

## Hookah Smoking

Hookah is a water pipe used to smoke tobacco, marijuana and other substances. Smoke is created through indirect charcoal heat, filtered through water, and drawn through a rubber hose to a mouthpiece. It is often smoked in group settings using the same mouthpiece.<sup>1</sup> Shisha, a mixture of tobacco and a sweetener (such as molasses) is a commonly-used product for hookah in the U.S. and is often flavored to taste like fruit or candy.



Photo by Thiago Rodrigues da Silva

### Not a safe alternative to cigarettes

- Many hookah smokers believe that smoking hookah is less harmful than smoking cigarettes.<sup>2</sup> However, smoking tobacco from a hookah carries many of the same or greater health risks as smoking cigarettes.<sup>1,5</sup>
- Water pipe smoking delivers nicotine, which is addicting, and is at least as toxic as cigarette smoke.<sup>3</sup>
- Due to the frequency of puffing, depth of inhalation, and length of the smoking session, hookah smokers may absorb higher concentrations of the toxins found in cigarette smoke.<sup>1,5</sup>
- A typical 1-hour-long hookah smoking session involves inhaling over 100 times the volume of smoke inhaled from a single cigarette.<sup>4</sup>
- Hookah smokers may be at risk for some of the same diseases as cigarette smokers, such as oral lung, stomach and esophageal cancer, reduced lung function and decreased fertility.<sup>5,6</sup>

### High use among youth and young adults

- In King County, 14% of 12th graders reported using hookah within the last 30 days.<sup>7</sup>
- Almost a quarter of U.S. young adults (aged 18-24) had used hookah to smoke flavored tobacco.<sup>8</sup>

### Health effects of hookah smoking and secondhand smoke

- The charcoal used to heat tobacco in the hookah increases the health risks by producing high levels of carbon monoxide, metals, and cancer-causing chemicals.<sup>1,6</sup>
- Hookah tobacco and smoke contain numerous toxic substances known to cause lung, bladder, oral cancers, and heart disease.<sup>1,6</sup>
- Secondhand smoke from hookahs poses a serious risk, particularly because it contains smoke not only from the tobacco but also from the heat source (e.g., charcoal) used in the hookah.<sup>1,6</sup>
- Babies born to women who smoked one or more water pipes a day during pregnancy have lower birth weights than babies born to nonsmokers and are at an increased risk for respiratory diseases.<sup>9</sup>
- Infectious diseases may be transmitted between smokers due to sharing a hookah.<sup>5</sup>

<sup>1</sup> American Lung Association. [An Emerging Deadly Trend: Waterpipe Tobacco Use Washington: American Lung Association](#), 2007 [accessed 2015 September 30].

<sup>2</sup> Aljarrah K, Ababneh ZQ, Al-Delaimy WK. Perceptions of hookah smoking harmfulness: predictors and characteristics among current hookah users. *Tob Induc Dis* 2009;5(1):16.

<sup>3</sup> Knishkowsky, B., Amitai, Y. Water-Pipe (Narghile) Smoking: An Emerging Health Risk Behavior. *Pediatrics*. 2005;116:113-119 [accessed 2009 April 21].

<sup>4</sup> World Health Organization. Tobacco Regulation Advisory Note. [Water Pipe Tobacco Smoking: Health Effects, Research Needs and Recommended Actions by Regulators](#). (PDF-550 KB) Geneva: World Health Organization, Tobacco Free Initiative, 2005 [accessed 2015 Oct 16].

### **New forms of hookah**

In recent years, new forms of hookah smoking have been introduced.

- Studies of tobacco-based shisha and "herbal" shisha show that smoke from both preparations contains carbon monoxide and other toxic agents known to increase the risks for smoking-related cancers, heart disease, and lung disease.<sup>13,10</sup>
- Electronic hookah, such as steam stones and hookah pens, are battery powered and turn liquid containing nicotine, flavorings, and other chemicals into a vapor, which is inhaled.<sup>11</sup> Products that contain nicotine are addictive, yet very little information is currently available on the health risks of the other flavorings and chemicals.
- For more information about electronic devices (e-cigarettes, vaping devices) see our [E-cigarette and vapor product page](#).

### **Regulations**

Hookah smoking is regulated the same way cigarette smoking is in Washington. [State law and local King County Board of Health Code](#) prohibit smoking (including hookah smoking) from all public places and places of employment. There are no exemptions for traditional hookah lounges.

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<sup>5</sup> Akl EA, Gaddam S, Gunukula SK, Honeine R, Jaoude PA, Irani J. The Effects of Waterpipe Tobacco Smoking on Health Outcomes: A Systematic Review. *International Journal of Epidemiology* 2010;39:834–57 [accessed 2015 Sept 14].

<sup>6</sup> Cobb CO, Ward KD, Maziak W, Shihadeh AL, Eissenberg T. Waterpipe Tobacco Smoking: An Emerging Health Crisis in the United States. *American Journal of Health Behavior* 2010;34(3):275–85 [accessed 2015 Sept 14].

<sup>7</sup> 2014 Washington Healthy Youth Survey

<sup>8</sup> Truth Initiative, "Correlates of Hookah Use and Predictors of Hookah Trial in U.S. Young Adults" *American Journal of Preventive Medicine*

<sup>9</sup> Nuwayhid, I, Yamout, B., Ghassan, and Kambria, M. [Narghile \(Hubble-Bubble\) Smoking, Low Birth Weight and Other Pregnancy Outcomes](#). *American Journal of Epidemiology* 1998;148:375–83 [accessed 2011 Feb 15].

<sup>10</sup> Blank MD, Cobb CO, Kilgalen B, Austin J, Weaver MF, Shihadeh A, Eissenberg T. Acute Effects of Waterpipe Tobacco Smoking: A Double-Blind, Placebo-Control Study. *Drug and Alcohol Dependence* 2011;116(1–3):102–9 [cited 2015 Sep 14].

<sup>11</sup> U.S. Food and Drug Administration. *Electronic Cigarettes (e-Cigarettes)* [last updated 2013 April 25; accessed 2015 Sep 14].