

Data Brief: New Hampshire Adolescent Cigarette Smoking and Marijuana Use



Background

Each day in the United States, over 3,800 young people under 18 years of age smoke their first cigarette, and over 1,000 youth under age 18 become daily cigarette smokers. The vast majority of Americans who begin daily smoking during adolescence are addicted to nicotine by young adulthood. More than 80% of adult tobacco use begins during adolescence, with 99% of first use occurring by the age of 26 years.¹ According to the 2014 U.S. Department of Health and Human Services, Surgeon General Report, *The Health Consequences of Smoking*, tobacco use causes more than 480,000 deaths annually (including deaths from secondhand smoke and residential fires).² The number of deaths per year associated with smoking is more than deaths from AIDS, alcohol, cocaine, heroin use, homicides, suicides, motor vehicle crashes, and fires combined.

Cigarette smoking costs the nation \$96 billion in direct medical costs and \$97 billion in lost productivity annually. In addition to the billions in medical costs and lost productivity, tobacco is exacting a heavy toll on young people. Annually in New Hampshire, there are 1,900 deaths caused by smoking, and the annual cost (health care and lost productivity) of smoking exceeds one billion dollars.³

Reducing youth cigarette smoking and marijuana use are extremely important for New Hampshire and are two of primary goals of the [NH State Health Improvement Plan \(NH SHIP\)](#). The New Hampshire Department of Health and Human Services (DHHS) collects data about the behaviors of high school aged youth using the Youth Risk Behavior Survey (YRBS). These data are useful in monitoring risk-taking behaviors; informing, educating, and empowering people about health behaviors; mobilizing community partnerships to take action; identifying and solving health problems; and developing policies and plans that support individual and community health efforts.

According to results of a New Hampshire 2013 YRBS analysis:

- 14% of high school aged youth surveyed reported smoking during the 30 days before the survey;
- 24% of high school aged youth surveyed reported using marijuana in the previous 30 days;
- 70% of the high school aged youth surveyed who reported smoking cigarettes also reported marijuana use;
- Among high school aged youth who reported current or previous marijuana use, current cigarette smokers were 3.3 times more likely to have first used marijuana before the age of 13 than were non-cigarette smokers.

Note: percentages are slightly different than those found on the NH Department of Education (DOE) website because data are limited to respondents that had valid information in both current marijuana and current smoking.

Cigarette Smoking and Marijuana Use

According to results of a NH 2013 YRBS analysis, 72% of New Hampshire high school aged youth reported they did not smoke cigarettes or use marijuana during the 30 days before the survey, while 28% reported smoking and marijuana use, or both.

More than one quarter of New Hampshire high school youth reported cigarette use, marijuana use or both.

Four percent of high school aged youth reported using only cigarettes; 14% reported using only marijuana, and 10% reported using both cigarettes and marijuana.

Current high school cigarette smokers were significantly more likely to report current marijuana use than non-smokers (70% versus 17%).

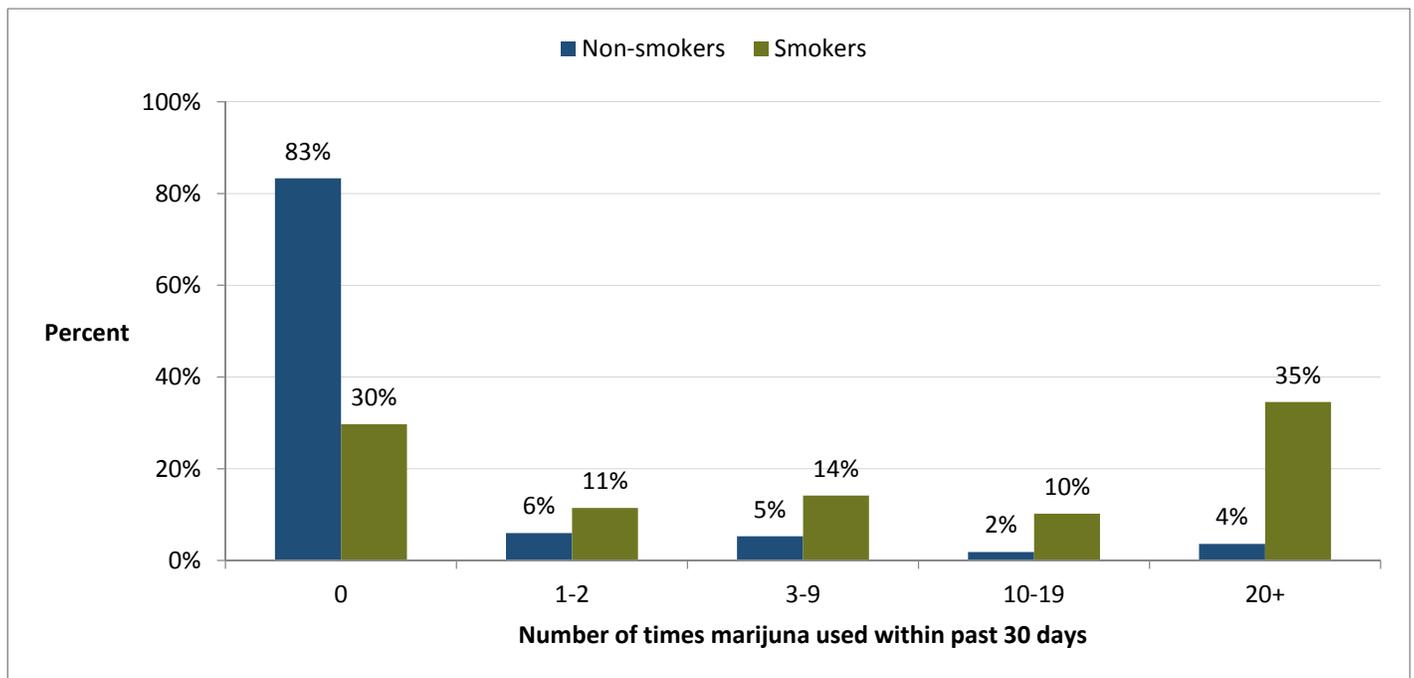
Frequency of Marijuana Use

Seventy-six percent of New Hampshire high school aged youth reported no marijuana use during the 30 days before the survey, while 13% reported using marijuana 1 to 9 times, 3% reported using marijuana 10–19 times, and 8% reported using marijuana 20 or more times.

Current high school cigarette smokers were more likely to report frequent marijuana use than non-smokers (Figure 1).

Eleven percent of cigarette smokers reported using marijuana one to two times during the 30 days before the survey versus 6% of non-smokers. Similarly, 35% of smokers versus 4% of non-smokers reported using marijuana 20 or more times during the 30 days before the survey.

Figure 1: Frequency of marijuana use by high school aged youth during the 30 days before the survey by reported smoking status, Youth Risk Behavior Survey, New Hampshire, 2013



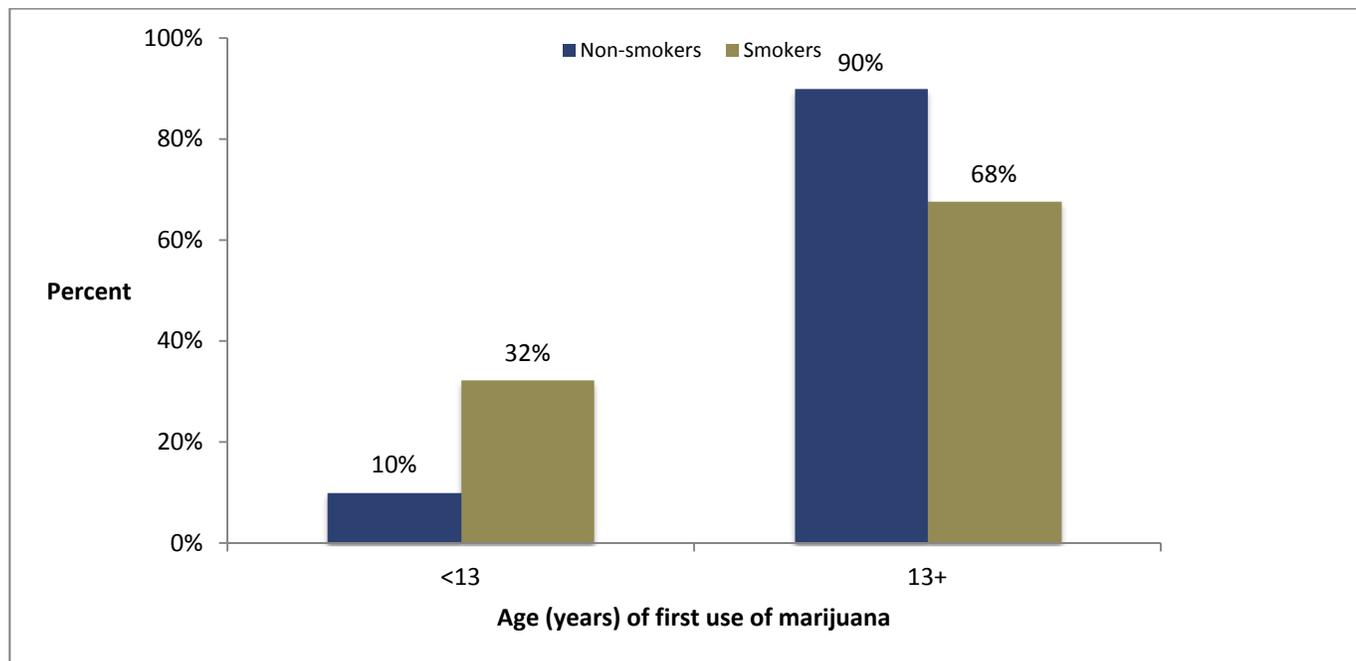
Initiation of Marijuana Use

High school cigarette smokers were more likely to start using marijuana at an earlier age than non-smokers (Figure 2).

Among the 40% of New Hampshire high school students who reported using marijuana at some time during their life, 17% reported using marijuana for the first time when they were younger than 13 years of age, and 83% reported first use when they were 13 years of age or older.

Current cigarette smokers who reported using marijuana at some time during their life were more likely to report using marijuana for the first time when they were younger than 13 years of age than were non-smokers who also reported using marijuana at some time during their life (32% versus 10%; Figure 2).

Figure 2: Age of initiation of marijuana use by high school aged youth who reported using marijuana at some time during their life, by smoking status, Youth Risk Behavior Survey, New Hampshire, 2013



Why Cigarette Smoking and Marijuana Use by Adolescents is Concerning

Cigarette smoking and marijuana use by adolescents is illegal, however it happens and can have a damaging effect on adolescent brain development. Researchers from across the country are working tirelessly to conduct research and disseminate findings to decision makers about the impact of smoking cigarettes and marijuana use on adolescent prefrontal cortex brain development

The research is clear. Adolescence and young adulthood are critical times for the physical development of the brain and central nervous system. Because changes are rapidly occurring within the body, the effects of smoking cigarettes and marijuana use can have long-term health consequences for adolescents once they reach adulthood.

Preventing young people from starting to smoke and/or using marijuana begins with increasing their knowledge of the dangers of tobacco use, changing their attitudes toward tobacco use, and increasing public support for policies that reduce the likelihood that they will use tobacco. Ensuring “Health in All

Policies”⁴ is an import activity that supports healthy adolescent and young adult brain development.

Future Items to Monitor

There are two areas of concern the NH Tobacco Prevention and Control Program will monitor over the next several years: 1) increased utilization of electronic nicotine delivery systems by adolescents (electronic cigarettes/ENDS) and 2) the potential association of changing marijuana laws and adolescent use of marijuana. The increased use of ENDS by youth who have never smoked cigarettes,⁵ and the use of ENDS by adults resulting in the re-normalizing of the appearance of smoking, have the strong potential to increase youth addiction to nicotine and experimentation with traditional smoking devices. There are also potential impacts as states begin to consider permitting medicinal use of marijuana and decriminalization of marijuana use. As with other substances that are abused, reducing risk factors for youth includes controlling availability to prevent youth access, and clearly communicating the risk of use to youth. Clearly communicating the risks associated with marijuana use and preventing unlawful access by youth are critical components of public health efforts.⁶

A Note about the Data

The NH Department of Health and Human Services would like to thank all of the schools that voluntarily participate in the data collection process. Survey results are used to monitor health and risk-taking behaviors that may impact adolescent and adult health in the future.

This data brief uses the most recent estimates available in New Hampshire. The data were collected by surveying high school aged youth in randomly selected New Hampshire high schools (grades 9 through 12). YRBS is funded through a Centers for Disease Control and Prevention (CDC) grant and administered jointly by the NH Department of Health and Human Services (DHHS) and the NH Department of Education (DOE). For details on YRBS and the survey methodology, please visit

<http://www.cdc.gov/healthyouth/yrbs/brief.htm>.

For information about alcohol, tobacco, and other drugs, please visit <http://www.dhhs.nh.gov>.

¹ U.S. Department of Health and Human Services. Preventing Tobacco Use Among Youth and Young Adults: A Report of the Surgeon General. 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, 2012. [accessed 2015 Feb 1].

² U.S. Department of Health and Human Services. The Health Consequences of Smoking—50 Years of Progress. A Report of the Surgeon General. Atlanta: 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, 2014. [accessed 2015 Feb 1].

³ *Smoking-Caused Healthcare Costs*. CDC, *Best Practices for Comprehensive Tobacco Control Programs—2014*, http://www.cdc.gov/tobacco/stateandcommunity/best_practices/.

See also Xu, X., et al., “Annual Healthcare Spending Attributable to Cigarette Smoking: An Update,” *Am J Prev Med*, 2014. State estimates based on 2009 dollars; national estimate in 2010 dollars. Health costs do not include estimated annual costs from lost productivity due to premature death and exposure to secondhand smoke. For other non-health care smoking-caused costs, see, e.g., U.S. Department of the Treasury, *The Economic Costs of Smoking in the U.S. and the Benefits of Comprehensive Tobacco Legislation*, 1998; Chaloupka, FJ & Warner, KE, “The Economics of Smoking,” in Culyer, A & Newhouse, J (eds), *The Handbook of Health Economics*, 2000; Leistikow, BN, et al., “Estimates of Smoking-Attributable Deaths at Ages 15-54, Motherless or

Fatherless Youths, and Resulting Social Security Costs in the United States in 1994,” *Preventive Medicine* 30:353-60, 2000.

⁴ Rudolph, L., Caplan, J., Ben-Moshe, K., & Dillon, L. (2013). *Health in All Policies: A Guide for State and Local Governments*. Washington, DC and Oakland, CA: American Public Health Association and Public Health Institute.

⁵ Johnston, L. D., O’Malley, P. M., Miech, R. A., Bachman, J. G., & Schulenberg, J. E. (2015). *Monitoring the Future national survey results on drug use: 1975-2014: Overview, key findings on adolescent drug use*. Ann Arbor: Institute for Social Research, The University of Michigan. [accessed 2015 Feb 1].

⁶ New Hampshire Bureau of Drug and Alcohol Services, New Hampshire Center for Excellence and the New Hampshire Charitable Foundation. *Collective Action Issue Brief #4: MARIJUANA USE IN NEW HAMPSHIRE*.

http://www.nhcenterforexcellence.org/images/USE_THISColl_IB4_Marijuana_1.15.14_1.pdf. [accessed 2015 Feb 5].



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