

MONROE COUNTY HEALTH DEPARTMENT

STATEMENT ON

ELECTRONIC NICOTINE DELIVERY DEVICES (ENDS)

July 9, 2015

WHAT ARE THEY?

ENDS, or electronic nicotine delivery devices, means any electronic oral device, such as one composed of a heating element, battery, and/or electric circuit, which provides an aerosol (commonly called “vapor”) of nicotine, and any other substances, and the use or inhalation of which simulates smoking.

KNOWN DANGERS:

- ENDS products are not regulated nor approved for tobacco cessation by the Federal Drug Agency.
- Nicotine levels in aerosol puffs from different brands vary widely, not only from each other, but within the same cartridge.^{3,6}
- Starting in February of 2010, E-cigarette liquids poisonings jumped from 1 per month to 215 per month in 3 years, with over 51% of these cases happening in children five and under.²
 - Calls to poison control centers involving exposures to e-cigarettes and liquid nicotine increased to 3,783 in 2014 from 1,543 in 2013 and 271 in 2011.¹
- According to the Surgeon General, nicotine exposure during adolescence, a critical window for brain development, may have lasting adverse consequences for brain development.
- For some ENDS brands, the level of formaldehyde, a cancer-causing agent, has been found to be as high as in the smoke produced by some cigarettes.⁷

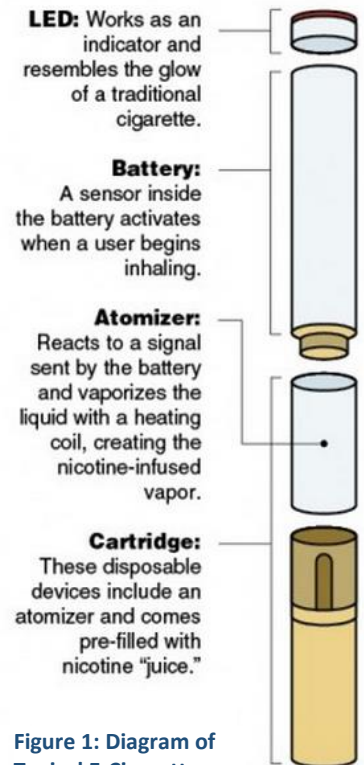


Figure 1: Diagram of Typical E-Cigarette

UNKNOWN RISKS:

- Tests show ENDS aerosol is not just “water vapor”; it contains nicotine and other carcinogenic and toxic compounds like formaldehyde and acetaldehyde.⁷
- Exhaled ENDS aerosol results in similar nicotine uptake by bystanders despite having less nicotine than in second-hand smoke.
- ENDS aerosols contain submicron particles that are both breathed in by the user and exhaled into the air.
- In an FDA lab analysis, the electronic cigarette cartridges that were labeled as containing no nicotine had low levels of nicotine present in all cartridges tested, except one (of 18 tested).⁶
- No brand of electronic cigarette has been submitted to FDA to establish their safety.

World Health Organization,

“ENDs users should be legally requested to not use ENDs indoors, especially where smoking is banned until exhaled vapor is proven to be not harmful to bystanders.”⁷

MARKETING TO KIDS

- With flavors like “gummy bears” and “cherry crush”, ENDS products are designed to appeal to youth.
 - Survey data shows that youth smokers are much more likely to use these flavored products.
 - In 2009 a federal law banned manufacturers from using candy, fruit, and other flavored cigarettes to prevent targeting youth.^{2,3}
- A study conducted in North Carolina found that only 5 of 98 attempts by teens to buy e-cigarettes online were blocked by online vendors’ attempts to verify customer age.¹

E-Cigarette Use in Youth 2011-2014

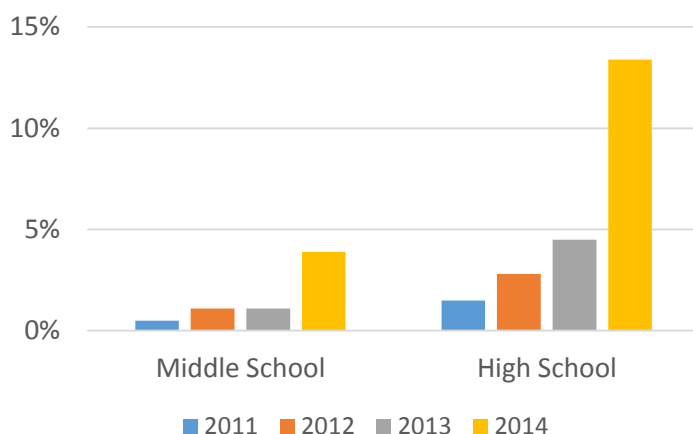


Figure 2: E-cigarette use among high school students tripled between 2011 and 2013 and again between 2013 and 2014. [Data taken from CDC National Youth Tobacco Survey]⁵

A federal survey reported that 17.1% of 12th graders reported using an e-cigarette in the past 30 days⁴

INTERFERENCE WITH SMOKE-FREE POLICIES

- ENDS has created challenges to the core message of tobacco control, which is tobacco is harmful. The promotion of ENDS comes with at least one of the following messages⁷:
 - a) Try to quit smoking and if you can't, use ENDS
 - b) You do not need to quit nicotine addiction, just smoking
 - c) Use ENDS where you can't smoke tobacco
- Concerns with gateway and renormalization of nicotine products include:
 - a) Children (and generally non-smokers) will use nicotine at a rate greater than expected if ENDS did not exist
 - b) Once addicted to nicotine through ENDS children will switch to cigarette smoking

References

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- 4 Campaign for Tobacco-Free Kids. (2015). Poisoning Calls About E-Cigarettes and Liquid Nicotine More Than Doubled 2014- FDA Must Act to Protect Kids [Press Release]. Retrieved from http://www.tobaccofreekids.org/press_releases/post/2015_01_13_poisoning
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- 6 U.S. Food and Drug Administration. (2014). *Summary of Results: Laboratory Analysis of Electronic Cigarettes Conducted by FDA* (Archived Content). Retrieved from <http://www.fda.gov/NewsEvents/PublicHealthFocus/ucm173146.htm>
- 7 WHO Framework Convention on Tobacco Control. (2014). *Electronic nicotine delivery systems-* (Report by WHO, FCTC COP 6). Moscow, Russian Federation. Retrieved from http://apps.who.int/gb/fctc/PDF/cop6/FCTC_COP6_10Rev1-en.pdf?ua=1

