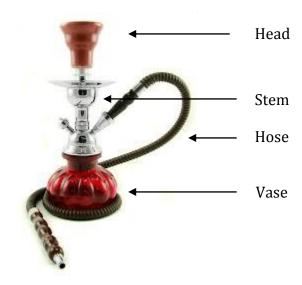
## Waterpipe Smoking: Bubble Trouble

### Four Hookah Myths Dispelled

### What is a waterpipe?

A waterpipe, also known as a hookah or narghile, has four main components: a head (a small ceramic bowl with ventilation holes in the bottom), a body or stem (a rigid tube that connects the head with the bottom), a glass vase and one or more hoses.



Shisha, which is smoked in a waterpipe, is a sticky sweet mixture of tobacco and/or other plant material, molasses and flavours. The shisha is placed in the head of the pipe and covered with perforated tinfoil. Because shisha is too moist to burn on its own, a piece of charcoal is placed on top. When the smoker sucks on the hose, a vacuum is created which pulls the smoke down from the head of the waterpipe through the stem, where it bubbles up through water in in the glass vase and is cooled before being inhaled.

# Myth #1: Only people from certain cultures smoke hookah pipes

While it is true that waterpipe smoking is a tradition in certain cultures, its popularity has spread to all corners of the globe, including Canada. Data indicate that young adults of all cultural backgrounds are at the forefront of this emerging epidemic; in 2011 24% reported ever trying a waterpipe—a statistic that has more than doubled in the previous 5 years. This is particularly concerning, given that the cigarette smoking rate among 20-24 year olds is higher than the national average (21% vs. 17%) and has alarmingly flatlined in recent years. Hookah smoking among youth ages 15–19 also doubled between 2006 and 2011, from 6% to 12%.

Waterpipe's popularity can be attributed to enticing shisha flavours with high sugar content, young people's misperceptions about its risks, its exotic appeal and affordability as an alternative social experience for those not old enough to get into to bars and nightclubs.

# Myth #2: Hookah smoking is safer than cigarettes

Contrary to popular belief, smoking tobacco in a hookah is not safer than cigarette smoking; it causes lung cancer, respiratory illness, low birth weight babies, and gum disease.<sup>5</sup> Although the smoke travels through water before being

inhaled, the water does not filter out the dangerous chemicals that harm health. Instead, it cools and moisturizes the smoke, making it more tolerable for new smokers. Adding ice to the water magnifies the effect. In addition, the tobacco's harshness is masked by shisha's intense flavourings and high sugar content. Unfortunately, Health Canada does not require graphic health warnings on tobacco shisha, which contributes to Canadians' misperceptions about the dangers of waterpipe smoking.

### Myth #3: I can't get addicted

Waterpipe smoking is a social activity that can often last an hour or more. Hookahs produce a lot of smoke, and hookah smokers have been observed to inhale more deeply than cigarette smokers. Nicotine is an extremely addictive drug regardless of whether it's in cigarettes or shisha. A waterpipe does not filter nicotine out of the smoke, and waterpipe smoking appears to present substantial risk with respect to initiating and maintaining a nicotine addiction.<sup>6</sup>

Package labeling on shisha is really poor with either misleading or no information about ingredients and nicotine content. Tobacco shisha is available as "washed" (nicotine content 0.05%) or "unwashed" (nicotine content ten times stronger at 0.5%), although this significant difference is not readily apparent on packages. Online discussions about "hookah hangovers" and "bad buzzes" suggest that waterpipe smokers are not aware of how much nicotine they are smoking.

# Myth #4: Smoking herbal shisha is harmless

Smoke is smoke, and all smoke is bad for health. Burning herbal shisha produces carbon monoxide and small particles (both contribute to heart disease), as well as the same cancercausing chemicals that are found in tobacco smoke. In addition, the charcoal used to heat any kind of shisha is a significant source of toxic chemicals known to cause heart disease and lung cancer. 8



Some bars and restaurants that allow indoor hookah smoking skirt the Smoke-Free Ontario Act by claiming to only serve herbal shisha. Beware: tobacco enforcement officers agree that up to 98% of the "herbal" shisha samples that have been chemically analyzed test positive for tobacco. This observation is supported by air quality testing done in 17 Toronto bars and restaurants which revealed the presence of nicotine in the air of most of the venues—all of which claimed they served only "herbal" shisha. 10 Even buying so-called herbal shisha at retail does not guarantee a tobacco-free product. In 2010 the RCMP seized 7 tonnes of Egyptian tobacco shisha from a Mississauga warehouse that was not labeled as containing tobacco. 11

For more information about waterpipe smoking, visit the Non-Smokers' Rights Association online at www.nsra-adnf.ca.

- <sup>5</sup> Akl, EA et al. The effects of waterpipe tobacco smoking on health outcomes: A systematic review. *International Journal of Epidemiology* 2010; 39(3):834-57.
- <sup>6</sup> Neergaard, J et al. Waterpipe smoking and nicotine exposure: A review of the current evidence. Nicotine & Tobacco Research 2007; 9:987-994.
- <sup>7</sup> Shihadeh, A et al. 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* 2012; 50:1494-1498.
- <sup>8</sup> Monzer, B et al. Charcoal emissions as a source of CO and carcinogenic PAH in mainstream narghile waterpipe smoke. *Food and Chemical Toxicology* 2008; 46:2991-2995.
- 9 Non-Smokers' Rights Association. National Forum on Waterpipe Use - Final Report. March 2012. <a href="http://www.nsra-adnf.ca/cms/file/files/National Forum Waterpipe Report-FINAL.pdf">http://www.nsra-adnf.ca/cms/file/files/National Forum Waterpipe Report-FINAL.pdf</a>.
- <sup>10</sup> Ferrence, R. *Waterpipe Use in Toronto Canada*. March 2013. Ontario Tobacco Research Unit. (unpublished).
- <sup>11</sup> Royal Canadian Mounted Police. *RCMP seize large quantity of shisha tobacco*. 23 April 2010. http://www.rcmp-grc.gc.ca/on/news-nouvelles/2010/10-04-23-london-eng.htm.

#### References

- <sup>1</sup> Health Canada. Canadian Tobacco Use Monitoring Survey (CTUMS). *Summary of Annual Results for 2011*. http://www.hc-sc.gc.ca/hc-ps/tobac-tabac/research-recherche/stat/ctums-esutc\_2011/ann\_summary-sommaire-eng.php.
- <sup>2</sup> Health Canada. Canadian Tobacco Use Monitoring Survey (CTUMS). *Summary of Annual Results for 2010*. http://www.hc-sc.gc.ca/hc-ps/tobac-tabac/research-recherche/stat/ctums-esutc 2010/ann summary-sommaire-eng.php.
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- <sup>4</sup> Health Canada. Canadian Tobacco Use Monitoring Survey (CTUMS). *Summary of Annual Results for 2011*. www.hc-sc.gc.ca/hc-ps/tobac-tabac/research-recherche/stat/ctums-esutc\_2011/ann\_summary-sommaire-eng.php.

