

<http://www.uvm.edu/~vlrs/>

Professor Jack (Anthony) Gierzynski

Anthony.Gierzynski@uvm.edu

517 Old Mill, Burlington, VT 05405-4110

Electronic cigarettes (also known as e-cigarettes, e-cigs, vaporizers, or vapes) are devices that aerosolize liquids – often containing nicotine, vegetable glycerin, propylene glycol, and artificial flavorings – for inhalation.¹ Some products contain no nicotine at all and are enjoyed for their flavor alone.

substitute.”⁵ The measure would impose a 92 percent tax on electronic cigarette products at point of wholesale.

cytotoxic or mutagenic¹³ activity when compared to the harmful Wet Total Particulate Matter (WTPM) of traditional cigarettes.¹⁴

Studies indicate that the nicotine in e-cigarettes itself is not carcinogenic, does not lead to smoking related diseases, and is not known to be very harmful (aside from its well-documented addictive potential).¹⁵ Some e-cigarettes may contain toxic chemicals similar to those found in

nicotine and other harmful constituents.²¹ The consumption of e-cigarettes causes emissions of propylene glycol, flavoring substances, and nicotine, into indoor air. Therefore, we can expect the use of electronic cigarettes to cause “passive vaping,” or the inhalation of vapors by non-users. However, in contrast to the traditional cigarettes, which burn and therefore emit smoke continuously, the aerosols²² and VOCs

The methods by which e-cigarette products are taxed may have distinct effects upon consumer choices. taxes, or taxes calculated as a percentage of a product's sale price, such as e-cigarette taxes in Minnesota or proposed in Vermont, affect vapor products differently than specific taxes do.⁴² Disposable e-cigarettes, which may be favored by low-income smokers or consumers without expensive reusable devices, include the value of the device and nicotine fluid in sale prices.⁴³ As a result, these products may be effectively taxed at a higher rate than traditional cigaret

The extent to which electronic cigarettes serve as smoking cessation tools may be affected by flavored e-liquids. However, if flavor availability entices non-smokers to purchase electronic cigarette products, states may opt to prohibit sale of flavored nicotine fluids. Federal law currently prohibits the sale of flavors other than menthol in traditional cigarettes. The Food and Drug Administration's (FDA's) Center for Tobacco Products retains the authority to place similar restrictions on electronic cigarettes, but has declined to take action on the issue.⁶¹ In 2015, Vermont lawmakers proposed legislation banning the sale of flavored liquid nicotine.⁶² Similar bills have been authored in other states, but no flavored e-liquid bans have been passed.⁶³

Electronic cigarettes are increasingly popular devices that vaporize liquids, often containing nicotine, for inhalation. Electronic cigarettes use fluids that may contain toxic chemicals similar to those found in traditional cigarettes, albeit in much lower concentrations.⁶⁴ Studies of e-cigarette use indicate these devices can cause moderate short-term side effects, ranging from sore throat to disorientation. More time is needed before the long-term health effects of electronic cigarette use may be assessed. Some research does indicate electronic cigarettes may hold promise as a form of nicotine replacement therapy, but the FDA has yet to approve e-

