



## THE WALL STREET JOURNAL.

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### OPINION

# The Misbegotten Crusade Against E-Cigarettes

'Long term e-cigarette use can substantially decrease cigarette consumption in smokers not willing to quit.'

By **MICHAEL B. SIEGEL**

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When electronic cigarettes came to the U.S. about 2007, I was skeptical. My assumption was they were a ploy by the tobacco industry to hook more people into smoking under the guise of being a safer product—the notorious low-tar cigarette scam all over again. But as I talked to many e-cigarette users, known as “vapers,” conducted research (*Journal of Public Health Policy*, 2011) and reviewed a growing body of scientific evidence, I became convinced that e-cigarettes have dramatic potential for reducing disease and death caused by smoking.

Yet many in the antismoking movement—in which I have been involved for decades—are conducting a misleading campaign against these products. And this campaign may be doing harm to public health.

The most common claim about e-cigarettes is that they are a “gateway” to smoking. In September 2013 Thomas Frieden, director of the Centers for Disease Control and Prevention, said “many kids are starting out with e-cigarettes and then going on to smoke conventional cigarettes.” He added that electronic cigarettes are “condemning many kids to struggling with a lifelong addiction to nicotine.”

These statements had no basis in fact when he made them, and the evidence is that they are bogus. One recent study in the *American Journal of Preventive Medicine* (January 2015) suggests that e-cigarettes are not acting as a gateway to smoking among youth. Another study in the journal *Drug and Alcohol Dependence* (February 2015) suggests the addictive potential of e-cigarettes is substantially lower than that of tobacco cigarettes.

Electronic cigarettes might even be a deterrent to tobacco addiction. Their use by high-school youth tripled between 2011 and 2013, rising from 1.5% to 4.5%, according to CDC data, and then, according to a University of Michigan study, skyrocketed in 2014, when 16% of 10th-graders and 17% of 12th-graders reported using them. That study reports a decline in youth smoking to a historically low level in these years, with smoking among 10th-graders dropping to 7.2% from 11.8% and among 12th-graders falling to 13.6% from 18.7%.



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Other unfounded fears about e-cigarettes abound. There is no evidence that e-cigarettes entice ex-smokers to return to nicotine use and then back to cigarette smoking. There also is no evidence that e-cigarettes are hindering the quitting process for smokers who—if not for e-cigarettes—would have quit completely. What we do know suggests that e-cigarettes are indeed a gateway: a one-way gateway

away from combustible cigarettes and toward a much safer alternative product.

Are electronic cigarettes safe? Of course not. But e-cigarettes don't need to be absolutely safe. By definition, harm reduction involves an alternative product that is much safer. As electronic cigarettes contain no tobacco and do not involve combustion, they do not expose users to most of the more than 60 carcinogens in tobacco smoke, and they appear to be safer by orders of magnitude.

Still, to address legitimate safety concerns, the Food and Drug Administration should set uniform safety standards for e-cigarettes and “vaping” products. These standards

should include childproof packaging, battery safety, quality-control standards for nicotine labeling and for the production of e-liquids, and modest regulation of flavorings such as a ban on diacetyl, a flavoring which when inhaled can cause a rare form of obstructive lung disease. The temperature of the coils also needs to be regulated to prevent overheating of the e-liquid, which results in the production of formaldehyde, a recognized carcinogen.

These regulations would go far toward maximizing the benefits of e-cigarettes while minimizing the risks. But instead of working to get them, the products are being demonized by those who should know better.

Earlier this month the California Department of Public Health published a pamphlet, “Protect Your Family From E-Cigarettes,” that claimed “E-cigarettes are just as addictive as regular cigarettes.” This flies in the face of the research published in December by the journal *Drug and Alcohol Dependence*, which showed that e-cigarettes are much less addictive than tobacco cigarettes. That study found that the addictiveness of e-cigarettes is equivalent to that of nicotine gum, an FDA-approved smoking cessation product.

The same pamphlet asserted that “studies show that e-cigarettes do not help people quit smoking cigarettes.” But a rigorous clinical trial in the *Lancet* showed e-cigarettes to be just as effective as the nicotine patch in getting smokers off cigarettes.

A January report by the California Department of Public Health on electronic cigarettes—“State Health Officer’s Report on E-Cigarettes: A Community Health Threat”—concludes that “there is no scientific evidence that e-cigarettes help smokers successfully quit traditional cigarettes.” But it does not cite the *Lancet* study, nor another, earlier clinical trial (*Internal and Emergency Medicine*, August 2014), which concluded that “long term e-Cigarette use can substantially decrease cigarette consumption in smokers not willing to quit and is well tolerated.”

Last month a *New England Journal of Medicine* article reported extremely high levels of formaldehyde in the aerosol of an electronic cigarette and concluded that vaping may therefore be more harmful than smoking. But the study was carried out under unrealistic conditions in which the e-liquid was severely overheated. Under more realistic conditions the study failed to detect any formaldehyde. Unfortunately, the e-cigarette cancer scare had already been spread through the media.

In the U.K., the percentage of smokers quitting each year steadily declined until 2011,

but increased from 2011 to 2014, a period when the proportion of smokers using e-cigarettes increased from 2% to 14%. A U.S. study (Nicotine & Tobacco Research, October 2014) reported that during the same period smokers who used e-cigarettes daily were six times more likely to quit than those who did not. This was extremely good news, but more recently the news is not so good.

Bloomberg Business reported last summer that e-cigarette sales began to slip in the U.S., and their use by smokers may even be declining in the U.K. The percentage of the public that believes smoking is more hazardous than electronic cigarettes has fallen to 65% in 2013 from 85% in 2010, according to a 2014 study in the American Journal of Preventive Medicine.

This is a tremendous lost opportunity. Vaping technology—or something like it that may be developed—has the potential to be one of the greatest antismoking breakthroughs. I would hate to see its promise wasted because of misinformation by the very public-health authorities who should be in the vanguard of reducing the harm from cigarettes.

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