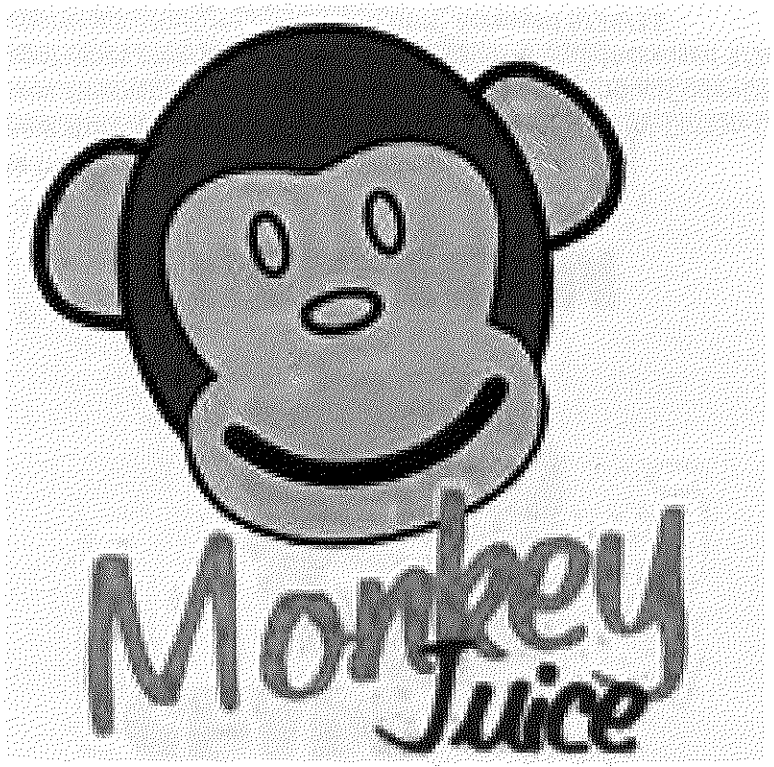

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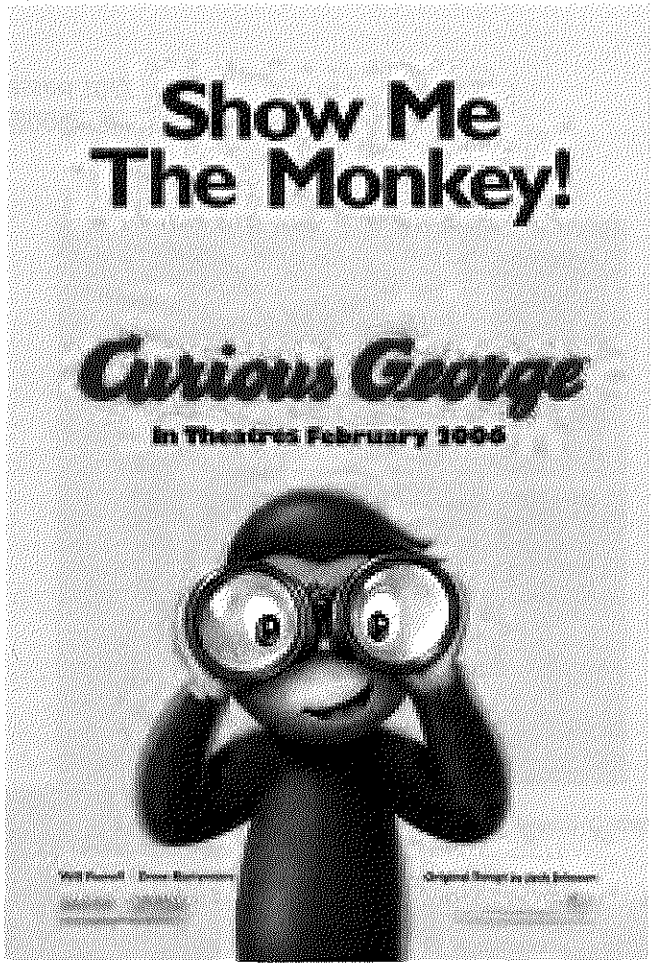

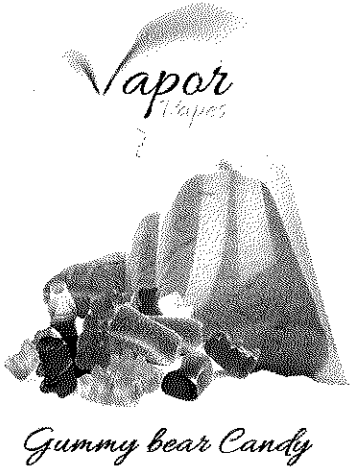

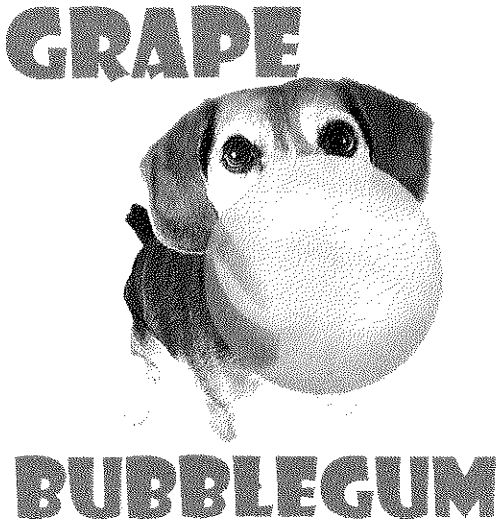

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http://www.steamspiritvapor.com/ProductDetails.asp?ProductCode=DES-captain-crunchAccessed 10/23/13

http://vaporvapes.com/gummy-bear-candy-flavor-e-liquidAccessed 9/26/13

http://vaporecigarettestore.com/menu.html Accessed 9/26/13

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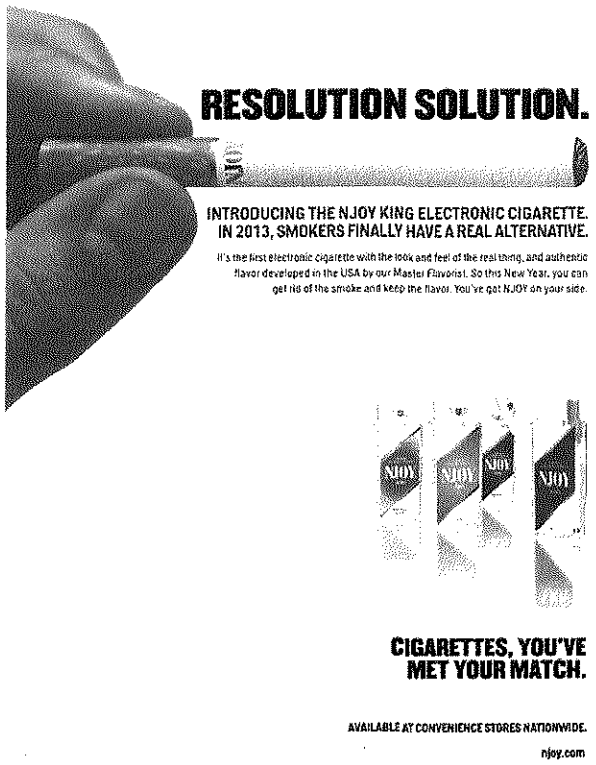

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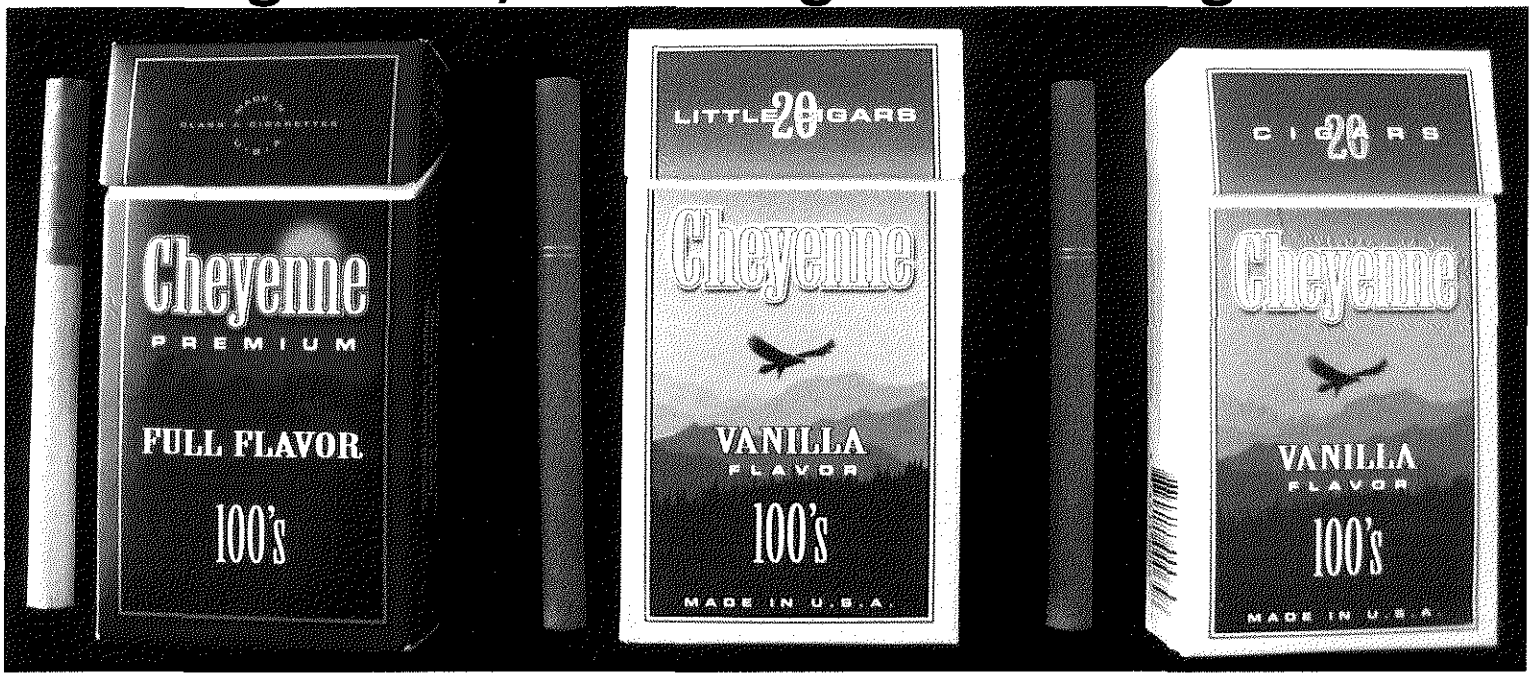
Manipulating Tobacco Products: Cigarettes, "Little Cigars" and "Cigars"



A manufacturer can turn a cigarette into a "little" cigar by adding tobacco to the wrapper. With the change, the product avoids FDA's prohibition on fruit and candy flavors in cigarettes.

A manufacturer can turn a "little" cigar into a "large" cigar by modestly increasing its weight (to just above 3 lbs per 1,000 unit). With the change, the product 1) continues to avoid FDA prohibition on fruit and candy flavors in cigarettes and 2) is taxed at a significantly lower rate than cigarettes or little cigars.

Cigar Smoking and Cancer

Reviewed: 10/27/2010

Key Points

- Cigar smoke, like cigarette smoke, contains toxic and cancer-causing chemicals that are harmful to both smokers and nonsmokers.
- There is no safe tobacco product, and there is no safe level of exposure to tobacco smoke.
- The more you smoke, the greater your risk of disease.
- Cigar smoking causes oral cavity cancers (cancers of the lip, tongue, mouth, and throat) and cancers of the larynx (voice box), esophagus, and lung.
- All cigar and cigarette smokers, whether or not they inhale, directly expose their lips, mouth, tongue, throat, and larynx to tobacco smoke and its toxic and cancer-causing chemicals.

1. How are cigars different from cigarettes?

Cigarettes usually differ from cigars in size and in the type of tobacco used (1–3). Moreover, in contrast with cigarette smoke, cigar smoke is often not inhaled.

The main features of these tobacco products are:

- **Cigarettes**: Cigarettes are uniform in size and contain less than 1 gram of tobacco each. U.S. cigarettes are made from different blends of tobaccos, which are never fermented, and they are wrapped with paper. Most U.S. cigarettes take less than 10 minutes to smoke.
- **Cigars**: Most cigars are composed primarily of a single type of tobacco (air-cured and fermented), and they have a tobacco wrapper. They can vary in size and shape and contain between 1 gram and 20 grams of tobacco. Three cigar sizes are sold in the United States:
  - **Large cigars** can measure more than 7 inches in length, and they typically contain between 5 and 20 grams of tobacco. Some premium cigars contain the tobacco equivalent of an entire pack of cigarettes. Large cigars can take between 1 and 2 hours to smoke.
  - **Cigarillos** are a type of smaller cigar. They are a little bigger than little cigars and cigarettes and contain about 3 grams of tobacco.
  - **Little cigars** are the same size and shape as cigarettes, are often packaged like cigarettes (20 little cigars in a package), and contain about 1 gram of tobacco. Also, unlike large cigars, some little cigars have a filter,

which makes it seem they are designed to be smoked like cigarettes (that is, for the smoke to be inhaled).

2. Are there harmful chemicals in cigar smoke?

Yes. Cigar smoke, like cigarette smoke, contains toxic and cancer-causing chemicals that are harmful to both smokers and nonsmokers. Cigar smoke is possibly more toxic than cigarette smoke (3). Cigar smoke has:

- **A higher level of cancer-causing substances**: During the fermentation process for cigar tobacco, high concentrations of cancer-causing nitrosamines are produced. These compounds are released when a cigar is smoked. Nitrosamines are found at higher levels in cigar smoke than in cigarette smoke.
- **More tar**: For every gram of tobacco smoked, there is more cancer-causing tar in cigars than in cigarettes.
- **A higher level of toxins**: Cigar wrappers are less porous than cigarette wrappers. The nonporous cigar wrapper makes the burning of cigar tobacco less complete than the burning of cigarette tobacco. As a result, cigar smoke has higher concentrations of toxins than cigarette smoke.

Furthermore, the larger size of most cigars (more tobacco) and longer smoking time result in higher exposure to many toxic substances (including carbon monoxide, hydrocarbons, ammonia, cadmium, and other substances).

Cigar smoke can be a major source of indoor air pollution (1). There is no safe level of exposure to tobacco smoke. If you want to reduce the health risk to yourself and others, stop smoking.

3. Do cigars cause cancer and other diseases?

Yes. Cigar smoking causes cancer of the oral cavity, larynx, esophagus, and lung. It may also cause cancer of the pancreas. Moreover, daily cigar smokers, particularly those who inhale, are at increased risk for developing heart disease and other types of lung disease. Regular cigar smokers and cigarette smokers have similar levels of risk for oral cavity and esophageal cancers. The more you smoke, the greater the risk of disease (3).

4. What if I don't inhale the cigar smoke?

Unlike nearly all cigarette smokers, most cigar smokers do not inhale. Although cigar smokers have lower rates of lung cancer, coronary heart disease, and lung disease than cigarette smokers, they have higher rates of these diseases than those who do not smoke cigars.

All cigar and cigarette smokers, whether or not they inhale, directly expose their lips, mouth, tongue, throat, and larynx to smoke and its toxic and cancer-causing chemicals. In addition, when saliva containing the chemicals in tobacco smoke is swallowed, the esophagus is exposed to carcinogens. These exposures probably account for the similar oral and esophageal cancer risks seen among cigar smokers and cigarette smokers (3).

5. Are cigars addictive?

Yes. Even if the smoke is not inhaled, high levels of nicotine (the chemical that causes addiction) can still be absorbed into the body. A cigar smoker can get nicotine by two routes: by inhalation into the lungs and by absorption through the lining of the mouth. Either way, the smoker becomes addicted to the nicotine that gets into the body.

A single cigar can potentially provide as much nicotine as a pack of cigarettes (1).

6. Are cigars less hazardous than cigarettes?

Because all tobacco products are harmful and cause cancer, the use of these products is strongly discouraged. There is no safe level of tobacco use. People who use any type of tobacco product should be encouraged to quit. For help with quitting, see the National Cancer Institute (NCI) fact sheet *Where To Get Help When You Decide To Quit Smoking* at http://www.cancer.gov/cancertopics/factsheet/tobacco/help-quitting on the Internet.

7. Do nicotine replacement products help cigar smokers to quit?

Nicotine replacement products, or nicotine replacement therapy (NRT), deliver measured doses of nicotine into the body, which helps to relieve the cravings and withdrawal symptoms often felt by people trying to quit smoking. Strong and consistent evidence shows that NRT can help people quit smoking cigarettes (4). Limited research has been completed to determine the usefulness of NRT for people who smoke cigars. For help with quitting cigar smoking, ask your doctor or pharmacist about NRT, as well as about individual or group counseling, telephone quitlines, or other methods.

8. How can I get help quitting smoking?

NCI and other agencies and organizations can help smokers quit:

- Go online to **Smokefree.gov** (http://www.smokefree.gov), a Web site created by NCI's Tobacco Control Research Branch, and use the Step-by-Step Quit Guide.
- Call **NCI's Smoking Quitline** at **1–877–448–7848 (1–877–44U–QUIT)** for individualized counseling, printed information, and referrals to other sources.

- Refer to the NCI fact sheet *Where To Get Help When You Decide To Quit Smoking* at http://www.cancer.gov/cancertopics/factsheet/tobacco/help-quitting on the Internet.

Selected References

1. Baker F, Ainsworth SR, Dye JT, et al. Health risks associated with cigar smoking. *Journal of the American Medical Association* 2000; 284(6):735–740. [PubMed Abstract]
2. Kozlowski LT, Dollar KM, Giovino GA. Cigar/cigarillo surveillance: Limitations of the U.S. Department of Agriculture System. *American Journal of Preventive Medicine* 2008; 34(5):424–426. [PubMed Abstract]
3. National Cancer Institute (1998). *Smoking and Tobacco Control Monograph 9: Cigars: Health Effects and Trends.* Bethesda, MD. Retrieved October 21, 2010, from: http://www.cancercontrol.cancer.gov/tcrb/monographs/9/index.html.
4. U.S. Department of Health and Human Services. *Reducing Tobacco Use: A Report of the Surgeon General.* Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, Office on Smoking and Health, 2000.

JOURNAL OF CLINICAL ONCOLOGY ASCO SPECIAL ARTICLE

Tobacco Cessation and Control a Decade Later: American Society of Clinical Oncology Policy Statement Update

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Authors' disclosures of potential conflicts of interest and author contributions are found at the end of this article.

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INTRODUCTION

Tobacco use constitutes the largest preventable cause of death and disability in developed countries and a rapidly growing health problem in developing nations. It is responsible for 30% of all cancer deaths and 80% of lung cancer deaths and is associated with increased risk for at least 17 types of cancer.[1,2] In addition to the tremendous human toll tobacco has taken in the 20th and 21st centuries, the economic costs of tobacco-related illnesses remain enormous. From 2000 to 2004, the United States spent approximately $193 billion each year on tobacco-related illnesses and lost productivity because of tobacco-related premature death.[3] Loss in productivity and increased health care costs associated with secondhand smoke (SHS) were reported in 2005 to have cost the United States an additional $10 billion per year.[4]

Although the United States has witnessed a decline in cigarette use, the use of other tobacco products is on the rise.[5,6] Furthermore, the rate of reduction of youth tobacco use is no longer as rapidly decreasing, despite intense public education and policy efforts to reduce youth tobacco use. At the global level, the epidemic of tobacco-related disease and death has just begun, because of the several-year lag between when individuals begin using tobacco and when their health suffers. Tobacco caused 100 million deaths in the 20th century.[7] If current trends continue, it will cause up to 1 billion deaths in the 21st century.[7] Unchecked, tobacco-related deaths will increase to more than 8 million per year by 2030. More than 80% of those deaths will be in low- and middle-income countries.[7]

As the leading professional organization representing physicians involved in cancer treatment and research, the American Society of Clinical Oncology (ASCO) is dedicated to the prevention and treatment of cancer. The overarching goal of the tobacco cessation and control efforts of ASCO are to promote the rapid, worldwide reduction and ultimate elimination of tobacco-related disease through discouraging the use of tobacco products and exposure to secondhand tobacco smoke. The tobacco control efforts of ASCO are led by a subcommittee of the Cancer Prevention Committee. The primary tobacco control goals of ASCO are multifaceted: 1) to develop an oncology workforce that effectively integrates tobacco cessation and control into its practices; 2) to collaborate with other organizations and professional societies to promote rapid, worldwide reduction in tobacco use and ultimate elimination of tobacco-caused disease, including disease resulting from secondhand smoke; and 3) to urge oncology providers to become proponents of tobacco policy change.

In 2003, ASCO released a policy statement on tobacco cessation and control, which set forth specific recommendations and called for personal accountability in eradicating tobacco use domestically and globally.[8] Since that time, there have been significant developments in tobacco cessation and control that have changed the political and scientific landscape. In response, the ASCO Cancer Prevention Committee commissioned this update of the previous ASCO statement to reflect the evolving regulatory and policy environment. This statement reviews advancements that have been made in tobacco cessation and control since 2003 and sets forth a refined set of recommendations for addressing tobacco cessation and control based on current challenges and opportunities. Key principles in the statement are as follows:

- Given that the scientific and medical evidence is indisputable that tobacco use poses a huge burden in cancer incidence and death in the United States and worldwide, it is our responsibility as health care professionals and cancer specialists to address the devastating consequences of tobacco use and to help patients with cancer quit.
- ASCO is committed to providing oncology providers with the evidence-based and practical information they need to successfully integrate tobacco cessation activities into their practices.
- ASCO recognizes the responsibility it has to take action to combat this problem globally

and affirms its commitment to supporting policies to eliminate the growth and persistence of tobacco use, to increase access to tobacco cessation services, and to expand funding for more research on tobacco cessation and control interventions.

- ASCO reaffirms its commitment to educating the oncology community on the successful integration of tobacco cessation services into practice, as well as to educating patients, their families, and the public at large about the risks caused by tobacco use in general and specifically in the population of patients with cancer.
- ASCO has set forth a set of recommendations for leading by example as health care professionals. At every opportunity, ASCO will strive to address the importance of decreasing the tobacco epidemic in the societies in which our members live, whether by supporting policy changes at the national level or one on one in the clinical setting.

ADVANCES IN TOBACCO CESSATION AND CONTROL SINCE 2003

Since the initial ASCO statement on tobacco cessation and control was published in 2003, evidence demonstrating the carcinogenic effect of tobacco use and exposure has expanded significantly. In 2004, the US Surgeon General listed bladder and kidney, cervical, esophageal, laryngeal, acute myelogenous leukemia, lung, oral and pharyngeal, pancreatic, and stomach as cancers induced by smoking.[9] Two years later, the dangers of SHS were emphasized in another Surgeon General report, which confirmed SHS causes premature death and disease in children and in adults who do not smoke and that there is no risk-free level of exposure to SHS.[10] The International Agency for Research on Cancer, in its updated review, listed the following as tobacco-caused cancers: oral cavity, oropharyngeal, nasopharyngeal, hypopharyngeal, esophageal, stomach, colorectal, liver, pancreatic, nasal cavity and paranasal sinuses, laryngeal, lung, cervical, ovarian (mucinous), bladder, kidney (body and pelvis), ureteral, and acute myeologenous leukemia.[1] In 2010, the Surgeon General report updated the state of the science for tobacco-related diseases, including cancer.[11] Included in this report is a substantial presentation of the increasing knowledge of the biologic mechanisms of tobacco-related cancers.

In addition to its well-established role in causing cancer, tobacco use has been shown to pose unique risks to individuals already diagnosed with cancer by compromising the effectiveness of treatment, increasing the risk of treatment-related complications, and increasing the risk of a second primary cancer[12-14] (Table 1). Tobacco use is a serious concern for patients at all stages of disease and points of treatment, including for survivors of cancer and those with advanced-stage disease.[17,18] Because tobacco use has a direct impact on cellular function, by inhibiting apoptosis, stimulating proliferation, and decreasing the efficacy of chemotherapy, quitting tobacco may improve response rates and survival, as well as lower the risk of developing a second cancer.[15,19-27]

Scientific advances also have increased our understanding of nicotine addiction and tobacco-caused illness.[11] An important finding is that low-tar and light cigarettes do not reduce overall disease risk and that the overall health of the public could be harmed if novel tobacco products (eg, electronic cigarettes or snus) serve to encourage tobacco product uptake among unlikely users or delay cessation among those looking to quit tobacco completely.[11]

The evidence base for tobacco cessation therapies has grown substantially over the last decade. Nicotine replacement therapy (eg, nicotine gum and patches) has been available over the counter for more than a decade. Nicotine lozenges and varenicline (a partial nicotinic receptor agonist) have been the latest therapies added to the slowly growing list of medications approved by the US Food and Drug Administration (FDA) and other regulatory agencies around the world for tobacco-use cessation.[28,29]

Table 1. Benefits of Tobacco Cessation and Risks of Continued Use in Patients With Cancer After Diagnosis and During Cancer Treatment

Benefits of Tobacco Cessation and Risks of Continued Use
Benefits of cessation
Tobacco cessation leads to:
Improved treatment outcomes
Reduced adverse effects
Improved survival
Decreased risk of infection
Improved breathing and increased energy
Improved quality of life
Risks of continued use
Tobacco use after diagnosis leads to:
Higher complication rates from surgery and slower recovery
Higher treatment-related toxicity from chemotherapy and radiotherapy
Increased risk of cancer recurrence
Increased risk of other serious ailments, such as cardiovascular or respiratory disease
Reduced treatment effectiveness
Safety risks for patients with reduced consciousness or those receiving oxygen
Increased risk of second primary cancer
Shorter survival
Impact of tobacco use on cancer treatments
Surgery
Increased complications from general anesthesia
Increased risk of severe pulmonary complications
Detrimental effects on wound healing, including:
Compromised capillary blood flow
Increased vasoconstriction
Increased risk of infection
Irradiation
Reduced treatment efficacy
Increased toxicity and adverse effects, including:
Xerostomia (ie, dry mouth)
Oral mucositis
Loss of taste
Pneumonitis
Soft tissue and bone necrosis
Poor voice quality
Chemotherapy
Potential exacerbation of adverse effects, including:
Immune suppression
Weight loss
Fatigue
Pulmonary and cardiac toxicities
Increased incidence of infection
Altered metabolism of drug with lower effective dose

NOTE. Data adapted.[8,13-16]

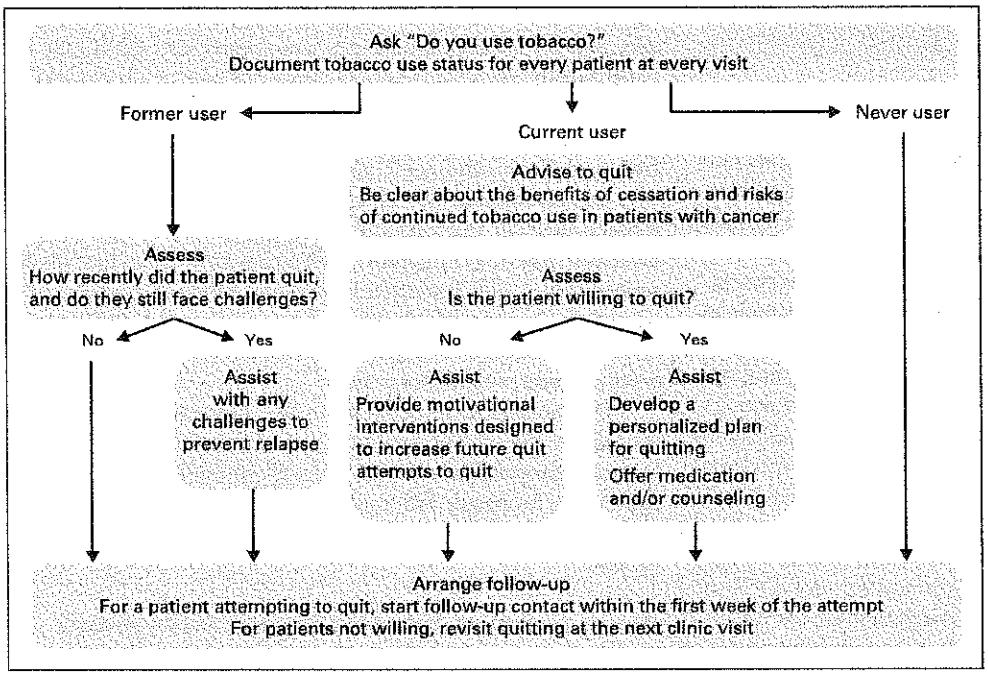

Fig 1. Incorporating the five As of tobacco cessation into practice. Data adapted.[16]

From a tobacco-use cessation standpoint, it is recognized that individuals who attempt to quit tobacco using evidence-based programs are twice as likely to succeed as those who try to quit on their own; these programs represent one of the most cost-effective interventions in health care.[16,30-32] To assist individuals in gaining access to evidence-based cessation services, in 2004, the US Department of Health and Human Services established a national toll-free number (1-800-QUIT-NOW), in which callers are routed to their states' tobacco cessation quit lines. Unfortunately, the extent of services provided vary significantly because of funding resources available from state and national funding agencies.[33-35]

ROLE OF THE ONCOLOGY PROVIDER IN TOBACCO CESSATION AND CONTROL

Over the last decade, there has been increased recognition of the important role health care providers can play in curbing the tobacco epidemic by emphasizing the importance of tobacco cessation and referring their patients who use tobacco to evidence-based cessation programs. Physician-relayed advice on smoking cessation increases the likelihood that patients will try to quit and enhances the odds that those who do so will remain tobacco free. Even brief tobacco-dependence treatment interventions are effective and should be offered to all tobacco users. Long-term cessation rates include 15% with counseling, 22% with medication alone, and 22% to 28% when counseling is combined with pharmacotherapy.[16]

In the oncology setting, tobacco use should be addressed at presentation and throughout treatment. A person newly diagnosed with cancer is often motivated to stop using tobacco and therefore receptive to discussions on how to do so. Nonetheless, tobacco cessation can prove difficult after a patient has received a cancer diagnosis. A recent study showed that survivors of a tobacco-related cancer had a higher persistent smoking prevalence (27%) than other cancer survivors (16%).[36] Understanding how to effectively target these high-risk populations is important.[37-39]

In 2008, the US Public Health Service (USPHS) updated its 2000 guideline on treating tobacco use and dependence to include new, effective clinical treatments for tobacco dependence that had become available. The 2008 update of the USPHS Clinical Practice Guideline—Treating Tobacco Use and Dependence—calls on physicians to change clinical culture and practice patterns to ensure that every patient who uses tobacco is identified, advised to quit, and offered scientifically sound treatments (Fig 1).[16] Although the guideline recommendation was written broadly for physicians, this guidance is relevant to the practice of oncology.

Despite the proven effectiveness of tobacco cessation services, many providers are reluctant to maintain consistent tobacco screening protocols, and fewer still offer assistance to their patients in their efforts to stop using tobacco.[40] This reluctance results from several factors, including lack of knowledge by clinicians about how to assess tobacco use and dependence quickly and consistently, limited understanding about the current state of knowledge regarding efficacy of treatment, uncertainty about how to implement brief interventions for their patients into a busy practice, lack of patient motivation, varying and limited insurance coverage for interventions, limited reimbursement, and limited availability of cessation programs.[40] These findings were similar to those of recent surveys performed in oncology practices within ASCO and the International Association for the Study of Lung Cancer.[41,42] In addition, Goldstein et al[43] found that most cancer centers do not provide tobacco cessation services, nor do they have the expertise to address cessation. Peters et al[44] and Gregorio et al[45] found a paucity of tobacco use information collected in actively accruing cancer trials.[44,45]

RECOMMENDATIONS

Education and Awareness

To encourage and improve the integration of tobacco cessation into oncology practices, it is vital that providers have the tools and resources necessary to be able to effectively offer cessation services, whether provided by physicians, clinics, or hospital nurses or through referral to cessation programs within treatment facilities or quit lines. Most importantly, the oncology practice should improve its systematic assessment of tobacco use and cessation to address this topic in both a time- and cost-effective manner. ASCO promotes the inclusion of tobacco cessation–focused educational offerings at ASCO meetings and in its publications, and it also fosters educational relationships with external organizations that share its goal of promoting cessation. ASCO has highlighted tobacco cessation in a number of its meetings and educational materials, including a chapter dedicated to tobacco control in the ASCO Curriculum on Cancer Prevention. Recently, ASCO developed a set of resources to help oncology providers integrate tobacco cessation counseling services into practice. The resources include provider and patient guides, detailing immediate steps patients can take to help quit tobacco use (available at www.asco.org\tobaccocessationguide). The patient guide has recently been translated into Spanish.

The WHO Framework Convention on Tobacco Control (FCTC) and the 2008 update of the USPHS guideline recommend that all health care professionals, including students in health care training programs, receive education on the treatment of tobacco use and dependence.[16,46] Despite these recommendations, students in health professions receive inadequate training for treating tobacco use and dependence. In an international survey assessing tobacco-related content in health professional school curricula, < 40% of students reported that they received training on smoking cessation techniques.[47] To address this issue, ASCO recommends the following:

Expand education, tools, and resources for providers. To achieve an oncology workforce that is well educated in providing tobacco cessation services to patients, ASCO recommends and is committed to fostering the creation of a new generation of tobacco cessation leaders. ASCO will continue to develop a variety of cessation tools and resources to assist providers in integrating tobacco cessation into their practices. In doing so, ASCO will continue to assess the need for and support the development of ASCO-generated guidance and practice tools on tobacco counseling and treatment among patients with cancer and survivors.

Increase focus on tobacco cessation in medical training. ASCO strongly supports education on tobacco use prevention and cessation at all levels of medical training and encourages oncology providers to participate in continuing education activities and programs related to prevention or cessation of tobacco use. ASCO also strongly encourages organizations involved in the ongoing credentialing of oncologists to include questions about tobacco-dependence treatment in examinations and test preparation materials. ASCO will seek to partner with the American Board of Internal Medicine to ensure sufficient examination content on tobacco cessation in oncology specialty training boards.

In addition to its mission of educating practitioners, ASCO also seeks to identify and promote tobacco cessation messages via patient education and communication directed toward patients with cancer, survivors, their families, and the general public. ASCO has developed educational materials (available at www.cancer.net) specifically for patients with cancer and their families on the use of tobacco during and after cancer treatment. There is current federal support of a mass media public education campaign about tobacco prevention and treatment. To this end, ASCO recommends the following:

Expand education for the public. ASCO recommends that all tobacco users in the United States be aware of the existence of evidenced-based, FDA-approved therapies and counseling as described in the USPHS guideline.[16] Increased efforts are needed on the part of private and public health entities to educate the public at large about the connection between tobacco and SHS exposure and many types of cancer, not just lung cancer.

Develop tools for diverse populations. Sustained support is also needed for the development and use of culture-, sex-, age-, and literacy-appropriate educational materials and skills, including those appropriate for people with cancer and their families, to address the benefits of cessation and the risks of tobacco use and exposure to SHS.[38]

Access to Proven Tobacco Cessation Interventions

Medicare coverage for tobacco cessation services has been available since 2005. In 2011, the Medicare program expanded tobacco cessation coverage to include all Medicare beneficiaries using tobacco, covering up to eight face-to-face sessions in a 12-month period. Medicare beneficiaries have access to drug therapies for tobacco cessation under the Medicare prescription drug benefit, Medicare Part D. ASCO has included reimbursement information in the tobacco cessation guide resources reference discussed previously (http://default.asco.org/policy-advocacy/coverage-patient-services).

The Patient Protection and Affordable Care Act (ACA) addresses tobacco-related issues both directly and indirectly.[48] Key provisions of the ACA require certain private health insurers to cover, without cost sharing, any preventive services assigned an A (strongly recommended) or B (recommended) grade by the US Preventive Services Task Force (USPSTF).[49] The current USPSTF recommendations address tobacco cessation, although at the time of publication, the Center for Consumer Information and Insurance Oversight, which is overseeing implementation of the ACA for private-sector health insurers, has proposed allowing each state to define its own package of essential health benefits. Historically, tobacco cessation services have not been defined or covered in a consistent manner by health insurers. Concerns exist that some insurers may not cover a comprehensive range of evidence-based services and drug therapies for tobacco cessation under the existing USPSTF language without adequate clarification from federal or state officials.[50]

Through Medicaid, the ACA establishes for pregnant women a more explicit requirement for coverage of comprehensive tobacco cessation services (including counseling and drug therapies), without cost sharing. Beyond the coverage for pregnant women, state Medicaid programs that voluntarily cover all USPSTF-recommended preventive services, including tobacco cessation, have had access to increased federal funding since January 1, 2013.[51] Effective January 1, 2014, state Medicaid programs will no longer be able to exclude tobacco cessation drugs from their prescription drug coverage.[51]

Repeated clinical tobacco cessation counseling is one of the most important and cost-effective preventive services that can be provided in medical practice.[12,30,52] As such, ASCO encourages all oncology

providers to adhere to the 2008 USPHS guideline, because persistent tobacco use will undermine treatment efficacy and shorten survival outcomes.[53] The United States is currently at a health care–provision crossroads, with critical decisions for the future of insurance coverage in the balance.[54] To ensure proven tobacco cessation interventions are accessible for all individuals, ASCO recommends the following:

Assure comprehensive coverage. ASCO recommends that all tobacco users have access to evidence-based tobacco cessation therapies and counseling. ASCO strongly supports health plan coverage (with no copay or deductible) and appropriate reimbursement for evidence-based tobacco cessation services, including intensive counseling services (including quit lines [1-800-QUIT NOW in the United States]) as well as FDA-approved cessation medications.

Support current initiatives on tobacco cessation services arising from the ACA. To ensure consistent and comprehensive coverage, ASCO advocates for the establishment of explicit safeguards regarding the scope of covered tobacco cessation services and products by state and local officials.

Tobacco Cessation As a Component of High-Quality Cancer Care

ASCO views tobacco cessation as a core prevention and treatment activity for all oncology providers. Because of the importance of tobacco use and its significant adverse impacts during treatment and follow-up of patients with cancer, oncologists must remain vigilant about tobacco use and its unfortunately high relapse rates. In parallel with cessation efforts, there are also growing efforts to obtain early diagnoses of lung cancer through low-dose computed tomography screening. ASCO supports the integration of tobacco cessation measures into spiral computed tomography screening for people who are still smoking.[55-57]

As part of its effort to build awareness and encourage cessation counseling, in 2006, ASCO began integrating smoking-related measures into the ASCO Quality Oncology Practice Initiative (QOPI), an oncologist-led, outpatient practice–based quality assessment and improvement program. Practices' performance on QOPI measures may indicate gaps in care and help ASCO identify the need for research and tools, as well as provide individual practices with information to guide continuous quality-of-care improvement opportunities. Participating practices are asked three questions: 1) Was smoking/tobacco use status assessed in the last year? 2) What is the tobacco use status while under care of the practice (smoker/tobacco user, former user, never user)? 3) Did the smoker/tobacco user receive advice to quit, or were cessation strategies discussed or recommended in the last year? QOPI data consistently show that outpatient oncology practices are documenting smoking status the majority of the time (on average, 97%); however, tobacco cessation services are actually offered to less than half of smokers (on average, 47%).

Measures to assess and promote the integration of tobacco cessation into practice have been developed and/or endorsed by other quality measurement organizations, including the Commission on Cancer, the National Quality Forum, and the Joint Commission. Of note, the Joint Commission Tobacco Cessation Performance Measure Set is currently optional.[58] To help ensure that tobacco cessation is fully integrated into cancer care, ASCO recommends the following:

Assess and potentially expand current measures. The ASCO QOPI measures will be continuously assessed and improved as necessary to capture the integration of tobacco cessation into clinical practices. Additionally, ASCO supports the adoption of the Joint Commission Tobacco Cessation Performance Measure Set as a required inpatient measure set, a step that has not yet been taken.

Research on Tobacco Use and Cessation

Despite the significant advances that have been made in the science of tobacco cessation, federal commitment to tobacco control research has been disproportionate to the burden of disease caused by tobacco.[59] Increased funding is needed to facilitate a broad array of tobacco control research, including epidemiologic studies; better understanding of the mechanisms of tobacco use and cancers; and behavioral and other treatment interventions. Increased funding is also needed to facilitate the ability of the scientific community to assess and assist regulatory bodies to establish valid scientific evidence with each new tobacco industry product. Scientific data regarding the safety and use of these new products as cessation aids are needed to inform both regulatory bodies and the public at large.

Other important issues are the many new tobacco and nicotine delivery products, such as e-cigarettes, or orbs or sticks, about which little is known; however, these products are being aggressively marketed by the tobacco industry, promoting maintenance of nicotine addiction over tobacco cessation. Having regulatory authority over all tobacco products would assist the public health community in effectively combating the claims of some manufacturers that their products are safer than cigarettes, because valid substantive evidence would be required to make such claims. At the time of this article, the FDA Center for Tobacco Products (CTP) has regulatory authority over only cigarettes, smokeless tobacco, and roll-your-own products.[60] However, the FDA has signaled its intention to assert authority over all tobacco products through future rule making in the near future.[61]

Increased research also is needed to better implement tobacco cessation programs in specific populations, such as youth. The USPSTF will shortly issue updated recommendations addressing cessation in the youth population. Because of the paucity of research on cessation in youth populations, the strength of the evidence is limited, yet it is sufficiently strong for the USPSTF to recommend that health care providers assist youth in attempting to quit.[62] Additionally, for individuals diagnosed with cancer, tobacco cessation treatment should be tailored to the specific needs of patients with cancer, including cancer survivors and those with late-stage diagnoses. However, data on effective tobacco cessation strategies for individuals after a cancer diagnosis are still incomplete.[37-39]

In the current economic climate, maintaining levels of funding may be problematic, and this could have a negative impact on future tobacco cessation research efforts. Compounding the funding issue is the fact that despite the clinical impact of tobacco use on cancer, its treatment, and cancer outcomes, only 29% of National Cancer Institute Cooperative Group clinical trials assessed tobacco use status at enrollment, and even fewer (22%) continued to assess current tobacco use status.[44] Even when tobacco use status is collected, it is usually only collected as self-report at the beginning of the trial and is not documented or confirmed throughout the course of the patient's cancer treatment and follow-up.[63] The failure to obtain these data limits the ability to understand the impact of tobacco use on treatment efficacy and outcomes.[12,45,64] If tobacco use data are systematically collected and analyzed, the information would provide clinicians and regulatory agencies with the data needed to understand the impact of existing and new tobacco products. Core data elements that include

tobacco use could also prove effective in identifying populations at high risk for continuing tobacco use after a cancer diagnosis.[22,23,63] These data collected over time could also provide insight into practical and effective ways to decrease tobacco use in these high-risk populations and improve patient outcomes.

ASCO recognizes that we currently have a strong evidence base for tobacco control interventions to promote tobacco cessation technologies. However, significantly more research is needed to advance the tobacco control agenda in a comprehensive and effective manner. To fully advance the tobacco control research agenda, ASCO recommends the following:

Increase funding for tobacco research. It is the view of ASCO that more federal funding should be devoted to a broad array of tobacco control research on topics including understanding the mechanisms of tobacco use and cancers and improving tobacco use prevention and behavioral and other treatment interventions. Increased funding is also needed to establish valid scientific evidence with each new tobacco industry product as it emerges, as well as to understand how to best implement tobacco cessation in specific populations, including cancer patients and survivors.

Include tobacco use status as a core data element in oncology clinical trials where appropriate. ASCO supports including tobacco use history and status as core data elements that are collected throughout the course of a clinical trial in which concomitant medications are routinely captured: at diagnosis, trial registration, and follow-up and during long-term survival or at death.[12] ASCO also recognizes the importance of maximizing clinical trial resources and encourages the inclusion of tobacco-related data as concomitant medications in a strategic and nonburdensome manner.

US Tobacco Regulation

In 2007, the Institute of Medicine issued a blueprint for the nation for ending the tobacco epidemic.[30] The blueprint emphasized several tobacco control strategies, including financial support of comprehensive state tobacco control programs at the Centers for Disease Control and Prevention (CDC) –recommended levels (including increased support for quit lines), increased tobacco taxes as a means to discourage tobacco use, and stronger federal regulation and oversight of tobacco products.[30] Since 2007, many of these recommendations have been enacted into law. Unfortunately, many comprehensive tobacco cessation programs, including quit lines, were not funded at CDC-recommended levels initially, and much existing funding has declined.

In 2009, the Family Smoking Prevention and Tobacco Control Act (FSPTCA) became law, granting the FDA authority to regulate the manufacture, distribution, and marketing of tobacco products (ie, cigarette, smokeless, and roll-your-own products) to protect public health through the newly formed CTP.[60] Via the FSPTCA, the FDA is tasked with aggressively restricting youth access, assessing tobacco industry research on the health and addictiveness of their products, reviewing product ingredients and additives, providing marketing orders to new tobacco products, and reviewing any health claims made by tobacco companies.[60] Also in 2009, the US Congress voted to increase the federal tax on cigarettes via the Children's Health Insurance Program Reauthorization.[65] There is substantial evidence establishing that increases in the prices of tobacco products help discourage the use of such products, especially for young children, teenagers, and low socioeconomic groups.[67]

The rate of reduction of national youth tobacco use slowed its prior decline for much of the past decade. Recent data from Monitoring the Future 2012 demonstrated that youth use did decline in 2011 and 2012, probably in relation to the increase in cigarette prices from the 2009 law.[67] It is estimated that 88% of smokers start using tobacco by age 18 years, making youth a prime target for antitobacco use initiatives and tobacco companies alike.[68] Youth smoking is heavily dependent on the impact of the marketing activities of the tobacco industry, an industry with an aggregate annual marketing budget of $10 billion for the United States alone, most of which is spent on cost promotions in the retail environment.[69] Convenience stores have become essential partners with the tobacco industry in fighting policies to reduce tobacco use.[69] This puts the public health community in a David-versus-Goliath situation in educating the next generation of potential tobacco users about its adverse health consequences.

Furthermore, although cigarette use is declining, the use of other tobacco products, like cigars and cigarillos (Table 2), is on the rise.[5,6] As such, tobacco companies are lobbying to have cigars and cigarillos

Table 2. Alternative Tobacco Products

Product	Description
Cigars	Information about cigars and cancer is available in the NCI fact sheet Cigar Smoking and Cancer at http://www.cancer.gov/cancertopics/factsheet/Tobacco/cigars.
Smokeless tobacco	Information about smokeless tobacco and cancer can be found in the NCI fact sheet Smokeless Tobacco and Cancer at http://www.cancer.gov/cancertopics/factsheet/Tobacco/smokeless.
Pipes	Pipe smoking causes lung cancer and increases the risk of cancers of the mouth, throat, larynx, and esophagus.[70,71]
Hookahs or water pipes (other names include argileh, ghelyoon, hubble bubble, shisha, boory, goza, and narghile)	A hookah is a device used to smoke tobacco. The smoke passes through a partially filled water bowl before being inhaled by the smoker. Some people think hookah smoking is less harmful and addictive than smoking regular cigarettes,[72] but all forms of tobacco smoking are harmful and addictive. Tobacco smoke, including the smoke produced by a hookah, contains harmful chemicals such as carbon monoxide and cancer-causing substances.[73]
Bidis	A bidi is a flavored cigarette made by rolling tobacco in a dried leaf from the tendu tree, which is native to India. Bidi use is associated with heart attacks and cancers of the mouth, throat, larynx, esophagus, and lung.[71,74]
Kreteks	A kretek is a cigarette made with a mixture of tobacco and cloves. Smoking kreteks is associated with lung cancer and other lung diseases.[74]

Abbreviation: NCI, National Cancer Institute.

excluded from tobacco product regulation, and legislation has already been introduced in the US Congress to have cigars (including premium cigars and cigarillos) excluded from regulation and FDA oversight, making them a potentially attractive option for youth.[75] These bills have the potential of opening the door to exemptions, thus undermining the FDA as the tobacco regulatory authority and undoing any positive impact made by tobacco control legislation in the last several years. The influence of strategic marketing by the tobacco industry, along with its lobbying efforts, has the potential to erode the success of government and public health efforts to reduce youth access to tobacco.

Tobacco control policies are rapidly changing in response to tobacco marketing and the tobacco lobby, as the health risks and costs are becoming increasingly evident—and unaffordable. Policy efforts aimed primarily at the tobacco industry have not been enough to eliminate tobacco use. Regulations need to be in place to ensure that the US tobacco Master Settlement Agreement (MSA) funds are spent more appropriately on health-related programs than they are currently. In 1998, the MSA provided $246 billion over 25 years to 46 states. Unfortunately, even at the maximum, only approximately 3% of the MSA dollars were ever used to support tobacco control in the states, a number that has dropped to 1.9% in the current economic climate.[75] Finally, although policy progress has been made over the last 10 years, the newly passed federal regulations are not safe from litigation. Recent split court decisions in tobacco industry lawsuits over the proposed graphic warnings have resulted in the CTP reconsidering how to address these warning-label requirements within the FSPTCA.

Although many advances have been made in tobacco control, there remains a need for continued efforts to counter tobacco industry lobbying and marketing by enhancing federal regulation of tobacco products. In advocating for policy change, ASCO will work closely with state affiliates and local state departments of health eager for partnerships with physicians, including oncologists, who provide much-needed clinical expertise and credibility IN advocacy and legislative efforts. ASCO recommends the following:

Increase tobacco excise taxes. Because increasing taxes on tobacco products provides a major disincentive to potential buyers, especially youth and low socioeconomic groups, ASCO supports the substantial increase in tobacco excise taxes. ASCO also supports the allocation of at least a portion of the taxes to support state comprehensive tobacco control programs.

Implement and enforce comprehensive clean indoor air policies. ASCO strongly supports prohibiting the use of combusted or inhaled tobacco products in all public places. ASCO encourages stakeholders to work with local governments and agencies to advocate for comprehensive clean indoor air ordinances and regulations. Such laws are effective in the denormalization of smoking, resulting in increased cessation by adults and decreased initiation among youth.

Ensure comprehensive funding of tobacco control programs. Comprehensive tobacco control programs, including quit lines and youth prevention programs, should be funded at the CDC-recommended level. Appropriate funding will ensure tobacco cessation services are comprehensive and available to all.

Eliminate advertising focused on youth tobacco use. ASCO supports public policy efforts for comprehensive and global elimination of advertising in the United States and throughout the world, especially lower-resource countries, particularly all forms of advertisement intended for youth to start using tobacco or nicotine delivery products.

Establish minimum-price laws for tobacco products. Twenty-five states and the District of Columbia currently have enacted minimum-price laws for cigarettes, which prohibit cigarette products from being sold at a discount and can help counteract industry-supported discounts and multipack offers.[76] Parallel laws are needed for other tobacco products.

Increase retail licensing fees. Increasing licensing fees will work to combat uptake of tobacco products in two ways: by not allowing the tobacco industry to discount tobacco prices in the retail setting, and by using the fees in enforcement of current tobacco laws.

Mandate public disclosure of tobacco company discounts. Mandated reporting will allow individuals, stakeholders, providers, and so on to learn how much money the tobacco industry is providing in discounts to retailers by geographic area.

Ensure all tobacco products are subject to the same regulations. Cigars and cigarillos, nicotine delivery products, and all other new tobacco products should not be exempt from regulations. Having low-cost or flavored alternatives to cigarettes makes these alternative products attractive options and encourages youth uptake. Additionally, ASCO supports the recommendation of the FDA Tobacco Products Scientific Advisory Committee that the "removal of menthol cigarettes from the marketplace would benefit public health in the United States."[77] The FDA CTP regulatory oversight of tobacco products should not be limited or restricted, including standards that lower the amount of nicotine in products to reduce their addictiveness.

Fully implement regulations requiring graphic warning labels on cigarette packaging. Graphic warning labels are an effective way to deter youth and nonusers from initiating tobacco use and encourage tobacco users to quit.[78,79] Current warnings on tobacco products in the United States have not been updated since 1984, and the Surgeon General noted in 1994 that the warnings were already ineffective because of the size and familiarity of the messages.[80]

Global Tobacco Control

On a global level, the FCTC is the first public health treaty enacted worldwide by the WHO; it came into force in 2005 with ratification by the first 40 countries. At present, slightly over 87% of the world population is covered by this convention.[46] This convention is a comprehensive treaty, which, if effectively enforced in each country, will be a deterrent to the still globally growing tobacco epidemic, particularly in developing economies. The United Nations, with partners from the Noncommunicable Disease (NCD) Alliance, made a landmark decision to reduce NCD mortality, including cancer, by 25% by the year 2025.[81] This so-called 25 × 25 initiative will focus on reducing risk factors, including tobacco use, that have a negative impact on NCDs.[81] The NCD Alliance recognizes the role the FCTC plays as the primary forum in the world for tobacco cessation efforts and will be identifying indicators to help monitor implementation of the FCTC on a global scale.

Significant efforts have been focused on global implementation of the FCTC. The European Commission in October 2011 committed €5.2 million to the FCTC Secretariat to particularly assist low- and middle-income countries to implement the convention.[82] Even this amount of money is significantly dwarfed by the marketing budget of the tobacco industry in low- and middle-income countries, let alone in more developed economies. As another burden to this effort, some

governments have reported struggling with a perceived lack of public will to overcome the political lobbying and commercial forces supporting tobacco use.[83] Other governments, including the US Government, have yet to ratify the FCTC, even though the involvement of the United States could make global efforts more effective financially and practically.[84] The evidence is clear that funding evidence-based tobacco control will lower tobacco use prevalence, and cutting such funding will lead to increased tobacco use—and tobacco related deaths. Thus, the FCTC is a critical policy initiative to adequately and sustainably support tobacco control in local, regional, national, and international programs.

ASCO and its global members can be effective advocates for global policies and advocacy. There has been global use of the so-called five As (ie, ask, advise, assess, assist, and arrange) and two As and R (ie, ask, advise, and refer) approaches as evidence-based tobacco cessation interventions.[85] However, implementing these guidelines into practice can be made more difficult in environments with minimal tobacco regulation and a culture of rampant tobacco use. Additionally, health care providers, including oncologists, often believe themselves to be too busy or are not knowledgeable enough to or connected with organizations within their countries to assist with such policy initiatives. ASCO will advocate for international policy initiatives and recommends that stakeholders around the globe work to do the following:

Ratify and implement the FCTC at a global level. At the time of this article, the United States has not ratified the FCTC. ASCO urges the US Government to ratify the FCTC and also stresses the importance of focusing our efforts on global implementation. ASCO will use its educational influence with the federal legislature and executive branches to implement this critical tobacco control convention.

Table 3. ASCO Recommendations on Tobacco Cessation and Control

Recommendation
Education and awareness
Expand education, tools, and resources for providers
Increase focus on tobacco cessation in medical training
Expand education for the public
Develop tools for diverse populations
Access to proven tobacco cessation interventions
Support current initiatives on tobacco cessation services arising from the Affordable Care Act
Continue work to assure comprehensive coverage
Integrating tobacco cessation as a key component of quality care
Expand quality measurement and improvement
Research
Increase funding for tobacco research
Include tobacco use status as a core data element in oncology clinical trials where appropriate
US tobacco regulation
Increase tobacco excise taxes
Implement and enforce comprehensive clean indoor air policies
Ensure comprehensive funding of tobacco control programs
Eliminate advertising focused on youth tobacco use
Establish minimum price laws for tobacco products
Increase retail licensing fees
Mandate public disclosure of tobacco company discounts
Ensure all tobacco products are subject to the same regulations
Fully implement regulations requiring graphic warning labels on cigarette packaging
Global tobacco control
Ratify and implement the FCTC at a global level
Support the UN Summit Declaration on NCDs
Develop country- and region-specific practice tools
Expand tobacco control plans
Support the passage of restrictive tobacco trade laws
Integrate tobacco cessation services into health care delivery systems
Leading by example as oncology professionals
Refrain from the use of all tobacco products
Treat tobacco dependence as aggressively and compassionately as cancer, discussing the causal relationship between tobacco use and cancer and assisting the patient and family members to end tobacco dependency
Help to ensure tobacco cessation services are widely available
Advocate to ensure hospitals, universities, clinics, offices, and all other work and patient care settings are tobacco free
Support 100% tobacco-free environments at all levels
Refuse to collaborate with the tobacco industry in research, reviews, promotion, or any other activity
Refuse any support (financial or otherwise) from the tobacco industry
Support efforts to prohibit marketing of tobacco and nicotine products to children

Abbreviations: ASCO, American Society Clinical Oncology; FCTC, Framework Convention on Tobacco Control; NCD, noncommunicable disease; UN, United Nations.

ASCO will assist in providing connections between ASCO members and their local tobacco control advocacy organizations.

Support of the United Nations Summit Declaration on NCDs. ASCO is a member of the NCD Alliance (http://www.ncdalliance.org/) and is working with other alliance members to keep pressure on the US Government to take steps to achieve the targets the government has agreed to support and will advocate for global resources in support of NCD targets throughout the world, especially in low- and middle-income countries.

Develop country- and region-specific practice tools. Develop the tobacco cessation guidelines, tools, and resources needed meet different countries' needs. ASCO can play a role in partnering with countries and other health care provider organizations, such as the Society for the Research on Nicotine and Tobacco, along with www.treatobacco.net, in the development of such guidelines.[85]

Expand tobacco control plans. Advocate for the development and adoption of tobacco control plans within individual countries and practice settings. Most countries have been developing their own national tobacco control plans in coherence with their adoption of the FCTC.

Support the passage of restrictive tobacco trade laws. ASCO also supports efforts to exempt tobacco from the Trans-Pacific Partnership Agreement, which by its nature would give the tobacco industry enhanced rights and privileges. Additionally, ASCO does not support any duty reductions for tobacco products, which would reduce the cost of US tobacco products abroad. Finally, ASCO supports efforts to insure individual international governments are able to impose and enforce their own regulatory policies on imported tobacco products, regardless of country of origin, including graphic warning labels on packaging.

Integrate tobacco cessation services into health care delivery systems. ASCO supports the complete integration of tobacco cessation into health care delivery systems worldwide, including oncology practices.

Leading by Example As Oncology Professionals

Oncology professionals must lead by example in combating the tobacco epidemic. ASCO has taken several steps as an organization to lead by example. ASCO strives to provide tobacco-free work and meeting environments, settings in which tobacco usage is expressly prohibited, for its employees and meeting attendees. Additionally, ASCO provides tobacco cessation support and counseling for its employees and is a member of the CEO Cancer Gold Standard Program (www.cancergoldstandard.org). ASCO is prohibited from receiving any kind of tobacco industry support and from providing support to the tobacco industry. Furthermore, ASCO supports institutions, such as universities, in prohibiting financial support from the tobacco industry.[86] On the basis of these principles, ASCO encourages its members and all oncology professionals to do the following:

- Refrain from the use of all tobacco and nicotine delivery products.
- Treat tobacco dependence as aggressively and compassionately as cancer.
- Advocate for the wide availability of tobacco cessation services.
- Advocate for tobacco-free hospitals, universities, clinics, offices, and all other work and patient care settings.
- Support 100% tobacco-free environments at all levels.
- Refuse to collaborate with the tobacco industry in research, reviews, promotion, or any other activity.
- Refuse any support (financial or otherwise) from the tobacco industry.
- Support efforts to prohibit marketing of tobacco and nicotine products to children.

DISCUSSION

In conclusion, as a group of physicians and other health care professionals who care for patients with cancer, ASCO is committed to decreasing death and suffering resulting from cancer. Given that the scientific and medical evidence is indisputable that tobacco use poses a huge burden on cancer incidence and death in the United States and worldwide, it is our responsibility as health care professionals and cancer specialists to address the devastating consequences of tobacco use and to help patients with cancer quit. To this end, ASCO reaffirms and strengthens its commitment to providing oncology providers with the evidence-based and practical information they need to successfully integrate tobacco cessation activities into their practices. ASCO is also committed to educating patients, their families, and the public at large about the risks tobacco use poses in general and specifically to the population of patients with cancer. Importantly, ASCO recognizes the responsibility it has to take action to combat this problem globally. In doing so, ASCO reaffirms its commitment to supporting policies to eliminate the growth and persistence of tobacco use, to increase access to tobacco cessation services, and to expand funding for research on tobacco cessation and control interventions. Finally, ASCO has set forth a set of recommendations for leading by example as health care professionals. The recommendations outlined in this policy statement update (summarized in Table 3) codify the commitments and priorities of ASCO in this vital area. At every opportunity, ASCO will strive to address the importance of decreasing the tobacco epidemic in the communities in which our members live, whether by supporting policy changes at the national level or one on one in the clinical setting.

AUTHORS' DISCLOSURES OF POTENTIAL CONFLICTS OF INTEREST

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AUTHOR CONTRIBUTIONS

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REFERENCES

1. Secretan B, Straif K, Baan R, et al: A review of human carcinogens: Part E—Tobacco, areca nut, alcohol, coal smoke, and salted fish. Lancet Oncol 10:1033-1034, 2009

2. American Cancer Society: Cancer facts and figures 2013. http://www.cancer.org/acs/groups/content/@epidemiologysurveillance/documents/document/acspo-036845.pdf

3. Centers for Disease Control and Prevention: Smoking-attributable mortality: Years of potential life lost and productivity losses—United States, 2000-2004. MMWR Morb Mortal Wkly Rep 57:1226-1228, 2008

4. Behan D, Erikson M, Lin Y: Economic Effects of Environmental Tobacco Smoke Report. Schaumburg, IL, Society of Actuaries, 2005

5. Centers for Disease Control and Prevention: Current tobacco use among middle and high school

students: United States, 2011. MMWR Morb Mortal Wkly Rep 61:581-585, 2012

6. Centers for Disease Control and Prevention: State-specific prevalence of cigarette smoking and smokeless tobacco use among adults: United States, 2009. MMWR Morb Mortal Wkly Rep 59: 1400-1406, 2012

7. World Health Organization: WHO report on the global tobacco epidemic, 2011. http://www.who.int/tobacco/global_report/2011/en/

8. American Society of Clinical Oncology: American Society of Clinical Oncology policy statement update: Tobacco control—Reducing cancer incidence and saving lives. J Clin Oncol 21:2777-2786, 2003

9. US Department of Health and Human Services: The Health Consequences of Smoking: A Report of the Surgeon General. Atlanta, GA, Centers for Disease Control and Prevention, 2004

10. US Department of Health and Human Services: The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General. Atlanta, GA, Centers for Disease Control and Prevention, 2006

11. US Department of Health and Human Services: How Tobacco Smoke Causes Disease: The Biology and Behavioral Basis for Smoking-Attributable Disease—A Report of the Surgeon General. Atlanta, GA, Centers for Disease Control and Prevention, 2010

12. Gritz ER, Dresler C, Sarna L: Smoking, the missing drug interaction in clinical trials: Ignoring the obvious. Cancer Epidemiol Biomarkers Prev 14: 2287-2293, 2005

13. Gritz ER, Fingeret M, Vidrine D: Tobacco control in the oncology setting, in Cancer Prevention: An ASCO Curriculum. Alexandria, VA, American Society of Clinical Oncology, 2007

14. Gritz ER, Lam C, Vidrine D, et al: Cancer prevention: Tobacco dependence and its treatment, in DeVita V, Lawrence R, Rosenberg S (eds): Cancer: Principles and Practice of Oncology (ed 9). Philadelphia, PA, Lippincott Williams and Wilkins, 2011

15. Warren GW: Tobacco use and cancer outcomes. Presented at the National Policy Forum Workshop on Reducing Tobacco-Related Cancer Incidence and Mortality, Washington, DC, June 11, 2012

16. Fiore MC, Jaen C, Baker T: Treating Tobacco Use and Dependence: 2008 Update. Rockville, MD, US Department of Health and Human Services, 2008

17. McBride C, Ostroff J: Teachable moments for promoting smoking cessation: The context of cancer care and survivorship. Cancer Control 10:325-333, 2003

18. Travis LB, Rabkin CS, Brown LM, et al: Cancer survivorship: Genetic susceptibility and second primary cancers—Research strategies and recommendations. J Natl Cancer Inst 98:15-25, 2006

19. Parsons A, Daley A, Begh R, et al: Influence of smoking cessation after diagnosis of early stage lung cancer on prognosis: Systematic review of observational studies with meta-analysis. BMJ 340: b5569, 2010

20. Warren GW, Romano MA, Kudrimoti MR, et al: Nicotine modulation of therapeutic response in vitro and in vivi. Int J Cancer 131:2519-2527, 2012

21. Rink M, Zabor EC, Furberg H, et al: Impact of smoking and smoking cessation on outcomes in bladder cancer patients treated with radical cystectomy. Eur Urol [epub ahead of print on November 27, 2012]

22. Petros WP, Younis IR, Ford JN, et al: Effects of tobacco smoking and nicotine on cancer treatment. Pharmacotherapy 32:920-931, 2012

23. Novy DM, Lam C, Gritz ER, et al: Distinguishing features of cancer patients who smoke: Pain, symptom burden, and risk for opioid misuse. J Pain 13:1058-1067, 2012

24. Peppone LJ, Mustian KM, Morrow GR, et al: The effect of cigarette smoking on cancer treatment-related side effects. Oncologist 16:1784-1792, 2011

25. Chen AM, Chen LM, Vaughan A, et al: Tobacco smoking during radiation therapy for head-and-neck cancer is associated with unfavorable outcome. Int J Radiat Oncol Biol Phys 79:414-419, 2011

26. Coon D, Tuffaha S, Christensen J, et al: Plastic surgery and smoking: A prospective analysis of incidence, compliance, and complications. Plast Reconstr Surg 131:385-391, 2013

27. Chang X, Ravi R, Pham V, et al: Adenylate kinase 3 sensitizes cell to cigarette smoke condensate vapor induced cisplatin resistance. PLoS One 6:e20806, 2011

28. US Food and Drug Administration: Smoking cessation products to help you quit. http://www.fda.gov/TobaccoProducts/ResourcesforYou/ucm168231.htm

29. Medicines and Healthcare Products Regulatory Agency: Stop smoking aids. http://www.mhra.gov.uk/Safetyinformation/Generalsafetyinformationandadvice/Product-specificinformationandadvice/Product-specificinformationandadvice-M-T/Stopsmokingtreatments/index.htm

30. Bonnie RJ, Stratton K, Wallace R (eds): Ending the Tobacco Problem: A Blueprint for the Nation. Washington, DC, National Academies Press, 2007

31. Stead LF, Perera R, Bullen C, et al: Nicotine replacement therapy for smoking cessation. Cochrane Database Syst Rev 11:CD0001456, 2012

32. Kasza KA, Hyland AJ, Borland R, et al: Effectiveness of stop-smoking medications: Findings from the International Tobacco Control (ITC) four country survey. Addiction 108:193-202, 2013

33. North American Quitline Consortium. http://www.naquitline.org

34. Anderson CM, Zhu SH: Tobacco quitlines: Looking back and looking ahead. Tob Control 16:i81–i86, 2007 (suppl 1)

35. Centers for Disease Control and Prevention: Increases in quitline calls and smoking cessation website visitors during a national tobacco education campaign: March 19-June 10, 2012. MMWR Morb Mortal Wkly Rep 61:667-670, 2012

36. Underwood JM, Townsend JS, Tai E, et al: Persistent cigarette smoking and other tobacco use after a tobacco-related cancer diagnosis. J Cancer Surviv 6:333-344, 2012

37. Park ER, Japuntich SJ, Rigotti NA, et al: A snapshot of smokers after lung and colorectal cancer diagnosis Cancer 118:3153-3164, 2012

38. Park ER, Japuntich S, Temel J, et al: A smoking cessation intervention for thoracic surgery and oncology clinics: A pilot trial. J Thorac Oncol 6:1059-1065, 2011

39. Cooley ME, Sarna L, Kotlerman J, et al: Smoking cessation is challenging even for patients recovering from lung cancer surgery with curative intent. Lung Cancer 66:218-225, 2009

40. Association of American Medical Colleges: Physician behavior and practice patterns related to smoking cessation summary report. https://www.aamc.org/download/55438/data/

41. Warren GW, Marshall JR, Cummings KM, et al: Practice patterns and perceptions of thoracic oncology providers on tobacco use and cessation in cancer patients. J Thorac Oncol 8:543-548, 2013

42. Warren GW, Marshall JR, Cummings KM, et al: Addressing tobacco use in patients with cancer: A survey of American Society of Clinical Oncology members. J Oncol Pract doi: 10.1200/JOP.2013.001025

43. Goldstein AO, Ripley-Moffitt CE, Pathman DE, et al: Tobacco use treatment at the US National Cancer Institute's designated cancer centers. Nicotine Tob Res 15:52-58, 2013

44. Peters EN, Torres E, Toll BA, et al: Tobacco assessment in actively accruing National Cancer Institute Cooperative Group Program clinical trials. J Clin Oncol 30:2869-2875, 2012

45. Gregorio DI, Hollenbeck M, Samociuk H: Who's assessing tobacco use in cancer clinical trials? Nicotine Tob Res 11:1354-1358, 2009

46. World Health Organization: Framework convention on tobacco control. http://www.who.int/fctc/en/

47. Warren CW, Jones NR, Chauvin J, et al: Tobacco use and cessation counselling: Cross-country—Data from the Global Health Professions Student Survey (GHPSS), 2005-7. Tob Control 17:238-247, 2008

48. University of Wisconsin Center for Tobacco Research and Intervention summary of selected tobacco, prevention, and public health provisions from HR 3590, the Patient Protection and Affordable Care Act, and HR 4872, the Health Care and Education Reconciliation Act of 2010 signed into law March 23, 2010, and March 30, 2010, respectively. http://multistatecessationcollaborative.org/images/PDFs/Policy_section/UWCTRI.ACASummary.pdf

49. US Preventive Services Task Force: Counseling and interventions to prevent tobacco use and tobacco-caused disease in adults and pregnant women: Reaffirmation recommendation statement. http://www.uspreventiveservicestaskforce.org/uspstf09/tobacco/tobaccors2.htm

50. Centers for Medicare and Medicaid Services: Center for Consumer Information and Insurance Oversight: Ensuring the Affordable Care Act serves the American people. http://cciio.cms.gov/resources/files/Files2/12162011/essential_health_benefits_bulletin.pdf

51. Pub Law 111-148. Patient Protection and Affordable Care Act. http://www.gpo.gov/fdsys/pkg/PLAW-111publ148/pdf/PLAW-111publ148.pdf

52. Solberg LI, Maciosek MV, Edwards NM, et al: Repeated tobacco-use screening and intervention in clinical practice: Health impact and cost effectiveness. Amer J Prev Med 31:62-71, 2006

53. Warren GW, Kasza KA, Reid ME, et al: Smoking at diagnosis and survival in cancer patients. Int J Cancer 132:401-410, 2013

54. Hockenberry JM, Curry SJ, Fishman PA, et al: Healthcare costs around the time of smoking cessation. Am J Prev Med 42:596-601, 2012

55. Bach P, Mirkin J, Oliver T, et al: Benefits and harms of CT screening for lung cancer: A systematic review. JAMA 2307:2418-2429, 2012

56. Aberle DR, Adams AM, Berg CD, et al: Reduced lung-cancer mortality with low-dose computed tomographic screening. N Engl J Med 365: 395-409, 2011

57. Smith RA, Brooks D, Cokkinides V, et al: Cancer screening in the United States, 2013: A review of current American Cancer Society Guidelines, current issues in cancer screening, and new guidance on cervical screening and lung cancer screening. CA Cancer J Clin 63:87-105, 2013

58. Joint Commission: Tobacco treatment. http://www.jointcommission.org/tobacco_treatment/

59. US Department of Health and Human Services, National Institutes of Health, National Cancer Institute: Promoting health lifestyles: Policy, program, and personal recommendation for reducing cancer risk. http://deainfo.nci.nih.gov/advisory/pcp/annualReports/pcp07rpt/pcp07rpt.pdf

60. Pub Law 111-31. Family Smoking Prevention and Tobacco Control Act 2009. http://www.gpo.gov/fdsys/pkg/PLAW-111publ31/html/PLAW-111publ31.htm

61. US Department of Health and Human Services: FDA center for tobacco products proposed rulemaking. http://www.gpo.gov/fdsys/pkg/FR-2013-01-08/pdf/2012-31671.pdf

62. US Preventive Services Task Force: Interventions to prevent tobacco use in children and adolescents. http://www.uspreventiveservicestaskforce.org/uspstf12/tobacco/tbacfact.pdf

63. Morales NA, Romano MA, Cummings MK, et al: Accuracy of self-reported tobacco use in newly diagnosed cancer patients. Cancer Causes Control 24:1223-1230, 2013

64. Land S: Methodological barriers to addressing critical questions about tobacco and cancer prognosis. J Clin Oncol 30:2030-2032, 2012

65. Pub Law 111-3. Children's Health Insurance Program Reauthorization Act of 2009. http://www.gpo.gov/fdsys/pkg/PLAW-111publ3/html/PLAW-111publ3.htm

66. Chaloupka FJ: Macro-social influences: The effects of prices and tobacco-control policies on the demand for tobacco products. Nicotine Tob Res 1:S105-S109, 1999 (suppl 1)

67. Johnston LD, O'Malley PM, Bachman JG, et al: The rise in teen marijuana use stalls, synthetic marijuana use levels, and use of "bath salts" is very low. http://www.monitoringthefuture.org/data/12data.html#2012data-cigs, http://www.monitoringthefuture.org/data/12data/pr12cig_8.pdf

68. US Department of Health and Human Services: Preventing Tobacco Use Among Youth and Young Adults: A Report of the Surgeon General. Atlanta, GA, Centers for Disease Control and Prevention, 2012

69. Campaign for Tobacco Free Kids: Deadly alliance: How big tobacco and convenience stores partner to market tobacco products and fight life-saving policies. http://www.tobaccofreekids.org/what_we_do/industry_watch/store_report/

70. Henley SJ, Thun MJ, Chao A, et al: Association between exclusive pipe smoking and mortality from cancer and other diseases. J Natl Cancer Inst 96:853-861, 2004

71. Tobacco smoke and involuntary smoking, in International Agency for Research on Cancer: IARC Monographs on the Evaluation of Carcinogenic Risks to Humans. Lyon, France, IARC Press, 2002

72. Smith-Simone S, Maziak W, Ward KD, et al: Waterpipe tobacco smoking: Knowledge, attitudes, beliefs, and behavior in two U.S. samples Nicotine Tob Res 10:393-398, 2008

73. Cobb C, Ward KD, Maziak W, et al: Waterpipe tobacco smoking: An emerging health crisis in the United States. Am J Health Behav 34:275-285, 2010

74. Prignot JJ, Sasco AJ, Poulet E, et al: Alternative forms of tobacco use. Int J Tuberc Lung Dis 12:718-727, 2008

75. Campaign for Tobacco Free Kids: A broken promise to our children: The 1998 state tobacco settlement 13 years later. http://www.tobaccofreekids.org/content/what_we_do/state_local_issues/settlement/FY2012/2011Broken_Promise_Report.pdf

76. Centers for Disease Control and Prevention: State cigarette minimum price laws: United States, 2009. MMWR Morb Mortal Wkly Rep 59:389-392, 2010

77. US Food and Drug Administration, Tobacco Products Scientific Advisory Committee: Menthol Cigarettes and Public Health: Review of the Scientific Evidence and Recommendations. Washington, DC, US Food and Drug Administration, 2011

78. Hammond D, Fong GT, McDonald PW, et al: Impact of the graphic Canadian warning labels on adult smoking behaviour. Tob Control 12:391-395, 2003

79. The health effects of tobacco and health warning messages on cigarette packages: Survey of adults and adult smokers—Prepared for Health Canada. http://www.smoke-free.ca/warnings/WarningsResearch/POR-04-19%20Final%20Report%205552%20Adult%20wave%209.pdf

80. US Department of Health and Human Services: Preventing Tobacco Use Among Young People: A Report of the Surgeon General. Atlanta, GA, Centers for Disease Control and Prevention, 1994, pp 167-169

81. United Nations General Assembly: Resolution 66/2. http://www.who.int/nmh/events/un_ncd_summit2011/political_declaration_en.pdf

82. European Commission: European commission provides €5.2 million to help lower income countries in tobacco control. http://ec.europa.eu/health/tobacco/docs/announcement_260911_en.pdf

83. Walter U, Suhrcke M, Gerlich MG, et al: The opportunities for and obstacles against prevention: The example of Germany in the areas of tobacco and alcohol. BMC Public Health 10:500, 2010

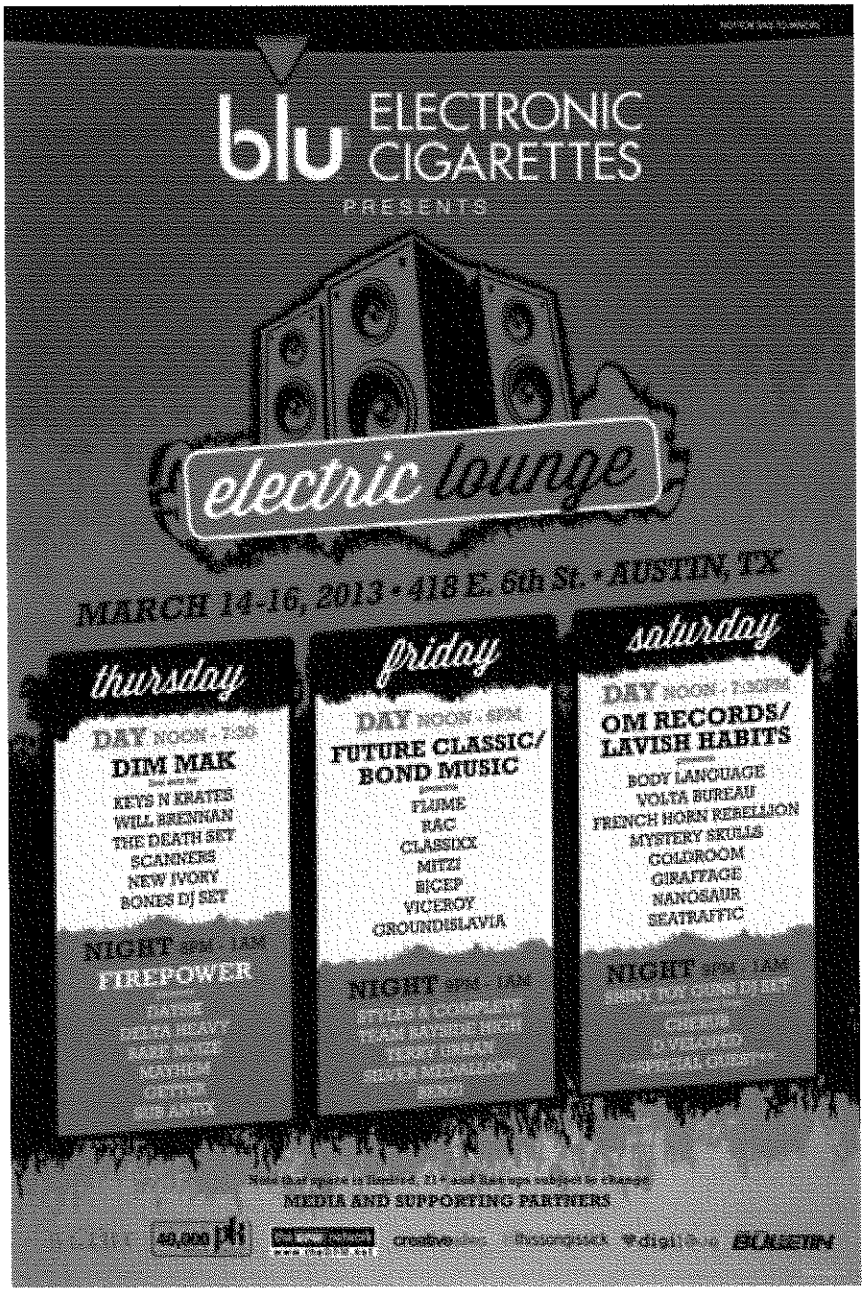
84. Bollyky TJ, Gostin LO: The United States' engagement in global tobacco control: Proposals for comprehensive funding and strategies. JAMA 304: 2637-2638, 2010

85. Treatobacco.net: National treatment guidelines. http://www.treatobacco.net/en/page_224.php

86. University of California Berkley School of Public Health Ad Hoc Tobacco Policy Committee: Tobacco funding policies at schools of public health and schools of medicine in the United States, 2004. http://senate.ucsf.edu/townhallmeeting/US-HealthSciTobaccoPolicies.pdf

Appendix

This statement was developed by the Tobacco Cessation and Control Subcommittee (Carolyn Dresler, MD, Nasser Hanna, MD, and James Mulshine, MD). It was reviewed and transmitted to the American Society of Clinical Oncology Board of Directors by the Cancer Prevention Committee: Eva Szabo, MD (National Cancer Institute, Bethesda, MD); Banu Arun, MD (University of Texas MD Anderson Cancer Center, Houston, TX); James Bearden, MD (Gibbs Cancer Center, Spartanburg, SC); Abenaa Brewster, MD (University of Texas MD Anderson Cancer Center); Kerry Courneya, PhD (University of Alberta, Edmonton, Alberta, Canada); Carolyn Dresler, MD, MPA (Arkansas Department of Health, Little Rock, AR); Carol Fabian, MD (University of Kansas, Westwood, KS); Paul Fisher, MD (Stanford Medical Center, Stanford, CA); Lewis Foxhall, MD (University of Texas MD Anderson Cancer Center, Houston, TX); Gary Gordon, MD (Abbot Labs, Abbott Park, IL); Nasser Hanna, MD (Indiana University Health Simon Cancer Center, Indianapolis, IN); Joe Harford, PhD (National Cancer Institute, Bethesda, MD); Madhuri Kakarala, MD, PhD (Van Andel Institute, Grand Rapids, MI); Larissa Korde, MD (University of Washington, Seattle, WA); Jennifer Ligabel, MD (Dana-Farber Cancer Institute, Boston, MA); Noralene Lindor, MD (Mayo Clinic, Scottsdale, AZ); Steven Lipkin, MD, PhD (Weill Cornell Medical School, New York, NY); Sanford Markowitz, MD, PhD (Case Western Reserve University, Cleveland, OH); Frank Meyskens, MD (Chao Family Comprehensive Cancer Center, Orange, CA); James Mulshine, MD (Rush University Medical Center, Chicago, IL); Therese Mulvey, MD (Southcoast Centers for Cancer Care, Fall River, MA); Howard Parnes, MD (National Cancer Institute, Bethesda, MD); Frances Shepherd, MD (Princess Margaret Hospital, Toronto, Ontario, Canada); Imad Shureiqi, MD, MS (University of Texas MD Anderson Cancer Center, Houston, TX); Luz M. Rodriguez Traver, MD (National Cancer Institute, Bethesda, MD); William William Jr, MD (University of Texas MD Anderson Cancer Center, Houston, TX); Marie Wood, MD (University of Vermont, Burlington, VT); and Stuart Wong, MD (Medical College of Wisconsin, Milwaukee, WI).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Centers for Disease Control and Prevention

MMWR

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November 15, 2013

Great American Smokeout — November 21, 2013

The Great American Smokeout, sponsored by the American Cancer Society, is an annual event that encourages smokers to make a plan to quit, or to plan in advance and quit smoking on that day, in an effort to stop permanently (*1*). This year, the Smokeout will be held on November 21.

Fifty years after the release of the first Surgeon General's report on smoking and health, remarkable progress has been made. Since 1964, smoking prevalence among U.S. adults has been reduced by half. Unfortunately, tobacco use remains the leading preventable cause of disease, disability, and death in the United States (*2*).

In 2010, nearly two out of three adult smokers wanted to quit, and more than half had made a quit attempt for >1 day in the preceding year (*3*). However, an estimated one out of five U.S. adults still smokes (*2*).

Quitting smoking is beneficial to health at any age and has immediate and long-term benefits. Getting help through counseling or medications can double or triple the chances of quitting successfully (*4*).

Additional information and support for quitting is available by telephone (800-QUIT-NOW [800-784-8669]). Additional quit support and real stories of persons who have quit successfully are available on CDC's Tips from Former Smokers website at http://www.cdc.gov/tips.

References

1. American Cancer Society. Great American Smokeout. Atlanta, GA: American Cancer Society; 2013. Available at http://www.cancer.org/healthy/stayawayfromtobacco/greatamericansmokeout.
2. CDC. Current cigarette smoking among adults—United States, 2011. MMWR 2012;61:889–94.
3. CDC. Quitting smoking among adults—United States, 2001–2010. MMWR 2011;60:1513–9.
4. Fiore MC, Jaen CR, Baker TB, et al. Treating tobacco use and dependence: 2008 update. Clinical practice guideline. Rockville, MD: US Department of Health and Human Services, Public Health Service; 2008. Available at http://www.surgeongeneral.gov/tobacco/treating_tobacco_use08.pdf.

Tobacco Product Use Among Middle and High School Students — United States, 2011 and 2012

Nearly 90% of adult smokers in the United States began smoking by age 18 years (*1*). To assess current tobacco product use among youths, CDC analyzed data from the 2012 National Youth Tobacco Survey (NYTS). This report describes the results of that analysis, which found that, in 2012, the prevalence of current tobacco product use among middle and high school students was 6.7% and 23.3%, respectively. After cigarettes, cigars were the second most commonly used tobacco product, with prevalence of use at 2.8% and 12.6%, respectively. From 2011 to 2012, electronic cigarette use increased significantly among middle school (0.6% to 1.1%) and high school (1.5% to 2.8%) students, and hookah use increased among high school students (4.1% to 5.4%). During the same period, significant decreases

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occurred in bidi* and kretek† use among middle and high school students, and in dissolvable tobacco use among high school students. A substantial proportion of youth tobacco use occurs with products other than cigarettes, so monitoring and prevention of youth tobacco use needs to incorporate other products, including new and emerging products. Implementing evidence-based interventions can prevent and reduce tobacco use among youths as part of comprehensive tobacco control programs. In addition, implementation of the 2009 Family Smoking Prevention and Tobacco Control Act, which granted the Food and Drug Administration (FDA) the authority to regulate the manufacture, distribution, and marketing of tobacco products (*1–3*), also is critical to addressing this health risk behavior.

NYTS is a school-based, self-administered, pencil-and-paper questionnaire administered to U.S. middle school (grades 6–8) and high school (grades 9–12) students to collect information on key tobacco control outcome indicators used to monitor the impact of comprehensive tobacco control policies and programs (*4*) and FDA's newly granted regulatory authority. NYTS was conducted in 2000, 2002, 2004, 2006, 2009, 2011, and 2012. The 2012 NYTS used a three-stage cluster sampling procedure to generate a cross-sectional, nationally representative sample of students in grades 6–12. This report includes 2011 and 2012 NYTS data to provide an updated definition of current tobacco use, which now also includes hookahs, snus, dissolvable tobacco, and electronic cigarettes, to take into account nonconventional products that are new to the market or are increasing in popularity; data for these four products were first collected in 2011. The previous definition for current tobacco use did not include all of these products, thus yielding slightly lower estimates of current tobacco use. For example, in 2011, the previous definition for overall current tobacco use resulted in estimates of 7.1% for middle school and 23.2% for high school students (*5*), whereas the new definition resulted in 2011 estimates of 7.5% for middle school and 24.3% for high school students (Table).

Of the 284 schools selected for the 2012 NYTS, 228 (80.3%) participated, resulting in a sample of 24,658 (91.7%) among 26,873 eligible students; the overall response rate was 73.6%. The 2011 NYTS had a comparable overall response rate of 72.7% (*5*). Respondents were asked about their current use of

* The question to assess past 30 day use of bidis changed between 2011 and 2012. In 2011, the bidis question was "In the past 30 days, on how many days did you smoke bidis?" Students selected among "0 days," "1 or 2 days," "3 to 9 days," "10 to 19 days," "20 to 29 days," or "all 30 days." In 2012, the bidis question was "In the past 30 days, which of the following products have you used on at least one day?" Students could select different products, of which "bidis (small brown cigarettes wrapped in a leaf)" was a possible selection. This change might have affected the results for bidis.

† The question to assess past 30 day use of kreteks changed between 2011 and 2012. In 2011, the kreteks question was "In the past 30 days, on how many days did you smoke kreteks?" Students selected among "0 days," "1 or 2 days," "3 to 9 days," "10 to 19 days," "20 to 29 days," or "all 30 days." In 2012, the bidis question was "In the past 30 days, which of the following products have you used on at least one day?" Students could select different products, of which "clove cigarettes (kreteks)" was a possible selection. This change might have affected the results for kreteks.

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TABLE. Percentage of middle and high school students currently using* tobacco products, by school level, sex, race/ethnicity, and product type — National Youth Tobacco Survey, United States, 2011 and 2012

	Total				Sex							
					Females				Males			
	2011		2012		2011		2012		2011		2012	
School level/Product type	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)
Middle school												
Tobacco†	7.5	(6.5–8.8)	6.7	(5.8–7.7)	5.9	(4.7–7.4)	5.6	(4.7–6.7)	9.0	(7.9–10.3)	7.8	(6.7–9.0)
Cigarettes	4.3	(3.5–5.2)	3.5	(2.8–4.3)	4.0	(3.1–5.2)	3.2	(2.5–4.0)	4.5	(3.7–5.5)	3.8	(3.0–4.7)
Cigars	3.5	(2.8–4.2)	2.8	(2.4–3.4)	2.5	(1.9–3.4)	2.4	(1.9–3.2)	4.3	(3.4–5.4)	3.2	(2.7–3.8)
Smokeless tobacco	2.2	(1.8–2.7)	1.7	(1.3–2.1)	1.4	(1.0–2.0)	1.2	(0.8–1.6)	3.0	(2.3–3.8)	2.2	(1.7–2.9)
Pipes	2.2	(1.7–2.9)	1.8	(1.4–2.3)	1.8	(1.3–2.5)	1.7	(1.3–2.3)	2.7	(2.1–2.5)	1.9	(1.4–2.4)
Bidis	1.7	(1.3–2.2)	0.6	(0.5–0.7)§	1.4	(1.0–1.9)	0.4	(0.3–0.7)§	1.9	(1.4–2.6)	0.7	(0.5–1.0)§
Kreteks	1.1	(0.9–1.4)	0.5	(0.4–0.7)§	0.9	(0.6–1.3)	0.4	(0.3–0.7)§	1.3	(1.0–1.6)	0.6	(0.4–0.9)§
Hookahs	1.0	(0.8–1.4)	1.3	(1.0–1.7)	1.0	(0.6–1.6)	1.0	(0.7–1.4)	1.1	(0.7–1.5)	1.5	(1.1–2.2)
Snus	0.9	(0.6–1.2)	0.8	(0.6–1.0)	0.8	(0.5–1.2)	0.6	(0.4–0.9)	1.0	(0.6–1.4)	1.0	(0.7–1.4)
Dissolvable tobacco	0.3	(0.2–0.4)	0.5	(0.4–0.8)§	0.3	(0.2–0.5)	0.4	(0.2–0.6)	0.3	(0.1–0.5)	0.7	(0.4–1.1)¶
Electronic cigarettes	0.6	(0.4–0.9)	1.1	(0.9–1.5)§	0.4	(0.2–0.7)	0.8	(0.6–1.1)§	0.7	(0.4–1.3)	1.5	(1.1–2.1)§
High school												
Tobacco†	24.3	(22.1–26.6)	23.3	(21.6–25.2)	19.0	(17.0–21.1)	18.1	(16.2–20.1)	29.4	(26.6–32.4)	28.3	(26.2–30.6)
Cigarettes	15.8	(13.7–18.1)	14.0	(12.5–15.7)	13.8	(11.7–16.2)	11.7	(10.2–13.4)	17.7	(15.2–20.4)	16.3	(14.5–18.3)
Cigars	11.6	(10.5–12.7)	12.6	(11.4–13.9)	7.4	(6.3–8.6)	8.4	(7.2–9.8)	15.7	(14.3–17.2)	16.7	(15.0–18.5)
Smokeless tobacco	7.3	(5.9–9.0)	6.4	(5.5–7.5)	1.6	(1.2–2.2)	1.5	(1.1–2.1)	12.9	(10.4–15.9)	11.2	(9.5–13.0)
Pipes	4.0	(3.4–4.6)	4.5	(4.0–5.2)	2.8	(2.2–3.4)	3.2	(2.7–3.9)	5.1	(4.3–6.0)	5.8	(5.0–6.7)
Bidis	2.0	(1.6–2.5)	0.9	(0.7–1.1)§	1.0	(0.7–1.4)	0.5	(0.3–0.7)§	2.9	(2.3–3.7)	1.3	(1.0–1.7)§
Kreteks	1.7	(1.4–2.0)	1.0	(0.8–1.2)§	0.8	(0.6–1.2)	0.5	(0.3–0.7)§	2.4	(1.9–2.9)	1.5	(1.1–1.9)§
Hookahs	4.1	(3.4–5.0)	5.4	(4.6–6.3)§	3.5	(2.8–4.4)	4.5	(3.7–5.4)	4.8	(3.7–6.1)	6.2	(5.3–7.3)
Snus	2.9	(2.3–3.7)	2.5	(2.0–3.0)	0.8	(0.5–1.1)	0.9	(0.7–1.3)	5.1	(3.9–6.6)	3.9	(3.2–4.9)
Dissolvable tobacco	0.4	(0.3–0.6)	0.8	(0.6–1.0)§	0.1	(0.1–0.4)	0.6	(0.4–0.9)¶	0.6	(0.4–1.0)	1.0	(0.8–1.4)
Electronic cigarettes	1.5	(1.2–2.0)	2.8	(2.3–3.5)§	0.7	(0.5–1.0)	1.9	(1.5–2.4)§	2.3	(1.7–3.1)	3.7	(2.9–4.8)§

See table footnotes on page 896.

cigarettes, cigars§ (defined as cigars, cigarillos, or little cigars), smokeless tobacco, pipes, bidis, kreteks, hookahs, snus, dissolvable tobacco, and electronic cigarettes. For each product, current use was defined as using on ≥1 day of the past 30 days.

Data were adjusted for nonresponse and weighted to provide national prevalence estimates with 95% confidence intervals for current tobacco use overall and by product, school level, sex, and race/ethnicity. Point estimate differences between 2011 and 2012 were assessed using a two-tailed t-test for significance ($p<0.05$).

In 2012, 6.7% of middle students reported current use of any tobacco product (Table). The most commonly used forms of tobacco were cigarettes (3.5%), cigars (2.8%), pipes (1.8%), smokeless tobacco (1.7%), hookahs (1.3%), electronic cigarettes (1.1%), snus (0.8%), bidis (0.6%), kreteks (0.5%), and dissolvable tobacco (0.5%). Among high school students, 23.3% reported current use of any tobacco product. The most commonly used forms of tobacco were cigarettes (14.0%), cigars (12.6%), smokeless tobacco (6.4%), hookahs (5.4%), pipes (4.5%), electronic cigarettes (2.8%), snus (2.5%), kreteks (1.0%), bidis (0.9%), and dissolvable tobacco (0.8%).

During 2011–2012, among middle school students, for current electronic cigarette use, significant increases were observed overall (0.6% to 1.1%) and among females (0.4% to 0.8%), males (0.7% to 1.5%), and Hispanics (0.6% to 2.0%) (Table). For hookahs, a significant increase was observed among Hispanics (1.7% to 3.0%).

During 2011–2012, among high school students, for electronic cigarette use, significant increases were observed overall (1.5% to 2.8%) and among females (0.7% to 1.9%), males (2.3% to 3.7%), non-Hispanic whites (1.8% to 3.4%), and Hispanics (1.3% to 2.7%). For hookahs, significant increases were observed overall (4.1% to 5.4%) and among non-Hispanic whites (4.3% to 6.1%). For cigars, a significant increase in use was observed among non-Hispanic blacks (11.7% to 16.7%).

§ The heading for the cigar section of the questionnaire changed between 2011 and 2012. In 2011, the heading was "Cigars." In 2012, the heading was "Cigars, cigarillos, or little cigars, such as Black and Milds, Swisher Sweets, Dutch Masters, White Owl, or Phillies Blunts," and the question on ever use of cigars also included brand names. This change might have affected the results for cigars.

Reported by

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TABLE. (*Continued*) Percentage of middle and high school students currently using* tobacco products, by school level, sex, race/ethnicity, and product type — National Youth Tobacco Survey, United States, 2011 and 2012

School level/ Product type	Race/Ethnicity															
	White, non-Hispanic				Black, non-Hispanic				Hispanic				Other race, non-Hispanic			
	2011		2012		2011		2012		2011		2012		2011		2012	
	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)
Middle school																
Tobacco†	6.2	(5.1–7.4)	5.1	(4.2–6.3)	8.5	(6.6–10.9)	7.7	(5.9–10.1)	11.5	(10.2–13.1)	10.5	(8.6–12.8)	6.1	(3.8–9.9)	3.1	(1.7–5.4)
Cigarettes	3.8	(2.8–5.1)	3.1	(2.4–4.0)	3.6	(2.6–5.0)	2.6	(1.7–4.0)	6.7	(5.6–8.0)	5.4	(4.2–7.1)	3.4	(2.0–5.8)	1.7	(0.8–3.6)¶
Cigars	2.3	(1.7–3.0)	1.6	(1.2–2.0)	5.7	(4.3–7.4)	5.0	(3.8–6.6)	6.1	(4.9–7.4)	4.9	(3.8–6.4)	1.6	(0.8–3.2)	1.5	(0.7–3.1)¶
Smokeless tobacco	2.3	(1.8–2.9)	1.6	(1.1–2.2)	1.0	(0.5–2.1)	0.6	(0.3–1.3)¶	2.9	(2.3–3.6)	2.4	(1.7–3.4)	2.4	(1.2–4.8)	1.4	(0.7–3.1)¶
Pipes	1.5	(1.1–2.2)	1.2	(0.8–1.7)	1.3	(0.8–2.1)	1.2	(0.6–2.2)¶	5.0	(4.2–6.1)	3.7	(2.7–5.1)	2.5	(1.2–5.0)	0.5	(0.2–1.1)¶
Bidis	1.0	(0.7–1.5)	0.3	(0.2–0.5)¶	1.9	(1.1–3.2)	0.6	(0.4–1.0)	3.5	(2.6–4.6)	1.2	(0.8–1.8)§	1.2	(0.5–2.8)	0.7	(0.2–2.4)¶
Kreteks	0.6	(0.4–0.6)	0.3	(0.2–0.5)	0.9	(0.5–1.6)	0.2	(0.1–0.7)¶	2.5	(2.0–3.3)	1.0	(0.6–1.7)§	1.8	(0.7–4.3)	0.7	(0.2–2.4)¶
Hookahs	0.9	(0.6–1.4)	0.8	(0.6–1.2)	0.9	(0.5–1.7)	0.9	(0.4–1.8)¶	1.7	(1.2–2.3)	3.0	(2.2–4.1)§	0.1	(0.0–0.5)	0.3	(0.1–1.6)¶
Snus	1.0	(0.7–1.4)	0.7	(0.5–1.0)	0.6	(0.2–1.3)	0.4	(0.1–0.9)¶	1.0	(0.6–1.5)	1.1	(0.7–1.7)	0.7	(0.2–2.5)	0.4	(0.1–2.8)¶
Dissolvable tobacco	0.2	(0.1–0.5)	0.4	(0.2–0.7)¶	0.4	(0.1–1.2)	0.5	(0.2–1.5)¶	0.2	(0.1–0.5)	1.0	(0.6–1.6)¶	0.4	(0.1–2.4)	0.1	(0.0–0.5)¶
Electronic cigarettes	0.6	(0.4–1.0)	0.9	(0.6–1.3)	0.4	(0.2–1.0)	1.1	(0.6–2.2)¶	0.6	(0.4–1.1)	2.0	(1.4–2.9)§	0.7	(0.2–2.6)	0.3	(0.1–0.8)¶
High school																
Tobacco†	26.6	(23.6–29.8)	24.6	(22.3–27.0)	18.9	(15.6–22.8)	22.6	(19.7–25.8)	23.8	(21.2–26.5)	22.5	(19.5–25.6)	13.9	(10.5–18.3)	13.7	(9.9–18.8)
Cigarettes	17.6	(14.7–20.9)	15.4	(13.2–17.8)	10.6	(7.6–14.6)	9.6	(7.6–12.0)	15.8	(13.9–17.8)	14.3	(12.0–16.9)	8.9	(6.2–12.5)	8.7	(5.9–12.5)
Cigars	12.1	(10.7–13.6)	12.2	(10.8–13.8)	11.7	(9.8–13.9)	16.7	(14.4–19.3)§	11.3	(9.8–13.1)	12.4	(10.6–14.4)	5.7	(4.0–8.1)	6.3	(4.4–9.0)
Smokeless tobacco	9.2	(7.4–11.5)	8.1	(6.9–9.5)	3.0	(1.8–5.1)	2.2	(1.5–3.2)	5.1	(3.8–6.8)	5.1	(3.8–6.8)	4.0	(2.4–6.6)	3.4	(2.3–5.2)
Pipes	3.5	(2.9–4.4)	4.5	(3.8–5.4)	2.4	(1.5–3.8)	2.9	(1.8–4.5)	6.3	(5.2–7.7)	6.2	(5.2–7.4)	3.4	(1.7–6.6)	2.4	(1.4–3.9)¶
Bidis	1.4	(1.0–2.0)	0.7	(0.5–1.0)§	2.0	(1.2–3.2)	0.8	(0.4–1.7)¶	3.7	(2.9–4.8)	1.4	(0.9–2.2)§	1.8	(1.0–3.4)	0.4	(0.2–1.1)¶
Kreteks	1.4	(1.0–2.0)	1.1	(0.8–1.5)	1.3	(0.8–2.2)	0.6	(0.3–1.1)¶	2.5	(1.9–3.3)	0.9	(0.6–1.4)§	2.0	(1.0–4.0)	0.3	(0.1–0.7)¶
Hookahs	4.3	(3.4–5.4)	6.1	(5.2–7.2)§	1.7	(0.9–3.0)	2.1	(1.6–2.9)	5.1	(4.1–6.3)	6.6	(5.1–8.5)	4.8	(2.5–9.0)	2.5	(1.5–4.1)¶
Snus	3.7	(2.8–4.9)	3.3	(2.6–4.2)	0.7	(0.3–1.5)	0.6	(0.3–1.1)¶	2.3	(1.7–3.1)	1.8	(1.3–2.5)	1.7	(0.7–3.8)	0.8	(0.4–1.6)¶
Dissolvable tobacco	0.3	(0.1–0.5)	0.7	(0.5–0.9)¶	0.3	(0.1–1.2)	0.8	(0.4–1.3)¶	0.8	(0.5–1.3)	1.4	(1.0–2.1)	0.6	(0.1–2.9)	0.5	(0.2–1.2)¶
Electronic cigarettes	1.8	(1.3–2.4)	3.4	(2.7–4.2)§	0.8	(0.3–1.7)	1.1	(0.7–1.9)¶	1.3	(0.8–2.1)	2.7	(1.9–3.8)§	0.6	(0.3–1.2)	2.2	(0.9–5.8)¶

Abbreviation: CI = confidence interval.

* Current use of cigarettes was determined by asking, "During the past 30 days, on how many days did you smoke cigarettes?" Current use of cigars was determined by asking, "During the past 30 days, on how many days did you smoke cigars, cigarillos, or little cigars?" Current use of smokeless tobacco was determined by asking, "During the past 30 days, on how many days did you use chewing tobacco, snuff, or dip?" Current use of a pipe was determined by asking, "During the past 30 days, on how many days did you smoke tobacco in a pipe?" In 2011, current use of bidis and kreteks was determined by asking, "During the past 30 days, on how many days did you smoke bidis?" and "During the past 30 days, on how many days did you smoke kreteks?" In 2012, current use of bidis and kreteks was determined by asking, "During the past 30 days, which of the following products (bidis and kreteks) have you used on at least 1 day?" Current use of hookahs, snus, dissolvable tobacco, and electronic cigarettes was determined by asking, "During the past 30 days, which of the following products (hookah, snus, dissolvable tobacco, and electronic cigarettes) have you used on at least 1 day?"

† Includes use for ≥1 day in the past 30 days of any of the following: cigarettes, cigars, smokeless tobacco, tobacco pipes, bidis, kreteks, hookahs, snus, dissolvable tobacco, or electronic cigarettes.

§ Difference between 2011 and 2012 was statistically significant by t-test ($p<0.05$).

¶ Data are statistically unreliable because sample size <50 or relative standard error >0.3 on at least 1 year's data; therefore, no t-test was performed.

Editorial Note

The findings in this report indicate that during 2011–2012 significant increases occurred in current use of nonconventional tobacco products, such as electronic cigarettes and hookahs, among middle and high school students; in addition, an increase in cigar use occurred among non-Hispanic black high school students. During this same period, overall current use of some tobacco products, such as bidis and kreteks, significantly decreased. These findings indicate that more efforts are needed to monitor and prevent the use of both conventional and nonconventional tobacco products among youths.

During 2011–2012, cigar use increased significantly among non-Hispanic black high school students to 16.7%, more than doubling the 2009 estimate (*6*). Further, cigar use among high school males (16.7%) was approximately double that of high school females (8.4%) and similar to cigarette use among high school males (16.3%). Cigars include traditional premium cigars as well as cigarillos and "little cigars," which are similar to cigarettes in terms of appearance, but depending on their weight, can be taxed at lower rates and legally sold with certain flavors that are banned from cigarettes (*7*). Youths are known to have higher rates of cigar use than adults, which might be related to the lower price of some cigars (e.g., cigarillos and "little cigars") relative to cigarettes, or the marketing of flavored cigars that might appeal to youths (*8*). Significant increases also were observed in overall use of current electronic cigarettes (*9*) and hookahs. Current use of electronic cigarettes doubled among middle and high school females, middle school males, and Hispanic high school students. Among non-Hispanic white high school students, this increase was slightly less than double (1.8% to 3.4%), and among high school males, this increase was slightly more than 60% (2.3 to 3.7). For current hookah use, an increase of more than 75%

What is already known on this topic?

Nearly 90% of adult smokers began smoking by age 18 years.

What is added by this report?

Although decreases in the use of certain tobacco products (bidis and kreteks) have been observed, current cigar use has increased among non-Hispanic black high school students (11.7% to 16.7%), and the use of nonconventional products, such as electronic cigarettes, have increased among middle school (0.6% to 1.1%) and high school (1.5% to 2.8%) students.

What are the implications for public health practice?

Current use of cigars and nonconventional tobacco products need to be monitored at local, state, and national levels. This is especially true for nonconventional tobacco products and specific population subgroups. To reduce tobacco use among youths, national and state tobacco control programs can continue to implement evidence-based strategies, including those that will work in coordination with the Food and Drug Administration to regulate the manufacture, distribution, and marketing of tobacco products.

(1.7% to 3.0%) was observed for Hispanic middle school students; among high school students, an overall increase of more than 30% (4.1% to 5.4%) was observed, but for non-Hispanic whites, this increase was more than 40% (4.3% to 6.1%). The increase in use of electronic cigarettes and hookah tobacco could be attributed to low price, an increase in marketing, availability, and visibility of these products, and the perception that these tobacco products might be "safer" alternatives to cigarettes. Cigars, electronic cigarettes, hookah tobacco, and certain other new types of tobacco products are not currently subject to FDA regulation. FDA has stated it intends to issue a proposed rule that would deem products meeting the statutory definition of a "tobacco product" to be subject to the Federal Food, Drug, and Cosmetic Act.[¶]

The findings in this report are subject to at least six limitations. First, data were only collected from youths who attended either public or private schools and might not be generalizable to all middle and high school-aged youths. Second, data were self-reported; thus, the findings are subject to recall and response bias. Third, current tobacco use was defined by including students who responded to questions about at least one of the 10 tobacco products but might have had missing responses to any of the other tobacco products that were assessed; missing responses were considered as nonuse, which might have resulted in conservative estimates. Fourth, in 2012, the question wording for bidis and kreteks was modified, and cigar brand examples were added to the heading and ever cigar use question of the survey; therefore, any observed changes in prevalence estimates across years might be attributed in part to these wording modifications. Fifth, the NYTS overall response rate of 73.6% in 2012 and 72.7% in 2011 might have resulted in nonresponse bias, even after adjustment for nonresponse. Finally, estimates might differ from those derived from other youth surveillance systems, in part because of differences in survey methodology, survey type and topic, and age and setting of the target population. However, overall relative trends are similar across the various youth surveys (*1*).

Effective, population-based interventions for preventing tobacco use among youths are outlined in the Surgeon General's report (*1*) and the World Health Organization's MPOWER package (*10*). Interventions include increasing the price of all tobacco products, implementing 100% comprehensive smoke-free laws and policies in workplaces and public places, warning about the dangers of all tobacco use with tobacco use prevention media campaigns, increasing access to help quitting, and enforcing restrictions on all tobacco product advertising, promotion, and sponsorship. Interventions are best implemented as part of comprehensive tobacco control programs, which are effective in decreasing tobacco use in the United States (*2*). Full implementation of comprehensive tobacco control programs at CDC-recommended funding levels, in coordination with FDA regulations of tobacco products, would be expected to result in further reductions in tobacco use and changes in social norms regarding the acceptability of tobacco use among U.S. youths (*1,2,10*).

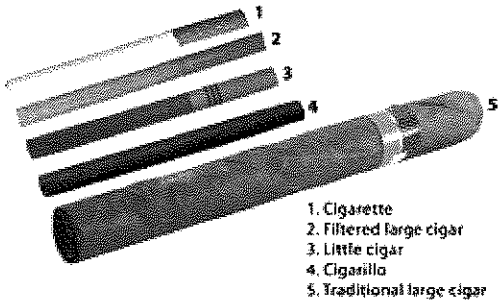
[¶] FDA has expressed its intent to assert jurisdiction over all tobacco products. Additional information available at http://www.reginfo.gov/public/do/eAgendaViewRule?pubId=201304&RIN=0910-AG38.

References

1. US Department of Health and Human Services. Preventing tobacco use among youth and young adults. Atlanta, GA: US Department of Health and Human Services, CDC; 2012. Available at http://www.cdc.gov/tobacco/data_statistics/sgr/2012/index.htm.
2. CDC. Best practices for comprehensive tobacco control programs—2007. Atlanta, GA: US Department of Health and Human Services, CDC; 2007. Available at http://www.cdc.gov/tobacco/stateandcommunity/best_practices/index.htm.
3. CDC. CDC Grand Rounds: current opportunities in tobacco control. MMWR 2010;59:487–92.
4. CDC. Key outcome indicators for evaluating comprehensive tobacco control programs. Atlanta, GA: US Department of Health and Human Services, CDC; 2005. Available at http://www.cdc.gov/tobacco/tobacco_control_programs/surveillance_evaluation/key_outcome/pdfs/frontmaterial.pdf.
5. CDC. Current tobacco use among middle and high school students—United States, 2011. MMWR 2012;61:581–5.
6. CDC. Tobacco use among middle and high school students—United States, 2000–2009. MMWR 2010;59:1063–8.
7. United States Government Accountability Office. Tobacco taxes: large disparities in rates for smoking products trigger significant market shifts to avoid higher taxes (GAO-12-475). Washington, DC: United States Government Accountability Office; 2012. Available at http://www.gao.gov/products/gao-12-475.
8. King B, Tynan M, Dube S, Arrazola R. Flavored-little-cigar and flavored-cigarette use among U.S. middle and high school students. J Adolesc Health 2013 [Epub ahead of print].
9. CDC. Notes from the field: electronic cigarette use among middle and high school students—United States, 2011–2012. MMWR 2013;62:729–30.
10. World Health Organization. WHO report on the global tobacco epidemic, 2008—the MPOWER package. Geneva, Switzerland: World Health Organization; 2008. Available at http://www.who.int/tobacco/mpower/mpower_report_full_2008.pdf.

CIGARS

Overview



- A cigar is defined as a roll of tobacco wrapped in leaf tobacco or in a substance that contains tobacco (as opposed to a cigarette, which is defined as a roll of tobacco wrapped in paper or in a substance that does not contain tobacco).[1,2]
- The three major types of cigars sold in the United States are large cigars, cigarillos, and little cigars.[1,2]
- Small or little cigars are about the same size as a cigarette and often include a filter.[3]
- Historically, cigar smoking in the United States has been a behavior of older men, but the industry's increased marketing of these products to targeted groups in the 1990s increased the prevalence of use among adolescents.[3]
- The use of flavorings in some cigar brands and the fact that they are commonly sold as a single stick has raised concerns that these products may be especially appealing to youth.[3,4,5]
- Cigar use is higher among youth who use other tobacco products or other drugs, such as alcohol, marijuana, and inhalants, than among youth who do not use these products.[3]
- In 2012, overall cigar industry sales were up 0.4% from 2011.[6]

Type	Description	Market Share (2012)*
*Percentage of U.S. market for cigar products[6]		
Large Cigar & Cigarillo Note: These two categories are now combined in the calculation of market share.	Cigar that typically contains at least one-half ounce of aged, fermented tobacco (i.e., as much as a pack of cigarettes) and usually takes 1 to 2 hours to smoke A short (3 to 4 inches) and narrow cigar that typically contains about 3 grams of tobacco and usually does not include a filter	94%
Little cigar	A small cigar that typically is about the same size as a cigarette and usually includes a filter	6%

Cigars contain the same toxic and carcinogenic compounds found in cigarettes and are not a safe alternative to cigarettes.[1,4]

Health Effects

- Regular cigar smoking is associated with an increased risk for cancers of the lung, esophagus, larynx (voice box), and/or oral cavity (lip, tongue, mouth, throat).[1,2]
- Cigar smoking is linked to gum disease and tooth loss.[2]
- Heavy cigar smokers and those who inhale deeply may be at increased risk of developing coronary heart disease.[1,2]
- Heavy cigar smoking increases the risk for lung diseases, such as emphysema and chronic bronchitis.[1,2]

Current Cigar Use

Adults*

Percentage of U.S. adults who were current cigar users† in 2012:[7]

- 5.4% of all adults in the United States
- 9.1% of adult males in the United States
- 2.0% of adult females in the United States
- 7.6% of African American adults
- 7.9% of American Indian/Alaska Native adults
- 1.7% of Asian American adults
- 4.2% of Hispanic adults
- 5.5% of White adults

High School Students

Percentage of U.S. high school students who were current cigar users† in 2012:[8]

- 12.6% of all students in grades 9–12
- 8,4% of female students in grades 9–12
- 16.7% of male students in grades 9–12
- Cigar use among high school males (16.7%) is approximately double that of high school females (8.4%) and similar to cigarette use among high school males (16.3%).[8]
- During 2011–2012, cigar use increased significantly among non-Hispanic Black high school students to 16.7%; there were no significant changes for non-Hispanic White, Hispanic, and other racial/ethnic groups.[8]

Middle School Students

Percentage of U.S. middle school students who were current cigar users† in 2012:[8]

- 2.8% of all U.S. students in grades 6–8
- 2.4% of female students in grades 6–8

- 3.2% of male students in grades 6–8
- During 2011–2012, there were no significant changes in cigar use among male or female middle school students or for any racial/ethnic group.[8]

Overall

- In 2012, an estimated 13.4 million people (or 5.2% of people 12 years of age or older) in the United States were current cigar users.[7]

NOTES:
*Adults are defined as persons 18 years of age or older.
†Current cigar use is defined as smoking cigars on 1 or more of the 30 days preceding the survey.

Marketing Information

In 2012, cigar sales in the United States by major cigar manufacturers showed:[6]

- Altadis USA (products include Dutch Masters and Backwoods brands) with 10% of the U.S. market share for large cigars and cigarillos and 19.7% of the U.S. market share for little cigars
- Cheyenne International with 15.4% of the U.S. market share for large cigars and cigarillos
- Lane Limited (products include Winchester and Captain Black) with 5.3% of the U.S. market share for little cigars
- Middleton (products include Black & Mild brand) with 10% of the U.S. market share for large cigars and cigarillos
- Prime Time International with 3.1% of the U.S. market share for large cigars and cigarillos and 19.7% of the U.S. market share for little cigars
- Swedish Match (products include White Owl and Garcia y Vega) with 7.8% of the U.S. market share for large cigars and cigarillos
- Swisher International (products include Swisher Sweets and Swisher Little brands) with 16.8% of the U.S. market share for large cigars and cigarillos and 52.5% of the U.S. market share for little cigars

Marketing efforts promote cigars as symbols of a luxuriant and successful lifestyle. The following marketing strategies all contribute to the increased visibility of cigar smoking in society:[1,3]

- Endorsements by celebrities
- Development of cigar friendly magazines (e.g., *Cigar Aficionado*)
- Images of highly visible women smoking cigars
- Product placement in movies

In 2001, the Federal Trade Commission mandated that cigar packaging and advertisements must display one of the following five "SURGEON GENERAL WARNING" text-only labels on a rotating basis:[9]

- Cigar Smoking Can Cause Cancers Of The Mouth And Throat, Even If You Do Not Inhale.
- Cigar Smoking Can Cause Lung Cancer And Heart Disease.
- Tobacco Use Increases The Risk Of Infertility, Stillbirth, And Low Birth Weight.
- Cigars Are Not A Safe Alternative To Cigarettes.
- Tobacco Smoke Increases The Risk Of Lung Cancer And Heart Disease, Even In Nonsmokers.

References

1. National Cancer Institute. Cigars: Health Effects and Trends. Smoking and Tobacco Control Monograph No. 9. Smoking and Tobacco Control Monograph No. 9. Bethesda (MD): National Institutes of Health, National Cancer Institute, 1998 [accessed 2013 Nov 6].
2. American Cancer Society. Cigar Smoking. Atlanta: American Cancer Society [accessed 2013 Nov 14].
3. U.S. Department of Health and Human Services. Preventing Tobacco Use Among Youth and Young Adults: A Report of the Surgeon General. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Office on Smoking and Health, 2012 [accessed 2013 Nov 14].
4. Campaign for Tobacco-Free Kids. The Rise of Cigars and Cigar-Smoking Harms [PDF–144 KB] Washington: Campaign for Tobacco-Free Kids [accessed 2013 Nov 14].
5. King BA, Tynan MA, Dube SR, Arrazola R. Flavored-Little-Cigar and Flavored-Cigarette Use Among U.S. Middle and High School Students. Journal of Adolescent Health 2013 (published online head of print on October 23, 2013) [accessed 2013 Nov 14].
6. The Maxwell Report: Cigar Industry in 2012. Richmond (VA): John C. Maxwell, Jr., 2013 [cited 2013 Nov 14].
7. Substance Abuse and Mental Health Services Administration. Results from the 2012 National Survey on Drug Use and Health: Detailed Tables. [accessed 2013].
8. Centers for Disease Control and Prevention. Tobacco Product Use Among Middle and High School Students–United States, 2011 and 2012. Morbidity and Mortality Weekly Report 2013;62(45):893-4 [accessed 2013 Nov 14].
9. Federal Trade Commission. Nationwide Labeling Rules for Cigar Packaging and Ads Take Effect Today. Washington: Federal Trade Commission, 2001 [accessed 2013 Nov 14].

For Further Information

Media Inquiries: Contact CDC's Office on Smoking and Health press line at 770-488-5493.
National Center for Chronic Disease Prevention and Health Promotion
Office on Smoking and Health
E-mail: tobaccoinfo@cdc.gov
Phone: 1-800-CDC-INFO

Bloomberg

Tobacco Firms Save $1 Billion With Kitty Litter in Cigars

By Anna Edney - Mar 1, 2013

A dozen tobacco companies have gained from a legal loophole that helped them avoid as much as $1.1 billion in U.S. taxes.

Their secret: Using fillers such as the clay found in cat litter or stuffing the products with more tobacco to tip the scales in their favor. The heavier weight let the companies sidestep a 2,653 percent increase in a federal excise tax, taking advantage of a 2009 law that spared so-called big cigars.

There were 22 companies producing small cigars in the year before the law created the new tax structure, according to data from the Treasury Department's Alcohol and Tobacco Tax and Trade Bureau. Twelve of those companies, none of which the government would name, either switched to or increased production of large cigars in the year following the law, the bureau found.

"It shows what length the tobacco companies will go to avoid taxes and regulation that were designed to improve public health without regard to their customers," Danny McGoldrick, vice president of research at the Campaign for Tobacco Free Kids in Washington, said in a telephone interview. "They should equalize the tax to stop the shenanigans."

The practice has contributed to a doubling in sales of the weightier tobacco products and slowed a decade-long decline in tobacco use. The Centers for Disease Control and Prevention in an Aug. 2 report blamed sharp increases in adult consumption of pipe tobacco and cigarette-like cigars since 2008 on the 2009 law "that created tax disparities between product types."

Durbin Legislation

The Government Accountability Office estimated in an April report that "market shifts from roll-your-own to pipe tobacco and from small to large cigars reduced federal revenue by a range of" $615 million to $1.1 billion from April 2009 through September 2011.

U.S. Senator Dick Durbin, an Illinois Democrat, introduced legislation Jan. 31 to close the loophole. The bill would equalize the tax structure so there wouldn't be an incentive to manipulate

products, generating $3.6 billion in new tax revenue over 10 years, Christina Mulka, a spokeswoman, said by e-mail.

The loophole appears to have mainly benefited smaller tobacco companies. Reynolds American Inc. (RAI), the second-biggest U.S. tobacco company, doesn't operate in that market, David Howard, a spokesman for the Winston Salem, North Carolina-based company, said in an e-mail.

Altria Group Inc. (MO), the largest seller of tobacco in the U.S., said its John Middleton Co. unit had already been selling large cigars with its Black & Mild line before the change in the law. The company didn't have to make any shifts in how it formulates the cigars, which mostly are wood or plastic tipped and come as singles or in packs of two or five, David Sylvia, a spokesman for Richmond, Virginia-based Altria, said by phone.

Customer Demand

Prime Time International Co., a closely held tobacco company, sells some of its large cigars and flavored cigars in 20-count packs, similar to regular cigarettes. Closely held Cheyenne International LLC, based in Grover, North Carolina, also specializes in smaller-sized cigars that have a similar look and design of cigarettes.

Jack Wertheim, chairman of Phoenix-based Prime Time, said shifts into the "large" cigar market are about responding to customer demands. The company sells large and small cigars to satisfy customers who prioritize taste and quality and appease those who want a lower-priced product, he said.

Prime Time isn't saving on taxes, and any savings would be passed to the customer, Wertheim said.

Current rules require a rolled tobacco product to weigh at least 3 pounds per 1,000 to be labeled as a "large" or "premium" cigar, a category where taxes increased just 155 percent.

Nothing Illegal

The Treasury Department said tobacco companies aren't doing anything illegal by making their products heavier.

"If you meet the definition of a large cigar, then you're a large cigar," Thomas Hogue, a spokesman for the tobacco bureau, said in a telephone interview. "There's nothing in the Internal Revenue code that goes after the specifics on how that weight is achieved."

Hogue wouldn't provide the names of the tobacco makers switching to heavier products.

Cheyenne was found to make two kinds of cigars that look like cigarettes yet weigh enough to be taxed as big cigars. One of the two has a regular fiber filter; the other has filters made of white fiber cylinders surrounding a granular clay substance.

X-Ray Tests

Jim Pankow, a chemistry professor at Portland State University in Oregon, published the first measurements of how addictive nicotine is when delivered by tobacco smoke. He agreed to conduct X-ray diffraction tests on the weightier Cheyenne product on behalf of Bloomberg News and found the clay filters were made of sepiolite. The weighty mineral is used for absorption in waste treatment, industrial cleaners and pet litters, according to the European Industrial Minerals Association.

"They're making products that are classified as cigars that are designed almost exactly like cigarettes," Pankow said in a telephone interview.

The vast majority of Cheyenne's cigars that are considered large began marketing in 2007, said Marc Scheineson, a partner at Alston & Bird LLP in Washington who is regulatory counsel for the tobacco company. He didn't say when the company's heavyweights hit shelves. He said less than 3 percent of the company's sales come from little cigars and heavyweights.

The Alcohol and Tobacco Tax and Trade Bureau reviewed Cheyenne's products to determine which excise class they fit in, he said.

"You can look at this as a loophole or tax planning or a way to perpetuate job growth or small business continuity," Scheineson said in a telephone interview.

Filter Choice

British American Tobacco Plc (BATS)'s Kent cigarettes used a similar micronite filter at one point. The London-based company said it moved the cigarettes to charcoal filters long ago.

"The decision regarding whether to use charcoal or micronite filters is simply down to taste and currently, charcoal filters are used in Kent cigarettes in the vast majority of international markets where the product is sold," Will Hill, a spokesman for the company, said in an e-mail.

Filtrona Plc (FLTR), a maker of cigarette and cigar filters, said its sepiolite-based Cavitec Flavour product is one of many specialty filter types. Altogether they represent about 17 percent of the Milton Keynes, U.K.-based company's total filter sales globally, Melanie Hulbert, a spokeswoman, said in an e- mail. Filtrona wouldn't reveal its customers' names, citing confidentiality agreements.

FDA Oversight

In addition to avoiding some taxes, cigars also sidestep a ban on flavored cigarettes. Cheyenne's heavyweight products come in wild cherry flavor, while their other cigars can be bought in flavors such as grape and vanilla.

The result is that while cigarette smoking -- the leading preventable cause of death in the U.S. -- continued an 11-year downward trend, large cigar smoking tripled from 2000 to 2011 and loose tobacco pipe smoking has jumped almost sixfold, the CDC said last year in a report.

Sales of large cigars more than doubled to 1 billion units a month in September 2011, from 411 million when the law took effect in January 2009, the GAO said. At the same time, small cigar sales dropped to 60 million from 430 million.

The FDA, which was given the authority by Congress in 2009 to regulate tobacco, primarily cigarettes, is now looking to broaden its rules.

The agency is "moving as expeditiously as possible to release for public comment a proposed rule to regulate additional categories of tobacco products," Jennifer Haliski, an agency spokeswoman, said in an e-mail.

The FDA is scheduled to release a proposed rule by April, the federal Office of Management and Budget, which oversees all regulation development, said on its website.

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