

E-cigarettes aren't a gateway to teen smoking, study says

By Arman Azad, CNN

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Dr. Sanjay Gupta talks to teens about vaping dangers 06:31

(CNN) — Vaping makes teens more likely to try cigarettes, but doesn't increase the odds that they'll become smokers, according to a new study that looked at more than 12,000 middle school and high school students in the United States.

The study calls into question earlier research that has linked electronic cigarettes to traditional smoking, but experts disputed the importance of the new findings. Many praised the study's methodology, for example, while also describing it as just one piece of evidence in a growing and conflicting field.

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relationship between teenage vaping and smoking can be attributed to shared risk factors for tobacco use -- for example, whether an adolescent drinks alcohol or is surrounded by smokers.

Earlier research, such as a [2018 study](#) from the University of California, San Francisco, linked vaping to "established cigarette smoking" in adolescents. But the new study has a simple explanation for that apparent link: People who tend to vape may just be more similar to those who tend to smoke.

Researchers used complex statistical methods to account for preexisting differences among teens, looking at demographic information such as race and sex, and also behavioral information, such as how often a teen reported being disciplined or how often they

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took risks.

Before controlling for those characteristics, trying an e-cigarette increased the odds of being a "current smoker" nearly 36-fold. But that effect went away when researchers accounted for more than a dozen "shared risk factors." Vaping still made teens more likely to have ever tried a cigarette, though, even if they didn't end up becoming regular smokers.

"This is a very important study using an innovative methodology," said Dr. Nicholas Chadi, an assistant professor of pediatrics at the University of Montreal who specializes in addiction medicine.

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But Chadi, who was not involved in the research, noted that "several published studies show a significant association between e-cigarette use and current and future smoking (and) these findings would need to be replicated."

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But the new data doesn't support that hypothesis, Selya said, and "it's really important to hold off on making policies on e-cigarettes until we have a more solid understanding of its effects."

Dr. Sharon Levy, director of the Adolescent Substance Use and Addiction Program at Boston Children's Hospital, said the study used "sophisticated data analysis strategies" but added, "unfortunately, I do not have a lot of confidence in these findings."

The study did not address "some of what we know about addiction and epidemics," she said, "namely that once people become addicted to a substance, they tend to use it in whatever form they can get it."

Young people who are now addicted to nicotine, then, may later transition to cigarettes for a variety of reasons. They could "become concerned about the short-term risks of e-cigarettes themselves" as news of [vaping-related illness](#) spreads, said Levy, or they could be "priced out of the e-cigarette market."

Related Article: Studies illustrate how marketing, flavors may impact vaping habits among young people

Newer data may point to different conclusion

Chadi, the University of Montreal professor, also noted the study used data from 2015 and 2016, "which is a period that predates, or was at the very beginning of, the rapid increase in e-cigarette use in teens."

Newer, [higher-nicotine products](#) such as Juul were "just starting to become popular on a larger scale at that time, so it's possible that the same study conducted today would show different results," he said.

Another limitation, which Selya acknowledged in her paper, is that the study didn't follow teenagers over time. Instead, it relied on surveys in which teenagers recalled current and former tobacco use. For people who reported using both vapes and cigarettes, then

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Still, Selya said her research "shows that standard statistics, which are used in most studies out there, are biased when it comes to looking at the effects of e-cigarettes." There has been a "knee-jerk reaction" to regulate vaping products such as combustible cigarettes, she added, describing those efforts as well-intentioned but potentially flawed.

Over-regulating e-cigarettes, she said, could actually push teenagers back to smoking.

"We have to ask what the effect of regulating e-cigarettes would be," Selya said, adding that "at a minimum, existing policies should be continuously re-evaluated as more research comes out."

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