

THE EMERGENCE OF NEW SMOKELESS TOBACCO PRODUCTS

Over the past several years, the tobacco industry has created and started marketing new types of smokeless tobacco products that pose a potential threat to public health. This move by the industry is part of its continuing strategy to keep people addicted to tobacco products and encourage youth and young adults to start. This new product line is also in response to the decrease in cigarette sales during the last decade.¹

The tobacco industry's marketing of these novel smokeless tobacco products indicates they are also attempting to counteract tobacco control policies, especially laws prohibiting smoking in public places and workplaces.² The industry does this by encouraging the use of dissolvable tobacco products in smokefree environments and encouraging dual use.^{2,3,4,5} During the American Cancer Society's Great American Smoke-Out in 2011, R.J. Reynolds ran an advertisement that encouraged smokers to switch to smokeless tobacco instead of quitting.^{4,5} Some of these new smokeless tobacco products, such as snus, are available nationwide, while others, such as the dissolvable tobacco products created by R.J. Reynolds and Philip Morris, are being test marketed in specific states.

Much of this strategy was documented in a report done by the U.S Food and Drug Administration (FDA)'s Tobacco Products Scientific Advisory Committee (TPSAC) on dissolvable tobacco products released in March 2012. The report concluded that dissolvable tobacco products could increase overall tobacco use by encouraging kids to start using tobacco or discourage current smokers from quitting.⁶ The report was required by Congress in the 2009 law giving the FDA authority to regulate tobacco products.

A 2009 study found that novel smokeless tobacco products are being promoted as safer alternatives to smoked tobacco products.² Consequently, the perception among the general public is that smokeless tobacco products are less harmful than those that are smoked.² Steps to protect public health are necessary to ensure these products do not discourage people from quitting tobacco use and end up repeating what happened with light and low-tar cigarettes during the 1970's.^{2,3}

Defining Smokeless Tobacco Products: Novel & Traditional Smokeless Tobacco Products

Smokeless tobacco products can be classified into two categories: novel and traditional. Novel products include snus, Ariva and dissolvable forms of tobacco. (One novel product developed by Altria, Verve, is chewable and contains nicotine but does not contain tobacco.)⁷ Traditional products include chewing tobacco and snuff. (Additional details about both categories of smokeless products are in the glossary on the right.) With smokeless product sales steadily increasing, tobacco manufacturers appear to be succeeding in hooking Americans to both new and traditional forms of smokeless tobacco. Sales of smokeless products were approximately \$700 million in 1985.⁸ By 2008, smokeless tobacco products totaled more than \$2 billion in sales. Spending on advertising and marketing for smokeless tobacco products among the five largest companies more than doubled from \$250.8 million in 2005 to \$547.9 million in 2008.⁸ Moist snuff represented more than 75 percent of the smokeless tobacco market in 2009.⁹ In 2009, 6.7 percent of all high school students and 11.6 percent of male high school students reported use of smokeless tobacco products.¹⁰

Traditional

Chew or loose-leaf chewing tobacco is processed tobacco that is placed between one's cheek and gums. It is sometimes flavored with sugar and comes in a variety of forms. It can be formed into strips that are sold in foil pouches, pressed in to a cake or plug, or the leaves can be twisted together to resemble ropes.¹¹

Snuff is a finely ground and cured form of tobacco that comes in several forms. Its moist form is typically packaged in cans and often referred to as dip. Some moist snuff comes in pouches that are placed between one's cheeks, lips or gums. The dry form is powdery and is taken orally and inhaled.¹¹

Novel

Ariva is available as a tobacco lozenge with natural, wintergreen or java flavoring. The product comes in small pellets, looks like candy and has sweet flavoring, and has been marketed as a reduced exposure product in the past. This product is sold nationwide.¹²

Dissolvable tobacco products come in many forms including strips, sticks and orbs. Strips are flat sheets of ground tobacco. Sticks are similar to toothpicks and coated in tobacco or made of fine ground tobacco. The nicotine content of sticks varies depending on the manufacturer.¹³ Orbs are flavored pellets that resemble Tic-Tacs or Pez candy.^{4,5,14} These products dissolve in one's mouth, eliminating the need to spit. They are often marketed as substitutes for cigarettes in settings where smoking is prohibited. Dissolvable tobacco products are available only in test markets in certain states.

Snus is a form of tobacco that comes in a small pouch called a sachet. The product is placed between one's cheek or teeth and one's gum and also does not require spitting. Snus are available nationwide.¹¹

Addressing the Public Health Concerns

More research on nicotine exposure levels and the health effects of novel smokeless tobacco products is needed. The limited data available from the TPSAC report and other studies suggest these novel smokeless tobacco products could pose a threat to the public's health, especially if these products attract new users or prevent current smokers from quitting. Rates of smokeless tobacco use are flat among youth, but cigarette smoking fell to a new low in 2011.¹⁵ Smokeless tobacco use among high school boys in 2011 exceeded 20 percent in some states including Arkansas, Kentucky, Montana, North Dakota, Oklahoma, South Carolina, South Dakota, Tennessee, West Virginia and Wyoming.¹⁵ Given these trends, the availability of new products like dissolvables may provide additional tobacco product options and could increase the use of smokeless tobacco among high school students and other youth. Moreover, many youth report using more than one tobacco product.³

Any long-term health effects of novel smokeless tobacco products will be better understood after they have been used for longer periods of time. More research is needed to determine if novel smokeless products will cause the deaths and diseases associated with traditional smokeless products such as cancer, heart disease and disorders of the oral cavity.

In summary, the evidence on the risk for cardiovascular disease from smokeless tobacco use is limited, although a small increase in risk is clearly possible. Because of the high background rates of cardiovascular disease, even a small increase in risk could represent a large public health impact in countries that have a high prevalence of smokeless tobacco use. The form of tobacco available in all smokeless products can make nicotine more readily available and more easily absorbed in one's mouth.¹⁶ Due to the short length of time novel smokeless tobacco products have been on the market, TPSAC was unable to reach definitive conclusions in its report about the health effects of the products. However, TPSAC recommended the adaptation of existing surveillance systems and surveys to yield more information about the use of dissolvables, especially among youth and other vulnerable populations.⁶ Implementing this recommendation will help to better determine the full public health impact of dissolvable tobacco products.

Marketing for smokeless tobacco products undermines tobacco control efforts and promotes dual usage.

There is no significant evidence to suggest that substituting these new smokeless tobacco products for more traditional tobacco products will reduce the potential harm to users.⁶ Yet, tobacco manufacturers are employing marketing tactics that mislead the public into believing that smokeless tobacco is a safer option. The companies are also promoting use of several types of tobacco products at once, also called dual use. A recent analysis of data from the Legacy Young Adult Cohort Study reported a 30 percent dual use rate among current tobacco users. Additionally, the study finds that 64 percent of individuals who use other tobacco products also smoke cigarettes, and report the same levels of smoking as cigarette-only users.¹⁷ Novel smokeless tobacco products also allow users to consume tobacco where smoking is prohibited, which could undermine smoking restrictions that are in place across a wide variety of settings, including schools and workplaces.

Sweetened flavors, cheaper prices and deceptive marketing tactics make novel smokeless tobacco products attractive to kids and easy to hide.

Novel smokeless tobacco products are cleverly designed and packaged to make them more attractive to youth and easily concealed. Some novel smokeless products are similar in size to Tic-Tacs or M&M's and are often flavored, enhancing the appeal to kids as well as young children and potentially increasing their risk of nicotine poisoning from eating them.^{4,5,13,14}

What Can be Done to Help

A broad array of methods to address novel smokeless tobacco products should be looked at, including ensuring adequate federal oversight of the marketing of the products, making all taxes on tobacco products equal to cigarettes and increasing the availability of tobacco prevention and cessation programs to educate youth and young adults about novel smokeless tobacco products as well as the strategies the tobacco industry uses to promote their use.

01 **Expand the funding and reach of tobacco control programs.**

The Centers for Disease Control and Prevention (CDC) made recommendations in its [Best Practices for Comprehensive Tobacco Control Programs—2007](#) for what states should be spending on tobacco prevention and cessation programs to have the largest impact. Funding these programs at recommended levels has the potential to discourage the use of all tobacco products, including novel smokeless tobacco products. Cessation services should be made more available to those attempting to quit. Most states do not adequately fund tobacco control programs even though they have been proven effective at reducing tobacco use.¹⁸

02 **Ensure that novel smokeless tobacco products and the claims made about them are subject to adequate federal oversight.**

All tobacco products, including new and novel smokeless products, should be subject to oversight by the federal government. This is especially important if any reduced risk or health claims are made about any products. In the past, the tobacco industry has marketed new products as less harmful than existing tobacco products without evidence to support this claim.¹⁹ Such claims need to be verified by the federal government prior to being made. Products like Altria's new Verve that do not contain tobacco but do contain nicotine should be subject to federal government oversight as well.⁷

03 **Increase the research and evidence base concerning novel smokeless tobacco products.**

As noted in FDA's TPSAC report on dissolvables, more research is needed on novel smokeless tobacco products specifically concerning the health effects of the products, who

is using them and how they are being used.⁶ More research is also needed to understand if these products discourage current tobacco users from quitting, or encourage non-users to start. Finally, additional research is needed to find effective cessation interventions for users of smokeless tobacco products.

04 **Increase public health outreach and education for youth, parents and decision-makers about novel smokeless tobacco products.**

Given their vulnerability and the industry targeting of youth, it is critical that outreach and education strategies address the health risks of novel smokeless products and the use of multiple types of tobacco products. Additionally, efforts should be targeted to males and to youth who live in the Midwest, South and West since the percentage of cigarette smokers who use more than one tobacco product is higher in these regions.³

05 **Ensure tax parity between tobacco products.**

Increases in price have the potential to reduce the use of tobacco products especially by youth.²⁰ Applying the same tax rate to all tobacco products, including novel smokeless tobacco products, is likely to discourage people from switching to alternative tobacco products that are less expensive and reduce the number of people using multiple tobacco products. One study showed that users of snuff were spending less than half of what it would cost to smoke cigarettes between 2000 and 2007.¹

Conclusion

There is much to be learned about the use and health risks of novel smokeless tobacco products. However, what is clear is that these products are marketed to youth and young adults, and the tobacco companies are marketing them as products that can be used in smokefree settings. In addition, the increasing availability of these types of smokeless products may have contributed to increased dual use of tobacco products. Dual use has grave implications for public health as it may mean fewer people quit smoking. More research, education and effective oversight by the FDA is needed to ensure these products do not addict more Americans, cause death and disease and prevent others from quitting tobacco use for good.

Key Resources

- A** FTC report, [Smokeless Tobacco Report for 2007 and 2008](#).
- B** The Tobacco Products Scientific Advisory Committee's (TPSAC) [The Nature and Impact of the Use of Dissolvable Tobacco Products on the Public Health: A Report from the Tobacco Products Scientific Advisory Committee](#) March 2012
- [Health Effects of Dissolvable Tobacco Products](#)
 - [College Students' Awareness and Perceptions of Dissolvable Tobacco Products](#)
- iii. [TPSAC's final edits to the Draft Summary: TPSAC REPORT ON DISSOLVABLE TOBACCO PRODUCTS](#)
- C** [Preventing Tobacco Use Among Youth and Young Adults: A Report of the Surgeon General](#) March 2012.
- D** Campaign for Tobacco-Free Kids. [Fact Sheets Smokeless Tobacco Harms](#) [accessed 2012 April 10].
- E** U.S. Department of Health and Human Services. [Preventing Tobacco Use Among Young People: A Report of the Surgeon General](#). Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Coordinating Center for Health Promotion, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 1994.
- F** Centers for Disease Control and Prevention. [Tobacco Use Among Middle and High School Students—United States, 2000–2009](#). *Morbidity and Mortality Weekly Report* 2010;59(33):1063–8.
- G** Centers for Disease Control and Prevention. [Cigarette Use Among High School Students—United States, 1991–2007](#). *Morbidity and Mortality Weekly Report* 2010;59(26):797–801.
- H** Johnston LD, O'Malley PM, Bachman PM, Schulenberg JE. [Monitoring the Future—National Results on Adolescent Drug Use: Overview of Key Findings, 2010](#) (PDF–1.66 MB). Ann Arbor (MI): University of Michigan, Institute for Social Research, 2011.
- I** Substance Abuse and Mental Health Services Administration. [Results from the 2009 National Survey on Drug Use and Health: Detailed Tables](#) (PDF–36.30 KB).
- J** U.S. Department of Health and Human Services. [Reducing Tobacco Use: A Report of the Surgeon General](#). Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Coordinating Center for Health Promotion, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2000.
- K** Campaign for Tobacco-Free Kids. [How Parents Can Protect Their Kids from Becoming Addicted Smokers](#) (PDF–259.13 KB). Washington: Campaign for Tobacco-Free Kids, 2009.
- L** Centers for Disease Control and Prevention. [Best Practices for Comprehensive Tobacco Control Programs—2007](#). 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, 2007.
- M** Connolly GN et al. Unintentional child poisonings through ingestion of conventional and novel tobacco products. *Pediatrics* 2010; 125(5): 896-9.

References

- Connolly G and Alpert H. Trends in the use of cigarettes and other tobacco products, 2000-2007. *Journal of the American Medical Association* 2008; 299(22):2629-30.
- Parascandola M, Augustson E, O'Connell ME, Marcus S. Consumer awareness and attitudes related to new potential reduced-exposure tobacco product brands. *Nicotine Tobacco and Research* 2009; 11(7): 886-95.
- Bombard J, Rock V, Pederson L, and Asman K. Monitoring polytobacco use among adolescents: Do cigarette smokers use other forms of tobacco? *Nic & Tob Res* 2008;10(11):1581-9.
- American Lung Association. [State of Tobacco Control](#). *American Lung Association* 2011.
- Trinkets and Trash. Artifacts of the Tobacco Epidemic. *Trinkets and Trash* 2011. <http://www.trinketsandtrash.org/tearsheet.asp?ItemNum=213576> (accessed July 2012).
- Tobacco Products Scientific Advisory Committee (TPSAC). The Nature and Impact of the Use of Dissolvable Tobacco Products on the Public Health: A Report from the Tobacco Products Scientific Advisory Committee. *Food and Drug Administration* 2012.
- Esterel, M. New from Altria: A Nicotine Lozenge. *Wall Street Journal* 2012. <http://online.wsj.com/article/SB10001424052702304019404577418651103755194.html> (accessed July 2012).
- Federal Trade Commission. [Smokeless Tobacco Report for 2007 and 2008](#); released in 2011.
- Maxwell JC. The Maxwell Report: The Smokeless Tobacco Industry in 2009. Richmond, VA: John C. Maxwell, Jr., 2010.
- Centers for Disease Control and Prevention. Tobacco Use Among Middle and High School Students – United States, 2000-2009. *Mortality and Morbidity Weekly Review* 2010;59(33):1063-8.
- Centers for Disease Control and Prevention. Smokeless Tobacco Facts http://www.cdc.gov/tobacco/data_statistics/fact_sheets/smokeless/smokeless_facts/index.htm (accessed August 2012).
- Star Scientific. Ariva and Stonewall Dissolvable Tobacco Website <http://www.dissolvabletobacco.com/main-w.html> (accessed August 2012).
- Connolly G et al. Unintentional child poisonings through ingestion of conventional and novel tobacco products. *Pediatrics* 2010; 125(5):896-9.
- TobaccoProducts.org. [Camel Orbs](http://tobacproducts.org/index.php/Camel_Orbs). http://tobacproducts.org/index.php/Camel_Orbs (accessed August 2012).
- Centers for Disease Control and Prevention. [Youth Risk Behavior and Surveillance – United States 2011](#). *Mortality and Morbidity Weekly Report* 2012.
- Richter P et al. Surveillance of moist snuff: total nicotine, moisture, pH, un-ionized nicotine, and tobacco specific nitrosamines. *Nicotine and Tobacco Research* 2008;10(11):1645-52.
- Rath JM et al. Patterns of tobacco use and dual use in US young adults: The missing link between youth prevention and adult cessation. *Journal of Environmental and Public Health* vol. 2012, Article ID 679134, 9 pages, 2012. doi:10.1155/2012/679134.
- Campaign for Tobacco-Free Kids. Comprehensive Tobacco Prevention and Cessation Programs Effectively Reduce Tobacco Use <http://www.tobaccofreekids.org/research/factsheets/pdf/0045.pdf>
- Slater S, Glovino G and Chaloupka F. Surveillance of tobacco industry retail marketing activities of reduced harm reduction products. *Nic & Tob Res* 2008;10(1):187-193.
- 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.