

"it's cool,
it's
"safe," &
it's fun."

LUCIA HAGERT

E-Cigarette Use Among
Teens

<https://www.healthline.com/health-news/what-will-happen-to-e-cigs-now>

What are E-Cigarettes?

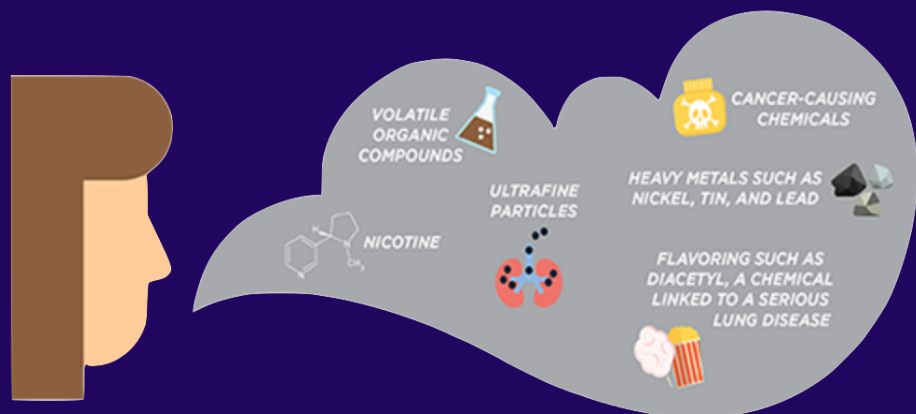


Figure 1; Source: Center for Disease Control and Prevention

Electronic cigarettes (e-cigarettes) have become a popular type of electronic nicotine delivery system, especially among teenagers (Durmowicz 2014). E-cigarettes are presented as a fun and safe way to smoke that allegedly does not pose the health dangers associated with smoking regular cigarettes. The central promise of e-cigarettes is that they help users stop smoking real cigarettes (Chapman 2014). E-cigarettes come in all different shapes and sizes and “use a small, heated coil to vaporize a nicotine-laced solution into an aerosol mist” (Maron 2014). Most users think it’s just nicotine-laced vapor that they are inhaling, but there are a host of other harmful ingredients in e-cigarette aerosol, which can be viewed in Figure 1.

E-cigarette companies market their products to youth by “sponsoring youth events, advertising on media that targets youth audiences, using flavors that appeal to young children and teenagers, and handing out free samples at youth events” (McCarthy 2014). On top of mass advertising, none of the e-cigarettes manufacturers are working to decrease cigarette sales despite the transfer of sales to e-cigarettes (Chapman 2014). Manufacturers continue to fight against proposals for an effective tobacco control policy. While manufacturers base most of their advertising off of the notion that it will help smokers permanently quit smoking, there is still “no evidence of the population-level impact of e-cigarettes on smoking cessation” (Chapman 2014). All the while, e-cigarettes usage among teens is soaring. A Center for Disease Control (CDC) report in November of 2018 said that usage had just about doubled from 2017-2018 (Boyles 2018). While 11% of seniors in high school reported e-cigarette use in 2017, 23.1% of seniors in high school have reported current e-cigarette use in 2018, as shown in Figure 2 (Boyles 2018).

The Problem

E-cigarette usage among youth in 2018:

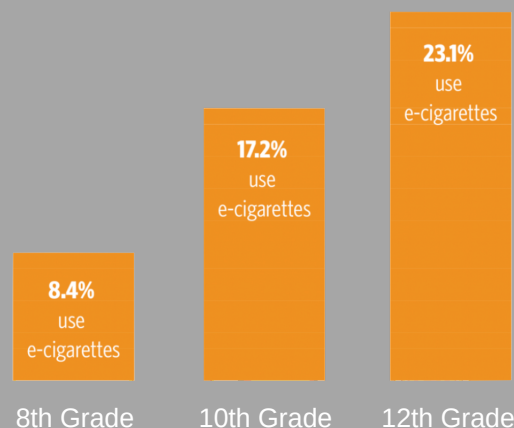


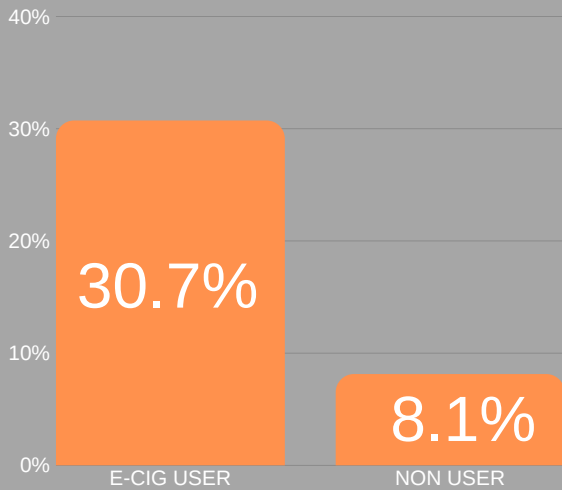
Figure 2; Source: Illinois Department of Public Health



TEEN E-CIG USERS ARE MORE LIKELY TO START SMOKING

Why It Matters

Start Smoking Within 6 Months



*Includes combustible tobacco products [cigarettes, cigars, and hookahs]

Figure 3; Source: National Institute on Drug Abuse

At the end of the day no one really knows for sure whether e-cigarettes are truly “safe.” The one thing that is known for sure, however, is that the nicotine that e-cigarettes contain is highly addictive, especially to young brains (Maron 2014). This is why public health experts are highly concerned with e-cigarettes’ rapid proliferation and popularity among teenagers (Maron 2014). Even though the true health hazards of e-cigarettes are largely unknown, primarily because they are so new, various studies have suggested that the vapors from e-cigarettes contain “several cancer-causing substances...and tiny particles of tin, chromium, nickel and other heavy metals, which in large enough concentrations, can damage the lungs” (Maron 2014). Aside from the possible negative long-term health effects that e-cigarettes pose, they can also serve as a gateway to introducing teenagers to other tobacco products, as well as drugs, and can lure former smokers back to using conventional cigarettes. As seen in Figure 3, E-cigarette users are 22.6% more likely than non-users to start smoking conventional cigarettes six months after trying an e-cigarette. Tobacco is the leading cause of death in this country, and because getting people to quit smoking is difficult, it’s vital that “every effort be made to keep young people from developing a nicotine habit” (Kamerow 2015).

Combatting an Epidemic

E-cigarettes are the smoke of choice among youth in the United States and abroad. E-cigarettes are posing a great need for policymakers to enact smoke-free laws as well as laws that limit youth access, or limit the advertising to youth (Cox, Barry & Glantz 2016). Regulation outside of the United States varies among different countries, however e-cigarettes are widely available to youth in the US and even in states that have legislation in place that ban the sale of e-cigarettes to minors (Durmowicz 2014).

As seen in Figure 4, eight states and Washington, D.C. have imposed a ban on e-cigarettes. Instituting e-cigarette regulations at the state level has become increasingly harder to mandate as cigarette companies have entered the market (Cox, Barry, & Glantz 2016). While e-cigarette legislation at the state level is possible, as depicted in Figure 4, local governments are critical to “overcoming cigarette company interference in the policymaking process” (Cox, Barry, & Glantz 2016).

States that have imposed a ban on e-cigarettes

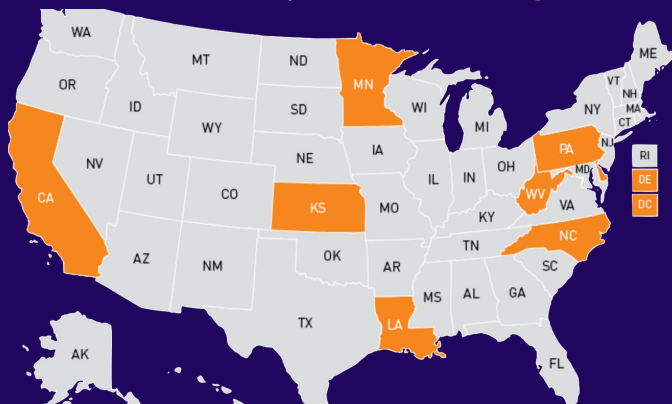


Figure 4; Source: truth initiative

Potential Solutions

E-cigarettes should be subject to the same regulations that cigarettes face. Regulatory efforts by the Food and Drug Administration are underway (McCarthy 2014). Possible solutions to the teenage vaping epidemic include banning indoor vaping, e-cigarette advertisement, and sale to minors in all states. All of these efforts can be made to “avoid the renormalization of a smoking culture in society” (Al-hamdani 2014). Enacting policies to cut ties between the tobacco industry and the e-cigarette industry are vitally important. This would protect the public from “repeats of Big Tobacco’s past actions in the new domain of e-cigarette” (Al-hamdani 2014).

It’s proven that nations with advanced tobacco control programs have, in fact, achieved all-time lows in teenage vaping (Chapman 2014).. For example, in Australia, only 3.4% of 12-17 year olds smoke daily (Chapman 2014). This is in sharp contrast with the 23.1% of US 12th graders who reported using e-cigarettes in 2018 shown in Figure 2.

Recommendation

Those who oppose regulation of e-cigarettes and vaping argue that limiting the use of e-cigarettes will encourage people to smoke conventional cigarettes (Mayor 2015). **However, “federal legislative milestones that protect youngsters from conventional cigarettes,” like banning sales to minors and preventing companies from using advertising to target youth are needed in order to avoid encountering unknown long-term negative health impacts associated with e-cigarettes (Maron 2014).**

References

- Al-hamdani, M. (2014). A short note on e-cigarette issues: Harm reduction, re-normalization, and Big Tobacco. *Journal of Public Health Policy*, 35(1), 132-134. doi:10.1057/jhhp.2013.42
- Boyles, S. (2018). Huge Increase in Teen E-Cig Use in 2018, Survey Finds. Retrieved April 10, 2019, from MEDPAGETODAY website: <https://www.medpagetoday.com/primarycare/smoking/76953>
- Chapman, S. (2014). E-cigarettes: The best and the worst case scenarios for public health—an essay by Simon Chapman. *BMJ: British Medical Journal*, 349. doi: 10.1136/bmj.g5512
- Cox, E., Barry, R., & Glantz, S. (2016). E-cigarette Policymaking by Local and State Governments: 2009-2014. *The Milbank Quarterly*, 94(3), 520-596. doi: 10.1111/1468-0009.12212
- Durmowicz, E. (2014). The impact of electronic cigarettes on the pediatric population. *Tobacco Control*, 23, li41-li46. doi: 10.1136/tobaccocontrol-2013-051468
- Kamerow, D. (2015). Teenagers, smoking, and vaping. *BMJ: British Medical Journal*, 350. doi: 10.1136/bmj.h2110
- Maron, D. (2014). Are E-Cigarettes Safe? *Scientific American*, 310(5), 31-32. doi: 10.1038/scientificamerican0514-31
- Mayor, S. (2015). Young adults using e-cigarettes are more likely to progress to smoking, study shows. *BMJ: British Medical Journal*, 351. doi: 10.1136/bmj.h4802
- McCarthy, M. (2014). E-cigarette companies target youth, US congressional study finds. *BMJ: British Medical Journal*, 348. doi: 10.1136/bmj.g2871