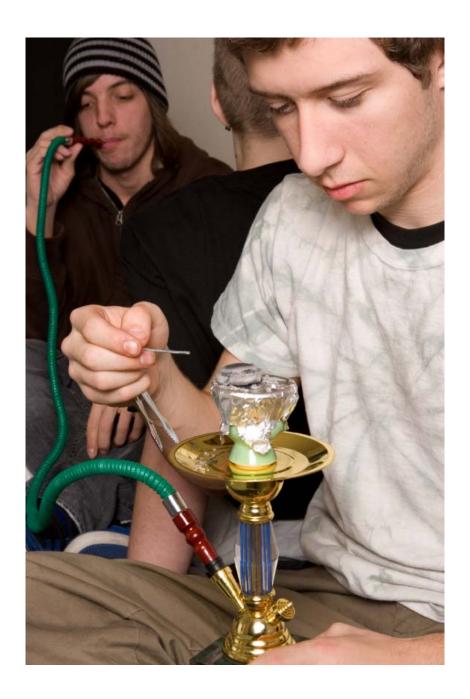
Hooked on Hookah: Issue Analysis and Policy Options for Waterpipe Smoking in Ontario



The Non-Smokers' Rights Association/ Smoking and Health Action Foundation

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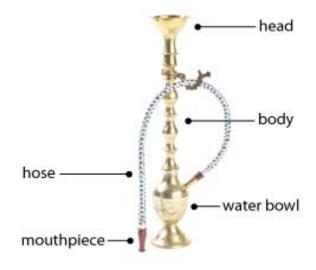
Introduction

Described as a global epidemic¹, the popularity of waterpipe smoking has been steadily increasing since the 1990s. No longer just the domain of older Middle Eastern men, waterpipe smoking is emerging as a chic new trend among young adults from Asia to the Eastern Mediterranean, from North Africa to Western Europe and North America. There are at least 400 hookah lounges or bars in the United States, likely many more, representing a 400% increase since 1999.² At last count there were over 130 hookah bars in Ontario alone, with another 500+ retailers selling combustible waterpipe preparations, also commonly known as shisha.³

Aimed at policy makers, public health advocates and law enforcement officers, this document provides background information on the waterpipe, along with an examination of the various types of shisha available on the Ontario market, a profile of waterpipe users and the reasons for its increasing popularity, the health effects of waterpipe use, and policy options to address this emerging public health issue at the federal, provincial and municipal levels. This document is intended to serve as a starting point for informed discussion among interested parties about the possible ways to curb the waterpipe smoking trend in Ontario.

What is a waterpipe and how does it work?

A typical waterpipe has 4 main components: a head, body, water bowl and one or more hoses. In quantities reportedly ranging from 10-20 grams. shisha (which may or may not contain tobacco) is placed in the head of the pipe and covered with perforated tinfoil. A piece of charcoal is placed on top. Shisha has a high moisture content and thus is not capable of self-sustained combustion, instead requiring the heat of the burning charcoal on top to produce smoke. When the smoker sucks on the hose, a vacuum is created which pulls the smoke down from the head of the waterpipe through the hollow body, where it bubbles up through the water bowl and is cooled before being inhaled.



A typical waterpipe with a single hose.

Thought to have been invented in India some 400 years ago, it is reported that waterpipes have been used by indigenous people of Africa and Asia and have been popular among Middle Eastern men for at least as long. Waterpipe smoking is a tradition found in many countries around the world, which is reflected in the pipe's large variety of names: narghile, nargile or arghile (Middle East), shisha or goza (North Africa), hookah or hukka (South Africa and Indian sub-continent) and hubble bubble (many regions). Hookah is one of the most common names used in North America and will be used interchangeably with waterpipe in this document.

What exactly is in shisha?

It is difficult to know what ingredients are in shisha for two reasons. At retail there is poor labelling of both manufactured tobacco shisha and manufactured "herbal" shisha. The lack of clarity regarding the ingredients in shisha is further compounded by the practice of many hookah cafes whereby they manually prepare non-standardized shisha mixtures on-site.

Tobacco shisha, known as *maassel*, *mo'assel* or *mu'essel* (literally meaning "honeyed"), is a moist mixture of tobacco, preservatives and flavourings held together with molasses or honey. It has been reported that the composition of manufactured tobacco shisha is variable and not well standardized. Anecdotally, tobacco shisha seems to be comprised of a mixture of 5% to 30% tobacco and 70% to 95% honey or molasses, but this is not necessarily reflected in the order of ingredients listed on packaged tobacco shisha available at retail.

There also seems to be significant variability regarding the nicotine content in tobacco shisha. Although not mentioned anywhere in the literature, it appears that there are two types of tobacco shisha: washed and unwashed. Online conversations posted to such websites as www.hookahpro.com, www.hookahforum.com suggest that washed variants of tobacco shisha have less nicotine content (0.05%) than unwashed varieties (0.5%). However, a brief examination of information posted on websites of tobacco shisha manufacturers themselves offer no insight into these anecdotes, and the tobacco packaging itself cannot be relied upon for consumer information. Online conversations between users posted to the websites listed above may reflect consumers' lack of awareness about nicotine content: comments about vomiting, "bad buzzes" and "hookah hangovers" are common.

The contents of "herbal" shisha are even less clear, although it appears that honey and molasses are used in quantity to bind mixtures together. Ingredient lists on packages are generally sparse with non-specific descriptors such as "herbs," flavourings and preservatives.



This tin of cola flavoured "herbal" shisha lists herbs, honey, molasses, glycerin, preservatives and natural flavouring as its ingredients.

One brand lists sugar cane bagasse, the fibrous byproduct of sugar production, as the primary ingredient in its "herbal hukka" product. One tobacco enforcement officer (TEO) has reported that some hookah bar proprietors are actually adding liquid nicotine, also known as "e-liquid" or "e-juice" to "herbal" shisha, making it extremely addictive. Flavoured e-liquid can be purchased online from a number of different manufacturers, appears to be available in a range of nicotine concentrations, and comes in quantities ranging from 10 ml to 5 L.

E-liquid is also available in dozens of flavours that can be smoked in either an "e-hookah," (full size electronic waterpipe)¹¹ or a portable e-hookah which is essentially an e-cigarette.¹² Information on one manufacturer's website reads:

We do not recommend these levels [28 mg and 36 mg] becuase [sic] the flavor will change by higher nicotine contents, also Nicotine overdose cause [sic] a handful of nasty symptoms.... E-liquid are [sic] made from only USP (food) graded ingredients with the extraction and purification technology to produce non-synthetic e-liquid processed from tobacco leaves. It is more natural and healthy....¹³

Who is smoking hookah pipes and why?

Waterpipe smoking is emerging as a chic new trend among young adults worldwide, including Canada. In a recent survey, 23% of young Canadians aged 18-24 reported smoking a waterpipe in the previous year. ¹⁴ Data from the 2006 Canadian Youth Smoking Survey indicate that 7% of Canadian adolescents in grades 7-12 (ages 13-18) have ever tried smoking a waterpipe, and 3% of them claim to have done so in the previous 30 days. ¹⁵ Prevalence rates from other surveys suggest that waterpipe smoking can range from 6 to 34% among Middle Eastern adolescents, 5 to 17% among American adolescents and 10 to 20% among American university students. ^{16,17,18} Findings from various other surveys suggest that cigarette smoking and use of other drugs such as alcohol or marijuana are risk factors for being a regular waterpipe smoker. ^{19,20,21,22}

A number of reasons stand out as to why waterpipe smoking is an increasingly popular phenomenon among young people: flavourings, misperceptions about harm, relative ease of access and appeal of the social interaction that accompanies its use.

1. Flavourings

With fruit, candy and alcohol flavours such as grape, orange, double apple, cola, bubble gum, cappuccino, marguerita and piña colada, waterpipe smoking is rapidly gaining popularity. Shisha has a high sugar content which, when mixed with flavourings, makes the smoke extremely aromatic. Due to a lower combustion temperature and the fact that it passes through water before being inhaled, hookah smoke is both



Cappuccino flavoured tobacco shisha

cooler and moister than cigarette smoke. The result is a smoke that both smells and tastes good and has a smoothness that is easily tolerated—masking the tobacco taste and softening the smoking experience for beginners.

2. Misperceptions about harm

There is a widespread perception that smoking tobacco in a waterpipe is less harmful and less addictive than cigarette smoking—because hookah smoke travels through water, the harmful constituents are believed to be filtered out before being inhaled. ^{23,24,25,26} The cooling and moisturizing effect of the water makes the smoke less irritating, confirming the belief that waterpipe is a relatively benign method of smoking. These misperceptions both encourage people to try smoking a waterpipe and reduce concerns about limiting use or quitting smoking altogether. In addition, given that a sizeable minority of smokers believe that nicotine itself causes most of the cancer associated with smoking, ²⁷ it is reasonable to hypothesize that nicotine-free "herbal" shisha is viewed by some as a "healthier" smoking option.

3. Relative ease of access

Hookah bars and lounges offer an alternative to young people who may not be old enough to gain access to bars and nightclubs. Typically priced from \$12 - \$15 per session, a group of young people can easily split the cost of renting a hookah pipe, which makes for an inexpensive way to hang out with friends. It is doubtful that identification to confirm legal age to be sold tobacco is scrupulously checked, and likely not checked at all when "tobacco-free" shisha is served.

4. Social nature of smoking a waterpipe

It is not easy to smoke a waterpipe quickly. Indeed, part of the attraction of smoking a hookah is the opportunity to gather with friends and socialize. In these circumstances, it is common for people to smoke for an hour or longer, passing the hose(s) back and forth. When asked about smoking a waterpipe



Young adults socializing and sharing a hookah pipe

versus a cigarette, young people agreed that a waterpipe offered a pleasurable experience—an opportunity to spend time and relax with friends. In contrast, these same survey respondents indicated that smoking cigarettes was considered a mundane, anxiety-relieving addiction.²⁸

What are the health effects of smoking a waterpipe?

There is a widespread misbelief that smoking a waterpipe is less harmful and less addictive than smoking cigarettes. However, emerging science on the health effects of waterpipe smoking paints a different picture. Much of the misperception about hookah pipes comes from the belief that the water filters nicotine and harmful substances from the smoke. A recent review of half a dozen studies on the filtering capability of hookahs has found that daily waterpipe use results in nicotine absorption of a magnitude similar to that of smoking 10 cigarettes per day. For non-daily use, a single session of waterpipe smoking was equivalent to smoking 2 cigarettes.²⁹ However, the study acknowledged that a number of contributing factors result in variation of nicotine absorption including type of tobacco, burn temperature, waterpipe design, individual smoking behaviour ("titration") and duration of smoking time.

Regardless, these numbers are significantly lower than the 100 or more cigarette equivalent published by the World Health Organization's Study Group on Tobacco Product Regulation in 2005. However, a critique of WHO's methods, published in the *Journal of Negative Results in BioMedicine* the following year, emphasized that the WHO had relied on methodologically flawed studies which did not accurately reflect human hookah smoking behaviour. For example, if the coal used to heat the tobacco is kept in the same place over the tobacco shisha during an entire smoking session, which is not representative of reality, the tobacco will char and tar readings will be inflated. Also, it has been pointed out that the use of an average puffing pattern figure to determine tar, nicotine and carbon monoxide does not represent the variable puffing observed within a group of smokers over the period of an hour or longer.³¹

The variability of nicotine content in tobacco shisha as mentioned earlier is illustrated in a 2004 study. The study tested 11 different brands of commercially available tobacco shisha and found that the nicotine content ranged from 1.8 mg/g to 6.3 mg/g with the average being 3.35 mg/g. 32 Ten to twenty grams of tobacco shisha are typically smoked in one waterpipe session, so this translates into roughly 33.5 – 67 mg of nicotine. Thus, waterpipe smoking appears to present substantial risk with respect to initiating and maintaining a nicotine addiction.

The World Health Organization has reported that a typical hookah session lasts 20-80 minutes, with smokers taking up to 200 puffs. This is in contrast to the 5-7 minutes and 8-12 puffs taken for a cigarette. However, given the criticism of the research methodology used to inform WHO, caution in interpretation is warranted. Since WHO's report in 2005, more studies have been undertaken to examine the differences between waterpipe and cigarette smoking. One such study observed, per person, a 56-fold greater volume of inhaled smoke and a 3.75-fold greater COHb (carboxyhemoglobin, or carbon monoxide in the blood) from a single waterpipe session compared to a single cigarette. The authors stated that this finding confirms their conclusions from a similar, earlier study. 34

Other studies looking into the toxicants of waterpipe smoke have reported that it likely contains many of the chemicals that are associated with the elevated incidences of cancer, cardiovascular disease and addiction of cigarette smokers. The Ontario Tobacco Research Unit has examined the evidence and concludes that waterpipe smoke is at least as toxic as cigarette smoke. One recent study on the toxicity of waterpipe smoke concluded that it seems to contain more chemicals linked to DNA mutations and cancer than cigarette smoke. A review of the literature on health outcomes indicates that waterpipe tobacco smoking is significantly associated with lung cancer, respiratory illness, low birth weight and periodontal disease. However, the review also pointed to the overall low quality of evidence on which these conclusions were drawn. It is not yet possible to draw concrete conclusions regarding health effects, as many waterpipe smokers also smoke cigarettes—making it difficult to differentiate the health effects of one from the other.

There is currently no body of evidence addressing the health effects of smoking "herbal" shisha. However, it is widely known that the combustion of any vegetable matter produces byproducts including particulate matter and carbon monoxide which are harmful to human health. Clearly, more and better research is needed regarding the health effects of smoking shisha.

An Emerging Public Health Issue

The widespread availability of shisha at retail and the emergence of hookah bars across Ontario are a serious cause for concern. Public health efforts in recent decades to drive down cigarette smoking rates have met with slow but steady success. However, the arrival of hookah smoking, among other things, is threatening to stall progress. This emerging public health issue is problematic for a number of reasons:

Youth smoking rates

With mouth-watering flavours, exotic appeal and widespread misperception about the health effects of its use, the waterpipe is a new form of smoking that is very attractive to young people. Although the current smoking rate for all Canadians aged 15 years and older now stands at 18%, the smoking rate among 20-24 year olds is significantly higher at 23%. Anecdotal reports suggest that hookah bars and cafes are springing up in cities where universities and colleges are situated. 40

Research published in the journal Pediatrics states that adolescent smokers often mix tobacco shisha with marijuana or hashish, and many replace the water in the pipe with alcoholic beverages.41 A more recent study published in 2008 found that as many as 36% of American tobacco shisha smokers may also use marijuana. 42 Also concerning is the possibility that young people may be smoking drugs such as Spice⁴³ with tobacco at hookah lounges, as was recently reported in Norfolk, Virginia.44 Mixing tobacco with drugs is never a good idea, given the risk of developing a long-term addiction to tobacco via drug experimentation.

Exposure to second-hand smoke

The Smoke-Free Ontario Act (SFOA) pertains only to tobacco—currently the smoking of other weeds or substances is beyond its jurisdiction. It is increasingly common at hookah bars for proprietors to remove tobacco



A hookah bar advertisement, Toronto, 2010

shisha from its original packaging and store it in unlabelled plastic containers.⁴⁵

Claiming the shisha is "herbal" and does not contain any tobacco, proprietors are circumventing the *SFOA* and allowing customers to smoke indoors. The combustion of any vegetable matter produces byproducts, including particulate matter and carbon monoxide, that are harmful to human health. ^{46,47} Permitting smoking in enclosed public places is also confusing to the public and undermines efforts to enforce the *SFOA*.

Transmission of communicable diseases

It is common practice for two or more people to share a single hookah pipe, which may have one hose for each smoker or, more likely, one or two hoses for the group. There are currently no public health requirements in Ontario for hookah lounges to properly clean and disinfect hoses between smoking sessions. The sharing of hoses and the lack of disinfecting pose risks for the transmission of communicable diseases such as tuberculosis, hepatitis, influenza, etc. News of a recent case of meningitis that led to the death of a 17 year old girl from Hamilton stated that she had spent time at a hookah bar hours before her death. The risk of disease transmission through sharing a waterpipe needs to be taken seriously.⁴⁸

Violation of package labeling and tax laws

There are numerous types of shisha on the market, both tobacco and "herbal," that do not meet various federal and provincial regulations. Violations include a lack of information for consumers regarding ingredients and nicotine content, no or improper health warnings, and failure to pay federal and provincial tobacco taxes. A convenience sample of eleven different shisha products (both "herbal" and tobacco) purchased at retail in Ottawa in 2010 illustrates the problems noted above. Six of the packages contain tobacco. One package claims to have a nicotine content of 0.05% and the other four boxes have no information whatsoever regarding nicotine content. 51,52,53,54 Chemical analysis by the Royal Canadian Mounted Police of the brand "Massoul" shisha revealed that the product contains



tobacco, contrary to its labeling.⁵⁵ This is both a consumer safety issue as well as a tax evasion problem.

This tub of grape flavoured tobacco shisha (left) came packaged inside a cellophane-wrapped box—with no information on the outside packaging regarding nicotine content and without a proper health warning.

None of the tobacco products purchased displays appropriate health warnings as required by the *Tobacco Act*, and none has proper tax stamps as required by the *Excise Act*, 2001. Many of the boxes advertise that the tobacco products are "tarfree" which is misleading, as tar is a byproduct of combustion—even unsmoked cigarettes do not contain tar! Finally, some of the boxes of tobacco have no net weight indicated, and others lack ingredient lists.

The packaging of "herbal" shisha is no better. One brand, *Soex*, lists "ugarsay anecay agassebay" among its ingredients, which is Pig Latin for sugar cane bagasse—a fibrous byproduct of sugar cane production.⁵⁶ Another brand, *Hydro Herbal*, lists only cane molasses, glycerin, honey and artificial flavour as its ingredients. However, upon inspection of the product, it is clear that there is also an abundance of a fibrous material that is not included on the ingredients list.



"Ugarsay anecay agassebay" is listed among the ingredients of this "herbal" shisha product (left)—Pig Latin for sugar cane bagasse.

Text on the back of the *Hydro Herbal* box reads, "An array of organic herbs secretly hidden for centuries across the Eastern seas has now been unlocked and unleashed and brought to the Western world exclusively by HYDRO Herbal." These "herbs," omitted from the ingredients list, look suspiciously similar to "ugarsay anecay agassebay." Claims of "tar-free" product were also very common among the "herbal" shisha packages examined.

Legislative Framework and Policy Options

As discussed earlier, there are two separate issues that require attention with respect to waterpipe smoking. First, there are consumer products available at retail with extremely poor labeling, making it difficult to determine what they contain, such as tobacco and/or nicotine. Second, an increasing number of public places across Ontario permit the smoking of shisha indoors. There are several possible approaches and policy options to address the hookah problem at all levels of government. The first set of approaches listed below involves enforcing existing laws, some of which will require federal and provincial cooperation. Other options presented will require legislative or regulatory amendments. Where possible, examples of various approaches being used in other jurisdictions to address waterpipe smoking illustrate these points.

Enforcement of current laws

1. Smoke-Free Ontario Act (SFOA): section 5 (Packaging, Health Warnings and Signs) and section 9 (Controls Relating to Smoking Tobacco)

Section 5 of the *Smoke-Free Ontario Act* defers to the federal *Tobacco Act* for packaging requirements—health warnings and health information displayed in English and French. However, there is no definition of pipe tobacco in either the *SFOA*, the federal *Tobacco Act* or the *Tobacco Products Information Regulations (TPIR)* that pertains to packaging requirements. As a result, some TEOs believe that it is not possible to lay charges under section 5 with respect to tobacco shisha. This is not true. The Region of Waterloo laid a charge under section 5 and successfully argued in court that pipe tobacco is pipe tobacco, regardless of whether it is smoked in a conventional pipe or a waterpipe.⁵⁸ If a TEO is confident that the shisha in question contains tobacco, the proprietor can be charged under section 5 with a lack of a proper health warning and/or improperly packaged tobacco (in the case of tobacco shisha being stored in plastic containers at hookah bars).

Similarly, if a TEO is confident that the shisha in question contains tobacco, section 9 can also be enforced regarding the smoking of tobacco in a public place or workplace. However, because of the confusion regarding the enforceability of section 5, clarification and co-operation from Health Canada on this point is needed to support and improve provincial enforcement efforts.

2. Tobacco Tax Act (Ontario)

Provincial tobacco tax applies to all tobacco products sold in Ontario, including waterpipe tobacco. ⁵⁹ Under the *Tobacco Tax Act*, all tobacco retailers and wholesalers must hold retailer and wholesaler permits, which must be registered with the Ministry of Revenue (MOR). Section 2 of the Act states that every consumer (a person who purchases or receives delivery of tobacco) shall pay 11.1 cents on every gram/part gram of tobacco. This provision is enforced through inspections by the MOR. Businesses must be able to prove with invoices and receipts that all taxes have been paid. Note that at present it is only cigarettes that must have Ontario's yellow tear tape and "ON" printed on packages.

The geographic area that must be covered by MOR inspectors is much greater than that for TEOs enforcing the *SFOA*. However, MOR inspectors have the power to search and seize, which TEOs do not. Hence, there are definite benefits to MOR inspectors and TEOs working cooperatively to maximize enforcement efforts and successfully lay charges. For example, municipalities such as the Region of Waterloo, Hamilton and Ottawa have started conducting joint inspections.

3. Ontario Health Promotion and Protection Act (HPPA), Part 3 (Community Health Protection)

The *Health Promotion and Protection Act* provides for the organization and delivery of public health programs and services, the prevention of the spread of disease and the promotion and protection of the health of the people of Ontario. Under Part 3, Section 10 of the *HPPA* requires Medical Officers of Health (MOH) to prevent, eliminate and decrease recognized health hazards in the community. Section 13 enables an MOH to make orders in response to health hazards.

Enforcement of the *HPPA* could be used to reduce the risk of communicable disease transmission in public places where hookah pipe hoses are shared between patrons during smoking sessions, and where the hoses may not be properly cleaned between different groups of customers. The City of Ottawa's public health department has started a public education campaign to this effect, stating that hookah smokers are at increased risk of hepatitis, tuberculosis and influenza. ⁶⁰ An MOH's order could require a protocol for cleaning and disinfecting the hookah hoses, or a separate mouthpiece for each smoking customer. In addition, an order could require a protocol for the storage, handling and preparation of shisha. Obviously this approach requires an MOH who is willing to champion the issue. Data needs to be collected that can demonstrate the risk of communicable diseases posed by sharing a hookah pipe. However, perhaps all that is needed are a few more well-publicized scares, such as the meningitis case from Hamilton mentioned earlier.

In 2003, when Ontario did not yet have comprehensive smoke-free legislation, Dr. Pete Sarsfield, the Medical Officer of Health (MOH) in Northwestern Ontario, declared exposure to second-hand tobacco smoke a health hazard. Citing section 13 of the *HPPA*, he ordered the prohibition of smoking in public places and workplaces in Northwestern Ontario. Dr. Sarsfield was challenged at the Health Services Appeal and Review Board and was ultimately not successful. Thus it is questionable whether the *HPPA* would be of any use to control exposure to second-hand shisha smoke.

4. Federal Tobacco Act and Tobacco Products Information Regulations (sections 3, 4, 5, 6 & 7)

The *Tobacco Act* regulates the manufacture, sale, labeling and promotion of tobacco products in Canada. Although tobacco shisha falls under the *Act*'s broad definition of a tobacco product, it is not mentioned explicitly in either the *Act* or the regulations. With respect to health warning requirements, the regulations indicate that Part 3 (Labeling) of the *Act* applies to pipe tobacco. However, the absence of a definition of pipe tobacco in either the *Act* or the regulations has left people wondering if they apply to tobacco shisha.

Health Canada should enforce this law, clearly communicating to stakeholders that waterpipe tobacco is recognized as pipe tobacco. Enforcement could focus on lack of proper health warnings and required consumer information in English and French on the packaging. Clarification and co-operation from Health Canada on these points will also improve provincial enforcement efforts, as the *SFOA* defers to the federal *Act* and its regulations for health warnings and package labeling requirements. Confusion on the part of TEOs regarding the applicability of the *Act* to tobacco shisha translates into missed opportunities for enforcement.

5. Federal Excise Act, 2001 and Stamping and Marking of Tobacco Products Regulations (sections 3 & 4)

This federal law deals with the taxation of tobacco and other products like wine and spirits. Under the *Excise Act, 2001*, it is unlawful to sell, offer for sale or have in one's possession a tobacco product unless it is properly stamped. Section 4(1) of the regulations states that tobacco products shall be stamped in a conspicuous place and in a manner that seals the package. Section 4(1)(c) further states that, in the case of a package of manufactured tobacco other than cigarettes or tobacco sticks, a stamp must meet the requirements under Schedule 3, including specific wording in English and French, and with specific text colour, font style and size.

Section 33(b) of the *Act* prohibits the sale of manufactured tobacco other than in its original packaging, and section 35 requires prescribed information be printed on packages of imported tobacco products before they are released under the *Customs Act* for entry into the duty-paid market.

The Canada Revenue Agency is responsible for enforcement of the *Excise Act*, and more could be done in terms of federal-provincial cooperation to crack down on tobacco that is being imported into Canada with either no or improper tax stamps.

6. Federal Consumer Packaging and Labeling Act (sections 4, 6 & 7)

This federal law deals with the packaging, labeling, sale, importation and advertising of prepackaged consumer products, which includes "herbal" shisha. Many of these products have dubious labeling as well as misleading claims such as "tar free." Enforcement of this *Act*, which is the responsibility of Industry Canada, could focus on mandatory bilingual labeling of ingredient lists (Pig Latin is not one of Canada's two official languages) and declaration of net quantity, along with prohibition of false or misleading representations such as "tar free."

Amend existing laws and regulations or create bylaws

1. Ban flavoured tobacco shisha (Smoke-Free Ontario Act, Tobacco Act)

Under section 6.1(2) of the *Smoke-Free Ontario Act*, "No person shall sell or offer to sell a flavoured tobacco product that has been prescribed as prohibited at retail or for subsequent sale at retail or distribute or offer to distribute it for that purpose." A relatively quick and easy policy option would be to amend the regulations to add flavoured tobacco shisha to the list of prescribed tobacco products, effectively banning it in Ontario. This option is recommended in Ontario's Tobacco Strategy Advisory Group (TSAG) report. The *SFOA* would not need to be opened up, and although this regulatory amendment would not address the "herbal" shisha issue, it would definitely put a significant dent in youth tobacco smoking activity.

Flavoured tobacco shisha could also be banned at the federal level via a regulatory amendment. Section 7.1(1) of the *Tobacco Act* enables the Governor in Council to amend the schedule by adding the name or description of a tobacco product.

2. Broaden the definition of smoking to include other weeds or substances (Smoke-Free Ontario Act, municipal smoke-free bylaws enabled via the Ontario Municipal Act, 2001)

The *Smoke-Free Ontario Act* currently prohibits the smoking of "lighted tobacco" in enclosed workplaces and public places. Although not as straightforward as a regulatory amendment, the *SFOA* could be opened up to extend the ban on smoking tobacco to include other weeds or substances. It may also be prudent to include the *heating* of tobacco and other substances in addition to the lighting of; anecdotally it has been suggested that current laws to not apply to hookah pipes because the shisha is indirectly heated instead of directly combusted. A broad definition of smoking would protect public health by preventing employees and patrons from being exposed to second-hand smoke of any kind. It would also improve enforcement efforts, as TEOs currently cannot lay charges unless they can prove that tobacco is being smoked.

For example, both Illinois and New Jersey have state laws with a broad definition of smoking. The New Jersey Smoke-Free Air Act (2006) states: "Smoking means the burning of, inhaling from, exhaling the smoke from, or the possession of a lighted cigar, cigarette, pipe or any other matter or substance which contains tobacco or any other matter that can be smoked..." ⁶²

Alternatively, if municipalities in Ontario do not wish to wait for the province to act, sections 10 and 11 of the Ontario *Municipal Act, 2001* give them the authority to pass bylaws respecting the "health, safety and well-being of persons." This arguably includes prohibiting the smoking of other weeds or

substances in public places and workplaces. Section 115 of this *Act* specifically enables municipalities to pass smoke-free tobacco bylaws, but there is no reason why a municipality could not evoke section 10 or 11 to address waterpipe smoking of "herbal" substances.

There are now at least 12 municipalities in British Columbia that have enacted smoke-free bylaws containing a more comprehensive definition of smoking. The City of Vancouver's bylaw #9535 is a good example—smoking is defined as "to inhale, exhale, burn, or carry a lighted cigarette, cigar, pipe, hookah pipe, or other lighted smoking equipment that burns tobacco or other weed or substance." The Local Government Act, Part 15, Division 4 (health protection authority) enables municipalities in BC to pass bylaws in the interest of public health—and Vancouver has rightly recognized that people should not be exposed to any kind of second-hand smoke in public places and workplaces.

3. Ban the sale of tobacco products in restaurants and bars (SFOA)

Currently, the *Smoke-Free Ontario Act* prohibits the sale of tobacco products in such places as hospitals, pharmacies and nursing homes. However, despite being a lethal consumer product, tobacco is still widely available for sale in not just gas stations and corner stores, but also bars and restaurants and other public places. Section 4(2), paragraph 10 of the *Act* prohibits the sale of tobacco in places that belong to a prescribed class. Bars, restaurants and hookah lounges could be added to the list of prescribed places via a regulatory amendment. Banning the sale of tobacco shisha in establishments that permit waterpipe smoking would help reduce consumption of shisha containing tobacco if the penalty were high enough to serve as a deterrent.

4. Implement licensing requirements

The *Ontario Municipal Act, 2001* gives municipalities powers and duties with respect to matters under their own jurisdiction for the purpose of providing good government. Section 151 gives municipalities licensing powers—they can impose conditions related to obtaining, continuing to hold or renewing a licence. Currently, not all Ontario municipalities require a licence to sell tobacco. Licensing facilitates enforcement by identifying the locations that sell tobacco products and enables a municipality to recover enforcement costs. Other potential benefits of expensive licences include fewer retail outlets that can afford to sell tobacco and greater vigilance on the part of retailers to avoid selling to minors—because the privilege of selling tobacco is more valuable. For example, the City of Ottawa charges \$360 per year for such a licence, making it the most expensive example of its kind in Ontario. Other municipalities that require relatively-expensive vendor licences include Markham (\$311), Richmond Hill (\$275) and Barrie (\$220).

Vendor licensing is a relatively easy and attractive option to help municipalities control the sale of tobacco in any form. To address the waterpipe problem, municipalities should consider requiring a vendor licence to sell *any* consumer product intended for smoking. This would help simplify enforcement of various provisions related to storage, labeling and sale of tobacco and herbal shisha. There are always new and creative products being introduced on the market—some designed specifically to take advantage of regulatory loopholes. One such example is "herbal" shisha with e-juice (pure nicotine) added, which is extremely addictive but arguably not a tobacco product.

In addition to requiring a licence to sell tobacco or other products intended for smoking, a municipality could also require a hookah licence for public places that wish to permit waterpipe smoking on their premises. As the *SFOA* already prohibits the smoking of tobacco in public places and workplaces, a municipal hookah licence would pertain to the smoking of other weeds or substances including "herbal" shisha. Although some people might claim that the optics of licensing hookah lounges are bad (the municipality might be perceived as condoning them), there are definite benefits to this approach.

Tobacco vendor and hookah licences could:

- Be expensive and require annual renewal;
- Prohibit new hookah bars from opening after a certain date (only hookah bars currently in business up to a certain date would be eligible to apply);
- Prohibit public places from holding a liquor or food service licence in addition to a hookah licence;
- Require health warnings on the sides of hookah pipes;
- Require separate hoses for each patron and a protocol for cleaning and disinfection; and
- Require standards for the storing and preparation of shisha.

Examples of jurisdictions in the United States that require a special hookah permit include the states of Iowa, Michigan and Maine, and the cities of Chicago and Anaheim. However, all of these jurisdictions have a definition of smoking that is limited to tobacco—it remains to be seen if the apparent or actual smoking of other weeds and substances is emerging as a problem like it is in Ontario. The licensing option appears to hold real merit and offers potential for municipalities to take local action on waterpipe smoking in the face of provincial inaction. Further examination of this option is definitely needed.

5. Require a minimum package size for pipe tobacco and prohibit the sale of single use shisha in public places (Smoke-Free Ontario Act, Tobacco Act)

Although perhaps not as hard-hitting as some of the other policy options already presented, a regulation requiring a minimum package size for pipe tobacco would help to reduce youth access at retail. However, this option would have to be accompanied by formal recognition of tobacco shisha as pipe tobacco. For example, a 50 gram box of tobacco shisha presently ranges in price from \$3.00 to \$11.00. If tobacco shisha were only available in 250 gram packages, the minimum price should be approximately \$65⁶⁶, which would be cost prohibitive for many young people.

As well, these laws could be amended to prohibit the sale of single use tobacco shisha in public places.

Conclusions

Waterpipe smoking is a popular new trend among young people that has arrived in Ontario. There are hookah cafes and lounges appearing across the province, many of them situated in towns and cities with a university or college. Smoking rates among young adults are already too high, and the attraction of smoking exotic flavoured shisha, coupled with the belief that it is relatively benign, can only force smoking rates even higher. As well, there are currently no public health requirements for hookah bars, despite the fact that sharing hoses poses a real risk of transmitting communicable diseases.

Employees and patrons at hookah bars are being exposed to second-hand smoke which is damaging to public health. Smoking in public places also undermines efforts to enforce the *SFOA*, as well as generally erodes public confidence in the rule of law. In addition, poorly labeled shisha products are widely available at retail. These consumer products, which lack required health warnings, tax stamps, ingredient lists and other information such as nicotine content, leave Ontarians totally in the dark regarding product safety. The lack of appropriate/required tax stamps likewise leaves governments short on entitled revenues.

There are several promising policy options to address this emerging public health issue. Public health advocates, policy makers, enforcement officers and other stakeholders at all levels of government need to come together to examine possible options and determine the optimum course to pursue. Urgent action is required to halt the rapid spread of waterpipe smoking and thus to protect the health of our young people.

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