

## Evidence, Policy, and E-Cigarettes — Will England Reframe the Debate?

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**T**obacco-control advocates have been embroiled in a multiyear controversy over whether electronic cigarettes threaten the goal of further reducing tobacco smoking or offer

the possibility of minimizing harm for people who cannot or will not quit smoking conventional cigarettes. England and the United States have now staked out very different positions.

The international landscape was dramatically reshaped in August 2015, when Public Health England (PHE), an agency of England's Department of Health, released a groundbreaking report, "E-cigarettes: an evidence update." With its claim that e-cigarettes are 95% less harmful than combustible cigarettes, the report attracted headlines internationally.

It recommended that smokers who cannot or will not quit smoking tobacco try e-cigarettes and expressed great concern that the public perceived the two products as posing equal risks. Strikingly, the report underscored e-cigarettes' potential to address the challenge of health inequalities, a central mission of PHE, stating that these devices "potentially offer a wide reach, low-cost intervention to reduce smoking and improve health in these more deprived groups in society where smoking is elevated."<sup>1</sup>

The report—written by tobacco-

addiction researcher Ann McNeill of King's College London — reflected the position on e-cigarettes that had been agreed to by the U.K. public health community. Yet the editors of the *Lancet* asserted that though PHE claims to protect the nation's health and well-being, it has failed to do so with this report. Two public health scholars writing in the *BMJ* also denounced the report, seizing on the methodologic limitations of one of the many studies on which the evidence review had relied, underlining the potential conflicts of interests acknowledged in the paper, and roundly condemning PHE for failing to meet basic evidentiary standards. Invoking the precautionary principle, the authors asserted that e-cigarette proponents bore the burden of prov-

ing that these products are not harmful. In contrast, 12 prominent U.K. public health organizations, including Cancer Research U.K. and the British Lung Foundation, defended PHE. Their joint press release underscored a public health responsibility to encourage smokers to switch to e-cigarettes, perhaps with the help of local smoking-cessation programs.

As dramatic as the report's recommendations appear to be, they **built on the United Kingdom's long-standing commitment to harm reduction.** In 1926, the

Application of harm-reduction principles to tobacco products debuted in England in the 1970s, at the Institute of Psychiatry of the Maudsley Hospital. **In 1976, Michael Russell, pioneer of effective nicotine-cessation treatments, famously wrote that "People smoke for nicotine but they die from the tar,"<sup>2</sup>** suggesting that one could satisfy a nicotine craving without risking the harms caused by smoking. Professional medical bodies in the United Kingdom endorsed a harm-reduction perspective. A 2007 report by the Tobacco Advisory Group of

delivery power of combustible cigarettes. Fiercely opposed to the tobacco industry, ASH had for decades called for increasingly stringent policies to reduce the prevalence of tobacco smoking by imposing higher taxes, banning advertisements, and setting strict limits on smoking in enclosed settings. **In 2014, an ASH review of the evidence concluded that fears of a "gateway effect" were unsubstantiated and that e-cigarettes were being used largely by current or former cigarette smokers. Because it found little evidence** that nonsmoking bystanders could be harmed by the vapor from e-cigarettes, ASH opposed inclusion of e-cigarettes in public smoke-free laws. Reinforcing his organization's commitment to harm reduction and the primary goal of assisting smokers who could not or would not give up cigarettes, ASH's chairman, John Moxham, said, "It would be a public health tragedy if smokers were discouraged from switching to electronic cigarettes and vapers were encouraged to go back to smoking because they don't understand that vaping is a lot less harmful than smoking. That really would cost lives."<sup>4</sup> Not surprisingly, ASH applauded the findings of the PHE report.

The dominant policy perspective in the United States serves as a foil to the one embraced in England. The Campaign for Tobacco-Free Kids — ASH's U.S. equivalent and a powerful voice in anti-tobacco advocacy — has been unequivocal in its denunciations of e-cigarettes. Similarly, the Centers for Disease Control and Prevention hosted a Public Health Grand Rounds on e-cigarettes in which all five speakers


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Ministry of Health's Rolleston Committee concluded that drug addiction was an illness that should be treated by physicians, sometimes with a minimal dose of drugs in order to prevent withdrawal symptoms. **When AIDS came to the United Kingdom in the 1980s, the first government report on human immunodeficiency virus (HIV) infection among injection-drug users encouraged safer drug practices.** Meanwhile, the United States took a prohibitionist position. Tight narcotic regulation and refusal to provide narcotics to addicts as treatment or maintenance defined the U.S. posture for decades.

the Royal College of Physicians made the case that strategies to protect smokers were key, since nicotine addiction is difficult to overcome and millions of people fail to quit. That report argued "that nicotine itself is not especially hazardous, and that if nicotine could be provided in a form that is acceptable and effective as a cigarette substitute, millions of lives could be saved."<sup>3</sup>

Even before e-cigarettes became widely available, the venerable and influential antitobacco organization Action on Smoking and Health (ASH) embraced the development of nicotine products that could rival the nicotine-

focused on the possible health risks associated with e-cigarette use. None acknowledged a potential role for e-cigarettes in reducing the tobacco burden in marginalized populations or reducing health disparities. Given the tight focus on potential risks to children and nonsmokers, e-cigarettes were out of the question. But one powerful voice for enhanced tobacco control in the United States did support the PHE report. In December 2015, the Truth Initiative (formerly the American

 *An audio interview with Dr. Fairchild is available at NEJM.org*

Legacy Foundation) declared in an organizational position paper, “If prudently regulated, we believe ENDS [electronic nicotine delivery systems] hold promise as one means to move smokers to a less harmful product and reduce the devastating death and disease burden caused by combustible tobacco products.”<sup>5</sup>

What distinguishes the harm-

reduction approach taken in the PHE report from the more absolutist approach adopted by U.S. policymakers today is a matter of focus. In England, where leading medical organizations regard nicotine alone as relatively benign, the pressing need to reduce the risks for current smokers frames the debate. The overwhelming focus in the United States is abstinence. It is in this broader context that the focus on children and nonsmokers must be viewed.

Will England change the international conversation about e-cigarettes? The answer will depend, in part, on what the evolving evidence suggests, and it may take years before the answers are definitive. In the end, the sorts of policies that are implemented will depend on whether whoever dominates the debate views harm reduction as opportunity or anathema.

Disclosure forms provided by the authors are available with the full text of this article at NEJM.org.

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