

the truth about smokeless tobacco

BACKGROUND

There are four general types of smokeless tobacco available in the United States:

- **Snuff** is finely ground tobacco packaged in cans or pouches, which can be sold dry (powdered form that is sniffed) or moist (placed between the lower lip or cheek and gum), and is sometimes used in teabag-like pouches. Examples of dry snuff include Bruton and Dental Snuff, while popular brands of moist snuff are Copenhagen and Skoal.¹
- Chewing tobacco ("chew") is available in loose leaves, plugs, or twists of tobacco, and is placed between the cheek and gum or teeth. Examples of chewing tobacco include Red Man and Levi Garrett.^{1,2}
- **Snus**, a product that originated in Sweden, is moist snuff that comes packaged in small pouches and is often flavored. This product does not produce excess saliva like other forms of smokeless tobacco, making it spit-less. Popular American snus products are Camel snus and Marlboro snus.³
 - Some Swedish snus are produced pursuant to a voluntary standard designed to reduce contaminants and nitrosamine levels (the "Gothiatek" standard). Some of these Swedish snus products have been approved by the FDA as new tobacco products. This determination required the FDA to conclude that the introduction of the products in the United States was appropriate for the protection of the public health. Not all snus products are produced pursuant to this standard, and the FDA has only issued new product approvals for particular Swedish snus.
- **Dissolvable tobacco** is another spit-less, frequently flavored tobacco product that is finely milled and dissolves orally. Ariva and Stonewall are some of the dissolvable products on the market.^{3,5}



SNUFF



CHEWING TOBACCO



SNUS



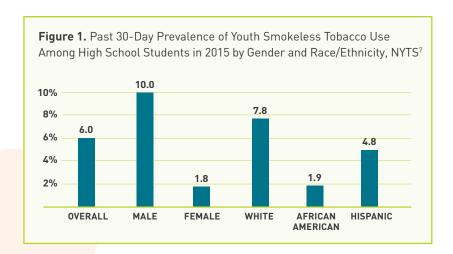
DISSOLVABLE TOBACCO

PATTERNS OF USE IN THE U.S.

The prevalence of smokeless tobacco use among adolescents and adults has been relatively stable since 2002. In 2014, there were 8.7 million (3.3%) past 30-day smokeless tobacco users, ages 12 or older in the U.S.⁶

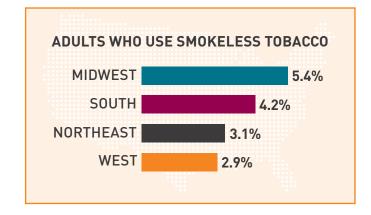
Youth

- In 2015, there were 1.1 million past 30-day high school and middle school smokeless tobacco users. The prevalence of past 30-day smokeless tobacco use was 6.0% among high school students and 1.8% among middle school students. This compares to 9.3% prevalence of past 30-day cigarette smoking among high school students.
- Among youth, males are far more likely to use smokeless tobacco than females. A greater proportion of whites use smokeless tobacco compared to any other ethnic group.⁷ (Figure 1)
- Flavored smokeless tobacco products are particularly popular among youth. In 2014, the prevalence of flavored smokeless tobacco use among past 30-day smokeless tobacco users was 64.7% among high school students and 36.1% among middle school students.8
- Smokeless tobacco use among youth is often accompanied by use of other tobacco products (poly-use). Among middle and high school students in 2014, 63.4% of past 30-day smokeless tobacco smokers, who reported using smokeless tobacco on 1–5 days during the past 30 days, also used at least one other product.
- In 2014, among high school students who were past 30-day users of smokeless tobacco, 42% used the product on 20 or more days in the past 30 days.



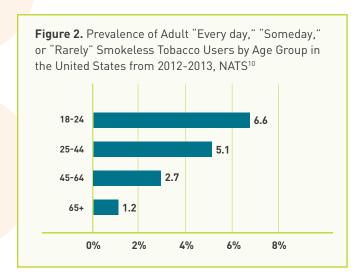
Young Adults & Adults

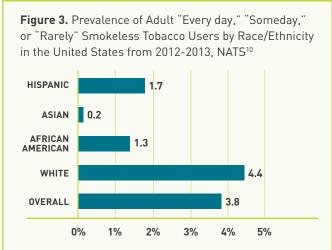
- Younger adults use smokeless tobacco at higher rates than older adults (Figure 2):
 - Respondents in the 2012-2013 National Adult Tobacco Survey (NATS) reported "every day," "someday," or "rarely" use of smokeless tobacco at 3.8% in adults overall, but 6.6% in 18-24 year olds, 5.1% in 25-44 year olds, and 2.7% in 45-64 year olds. 10
 - Respondents in the 2012-2013 NATS reported "every day" or "someday" use of smokeless tobacco at 2.6% in adults overall, but 4.4% in 18-24 year olds and 3.1% in 25-44 year olds, and 2.1% in 45-64 year olds.¹⁰
- In the adult population, smokeless tobacco use is more common among whites. 10 (Figure 3)
- There are considerable regional differences in adult smokeless tobacco use. Smokeless tobacco use is most common in the Midwest (5.4%) and the South (4.2%) and is less common in the West (2.9%) and the Northeast (3.1%).¹⁰
- There are high concentrations of smokeless tobacco use in certain industries and occupations. Among working U.S. adults, smokeless tobacco use is highest in mining [18.8%], wholesale trade [8.9%], and



construction (7.9%) industries, as well as occupations involving construction and extraction (10.8%), and installation, maintenance, and repair (9.0%).¹¹

• Use of smokeless tobacco is also prevalent in military populations. In 2011, the Department of Defense determined that 12.8% of military personnel were current smokeless tobacco users. 12

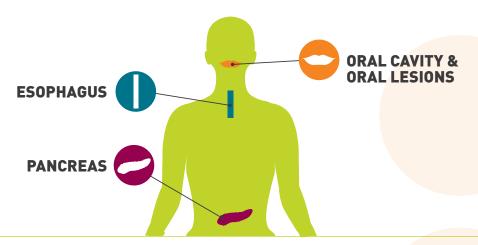




HEALTH & SAFETY

- Smokeless tobacco use causes precancerous oral lesions, oral, esophageal, and pancreatic cancer. The risk of cancer of the oral cavity, esophagus, and pancreas is lower for smokeless tobacco users than for smokers. 14,15
- Chronic use of smokeless tobacco can result in nicotine addiction. 16-19 Nicotine use during pregnancy is associated with low birth weight and preterm delivery. 14
- Youth use of nicotine in any form is unsafe. Nicotine use during adolescence can disrupt the formation of brain circuits that control attention, learning, and susceptibility to addiction. 14,20 Early age of nicotine use and pleasurable initial experiences are correlated with daily use and lifetime nicotine dependence. 21
- Harms from smokeless tobacco products vary by product type, given that levels of nicotine and toxicants vary significantly across different types of smokeless products. 22-24 However, smokeless tobacco use, while harmful, is less harmful than cigarette smoking. The least harmful smokeless tobacco products are low-nitrosamine Swedish snus 25,26 which have received an order from FDA allowing them to be marketed as new tobacco products. 4,27 To receive such an order, manufacturers must show that the introduction of a new product in the market would be appropriate for the protection of the public health. Not all snus products are low-nitrosamine products, and many snus products currently on the market in the United States have not been reviewed by the FDA under the new product standard.
- Switching completely from smoking cigarettes to using the least harmful forms of smokeless tobacco (e.g., Swedish snus) may result in lower health risks to individuals. Evidence from Sweden indicates that increased prevalence of snus use from 1976 to 2002 was correlated with reductions in cigarette smoking prevalence and faster reductions in rates of lung cancer and heart attack than seen in similar countries examined over the same period. As of 2012, lung cancer was the leading cause of cancer death among men in all European countries except Sweden.

SMOKELESS TOBACCO LINKS TO 3 TYPES OF CANCER



MARKETING IN THE U.S.

- The five major U.S. manufacturers of smokeless tobacco products spent a total of \$503.2 million on advertising and promotion of their products in 2013, an increase from \$435.9 million the year prior.³¹
- Promotional allowances (including price discounts) to retailers or wholesalers accounted for 71% of 2013 spending.³¹
- Expenditures for sports and sporting events were \$2.1 million in 2013, a decrease from \$15.2 million in 2009.³¹
- Some cigarette companies advertise that smokeless tobacco can be used in places where tobacco smoking is not allowed.³²









* actual promotions found online & in-stores

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POLICY IN THE U.S.

Youth Access

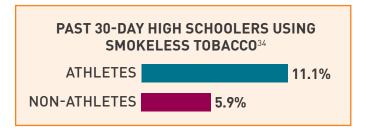
The 2009 Family Smoking Prevention and Tobacco Control Act (FSPTCA) gave the U.S. Food and Drug Administration (FDA) the authority to regulate tobacco products, including smokeless tobacco. Provisions in that law pertaining to smokeless tobacco include:

- Establishing a federal nationwide minimum age of 18 for smokeless tobacco sales.
- Requires retailers to verify age by photographic identification for all over-the-counter tobacco sales. The FSPTCA required FDA to issue regulations to establish age verification requirements for the Internet and other non-face-to-face purchase of any tobacco products. However, FDA has yet to implement this set of regulations. 4
- Prohibits name brand sponsorship of sporting or other cultural events for cigarettes and smokeless tobacco.
- Requires retailers to keep smokeless tobacco products behind the counter.
- Prohibits vending machines in most locations and requires smokeless tobacco sales in stores to be conducted in a face-to-face transaction.
- Prohibits free gifts with purchase, other than tobacco products (no branded t-shirts or hats).
- Prohibits marketing products with modified risk claims without an order from FDA.
- Continues the prohibition of smokeless tobacco advertising on radio and television, originally established by the Comprehensive Smokeless Tobacco Health Education Act (CSTHEA) of 1986.

The Prevent All Cigarette Trafficking (PACT)
 Act prohibits the mailing of smokeless tobacco
 through the U.S. Postal Service and requires
 internet and mail-order retailers to comply
 with age verification requirements, and pay
 appropriate federal and state taxes.

Smokeless Tobacco and Sports

 The association between smokeless tobacco and sports continues to harm young people.
 According to data from the 2013 Youth Risk Behavior Surveys, the proportion of past 30day smokeless tobacco use among high school athletes increased 11% from 2001 to 2013.³⁵ In 2013, past 30-day smokeless tobacco use was highest among male high school athletes [17.4%].³⁵



- In 2016, in an effort to break the cultural association between sports, and particularly baseball, with smokeless tobacco, the state of California banned the use of smokeless tobacco in all its professional baseball stadiums.
- Several localities including Boston, MA,
 Chicago, IL, Los Angeles and San Francisco,
 CA, and New York, NY have passed laws
 banning the use of smokeless tobacco in their professional baseball stadiums –some of these bans extend to all tobacco products in all sporting venues.

Flavored Smokeless Tobacco

- Currently there are no federal laws or regulations restricting the manufacture of flavored smokeless tobacco products.
- Several localities, including Providence, RI, New York, NY, Chicago, IL, Minneapolis and St. Paul, MN and Boston, MA have instituted some form of a ban on the sale of flavored tobacco, which includes smokeless tobacco.

















Warning Labels

- The FSPTCA amended the CSTHEA to require larger and more visible text warnings for smokeless tobacco products and their advertising. On a rotating basis, smokeless manufacturers must include the following four warnings on all smokeless tobacco packages and advertisements:
 - WARNING: This product can cause mouth cancer.
 - WARNING: This product can cause gum disease and tooth loss.
 - WARNING: This product is not a safe alternative to cigarettes.
 - WARNING: Smokeless tobacco is addictive.
- FDA's final "deeming" regulation further required the following warning to be included on all tobacco products:
 - WARNING: This product contains nicotine. Nicotine is an addictive chemical.

Taxes

• The Children's Health Insurance Program Reauthorization Act (CHIPRA) of 2009 increased the federal excise taxes on chewing tobacco from \$0.195 per pound to \$0.5033 per pound and snuff from \$0.585 per pound to \$1.51 per pound.³⁶



where we stand: smokeless tobacco

Truth Initiative's mission is to achieve a culture where all youth and young adults reject tobacco. Consistent with Truth Initiative's vision of a future where tobacco is a thing of the past, we support the following policies with regard to smokeless tobacco:

- Given their well-documented appeal to youth, all flavors, including menthol, should be eliminated from smokeless tobacco products.
- The marketing of all smokeless tobacco products should be restricted so that it does not target or appeal to youth.
- Sales of all smokeless tobacco products should be limited to those 21 or older.
- Internet and other non-face-to-face sales of smokeless tobacco should be prohibited.
- All smokeless use should be subject to tobacco-free laws and requirements.
 - Truth Initiative actively supports tobacco-free college campuses and tobacco-free sports venues.
- We support taxation proportional to the harms of each type of tobacco product to
 discourage use of the most harmful products. Combusted tobacco products should
 be taxed at the highest levels, and the least harmful, non-combusted tobacco
 products should be taxed at lower levels.

TRUTH INITIATIVE PUBLICATIONS ON SMOKELESS TOBACCO

- Ambrose BK, Day HR, Rostron B, Conway KP, Borek N, Hyland A, Villanti AC. Flavored tobacco product use among US youth aged 12-17 years, 2013-2014. JAMA. 2015;314(17):1871-1873.
- Mays D, Moran MB, Levy DT, Niaura RS. The impact of health warning labels for Swedish snus advertisements on young adults' snus perceptions and behavioral intentions. Nicotine & Tobacco Research. 2015 Jun 25. [Epub ahead of print].
- Richardson A, Pearson J, Xiao H, Stalgaitis C, Vallone D. Prevalence, harm perceptions, and reasons for using noncombustible tobacco products among current and former smokers. American Journal of Public Health. 2014 Aug;104(8):1437-44.
- Richardson A, Williams V, Rath J, Villanti AC, Vallone D. The next generation of users: prevalence and longitudinal patterns of tobacco use among US young adults. Am J Public Health. 2014 Aug;104(8):1429-36. PMID: 24922152. Abstract.
- Richardson A, Ganz O, Stalgaitis C, Abrams D, Vallone D. Noncombustible tobacco product advertising: how companies are selling the new face of tobacco. Nicotine & Tobacco Research. 2014 May;16(5):606-14.
- Rath JM, Villanti AC, Abrams DB, Vallone DM. Patterns of Tobacco Use and Dual Use in U.S. Young Adults: The missing link between youth prevention and adult cessation. Journal of Environmental and Public Health. 2012: http://www.hindawi.com/journals/jeph/2012/679134/

SMOKELESS

The use of smokeless tobacco has been relatively stable since 2002. In 2015, 6% of high school students were current smokeless tobacco users.

But that's not the whole story.



Young men and white youth are more likely to use smokeless tobacco. 10% of high school males and 7.8% of white high school students were current smokeless tobacco users in 2015.

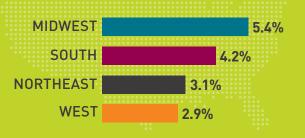


Flavors are popular among smokeless tobacco users.

64.7% of high school students and 36.1% of middle school students who currently use smokeless tobacco **used flavored products.**

Where you live says a lot about how likely you are to use smokeless tobacco.

ADULTS WHO USE SMOKELESS TOBACCO

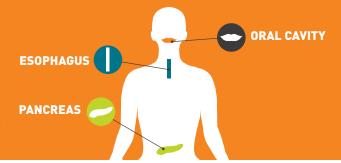


SMOKELESS TOBACCO *IS* DANGEROUS. High school athletes are nearly twice as likely to use smokeless tobacco than their peers.

In 2013, 11.1% of high school athletes were current smokeless tobacco users, compared to 5.9% among high school students who do not play sports.



SMOKELESS TOBACCO
TO 3 TYPES
OF CANCER



REFERENCES

- National Cancer Institute. Smokeless Tobacco or Health: An International Perspective. Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health. National Cancer Institute: 1992.
- Popova L, Ling PM. Alternative tobacco product use and smoking cessation: a national study. Am J Public Health. 2013;103(5):923-930.
- 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.
- Department of Health and Human Services. Premarket Tobacco Application (PMTA) Technical Project Lead (TPL) Review.
- McMillen R, Maduka J, Winickoff J. Use of emerging tobacco products in the United States. J Environ Public Health. 2012;2012.
- Center for Behavioral Health Statistics and Quality. Behavioral Health Trends in the United States: Results from the 2014 National Survey on Drug Use and Health (HHS Publication No. SMA 15-4927, NSDUH Series H-50). September 2015.
- Singh T, Arrazola RA, Corey CG, et al. Tobacco Use Among Middle and High School Students - United States, 2011-2015. MMWR Morb Mortal Wkly Rep. 2016;65[14]:361-367.
- Corey CG, Ambrose BK, Apelberg BJ, King BA. Flavored Tobacco Product Use Among Middle and High School Students - United States, 2014. MMWR Morb Mortal Wkly Rep. 2015;64(38):1066-1070.
- Neff LJ, Arrazola RA, Caraballo RS, et al. Frequency of Tobacco Use Among Middle and High School Students - United States, 2014. MMWR Morb Mortal Wkly Rep. 2015;64(38):1061-1065.
- Agaku IT, King BA, Husten CG, et al. Tobacco product use among adults--United States, 2012-2013. MMWR Morb Mortal Wkly Rep. 2014;63(25):542-547.
- Mazurek JM, Syamlal G, King BA, Castellan RM. Smokeless tobacco use among working adults - United States, 2005 and 2010. MMWR Morb Mortal Wkly Rep. 2014;63(22):477-482.
- Department of Defense. 2011 Health Related Behaviors Survey of Active Duty Military Personnel. 2013.
- IARC Working Group on the Evaluation of Carcinogenic Risks to Humans.
 Smokeless Tobacco. 2012;100-E. http://monographs.iarc.fr/ENG/Monographs/vol100E/mono100E-8.pdf.
- 14. U.S. 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.
- Boffetta P, Hecht S, Gray N, Gupta P, Straif K. Smokeless tobacco and cancer. The Lancet. Oncology. 2008;9(7):667-675.
- IARC Working Group on the Evaluation of Carcinogenic Risks to Humans. Smokeless Tobacco and Some Tobacco-specific N-Nitrosamines. 2007;89. http://monographs.iarc.fr/ENG/recentpub/mono89.pdf.
- 17. Hatsukami DK, Severson HH. Oral spit tobacco: addiction, prevention and treatment. Nicotine Tob Res. 1999:1:21-44.
- Hatsukami DK, Lemmonds C, Tomar SL. Smokeless tobacco use: harm reduction or induction approach? Prev Med. 2004;38:309-317.
- 19. United States Department of Health and Human S. The health consequences of smoking: nicotine addiction: A report of the Surgeon General. Rockville: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control, Center for Health Promotion and education, Office on Smoking and Health;1988.
- England LJ, Bunnell RE, Pechacek TF, Tong VT, McAfee TA. Nicotine and the Developing Human: A Neglected Element in the Electronic Cigarette Debate. Am J Prev Med. 2015;49(2):286-293.
- Hu MC, Davies M, Kandel DB. Epidemiology and correlates of daily smoking and nicotine dependence among young adults in the United States. Am J Public Health. 2006;96(2):299-308.
- NIH State-of-the-Science Panel. National Institutes of Health State-of-the-Science conference statement: Tobacco use: Prevention, cessation, and

- control. Ann Intern Med. 2006;145(11):839-844.
- Song MA, Marian C, Brasky TM, Reisinger S, Djordjevic M, Shields PG. Chemical and toxicological characteristics of conventional and low-TSNA moist snuff tobacco products. Toxicol Lett. 2016;245:68-77.
- Stepanov I, Jensen J, Hatsukami D, Hecht SS. New and traditional smokeless tobacco: comparison of toxicant and carcinogen levels. Nicotine Tob Res. 2008;10(12):1773-1782.
- Levy DT, Mumford EA, Cummings KM, et al. The relative risks of a lownitrosamine smokeless tobacco product compared with smoking cigarettes: estimates of a panel of experts. Cancer Epidemiol Biomarkers Prev. 2004;13(12):2035-2042.
- Nutt DJ, Phillips LD, Balfour D, et al. Estimating the harms of nicotinecontaining products using the MCDA approach. European addiction research. 2014;20(5):218-225.
- 27. FDA issues first product marketing orders through premarket tobacco application pathway [press release]. November 10 2015.
- Ramstrom LM, Foulds J. Role of snus in initiation and cessation of tobacco smoking in Sweden. Tob Control. 2006;15(3):210-214.
- Foulds J, Ramstrom L, Burke M, Fagerstrom K. Effect of smokeless tobacco (snus) on smoking and public health in Sweden. Tob Control. 2003;12(4):349-359
- Ferlay J, Steliarova-Foucher E, Lortet-Tieulent J, et al. Cancer incidence and mortality patterns in Europe: estimates for 40 countries in 2012. Eur. J. Cancer. 2013;49(6):1374-1403.
- Federal Trade Commission. Smokeless Tobacco Report for 2013. Washington, DC: Federal Trade Commission; 2016.
- 32. Timberlake DS, Pechmann C, Tran SY, Au V. A content analysis of Camel Snus advertisements in print media. Nicotine Tob. Res. 2011;13(6):431-439.
- Family Smoking Prevention and Tobacco Control Act. Public Law No: 111-31.
 Vol HR 125620092009.
- 34. 26 U.S.C. 5702.
- Agaku IT, Singh T, Jones SE, et al. Combustible and Smokeless Tobacco Use Among High School Athletes - United States, 2001-2013. MMWR Morb Mortal Wkly Rep. 2015;64(34):935-939.
- U.S. Department of Treasury Alcohol and Tobacco Tax and Trade Bureau.
 Federal Excise Tax Increase and Related Provisions. http://www.ttb.gov/main_pages/schip-summary.shtml.