

The CBHSQ Report

Short Report

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TRENDS IN SMOKELESS TOBACCO USE AND INITIATION: 2002 TO 2014

AUTHORS

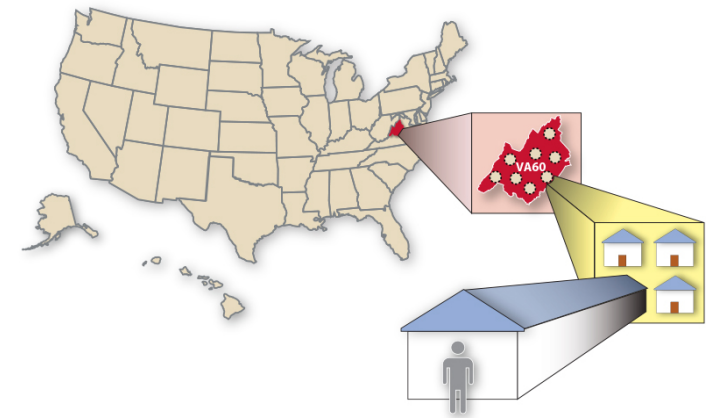
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INTRODUCTION

Although cigarette use has decreased within the United States, the promotion of smokeless tobacco has increased.^{1,2} Smokeless tobacco products, such as chewing tobacco or snuff, may be chewed, placed in the oral cavity outside the gums, or inhaled or snorted through the nose rather than smoked. All tobacco use is addictive, and there is no safe level of smokeless tobacco use.³ Smokeless tobacco contains the addictive chemical nicotine, just like a cigarette.³ Once addicted to nicotine from smokeless tobacco use, many people, particularly young people, expand their tobacco use by smoking cigarettes.⁴

Smokeless tobacco use poses significant health risks.³ All tobacco products contain toxicants, and smokeless tobacco products contain cancer-causing chemicals.^{5,6} Smokeless tobacco products cause oral, esophageal, and pancreatic cancers and can also cause stained teeth, cavities, and tooth loss as a result of gum disease.^{3,6} Smokeless tobacco users can experience these negative health consequences at any age.³ Monitoring trends in smokeless tobacco use and the shifting demographics of users can help to further refine prevention efforts. Information about smokeless tobacco use and initiation can provide vital data to monitor changes over time and to inform enforcement, educational, and prevention efforts.

The National Survey on Drug Use and Health (NSDUH) is an annual survey of the civilian, noninstitutionalized population of the United States aged 12 years or older. NSDUH asks people aged 12 or older about their substance use in the past 30 days, including their use of tobacco products (e.g., cigarettes, cigars, pipe tobacco, chewing tobacco, snuff). One of NSDUH's strengths is the stability of the survey design, which allows for comparisons of smokeless tobacco use trends across multiple years of data.



In Brief

- In 2014, 3.3 percent of people aged 12 or older (an estimated 8.7 million people) used smokeless tobacco in the past month. Past month smokeless tobacco use remained relatively stable between 2002 and 2014.
- Past month smokeless tobacco use between 2002 and 2014 was mostly consistent among adults aged 26 or older. There was more variability in the percentages of young adults aged 18 to 25 and adolescents aged 12 to 17 who used smokeless tobacco between 2002 and 2014. Smokeless tobacco use for adolescents aged 12 to 17 was higher during the mid-2000s, but the 2014 estimates were closer to the lower levels seen in the early 2000s.
- In 2014, an estimated 1.0 million people aged 12 or older used smokeless tobacco for the first time in the past year; this represents 0.5 percent of people who had not previously used smokeless tobacco.

In this issue of *The CBHSQ Report*, "smokeless tobacco" refers to either chewing tobacco and snuff. People who used these substances are asked how old they were when they first used them; responses were used to identify people at risk for initiation (i.e., people who had never used the substance as of 12 months before the interview date) and to identify past year initiates (i.e., people who used the substance for the first time in the 12 months before the survey). This report examines smokeless tobacco use and initiation among people aged 12 or older in 2014 and trends between 2002 and 2014. All differences discussed in this report are statistically significant at the .05 level.

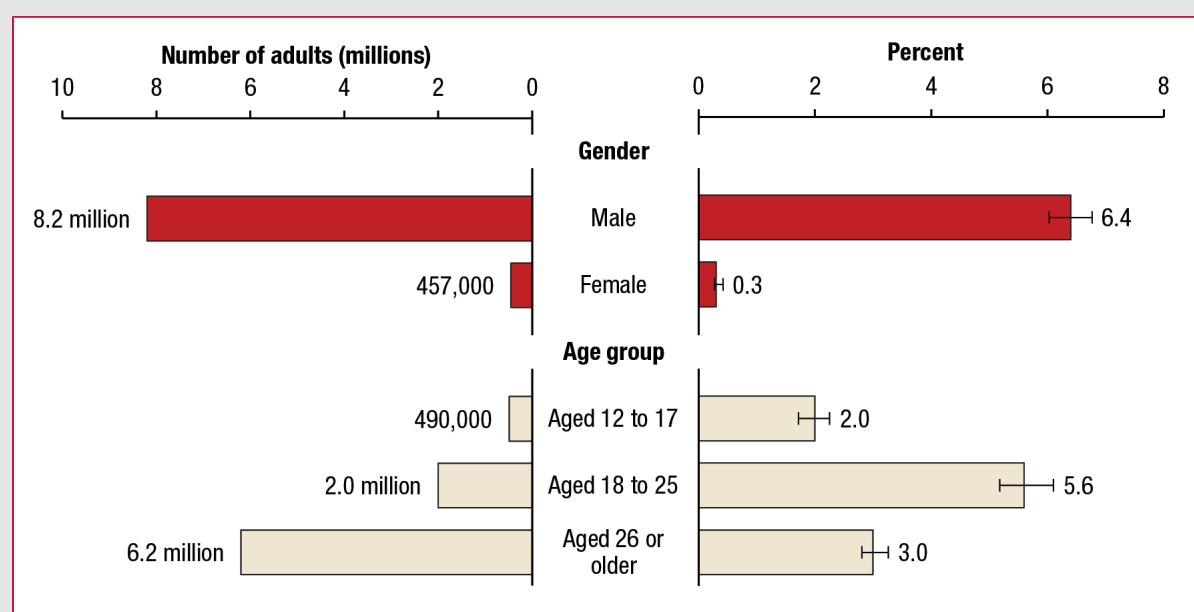
SMOKELESS TOBACCO USE

In 2014, 3.3 percent of people aged 12 or older, or an estimated 8.7 million people, used smokeless tobacco in the past month. Males were more likely than females to have used smokeless tobacco in the past month. In 2014, 6.4 percent of males compared with 0.3 percent of females used smokeless tobacco in the past month (8.2 million vs. 457,000) (Figure 1). Young adults aged 18 to 25 were more likely to have used smokeless tobacco in the past month than were adolescents aged 12 to 17 or adults aged 26 or older (5.6 vs. 2.0 and 3.0 percent, respectively); these percentages translate to 490,000 people aged 12 to 17, 2.0 million people aged 18 to 25, and 6.2 million people aged 26 or older being current smokeless tobacco users.

The percentages of people aged 12 or older who used smokeless tobacco in the past month remained relatively stable between 2002 and 2014 (Figure 2). Among females, the percentages of past month smokeless tobacco use have remained stable since 2002. Among males, the trend in smokeless tobacco use has been essentially stable, with only the 2004 percentage differing from the 2014 percentage. In every year between 2002 and 2014, males were more likely than females to have used smokeless tobacco.

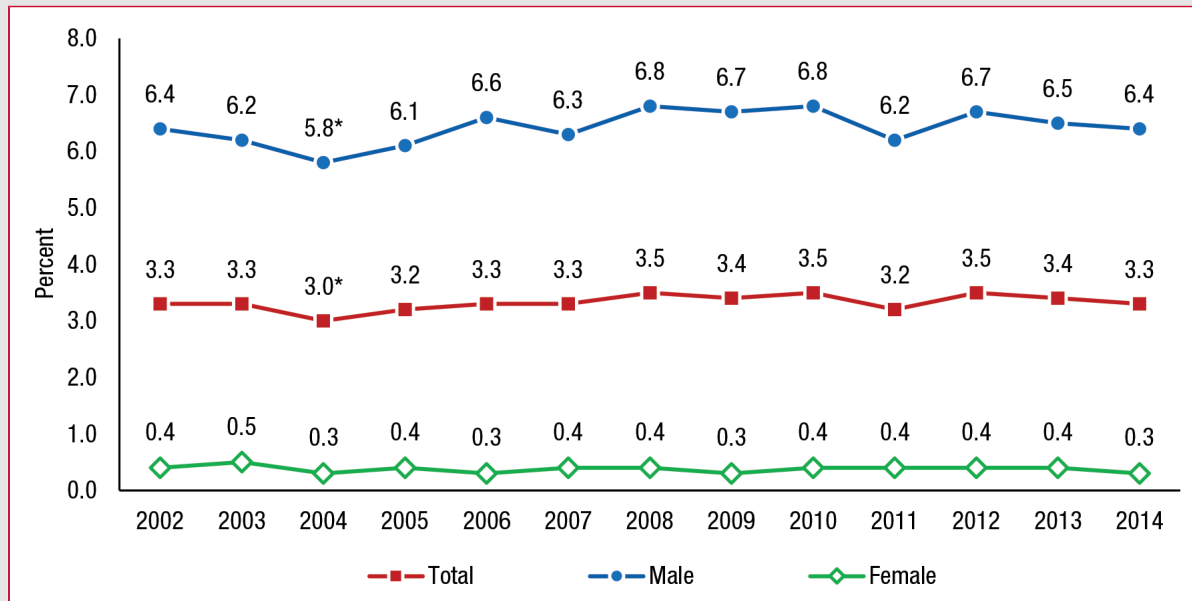
Similar to the trend in smokeless tobacco use among the population aged 12 or older, the trend in past month smokeless tobacco use was also stable among adults aged 26 or older (Figure 3). Between 2002 and 2014, the percentages of adults aged 26 or older who used smokeless tobacco in the past month has not varied greatly—ranging from 2.7 to 3.3 percent. For young adults and adolescents, the trends have not been as stable as those for people aged 26 or older, and there has been a wider range in the percentages using smokeless tobacco for these age groups. The percentage of young adults aged 18 to 25 who used smokeless tobacco in 2014 was higher than the percentages in 2002 through 2004 but lower than the percentage in 2010. The percentage of adolescents aged 12 to 17 who used smokeless tobacco in the past month in 2014 was lower than the percentages in 2006, 2007, 2009, and 2010. In every year between 2002 and 2014, young adults aged 18 to 25 were more likely to have used smokeless tobacco than adolescents aged 12 to 17 or adults aged 26 or older.

Figure 1. Past month smokeless tobacco use among people aged 12 or older, by gender and age group: 2014



Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health (NSDUH), 2014.

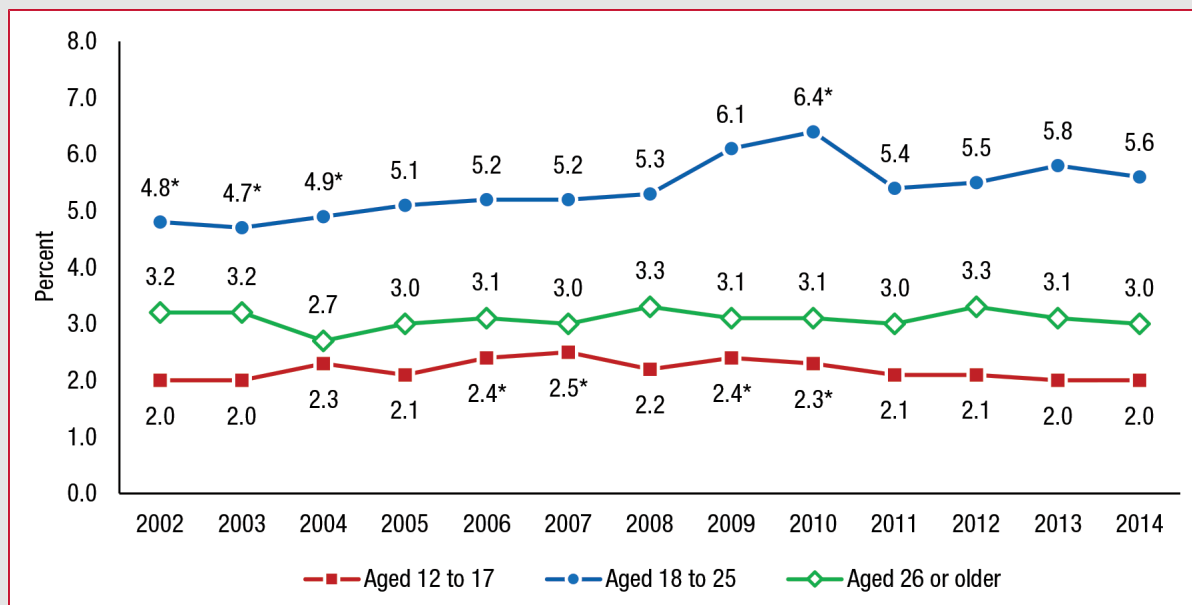
Figure 2. Past month smokeless tobacco use among people aged 12 or older, by gender: 2002 to 2014



* Difference between this percentage and the percentage for 2014 is statistically significant at the .05 level.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Surveys on Drug Use and Health (NSDUHs), 2002 to 2014.

Figure 3. Past month smokeless tobacco use among people aged 12 or older, by age group: 2002 to 2014



* Difference between this percentage and the percentage for 2014 is statistically significant at the .05 level.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Surveys on Drug Use and Health (NSDUHs), 2002 to 2014.

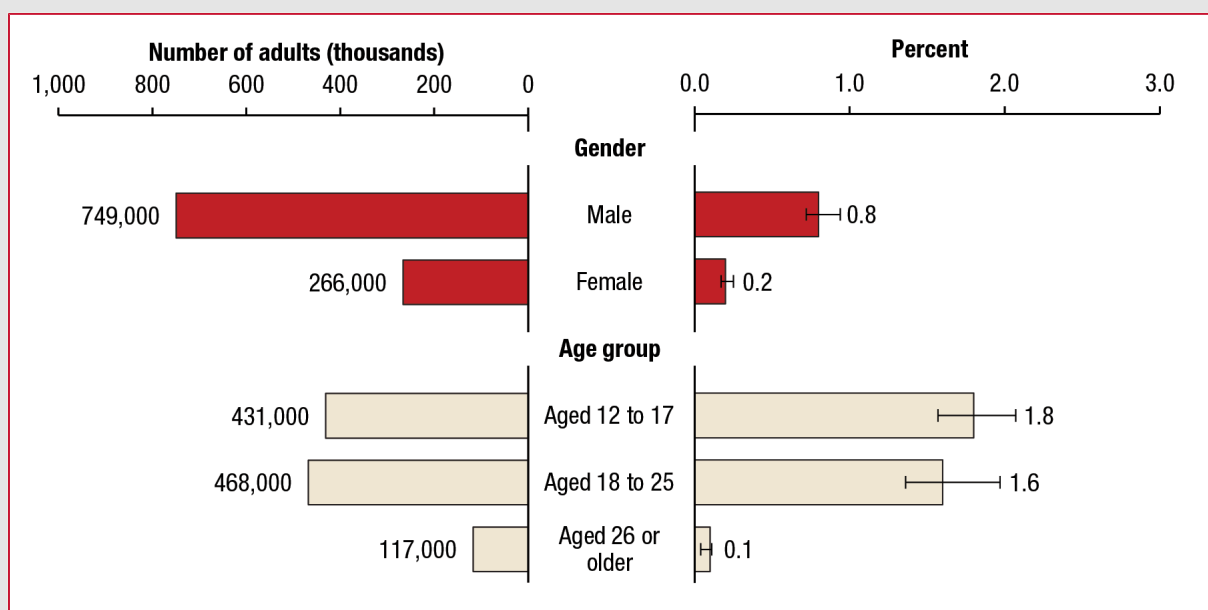
SMOKELESS TOBACCO USE INITIATION

In 2014, an estimated 1.0 million people aged 12 or older used smokeless tobacco for the first time (i.e., past year initiates); this represents 0.5 percent of people who had not previously used smokeless tobacco (i.e., those at risk for initiation). The number of past year initiates and the percentage of people using smokeless tobacco for the first time among those at risk for initiation were higher among males than females (Figure 4). In 2014, 749,000 males and 266,000 females used smokeless tobacco for the first time. These numbers represent 0.8 and 0.2 percent of males and females at risk for initiation, respectively. The number of past year initiates and the percentage of people using smokeless tobacco for the first time among those at risk for initiation were higher among adolescents and young adults than among adults aged 26 or older (Figure 4). An estimated 431,000 people aged 12 to 17, 468,000 people aged 18 to 25, and 117,000 people aged 26 or older used smokeless tobacco for the first time in 2014. These numbers represent 1.8 percent of adolescents at risk for initiation, 1.6 percent of young adults at risk for initiation, and 0.1 percent of adults aged 26 or older at risk for initiation.

The percentage of people initiating smokeless tobacco use in the past year among people at risk for initiation was lower in 2014 than in the years between 2005 and 2011 but matched the levels between 2002 and 2004 and more recent years 2012 and 2013 (Figure 5). Similar trends were seen among males at risk for initiation and adolescents aged 12 to 17 at risk for initiation (Figures 5 and 6).

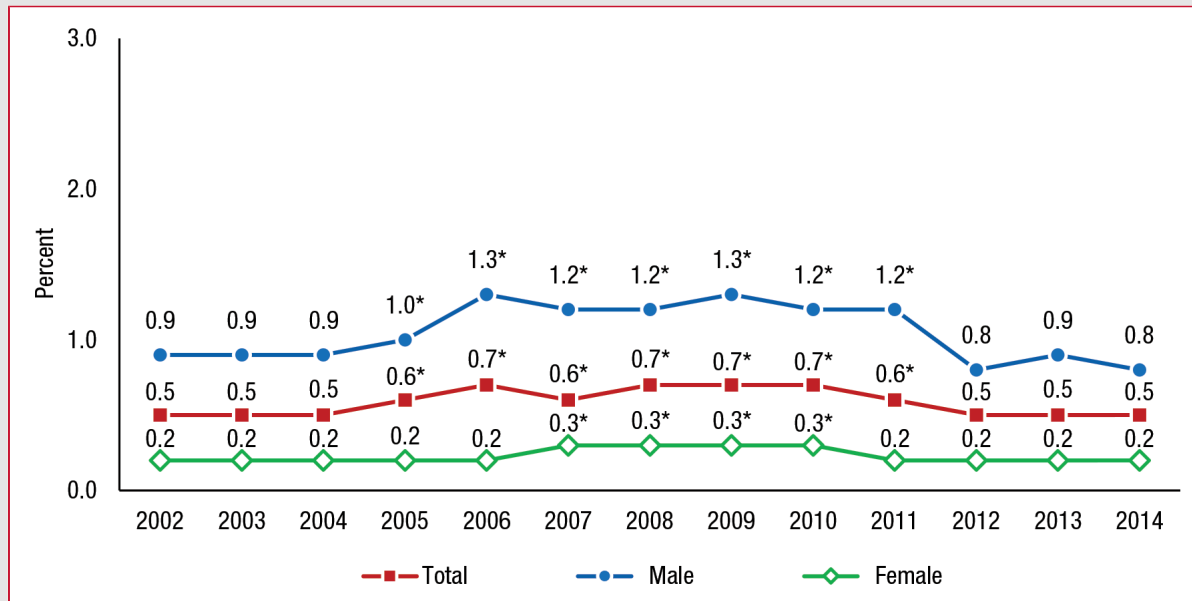
In every year between 2002 and 2014, the percentage of recent initiation of smokeless tobacco use among those who were at risk for initiation was higher among males than females. Among those at risk for initiation, adolescents and young adults were more likely than adults aged 26 or older to have used smokeless tobacco for the first time in every year between 2002 and 2014.

Figure 4. Past year initiation of smokeless tobacco use among people aged 12 or older who are at risk for initiation, by gender and age group: 2014



Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health (NSDUH), 2014.

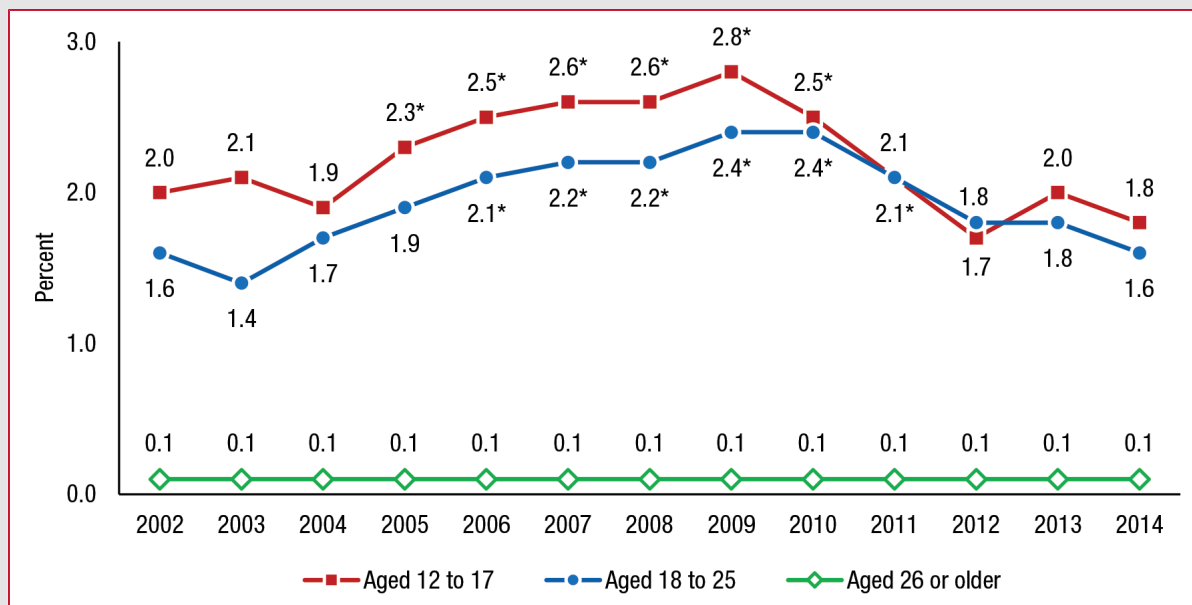
Figure 5. Past year initiation of smokeless tobacco use among people aged 12 or older who are at risk for initiation, by gender: 2002 to 2014



* Difference between this percentage and the percentage for 2014 is statistically significant at the .05 level.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Surveys on Drug Use and Health (NSDUHs), 2002 to 2014.

Figure 6. Past year initiation of smokeless tobacco use among people aged 12 or older who are at risk for initiation, by age group: 2002 to 2014



* Difference between this percentage and the percentage for 2014 is statistically significant at the .05 level.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Surveys on Drug Use and Health (NSDUHs), 2002 to 2014.

DISCUSSION

Smokeless tobacco contains nicotine and is addictive.³ There is no safe level of smokeless tobacco use and there are several negative health consequences from smokeless tobacco use.³ Although national, state, and local smoking cessation efforts appear to have resulted in a significant reduction in the number of Americans who smoke cigarettes,⁷ the overall use of smokeless tobacco has remained mostly unchanged since 2002. On the positive side, there have been declines in initiation of smokeless tobacco between 2006 and 2014 among males, adolescents, and young adults. The declines in smokeless tobacco initiation among adolescents and young adults is particularly relevant to improving the health of the nation because smokeless tobacco use is often linked to subsequent cigarette initiation.⁴ Taken together, the findings in this report suggest a continuing need for prevention messages and tobacco cessation programs that specifically address the inherent risk of smokeless tobacco. Continuing to monitor trends in smokeless tobacco use and demographics of smokeless tobacco initiates can help to further refine prevention efforts.

Quitting smokeless tobacco use is as challenging as smoking cessation. The Substance Abuse and Mental Health Services Administration (SAMHSA) provides resources to support those who want to quit using tobacco products. SAMHSA oversees implementation of the Synar Amendment, which requires states to have laws prohibiting the sale and distribution of tobacco products to minors. For more information and resources on tobacco and cessation, please visit <http://www.samhsa.gov/atod/tobacco> and <http://www.integration.samhsa.gov/health-wellness/wellness-strategies/tobacco-cessation-2>.

ENDNOTES

1. Delnevo, C. D., Wackowski, O. A., Giovenco, D. P., Manderski, M. T. B., Hrywna, M., & Ling, P. M. (2014). Examining market trends in the United States smokeless tobacco use: 2005–2011. *Tobacco Control, 23*(2), 107–112.
2. Maxwell, J. C. (2011). *The Maxwell Report: The smokeless tobacco industry in 2010*. Richmond, VA.
3. U.S. Food and Drug Administration. (2017). *Dip, Chew, Snuff, Snus: "Smokeless" Doesn't Mean "Safe."* Retrieved from <https://www.fda.gov/TobaccoProducts/Labeling/ProductsIngredientsComponents/ucm542713.htm#refs>
4. Lund, I., & Scheffels, J. (2014). Smoking and snus use onset: Exploring the influence of snus debut age on the risk for smoking uptake with cross-sectional survey data. *Nicotine and Tobacco Research, 16*(6), 815–819.
5. World Health Organization, International Agency for Research on Cancer. (2007). *IARC monographs on the evaluation of carcinogenic risks to humans. Volume 89: Smokeless tobacco and some tobacco-specific n-nitrosamines*. Lyons, France.
6. Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health. (2014). *The health consequences of smoking—50 years of progress: A report of the Surgeon General*. Retrieved from <http://www.surgeongeneral.gov/library/reports/50-years-of-progress/full-report.pdf>
7. Davis, K. C., Farrelly, M. C., Duke, J., Kelly, L., & Willett, J. (2012). Antismoking media campaign and smoking cessation outcomes, New York State, 2003–2009. *Preventing Chronic Disease, 9*.

SUGGESTED CITATION

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SUMMARY

Background: Although cigarette use has decreased within the United States, the promotion of smokeless tobacco has increased. This report presents information on smokeless tobacco use and initiation. **Method:** This report uses data from the 2002 to 2014 National Surveys on Drug Use and Health to examine smokeless tobacco use and initiation among people aged 12 or older in 2014 and presents trends between 2002 and 2014. **Results:** In 2014, an estimated 8.7 million people aged 12 or older used smokeless tobacco in the past month. Males were more likely than females to have used smokeless tobacco in the past month. Percentages of people using smokeless tobacco in the past month remained relatively stable between 2002 and 2014. Around 1.0 million people aged 12 or older used smokeless tobacco for the first time in the past year. Although there were higher percentages of people initiating smokeless tobacco use in the past year among people at risk for initiation in 2005 through 2011, the 2014 estimates were similar to the levels between 2002 and 2004. **Conclusion:** Smokeless tobacco is not a healthy alternative to cigarette smoking. Although the number of Americans who smoke cigarettes has been significantly reduced, the overall use of smokeless tobacco has remained mostly unchanged since 2002. On the positive side, there have been declines in initiation of smokeless tobacco between 2006 and 2014 among males, adolescents, and young adults. Taken together, the findings in this report suggest a continuing need for prevention messages and tobacco cessation programs that specifically address the inherent risk of smokeless tobacco.

Keywords: initiation, National Survey on Drug Use and Health, smokeless tobacco

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KEYWORDS

Age Group, Gender, Short Report, Population Data, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, Researchers, Drug Use Trends, Tobacco, All US States Only

The Substance Abuse and Mental Health Services Administration (SAMHSA) is the agency within the U.S. Department of Health and Human Services that leads public health efforts to advance the behavioral health of the nation. SAMHSA's mission is to reduce the impact of substance abuse and mental illness on America's communities.

The National Survey on Drug Use and Health (NSDUH) is an annual survey sponsored by SAMHSA. The data used in this report are based on information obtained from 67,900 people aged 12 or older in 2014. NSDUH collects data by administering questionnaires to a representative sample of the population through face-to-face interviews at their place of residence.

The CBHSQ Report is prepared by the Center for Behavioral Health Statistics and Quality (CBHSQ), SAMHSA, and by RTI International in Research Triangle Park, North Carolina. (RTI International is a registered trademark and a trade name of Research Triangle Institute.)

Information on the most recent NSDUH is available in the following publication:

Center for Behavioral Health Statistics and Quality. (2016). *Key substance use and mental health indicators in the United States: Results from the 2015 National Survey on Drug Use and Health* (HHS Publication No. SMA 16-4984, NSDUH Series H-51). Retrieved from <http://samhsa.gov/data/>

Also available online at <http://www.samhsa.gov/data/population-data-nsduh>.



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