

FREQUENTLY ASKED QUESTIONS ABOUT E-CIGARETTES

What is an e-cigarette/vapor product?

- A battery-powered device that heats a liquid solution to produce a vapor for inhalation.
- Some look similar to cigarettes and even have a tip that lights up when the user inhales. Other vaping devices look less like cigarettes but serve the same purpose. Some are refillable and rechargeable, while others are disposable.
- The liquid solution comes in various flavors and nicotine levels.
- Use of an e-cigarette is often referred to as “vaping” rather than “smoking.”

Is their popularity increasing?

- Sales of e-cigarettes have greatly increased in the United States since 2010.
- A large portion of the population is aware of e-cigarettes, including most adolescents and young adults.
- Awareness of e-cigarettes is particularly high among smokers.

Are they safe? Are they regulated?

- E-cigarettes do not contain traditional tobacco, but they do contain nicotine, which is a tobacco-derived product. As a result, a federal court has determined they can be regulated as a tobacco product, and the FDA has announced its intent to regulate e-cigarettes.
- Because the products are not currently regulated and many are produced outside the United States, there is no oversight of a manufacturer’s claims or an independent reseller’s claims regarding ingredients, nicotine content or safety.

MORE INFORMATION ABOUT E-CIGARETTES

1) Minors should not have access to e-cigarettes/vaping devices.

- The nicotine present in e-cigarettes can negatively affect the developing brain.ⁱ E-cigarettes/vaping devices 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 is decreasing.
 - Between 2009 and 2011, there was an 8.1% decrease in combustible cigarette use among high school students and a 17.4% decrease in combustible cigarette use among middle school students in the United States.^{ii,iii}
 - Between 2011 and 2012, there was an 86.7% increase in e-cigarette use among high school students and an 83.3% increase in e-cigarette use among middle school students in the United States.^{iv}

2) There are safer and more 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. Vapers who use e-cigarettes while continuing to use combustible cigarettes are not improving their health.
- E-cigarettes/vaping devices contain cancer-causing chemicals (carcinogens) and nicotine.^v
 - Nicotine is as addictive as heroin and cocaine^{vi} and is toxic at certain doses.^{vii}
 - Nicotine affects the nervous system and heart and can be absorbed into the body through inhalation, ingestion and skin contact.^{viii}
 - Refill cartridges for e-cigarettes with high nicotine content are possibly life-threatening, particularly for children.^{ix}
- Because e-cigarettes/vaping devices are not regulated, their safety may be questioned. Among e-cigarette/vaping devices, the concentration of chemical contaminants and nicotine has been shown to vary greatly. This means these unregulated products may provide uncontrolled doses of harmful contaminants.^{x,xi}
- 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 products provide controlled doses of nicotine and have been tested and regulated as cessation products.^{xii}

- E-cigarette and vaping devices have not been adequately tested nor approved as tobacco cessation devices. The safest alternative to the use of traditional tobacco products is complete cessation.
- While some people claim to have quit combustible cigarettes using e-cigarettes/vaping devices, early studies indicate that quit rates are not significantly greater with vaping devices than nicotine replacement therapy products that have been licensed, tested and approved for this purpose.^{xiii} 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.^{xiv}

3) E-cigarettes/vaping devices 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.^{xv}
- The vapor produced from an e-cigarette or vaping device is *not* water vapor. E-cigarettes/vaping devices emit chemicals, which may include propylene glycol, glycerine, tobacco specific nitrosamines and other tobacco-related contaminants.^{xvi}
 - Propylene glycol may cause respiratory irritations and possibly increase the risk for asthma.^{xvii}
 - Glycerine may cause lipid pneumonia on inhalation.^{xviii}
- In addition, certain carcinogenic (cancer-causing) substances and nicotine may also present in the vapor produced by e-cigarettes at some level.^{xix}
- E-cigarettes and vaping devices should not be used indoor or in cars, or around children. Secondhand vapor carries toxins with it that impact non-smokers/non-vapers. Research suggests bystanders can get just as much exposure to nicotine from secondhand vapor as they do from secondhand smoke.^{xx}
- 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.^{xxi} Nicotine and other cigarette contaminants can be 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 vaping on cancer, heart disease, long-term health consequences and youth initiation to tobacco products.

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