

HOOKAH

WHAT IS HOOKAH?

Hookah is a form of water pipe that is widely used throughout the world. A flavored blend of tobacco is smoked in a hookah using ignited coal as a heat source. The four primary components of hookah include:

SHISHA: The sticky blend of tobacco and other ingredients such as spices, dried fruit, molasses, honey, and artificial flavors that is smoked using a hookah pipe. Heavy metals, including nickel, chromium, lead, and arsenic are present in shisha and shisha smoke.¹

COAL: The heat source for the tobacco. Burning coal creates carbon monoxide, which can be highly toxic. Multiple cases of carbon monoxide poisoning requiring emergency treatment have been identified after using hookah.^{2,3}

WATER: The large well at the base of the hookah is filled with liquid, typically water. The water cools the smoke, making it easier to inhale a larger volume and easier for the hazardous elements in the smoke to penetrate more deeply into the user's lungs.^{1,4}

HOSE & MOUTHPIECE: The common practice of sharing a mouthpiece while smoking hookah in a group exposes the smokers to communicable diseases such as colds, viruses including the flu and herpes, oral bacterial infections, and tuberculosis.⁴



QUICK FACTS

- Compared with cigarettes, hookah contains:
 - 5 times more cancer-causing agents
 - 100 times more tar
 - 4 times more nicotine
 - 11 times more carbon monoxide⁴
- Hookah users may inhale as much smoke in one session as a cigarette smoker would inhale in 100 cigarettes (5 packs).⁸
- Six percent of Californians under the age of thirty use hookah, compared to .06 percent of individuals over the age of thirty.¹¹
- Flavors matter! Hookah tobacco comes in hundreds of flavors, which increases the likelihood of hookah initiation among non-smokers or never smokers, and the continued use of hookah among regular users.¹³
- Hookah is used by individuals who would not otherwise use tobacco.⁵
- Dual use of cigarettes and hookah is more common than hookah use alone.⁶
- Among individuals who were not current smokers, those who had tried hookah were more likely to report intent to try cigarettes soon.⁷



MISCONCEPTIONS



THE WATER FILTERS THE SMOKE, MAKING IT HEALTHIER:

Hookah smoke contains high levels of toxins including carbon monoxide, heavy metals, nicotine, and other cancer-causing chemicals even after passing through the water. In fact, a hookah's water process actually makes the harmful particles smaller than cigarette smoke and more likely to reach deeper into the pulmonary system and to cross the blood-brain barrier.¹⁴

HOOKAH SMOKING DOES NOT LEAD TO TOBACCO ADDICTION:

Tobacco smoked in a hookah pipe contains nicotine. Nicotine is a poisonous and highly addictive drug. A hookah user is two times more likely to become a cigarette smoker than someone who does not smoke hookah.¹

HOOKAH SMOKING INDUCES RELAXATION AND STRESS RELEASE:

Nicotine is a stimulant and does not relieve stress, even though smokers often believe that it does. Nicotine only relieves the stress it causes due to addiction.¹

HOW DOES IT WORK?

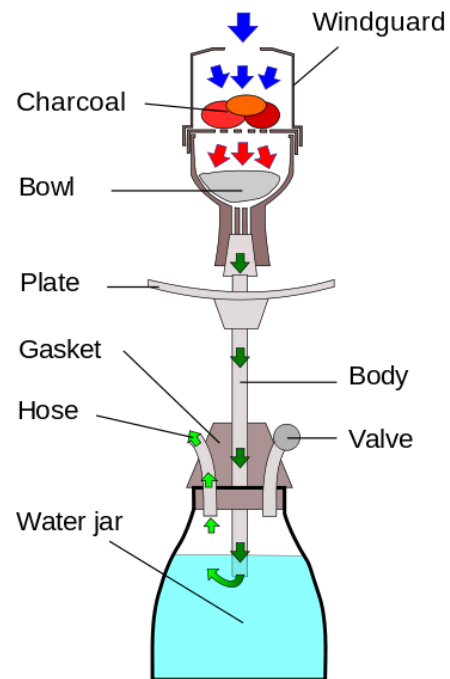
To use a hookah, tobacco is placed in the ignition chamber (bowl) of the hookah and covered with charcoal. A small pipe leads from the bowl to the water chamber at the base. When the smoker inhales through a hose connected to the water chamber, smoke is drawn down from the bowl, through the pipe, through the water chamber and out through the hose and mouthpiece where it is inhaled by the smoker.¹



SMOKING HOOKAH IS NEVER SAFE

Recently there has been an emergence of products which claim to be safer than using conventional hookah. Steam stones, and tobacco-free or tar-free shisha claim to expose the user to fewer health hazards than traditional hookah, but these claims are either unsubstantiated or have been refuted.

- **STEAM STONES** are heat-treated porous materials soaked in fluid (usually glycerin, flavor, and color) and heated in hookahs where tobacco would normally be placed. When heated, the fluid creates a smoke-like vapor that is inhaled by the user. Health risks of using this product are unknown, but the user is still exposed to carbon monoxide from the burning of coal.⁹
- **TOBACCO-FREE (HERBAL) SHISHA** has been found to contain polycyclic aromatic hydrocarbons as well as high levels of heavy metals including lead, chromium, nickel, and arsenic. The toxic byproducts of burning herbal shisha are equivalent or greater to those produced from tobacco shisha.¹⁰
- Advertising shisha as “**TAR-FREE**” is a gimmick. Tar is not added to the shisha, but created when the tobacco burns.⁸



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1. Griffiths, M., Ford, E. (2014). Hookah Smoking: Behaviors and Beliefs among Young Consumers in the United States. *Social Work in Public Health*. 29, 17-26. doi:10.1080/19371918.2011.619443
2. Fauci, G., Weiser, G., Steiner, I., Shavit, I. (2012). Carbon monoxide poisoning in narghile (water pipe) tobacco smokers. *Canadian Journal of Emergency Physicians*. doi: 10.2310/8000.2011.110431
3. Sivilotti, M., Abu-Laban, R. (2011). Inhaling smoke causes smoke inhalation: put that in your hookah pipe! *Canadian Journal of Emergency Physicians*. 14(1):3-4 doi: 10.2310/8000.2011.110703
4. Asotra, K. (2005). Hooked on Hookah? What you don't know can kill you. *Burning Issues: Tobacco's Hottest Topics*. Tobacco-Related Disease Research Program Newsletter 7, No 3 1-10.
5. Nuzzo, E., et al. (2012). Associations between hookah tobacco smoking knowledge and hookah smoking behavior among US college students. *Health Education Research*. doi: 10.1093/her/cys095
6. Cobb, C. Khadar, Y., Nasim, A., Eissenberg, T. (2012). A multiyear survey of waterpipe and cigarette smoking on a US University Campus. *Journal of American College Health*. 60, 7 (521).
7. Heinz, A. et al. (2013). A comprehensive examination of hookah smoking in college students: Use patterns and contexts, social norms, and attitudes, harm perception, psychological correlates and co-occurring substance use. *Addictive Behaviors* 38, 2751-2760.
8. Scientific Evidence of the Health Risks of Hookah Smoking. *CESAR Fax*. June 9, 2008 Vol 17, Issue 23.
9. Hammad, F. et al. (2013). 'Herbal' but potentially hazardous: an analysis of the constituents and smoke emissions of tobacco-free waterpipe products and the air quality in the cafes where they are served. *Tobacco Control*. doi: 10.1136/tobaccocontrol-2013-051169
10. Lee, Y., Mukherjee, A., Grana, R. (2012). Hookah steam stones: smoking vapor expands from electronic cigarettes to waterpipes. *Tobacco Control*.
11. Vuong TD, Zhang X, Roeseler A. (2019). California Tobacco Facts and Figures 2019. Sacramento, CA: California Department of Public Health.
12. MMWR. 11/15/13. Tobacco Product Use Among Middle and High School Students.
13. Owens, V. L., Ha, T., & Soulakova, J. N. (2019). Widespread use of flavored e-cigarettes and hookah tobacco in the United States. *Preventive medicine reports*, 14, 100854.
14. University of California - Irvine. "In first-of-its-kind study, researchers highlight hookah health hazards: Smokers exposed to toxic chemicals, ultrafine particles and carbon monoxide." *ScienceDaily*. ScienceDaily, 12 August 2019. Accessed: www.sciencedaily.com/releases/2019/08/190812144932.htm.