



SMOKELESS TOBACCO IN THE UNITED STATES

Health Harms of Smokeless Tobacco

Leading health care authorities in the U.S. and around the world have unequivocally stated that smokeless tobacco products are harmful to health. However, tobacco companies – and increasingly more cigarette companies – continue to produce and market new smokeless tobacco products to attract new users and keep smokers addicted.

Health Care Authorities on Smokeless Tobacco Products in the USA

U.S. Surgeon General¹

- “After a careful examination of the relevant epidemiologic, experimental, and clinical data, the committee concludes that **the oral use of smokeless tobacco represents a significant health risk. It is not a safe substitute for smoking cigarettes. It can cause cancer and a number of non-cancerous oral conditions and can lead to nicotine addiction and dependence.**”
- “**The scientific evidence is strong that the use of snuff can cause cancer in humans.** The evidence for causality is strongest for cancer of the oral cavity, wherein cancer may occur several times more frequently in snuff dippers compared to non-tobacco users.”

U.S. National Cancer Institute²

- “**The bioassay data strongly support the epidemiological observation that ST is carcinogenic to humans.** Twenty-eight carcinogens have been identified in chewing tobacco and snuff. The high concentrations of N-nitrosamines in ST, and especially the high levels of TSNA, are of great concern.”
- “**The evidence that NNK and NNN play a role in human oral cancer induced by snuff is strong.** Both compounds are present in significant amounts in snuff and in the saliva of snuff dippers. They are metabolically activated in snuff dippers to intermediates that bind to hemoglobin. They cause oral tumors in rats and are metabolically activated by rat and human oral tissue. Although there are many questions about the mechanisms by which snuff causes oral tumors in rats and humans, there is no doubt that the presence of NNK and NNN in snuff is an unacceptable risk to people who choose to use these products.”

U.S. National Toxicology Program³

- “**The oral use of smokeless tobacco is known to be a human carcinogen** based on sufficient evidence of carcinogenicity from studies in humans which indicate a causal relationship between exposure to smokeless tobacco and human cancer.”
- “**Smokeless tobacco has been determined to cause cancers of the oral cavity.** Cancers of the oral cavity have been associated with the use of chewing tobacco as well as snuff which are the two main forms of smokeless tobacco used in the United States.”

World Health Organization (WHO)

- “**There is conclusive evidence that certain smokeless tobacco products increase risk of oral cancer, specifically ... smokeless tobacco in the United States.**”⁴

Despite all the evidence of the harms of smokeless tobacco, smokeless tobacco companies, particularly the U.S. Smokeless Tobacco Company (UST), now a subsidiary of Altria, the parent company of Philip Morris USA, has in the recent past denied that smokeless tobacco causes cancer or any other disease.⁵

Smokeless Tobacco Use in the U.S.

While youth smokeless tobacco use declined from 1997 to 2003, three different national surveys show that smokeless tobacco use has increased more recently. The Youth Risk Behavior Survey found that in 2009, 15.0 percent of U.S. high school boys currently use smokeless tobacco products – a 36 percent increase from 2003. In some states, smokeless tobacco use among high school boys in 2009 was

particularly high, including Alabama (20.5%), Alaska (19.3%), Arkansas (19.9%), Kentucky (24.7%), Montana (24.1%), North Dakota (23.2%), South Dakota (23.4%), Tennessee (21.3%), West Virginia (24.2%), and Wyoming (24.7%).⁶

According to the 2010 Monitoring the Future survey, there was a 39.3 percent increase in 12th graders using smokeless tobacco from 2006 (6.1%) to 2010 (8.5%). Among 10th graders, there was a 53 percent increase in smokeless tobacco use from 2004 to 2010 (4.9% to 7.5%).⁷

Similarly, a 2009 National Survey on Drug Use and Health report showed that the number of boys aged 12 to 17 starting to use smokeless tobacco has significantly increased since 2002. Youth aged 12 to 17 were more likely to start using smokeless tobacco compared to 18 to 25 year olds.⁸

Accurate national smokeless tobacco prevalence data for adults are not yet available. The 2009 National Survey on Drug Use and Health reported that 6.1 percent of young adults between ages 18 and 25 and 3.1 percent of adults over age 26 used smokeless tobacco.⁹ State-specific data from the 2009 Behavior Risk Surveillance System (BRFSS) show wide variation in adult smokeless tobacco use across the states, with the highest prevalence among adult men in West Virginia (17.1%) and Wyoming (16.9%).¹⁰

Dual Use – Smokeless Tobacco Use and Cigarette Smoking

Youth prevalence data show that cigarette smoking and smokeless tobacco use has declined between 1997 and 2003, but as the youth smoking decline has stalled since then, youth smokeless use has actually increased.¹¹ This suggests smokeless is *not* substituting for smoking but is adding to the number of tobacco users. From 2002 to 2007, more than half (52.8%) of youth aged 12 to 17 who used smokeless tobacco in the past month also reported past month cigarette smoking.¹²

The 2009 BRFSS found that more than 10 percent of male smokers also currently use smokeless tobacco in 32 states.¹³ A 2010 study found that more than a third (37%) of men over age 25 who used smokeless tobacco on some days also smoked cigarettes every day. In contrast, dual use was much higher among high school boys, and those who used smokeless tobacco were five times more likely to also smoke half a pack of cigarettes per day compared to high school boys who did not use smokeless tobacco.¹⁴

Marketing Smokeless Tobacco to Kids

Smokeless tobacco companies in the U.S., particularly the U.S. Smokeless Tobacco Company (UST), now a subsidiary of Altria (the parent company of Philip Morris USA) have a long history of creating new products that appeal to kids and marketing them aggressively to children.¹⁵ In recent years, there has been an onslaught of new smokeless tobacco products on the market, which, coupled with aggressive marketing strategies, are likely to attract new youth users.

Tobacco documents show that UST had a specific strategy to “graduate” new, young smokeless tobacco users from candy- or fruit-flavored starter products to more potent varieties. A 1985 internal UST newsletter indicates the company’s desire to appeal to youth: “Skoal Bandits is the introductory product, and then we look towards establishing a normal graduation process.”¹⁶ Likewise, a former UST sales representative revealed that “Cherry Skoal is for somebody who likes the taste of candy, if you know what I’m saying.”¹⁷

From 1998 to 2008 (the most recent year for which data are available), the total advertising and marketing expenditures of the top-five smokeless tobacco companies in the U.S. (Conwood Company, National Tobacco Company, Swedish Match North America, Inc., Swisher International, and UST) increased by 276 percent. In 2008, these smokeless tobacco companies spent a record \$547.9 million to advertise and market their products.¹⁸ The year 2006 marked a change in cigarette company strategy, with both R.J. Reynolds and Philip Morris USA entering the smokeless tobacco market with snus tobacco products. Trend reports show that cigarette sales are declining, but smokeless tobacco sales are on the rise.¹⁹

Smokeless tobacco companies continue to advertise products in magazines that appeal to youth, such as *Sports Illustrated* and *Rolling Stone*.²⁰ In fact, despite the restrictions placed on youth advertising by the Smokeless Tobacco Master Settlement Agreement of 1998, UST continued to advertise in youth-oriented magazines. From 1997 to 2001, UST’s expenditures in youth magazines increased 161 percent, from \$3.6 million to \$9.4 million.²¹ And although R.J. Reynolds stopped running magazine ads for its main

cigarette brands in 2008, it has continued to place magazine ads for its Camel smokeless tobacco products in *Rolling Stone*, *Sports Illustrated*, and other youth-friendly magazines.

Although the state tobacco settlement agreements have limited UST's ability to continue to do brand-name sponsorships of events and teams, UST continues to be a promotional sponsor of both professional motorsports and rodeo and bull riding.²² As the general manager of the College Finals said, "U.S. Tobacco is the oldest and best friend college rodeo ever had."²³

Cigarette Companies Enter the Smokeless Market

The downward trend in smoking rates and the increasing popularity of smokeless tobacco products has pushed cigarette companies into the smokeless tobacco market, relying on their popular cigarette brand names to attract new users. The two largest U.S. cigarette manufacturers, both of whom were found to be racketeers and guilty of marketing to kids by a U.S. District Court Judge, both acquired two of the largest smokeless tobacco manufacturers and are producing their own smokeless tobacco products under their famous cigarette brand names. Reynolds American – labeled as a "serial violator" of the Master Settlement Agreement by the U.S. Department of Justice – entered into the smokeless tobacco market with its purchase of Conwood in 2006, while Philip Morris USA's parent company, Altria, purchased UST in 2009. Not to be left out, the smaller cigarette companies – Lorillard and the Liggett Group – also test-marketed their own smokeless products in 2008.

There is reason for concern given the track record of UST and its prior marketing behavior aimed at kids and adolescents as well as the recent entry of Reynolds American and now Philip Morris USA into the smokeless tobacco category.²⁴ In her landmark ruling in the Department of Justice (DOJ) lawsuit against Philip Morris USA and R.J. Reynolds (and the other defendant companies), Judge Kessler found, "The evidence is clear and convincing – and beyond any reasonable doubt – that Defendants have marketed to young people twenty-one and under while consistently, publicly, and falsely, denying they do so."²⁵ Just one example is a recent California Supreme Court ruling that found R.J. Reynolds (which is owned by Reynolds American) had, on six separate occasions, violated California state law banning the free distribution of cigarettes at events attended by minors.²⁶

Novel Products

In the last several years, cigarette companies have introduced a number of new smokeless tobacco products. Most notable are the snus products, which are small, teabag-like pouches containing tobacco and other flavorings that users place between their upper gum and lip. R.J. Reynolds's Camel Snus and Philip Morris USA's Marlboro Snus are now sold nationally in a variety of flavors, and Liggett Group's Grand Prix Snus and Lorillard's Triumph Snus were test-marketed in 2008. And because these products do not require spitting, their use can be easily concealed. One high school student admitted using Camel Snus during class, saying, "It's easy, it's super-discreet...and none of the teachers will ever know what I'm doing."²⁷

In addition to Star Scientific's Ariva tobacco lozenges and Stonewall Hard Snuff, both forms of dissolvable tobacco pellets, R.J. Reynolds began test-marketing its own new line of dissolvable tobacco products, again under the Camel brand name, in three cities in January 2009.²⁸ Camel Orbs are pellets of ground tobacco resembling tic tacs, Camel Strips are flat sheets of ground tobacco that work like dissolvable breath strips, and Camel Sticks are toothpick-like sticks of ground tobacco. The Indiana Poison Center issued a warning that the products' resemblance to non-tobacco products put children at risk for accidental poisoning. Currently, under the Family Smoking Prevention and Tobacco Control Act of 2009, the U.S. Federal Drug Administration is studying these and other dissolvable tobacco products for their potential appeal to children.²⁹

While very new, these developments could possibly result in changes in the smokeless tobacco market specifically and more generally in the market for all tobacco products, but the nature of those changes is not certain. Potential outcomes could include:

- Increased youth access to smokeless tobacco products as the new low-weight tobacco products continue to be inadequately taxed at the state and federal level.

- Increased efforts by smokeless manufacturers to encourage adult smokers who are concerned about their health or who are interested in quitting to switch to smokeless tobacco.
- Increase in nicotine addiction due to dual use of smokeless and combusted tobacco products in light of increasing limitations on public indoor and workplace smoking.
- Increased youth experimentation with smokeless tobacco (due to the ability to use it discretely/secretly) and it could be a deterrent to youth tobacco use cessation efforts.
- Decreased cessation rates as smokers use smokeless tobacco products in places they cannot smoke rather than being abstinent from tobacco and nicotine exposure.

Campaign for Tobacco-Free Kids, August 2, 2011 / Ann Boonn

Types of Smokeless Tobacco

- *Oral (moist) snuff* is a finely cut, processed tobacco, which the user places between the cheek and gum that releases nicotine which, in turn, is absorbed by the membranes of the mouth.
- *Snus (or pouches)* is a tea-bag like packet of moist snuff tobacco and flavorings, placed between the upper gum and lip. The product design does not require the user to spit, unlike traditional moist snuff.
- *Dissolvable tobacco products* are made of ground tobacco and flavorings, shaped into pellets, strips, or other forms, that the user ingests orally. These products do not require spitting.
- *Looseleaf* chewing tobacco is stripped and processed cigar-type tobacco leaves, loosely packed to form small strips. It is often sold in a foil-lined pouch and usually treated with sugar or licorice.
- *Plug* chewing tobacco consists of small, oblong blocks of semi-soft chewing tobacco that often contain sweeteners and other flavoring agents.
- *Nasal snuff* is a fine tobacco powder that is sniffed into the nostrils. Flavorings may be added during fermentation, and perfumes may be added after grinding.

For more information on smokeless tobacco, see the Campaign's website at http://www.tobaccofreekids.org/facts_issues/fact_sheets/toll/products/smokeless/.

¹ U.S. Department of Health and Human Services (HHS), *The Health Consequences of Using Smokeless Tobacco: A Report of the Advisory Committee to the Surgeon General*, Bethesda, MD 20892, NIH Publication No. 86-2874, April 1986, <http://profiles.nlm.nih.gov/NN/B/B/F/C/>.

² National Institutes of Health (NIH), National Cancer Institute (NCI), *Smoking and Tobacco Control Monograph 2: Smokeless Tobacco or Health: An International Perspective*, September 1992, http://cancercontrol.cancer.gov/tcrb/monographs/2/m2_complete.pdf.

³ HHS, Public Health Service, National Toxicology Program, *Report on Carcinogens, Eleventh Edition*, January 31, 2005, <http://ntp.niehs.nih.gov/index.cfm?objectid=32BA9724-F1F6-975E-7FCE50709CB4C932>.

⁴ World Health Organization Scientific Advisory Committee on Tobacco Product Regulation, Scientific Advisory Committee on Tobacco Product Regulation Recommendation on Smokeless Tobacco Products, 2003.

⁵ Letter to Secretary Donald S. Clark, U.S. Federal Trade Commission, dated February 5, 2002, from Daniel C. Schwartz, Partner, Bryan Cave LLP. UST website (accessed May 8, 2006), *2005 Annual Report & 2006 Proxy UST*, <http://ccbn.mobular.net/ccbn/7/1301/1391/print/print.pdf>.

⁶ Centers for Disease Control and Prevention (CDC), "Youth Risk Behavior Surveillance—United States, 2009," *Morbidity and Mortality Weekly Report (MMWR) Surveillance Summaries* 59(SS-5), June 4, 2010, <http://www.cdc.gov/mmwr/pdf/ss/ss5905.pdf>.

⁷ Johnston, LD, et al., *Monitoring the Future Overview of Key Findings, 2010*, 2010, <http://monitoringthefuture.org/pubs/monographs/mtf-overview2010.pdf>.

⁸ Substance Abuse and Mental Health Services Administration (SAMHSA), *The NSDUH Report: Smokeless Tobacco Use, Initiation, and Relationship to Cigarette Smoking: 2002 to 2007*, Rockville, MD: Office of Applied Studies, March 5, 2009, <http://www.oas.samhsa.gov/2k9/smokelessTobacco/smokelessTobacco.pdf>.

⁹ SAMHSA, *Results from the 2009 National Survey on Drug Use and Health: Volume I. Summary of National Findings*, Office of Applied Studies, NSDUH Series H-38A, HHS Publication No. SMA 10-4856, 2010, <http://oas.samhsa.gov/NSDUH/2k9NSDUH/2k9Results.htm>. Because this is a household survey, people tend to underreport use.

¹⁰ CDC, "State-Specific Prevalence of Cigarette Smoking and Smokeless Tobacco Use Among Adults—United States, 2009," *MMWR* 59(43):1400-1406, November 5, 2010, <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5943a2.htm>.

¹¹ CDC, "Youth Risk Behavior Surveillance—United States, 2009," *MMWR Surveillance Summaries* 59(SS-5), June 4, 2010, <http://www.cdc.gov/mmwr/pdf/ss/ss5905.pdf>.

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- ¹² SAMHSA, *The NSDUH Report: Smokeless Tobacco Use, Initiation, and Relationship to Cigarette Smoking: 2002 to 2007*, Rockville, MD: Office of Applied Studies, March 5, 2009, <http://www.oas.samhsa.gov/2k9/smokelessTobacco/smokelessTobacco.pdf>.
- ¹³ CDC, "State-Specific Prevalence of Cigarette Smoking and Smokeless Tobacco Use Among Adults—United States, 2009," *MMWR* 59(43):1400-1406, November 5, 2010, <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5943a2.htm>.
- ¹⁴ Tomar, SL, Albert HR, & Connolly, GN, "Patterns of dual use of cigarettes and smokeless tobacco among US males: findings from national surveys," *Tobacco Control* 19:104-109, 2010.
- ¹⁵ See, e.g., TFK Factsheet, *Smokeless Tobacco and Kids*, <http://www.tobaccofreekids.org/research/factsheets/pdf/0003.pdf>.
- ¹⁶ "The Marketing of Nicotine Addiction by One Oral Snuff Manufacturer," *Tobacco Control* 4(1), Spring 1995.
- ¹⁷ Freedman, AM, "How a Tobacco Giant Doctors Snuff Brands to Boost Their Kick," *The Wall Street Journal*, October 26, 1994.
- ¹⁸ Federal Trade Commission (FTC), *Federal Trade Commission Smokeless Tobacco Report for 2007 and 2008*, 2011, <http://ftc.gov/os/2011/07/110729smokelesstobaccoreport.pdf>.
- ¹⁹ U.S. Alcohol and Tobacco Tax and Trade Bureau Tobacco Statistics, <http://www.ttb.gov/tobacco/tobacco-stats.shtml>. Goldman Sachs, *May c-store; cigarette volume declines appear to be moderating*, June 5, 2009.
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- ²¹ Massachusetts Department of Public Health, *Smokeless Tobacco Advertising Expenditures Before and After the Smokeless Tobacco Master Settlement Agreement: A Report of the Massachusetts Department of Public Health*, May 2002, <http://archives.lib.state.ma.us/bitstream/handle/2452/49479/ocm50878863.pdf>.
- ²² UST website, accessed May 7, 2008
- ²³ *Rocky Mountain News*, June 22, 1996.
- ²⁴ For more examples, see TFK Factsheet, *Smokeless Tobacco and Kids*, <http://www.tobaccofreekids.org/research/factsheets/pdf/0003.pdf>.
- ²⁵ Tobacco Control Legal Consortium, *The Verdict Is In: Findings From United States v. Philip Morris, Marketing to Youth*, 2006.
- ²⁶ California Attorney General, *Attorney General Lockyer Announces \$5 Million Settlement with R.J. Reynolds to Resolve Lawsuit Over Firm's Distribution of Free Cigarettes*, May 8, 2006, http://oag.ca.gov/news/press_release?id=1301.
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- ²⁸ TFK, *The Danger from Dissolvable Tobacco and Other Smokeless Tobacco Products*, <http://www.tobaccofreekids.org/research/factsheets/pdf/0363.pdf>.
- ²⁹ Deyton, L (Director of the FDA Center for Tobacco Products), "Letter to Industry on Dissolvable Smokeless Tobacco Products (R.J. Reynolds Tobacco Company)" and "Letter to Industry on Dissolvable Smokeless Tobacco Products (Star Scientific, Inc)," February 1, 2010.