

# Noncigarette Tobacco Advertising May Be Hazardous to a Teen's Health

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Cigarette smoking contributes to nearly 1 in 5 deaths in the United States and myriad health problems.<sup>1</sup> Among the 16.8% of US adults who currently smoke, nearly 90% began to do so before they were 18 years old.<sup>2</sup> At this age, brain development is incomplete, and youth lack full ability to make sound decisions.<sup>3</sup> Once they begin to smoke, it can be very difficult to stop.<sup>4</sup> Thus, it is critical to minimize prosmoking influences in young lives.

In “Receptivity to Tobacco Advertising and Susceptibility to Tobacco Products Among US Adolescents,” Pierce et al<sup>5</sup> address 1 important influence. Using early data from the Population Assessment of Tobacco and Health (PATH) study, they provide evidence that moderate to high levels of receptivity to advertising for tobacco products other than cigarettes is associated with susceptibility to cigarette smoking. Pierce et al<sup>5</sup> also found that nearly half of 12- to 17-year-old nonsmoking PATH participants were receptive to some form of tobacco advertising; they had “a willingness to be open and responsive to the sponsor’s ideas, impressions, and suggestions.”<sup>6</sup>

Policymakers and practitioners should heed these important findings. They suggest that a critical gap in the regulation of cigarette marketing is the relatively weak regulation of advertising for other tobacco products. It may not be enough to regulate advertising for cigarettes if ads for e-cigarettes, cigars, and chewing tobacco also influence youth to smoke cigarettes. Indeed, PATH results raise the possibility that

advertising for e-cigarettes, which had been largely absent until very recently, is responsible for the plateau in previously declining percentages of youth smoking combustible cigarettes.<sup>7</sup>

Key aspects of the study by Pierce et al<sup>5</sup> are exceptionally strong, including the large, nationally representative sample of nonsmoking youth and the incorporation of a near census of tobacco ads in the PATH receptivity measure. PATH has the potential to provide some of the best evidence yet regarding tobacco advertising and its influence on youth. However, the results also raise questions.

Most importantly, the link found between tobacco marketing receptivity and cigarette smoking susceptibility was cross-sectional. It might be that being open to smoking cigarettes increases receptivity to ads for tobacco products, that is, that the causal relationship is the opposite of what the authors hypothesized. It might also be that both receptivity to advertising and susceptibility to smoking reflect a third factor unmeasured by the study. So far, we know only that youth open to smoking cigarettes are open to the ideas in tobacco advertising. It will be critically important to test whether this association holds up longitudinally. If it does, other questions are raised. Do noncigarette tobacco ads actually increase smoking, leading someone to smoke cigarettes who is open to influence but who would, in the absence of such ads, never do so? Or do tobacco ads merely hasten initiation of cigarette smoking among people who are open to both smoking and advertising (an effect that would still



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be of concern given that those who begin smoking earlier are more likely to become addicted)?<sup>1</sup>

It will also be important to establish the percentage of youth who are receptive to tobacco advertising. Pierce et al<sup>5</sup> reported that 41.0% to 49.5% of their sample fell in this category. This is probably an overestimate. Youth were counted as receptive if they recalled ever seeing a particular ad. Recalled exposure reflects exposure, attention to, and retention of at least some aspects of a message. These are the initial steps in the influence process<sup>8</sup> but do not necessarily indicate openness to an ad's influence. As the authors noted, whether one likes an ad (or identifies with the people or ideas it depicts, or responds with skepticism) is key to its influence<sup>9</sup> on beliefs and behavior. Indeed, media literacy (taught to combat advertising influences) involves attending to marketing so that messages, implicit and explicit, can be recognized and counterargued.<sup>10</sup> Thus, some who remember an ad may have dismissed its message as inaccurate or manipulative. Only 8.8% to 15.0% of nonsmoking youth are tobacco-ad receptive if one limits the definition to PATH participants who liked a tobacco ad or had a favorite ad. The true number of tobacco ad-receptive youth probably lies somewhere between these figures and the nearly 50% estimated by Pierce et al.<sup>5</sup>

The key issue raised in their article, that ads for 1 tobacco product have a generalized influence on desire for

other tobacco products, will have implications for marketing policies and youth interventions. We need to know when and why generalization occurs<sup>11</sup>; drawing on insights from cognitive psychology may help.

Perhaps most importantly, we need to understand what makes some youth more receptive to advertising than others. A better understanding of the basis of such vulnerability may provide the key to protecting youth from negative media influences and helping them benefit from health-promoting messages.

#### ABBREVIATION

PATH: Population Assessment of Tobacco and Health

#### REFERENCES

1. US Department of Health and Human Services. *The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General*. Atlanta, GA: US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 2014
2. US Department of Health and Human Services. *Preventing Tobacco Use Among Youth and Young Adults: A Report of the Surgeon General*. Atlanta, GA: US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 2012
3. Steinberg L. A social neuroscience perspective on adolescent risk-taking. *Dev Rev*. 2008;28(1):78–106
4. Fiore MC, Jaén CR, Baker TB, et al. *Treating Tobacco Use and Dependence: 2008 Update—Clinical Practice Guidelines*. Rockville, MD: US Department of Health and Human Services, Public Health Service, Agency for Healthcare Research and Quality; 2008
5. Pierce JP, Sargent JD, White MM, et al. Receptivity to tobacco advertising and susceptibility to tobacco products among US adolescents. *Pediatrics*. 2017;139(6):20163353
6. Henriksen L, Feighery EC, Schleicher NC, Fortmann SP. Receptivity to alcohol marketing predicts initiation of alcohol use. *J Adolesc Health*. 2008;42(1):28–35
7. Singh T, Arrazola RA, Corey CG, et al; Centers for Disease Control and Prevention. Tobacco use among middle and high school students—United States, 2011–2015. *MMWR Morb Mortal Wkly Rep*. 2016;65(14):361–367
8. McGuire WJ. Attitude change: the information-processing paradigm. In: McClintock CG, ed. *Experimental Social Psychology*. New York, NY: Holt, Rinehart & Winston; 1972:108–141
9. Austin EW, Pinkleton BE, Fujioka Y. The role of interpretation processes and parental discussion in the media's effects on adolescents' use of alcohol. *Pediatrics*. 2000;105(2):343–349
10. Buckingham D. *Media Education: Literacy, Learning, and Contemporary Culture*. Malden, MA: Blackwell Publishing; 2003
11. Nosofsky RM. Choice, similarity, and the context theory of classification. *J Exp Psychol Learn Mem Cogn*. 1984;10(1):104–114

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