

WATERPIPE SMOKING IN CANADA: NEW TREND, OLD TRADITION



Non-Smokers' Rights Association

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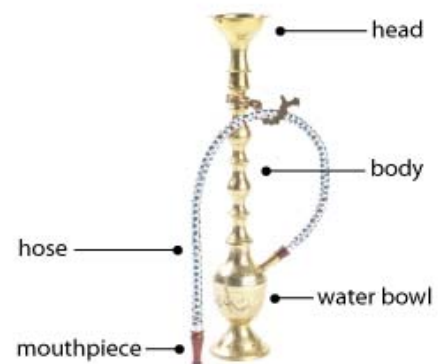
Introduction

Described as a global epidemic,¹ 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. Research on hookah websites suggests there are now over 700 hookah establishments in the United States,² and Toronto Public Health estimates there are about 200 premises offering hookah smoking in Toronto alone. Anecdotally, they are popping up in Canadian towns and cities from coast to coast, with approximately 2 in Victoria, 1 in Kamloops, 10 in Edmonton, 10 in Calgary, 1 in Regina, 20 in Ottawa, 10 in Montreal, 2 in St. John, 2 in Halifax, etc.³ Jurisdictions including Quebec and a number of municipalities around the country have passed laws that directly or indirectly address hookah smoking; for them, the issue has become one of enforcement. For most other jurisdictions in Canada, policy makers are only just now starting to look at the issue and weigh their options.

This document provides background information on waterpipe smoking, along with an examination of the various types of shisha (combustible waterpipe preparations) available on the 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 Canada.

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



A typical waterpipe with a single hose

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.

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.^{4,5} 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).^{6,7} 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 establishments 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.⁸ 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.hookahreviews.net and 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 manufacturers' websites offers no insight into these anecdotes, and the tobacco packaging itself cannot be relied upon for consumer information. In fact, recently published research concludes that nicotine content labelling is not related to actual nicotine delivery. The testing of three different brands of tobacco shisha demonstrated that smoking a product with a label reading "0.05% nicotine" led to greater blood plasma nicotine levels than smoking a brand with a "0.5% nicotine" label.⁹ 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. Anecdotally, tobacco enforcement officers in southern Ontario have reported that some proprietors are actually adding liquid nicotine, also known as "e-liquid" or "e-juice" to "herbal" shisha, making it extremely addictive.¹⁰ Flavoured e-liquid can be purchased online from a number of different manufacturers,¹¹ and appears to be available in a variety of concentrations and volumes.

(full size electronic waterpipe)¹² or a portable e-hookah, which is essentially an e-cigarette.¹³ Tobacco enforcement officers have recently noted the availability of e-hookahs at retail in Toronto. Information about e-juice on one manufacturer's website reads:

E-liquid is also available in dozens of flavours that can be smoked in either an "e-hookah"

Dekang E-liquid is extracted from high quality tobacco leaves. It is more natural and healthy. Our products have the authentication of CE, ROHS, SGS, TUV, GMP, Non-toxic and clinical testing report. All flavors can be made with or without nicotine. Nicotine strength can be tailored. Above taste can be made with or without PROPYLENE GLYCOL. Customized flavors available as per clients requirement.¹⁴

Who is smoking hookah pipes and why?

With mouth-watering flavours, exotic appeal and widespread misperception about its health effects, waterpipe smoking is emerging as a chic new trend among young adults worldwide, including Canada. This is a concern, given that the cigarette smoking rate among 20-24 year olds is significantly higher than the national average (22% vs 17%)¹⁵ and has flatlined in the past 5 years.¹⁶

One survey found that 23% of young adults in Montreal ages 18-24 reported smoking a waterpipe in the previous year.¹⁷ Data from the 2006 Canadian Youth Smoking Survey indicate that 7% of Canadian adolescents in grades 7-12 (ages 13-18) have tried smoking a waterpipe, and 3% of them claim to have done so in the previous 30 days.¹⁸ 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.^{19,20,21} In fact, a recent web-based survey of 3,770 college students from 8 universities in North Carolina found that 40% of students reported ever having smoked tobacco from a waterpipe, and 17% reported use in the past 30 days.²²

Findings from various surveys suggest that cigarette smoking and use of other drugs such as alcohol or marijuana are risk factors for being a regular waterpipe smoker.^{23,24,25,26} Research published in the journal *Pediatrics* states that adolescent smokers often mix tobacco shisha with marijuana or hashish, and some replace the water in the pipe with alcohol.²⁷ A more recent study published in 2008 found that as many as 36% of American tobacco shisha smokers may also use marijuana.²⁸ Also a concern is the possibility that young people may be smoking drugs such as Spice²⁹ with tobacco at hookah lounges, as has been reported in Norfolk, Virginia.³⁰ In January 2011 Calgary police made their first seizure of synthetic marijuana at 7 head shops across the city.³¹ Mixing tobacco with drugs is never a good idea, given the risk of developing a long-term addiction to tobacco via drug experimentation.



A hookah bar advertisement, Toronto, 2010

1. Flavourings

With fruit, candy and alcohol flavours such as grape, orange, double apple, cola, bubble gum, cappuccino, margarita and piña colada, waterpipe smoking is rapidly



Cappuccino flavoured tobacco shisha

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 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.^{32,33,34,35} 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,³⁶ 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 establishments offer an alternative to young people who may not be old enough to gain access to bars and nightclubs. At a recent provincial meeting in Ontario, tobacco enforcement officers noted that the average age of customers frequenting hookah cafes is 15 years. Typically priced from \$12 to \$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 proprietors are scrupulous in checking identification to confirm that the patrons are of legal age to be sold tobacco; identification is likely not checked at all when “herbal” 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 hookah smoking 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



Young adults socializing and sharing a hookah pipe

about smoking a waterpipe 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.³⁷

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 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 found to be equivalent to smoking 2 cigarettes.³⁸ However, the study acknowledged that a number of factors results 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 2005.³⁹ 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 charcoal 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.⁴⁰

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.⁴¹ Ten to twenty grams of tobacco shisha are typically smoked in one waterpipe session, which 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 each. This is in contrast to

the 5-7 minutes and 8-12 puffs to smoke a cigarette.⁴² However, given the criticism of the research methodology used to inform the WHO, caution in interpretation is warranted. Since the 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 level of carbon monoxide in the blood (COHb or carboxyhemoglobin) from a single waterpipe session compared to a single cigarette. The authors stated that this finding confirms their conclusions from a similar, earlier study.⁴³

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.⁴⁴ The Ontario Tobacco Research Unit has examined the evidence and concludes that waterpipe tobacco smoke is at least as toxic as cigarette smoke.⁴⁵ 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.⁴⁶ 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.⁴⁷ 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 specifically addressing the health effects of smoking “herbal” shisha. Part of the problem is that manufacturers choose not to list individual ingredients on shisha packages, preferring the ambiguity of the term “herbs.” However, it is widely known that combustion of vegetable matter produces byproducts known to be harmful to health, including particulate matter, carbon monoxide (CO) and polycyclic aromatic hydrocarbons (PAHs, known cancer-causing chemicals). A Health Canada fact sheet on herbal cigarettes cautions users against “the danger posed by the inhalation of smoke of any kind.”⁴⁸

Regardless of whether tobacco shisha or “herbal” shisha is being smoked, charcoal is needed as a heat source to create the smoke. Hookah charcoal is generally sold as either briquettes (pulverized charcoal held together with a binder such as starch), or as traditional raw “lumps” made by heating biomass particles (such as coconut shells) to extremely high temperatures. Some of the charcoal briquettes on the market are treated with an ignition agent to render them “easy light.” Peer-reviewed research has been undertaken on the importance of charcoal as a toxicant source, with a focus on two well-known charcoal emissions—CO and PAH. Both CO and PAH are considered major causative agents in cardiovascular disease and lung cancer.⁴⁹ One study that compared the burning of shisha using charcoal versus an electrical heating element found that approximately 90% of the CO and 75-92% of the PAH

compounds measured in the smoke actually originated in the charcoal.⁵⁰ A later study building on these findings reported that because charcoal production involves pyrolysis (extreme heat), PAH residues in raw charcoal can account for more than half of the total PAH emitted in hookah smoke.⁵¹ In other words, waterpipe charcoal products contain high levels of PAH even before they are lit, owing to their manufacturing process.

Preliminary indoor air quality (IAQ) testing in a couple of hookah establishments in Toronto has revealed very high CO readings. The first café tested, which claimed that only “herbal” shisha was being served, had an indoor CO reading 20X higher than outdoor ambient CO. The second café had a reading 56X higher. The tobacco enforcement officer present during the testing commented that both cafés were not even close to capacity.⁵² Further IAQ testing of hookah establishments is warranted. If enforcement officers are not able to clamp down on waterpipe smoking due to claims that the shisha is “herbal” and therefore not covered by smoke-free laws, then perhaps change could come about via more general occupational health and safety laws regarding indoor air quality.

An emerging public health issue

The widespread availability of shisha at retail and the emergence of places offering hookah across Canada 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 waterpipe smoking, among other things, is threatening to stall progress. This emerging public health issue is problematic for a number of reasons:

Exposure to second-hand smoke

Provincial and territorial smoke-free legislation and local bylaws pertain only to tobacco, with the exception of Quebec and a couple of dozen municipalities in BC, AB and NS. For all other jurisdictions, the smoking of other weeds or substances is not included. It is increasingly common at hookah establishments for proprietors to remove tobacco shisha from its original packaging and store it in unlabelled plastic containers.⁵³ Claiming the shisha is “herbal” and does not contain any tobacco, proprietors are circumventing smoke-free laws 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.^{54,55} Permitting smoking in enclosed public places is also confusing to the public and undermines enforcement efforts.

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 known public health requirements in Canada for the cleaning and disinfection of hookah hoses, although the Ontario city of Hamilton has proactively created and distributed guidelines for known hookah establishments. This is likely in response to a meningitis case involving a 17 year-old girl who had visited a shisha café just hours before her death.⁵⁶ The sharing of hoses and the lack of disinfection pose risks for the transmission of communicable diseases such as meningitis, tuberculosis, hepatitis, influenza, etc.

Lack of consumer information on packaging

There are numerous types of shisha on the market, both tobacco and “herbal,” whose packaging does not adequately communicate to consumers risk information, ingredients or nicotine content. However, Health Canada advises that the federal *Tobacco Act* and related *Tobacco Products Information Regulations* pertaining to labeling do not cover tobacco shisha. As a result, it is sold without graphic health warnings or other information such as nicotine content.

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%⁵⁷; another claims the nicotine content is ten times

higher at 0.5%,⁵⁸ and the other four boxes have no information whatsoever regarding nicotine content.^{59,60,61,62}



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 graphic health warning.

None of the tobacco products purchased displays graphic health warnings. Many of the boxes advertise that the tobacco products are “tar-free,” which is misleading; since 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* (right), lists “ugarsay anecay agassebay” among its ingredients, which is Pig Latin for sugar cane bagasse—a fibrous byproduct of sugar cane production.⁶³ 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.



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.”⁶⁴ Claims of “tar-free” product were also very common among the “herbal” shisha packages examined.

Violation of Tax Laws

Virtually all tobacco shisha available in Canada is imported. It is recognized as a tobacco product under provincial tobacco tax laws as well as the *Excise Act, 2001* and requires a federal tax stamp. However, it is often falsely declared as a food product at the border.⁶⁵ Other shisha tobacco is not even labelled as tobacco and also avoids taxation. For example, chemical analysis by the Royal Canadian Mounted Police (RCMP) of the brand “Massoul” shisha revealed that the product contained tobacco, contrary to its labelling.⁶⁶ This is both a consumer safety issue as well as a tax evasion problem.

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 labelling, making it difficult to determine what they contain, such as tobacco and/or nicotine. Second, an increasing number of public places across Canada 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 federal laws, the first of which would require Health Canada to make a policy change. Other provincial and municipal options explored will require legislative or regulatory amendments.

Enforcement of current federal laws

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

The *Tobacco Act* regulates the manufacture, sale, labelling and promotion of tobacco products in Canada. No province has labelling regulations that go above and beyond the federal requirements. The *Act* defines a tobacco product as:

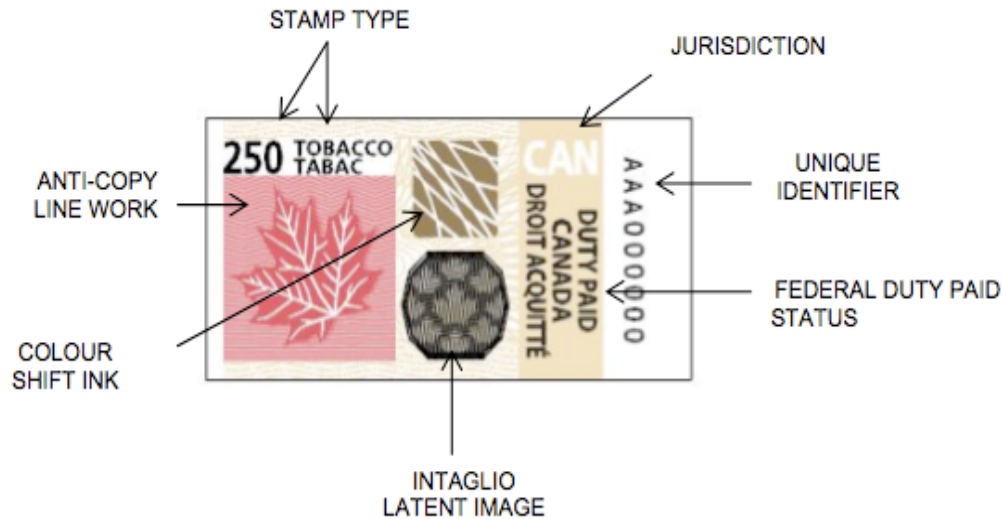
“a product composed in whole or in part of tobacco, including tobacco leaves and any extract of tobacco leaves. It includes cigarette papers, tubes and filters but does not include any food, drug or device that contains nicotine to which the *Food and Drugs Act* applies.”⁶⁷

| Although tobacco shisha appears to fall under the *Act's* broad definition of a tobacco product, it is not specifically identified in either the *Act* or the regulations. In fact, there is no definition of pipe tobacco in either the *Act* or the regulations. Because of this, Health Canada is narrowly interpreting the legislation and advising that the graphic health warnings requirements do not apply to tobacco shisha.

Health Canada could choose to interpret the *Tobacco Act* more broadly to include tobacco shisha. However, this might involve provinces having to seek legal clarity and/or a directive from Health Canada. With a change in policy, enforcement could then focus on lack of graphic health warnings and the required consumer information in English and French on the packaging.

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

This federal law, enforced by the RCMP, deals with the taxation of tobacco and other products like wine and spirits. Under section 32(1), no person shall sell, offer for sale or have in their possession a tobacco product unless it is stamped to indicate that duty has been paid. Section 4(2) of the regulations specifies that tobacco products shall be stamped in a conspicuous place and in a manner that seals the package, among other requirements. Section 33(b) of the *Act* prohibits the sale of manufactured tobacco other than in its original packaging, and section 35 requires that 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.



Canada Revenue Agency's new tobacco excise tax stamp, with enhanced security features, came into effect 1 April 2011

Unfortunately, because tobacco shisha is not being honestly declared at the border as shisha, or is not labelled as containing tobacco, duty is not being paid. RCMP officers from southern Ontario have cited a lack of capacity to address the growing shisha problem.⁶⁸

3. *Consumer Packaging and Labelling Act* (sections 4, 6 &7)

The *Consumer Packaging and Labelling Act* requires that prepackaged consumer products bear accurate and meaningful labelling information to help consumers make informed purchasing decisions. The *Act* prohibits false or misleading representations and sets out specifications for mandatory label information such as the product's name, net quantity and dealer identity.⁶⁹ The Competition Bureau is an independent law enforcement agency responsible for the administration and enforcement of a number of laws, including the *Consumer Packaging and Labelling Act*. Many of the "herbal" shisha products for sale on the Canadian market have dubious labelling as well as misleading claims such as "tar free." Enforcement could focus on mandatory bilingual labelling 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 "herbal" and "tar free."

Amend existing laws and regulations or create bylaws

1. Provincial smoke-free legislation

Amend definition of smoking

As mentioned earlier, all provinces except Quebec have smoke-free legislation that pertains only to tobacco. (Quebec introduced a regulation in 2008 stating that any product that does not contain tobacco and is intended to be smoked is considered to be tobacco.⁷⁰) Moreover, some jurisdictions specify that to smoke means to hold or otherwise have control over a “lit” or “ignited” tobacco product. These two loopholes are problematic. Hookah proprietors can claim that their shisha is “herbal” and that the smoke-free legislation therefore does not apply. An argument could also be made that because shisha is moist and not capable of self-sustained combustion, it is not technically “lit” but instead is heated. 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, which are currently hampered by inspectors needing to prove the shisha contains tobacco before charges can be laid.

Ban flavoured tobacco shisha

Banning flavoured tobacco shisha at the provincial level is an option worth considering. In Ontario this would be relatively easy, requiring only an amendment to the regulations to add it to the list of prescribed tobacco products prohibited at retail (section 6.1(2)). However, it appears that for all other provinces, a legislative amendment would be required. Although banning flavoured tobacco shisha would not address the “herbal” issue, it would definitely put a significant dent in youth tobacco smoking. 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.

Saskatchewan's *Tobacco Control Act* is unique in that it includes a definition for “tobacco-related product”: a cigarette paper, a cigarette tube, a cigarette filter, a cigarette maker, a pipe or any other product used in association with tobacco that is prescribed.⁷¹ If hookah pipes, “herbal” shisha, waterpipe charcoal products and other related accessories were prescribed in the regulations as tobacco-related products, section 4(1) of the *Act* would effectively prohibit young people from being able to buy them or otherwise be furnished with them. Similarly, section 6(1) dealing with promotion would presumably apply to all types of promotion, including the mere mention of waterpipe on a menu. Prescribing “herbal” shisha as a tobacco-related product could also mean that hookah establishments would not be able to use the herbal argument to permit smoking indoors.

Ban the sale of tobacco products in restaurants and bars

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. Quebec and Nova Scotia are the only two provinces that currently prohibit the sale of tobacco in restaurants and bars. Other provinces could follow suit via regulatory amendments to add these locations to the list of prescribed locations where tobacco sales are banned. Banning the sale of tobacco shisha in establishments that permit waterpipe smoking would help reduce the consumption of shisha containing tobacco if the penalty were high enough to serve as a deterrent.

Include labelling requirements

No province has labelling regulations that go above and beyond those required by the federal *Tobacco Act* and the *Tobacco Products Information Regulations*. However, because Health Canada advises that shisha tobacco does not fall under the *Act* with respect to packaging and labelling, it is being legally sold without graphic health warnings or information about nicotine content. British Columbia, Manitoba, Ontario and Quebec have smoke-free legislation with enabling provisions to make labelling regulations. Alberta, Saskatchewan, New Brunswick, Nova Scotia and PEI have more general enabling provisions, indicating that regulations can be passed respecting any matter considered necessary or advisable to carry out the purposes of the legislation. It appears that only Newfoundland and Labrador does not have the authority, explicit or otherwise, to create labelling regulations.

Establish a minimum price or package size for tobacco products

Quebec's *Tobacco Act* regulation stipulates that the amount paid by a consumer for the purchase (within one sale) of one or more tobacco products, other than cigarettes, must be higher than \$10.00. Because the term "tobacco" includes other products that do not contain tobacco that are intended to be smoked, this applies to "herbal" shisha as well. Establishing minimum pricing is an interesting option worth looking into, as well as requiring minimum quantities. In Ontario, if the smallest package of tobacco shisha available at retail were 250 grams (instead of 50 g), the minimum legal price would be approximately \$65⁷², which would be very cost prohibitive for young people. Another option along the same lines would be a ban on the sale of single use tobacco shisha in public places.

The experience in Quebec is instructive regarding its smoke-free law and the control of waterpipe smoking. The *Tobacco Act* grandfathers those cigar lounges that existed in 2005 (address and ownership must remain the same) and where cigar or pipe tobacco gross income exceeds \$20,000 or more. This has essentially turned the waterpipe establishment issue in Quebec to one of

enforcement. Anecdotally there are fewer than 40 cigar lounges that operate legally in Quebec, of which approximately half are hookah establishments.⁷³

2. Provincial public health laws

There may be opportunity to control waterpipe smoking in public places through the use of existing provincial public health laws. Enforcement could focus on reducing the risk of communicable disease transmission via the sharing of hookah pipe hoses. Anecdotal reports from enforcement officers in Ontario suggest that hoses are not adequately cleaned or sanitized between groups of patrons. 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, among other things.⁷⁴

Tobacco control and public health inspectors in Ontario have also documented public health violations at hookah establishments related to the contamination of food preparation surfaces and equipment. The photo below not only shows a dirty countertop but also documents the presence of furniture polish—something inspectors have reported being used as a propellant in some establishments to quickly light waterpipe charcoal.



Image courtesy of Hamilton Public Health

3. Provincial tobacco tax acts

Tobacco shisha does not appear to be explicitly identified in any provincial tobacco tax law. Nonetheless, it falls under the category of “other tobacco” and thus provincial tobacco tax laws apply. Various jurisdictions in Ontario have had success conducting joint inspections between the Ministry of Revenue and the Ministry of Health. This strategy of working cooperatively has been particularly useful given that tobacco enforcement officers lack the power to search and seize under the *Smoke-Free Ontario Act*. In fact, one of the recommendations following an Ontario-wide waterpipe meeting in October 2011 was to emphasize the importance of collaboration and cooperation between agencies. Such

collaboration maximizes law enforcement resources, facilitates the sharing of intelligence between agencies and sends a strong message to retailers and hookah proprietors that the law must be obeyed.

4. Municipal bylaws

In some provinces, municipalities have the authority to pass bylaws respecting the “health, safety and well-being of persons.” Nuisance bylaws might also be considered, one benefit being that proof of harm would not need to be established. This arguably includes prohibiting the smoking of non-tobacco weeds or substances in public places and workplaces. In BC, thanks to enabling legislation including the *Vancouver Charter*, the *Communities Charter* and the *Local Government Act*, 12 municipalities have passed bylaws that go above and beyond the provincial *Tobacco Control Act*. Nine of these bylaws explicitly include reference to the hookah pipe.⁷⁵

In Alberta, the *Municipal Government Act* similarly enables municipalities to pass bylaws respecting the safety, health and welfare of people. Although there are currently no bylaws in Alberta that explicitly mention waterpipe smoking, there are 8 municipalities with bylaws whose definitions of smoking are arguably not exclusive to tobacco.⁷⁶ Similarly, Nova Scotia's *Municipal Government Act* has enabled the Counties of Victoria and Richmond and the Town of Wolfville to pass smoking bylaws that also do not mention tobacco.⁷⁷

Vendor licensing via bylaw is a relatively easy and attractive option that could help to control the sale of tobacco in any form. Eleven provinces/territories require some form of tobacco retailer licence, but only New Brunswick and Nova Scotia impose a fee. In two provinces, Alberta and Ontario, some municipalities have stepped in and imposed meaningful licensing conditions. St. Albert, AB boasts not only the highest licence fee in the country at \$500 per year, but also the most rigorous requirements. A handful of Ontario municipalities have also enacted licence fees, with Ottawa leading the way at \$428 per year.⁷⁸

Licensing facilitates enforcement by identifying the locations that sell tobacco products and enables a municipality to recover enforcement costs, particularly if the cost of the license is set high. Other potential benefits 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.

In fact, municipalities could consider requiring a vendor licence to sell *any* consumer product intended for smoking, which would help to simplify enforcement. 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. Although some people might claim that the optics of licensing hookah establishments are bad (the municipality might be perceived as condoning them), there are definite benefits to this approach, and it offers potential for municipalities to take local action in the face of provincial inaction.

Tobacco vendor and hookah licences could:

- Be expensive and require annual renewal;
- Prohibit new hookah establishments from opening after a certain date (only those 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.

Conclusions

Waterpipe smoking is a popular new trend among young people that has arrived in Canada. There are hookah cafes and lounges appearing across the country, 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 higher. As well, there are currently no public health requirements for hookah establishments, despite the fact that sharing hoses poses a risk of transmitting communicable diseases.

Employees and patrons at hookah establishments are being exposed to second-hand smoke, which is damaging to public health. Smoking in public places also undermines efforts to enforce provincial smoke-free laws, as well as generally erodes public confidence in the rule of law. In addition, poorly labelled shisha products are widely available at retail. These consumer products, which lack health warnings, tax stamps, ingredient lists and other consumer information such as nicotine content, leave Canadians totally in the dark regarding product safety. The lack of required tax stamps and a general evasion of taxation likewise deprive governments of needed revenues.

A variety of policy options to address this emerging public health issue exists at all levels of government. The experience from Quebec is instructive, and bylaws from a number of jurisdictions could help shape future policy. Public health advocates, policy makers, enforcement officers and other interested parties need to come together to examine possible options and determine next steps. 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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