



## Position Statement on Electronic Cigarettes (e-cigarettes, e-cigs, vapors) Last revision –2/4/2015

### Introduction

The Nevada Tobacco Prevention Coalition (NTPC) is a group of volunteers, community organizations, and public health professionals who have worked together for more than two decades to reduce the burden of tobacco use and nicotine addiction in Nevada. In response to the increase in tobacco-free policies nationally, the tobacco industry has developed new products, allowing consumers to obtain nicotine without the use of a traditional cigarette. In many cases, these new products are claimed and/or perceived to be “harm reducing” or safe alternatives to conventional cigarettes; however, there is no reliable science to substantiate this claim. Nicotine causes addiction as powerful and self-enforcing as addiction to cocaine and heroin. Eliminating tobacco use and nicotine addiction helps prevent death and disease. Substituting one disease-causing agent for another is not a healthy choice and hinders public health efforts to reduce the toll of death and disease in Nevada.

Electronic cigarettes, e-cigarettes, e-cigs, vape pipes, hookah pens, e-hookahs or vapors as they are more commonly known, are nicotine-delivery devices that sometimes look like cigarettes in shape, size, and general appearance. These battery-powered devices usually include a battery component, an atomizer, and a cartridge with a mouthpiece. When the smoker puffs on the mouthpiece of the cartridge, the battery causes the tip of the e-cigarette to glow and the heat created by the battery turns the liquid nicotine into an aerosol, or mist, of liquid, flavorings, and nicotine. The aerosol can be breathed in and out by the user, creating a cloud that looks like cigarette smoke. Using an e-cigarette is commonly referred to as vaping.

The e-cigarette is sold as a metal tube that requires refillable containers of nicotine and flavorings, often called juice, and the cartridge generally contains up to 20mg of nicotine or more. Some of the flavors available include coffee, tobacco, apple, strawberry, banana, and bubble gum. The refill bottles contain up to 7 grams of nicotine. There are also numerous inexpensive e-cigarettes available that are disposable and don't require refilling the cartridge. These products can be discarded once the user depletes the liquid nicotine.

### Safety, Quality, and Health Effects of E-Cigarettes

In 2009, the Food and Drug Administration (FDA) tested the ingredients in a small sample of cartridges from the two leading brands of e-cigarettes. They found that the samples contained detectable levels of known cancer-causing agents and other toxic chemicals, including diethylene glycol (commonly found in antifreeze) in one cartridge and nitrosamines in several cartridges. The tests also found that there was no consistency in the levels of nicotine between different products with **the** same label. Some of the products labeled “no nicotine” still contained low levels of nicotine.

In 2013, published studies indicated that e-cigarettes do not just emit “harmless water vapor.” Secondhand e-cigarette aerosol (misleadingly called vapor by the industry) contains nicotine, ultrafine particles and low levels of toxins that are known to cause cancer. E-cigarette aerosol is made up of a high concentration of ultrafine particles, and the particle concentration is higher than in conventional tobacco cigarette smoke. Exposure to fine and ultrafine particles may exacerbate respiratory ailments like asthma, and constrict arteries which could trigger a heart attack. At least 10 chemicals identified in e-cigarette aerosol are classified as carcinogens and reproductive toxins. The compounds that have already been identified in mainstream (MS) or secondhand (SS) e-cigarette aerosol include: Acetaldehyde (MS), Benzene (SS), Cadmium (MS), Formaldehyde (MS,SS), Isoprene (SS), Lead (MS), Nickel (MS), Nicotine (MS, SS), N-Nitrosornicotine (MS, SS), and Toluene (MS, SS). E-cigarettes contain and emit propylene glycol, a chemical that is used as a base in e-cigarette solution and is one of the primary components in the aerosol emitted by e-cigarettes. Short term exposure causes eye, throat, and airway irritation. Long term inhalation exposure can result in children developing asthma. Even though propylene glycol is FDA approved for use in some products, the inhalation of vaporized nicotine in propylene glycol is not. Some studies show that heating propylene glycol changes its chemical composition, producing small amounts of propylene oxide, a known carcinogen.

In 2014, the CDC studied the number of calls to poison centers involving e-cigarette liquids containing nicotine and found that they rose from one per month in September 2010 to 215 per month in February 2014. The number of calls per month involving conventional cigarettes did not show a similar increase during the same time period. More than half (51.1 percent) of the calls to poison centers due to e-cigarettes have involved young children 5 years and under. According to the Nevada Poison Center, in 2013 a total of 21 calls were received from Nevada residents related to e-liquid ingestion or exposure. Ten of those calls related to children between the ages of zero and five years of age. In 2014, calls doubled to 44 and more than 70 percent (31 calls) related to children ages zero to five. Although no deaths have been reported to date in Nevada, half of the callers went to a medical facility to seek treatment.

The American Society for Heating, Refrigeration, and Air Conditioning Engineering (ASHRAE), the organization that develops engineering standards for, among other things, building ventilation systems published a recent study that concluded e-cigarettes emit harmful chemicals into the air and need to be regulated in the same manner as tobacco smoking. There is evidence that nitrosamines, a group of carcinogens found specifically in tobacco, are carried over into the e-cigarette fluid from the nicotine extraction process. There is also evidence that the glycol carriers can be oxidized by the heating elements used in e-cigarettes to vaporize the liquids, creating aldehydes such as formaldehyde. Consumers should be warned that, while the health risks associated with the usage of e-cigarettes are less than those associated with tobacco smoking, there remain substantial health risks associated with the use of e-cigarettes.

### **Regulation of E-Cigarettes**

In 2010, following a lawsuit by e-cigarette manufacturers, federal courts ruled that the FDA *could* regulate e-cigarettes as tobacco products under the Tobacco Control Act, but *not* as tobacco cessation aids. In 2011, the FDA issued a statement announcing they intend to regulate e-cigarettes as tobacco products, as allowed by the courts, which includes marketing restrictions, mandated ingredient listing and pre-market review. The FDA has yet to issue regulations specific to e-cigarettes, though they are expected to at any time.

At the state and local level, many governments have chosen to limit and regulate e-cigarettes. As of October 2014, 226 municipalities and three states include e-cigarettes as prohibited products for use in smoke free environments. Many entities have banned the use of e-cigarettes in areas where smoking is already prohibited, by adding vaping to existing smoke-free laws. Others are banning or limiting the sale of e-cigarettes to minors. Another approach is to regulate who can sell e-cigarettes, by requiring tobacco retailer licensure in order to sell. In Nevada, no legislated age-restrictions on the sale and use of e-cigarettes currently exists. Additionally, e-cigarettes in Nevada are not taxed as tobacco products, resulting in no generation of tobacco tax revenue. Although, no legislation restricting the use of e-cigarettes exists in Nevada, numerous businesses and organizations have voluntarily implemented restrictions on the use of e-cigarettes indoors and outdoors.

### **Marketing E-Cigarettes**

Just a few years ago, there were only a handful of U.S. companies that sold e-cigarettes, though most e-cigarettes were still made in China. Now, many companies make and sell e-cigarettes, including US tobacco companies Altria, Reynolds, and Lorillard. There has been a rapid expansion of marketing e-cigarettes, in print, radio, television, and billboard advertising in Nevada and nationwide. Many times, the e-cigarette is marketed as a way to get nicotine in places where smoking is not allowed or as a recreational alternative to smoking. In April 2014, an investigative report released by 11 members of Congress provides detailed evidence that e-cigarette manufacturers are using the same marketing tactics long used to market regular cigarettes to kids. These tactics include TV and radio ads that reach youth audiences; sponsorships and free samples at youth-oriented events such as auto races and music festivals; celebrity spokespeople who depict e-cigarette smoking as glamorous; and sweet, kid-friendly flavors with names like Cherry Crush, Chocolate Treat, Peachy Keen and Grape Mint. The report finds that many e-cigarette companies also use social media to promote their products and have widely varying policies regarding sales to minors, with one company reporting that that it does not have any policy barring sales to minors. Youth exposure to television ads for electronic cigarettes increased by 256 percent from 2011 to 2013, exposing 24 million U.S. kids to these ads, according to a study published in the journal *Pediatrics*. Several e-cigarette marketers are also marketing their products as a means to quit smoking, despite a lack of credible evidence that says they are effective.

### **Attitudes and Usages**

Sales of e-cigarettes have grown rapidly in the U.S., and after doubling every year since 2008, sales in 2013 accelerated even faster and are projected to reach \$1.7 billion. The cost of e-cigarettes has fallen dramatically, as well, making them more affordable, and thus more attractive to young people. Recent findings from the Centers for Disease Control and Prevention show that in 2012, more than 1.78 million middle and high school students nationwide had tried e-cigarettes. Research indicates that aggressive marketing to youth may have played a role in the dramatic increase. Surveys show that more than 40% of Americans have heard of e-cigarettes and 70% of smokers believe they are less harmful than cigarettes.

### **Conclusion**

While more studies are likely to be conducted on the safety of e-cigarettes in the months and years to come, most public health professionals and the NTPC agree it is premature to call e-cigarettes a safe alternative to traditional cigarettes. Additionally, e-cigarettes are not considered approved tobacco cessation aids and should not be marketed as such. The dramatic increase of e-cigarette usage by youth and the ever present marketing of e-cigarettes to all populations have created concern with public health leaders. The NTPC supports efforts to protect the public health by including e-cigarettes in clean indoor air laws; implementing marketing, age, and flavor restrictions; taxing e-cigarette components as tobacco products;

requiring tobacco retail licensure to sell these products, and voluntary restriction of sales to minors. If current e-cigarette trends continue, decades of efforts that have made smoking socially unacceptable will be reversed.

## Recommendations

### Policy Makers:

- The NTPC supports efforts to protect the public health by including e-cigarettes in clean indoor air laws; implementing marketing, age, and flavor restrictions; taxing e-cigarette components as tobacco products; requiring tobacco retail licensure to sell these products, and restriction of sales to minors. If current e-cigarette trends continue, decades of efforts that have made smoking socially unacceptable will be reversed. Visit [www.tobaccofreenv.org](http://www.tobaccofreenv.org) for additional information.

### Health Care Providers:

- Ask each patient about their tobacco and nicotine use at each visit.
- Encourage patients to quit all use of tobacco products including e-cigarettes through evidence-based methods such as the Nevada Tobacco Quitline at 1-800-QUIT NOW or (800) 784-8669.
- Restrict the use of e-cigarettes indoors and near entrances and exits to medical facilities.
- Provide scientific information about e-cigarettes and other tobacco products to patients.
- Educate parents and the public to take steps to protect children and themselves from exposure to e-cigarette emissions.

### Public:

- Utilize evidence-based methods to quit the use of e-cigarettes and other tobacco products. For free help quitting contact the Nevada Tobacco Quitline. The Nevada Tobacco Quitline offers FREE telephone-based service to Nevada residents 13 years or older, so you can speak to a coach in person. Through the telephone program, you can receive a free supply of nicotine replacement patches, gum, or lozenges. Coaches will determine if you are eligible to receive the nicotine replacement therapy. The Quitline also offers a FREE online service at [www.nevadatobaccoquitline.com](http://www.nevadatobaccoquitline.com). When you enroll online, you get special tools, a support team of coaches, research-based information, and a community of others trying to become tobacco free. Expert coaches can talk to you about overcoming common barriers, such as dealing with stress, fighting cravings, coping with irritability, and controlling weight gain. Call 1-800-QUIT NOW or (800) 784-8669 to start the process today.
- Limit using e-cigarettes and other tobacco products around others or near entrances and exits to businesses.
- Declare your home and car e-cigarette and tobacco-free zones.

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