

- E-cigarettes do not contain traditional tobacco, but they do contain nicotine, which is a tobacco-derived product. As a result, a federal court determined they could be regulated as a tobacco product, thus the FDA finalized a rule to extend its regulation of tobacco products, [Deeming Tobacco Products To Be Subject to the Federal Food, Drug, and Cosmetic Act](#), that goes into effect August 8, 2016.
- E-cigarette aerosol is not just water vapor. Exhaled aerosol contains propylene glycol, glycerol, flavorings, and nicotine, along with acetone, formaldehyde, acetaldehyde, propanal diacetyl, and triacitine.^{iv}
- The liquid nicotine solution can be dangerous to children or pets if ingested. In Oklahoma, reported nicotine poisonings have gone from 17 in 2012 to over 100 each preceding year.¹

MORE INFORMATION ABOUT E-CIGARETTES

1) Minors should not have access to e-cigarettes/vapor products.

- Changes to the Oklahoma law regarding youth access to tobacco products (SB1602) now prohibits youth access to both the nicotine in the vapor product device *and* the vapor product device itself. Electronic cigarettes and vapor products and devices were added in as a separately defined product. FDA's proposed regulations *do not prohibit* a minor from purchasing a vapor product device that does not contain nicotine.
- The nicotine present in e-cigarettes can negatively affect the developing brain.^v E-cigarettes/vapor products should therefore not be made available to minors.
- E-cigarette/vapor product use is increasing among middle and high school students, while the use of combustible cigarettes among youth has decreased over time.
 - Between 2013 and 2015, there was a 26.8% decrease in combustible cigarette use among Oklahoma high school students, and a 20.7% decrease in combustible cigarette use among Oklahoma middle school students.^{vi}
 - Between 2013 and 2015, there was a 255.6% increase in e-cigarette use among Oklahoma high school students, and a 381.8% increase in e-cigarette use among Oklahoma middle school students.^{vii}

2) There are safer and proven effective ways to quit smoking combustible cigarettes.

- Cigarettes and other combustible tobacco products are so harmful that quitting cigarettes completely is the only way to achieve health benefits. Dual users of e-cigarettes and combustible cigarettes are not improving their health.
- E-cigarettes/vapor products contain cancer-causing chemicals (carcinogens) and nicotine.^{viii}
 - Nicotine is as addictive as heroin and cocaine^{ix} and is toxic at certain doses.^x

¹ Oklahoma Poison Control Center. E-cigarette Exposure data. Shared September 2015.

- Nicotine affects the nervous system and heart and can be absorbed into the body through inhalation, ingestion and skin contact.^{xi}
- Refill cartridges for e-cigarettes with high nicotine content are possibly life-threatening, particularly for children.^{xii}
- Among e-cigarette/vapor products, the concentration of chemical contaminants and nicotine has been shown to vary greatly. This means these products may provide uncontrolled doses of harmful contaminants.^{xiii,xiv}
- Some survey data state that people believe e-cigarettes are less harmful than FDA-approved nicotine replacement products such as patches, gum, or lozenges, which is untrue. FDA-approved tobacco cessation aids provide controlled doses of nicotine and have been tested and regulated as cessation products.^{xv}
- E-cigarette and vapor products have not been adequately tested nor approved as tobacco cessation devices. The safest alternative to the use of traditional tobacco products is complete cessation of all nicotine.
- While some people claim to have quit combustible cigarettes using e-cigarettes/vapor products, early studies indicate that quit rates are not significantly greater with vapor products than nicotine replacement therapy products that have been licensed, tested and approved for this purpose.^{xvi}
- Completion of the Tobacco Helpline's multi-unit call program when combined with FDA-approved nicotine replacement therapy has been shown to result in a significantly higher quit rate.^{xvii}

3) E-cigarettes/vapor products should not be considered "clean" indoors.

- According to one study, within three minutes, e-cigarettes emit particulate matter (PM_{2.5}) in indoor air that exceeds the WHO air quality guideline value for short term exposure.^{xviii}
- The vapor produced from an e-cigarette or vaping device is *not* water vapor. E-cigarettes/vapor products emit elevated levels of chemicals, including propylene glycol, glycerine, tobacco specific nitrosamines and other tobacco-related contaminants.^{xix}
 - Propylene glycol may cause respiratory irritations and possibly increase the risk for asthma.^{xx}
 - Glycerine may cause lipoid pneumonia on inhalation.^{xxi}
- In addition, certain carcinogenic (cancer-causing) substances and nicotine are also present in the vapor produced by e-cigarettes at some level.^{xxii}

- E-cigarettes and vapor products should not be used indoor or in cars, or around children. Secondhand vapor carries toxins with it that impact non-smokers/non-vapers. Studies suggest bystanders get just as much nicotine exposure from secondhand vapor as they do from secondhand smoke.^{xxiii}
- MRI images indicate that there are changes in the brain after one hour of moderate secondhand smoke exposure to cigarettes, most likely due to nicotine exposure.^{xxiv} Nicotine and other cigarette contaminants are released in the vapor of e-cigarettes exposing bystanders to harmful chemicals at some level. Indoor spaces should be free of these contaminants to minimize negative health consequences.

We need much more research on the impact of e-cigarette and vapor product use on cancer, heart disease, long-term health consequences, tobacco cessation, and youth initiation to tobacco products.

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