



## STAFF REPORT ACTION REQUIRED

### Hookah (Waterpipe) Use in Licensed Establishments

<b>Date:</b>	May 14, 2015
<b>To:</b>	Board of Health
<b>From:</b>	Medical Officer of Health
<b>Wards:</b>	All
<b>Reference Number:</b>	

#### SUMMARY

---

This report responds to a Board of Health (BOH) request from March 2014 to consult on measures, including prohibition, to address the health risks of hookah use in Toronto commercial establishments.

Toronto Public Health (TPH) has consulted with businesses that permit hookah use on their premises, patrons of these establishments, neighbouring businesses that do not offer hookah, local Business Improvement Areas, cultural and health organizations, community health centres and universities and colleges. TPH has also reviewed the evidence of health risks from hookah use and second-hand hookah smoke exposure, reviewed actions in other jurisdictions, scanned international legislation regulating hookah use and examined the economic impacts of hookah legislation on businesses.

These activities confirmed the need for regulation of hookah businesses based on significant health concerns associated with using a hookah to smoke any substance. A number of jurisdictions in Canada and internationally have prohibited hookah use to address these concerns. Input from community stakeholders indicated mixed views to prohibition dependant on stakeholder type, with business owners particularly concerned about the economic impact of prohibition. The TPH consultation also revealed low levels of public awareness about the health risks of hookah use.

This report proposes that the BOH request City Council to prohibit hookah (waterpipe) use in establishments licensed by the City of Toronto. Prohibiting the use of hookah in licensed premises was identified as the most health protective option to address risks from hookah use. This report also recommends that TPH conduct a comprehensive public education campaign to accompany the implementation of any regulatory change.

A report by the Executive Director, Municipal Licensing and Standards recommending amendments to Municipal Code Chapter 545, Licensing will be considered by the Licensing and Standards Committee on June 25, 2015.

This report has been prepared in consultation with the City Solicitor and Executive Director of Municipal Licensing and Standards Division.

## **RECOMMENDATIONS**

---

### **The Medical Officer of Health recommends that:**

1. Effective October 1, 2015, City Council prohibit the use of hookah in establishments that are licensed or required to be licensed under Municipal Code Chapter 545, Licensing; and
2. The Board of Health forward this report for information to Licensing and Standards Committee and request Licensing and Standards Committee to consider the Board of Health's recommendations when it considers prohibiting the use of a hookah in licensed premises.

### **Financial Impact**

There is no financial impact arising from this report beyond what has already been approved in the current year's budget.

### **DECISION HISTORY**

On October 22, 2012, the BOH adopted the recommendations of the report Toronto Public Health Tobacco Control Plan: Update 2012 (<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2012.HL17.3>). The BOH recommended that the Ministry of Health and Long-Term Care consult and take action to minimize harm from hookah smoking in Ontario.

On March 24, 2014, the BOH approved, with amendments, the recommendations in the report Health Risks of Waterpipe Smoking (<http://www.toronto.ca/legdocs/mmis/2014/hl/bgrd/backgroundfile-67436.pdf>). The BOH requested the Medical Officer of Health (MOH) to consult on ways, including prohibition, to address the health risks of hookah smoking at commercial establishments. The BOH also requested the MOH to include in the requested report information on international legislation on hookah use and an economic impact analysis on businesses.

### **ISSUE BACKGROUND**

A hookah (also known as a waterpipe, narghile, hubble bubble, ghelyoon, ghalyan, goza, arghile) is a device that is used to smoke moist tobacco or non-tobacco (herbal) products often known as shisha. Hookah is an alternative form of smoking. Although hookahs have traditionally been used to smoke tobacco products in Iran, South Asia and Middle Eastern countries, in recent years ongoing health surveillance continues to show the

growing popularity of this behaviour in North America, particularly among youth and young adults.<sup>1,2</sup>

Currently, Toronto businesses can offer hookahs for use by their clients without a specific licence. In October 2012, Municipal Licensing and Standards Division (MLS) recommended to the Licensing and Standards Committee that they develop a licensing regime for hookah businesses. The committee referred that report back to the Executive Director, MLS for a further report. MLS referred the issue to TPH to monitor hookah businesses from a health perspective.

Although the numbers are difficult to determine, TPH estimates as of April 2015 that at least 60 Toronto businesses offer hookah use on their premises. Information from the Ministry of Health and Long-Term Care indicates that Toronto has the largest number of hookah businesses in Ontario. The majority of these businesses are licensed as eating establishments, although some are licensed as entertainment establishments/nightclubs or retail stores.

Currently, only non-tobacco shisha can be smoked at hookah businesses. The 2006 Smoke-Free Ontario Act (SFOA) prohibits smoking tobacco in workplaces, enclosed public places, and as of January 2015, on all bar and restaurant patios. However, there is some evidence that tobacco is often mixed with shisha products and served in areas where tobacco use is prohibited, including at Toronto establishments.<sup>3,4</sup>

In March 2014, the MOH reported to the BOH on health concerns associated with hookah (waterpipe) use. Hookah use poses health risks for users and those exposed to second-hand smoke. Additionally, hookah use in licensed establishments undermines the success of the SFOA because it contributes to the social acceptability of smoking in public places. As requested by the BOH, TPH has consulted with stakeholders and recommends that hookah use be prohibited in establishments licensed by the City of Toronto to address these concerns.

Toronto's experience with smoke-free policy development indicates that smoking prohibitions are the most effective way to reduce smoking behaviour, lower health risks for smokers and non-smokers and denormalize smoking. Therefore this report recommends that hookah use be prohibited at Toronto's licensed establishments.

## **COMMENTS**

This report recommends that City Council prohibit hookah use in establishments licensed by the City of Toronto and proposes an approach to implementing this recommendation. This was identified as the preferred, most health protective option to address the public health concerns with hookah use.

The report also summarizes the findings from TPH's evidence review and consultations with stakeholders conducted since March 2014.

## Health Risks of Hookah Use

In March 2014, TPH reported to the Board of Health on the health effects of hookah use in indoor public places, including recent evidence on indoor air quality at hookah businesses in Toronto.<sup>5</sup> The report demonstrated that hookah use of any substance could have negative consequences for health, especially for workers in establishments that allow hookah use.

Notably, TPH presented the findings of a 2013 air monitoring study conducted by the Ontario Tobacco Research Unit (OTRU) at 12 indoor and 5 outdoor hookah cafes in Toronto. Researchers found concerning levels of PM<sub>2.5</sub> (fine air pollutant particles) and carbon monoxide (CO). Overall, OTRU researchers concluded that staff and patrons in indoor hookah cafes are exposed to air pollution at levels that are considered harmful to human health. Outdoor hookah cafes showed less harmful levels than indoors, but air quality levels were still poor. Researchers also found high levels of air nicotine in indoor locations where they took measurements, suggesting that tobacco shisha is smoked in contravention of the SFOA at hookah businesses, exposing staff and patrons to the health risks of tobacco use, nicotine and second-hand tobacco smoke.<sup>3</sup> These results are consistent with other studies that indicate that regardless of the type of shisha (i.e. tobacco or non-tobacco based), hookah use exposes the users and bystanders, including employees or people living in residences that are co-located, to unacceptably high, and in some cases, hazardous levels of CO, PM<sub>2.5</sub> and cancer-causing chemicals.<sup>6,7</sup> Hookah smoking is found to be associated with a number of short and long-term health effects including carbon monoxide poisoning, heart, lung and gum disease, low birth weight and oesophageal, gastric and lung cancers.<sup>8</sup>

Regardless of the substance being used, hookah use in commercial establishments contributes to the social visibility of smoking in public places. This in turn, influences the perceived acceptability of smoking, particularly among youth.<sup>9</sup> Many Toronto hookah businesses permit entry to minors. Hookah use is often perceived as less harmful, less addictive and more socially acceptable than cigarette smoking. This may be due to the common misperception that the water in a hookah filters the nicotine and other harmful chemicals from the smoke.<sup>10,11</sup> A recent large study of American adolescents and young adults found that hookah tobacco smoking is linked to subsequent cigarette smoking.<sup>12</sup> Analysis of data from the Youth Smoking Survey 2012/2013 found that 38% of Ontario students and 38% of Canadian students (grades 9-12) believe hookah use is less harmful than smoking cigarettes. Canadian students who believed that hookah use was less harmful than cigarette smoking had significantly higher odds of current hookah use compared to youth who reported that hookah is at least as harmful as cigarettes. Furthermore, about half of Ontario hookah users (53%) had used flavoured shisha.<sup>13</sup> The availability of flavoured shisha has been found to contribute to the perception that hookah use is less harmful than cigarette use, and as seen with traditional cigarettes, flavoured products have high appeal for youth.<sup>14</sup>

Restrictions on hookah use in Toronto and public education activities are needed to further denormalize this form of smoking and communicate to youth that hookah use is not a healthy activity.

## Regulatory Approaches in Other Canadian Jurisdictions

A growing number of Canadian jurisdictions have addressed hookah use through various legislative approaches. Quebec's tobacco control legislation includes all smoked tobacco products and non-tobacco products, including shisha. Alberta passed legislation in 2013 that prohibits the smoking of "tobacco-like" products (including the prohibition of smoking these products in hookahs) in public places where smoking is prohibited.<sup>15</sup> More recently, Nova Scotia amended their Smoke-free Places Act to prohibit hookah use (for tobacco or non-tobacco substances) in places where smoking is prohibited. This legislation takes effect on May 31, 2015.<sup>16</sup>

A number of municipalities in British Columbia (BC) prohibit hookah use in restaurants, cafes or bars and/or on outdoor patios. In 2007, the City of Vancouver enacted a by-law that prohibited the burning of any substance using a hookah pipe in indoor public places, including non-tobacco hookah products. In 2011, two hookah business owners challenged the by-law in BC Provincial Court, claiming that: 1) the City failed to provide evidence of harm from second-hand smoke from non-tobacco products 2) the by-law violated their Canadian Charter rights and 3) the by-law was vague and uncertain. In August 2014, the Provincial Court of BC upheld the City by-law, finding that the City was justified in enacting the by-law for the protection of health and prevention of disease. Expert witnesses provided evidence that was accepted by the court concluding that the use of hookah to burn any substance causes harm. Furthermore, the court found that the by-law did not violate Charter rights.

In 2012, the BOH recommended that the Ministry of Health and Long-Term Care consult with stakeholders on strategies to minimize harm from non-tobacco hookah use.<sup>17</sup> Similarly, the Association of Local Public Health Agencies (ALPHA) adopted a resolution in 2013 advocating for provincial legislation to be enacted to prohibit hookah use (regardless of the substance being used) in all enclosed public places and workplaces.<sup>18</sup> To date, the provincial government has taken limited action to address hookah use. In November, 2014, the Ontario government introduced Bill 45, the *Making Healthier Choices Act, 2014*. Schedule 11 of Bill 45 would, if enacted, strengthen enforcement of the SFOA by allowing Tobacco Enforcement Officers to take samples to test substances relevant to SFOA inspections which could include testing substances used in hookahs. Bill 45 was referred to the Standing Committee on General Government in April 2015. This proposed change would help to address smoking tobacco products in hookahs in public places, a practice that is prohibited by the SFOA. This legislative change would not, however, address the practice of smoking non tobacco products in hookahs, which has been shown to cause harm.<sup>3,5,6</sup>

In Ontario, four municipalities have prohibited hookah use in indoor public places regardless of whether tobacco or herbal shisha is being used: Peterborough, Orillia, Bradford West Gwillimbury and Barrie. These municipalities had few, if any, businesses that allowed hookah use prior to bylaw enactment. These jurisdictions set an important precedent for local action to reduce the harms associated with indoor hookah use in Ontario.

## International Hookah Regulation

TPH reviewed a comprehensive survey by international researchers that analyzed hookah regulation globally.<sup>19</sup> International jurisdictions are increasingly relying on legislative options to regulate hookah use, focusing primarily on regulating tobacco-based shisha use in public places and workplaces. Some laws specifically address hookah while others have a broad definition of "smoking" or "tobacco products" that covers hookah use without addressing it explicitly. The majority of smoke free and tobacco control laws reviewed are from the latter category. For example, in the UK smoking tobacco or any other substance is prohibited under the Health Act (2006). Smoking is defined broadly and includes both tobacco and non-tobacco shisha as well as any other substance.<sup>20, 21</sup> Several countries including Argentina, Bangladesh, Ecuador, India, Israel, Lebanon, Namibia, Russia, Saudi Arabia, South Africa, Syria, United Arab Emirates and Vietnam, specifically mention hookah or one of its synonyms in the definition of "smoking" or "tobacco products" in their smoke-free or tobacco-control laws.<sup>22</sup> Furthermore, a few jurisdictions, including Costa Rica, Israel, Turkey and Ukraine, have developed hookah-specific smoke-free laws. Several countries in the Middle East, where hookah use originated, have also prohibited hookah use in public places such as restaurants and lounges in the last decade.

In the United States (US), the states of Illinois, New Mexico, Michigan and Maine, and the City of Chicago, specifically address hookah use in their smoke-free regulations. New York City's smoke-free air law prohibits smoking tobacco shisha in restaurants and bars, however the law does not specifically address the use of hookah.<sup>23</sup> In 2006, the New Jersey Smoke-Free Air Act prohibited the use of hookahs for smoking tobacco or non-tobacco products.<sup>24</sup> Some US jurisdictions exempt hookah establishments from smoking prohibitions under specific circumstances. For example, Illinois exempts hookah establishments from smoke-free regulations if more than 80% of total revenue comes from tobacco shisha sales. The states of Michigan and Maine, and the City of Chicago also require a special permit for hookah establishments.<sup>25</sup>

## Stakeholder Consultations

Between October 2014 and January 2015, TPH conducted stakeholder consultations with the following groups:

1. Patrons of hookah establishments
2. Businesses
  - a. Hookah establishment owners
  - b. Business Improvement Areas (BIAs)
  - c. Neighbouring businesses (that do not permit hookah use)
3. Cultural organizations
4. Community Health Centres (CHCs)
5. Health organizations
6. Universities and colleges

Some overall themes and key findings emerged from these consultations:

- There is a need for raising awareness about the health risks of hookah use.

- There is a need to use education methods appropriate to the different intended audiences such as young people, older adults or business operators.
- Visiting hookah establishments is a social and cultural practice for some patrons.
- Nearly half of patrons interviewed would still visit the businesses even if they did not offer hookah use.
- There are mixed views to a possible prohibition dependent on the stakeholder type (some are for, some are against and some are neutral).

Should City Council decide to adopt TPH's recommendation to prohibit hookah use, TPH proposes that a public education strategy be developed to facilitate the implementation of Council's decision. A complete summary of the consultation findings is provided in Appendix A. Additional details are also included in the balance of this report.

### **Impact of Hookah Use Prohibition on Businesses**

TPH examined the economic impact of hookah regulations on businesses. TPH is not aware of any published evidence on the economic impact of hookah regulations. Findings from the TPH consultation and an environmental scan assessing experiences in other jurisdictions were the indirect sources TPH relied on for this analysis.

The literature on the impact of smoke-free laws on businesses concludes that there were no significant long-term effects on revenues of restaurants and bars or employment in this sector.<sup>26,27</sup> The impact of prohibiting hookah use on premises that operate mainly as bars and restaurants may be similar. However, it is difficult to predict the impact of prohibiting hookah use on places where the business model centres on offering hookah with limited food and alcohol sales.

The stakeholder consultations included interviews with hookah business owners and their patrons. Ipsos Reid, commissioned by TPH, conducted intercept interviews with 100 patrons of thirteen hookah businesses across Toronto. These establishments are from three areas of the city (Danforth Avenue, Lawrence Avenue East and Dundas Street near Yonge Street) that have large concentrations of hookah businesses. Findings from the intercept interviews indicate that nearly half of the patrons (46%) would still visit these establishments even if hookah use was not permitted.

Ipsos-Reid was also commissioned to interview business operators on behalf of TPH. TPH provided them with a list of 71 known hookah establishment owners at the time of the survey. Out of 71 entries, 14 operators were successfully reached, recruited and interviewed. All interviewed operators stated that approximately 70-90% of their revenue comes from hookah use. Almost all of the operators interviewed stated that a prohibition on hookah use would result in the closure of their business. Since only a relatively small percentage of establishment operators were interviewed, the findings may not be representative of all establishments and/or may only represent those operators whose business is based almost exclusively on patron hookah use.

In Toronto, looking at all known businesses, approximately half of the hookah establishments are restaurants, bars or nightclubs and clearly rely on revenue from other

sources such as food and alcohol. For the other half, hookah use is the main activity and likely is a more important source of revenue.

## **Proposed Approach**

### **Prohibiting Hookah Use in all Licensed Establishments**

TPH recommends that the BOH request City Council to prohibit hookah use in establishments licensed by the City of Toronto and that this prohibition come in to effect on October 1, 2015. If adopted, the prohibition would apply to all licenced premises including restaurants, bars, cafes, retail stores and night clubs. TPH estimates that hookah use mainly occurs at these types of establishments. This approach would also cover all other businesses licensed by the City of Toronto. Business owners would be responsible for prohibiting hookah use on their premises.

TPH is aware that some hookah businesses do not currently have a business licence. TPH, together with MLS enforcement staff, will take the necessary steps to ensure that businesses requiring a licence become licensed.

### **Enforcement**

If hookah use is prohibited in licensed premises in Toronto, TPH would assume responsibility for enforcing this prohibition. TPH would use enforcement strategies that would evolve over time and allow licensed businesses affected by the prohibition to adjust to the hookah use prohibition in their premises. TPH would initially focus on raising awareness of the hookah use prohibition through a public education "blitz" with the goal of enabling TPH to adopt a complaints based model of enforcement by October 1, 2015. After October 1, 2015, enforcement could include issuing tickets and summonses and possibly initiating Licensing Tribunal hearings.

### **Public Education**

A key theme in TPH's stakeholder consultations was the importance of raising awareness about the health risks of hookah use. Consultation participants from BIAs, cultural organizations, CHCs, health organizations and universities all noted that members of the public are largely unaware of the health risks associated with hookah use. To this end, TPH has developed a public education strategy to promote public awareness of the adverse health effects of hookah use and to encourage compliance with the proposed prohibition on hookah use in establishments licensed by the City of Toronto.

The first phase of the strategy has already started and focuses on the adverse health impacts of hookah use, both in licensed establishments and in private settings. The approaches used during this phase include both short term and long term strategies to:

- Target key audiences/users with print educational materials in various venues, and in ethnocultural papers;
- Expand the amount of material on the [toronto.ca/health](http://toronto.ca/health) page to provide the public with more information and resources to support our messaging;
- Identify program specific outreach and promotion opportunities that include information about hookah use such as through the Youth Health Action Network or post-secondary networks; and



- Provide training to various TPH frontline staff and engage community health care providers and health professionals.

A key partner in this work is the Youth Health Action Network (YHAN). YHAN is a TPH initiative that is led by and created for City of Toronto youth ages 16 to 24. YHAN members use peer education and health advocacy tools to take action on public health issues, including youth hookah use. The YHAN has already completed considerable work on this issue including creating Youtube videos of 'street buzz' interviews with youth,<sup>28</sup> developing a social media campaign and hosting a youth forum on hookah use and a lunch and learn at George Brown College.

If Council prohibits hookah use in establishments licensed by the City of Toronto, the second phase of the public education strategy would focus on publicizing the prohibition on hookah use in licensed establishments. This phase would take place between Council approval and October 1, 2015 (the date TPH proposes as the 'in force date' of the hookah use prohibition) and will be directed toward patrons and licensed hookah establishment operators.

This phase of the education campaign will include:

- Conducting outreach to operators of hookah establishments;
- Providing information about the regulatory changes to businesses licensed by the City of Toronto through the licence renewal process;
- Providing information about the regulatory changes on [toronto.ca/health](http://toronto.ca/health) and the MLS website;
- Targeting key audiences/users with educational materials in areas where hookah businesses are located;
- Posting educational messages about the health risks associated with hookah use at post-secondary campuses in Toronto; and
- Increasing hookah specific messaging on social media platforms.

## Conclusion

Using a hookah to smoke any substance poses health risks to users and those exposed to the smoke, including employees. It also undermines public health efforts to denormalize smoking generally and, more particularly, efforts to discourage smoking among youth and young adults. TPH is proposing that the BOH request City Council to prohibit hookah use in all establishments licensed by the City of Toronto, bringing Toronto in line with other jurisdictions elsewhere in Ontario, Canada and internationally.

Consultation with hookah businesses, patrons, ethno-cultural organizations, health organizations and post-secondary institutions helped inform TPH's recommended approach to regulating hookah use and the design of the implementation plan. If City Council prohibits hookah use in establishments licensed by the City of Toronto, TPH will conduct public education activities informing the public of the health risks associated with hookah use. These education activities will also inform the public and business operators that hookah use is prohibited in licensed establishments. Early stage enforcement activities would focus on education and encouraging voluntary compliance with the proposed changes to Municipal Code Chapter 545, Licensing.

**CONTACT**

Loren Vanderlinden  
Manager, Healthy Public Policy  
Toronto Public Health  
Tel: 416-338-8094  
Email: [lvander@toronto.ca](mailto:lvander@toronto.ca)

Monica Campbell  
Director, Healthy Public Policy  
Toronto Public Health  
Tel: 416-338-0661  
E-mail: [mcampbe2@toronto.ca](mailto:mcampbe2@toronto.ca)

**SIGNATURE**

---

Dr. David McKeown  
Medical Officer of Health

**ATTACHMENTS**

Appendix A: Summary of Stakeholder Consultations on Hookah Use

## REFERENCES

---

- <sup>1</sup> Health Canada. *Canadian Tobacco Use Monitoring Survey (CTUMS): Summary of Annual Results for 2012*. Accessed on October 24, 2013 at: [http://www.hc-sc.gc.ca/hcps/tobac-tabac/research-recherche/stat/\\_ctums-esutc\\_2012/ann\\_summary-sommaire-eng.php](http://www.hc-sc.gc.ca/hcps/tobac-tabac/research-recherche/stat/_ctums-esutc_2012/ann_summary-sommaire-eng.php).
- <sup>2</sup> Minaker, L.M., Shuh, A., Burkhalter, R.J. & Manske, S. (2015). Hookah use prevalence, predictors, and perceptions among Canadian youth: Findings from the 2012/2013 Youth Smoking Survey. *Cancer Causes Control*.
- <sup>3</sup> Zhang B, Haji, F., Kaufman P., Muir S. and Ferrence R. (2013). 'Enter at your own risk': a multimethod study of air quality and biological measures in Canadian waterpipe cafes. *Tobacco Control* 0:1–7.
- <sup>4</sup> Roskin, J. and Aveyard, P. (2009). Canadian and English students' beliefs about waterpipe smoking: a qualitative study. *BMC Public Health* 9(10).
- <sup>5</sup> Toronto Public Health (2014). *Health Risks of Indoor Waterpipe Smoking*. Report to the Board of Health. <http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2014.HL29.1>
- <sup>6</sup> Shihadeh A., Salman R., Jaroudi E., Saliba N., Sepetdjian E., Blank M.D., Cobb C.O., and Eissenberg T. (2012). Does switching to a tobacco-free waterpipe product reduce toxicant intake? A crossover study comparing CO, NO, PAH, volatile aldehydes, "tar" and nicotine yields. *Food and Chemical Toxicology*. 50(5):1494-8.
- <sup>7</sup> Hammal F., Chappell A., Wild T.C., Kindsierski W., Shihadeh A., Vanderhoek A., Khanh Huynh C., Plateel G & Finegan B.A. (2013). 'Herbal' but potentially hazardous: an analysis of the constituents and smoke emissions of tobacco-free waterpipe products and the air quality in the cafés where they are served. *Tobacco Control* 0:1-18.
- <sup>8</sup> Z.M. El-Zaatari, H.A. Chami, G.S. Zaatari (2015). Health effects associated with waterpipe smoking. *Tobacco Control* 0:1–13.
- <sup>9</sup> Alesci N.L., Forster J.L. & Blaine T. (2003). Smoking visibility, perceived acceptability, and frequency in various locations among youth and adults. *Preventive Medicine* 36: 272–281.
- <sup>10</sup> Akl E.A. , Jawad M., Yim Lam W., Co C.N., Obeid, R. & Irani, J. (2013). Motives, beliefs and attitudes towards waterpipe tobacco smoking: a systematic review. *Harm Reduction Journal* 10(12).
- <sup>11</sup> Roskin, J. and Aveyard, P. (2009). Canadian and English students' beliefs about waterpipe smoking: a qualitative study. *BMC Public Health* 9(10).
- <sup>12</sup> Soneji, S., Sargent, J.D., Tanski, S.E., Primack, B.A. (2015). Associations Between Initial Water Pipe Tobacco Smoking and Snus Use and Subsequent Cigarette Smoking Results From a Longitudinal Study of US Adolescents and Young Adults. *JAMA Pediatrics* 169(2):129-136.
- <sup>13</sup> Minaker, L.M., Shuh, A., Burkhalter, R.J. & Manske, S. (2015). Hookah use prevalence, predictors, and perceptions among Canadian youth: Findings from the 2012/2013 Youth Smoking Survey. *Cancer Causes Control*. <http://www.ncbi.nlm.nih.gov/pubmed/25783457>
- <sup>14</sup> Minaker L. M., Ahmed R., Hammond D., & Manske S (2014). Flavored Tobacco Use Among Canadian Students in Grades 9 Through 12: Prevalence and Patterns From the 2010–2011 Youth Smoking Survey. *Prev Chronic Dis*, 11.

- 
- <sup>15</sup> Alberta Health Tobacco Reduction in Alberta. Tobacco Reduction Amendment Act, 2013, <http://www.health.alberta.ca/initiatives/tobacco-reduction.html>
- <sup>16</sup> Nova Scotia, Canada Health & Wellness. Healthy Communities. Tobacco Control. Amendments to Tobacco Legislation. <http://novascotia.ca/dhw/healthy-communities/tobacco-act-amendments.asp>
- <sup>17</sup> Toronto Public Health (2012). *Toronto Public Health Tobacco Control Plan Update 2012*. Report to the Board of Health. <http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2012.HL17.3>
- <sup>18</sup> Association of Local Public Health Agencies. (2013). *alPHa Resolution A13-:5: Provincial Legislation to Prohibit Waterpipes in Enclosed Public Places and Enclosed Workplaces*. [http://c.ymcdn.com/sites/www.alphaweb.org/resource/collection/8A9C4E6C-E972-450C-81E4-FAB5D820D8A0/A13-5\\_Waterpipes.pdf](http://c.ymcdn.com/sites/www.alphaweb.org/resource/collection/8A9C4E6C-E972-450C-81E4-FAB5D820D8A0/A13-5_Waterpipes.pdf).
- <sup>19</sup> Jawad M, El Kadi L, Mugharbil S, Nakkash R. (2014) *Waterpipe tobacco smoking legislation and policy enactment: a global analysis*. Published in *Tob Control*. <http://tobaccocontrol.bmj.com/cgi/lookup?view=long&pmid=25550418>
- <sup>20</sup> *Health Act, Part 1 — Smoking, Chapter 1 — Smoke-free premises, places and vehicles*. (2006). <http://www.tobaccocontrollaws.org/files/live/England/England%20-%202006%20Health%20Act%20-%20national.pdf>
- <sup>21</sup> Jawad M. (2014). *Legislation enforcement of the waterpipe tobacco industry: a qualitative analysis of the London experience*. *Nicotine Tob Res* 16:1000–8.
- <sup>22</sup> Jawad M, El Kadi L, Mugharbil S, Nakkash R. (2014) *Waterpipe tobacco smoking legislation and policy enactment: a global analysis*. Published in *Tob Control*. <http://tobaccocontrol.bmj.com/cgi/lookup?view=long&pmid=25550418>
- <sup>23</sup> *New York City Smoke-Free Air Act*. (2002). <http://www.nyc.gov/html/doh/downloads/pdf/smoke/tc5.pdf>
- <sup>24</sup> *Emerging Issue of Waterpipe/Hookah Use*. (n.d.). Paper presented at Program Training and Consultation Centre (PTCC). <https://www.ptcc-cfc.on.ca/common/pages/UserFile.aspx?fileId=104483>
- <sup>25</sup> City of Chicago :: Tobacco Regulations. (n.d.). [http://www.cityofchicago.org/city/en/depts/bacp/supp\\_info/tobaccoregulations.html](http://www.cityofchicago.org/city/en/depts/bacp/supp_info/tobaccoregulations.html)
- <sup>26</sup> Loomis BR, Shafer PR, van Hasselt M. (2013). The Economic Impact of Smoke-Free Laws on Restaurants and Bars in 9 States. *Prev Chronic Dis* 10:120327
- <sup>27</sup> Hahn, EJ, “Smokefree Legislation: A Review of Health and Economic Outcomes Research,” *American Journal of Preventive Medicine* 39(6S1):S66-S76, 2010.
- <sup>28</sup> Youth Health Action Network. (2013). Video: What's the buzz on the streets? Waterpipe Smoking. Available at: <http://www.youtube.com/watch?v=Uq8AuhVALAw&feature=c4-overview&list=UUvDCaCPMHZUjjA3HofT-oKQ>