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**Subject: Amendments to By-law 112-2013 – A Regional By-law to Protect Children and Vulnerable Persons from Exposure to Outdoor Second-hand Smoke**

**Report to: Public Health and Social Services Committee**

**Report date: Tuesday, June 11, 2019**

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**Recommendations**

1. That Regional Council **APPROVE** the proposed amendments to By-law No. 112-2013 being a Regional By-law to Protect Children and Vulnerable Persons from Exposure to Outdoor Second-hand Smoke, outlined in the Consultation Recommendations section of Report PHD 09-2019;
2. That Regional Council **ADOPT** a bill to amend By-law No. 112-2013 being a Regional By-law to Protect Children and Vulnerable Persons from Exposure to Outdoor Second-hand Smoke, to include the amendments found in the Consultation Recommendations section of Report PHD 09-2019, that will, if adopted, come into force and effect on August 1, 2019 provided that:
  - a. A majority of the councils of the local area municipalities pass resolutions consenting to the By-law; and
  - b. The total number of electors in the local municipalities that have passed resolutions in support of the Bill form a majority of all electors in the Region of Niagara as established in the revised list of electors for the municipal election held in the year 2018; and
3. That, subject to the adoption of the aforementioned Bill, a copy of the Bill and Report PHD 09-2019 **BE CIRCULATED** to the Clerks of the 12 local area municipalities with a request that their councils adopt the following resolution and advise the Regional Clerk of the results of that consideration, no later than July 31, 2019:

“That the Council of (name of municipality) consents to the passage of By-law No. <> of The Regional Municipality of Niagara, being a by-law to amend By-law 112-2013 - A Regional By-law to Protect Children and Vulnerable Persons from Exposure to Outdoor Second-hand Smoke.

**Key Facts**

- *Smoke-Free Ontario Act, 2017 (SFOA)* and *Cannabis Statute Law Amendment Act, 2018* incorporated cannabis and vaping products into SFOA's scope, and prohibited cannabis and e-cigarette places of use to be the same as tobacco products.

- The Outdoor Second-hand Smoking By-law Amendment Report (PHD 02-2019) sought to harmonize the existing Regional by-law with the amended *SFOA*, by including cannabis and vaping products. This amending by-law was approved as By-law 2019-07 and allowed for time to consult with the public, work with the municipalities to improve the by-law, and conduct a review of research to understand the health effects of second-hand exposure to cannabis and e-cigarette vapour. The amending by-law included a sunset clause in that it is only intended to be in force until a permanent by-law is enacted.
- Through the leadership of the area CAOs, fulsome consultation has occurred with municipal representatives and a survey was conducted to gauge public opinion.
- Public health is concerned that continued cannabis and e-cigarette use without policy to limit places of use could lead to normalization of use, second-hand exposure to smoke and vapour, and also trigger relapse through exposure of those individuals trying to quit.
- The review of research supports restricting cannabis use as a precautionary approach with cannabis smoke containing multiple known carcinogens already found in tobacco smoke. While e-cigarette vapour has shown minimal harm, youth are taking up e-cigarettes at an alarming rate and youth e-cigarette users have demonstrated a higher chance of switching to tobacco use.
- The local area municipalities (LAMs) were presented with the results from the public consultation survey and the review of research to guide decision making. The research, public and LAMs are supportive of including cannabis and vaping into the Regional by-law, while expanding the prohibited places of use to include
  - Nine metres from entrances or exits of public buildings
  - Municipal/regional recreational trails
  - Municipal/regional beaches

## **Financial Considerations**

There are no financial implications from the amendments to the Regional by-law. Keeping the Regional by-law aligned with the *SFOA* will streamline enforcement and continue to keep costs minimal.

## **Analysis**

### **Smoke-Free Legislative Updates**

Upon legalization of recreational cannabis on October 17, 2018, new *SFOA* provisions were simultaneously proclaimed to prohibit cannabis and vaping use where tobacco is prohibited. With this update, Niagara Region By-law No. 112-2013 became misaligned by only applying to tobacco products. Subsequently, a by-law to amend By-law 112-2013 to include cannabis and vaping products with a one-year sunset clause, received triple majority support which allowed for harmonization while staff worked on reviewing

the latest research evidence on the topic, as well as a fulsome consultation with the public and LAMs.

## **Review of Latest Research Evidence:**

### **Tobacco**

Smoking tobacco remains the leading cause of preventable disease and preventable death in Ontario and Canada. Legislative smoking restrictions have been shown to have multiple beneficial effects, including

- Decrease exposure of non-smokers to second-hand tobacco smoke, and thereby decrease harmful effects of second-hand smoke<sup>1</sup>
- Support for smokers in either increasing success in quit attempts or by decreasing the amount they smoke<sup>2</sup>
- Decrease the prevalence of smoking through deterring people from initiating use<sup>3</sup>
- Associated with increase in self-imposed restriction of smoking in the home, further decreasing the exposure of children to second-hand smoke<sup>4</sup>

Evidence supports legislation aimed at limiting exposure to second-hand smoke and protecting people's rights to smoke-free air.<sup>5</sup> Such legislative examples could include the *SFOA* or local smoke-free by-laws. The Regional By-law has demonstrated Niagara's commitment to denormalization, i.e. decreasing the social acceptance of smoking, and making smoking an abnormal occurrence. Broader by-laws help with denormalization and supporting citizens who are trying to quit by reducing the volume of visual cues in areas of daily life.<sup>6</sup>

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<sup>1</sup> Frazer K, Callinan JE, McHugh J, et al. Legislative smoking bans for reducing harms from secondhand smoke exposure, smoking prevalence and tobacco consumption. *Cochrane Database Syst Rev.* 2016; 2:CD005992. doi:10.1002/14651858.CD005992.pub3

<sup>2</sup> Monson E, Arsenault N. Effects of enactment of legislative (public) smoking bans on voluntary home smoking restrictions: A review. *Nicotine Tob Res.* 2017; 19(2): 141-148. doi:10.1093/ntr/ntw171

<sup>3</sup> Monson E, Arsenault N. Effects of enactment of legislative (public) smoking bans on voluntary home smoking restrictions: A review. *Nicotine Tob Res.* 2017; 19(2): 141-148. doi:10.1093/ntr/ntw171

<sup>4</sup> Monson E, Arsenault N. Effects of enactment of legislative (public) smoking bans on voluntary home smoking restrictions: A review. *Nicotine Tob Res.* 2017; 19(2): 141-148. doi:10.1093/ntr/ntw171

<sup>5</sup> Holitzki H, Dowsett LE, Spakman E, Noseworthy T, Clement F. Health effects of exposure to second- and third-hand marijuana smoke: A systematic review. *CMAJ Open.* 2017; 5(4): E814-E822. doi:10.9778/cmajo.20170112

<sup>6</sup> Robertson L, McGee R, Marsh L, Hoek J. A systematic review on the impact of point-of-sale tobacco promotion on smoking. *Nicotine Tob Res.* 2015;17(1):2-17. doi:10.1093/ntr/ntu168

## Cannabis

Cannabis research in terms of second-hand exposure is very limited. However, two systematic reviews on the health impacts of significant second-hand exposure to cannabis<sup>7,8</sup> found

- Metabolites of cannabis found in bodily fluids following second-hand exposure
- Psychoactive effects occur with sufficient exposure,
- Eye irritation occurs with sufficient exposure.

These limited studies assessed only short-term impacts and primarily utilized unventilated rooms; ventilation significantly reduced or completely eliminated the impacts. However, cannabis smoke has been found to contain known carcinogens, similar to tobacco smoke.<sup>9,10</sup> Second-hand cannabis therefore carries risk for similar health consequences, such as increased rates of heart disease and lung disease, including lung cancer. Including cannabis in Niagara's smoke-free by-law represents a reasonable precautionary approach considering the potential harm from second-hand exposure, but especially in terms of denormalization for Niagara's children and youth.

## E-cigarettes

Several systematic reviews have been conducted on the health impacts of second-hand e-cigarette vapour:<sup>11,12,13,14</sup>

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<sup>7</sup> Holitzki H, Dowsett LE, Spakman E, Noseworthy T, Clement F. Health effects of exposure to second- and third-hand marijuana smoke: A systematic review. *CMAJ Open*. 2017; 5(4): E814-E822. doi:10.9778/cmajo.20170112

<sup>8</sup> Berthet A, De Cesare M, Favrat B, et al. A systematic review of passive exposure to cannabis. *Forensic Sci Int*. 2016; 269: 97-112. doi: 10.1016/j.forsciint.2016.11.017

<sup>9</sup> Maertens RM, White PA, Rickert W, et al. The genotoxicity of mainstream and sidestream marijuana and tobacco smoke condensates. *Chem Res Toxicol*. 2009; 22(8): 1406-1414. doi:10.1021/tx9000286

<sup>10</sup> Moir D, Rickert WS, Levasseur G, et al. A comparison of mainstream and sidestream marijuana and tobacco cigarette smoke produced under two machine smoking conditions. *Chem Res Toxicol*. 2008; 21(2): 494-502. doi:10.1021/tx700275p

<sup>11</sup> Glasser AM, Collins L, Pearson JL, et. Al. Overview of electronic nicotine delivery systems: A systematic review. *Am J Prev Med*. 2017; 52(2):e33-e66. doi:10.1016/j.amepre.2016.10.036

<sup>12</sup> Hess IMR, Lachireddy K, Capon A. A systematic review of the health risks from passive exposure to electronic cigarette vapour. *Public Health Res Pract*. 2016; 26(2): e2621617. doi:10.17061/phrp2621617

<sup>13</sup> Farsalinos KE, Polosa R. Safety evaluation and risk assessment of electronic cigarettes as tobacco cigarette substitutes: A systematic review. *Ther Adv Drug Safety*. 2014; 5(2): 67-86. doi:10.1177/2042098614524430

<sup>14</sup> Grana R, Benowitz N, Glantz SA. E-cigarettes: A scientific review. *Circulation*. 2014; 129: 1972-1986. doi:10.1161/circulationaha.114.007667

- Second-hand exposure to vapour increases cotinine (a metabolite of nicotine) in blood<sup>15,16</sup>
- E-cigarette vapour increases particulate matter, heavy metals, and nicotine in the air, however levels are significantly less than conventional cigarette smoke<sup>17,18,19</sup>
- Second-hand exposure to vapour has a minimal to negligible potential to harm<sup>20,21,22</sup>

One study found that e-cigarette use in adolescents and young adults increased the probability of beginning to smoke conventional cigarettes.<sup>23</sup> If a youth did not smoke and had never used an e-cigarette, there was found to be a 7.9% chance that they would begin to smoke in the future. However, if a youth began using an e-cigarette, there was a 30.4% chance of them beginning to smoke conventional cigarettes in the future.<sup>24</sup> Thus, a strong reason to include e-cigarettes in the by-law is to deter youth from initiating tobacco use.

Niagara Region Public Health and Emergency Services (NRPH & ES) is assessing our capacity to conduct a local evaluation on the impact of smoke-free policies, to understand how well the intended goals are being achieved and to inform possible improvements.

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<sup>15</sup> Glasser AM, Collins L, Pearson JL, et. Al. Overview of electronic nicotine delivery systems: A systematic review. *Am J Prev Med.* 2017; 52(2):e33-e66. doi:10.1016/j.amepre.2016.10.036

<sup>16</sup> Grana R, Benowitz N, Glantz SA. E-cigarettes: A scientific review. *Circulation.* 2014; 129: 1972-1986. doi:10.1161/circulationaha.114.007667

<sup>17</sup> Hess IMR, Lachireddy K, Capon A. A systematic review of the health risks from passive exposure to electronic cigarette vapour. *Public Health Res Pract.* 2016; 26(2): e2621617. doi:10.17061/phrp2621617

<sup>18</sup> Farsalinos KE, Polosa R. Safety evaluation and risk assessment of electronic cigarettes as tobacco cigarette substitutes: A systematic review. *Ther Adv Drug Safety.* 2014; 5(2): 67-86. doi:10.1177/2042098614524430

<sup>19</sup> Grana R, Benowitz N, Glantz SA. E-cigarettes: A scientific review. *Circulation.* 2014; 129: 1972-1986. doi:10.1161/circulationaha.114.007667

<sup>20</sup> Glasser AM, Collins L, Pearson JL, et. Al. Overview of electronic nicotine delivery systems: A systematic review. *Am J Prev Med.* 2017; 52(2):e33-e66. doi:10.1016/j.amepre.2016.10.036

<sup>21</sup> Hess IMR, Lachireddy K, Capon A. A systematic review of the health risks from passive exposure to electronic cigarette vapour. *Public Health Res Pract.* 2016; 26(2): e2621617. doi:10.17061/phrp2621617

<sup>22</sup> Farsalinos KE, Polosa R. Safety evaluation and risk assessment of electronic cigarettes as tobacco cigarette substitutes: A systematic review. *Ther Adv Drug Safety.* 2014; 5(2): 67-86. doi:10.1177/2042098614524430

<sup>23</sup> Soneji S, Barrington-Trimis JL, Wills TA, et al. Association between initial use of e-cigarettes and subsequent cigarette smoking among adolescents and young adults: A systematic review and meta-analysis. *JAMA Pediatr.* 2017; 171(8): 788-797. doi:10.1001/jamapediatrics.2017.1488

<sup>24</sup> Soneji S, Barrington-Trimis JL, Wills TA, et al. Association between initial use of e-cigarettes and subsequent cigarette smoking among adolescents and young adults: A systematic review and meta-analysis. *JAMA Pediatr.* 2017; 171(8): 788-797. doi:10.1001/jamapediatrics.2017.1488

## Public Consultation

In order to conduct a fulsome consultation with the public, NRPH & ES developed a survey with the following objectives:

- a. To understand Niagara residents' opinions and attitudes toward smoking restrictions
- b. To determine the level of support or opposition to the amendments to Regional By-law No. 112-2013 in By-law No. 2019-07
- c. To determine the level of support or opposition toward possible by-law amendments

An online and paper survey was available between March 7 and April 5, 2019. The survey was promoted primarily through social media accounts (i.e. Facebook, Twitter, Instagram), and municipal/regional websites. Respondents to the survey resided both inside and outside of Niagara Region. There were a total of 5,578 surveys completed. See below for the breakdown of survey responses for residents within Niagara Region by municipality; this shows that a representative distribution of respondents was achieved.

**Table 1-Number and Proportion of Respondents by Municipality**

Municipality	Population Estimate (2016) <sup>a</sup>	Proportion of Total Niagara Population	Number of Respondents	Proportion of Total Survey Respondents
Niagara	447,888	100%	5,508	98.7%
St. Catharines	133,113	30%	1,677	30.1%
Niagara Falls	88,071	20%	1,035	18.6%
Welland	52,293	12%	691	12.4%
Fort Erie	30,710	7%	414	7.4%
Port Colborne	18,306	4%	300	5.4%
Lincoln	23,787	5%	298	5.3%
Niagara-on-the-Lake	17,511	4%	256	4.6%
Grimsby	27,314	6%	254	4.6%
Thorold	18,801	4%	220	3.9%
Pelham	17,110	4%	183	3.3%

West Lincoln	14,500	3%	109	2.0%
Wainfleet	6,372	1%	71	1.3%

<sup>a</sup> Data source: Statistics Canada, 2016 Census of the Population. All data references are for the Census Division of Niagara.

Of the respondents, 35% used at least one tobacco or alternative product (i.e., cigarettes, cigars, little cigars and cigarillos, shisha/hookah, cannabis [medical & recreational], vapes [including JUUL] or Heat-Not-Burn tobacco products) at least once in the past 30 days.

Overall, 75.7% of respondents are supportive of the amendments to Regional By-law No. 112-2013, which includes tobacco, cannabis and vaping products. Furthermore, 84.7% of respondents are supportive of including additional prohibited locations, the list of which was selected from a scan of smoke-free by-laws in other jurisdictions.

**Table 2-Number and Proportion of Respondents Who Support Additional Locations in By-Law**

Location	<i>n</i>	%
Nine metre radius surrounding any entrance or exit of a public building	4,416	79.2%
Municipal recreational trails (including trail entrances/exits)	3,144	56.4%
Municipal beaches	3,377	60.5%
Outdoor community meeting areas	3,515	63.0%
Other	771	13.8%

NRPH & ES receives daily complaints to the Tobacco Hotline from Niagara region residents. Over the course of 2014 to 2018, NRPH & ES received 559 documented complaints related to smoking. Smoking in front of entrances or exits to public buildings is the highest complaint for outdoor spaces, and this finding is further supported through the recent public survey with 79.2% of respondents supportive of prohibiting smoking

and vaping within a nine-metre radius surrounding any entrance or exit of a public building.

## **Municipal Consultation**

In January 2019, NRPH & ES had a meeting with the Chief Administrative Officers (CAOs) from the local area municipalities (LAMs) to discuss the smoke-free outdoor spaces by-law and the changes to the *SFOA*. The CAOs recommended that a representative group from each LAM work together to form a consensus on amendments to the Regional by-law in a collaborative approach.

Subsequent meetings were held between February and April with the 12 LAM representatives. Representatives included a cross section of disciplines including by-law enforcement, planning and development, parks and recreation, legal services, building, health and safety, and a CAO.

The group was provided with background information on the by-law, changes to the *SFOA*, current research and evidence on cannabis and vaping, and results of an environmental scan of recent smoke-free bylaw amendments. As a group, decisions and guidance were provided for the public consultation survey including planning, implementation, and communication.

Survey results from public consultation were shared with the LAM representatives, from the perspective of the entire sample size, as well as municipal-specific information. Each proposed amendment was based on the literature review, environmental scan, and/or public consultation results. The LAM group was presented with an individual item for consideration, given the opportunity to discuss whether the amendments should be added, and then each LAM was provided an opportunity to either support or oppose the amendment.

## **Consultation Recommendations**

The LAM representatives with consensus recommend the following amendments to Niagara Region By-law No. 112-2013

1. Inclusion of tobacco, cannabis and vaping
2. Expanding the prohibit places of use to include
  - a. Nine metres from entrances or exits of public buildings
  - b. Municipal/regional recreational trails
  - c. Municipal/regional beaches

Exclusions to the by-law include highways, road allowances abutting a regional or municipal property, municipal sidewalks, designated parking areas, and rights-of-way.



The *Municipal Act* provides municipalities the authority to pass by-laws with respect to the health, safety, and well-being of persons and specifically with respect to smoking and vaping of tobacco, cannabis and vapour products (section 115).

Furthermore, the *Municipal Act* provides authority to prohibit use within public places and workplaces.

To be enacted, the by-law must pass a “triple majority”, meaning

1. A majority of votes in favour of the by-law are cast at Regional Council
2. A majority of the local area municipalities must pass their own resolutions consenting to the by-law
3. The number of electors in those municipalities that pass consenting resolutions must represent a majority of all electors in the Region. If the by-law fails on either (1) or (2) above, it will be deemed to have been repealed at the Regional level.

## **Enforcement**

Enforcement of smoking and vaping restrictions is often raised as a fiscal concern, however research following the implementation of local tobacco by-laws demonstrates that new laws are manageable with the current staff and within operational budgets.<sup>25</sup> The amended by-law will utilize the existing five FTE Tobacco Control Officers (TCOs) that currently enforce the Smoke-Free Ontario Strategy and current Regional By-law. Responsibilities of the TCOs entail promotion, education, and enforcement. Since legalization on October 17, 2018 to May 1, 2019, NRPH & ES has received 17 complaints related to cannabis and 92 complaints related to vaping.

In Niagara, enforcement of any new legislation consists of an education phase, and then moves on to warnings and/or charges, as appropriate. Enforcement of this by-law will be performed on a complaint basis where the TCOs work in conjunction with existing municipal by-law officers. Municipal by-law officers will have the authority to issue charges if there is support and capacity from their LAM.

A complaint referral process will be in place based on what already exists through the Tobacco Hotline and the NRPH & ES website. Previous experience enforcing by-laws demonstrates that comprehensive education efforts are fundamental to ensuring successful implementation. It is important to ensure that people know about the changes and NRPH & ES will ease into this change process with a similar approach to any of the legislative amendments.

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<sup>25</sup> Kennedy RD, Zummach D, Filsinger S, Leatherdale ST. Reported municipal costs from outdoor smoke-free by-laws-experience from Ontario, Canada. *Tobacco Induced Diseases*. 2014; 12(4): 1-6. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3944976/>

## **Public Education**

NRPH & ES has developed a public education strategy that will ultimately increase awareness of the by-law and educate residents of the benefits of a smoke-free and vape-free environment. Strategies will include utilizing existing staff and support from a summer student to provide education and awareness through dissemination of information and resources to various stakeholders and using existing website and social media channels to engage Niagara residents. LAMs have agreed to support the communication efforts with updates to municipal website's and/or social media pages, and this collaboration will improve the campaign's reach.

## **Signage**

Purchasing and distribution of signage will be managed through the existing operational budget. The Region will supply signs to the local area municipalities and/or property owners/operators with either metal signs or decals. Owners and operators of public buildings will have access to ordering signage online via the NRPH & ES website, as per our usual process.

It will be the responsibility of the municipality or property owner/operator to post or adhere the signs as appropriate.

## **Alternatives Reviewed**

Through the consultation process, neither the public nor the LAMs supported excluding cannabis or vaping from the by-law. Consideration was given to fully expand the by-law to all public spaces, however due to the authority granted under the *Municipal Act*, application was limited to public places that did not include highways, roads, or sidewalks. Furthermore, the scope of the consultation limited expansion of the by-law beyond the current recommendations, as well as recommendations based on evidence in terms of excessive prohibition.

## **Relationship to Council Strategic Priorities**

This work supports Doing Business Differently by proposing that Niagara continue to aim for simplicity and consistency while remaining among the leaders in Ontario in its smoke-free policies.

## **Other Pertinent Reports**

- [PHD 02-2019 – Outdoor Second-Hand Smoking By-law Amendment - REVISED](#)
- [PHD 01-2019 – Cannabis Legalization](#)
- [PHD 13-2018 – Comprehensive Tobacco Control Report](#)

- [PHD 07-2018 – Cannabis Legalization](#)
- [PHD 01-2018 – Smoke-Free Ontario Modernization](#)
- [PHD 04-2017 - Ontario Student Drug Use and Health Survey Results](#)
- [PHD 09-2016 Revised - Cannabis Regulation and Control](#)

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