

E-cigarettes and Smoke-free Policies

What are E-cigarettes and what do they contain?

- E-cigarettes are battery operated devices that vaporize a liquid solution consisting of ingredients generally regarded as safe for human consumption (89-90% propylene glycol, vegetable glycerin, water, flavoring) and a small amount of nicotine. (Laugesen, 2008)
- Electronic cigarettes are a completely smokeless alternative to traditional cigarettes and are not marketed as a nicotine addiction treatment. (Cahn and Siegel, 2011)
- Testing by the FDA found tobacco specific nitrosamines and tobacco specific impurities in the unvaporized liquid “at very low levels,” equivalent to the quantity found in FDA-approved nicotine products. (USFDA 2009).
- FDA testing detected a non-toxic amount of diethylene glycol (DEG) at 1% (approximately 0.01 g) in one of 18 cartridges tested. (USFDA 2009).
- The major hazard from DEG occurs following the ingestion of relatively large single doses. The estimated lethal dose of DEG for humans is approximately 1 ml/kg. (Health Canada, 2010)
- Multiple companies have had their products tested for diethylene glycol and none of the samples have turned up positive. (Siegel, 2011)
- A puff of e-cigarette mist delivers only 10% of the nicotine delivered by a similar puff of smoke from a conventional cigarette. (Laugesen, 2009) (Bullen, 2010)
- E-cigarette use mimics smoking; but, there is no combustion and the user inhales vapor, not smoke. (Cahn and Siegel, 2010)

Do E-cigarettes give off secondhand smoke?

- The e-cigarette generates no side-stream smoke from its artificially lit tip. (Laugesen, 2008)
- After the user inhales, the residual aerosol, or vapor, is exhaled into the surrounding air. (Trtchounian, Williams, & Talbot, 2010)
- The exhaled vapor of the e-cigarette is composed of propylene glycol, and contains almost no nicotine; and no carbon monoxide. (Laugesen, 2008)

Is secondhand vapor from e-cigarettes harmful?

- E-cigarette vapor was tested for over 50 cigarette smoke toxicants and none were found. (Laugesen 2009)
- “Lacking any active ingredient or any gaseous products of combustion, the PG mist or ‘smoke’ is not harmful to bystanders.” (Laugesen, 2008)
- Electronic cigarettes tested did not expose users to “measurable levels of nicotine or carbon monoxide, although both suppressed nicotine/tobacco abstinence symptom ratings.” (Eissenberg, 2010)

Are there other facts or concerns about the use of e-cigarettes?

- They are proving acceptable as a complete replacement for smoking for up to 79% of consumers. (Heavner, Dunworth, Bergen, Nissen, & Phillips, 2008)
- Over 90% of users report that their health has improved. (Heavner, Dunworth, Bergen, Nissen, & Phillips, 2008)
- Smokers with a documented history of recurring relapses were able to quit and to remain abstinent for at least six months after taking up an e-cigarette. (Polosa, 2011)
- e-Cigarettes can substantially decrease cigarette consumption without causing significant side effects in smokers not intending to quit. (Polosa, 2011)
- Sales of e-cigarettes to youth should be prohibited in the same manner as all tobacco and nicotine products.
- Surveys of e-cigarette users strongly indicate that the devices do not have a strong appeal for young adults and youth. High start-up costs and maintenance requirements for e-cigarettes discourage youth from choosing e-cigarettes over traditional cigarettes. (CASAA, 2010)
- The vast majority of e-cigarette users surveyed are current and former long-time smokers between the ages of 30 to 65. (CASAA, 2010)
- A great number of e-cigarette users report that traditional cigarettes taste extremely foul after switching to e-cigarettes, further reducing the urge to return to smoking. This effect would greatly minimize the risk of e-cigarettes becoming a “gateway product” and initiating youth to smoking traditional cigarettes. (CASAA, 2010)
- E-cigarettes are easily distinguishable from traditional cigarettes. There is no lingering smoke, no unpleasant odor, no ashes, no embers, no side stream smoke from the tip and no butts. Many e-cigarette brands are available in colors and shapes which further distinguish them from traditional cigarettes. (CASAA, 2011)

How is the U.S. government responding to the so-called risks involved with e-cigarettes?

- The Hon. Judge Richard J. Leon of the U.S. District Court for the District of Columbia granted an injunction against FDA seizures of e-cigarette imports. (Leon, 2010)
- Judge Leon stated that the FDA has failed to produce any evidence that the products have harmed anyone.
- The District Court and the U.S. District Court of Appeals stated that the FDA may regulate e-cigarettes under the Family Smoking Prevention and Tobacco Control Act, but not as drugs or devices under the Food, Drug, and Cosmetics Act. (Garland, Kavanaugh & Williams, 2010)
- The FDA announced its intention to regulate electronic cigarettes as “tobacco products.” (FDA, 2011)

What are the recommendations regarding e-cigarettes and smoke-free policies?

- The Consumer Advocates for Smoke-free Alternatives Association strongly opposes including e-cigarettes in smoking bans.
- Allowing indoor use provides smokers with a powerful incentive to switch to a reduced harm alternative to smoking. (CASAA, 2010)
- Electronic cigarettes, as a tobacco harm reduction product, are supported by the American Association of Public Health Physicians, the American Council on Science and Health, Smokefree Pennsylvania and tobacco control researchers such as Dr. Carl Philips, Dr. Brad Rodu and Dr. Michael Siegel.

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For more information, contact the Consumer Advocates for Smoke-free Alternatives Association, <http://CASAA.org>