

Hookah and Shisha

New Hampshire Division of Public Health Services

Fact Sheet

What is a Hookah?

A hookah is a type of water pipe often used to smoke flavored tobacco. Alternative names for it include: narghile, argileh, hubble-bubble, and goza.

What is Shisha?

Shisha is flavored tobacco made up of shredded tobacco leaf combined with molasses, honey, or dried fruit.

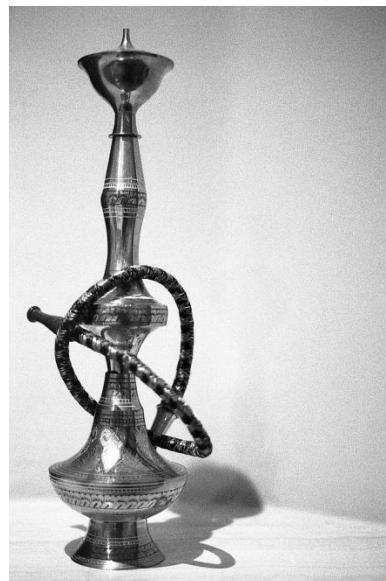
Hookah and Shisha Use

Shisha is heated indirectly with burning embers or heated charcoal. The smoke then travels through a water-filled basin before being drawn out through a rubber hose and mouthpiece. Smoking shisha is often a social activity, with several people sharing a hookah for an extended period of time.ⁱ

Background

Hookah use has a long history, originating in ancient Persia and India and later spreading throughout the Middle East, Northern Africa, and Asia during the 15th century. Hookahs and hookah cafes/ bars have followed Middle Eastern immigrants to other regions of the world, including an increased popularity in the United States. Now, in addition to their prevalence in Middle-Eastern communities, hookah bars have become popular among youth and college students in urban areas.ⁱⁱ This trend is further demonstrated by a Monitoring the Future survey, in which the percentage of American 12th graders that had used hookah in the past year increased from 17 percent in 2010 to 23 percent in 2014.ⁱⁱⁱ

Figure 1. Picture of a hookah water pipe^{iv}



Regulation

The Food and Drug Administration (FDA) currently **does not** regulate shisha. A new federal rule was proposed in 2014 to begin regulation of a variety of tobacco products, including water pipe tobacco; however this rule is not yet final.^v

Regarding public use, New Hampshire's definition of smoking under the Indoor Smoking Act is "having in one's possession a lighted pipe, or any device designed to produce the effect of smoking."^{vi} Despite this definition, hookah bars and lounges circumvent this policy by qualifying as a retail tobacco store or cigar bar, which contributes to the perception that smoking is normal.ⁱ Local governments can enact more stringent policies to counteract the harmful effects of secondhand smoke in public places.ⁱⁱ

Health Risks

In addition to the nicotine, tar, heavy metals, and carcinogens (cancer-causing chemicals)

Hookah and Shisha

New Hampshire Division of Public Health Services

Fact Sheet

produced by the burning shisha, the burning charcoal adds further carbon monoxide and heavy metals to the hookah smoke.ⁱⁱ The substances found within the composite shisha and charcoal smoke are associated with numerous cancers, including: lung, bladder, stomach, and oral cancer.^{vii} Additionally, hookah smoke puts users at risk for conditions such as: respiratory disease, heart disease, decreased fertility, and delivering a low birth weight baby.^{viii}

Although the particles in hookah smoke are less concentrated than cigarette smoke, the method and culture of smoking hookah multiplies its health effects. The frequency of puffs, the depth of smoke inhalation, and the length of the smoking event are greater in hookah as compared to cigarettes. Whereas an average cigarette involves about 20 puffs, or 500-600 milliliters of inhaled smoke, a typical one hour hookah session may involve about 200 puffs, which leads to about 90,000 milliliters of smoke inhalation. Depending on the chemical being measured, hookah smoke may be equivalent to anywhere between 1 and 50 cigarettes.^{ix} Additionally, as hookah smoking occurs within a group setting, the mouthpiece is often shared, which adds an additional risk of infectious disease transmission, including herpes, hepatitis, and tuberculosis.ⁱ Even though hookah smoke does not produce the same side-stream smoke as cigarette smoke, exposure to environmental tobacco smoke (ETS) remains harmful to bystanders and the smoker alike.^x

Hookah and Youth

There are several regulatory gaps that make hookah smoking more accessible and attractive to youth. While the Family Smoking Prevention and Tobacco Control Act gave the FDA the authority to regulate tobacco products and

prohibited the production of flavored cigarettes, this prohibition does not extend to shisha, which can be found in a variety of sweet and fruity flavors. This factor may contribute to the high hookah use among youth.ⁱ Additionally, some flavored forms of shisha contain no tobacco and thus may be more accessible to minors; however smoke from the charcoal is still harmful to users.^{xi}

Another concern with hookah is not only the health impacts it can have in and of itself, but also that smoking hookah may be a gateway to cigarette use. One study of Arab Americans in the United States found that youth ages 14-18 were over eight times more likely to smoke cigarettes if they had tried hookah in the past.^{xii}

What about e-Hookah?

Traditional hookah use differs from electronic hookah (e-hookah, hookah pen, or vape pen) in both method of use and in substance. Whereas traditional hookah utilizes indirect heating of tobacco and smoking through a water pipe, e-hookah involves an electronic device that heats and vaporizes a liquid nicotine product for individual consumption.^{xiii} For more information on e-Hookah, see the [New Hampshire Division of Public Health Services Electronic Cigarette Fact Sheet](#).^{xiv}



NH Department of Health and Human Services
Division of Public Health Services
Tobacco Prevention and Control Program
29 Hazen Drive, Concord, NH 03301
<http://www.dhhs.nh.gov> 1-800-852-3345 ext. 6891

Hookah and Shisha

New Hampshire Division of Public Health Services

Fact Sheet

ⁱ "Regulatory Options for Hookahs and Water Pipes." *Public Health Law Center*. Tobacco Control Legal Consortium, 2013. Web. 23 Nov. 2015.
[<http://publichealthlawcenter.org/sites/default/files/resources/tclc-fs-regulatory-options-hookahs-2013.pdf>](http://publichealthlawcenter.org/sites/default/files/resources/tclc-fs-regulatory-options-hookahs-2013.pdf).

ⁱⁱ "An Emerging Deadly Trend: Waterpipe Tobacco Use." *Lung USA* 2. American Lung Association, 1 Feb. 2007. Web. 23 Nov. 2015.
[<http://www.lungusa2.org/embargo/slati/Trendalert_Waterpipes.pdf>](http://www.lungusa2.org/embargo/slati/Trendalert_Waterpipes.pdf).

ⁱⁱⁱ "Dangers of Hookah Smoking." *Centers for Disease Control and Prevention*. Centers for Disease Control and Prevention, 9 Nov. 2015. Web. 23 Nov. 2015.
<http://www.cdc.gov/features/hookahsmoking/>.

^{iv} "Ali, Missi. *Shisha & Shadow*. Digital image. 8 Dec. 2011. Web. 30 Nov. 2015.
[<https://www.flickr.com/photos/15481483@N06/6479638441>](https://www.flickr.com/photos/15481483@N06/6479638441).

^v "Deeming – Extending Authorities to Additional Tobacco Products." *U.S. Food and Drug Administration*. U.S. Department of Health and Human Services, 13 Oct. 2015. Web. 3 Dec. 2015.
[<http://www.fda.gov/TobaccoProducts/Labeling/RulesRegulationsGuidance/ucm388395.htm>](http://www.fda.gov/TobaccoProducts/Labeling/RulesRegulationsGuidance/ucm388395.htm).

^{vi} New Hampshire (State). Legislature. Senate. Title XII Public Safety and Welfare. Ch. 155. *Indoor Smoking Act*. Section 155:65. (2007):
[<http://www.gencourt.state.nh.us/rsa/html/XII/155/155-65.htm>](http://www.gencourt.state.nh.us/rsa/html/XII/155/155-65.htm).

^{vii} Aslam, Hafiz, Shafaq Saleem, Sidra German, and Wardah Qureshi. "Harmful Effects of Shisha: Literature Review." *Int Arch Med International Archives of Medicine* 7 (2014): 16. Web. 23 Nov. 2015.
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4003490/>.

^{viii} "Hookahs." *Centers for Disease Control and Prevention*. Centers for Disease Control and Prevention, 14 Sept. 2015. Web. 23 Nov. 2015.
[<http://www.cdc.gov/tobacco/data_statistics/fact_sheets/tobacco_industry/hookahs/index.htm>](http://www.cdc.gov/tobacco/data_statistics/fact_sheets/tobacco_industry/hookahs/index.htm).

^{ix} Cobb, Caroline, Kenneth D. Ward, Wasim Maziak, Alan L. Shihadeh, and Thomas Eissenberg. "Waterpipe Tobacco Smoking: An Emerging Health Crisis in the United States." *American Journal of Health Behavior* (2010): 275-85. Web. 4 Dec. 2015.
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3215592/>.

^x Chaouachi, Kamal. "Hookah (Shisha, Narghile) Smoking and Environmental Tobacco Smoke (ETS). A Critical Review of the Relevant Literature and the Public Health Consequences." *International Journal of Environmental Research and Public Health IJERPH* 6.2 (2009): 798-843. Web. 23 Nov. 2015.
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2672364/>.

^{xi} "Hookah: 50 State Survey." *Legal Resource Center for Public Health Policy*. University of Maryland King Carey School of Law, 1 May 2013. Web. 23 Nov. 2015.

<https://www.law.umaryland.edu/programs/publichealth/documents/Hookah_50_State_Survey.pdf>.

^{xii} Rice, Virginia Hill, Linda S. Weglicki, Thomas Templin, Adnan Hammad, Hikmet Jamil, and Anahid Kulwicki. "Predictors of Arab American Adolescent Tobacco Use." *Merrill-Palmer Quarterly* 52.2 (2006): 327-42. Web. 30 Nov. 2015.
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1533871/>.

^{xiii} "E-cigarettes and E-hookahs: MedlinePlus Medical Encyclopedia." *MedLine Plus*. NIH U.S National Library of Medicine, 19 Nov. 2015. Web. 23 Nov. 2015.
[<https://www.nlm.nih.gov/medlineplus/ency/patientinstructions/000761.htm>](https://www.nlm.nih.gov/medlineplus/ency/patientinstructions/000761.htm).

^{xiv} "The Facts about Electronic Cigarettes." *New Hampshire Department of Health and Human Services*. 2015. Web. 28 Dec. 2015.
[<http://www.dhhs.nh.gov/dphs/tobacco/documents/electronic-cigarettes-fs.pdf>](http://www.dhhs.nh.gov/dphs/tobacco/documents/electronic-cigarettes-fs.pdf).