



Hamilton

# INFORMATION REPORT

<b>TO:</b>	Mayor and Members Public Health Committee
<b>COMMITTEE DATE:</b>	May 1, 2023
<b>SUBJECT/REPORT NO:</b>	Hamilton's Waterpipe By-law (BOH23017) (City Wide)
<b>WARD(S) AFFECTED:</b>	City Wide
<b>PREPARED BY:</b>	Heidi McGuire (905) 546-2424 Ext. 6170
<b>SUBMITTED BY:</b>	Kevin McDonald Director, Healthy Environments Division Public Health Services
<b>SIGNATURE:</b>	

## COUNCIL DIRECTION

At its meeting on February 21, 2020 the Board of Health provided the following direction:

“That the City of Hamilton Public Health Services report back to the Board of Health with recommendations for implementation of a by-law to regulate the smoking of non-tobacco combustible substances in public places and work places by June 2020.”

## INFORMATION

This report back to the Public Health Committee has been delayed due to the COVID-19 pandemic emergency response; the 2022 municipal election; and the more recent Board of Health orientation sessions. Prior to delivering a Recommendation Report proposing a Waterpipe Bylaw for the City of Hamilton, it was felt to be prudent to re-introduce this issue for the Public Health Committee's awareness and information. Public Health Services (PHS) plans to bring a Recommendation Report to the Public Health Committee at its September 8, 2023 meeting.

### Waterpipe

A waterpipe (or hookah) is a device used to smoke moist tobacco and/or non-tobacco herbal products. The substance that is smoked in a waterpipe is often referred to as shisha. The ingredients in shisha vary and may include dried plants, herbs, tobacco

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leaves, preservatives and flavourings mixed with molasses or honey.<sup>1</sup> A waterpipe uses charcoal to heat shisha to produce smoke, which is drawn into water, cooled, and inhaled by an individual using a hose and a mouthpiece.<sup>1</sup> Waterpipe smoking often occurs in a group setting at establishments that offer this activity in conjunction with food and beverage service.

### **Health and Safety Concerns**

Waterpipes filled with tobacco and/or herbal shisha contain harmful toxins and chemicals, including particulate matter, polycyclic aromatic hydrocarbons, carbon monoxide, and heavy metals.<sup>2</sup> With the exception of nicotine, all toxicants measured in herbal smoke equal or exceed those found in tobacco waterpipe smoke.<sup>2, 3</sup> Non-tobacco and tobacco shisha contain similar levels of toxins.<sup>2, 3</sup> Waterpipe smoking has been linked to the same diseases as cigarette smoking, with multiple harmful health outcomes including lung cancer, heart disease, negative respiratory effects (including reduced lung function), dental disease, and negative pregnancy outcomes.<sup>2, 4</sup> A waterpipe session takes between 20 to 80 minutes, putting others at risk due to the high levels of toxic compounds in second-hand smoke, irrespective of whether tobacco is contained within the waterpipe.<sup>2</sup> Multiple studies have demonstrated hazardous occupational exposures in hookah bars.<sup>5-9</sup>, with higher levels of nicotine, carbon monoxide, tar and heavy metals compared with cigarettes<sup>3, 4, 10</sup> and indoor levels of PM<sub>2.5</sub> fine air pollutant particles, carbon monoxide and air nicotine that are hazardous to human health.<sup>11</sup>

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<sup>1</sup> Non-Smokers Rights Association. (2012). Waterpipe smoking in Canada: New trend, old tradition. Ottawa, ON: Non-Smokers Rights Association.

<sup>2</sup> Ontario Agency for Health Protection and Promotion (Public Health Ontario). (2021). Evidence brief: health impacts of waterpipe smoking and exposure. Toronto, ON: Queen's Printer for Ontario.

<sup>3</sup> Shihadeh A, Schubert J, Klaiany J, et al. (2015). Toxicant content, physical properties and biological activity of waterpipe tobacco smoke and its tobacco-free alternatives. *Tobacco Control*, 24(Suppl 1), i22-i30.

<sup>4</sup> Waiziry R, Jawad M, Ballout RA, et al. (2017). The effects of waterpipe tobacco smoking on health outcomes: an updated systematic review and meta-analysis. *International Journal of Epidemiology*, 46(1), 32-43. doi: 10.1093/ije/dyw021.

<sup>5</sup> Cobb CO, Vansickel AR, Blank MD, Jentink K, Travers MJ, & Eissenberg T. (2013). Indoor air quality in Virginia waterpipe cafes. *Tobacco Control*, 22(5), 338-43. doi: 10.1136/tobaccocontrol-2011-050350.

<sup>6</sup> Misek R & Patte C. (2014). Carbon monoxide toxicity after lighting coals at a hookah bar. *Journal of Medical Toxicology*, 10, 295–298. doi: 10.1007/s13181-013-0368-x.

<sup>7</sup> Torrey CM, Moon KA, Williams DAL, Green T, Cohen JE, Navas-Acien A, & Breyse PN. (2015). Waterpipe cafes in Baltimore, Maryland: Carbon monoxide, particulate matter, and nicotine exposure. *Journal of Exposure Science and Environmental Epidemiology*, 25(4), 405-410. <https://doi.org/10.1038/jes.2014.19>.

Apart from the known health effects of waterpipe smoke, the practice of sharing a waterpipe may lead to other health impacts such as the spread of infectious pathogens due to inadequate cleaning of smoking equipment such as hoses and mouthpieces between users.<sup>2</sup> Waterpipe smokers often share a hose/mouthpiece in a communal environment, putting users at risk of contracting viruses and respiratory infections such as meningitis, tuberculosis, hepatitis, herpes, influenza, COVID-19, and oral diseases.<sup>2</sup> Effectiveness of disposable mouthpieces is undetermined and transmission of infectious pathogens may be possible via contamination of the hose or water bowl, which are typically cleaned less often and are more challenging to clean effectively.<sup>2</sup>

### **Prevalence and Usage**

Although prevalence of waterpipe smoking is low compared with other forms of tobacco use, there is a concern with prevalence among youth, leading to future addiction. Past year use for waterpipe smoking in 2019 was approximately 10% for Grade 12 Ontario students, while usage decreases with decreasing age.<sup>12</sup> Appealing fruit and candy flavours, misperception of harms, accessibility, and social use are contributing factors to waterpipe use among youth.<sup>13-16</sup> Peel Region Public Health identified that 72% of

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<sup>8</sup> Zeidan RK, Rachidi S, Awada S, et al. (2014). Carbon monoxide and respiratory symptoms in young adult passive smokers: A pilot study comparing waterpipe to cigarette. *International Journal of Occupational Medicine Environmental Health*, 27, 571–82. doi:10.2478/s13382-014-0246-z

<sup>9</sup> Zhou S, Behrooz L, Weitzman M, et al. (2017). Secondhand hookah smoke: An occupational hazard for hookah bar employees. *Tobacco Control*, 26, 40-45.

<sup>10</sup> U.S. Centers for Disease Control and Prevention. (2021). Hookahs. Atlanta (GA): CDC.

<sup>11</sup> Zhang B, Haji F, Kaufman P, Muir S, & Ferrence R. (2015). 'Enter at your own risk': A multimethod study of air quality and biological measures in Canadian waterpipe cafes. *Tobacco Control*, 24(Suppl 2), 175-181.

<sup>12</sup> Boak A, Elton-Marshall T, Mann RE, & Hamilton HA. (2020). Drug use among Ontario students, 1977-2019: Detailed findings from the Ontario Student Drug Use and Health Survey (OSDUHS). Toronto (ON): Centre for Addiction and Mental Health.

<sup>13</sup> Akl EA, Ward KD, Bteddini D, et al. (2015). *Tobacco Control*, 24, i13–i21.

<sup>14</sup> Arshad, A, Matharoo, J, Arshad, E. et al. (2019). Knowledge, attitudes, and perceptions towards waterpipe tobacco smoking amongst college or university students: A systematic review. *BMC Public Health*, 19, 439. doi:10.1186/s12889-019-6680-x

<sup>15</sup> Health Canada. (2014). Youth Smoking Survey 2012-2013. Ottawa, ON: Health Canada.

<sup>16</sup> Hammal, F, Wild, TC, Nykiforuk, C, Abdullahj, K, Mussie, D, & Finegan, BA. (2016). Waterpipe (hookah) smoking among youth and women in Canada is new, not traditional. [Nicotine & Tobacco Research](#), 18(5), 757-762. doi: 10.1093/ntr/ntv152

<sup>17</sup> Smith J & de Villa E. (2016). Prohibiting waterpipe smoking in specified public areas: Regional report. Mississauga, ON: Peel Regional Council.

<sup>18</sup> Grewal, K. (2022). Waterpipe smoking by-law. Niagara, ON: Niagara Region Council.

waterpipe establishment patrons were between ages 18 and 24 and Niagara Region Public Health found that use of waterpipes was highest among those aged 17 to 24 years.<sup>17, 18</sup> Studies link hookah tobacco smoking to subsequent cigarette smoking.<sup>19</sup> In a 2022 community survey about waterpipe use, Niagara Region Public Health found that 31.3% of survey respondents used waterpipes for cultural reasons.<sup>18</sup> Waterpipes were most commonly used at waterpipe establishments (68.7%), at home (59.6%), or someone else's home (55.6%).<sup>18</sup> When asked about the primary reason for visiting a waterpipe establishment, 'to socialize' (34.5%) was the top reason; for 'food and drink (26.7%)' was second; 'to smoke' (21.6%) was ranked third.<sup>18</sup>

### **Local Context & Enforcement Challenges**

On October 17, 2018, the provincial government enacted the *Smoke-Free Ontario Act* (SFOA) to protect workers and the public from second-hand smoke and vapour. The SFOA prohibits tobacco and cannabis smoking, and the use of vapour products in prescribed places such as enclosed public places, workplaces, restaurants and bars (including within nine metres of patios), as well as prescribed outdoor recreation spaces. Tobacco waterpipe smoking is prohibited in enclosed public spaces and outdoor spaces under the SFOA; however non-tobacco or herbal waterpipe smoking is permitted, due to a gap in the Provincial regulatory framework.

While Hamilton City Council partially closed the gap in 2012 through the introduction of Hamilton's Prohibiting Smoking Within Parks and Recreation Properties By-law that prohibits the use of non-tobacco products, including waterpipes, on outdoor municipal recreation property, such activity continues to be permitted indoors. Enforcement challenges remain for these indoor premises. Ontario Ministry of Health protocol requires Enforcement Officers to obtain samples of shisha at waterpipe establishments for laboratory testing to determine if it contains nicotine (tobacco) before laying charges, which takes a considerable amount of time and is expensive to complete.

In the city of Hamilton, there are approximately ten waterpipe establishments operating at present. Most shisha samples tested since 2018 from Hamilton waterpipe establishments were found to contain nicotine, which is an indicator for tobacco in the product (>80%). Public Health Services (PHS) laid its first charges against a waterpipe establishment in August 2018 under the SFOA, resulting in convictions in June 2019 for a total fine of \$3000. Warnings and charges by PHS, Municipal Law Enforcement (MLE) and Hamilton Police Services have continued since that time at premises found to permit illegal smoking.

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<sup>19</sup> Yu Z, Wang M, Fu J. (2023). [Association between waterpipe use and susceptibility to cigarette smoking among adolescents and young adults who never smoked: A systematic review and meta-analysis](#). *Tobacco Induced Disease*, 21, 29.

### **Legal Issues**

In Ontario, municipalities are granted authority under the *Municipal Act, 2001* to enact by-laws respecting the health, safety and well-being of individuals within its jurisdiction. By-laws prohibiting waterpipe smoking in enclosed public places and workplaces have been challenged in court in Toronto, Peel Region and Vancouver, but have all been upheld.<sup>20-22</sup> This sets a precedent that municipalities have the authority to pass such by-laws and reinforces the validity of such by-laws.

### **Jurisdictional Scan**

Approximately 35 communities in Ontario have created by-laws to prohibit or control the use of (tobacco and non-tobacco herbal) waterpipe smoking within indoor and/or outdoor settings including Barrie, Durham Region, Halton Region, Niagara Region, Orillia, Ottawa, Peel Region, Peterborough and Toronto. In addition, five provinces in Canada regulate waterpipe smoking in public spaces such as Quebec, Alberta, Nova Scotia, New Brunswick and Prince Edward Island. Many jurisdictions across Canada, the United States, and the Middle East have also passed laws prohibiting waterpipe smoking in public places and workplaces.

### **Proposed Consultation in Hamilton**

In order to assess support and determine the scope of restrictions for a proposed waterpipe by-law, a consultation process is proposed with other City departments (Planning and Economic Development), Hamilton Police Services, other Ontario municipalities that have implemented waterpipe by-laws, and with waterpipe establishment owner/operators.

A robust consultation process increases the defensibility of a by-law. In the court challenge to Mississauga's by-law, the Ontario Court of Appeal found the by-law was not enacted in bad faith and spoke positively of the "very diligent and thorough levels of inquiry, research and consultation by the Region prior to the enactment of the subject By-law".<sup>20</sup>

Prior to the proposed consultations PHS will post notice publicly regarding the upcoming consultation through established City of Hamilton procedures, as well as proactively engaging waterpipe establishment owners and operators to determine sources of revenue, expected impacts on business and opinions on waterpipe restrictions. In 2022, Niagara Region Public Health conducted a similar consultation and found that revenue from waterpipe sales ranged from three to 15%, while two of the five establishments did not expect a prohibition to have a significant impact on their business.<sup>18</sup>

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<sup>20</sup> 2386240 Ontario Inc. v. Mississauga (City), 2019 ONCA 413.

<sup>21</sup> 232169 Ontario Inc. (Farouz Sheesha Café) v. Toronto (City).

<sup>22</sup> 2017 ONCA 484; Vancouver (City) v. Abdiannia, 2015 BCSC 1058.

A common concern among businesses is that smoke-free regulations can cause financial loss. However, studies conducted on the economic impacts of smoke-free environments demonstrate that the hospitality industry is not impacted financially by smoke-free regulations.<sup>23-25</sup> The goal is to protect people, including workers and vulnerable populations with respiratory diseases such as asthma, from second-hand smoke exposure.

#### **APPENDICES AND SCHEDULES ATTACHED**

Not Applicable.

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<sup>23</sup> Scollo M, Lal A, Hyland A, et al. (2003). Review of the quality of studies on the economic effects of smoke-free policies on the hospitality industry. *Tobacco Control*, 12,13-20.

<sup>24</sup> Melberg HO, Lund KE. (2012). Do smoke-free laws affect revenues in pubs and restaurants? *European Journal of Health Economics*, 13(1), 93-9. doi: 10.1007/s10198-010-0287-6.

<sup>25</sup> International Agency for Research on Cancer. Evaluating the effectiveness of smoke-free policies. IARC handbooks of cancer prevention: tobacco control. Vol. 13. Lyon, France: World Health Organization, International Agency for Research on Cancer; 2009. Available from: <http://www.iarc.fr/en/publications/pdfs-online/prev/handbook13/handbook13.pdf>.