemented in Minnesota public housing sites concluded that improved communications about the policy would enhance its impact (Hennrikus et al., 2017).

WRH tenants and staff had challenges determining whether smoke was coming from a smoke-free unit or an exempted unit, and deciding what to do about complaints regarding exempted units. A few tenants who lived in non-smoking units also reported smoking inside or on the balconies or patios of exempted units. While these tenants were technically in compliance, their smoking behavior undermined the intended outcomes of the policy.

In both housing cases, tenants indicated that they would not jeopardize relationships by asking guests to smoke outside. Similar results were found in a systematic review of barriers, motivators and enablers of smoke-free homes in which 11 studies reported situations where participants were unwilling or uncomfortable asking visitors not to smoke inside (Passey et al., 2016). Reasons for this behavior included concerns about etiquette, appearing ungracious, experiencing embarrassment, and fears of offending visitors and being rejected. These social dimensions of smoke-free policies are largely unexplored and particularly relevant to multi-unit housing environments.

Staff of both housing cases viewed informal tenant policing of policies as a positive component of enforcement. However, some tenants were uncomfortable reporting non-compliance, which could lead to conflict and other negative repercussions. As policies are developed, implemented and monitored, their potential effect on power, control and social roles of tenants and staff need to be considered. Policy approaches should be designed to prevent the marginalization of groups who are most vulnerable to smoking and SHS exposure while maximizing the effect and impact of policies (Hemsing et al., 2012).

Our findings also provide insight into how smoke-free policies can support positive changes in smoking behavior. Consistent with published literature, tenants in both housing cases reported that the policy helped them decrease their cigarette consumption and quit smoking (Kennedy et al., 2015; Kernoghan et al., 2014; Winickoff et al., 2010; Mills et al., 2009; Shields, 2007; Gilpin et al., 1999). Reported motivations for making a quit attempt include moving into a smoke-free unit, economic benefits, concerns about smoking around children and improved health. Decreased smoking was mostly attributed to the inconvenience of having to go outdoors to smoke and having less opportunity for social smoking. However, for many tenants, maintaining a quit attempt was a challenge.

Cessation support was raised by YHC tenants, as a resource that was lacking in the smoke-free policy process. This is particularly important for affordable housing tenants who may have limited access due to lack of information and financial constraints. Low income tenants may also experience greater mental and financial stress, and require additional support to address their tobacco related goals (Siahpush et al., 2009). Similarly, tenants who have multiple health issues and poor mobility may benefit from tailored cessation supports. Providing cessation services as part of a smoke-free policy may help residents to comply and potentially minimize resources needed for enforcement.

Communication campaigns focused on changing social norms related to indoor smoking may also help to improve compliance and change smoking behaviour. Given that some tenants attributed making a quit attempt to concerns about smoking around children and grandchildren, this could be used in media campaigns to support policy development and compliance. For example, Robinson et al. (2011) found that many parents are willing to act on messages that focus on the need to protect children from exposure to smoking, including maintaining a non-smoking environment.

#### 4.1. Limitations

The purposive sampling approach may have resulted in respondent biases. Tenants who felt strongly about the smoke-free housing policy, particularly those who were supportive of the policy and concerned about exposure to SHS, may have been more likely to participate. In addition, most tenants who participated in an interview lived in a building that primarily housed seniors, so the data may be biased towards the experiences and viewpoints of older adults.

# 5. Conclusions

Our study demonstrates that comprehensive smoke-free housing policies, regardless of the policy type, support positive changes in smoking behavior such as reduced smoking and quitting. This provides opportunities for targeted communication campaigns and cessation support within the housing environment. Exempting existing tenants from smoke-free policies that apply to living units in multi-unit housing contributes to non-compliance and challenges for policy enforcement. Approving legislation that does not allow the exemption of existing leases would help to avoid many of the challenges experienced by staff and tenants. In jurisdictions where lease exemptions are legally required, adequate resources for monitoring and enforcement of the policy, along with consistent and clear communication, particularly regarding balconies and other outdoor spaces, should encourage compliance.

#### **Conflicts of interest**

None.

# Funding

This work was supported by the Canadian Institutes of Health Research (grant number 120260); the Ontario Tobacco Research Unit (OTRU) which receives funding from the Ontario Ministry of Health and Long-Term Care; and The Propel Centre for Population Health Impact, which is supported by the Canadian Cancer Society Research Initiative (grant number 701019).

# Acknowledgments

The authors wish to thank the residents and staff of Waterloo Region Housing and Yukon Housing Corporation for their participation in the study through interviews and focus groups, key informants for their contributions to the research, research field assistants, and members of the Waterloo Region Housing Smoke-Free Policy Evaluation Committee. The research was carried out by the Ontario Tobacco Research Unit (OTRU), which receives funding from the Ontario Ministry of Health and Long-Term Care, and through research collaboration with The Propel Centre for Population Health Impact, which is supported by a Major Program Grant from the Canadian Cancer Society Research Initiative (CCSRI Grant #701019).

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