

Secondhand Smoke: Hookah and E-Cigarettes in Utah

The Utah Indoor Clean Air Act was passed by the legislature to provide protection to Utahns and visitors from the toxic effects of secondhand smoke exposure. Secondhand smoke has been classified by the U.S. Environmental Protection Agency (EPA) as a Group A carcinogen, which is known to cause cancer in humans.¹ There is no established safe level of exposure to this class of carcinogens.¹ Clean air legislation that prohibits tobacco smoke in indoor public places has been shown to lead to significant decreases in smoking-related health risks such as heart attacks and strokes.

Hookah

Secondhand smoke from hookah is a mixture of tobacco smoke and smoke from the fuel (usually charcoal) used to light the tobacco. It puts non-users, workers and patrons alike, at risk for the same types of diseases as secondhand smoke from cigarettes, including: cancer, heart disease, respiratory illnesses and adverse effects during pregnancy.²

A typical hookah session lasts from 20-80 minutes, with hookah smokers taking up to 200 puffs. In contrast, cigarettes are typically smoked in 5-7 minutes with 8-12 puffs. As a result, a single hookah causes significantly higher levels of secondhand smoke than a cigarette.³ Research regarding the contents of secondhand smoke produced by hookah demonstrates that levels of particulate matter can build up to toxic levels similar or even more than measured in traditional secondhand smoke.⁴ In one study, the mean particulate matter increased by 553% for hookah (increase from 55 to 365 mg/m³) compared with 447% for cigarettes (increase from 52 to 287 mg/m³).⁵

Secondhand tobacco smoke from hookah is secondhand tobacco smoke, and is toxic. In addition, hookah smoke often produces a sweet smelling aroma that makes secondhand smoke exposure less obvious to patrons and employees of hookah bars.⁶

The Utah Indoor Clean Air Act prohibits tobacco smoke in indoor places of public access. Accordingly, the World Health Organization (WHO) and the American Lung Association recommend that tobacco smoke from hookahs be treated the same as smoke from other tobacco products and be prohibited in the same places.^{2,7}

E-Cigarettes

A relatively new nicotine delivery product on the market is the electronic cigarette, commonly referred to as an e-cigarette. Although not a tobacco product, they are designed to look and feel like a conventional cigarette. E-cigarettes are actively marketed as an alternative to regular cigarettes for use in places where smoking is not permitted. However, since e-cigarettes have not been scientifically evaluated, there is no evidence that these products are safe for human consumption or that they are effective at helping smokers or other tobacco users quit, as some manufacturers continue to claim. Unlike other nicotine replacement products such as gums or patches, the U.S. Food and Drug Administration (FDA) has not approved e-cigarettes as smoking cessation aids. Due to the lack of information about the chemicals in e-cigarettes or in e-cigarette vapor, and the lack of oversight and quality control during manufacturing, e-cigarettes can neither be recommended as a safe alternative to smoking or tobacco use nor as a quitting aid.

- After the user inhales, the residual aerosol, or vapor, is exhaled into the surrounding air.⁸
- It is likely that e-cigarettes emit nicotine, propylene glycol, carcinogens, and other substances.⁹
- Nicotine deposits on indoor surfaces and lasts for weeks to months.¹⁰

Benefits of Smoke-Free Workplace Policies

Many local Utah businesses and business leaders support the implementation of smoke-free policies. These policies lead to substantial financial and health-related benefits for businesses and employees, including reductions in employee smoking and related healthcare costs, improved employee productivity, reduced cleaning and maintenance costs, and reduced fire risk and fire insurance premiums. A smoke-free workplace also prevents violation of the Americans with Disabilities Act which can occur when people with respiratory problems have limited access or cannot patronize or work in a business due to tobacco smoke pollution.

Hookah use in workplaces and public places where smoking of traditional tobacco products is already prohibited creates concern and confusion and leads to difficulties in enforcing the smoking prohibitions currently in place under the Indoor Clean Air Act.

Special Risk To Hospitality Workers

Hospitality employees in a smoking restaurant or bar have no choice but to breathe secondhand smoke every shift they work. Even if they are active smokers, exposure to secondhand smoke increases their health risks as well as the health risks of non-smoking patrons.¹⁰ Restaurant and bar workers are subject to much longer exposure than patrons and are exposed to the highest levels of secondhand smoke of any occupational or demographic group.¹¹ Hazardous working conditions are prohibited in every other line of work.

Electronic Cigarette



Acquired from www.vaping.com and <http://bestvapormokesstore.com/flavoredvapor-electric-cigarettes/>

Hookah



Acquired from <http://www.pjstar.com/photos/x782439022/Hookah-Bar-for-West-Peoria> and http://abcnews.go.com/Health/government-crack-hookahs/story?id=13725723#_Tx204KXRAsc

¹ U.S. Environmental Protection Agency. (1994, June). Setting the Record Straight: Secondhand Smoke is a Preventable Health Risk. Retrieved May 23, 2011, from U.S. Environmental Protection Agency Web site: <http://www.epa.gov/smokefree/pubs/strsfs.html>

² World Health Organization. "Waterpipe Tobacco Smoking: Health Effects, Research Needs and Recommended Actions by Regulators." 2005. 8 June 2009. <http://www.who.int/tobacco/global_interaction/tobreg/waterpipe/en/index.html>

³ Second-hand Smoke and Hookah Pipes, Non-Smokers' Rights Association Smoking and Health Action Foundation, March 2008.

⁴ Eissenberg, Thomas and Alan Shihadeh, Waterpipe Tobacco and Cigarette Smoking: Direct Comparison of Toxicant Exposure, *American Journal of Preventive Medicine* 37(6) 2009, P 521; Aljarrah, Khaled, Zaid Q. Ababneh, and Wael K Al-Delaimy, Perceptions of Hookah Smoking Harmfulness: Predictors and Characteristics Among Current Hookah Users, *Tobacco Induced Diseases* 2009, 5:16.; Maziak, W, Rastram S, Ibrahim I, Ward KD, Eissenberg T. *Nicotine Tobacco Research*, 10(3): 519-23, 2008; Daher N, Jaroudi E, Sheheitti H, Badr T, Sepetdjan E, Al Rashidi M, Saliba N, WShihadeh A. Comparison of Carcinogen, Carbon Monoxide, and Ultrafine Particle Emissions from Narghile Waterpipe and Cigarette Smoking: Sidestream Smoke Measurements and Assessment of Second-hand Smoke Emission Factors, *Atmospheric Environment*, Jan1; 4(1):8-14, 2010.; El Nachef, W. N., & Hammond, K. (2008). Exhaled carbon monoxide and with waterpipe use in U.S. students. *Journal of the American Medical Association*, 299(1), 36-38.; A. Mirahmadizadeh, N. Nakhaee, Reply: Recent Evidence is Alerting Us to the Critical Importance of Secondhand Water Pipe Smoke, *Medical Principles and Practice*, pp 425-426, 2009.

⁵ Maziak, W, Rastram S, Ibrahim I, Ward KD, Eissenberg T. *Nicotine Tobacco Research*, 10(3): 519-23, 2008

⁶ Noonan D., Exemption for Hookah Bars in Clean Air Legislation: A Public Health Concern, *Public Health Nursing*, January-February 2010, pp 49-53 (abstract).

⁷ American Lung Association. "An Emerging Deadly Trend: Waterpipe Tobacco Use." 2007. 10 June 2009. <http://www.lungusa2.org/embargo/slati/Trendalert_Waterpipes.pdf>

⁸ Trtchounian, A., Williams, M., & Talbot, P. (July 19, 2010) Conventional and electronic cigarettes (e-cigarettes) have different smoking characteristics. *Nicotine & Tobacco Research Advance Access*. Doi:10.1093/ntr/ntq114

⁹ Henningfield, J.E., & Zaatari, G.S. (2010). Electronic nicotine delivery systems: Emerging science foundation for policy. *Tobacco Control*, 19(2), 89-90.

¹⁰ University of California, S.F. (2011) *What About Choice*. Retrieved October 19, 2011 from Tobacco Scam website at http://tobaccoscamlucsf.edu/simply/simply_wac.cfm

¹¹ University of California, S.F. (2011) *Your Exposure At Work*. Retrieved September 30, 2011 from Tobacco Scam website at http://tobaccoscamlucsf.edu/Secondhand/Secondhand_iih.cfm.