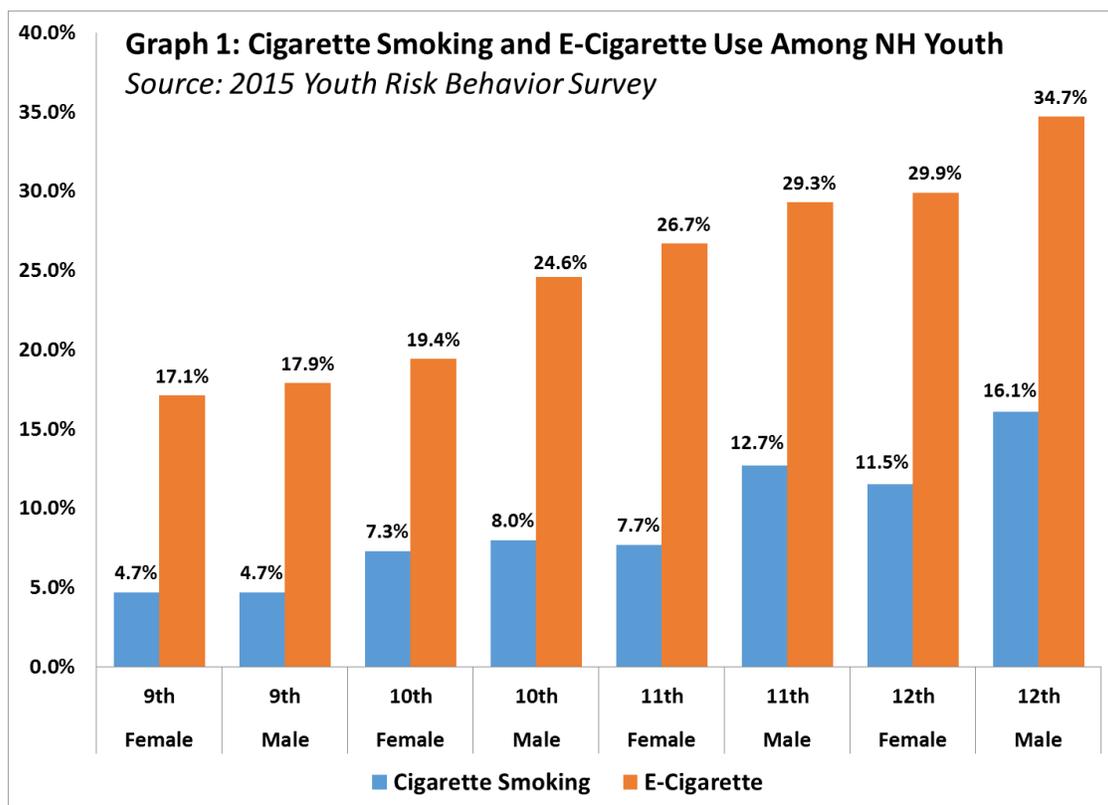


Public Health Advisory for Pediatricians: E-Cigarette Use among High School Age Youth in New Hampshire

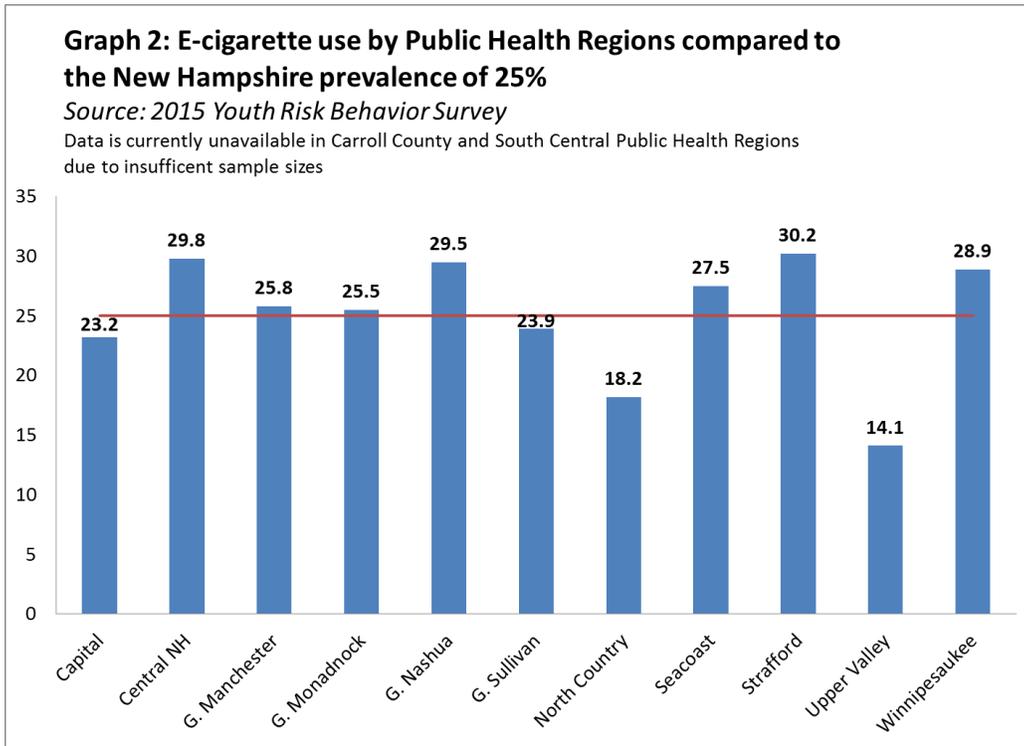
The New Hampshire Department of Health and Human Services calls attention to the alarming number of New Hampshire youth using e-cigarettes. In August 2016, the US Food and Drug Administration defined e-cigarettes as tobacco products.¹

According to the 2015 New Hampshire Youth Risk Behavior Survey (YRBS), 25% of high school age youth report having used tobacco products in the 30 days prior to taking the survey. Even more disturbing is that 34.7% of 12th grade males report using the products in the past 30 days before the survey.



The New Hampshire Department of Health and Human Services (DHHS) recognizes the important role pediatricians play in a child's life. Given the statistics presented in Graph 1, DHHS asks **all pediatricians** to "Ask" your patients about tobacco use including electronic cigarettes and "Refer" them to **1-800-QUIT-NOW (1-800-784-8669)** or www.quitnownh.org. QuitNowNH can provide tobacco treatment services to adolescents but cannot provide over-the-counter nicotine replacement therapies to people under the age of 18.

Graph 2 below, shows youth e-cigarette use stratified by [Public Health Regions](#) (PHRs). The following PHRs had higher e-cig use prevalence than the 25% average: Central, Greater Nashua, Seacoast, Strafford, and Winnepesaukee.



U.S. Food and Drug Administration Deeming Rule

On August 8, 2016, the U.S. Food and Drug Administration (FDA) released its final rule that extends regulatory authority to all tobacco products, including e-cigarettes, cigars, and hookah and pipe tobacco, as part of its goal to improve public health. This means the FDA defines all of the aforementioned products as tobacco products.¹

Why Adolescent Smoking Is of Concern

The research is clear that nicotine, a chemical contained in tobacco, has damaging effects on adolescent and young adult brain development. Exposing the brain to nicotine during adolescence can have long-term effects on the prefrontal cortex (PFC), the area of the brain responsible for executive functions and attention performance. The PFC is one of the areas of the brain to mature last. Smoking during adolescence increases the risk of developing psychiatric disorders and cognitive impairment later in life. In addition, adolescent smokers suffer from attention deficits, which worsen with the years of smoking.²

Data

National data released by the U.S. Centers for Disease Control and Prevention (CDC) and the FDA show that youth use of electronic cigarettes exceeds use of cigarettes for the second year in a row, with 16% of high schoolers and 5.3% of middle schoolers reporting current use in 2015. This is important because the research shows that smoking e-cigarettes (or vaping) is an indicator of future cigarette smoking.³

As with adults, dual use of e-cigarettes and conventional cigarettes is high among adolescents and increasing rapidly. A study appearing in the Journal of the American Medical Association in November 2016, entitled *Association of e-Cigarette Vaping and Progression to Heavier Patterns of Cigarette Smoking*

Respondents, highlighted students in 10 public high schools in Los Angeles County, California, that were enrolled in a longitudinal study. This analysis used data from surveys administered during fall (baseline) and spring (follow-up) of 3,251 10th graders (2014–2015). The authors concluded that most e-cigarette users switched to cigarette smoking, and the frequency in vaping reflects how soon one will switch to cigarette smoking and also how heavily the person is likely to smoke.⁴

The 2016 U.S. Surgeon General Report, "[E-Cigarette Use among Youth and Young Adults](#),"⁵ concluded that: (1) the flavors in e-cigarettes are one of the main reasons youth use them; (2) e-cigarette aerosol exposure is not safe; and (3) e-cigarette use is strongly associated with the future use of other tobacco products among youth and young adults.

Resources:

- [Public Health Advisory for Providers about E-Cigarettes](#)
- [The Facts about Electronic Cigarettes](#)

References:

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4. Leventhal AM, Stone MD, Andrabi N, Barrington-Trimis J, Strong DR, Sussman S, Audrain-McGovern J. Association of e-Cigarette Vaping and Progression to Heavier Patterns of Cigarette Smoking. *JAMA*. 2016;316(18):1918-1920. doi:10.1001/jama.2016.14649. Retrieved 2/3/2017 from <http://jamanetwork.com/journals/jama/fullarticle/2579858>.
5. U.S. Department of Health and Human Services. *E-Cigarette Use among Youth and Young Adults: A Report of the Surgeon General—Executive Summary*. Atlanta, GA: U.S. 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, 2016. https://e-cigarettes.surgeongeneral.gov/documents/2016_SGR_Exec_Summ_508.pdf.

For More Information or Technical Assistance:

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