

American Society of Clinical Oncology Policy Statement Update: Tobacco Control—Reducing Cancer Incidence and Saving Lives

Adopted on May 23, 2003, by the American Society of Clinical Oncology

Executive Summary: As an international medical society dedicated to cancer prevention, the American Society of Clinical Oncology (ASCO) advocates a fundamental reform of United States and international policy toward addictive tobacco products. ASCO's goal is the immediate reduction of tobacco use and ultimate achievement of a tobacco-free world.

The centerpiece of ASCO's policy is the recommendation for an independent commission to study the tobacco problem in all of its dimensions: social, medical, legal, and economic (both domestically and globally). The commission membership should include broad-based representation and expertise on tobacco issues. In ASCO's view, tobacco control efforts to date have been less than successful because they are too fragmented and incremental, leaving many important issues unaddressed. A more comprehensive solution could flow from this study, including input from a variety of government agencies involved with public health, agriculture, First Amendment and other legal considerations, and international trade. The study, within defined time limits, should culminate in a report that outlines a strategy for achieving immediate reduction of tobacco use and ultimate achievement of a tobacco-free world, including explicit plans and a timetable for implementation.

Although this comprehensive approach to tobacco control will take many years to implement even under the

best of circumstances, there are certain measures that could be undertaken immediately with meaningful impact on tobacco usage. These include:

- Increasing efforts to discourage tobacco use, particularly among the young
 - Raising federal excise taxes by at least \$2 per pack and encouraging states to consider tobacco taxes as a first resort in revenue enhancement
 - Ensuring that tobacco settlement funds be devoted only to health-related projects, including medical treatment, biomedical research, and tobacco prevention efforts
 - Requiring disclosure of all ingredients in tobacco products
 - Comprehensively reforming third-party payment for tobacco cessation efforts
 - Additional restriction of secondhand smoke in any places where the public may congregate
 - Supporting necessary research into tobacco addiction, toxicities, and prevention strategies
 - Enhancing global tobacco control, including a halt of United States government promotion of tobacco products
- J Clin Oncol 21.* © 2003 by American Society of Clinical Oncology.

THE AMERICAN Society of Clinical Oncology (ASCO) is dedicated to the prevention of cancer and urges a comprehensive assault on addictive tobacco products, which constitute the largest preventable cause of death and disability in developed countries and a rapidly growing health problem in developing nations.¹

As physicians and other healthcare professionals, we are entrusted with preventing disease, preserving health, and saving human lives. In addition, as cancer specialists, our commitment is to decrease death and suffering from cancer. Given these charges, we conclude that radical steps are necessary in the near term to reduce significantly the availability and use of tobacco products, which are responsible for 30% of cancer deaths.² The long-term goal must be the achievement of a tobacco-free world.

A strategy to immediately reduce tobacco use and achieve a tobacco-free world is well grounded in science and medicine and is a crucial public health priority. ASCO advocates a thorough re-evaluation of our nation's policies toward tobacco products, both domestically and internationally. On the domestic front, we should acknowledge that our regulatory efforts to date have been piecemeal and inadequate, and that they should be replaced by a comprehensive science-based initiative addressing all elements of the tobacco problem, with a strategic imperative to increasingly marginalize and eventually achieve a tobacco-free world. Internationally, the United States government must take responsibility not only for its failures

to control tobacco use in this country, but also for pursuit of agricultural and trade policies that contribute significantly to disease and deaths from tobacco globally. Finally, as healthcare professionals, we must assume personal responsibility for our actions in combating this worldwide public health scourge.

BACKGROUND

Public Health Consequences of Tobacco Use

The scientific and medical evidence is indisputable that tobacco products cause great harm not only to users, but also to

*From the American Society of Clinical Oncology, Alexandria, VA.
Submitted May 23, 2003; accepted May 23, 2003.*

ASCO sincerely appreciates the contributions of the Public Issues Committee (PIC), which devoted significant time and effort to this project. The efforts were led by Paul Bunn, MD, ASCO President (University of Colorado Cancer Center, Denver, CO) and David G. Pfister, MD, Chair of the PIC Working Group (Memorial Sloan-Kettering Cancer Center, New York, NY). A list of Committee members and other project participants appears in the Appendix.

Address reprint requests to Suanna S. Bruinooge, American Society of Clinical Oncology, Cancer Policy and Clinical Affairs, 1900 Duke St, Suite 200, Alexandria, VA 22314; email: bruinoos@asco.org.

*© 2003 by American Society of Clinical Oncology.
0732-183X/03/2114-1/\$20.00*

nonusers, creating devastating health consequences and incalculable economic damages in both the United States and abroad. The overwhelming majority of mouth, throat, esophageal, and lung cancers are associated with tobacco use. The mortality of lung cancer is particularly sobering, with nine of 10 people diagnosed with the disease ultimately succumbing to it.¹ Perhaps less well appreciated by the public is tobacco's significant role in the development of a spectrum of other cancers, including, but not limited to, tumors of the bladder, pancreas, uterine cervix, colon, and kidney. In addition, tobacco use is associated with a host of other diseases (among them emphysema, coronary heart disease, stroke, osteoporosis, and reproductive health complications [including erectile dysfunction and infertility]), and thus adversely affects health in the broadest of terms.

In the United States, 46.5 million adults,³ approximately 30% of United States high school students, and 10% of United States middle school students⁴ continue to smoke. Although smokers in the United States are consuming fewer cigarettes per person, the percentage of adults who smoke has remained constant at roughly 25% during the last decade.⁵ Tobacco use causes an average of more than 440,000 deaths annually at a cost of more than \$75 billion in direct medical expenses.⁶ The National Cancer Institute (NCI) estimates that tobacco is responsible for one in five deaths in the United States, making tobacco use among the most costly, yet preventable, causes of death.²

The problem of tobacco use is not simply a domestic one. Tobacco use rates are increasing worldwide, especially in developing countries. Most of the world's smokers (82% or 950 million) live in the developing world. Close to half of all men in low-income countries smoke daily, and this number is increasing. In Africa, Asia, South America, and certain areas of Southern Europe, the tobacco epidemic is at an earlier stage than in the United States, so the majority of smokers remain men and boys.⁷ Nevertheless, women's tobacco use rates in developing countries are also on the increase. This increase caused the United States Surgeon General to conclude the following in a 2001 report: "Thwarting an increase in tobacco use among women, especially in countries where prevalence is still relatively low, represents one of the greatest disease prevention opportunities in the world today."⁸

The high rates of tobacco use in the developing world translate to significant mortality from tobacco. According to the World Health Organization and the World Bank, tobacco use kills eight people every minute or more than 4 million people each year. If current trends continue, the global tobacco death toll will grow to 10 million annually by the year 2030, with about half of these deaths in people aged 35 to 69 years.⁹ By 2030, people from developing countries will account for 70% of all tobacco deaths.⁹

The young are particularly at risk from tobacco because addiction at an early age results in long-term exposure to deadly carcinogens and other toxins. Preventing children from using tobacco is therefore critical to reducing tobacco's deadly consequences. Several studies indicate that if tobacco use is not commenced in childhood or adolescence, it is unlikely to be initiated in adulthood.¹⁰

Limited Progress

After the release of the first Surgeon General's report on the effects of smoking in 1964,¹¹ Congress passed the Federal Cigarette Labeling and Advertising Act of 1965¹² and the Public Health Cigarette Smoking Act of 1969.¹³ These laws established health-warning labels on cigarette packages, banned cigarette advertising in the broadcast media, and imposed the requirement that the Surgeon General issue an annual report on the health consequences of smoking.¹⁴

There have been additional actions by federal, state, and local governments in the United States and in other nations, as well as voluntary private sector initiatives, to discourage the use of tobacco and educate the public regarding its dangers. These efforts include:

- Restrictions on smoking on domestic and international airline flights
- Bans on smoking in public places
- Public education campaigns by public and private organizations to counter tobacco industry marketing and increase knowledge about the health consequences of smoking
- Increased research on the scientific and medical implications of tobacco use

These efforts have achieved positive results and should be commended. However, after smoking rates among men decreased after the Surgeon General's first report,¹⁴ progress seems to have stalled. ASCO is concerned that the number of adults in the United States who use tobacco has remained virtually unchanged over the last decade, rates of tobacco use among racial and ethnic minorities have increased steadily over the last decade, and global use is increasing.^{3,15,16}

RECOMMENDATIONS

A Domestic Strategy for Tobacco Control

Regulatory approaches in the United States to date have been unsuccessful in reducing usage below the current, unacceptably high levels of approximately 25% of adults. These efforts, largely conducted through the Federal Trade Commission, the Office of the Surgeon General, and for a short time the United States Food and Drug Administration (FDA), have focused on advertising and information. Little has been done to address the addictive qualities of tobacco products that make cessation so difficult. Moreover, although some agencies of the government have been involved in steps to restrain commerce in these products, others have actively promoted them, not only in this country but also abroad, perhaps especially in developing countries that are least able to deal with the consequences of tobacco use.

Fragmented solutions have proven inadequate. A new, more comprehensive strategy is required. Tobacco use permeates many aspects of our culture, domestically and internationally, and has wide-ranging economic and other implications. Every agency of the United States government must embrace a mission to eliminate the public health consequences of tobacco use. To that end, ASCO recommends the immediate formation of an independent commission charged with development of a com-

prehensive plan for immediate reduction in tobacco use and achievement of a tobacco-free world. The commission membership should include broad-based representation and expertise on tobacco issues.

Among the topics for consideration by this study group should be the following:

- What scientific and medical research is required for us to better understand tobacco addiction and how best to defeat it?
- What economic reforms should be instituted to eliminate all incentives for cultivation, manufacturing, and marketing of tobacco-containing products?
- What compensation or other offsets should be considered to address affected economic interests, including farmers, manufacturers of tobacco products, and governments dependent on tax revenue from tobacco sales?
- Given First Amendment constraints, what steps may be taken to minimize any ability of tobacco purveyors to advertise their products or to provide any information regarding them other than factual scientific or medical risks?
- What should be the eventual regulatory status of tobacco products, given their proven addictive properties and their capacity for inflicting morbidity and mortality at great expense to the national and global economies?
- Which agency (or agencies) of the federal government is best equipped to undertake the task of comprehensive tobacco control?

The last issue is critical, as the mission of the designated tobacco control agency (or agencies) will be complex, multifaceted, and of uncertain duration. At present, tobacco control advocates are united in their belief that the FDA is the agency that is best qualified to provide the scientific expertise necessary to commence a strategy of immediate reduction of tobacco use. However, as the tobacco control effort proceeds, the goal of achieving a tobacco-free world may require a more expansive approach, taking into account the many dimensions of the tobacco problem, including not only scientific questions, but also issues related to agriculture support, tax and revenue collection, trade and international relations, and marketing and advertising restraints in light of First Amendment protections.

The independent commission should be charged with the responsibility of assessing the role of the FDA in achieving the goal of a tobacco-free world, considering the extent to which regulatory authority beyond that of the FDA may be required to reach that goal. The full range of options should be considered, among them, expanded authority of the FDA to address matters beyond its current expertise, assignment of responsibilities to agencies other than the FDA, and creation of an entirely new agency with the broad powers and ample resources necessary to comprehensively address the goal of a tobacco-free world.

Immediate Strategies to Reduce Tobacco Use

Because a comprehensive strategy of tobacco control will require some time to develop and implement, ASCO suggests that a number of steps be taken immediately to reduce tobacco usage.

Restrict access by children and teenagers.

Every day, more than 5,000 children try their first cigarette⁶ and 2,000 become regular, daily smokers.¹⁷ Although there have been recent declines in the percentage of children who smoke, a significant number continue to use tobacco products.¹⁸ Almost 90% of all adult smokers began smoking while in their teens, or earlier, and more than half become regular, daily smokers before they reach the age of 19 years.¹⁰ Roughly one third of those who begin smoking in their youth will eventually die prematurely as a result of their smoking.¹⁹

The powerful, early addiction to smoking may be partly caused by the fact that teenagers seem to become addicted to nicotine at a faster rate than adults. NCI-supported research demonstrates that children do not need to be daily smokers to become dependent on nicotine and experience withdrawal symptoms. In a group of children aged 12 to 13 years who smoked one or more cigarettes a month, 63% reported experiencing at least one symptom of nicotine dependence.² Some data also indicate that approximately 20% of high school students exhibit substantial levels of nicotine dependence comparable with those experienced by adult smokers.^{20,21}

Because early tobacco use may lead to a life of tobacco addiction and serious health consequences, restricting children's access to tobacco must be a fundamental element of any tobacco control program. Despite state laws prohibiting the sale of tobacco products to minors, children are able to buy such products easily. Roughly half of all young smokers buy their own cigarettes directly from retailers, from vending machines, or by giving money to others to buy for them. Another third usually receive cigarettes from others for free, and shoplifting or stealing is the source for a smaller but significant percentage of children who smoke.²²

ASCO recommends the following actions to reduce adolescent access to tobacco products:

- Prohibit the sale of tobacco products in settings where verification of buyer's age and compliance with tobacco sales taxes are difficult to enforce, such as the Internet and mail-order sales
- Improve enforcement of strong and specific penalties for people who sell, or otherwise make available, tobacco products to children and adolescents, including, as appropriate, criminal penalties for intentional sales to minors
- Increase partnering with individuals whom young people admire and emulate, such as sports celebrities, popular music artists, and other entertainers—and their corporate sponsors—to convey an antitobacco use message

Increase tobacco excise taxes.

The Surgeon General,²³ World Bank,²⁴ National Academy of Sciences' Institute of Medicine,²⁵ and NCI²⁶ have issued reports indicating that increasing tobacco excise taxes is the most effective means of deterring tobacco use, particularly among children and young adults. ASCO supports substantial increases in tobacco taxes as a means of reducing tobacco use and its health consequences.

As of March 1, 2003, the federal tobacco tax is 39 cents per pack. Taking into account the state tax increases scheduled to take effect in 2003, the average state tobacco tax is 67.3 cents per pack, ranging from \$1.51 in Massachusetts to 2.5 cents in Virginia. The average tax in major tobacco-producing states (KY, VA, NC, SC, GA, TN) is 8.25 cents, and 76.2 cents in all other states. As a result of state budget shortfalls, several states are considering tobacco tax increases to raise revenue. In addition, there are numerous local taxes, such as the \$1.50 tax per pack in New York City.²⁷

Several studies demonstrate that increases in the price of cigarettes significantly affect children's likelihood to smoke. Among teenagers especially, increasing taxes on cigarettes will lead to significant reductions smoking frequency and prevalence.²⁸⁻³⁰ In 1989, when California increased its tax on tobacco products by 25 cents, there was a 17% decrease in smoking. In 1992, Massachusetts increased its tobacco tax by 25 cents and an 18% decrease in cigarette sales was observed in the first 18 months. In Canada, total cigarette consumption declined by more than 20% from 1980 to 1989, as the real price of tobacco products increased by 101%. Conversely, reductions in tobacco taxes may result in increases in smoking rates. For example, Canadian youth smoking increased for the first time in nearly 15 years when Canada reduced tobacco taxes to combat smuggling.³¹

A subcommittee of the United States Department of Health and Human Services Interagency Committee on Smoking and Health issued a report in February 2003 recommending a \$2 increase in the federal excise tax. The subcommittee argued that the increase could prevent 3 million premature deaths and help 5 million people in the United States quit smoking within a year.³² ASCO commends the subcommittee for its recommendation and endorses a substantial increase (a minimum of \$2) in the federal excise tax on cigarettes and other tobacco products. ASCO also supports increases in state tobacco taxes (a minimum of \$1 per pack) and urges prompt action to boost the rate in those states where taxes are well below this level. We suggest that the Department of Health and Human Services Committee consider proposing a system of incentives to persuade the states to boost their excise taxes.

In addition, evidence indicates that, in the face of price increases, tobacco users may substitute use of one tobacco product for another.²⁶ ASCO is concerned that a dramatic increase in the tax of cigarettes may lead cigarette smokers to the use of less expensive—but nonetheless harmful—alternative tobacco products. Allowing this shift to occur would undermine the health benefits of a tax increase. Therefore, ASCO recommends that local, state, and federal tax policies apply proportionately to all types of tobacco products.

Allocate state tobacco settlement funds for tobacco prevention and cessation.

The 1998 settlement of claims against tobacco companies asserted by 46 states will result in more than \$206 billion flowing into state coffers between 2000 and 2025. With few exceptions, states have used funds for nearly all budgetary needs except

tobacco control.³³ A report released by a number of public health organizations demonstrates that states have enacted spending cuts (\$86.2 million or 11%) in tobacco prevention and cessation programs in 2003, despite record-high revenues from tobacco sources (\$20.3 billion).³⁴

There is some evidence that comprehensive state initiatives to reduce tobacco use are effective. In 1988, California became the first state to increase tobacco taxes and dedicate a portion of the revenues to a comprehensive tobacco-use prevention program. As a result of the initiative, California's smoking prevalence decreased by nearly 5% and per-capita cigarette consumption was nearly halved from 1988 to 1999. In addition, California residents observed greater declines in lung and bronchus cancer incidence rates compared with those in the rest of the country.³⁵ Massachusetts and Oregon also reduced cigarette consumption by combining tax increases and tobacco prevention and education programs.^{36,37}

ASCO believes that it is imperative for all settlement funds to be dedicated to health-related projects, including medical treatment, biomedical research, and tobacco prevention efforts. It is not appropriate to expend these settlement funds on matters utterly unrelated to health care and research.

States should also be discouraged from embarking on long-term funding schemes that are based on settlement funds, such as the plans under consideration by some states to issue tobacco settlement bonds. This reliance on tobacco-related financing may undermine efforts to restrict future tobacco use.

Restrict advertising and promotion.

The tobacco industry continues to increase spending on advertising and promotions, despite the advertising restrictions agreed to in the 1998 Master Settlement Agreement with 46 states. The Federal Trade Commission reports that tobacco advertising and promotional spending increased by more than 42% from 1998 to 2000, to a total of \$9.57 billion.³⁸ This is the most the industry has ever reported spending, and is more than double the \$4.19 billion dedicated to all cancer research at the NCI in fiscal year 2002. Children and adolescents are especially influenced by such advertising and promotions. A significant majority of smokers under 18 years of age (88%) smoke the three most advertised cigarette brands.³⁹

ASCO proposes measures to restrict tobacco advertising, promotion, and misleading claims, especially those directed at children. At a minimum, such national efforts should:

- Ban outdoor advertising, including large displays around stores
- Prohibit advertising in publications with a substantial youth readership
- Prohibit the sale or giveaway of products (eg, hats, t-shirts, gym bags, and so on) and functional items in stores (eg, shopping baskets, clipboards, pens, and so on) that contain tobacco brand names or logos
- Restrict the placement of tobacco products in stores to ensure that they are not accessible to children and adolescents
- Prohibit brand name sponsorship of sporting or entertainment events and allow only the corporate name to be used

- Require stronger and more prominent warning labels on all tobacco products and in tobacco advertisements, including pictorial warnings of health effects
- Prohibit the use of deceptive marketing terms, such as “low-tar” and “light,” as well as reduced health-risk claims by tobacco manufacturers⁴⁰

Significant attention should also be paid to the portrayal of smoking and the use of tobacco products in movies and television. Too often, smoking is presented on screen as a fashionable, desirable, and trendy activity. We should not underestimate the impact that these images have on audiences in the United States and internationally, particularly the young. Data indicate that exposure to smoking by characters in movies strongly and independently promotes smoking among adolescents who view those movies.⁴¹ ASCO challenges the entertainment industry to end these popularized tobacco-use depictions in movies and television programs.

Immediately require disclosure of ingredients.

It is undisputed that tobacco products contain many carcinogens and other toxins, but manufacturers have employed a range of legal devices to maintain the secrecy of those deadly ingredients. Congress should move without delay to require disclosure of the ingredients of all tobacco products to public health officials and to authorize their further disclosure to the public in a manner deemed most effective in notifying and deterring potential users. The disclosure should include listing of ingredients on every unit of tobacco products made commercially available in a manner that will be understood by potential users in terms of health consequences.

Enhance public education.

The billions of dollars invested by tobacco companies in advertising and promotional activities dwarf the approximately \$103 million devoted to the Centers for Disease Control and Prevention Office on Smoking and Health to coordinate tobacco-use education, prevention, and research efforts. Public education efforts and resources must be increased, with responsibilities shared by both the public and private sectors. ASCO believes that the federal, state, and local governments should use a significant portion of tobacco excise taxes to fund public education efforts.

Education funds should be specifically targeted at preventing young people from smoking and using other tobacco products. The Surgeon General concluded in a 1994 report that nearly all first-time tobacco use occurs before high school graduation, indicating that successful prevention efforts within these ages will significantly decrease the number of people who smoke in adulthood.¹⁰ In addition, a 2000 Surgeon General report found that educational strategies, combined with community- and media-based activities, can postpone or prevent smoking onset in 20% to 40% of adolescents.²³ Because parents are the first and, in many cases, most significant influence on younger children, educational programs might be more effective if parents are included, particularly if the parents are smokers.⁴²⁻⁴⁴

Another area that requires particularly enhanced attention is tobacco use among women and girls, which has led to a 600%

increase in women’s deaths from cancer; this has been referred to by the Surgeon General as a “full-blown epidemic.”⁸ The rate of tobacco use by girls and young women increased from 27% to 34.9% between 1991 and 1999.⁴⁵ Fortunately, rates are beginning to decline, but they remain unacceptably high. A contributing factor to the increase in female smoking is marketing efforts with themes targeted at women. Women are particularly susceptible to advertising campaigns that describe cigarettes as “slims” or “thins,” such as the successful Virginia Slims campaign launched by Philip Morris.^{46,47} Fears about gaining weight while trying to quit may make women and girls more reluctant to try cessation. Once they become smokers, women have a more difficult time quitting than do men.⁴⁸ Girls and women aged 12 to 24 years are more likely to report being unable to cut down on smoking than are men and boys of the same age.¹⁰

In the 1980s, increased use of tobacco among women caused lung cancer to overtake breast cancer as the leading cause of cancer death of women, a fact not fully appreciated by women when they consider their various health risks. The American Cancer Society estimates that 68,800 women will die of lung cancer and 39,800 women will die of breast cancer in 2003.⁴⁹ The dramatic increase in lung cancer deaths occurred in the last 50 years. Only 3% of all cancer deaths among women were associated with lung cancer in the 1950s, but lung cancer rapidly increased to cause 25% of all women’s cancer deaths in 2000.⁸

Women who smoke are also particularly susceptible to cervical dysplasia and cancer, especially if they also use oral contraceptives. Treatment for cervical or uterine cancer (or both) can result in permanent infertility, which is another fact that is not fully appreciated by women. Evidence also strongly links female smoking to increased risks for other cancers as well. Female smoking also increases risk for accelerated osteoporosis.⁵⁰ Health professional societies and public health organizations should work together with organizations focused on women’s issues to incorporate tobacco-use prevention and cessation more prominently into the broader women’s health agenda.

Create more effective tobacco cessation services.

The nicotine contained in tobacco products is highly addictive, making it very difficult for people to quit smoking. Of the 50 million Americans who smoke, 35 million would like to quit, and 20 million try each year. Only 1 million smokers annually are successful in their attempt to quit. New treatment cessation programs are critically important if this success rate is to be improved.

Both cancer experts and public health officials recognize the important role played by healthcare providers in helping people to quit smoking. The NCI recommends follow-up “intensive treatment (pharmacologic and counseling by a smoking specialist) for those having difficulty quitting or remaining abstinent.”⁵¹ Increasing the number of people who attempt to cease using tobacco depends in large part on the involvement of a caring healthcare professional. The United States Public Health Service (PHS) issued a treatment guideline to aid healthcare providers in treating tobacco dependence.⁵² The PHS Guideline asserts that significantly more smokers would quit each year with advice

from their physician regarding smoking cessation. Some data indicate that approximately 70% of tobacco users visit a physician each year.⁵³ Unfortunately, studies indicate that a minority of those smokers who visited a physician were offered assistance or follow-up in ending their addiction.⁵²

In keeping with its goals to improve patients' health, prevent cancer, and enhance the knowledge and training of healthcare providers, ASCO makes a number of policy recommendations to help more individuals successfully end their deadly addiction to tobacco:

- *Insurance coverage for tobacco-use cessation.* Coverage should be available for cessation products, counseling by health professionals, and extra assistance, as appropriate, through nicotine dependence centers. Studies have demonstrated that counseling combined with nicotine replacement therapy products approximately doubles the rate of cessation. Because people often are unsuccessful in their first attempt to stop smoking, insurers should provide coverage for multiple attempts. Cessation services, including nicotine replacement therapy and counseling services, should be a required benefit in all federal health programs, including Medicare, Medicaid, and programs for federal employees, veterans, and military personnel. Insurance coverage of cessation services will help to improve the health of many tobacco users. Studies also indicate that cessation services have the potential to pay for themselves over the course of a decade through savings of direct and indirect tobacco-related medical expenses.⁵⁴
- *Education on tobacco-use cessation techniques for health-care providers.* To be most effective, information should be incorporated into all stages of health professional education and training. A September 2002 study found that the majority of medical schools do not require clinical training in tobacco-use intervention techniques.⁵⁵ With adoption of this policy statement, ASCO will commit its resources to develop (in conjunction with other provider and patient advocacy organizations) a core curriculum on tobacco cessation for use in medical schools, and to recommend the inclusion of tobacco cessation questions on board certification and recertification exams and in continuing education courses.
- *Integration of tobacco-use cessation into all patient visits.* The PHS Guideline recommends categorizing patients according to their tobacco-use status and considering tobacco use as one of the key vital signs of care.^{52,56}
- *Education materials and assistance specific to tobacco-use risks for people living with cancer.* Cessation is often discussed in the context of cancer prevention, but providers also need to discuss tobacco use with their patients in the context of cancer treatment and recurrence. For example, researchers have indicated that smokers successfully treated for head and neck squamous cell cancer have greater chances of developing another cancer if they do not cease using tobacco products.⁵⁷ It is often the second cancer or the second primary tumor that proves fatal, and this risk may persist for up to 20 years. Studies have also found that

patients who continue to smoke may experience decreased effectiveness of and tolerance for some cancer treatments.^{51,58} Because many people have learned to use tobacco products as a way to manage stress, it is important that cancer care providers offer patients resources and assistance to cope with the stress of a cancer diagnosis and treatment, as well as the fear of cancer recurrence.

Target use of noncigarette tobacco products.

No tobacco use is safe. Although cessation efforts tend to focus on assisting patients in their efforts to quit smoking, it is also important to stress that patients should not transfer from smoking to the use of other tobacco products. Some of the more popular noncigarette products include:

- *Chewing tobacco, loose leaf, and snuff tobacco.* These products pose increased risk of oral cancers, gum disease, and dental problems, especially for users who keep the tobacco in their mouth for long periods of time.⁵⁹ The widespread use of variations on these products (eg, pan, which is a mixture of tobacco and other substances wrapped in a vegetable leaf) in Southeast Asia and India make oral cavity cancer the most common type of cancer in these locales. The amount of nicotine absorbed in these products is two to three times greater than that delivered by a cigarette.⁶⁰ Because use of smokeless tobacco products is common among athletes and many young people admire and emulate sports figures, these products are of particular concern.
- *Cigars.* Use of this form of tobacco is associated with lung, oral, larynx, esophageal, and pancreatic cancers. For those who inhale or smoke several cigars a day, there is also increased risk of coronary heart and chronic obstructive pulmonary diseases.^{61,62} Because cigars have more tobacco per unit, they generally take longer to smoke and generate more smoke and carbon monoxide. Generally, the tobacco used in cigars has increased nitrate content, resulting in higher concentrations of nitrogen oxides, carcinogenic *N*-nitrosamines, and ammonia in the smoke. The NCI has concluded that "cigar smoke is as, or more, toxic and carcinogenic than cigarette smoke."⁶³ Of particular concern is the fact that cigars are not under the same degree of federal oversight and control as are other tobacco products.⁶⁴ Studies have demonstrated that cigar use in the United States increased during the 1990s among adults and teenagers.⁶⁵
- *Pipes.* Although the downward trend in pipe smoking in the United States is encouraging, this form of tobacco use is associated with oral, larynx, esophageal, and lung cancers, as well as chronic obstructive pulmonary disease.⁶⁶

The regulation and taxation of tobacco products should be consistent across all types of tobacco products. In particular, researchers have concluded that "control of cigar and pipe smoking is as important as cigarette smoking control for the prevention of lung cancer."⁶⁷ In addition, public education campaigns should focus on the specific healthcare dangers

inherent in noncigarette tobacco products, especially in cultures where use of these products is more accepted.

Eliminate public exposure to secondhand smoke.

Studies rank environmental tobacco smoke, also known as secondhand smoke or passive smoking, as the third leading cause of preventable death in the United States, after active smoking and alcohol use. Secondhand smoke causes an estimated 53,000 deaths annually. About half of these deaths occur from exposure in the workplace.⁶⁸⁻⁷⁰ Exposure to secondhand smoke causes cancer, heart disease, respiratory problems, and numerous other health problems among nonsmokers, especially children.

Eliminating exposure to secondhand smoke will have the immediate benefit of reducing public health risks and the indirect benefits of reducing tobacco consumption, encouraging people to quit, and presenting more positive role modeling for children. According to the tobacco industry's own research, a total ban on tobacco use in the workplace would not only decrease consumption by 10% to 15%, but also increase cessation rates by 70% to 80%.⁷¹

ASCO firmly supports state and local efforts to ban tobacco use in all public spaces, including all bars, restaurants, workplaces, and healthcare facilities.

Assist tobacco farmers.

ASCO supports state and federal efforts to assist tobacco farmers in their transition to the growth of nontobacco products. Government programs should provide fair compensation to tobacco farmers for the loss of income associated with tobacco production. Clearly, inadequate attention to economic issues of this nature will undermine the success of the proposed changes in tobacco policy. In accordance with the recommendations of the 2001 report of the President's Commission on Improving Economic Opportunity in Communities Dependent on Tobacco Production While Protecting Public Health, ASCO supports a major restructuring of the federal tobacco program to address changing economic and public health realities associated with tobacco use.⁷² In addition, ASCO supports the phase-out of all federal government subsidies associated with tobacco growth and production.

Enhance research efforts.

Basic and clinical research is critical to improving our understanding of the nature of tobacco addiction, effects of tobacco use, and the optimal ways to promote cessation. Because people use tobacco products for a variety of reasons, employing interdisciplinary research teams will help provide the widest range of approaches to research and types of data. Effective research teams will likely include those with expertise in the physiological, socioeconomic, mental, and emotional impacts of tobacco use.

The following topical areas merit specific research attention:

- *Understanding the mechanisms and processes of addiction.* Research should focus on increasing the understanding of addictive processes, particularly genetic and behavioral triggers to nicotine addiction.
- *Accelerating consideration of treatment candidates.* Treat-

ment possibilities resulting from our understanding of the biologic substrates and behavioral mechanisms of nicotine and tobacco addiction should be investigated and translated into new products as rapidly as possible.

- *Improving tobacco cessation techniques.* Improvements should focus on nonnicotine therapies, the relationship between the amount of nicotine in cessation products and the success of cessation attempts, and the effectiveness and impact of cessation products in people with cancer.
- *Developing and integrating effective tobacco cessation methods into practice.* A concentrated effort should be made to identify effective educational methods to assist providers in incorporating cessation messages into all levels of patient interaction.

The federal government should enhance its leadership role in conducting and supporting research in these and other areas, and partnering, when possible, with private organizations. ASCO also acknowledges the important contributions already made by many private and nonprofit groups that have an established interest and track record in tobacco addiction, cessation, and control research.

Enhance global tobacco control.

As an international medical society, ASCO is concerned with use of tobacco products not just domestically, but also globally, and the Society urges other countries to take aggressive action to restrict access to these products, particularly by children. Nevertheless, ASCO recognizes the negative influence that the United States government has often exerted to promote tobacco interests throughout the world.⁷³ The United States is fourth in world tobacco production (following China, Brazil, and India) and second to Brazil in tobacco exports.⁷⁴ United States imports of foreign-grown tobacco leaf have surged in the past decade from 413 million pounds in 1990 to 587 million pounds in 2001 to 2002. Most of this increase has occurred in the last year: 2000 to 2001 imports were 468 million pounds.⁷⁵

This complicity of United States policy in global tobacco use must cease. Specifically, United States trade officials should refrain from expenditure of government funds and influence to promote tobacco products in other countries. Moreover, the United States should give health and safety concerns related to tobacco-use primacy over other trade issues or agreements, especially within the context of international trade conventions.

Other countries should impose their own rigorous regulatory regimes, with special emphasis on discouraging children from tobacco use. At a minimum, ASCO supports effective international policies and treaties containing the following elements:

- Significant restrictions on tobacco marketing and promotion, particularly aimed at children and adolescents
- Mandatory ingredient disclosure to government regulatory agencies and to the public
- Prominent warning labels on packaging and marketing materials in local languages reflecting the most relevant dialect or dialects
- Restrictions on exposure to secondhand smoke
- Increased tobacco excise taxes

- Enhanced culturally relevant educational initiatives on the dangers of tobacco use, particularly among young people
- Control of tobacco smuggling

ASCO understands that cultural variety requires a multiplicity of approaches suitable to local conditions and values. Accordingly, ASCO supports national autonomy in devising specific regulatory regimes but urges that each country embrace ASCO's mission of immediately reducing tobacco use and ultimately attaining a tobacco-free world.

A special concern is raised by countries that derive a significant portion of their overall revenue from operation of tobacco enterprises, and thus may have a fundamental aversion to tobacco cessation. To address these and other situations in which national authorities may be disinclined to adopt antitobacco postures, ASCO recommends that United States financial assistance to such countries be made dependent on progress against tobacco use. In addition, in extreme circumstances in which national authorities fail to address the problem of tobacco usage by children, such national policy should be considered a violation of international human rights.

Take responsibility as healthcare professionals.

Physicians, nurses, and other healthcare professionals, especially those in primary care disciplines, have the opportunity and responsibility to assist patients' efforts to cease tobacco use and to ensure that nonsmokers continue to resist. An important part of the healthcare professional's responsibility is serving as a role model to patients by refraining from

the use of all tobacco products. Oncology specialists should discuss the causal relationship between tobacco use and cancer and assist the patient and family members to end tobacco dependency.

In addition, healthcare professionals must advocate for public and private insurance coverage of medically necessary—and often ongoing and time-sensitive—interventions, including cessation services and treatment of tobacco-related diseases. Cancer specialists and primary care providers must work in concert to address the significant problems posed by their patients' tobacco use. In light of our responsibility as healthcare professionals and cancer specialists, ASCO previously adopted a policy prohibiting the Society's investment in tobacco companies.

CONCLUSION

To date, comprehensive efforts at tobacco control, both in the United States and globally, have been unsuccessful, except in limited circumstances. A dramatic new approach is needed. ASCO supports a total re-examination of our tobacco control strategy, with a goal of immediate reduction of tobacco use and the ultimate achievement of a tobacco-free world. Both the United States and its international partners should explicitly adopt the mission of immediate significant reduction of tobacco use and the goal of a tobacco-free world. In furtherance of those ends, United States trade policy must subjugate the economic interests of tobacco to the larger needs of global public health.

APPENDIX

This policy statement was reviewed and transmitted to the ASCO Board of Directors by ASCO's Public Issues Committee:

John E. Niederhuber, MD, Chair (University of Wisconsin Comprehensive Cancer Center, Madison, WI); Arlene A. Forastiere, MD, Past Chair (Johns Hopkins Oncology Center, Baltimore, MD); Maria Quintos Baggstrom, MD (University of North Carolina at Chapel Hill, Chapel Hill, NC); Lodovico Balducci, MD (H. Lee Moffitt Cancer Center, Tampa, FL); Linda D. Bosserman, MD, FACP (Wilshire Oncology Medical Group, Inc., Pomona, CA); Jay L. Bosworth, MD (Long Island Radiation Therapy, Manhasset, NY); Marcia Brose, MD, PhD (Hospital of the University of Pennsylvania, Philadelphia, PA); Michael Goldstein, MD (Brookline, MA); Larry D. Cripe, MD (Indiana University Cancer Center, Indianapolis, IN); Michael Fisch, MD, MPH, Gabriel N. Hortobagyi, MD, and Leonard Zwelling, MD, MBA (M.D. Anderson Cancer Center, Houston, TX); Dean Gesme, MD (Oncology Associates of Cedar Rapids, Cedar Rapids, IA); Bruce G. Gordon, MD (University of Nebraska Medical Center, Omaha, NE); Julie Gralow, MD (University of Washington–Seattle Cancer Care, Seattle, WA); Steven M. Grunberg, MD (University of Vermont Medical Center, Burlington, VT); V. Suzanne Klimberg, MD (University of Arkansas for Medical Sciences, Little Rock, AR); Timothy Kuzel, MD (Northwestern University Medical School, Chicago, IL); Lawrence S. Lessin, MD, MACP (Washington Cancer Institute, Washington Hospital Center, Washington, DC); Richard Pazdur, MD (Food and Drug Administration, Rockville, MD); David G. Pfister, MD (Memorial Sloan-Kettering Cancer Center, New York, NY); Carolyn D. Runowicz, MD (St. Luke's-Roosevelt Hospital Center, New York, NY); Steven E. Come, MD, and Lowell E. Schnipper, MD (Beth Israel Deaconess Medical Center, Boston, MA); Lynn M. Schuchter, MD (University of Pennsylvania Cancer Center, Philadelphia, PA); Ellen V. Sigal, PhD (Friends of Cancer Research, Washington, DC); Ellen Stovall (National Coalition for Cancer Survivorship, Silver Spring, MD); and John H. Ward, MD (University of Utah School of Medicine, Salt Lake City, UT).

Others involved in development and review of the policy statement include: Heine H. Hansen, MD, PhD (Finsen Center, Copenhagen, Denmark); Jamie Ostroff, PhD (Memorial Sloan-Kettering Cancer Center, New York, NY); Bernard Levin, MD, and Alexandre Prokhorov, MD (M.D. Anderson Cancer Center, Houston, TX).

REFERENCES

1. U.S. Department of Health and Human Services: Changes in Cigarette-Related Disease Risks and Their Implications for Prevention and Control. Tobacco and Control monograph 8. Bethesda, MD, U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute, NIH publication 97-4213, 1997
2. U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute: FY02 NCI Bypass Budget: November 2000. <http://2002.cancer.gov/scptobacco.htm>. Last accessed 3/10/03
3. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention: Morbidity and Mortality Weekly Report.

Cigarette Smoking Among Adults: United States, 2000. July 26, 2002, vol 51, no. 29

4. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention: Morbidity and Mortality Weekly Report. Tobacco Use Among Middle and High School Students. January 28, 2000, vol 49, no. 3

5. U.S. Department of Agriculture, Economic Research Service: Agricultural Outlook. January-February 2002. <http://www.ers.usda.gov/publications/agoutlook/jan2002/ao288c.pdf>. Last accessed 4/1/03

6. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Office on Smoking and Health. <http://www.cdc.gov/tobacco/issue.htm>. Last accessed 4/1/03

7. Tobacco Control Resource Centre, International Union Against Cancer (IICC): Tobacco Control Factsheets: Youth and Cigarette Smoking. http://www.tobacco-control.org/tcrc_Web_Site/Pages_tcrc/Resources/Factsheets/Factsheets_main_page.htm. Last accessed 4/1/03

8. U.S. Department of Health and Human Services: Women and Smoking: A Report of the Surgeon General, 2001. Atlanta, GA, U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2001

9. World Bank Group: Tobacco at a Glance. <http://www1.worldbank.org/tobacco/tobacco.pdf>. Last accessed 4/1/03

10. U.S. Department of Health and Human Services: Youth and Tobacco: Preventing Tobacco Use Among Young People: A Report of the Surgeon General, 1995. Atlanta, GA, U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 1995

11. U.S. Department of Health, Education, and Welfare: Smoking and Health: Report of the Advisory Committee to the Surgeon General of the Public Health Service. Atlanta, GA, U.S. Department of Health, Education, and Welfare, Public Health Service, Communicable Disease Center, DHEW publication 1103, 1964

12. Public Law No. 89-92, 15 U.S.C. §§ 1331 to 1340, 1998

13. Public Law No. 91-222, 15 U.S.C. §§ 1331 to 1340, 1998

14. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Office on Smoking and Health: History of the 1964 Surgeon General's Report on Smoking and Health. <http://www.cdc.gov/tobacco/30yrsge.htm>. Last accessed 4/1/03

15. U.S. Department of Health and Human Services: Tobacco Use Among U.S. Racial/Ethnic Minority Groups: African Americans, American Indians and Alaska Natives, Asian Americans and Pacific Islanders, and Hispanics—A Report of the Surgeon General. Atlanta, GA, U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 1998

16. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention: Morbidity and Mortality Weekly Report. Achievements in Public Health: Tobacco Use—United States, 1990-1999. November 5, 1999, vol 48, no. 43

17. Campaign for Tobacco-Free Kids: Smoking and Kids. October 24, 2002. <http://tobaccofreekids.org/research/factsheets/pdf/0001.pdf>. Last accessed 4/1/03

18. Campaign for Tobacco-Free Kids: Tobacco Use Among Youth. August 27, 2002. <http://tobaccofreekids.org/research/factsheets/pdf/0002.pdf>. Last accessed 3/31/03

19. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention: Morbidity and Mortality Weekly Report. Projected Smoking-Related Deaths Among Youth—United States. November 8, 1996, vol 45 no. 44

20. Prokhorov AV, Pallonen UE, Fava JL, et al: Measuring nicotine dependence among high-risk adolescent smokers. *Addict Behav* 21:117-127, 1996

21. Prokhorov AV, Hudmon KS, de Moor CA, et al: Nicotine dependence, withdrawal symptoms, and adolescents' readiness to quit smoking. *Nicotine Tob Res* 3:151-155, 2001

22. Campaign for Tobacco-Free Kids: Where do Youth Smokers Get their Cigarettes? August 27, 2002. <http://tobaccofreekids.org/research/factsheets/pdf/0073.pdf>. Last accessed 4/1/03

23. 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, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2000

24. World Bank Group: Curbing the Tobacco Epidemic: Governments and the Economics of Tobacco Control, 1999. <http://www1.worldbank.org/tobacco/reports.asp>. Last accessed 4/1/03

25. National Academy of Sciences, Institute of Medicine, National Cancer Policy Board: Taking Action to Reduce Tobacco Use. Washington, DC, National Academy Press, 1998

26. U.S. Department of Health and Human Services: Changing Adolescent Smoking Prevalence: Where It Is and Why. Smoking and Tobacco Control Monograph No. 14. Bethesda, MD, U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute, NIH publication 00-4892, November 2000

27. Campaign for Tobacco-Free Kids: 2003 State Cigarette Excise Tax Rates & Rankings. March 28, 2003. <http://tobaccofreekids.org/research/factsheets/index.php?CategoryID=18>. Last accessed 12/16/02

28. Chaloupka FJ: How Effective are Taxes in Reducing Tobacco Consumption? In Jeanrenaud C, Soguel N (eds): Valuing the Costs of Smoking: Assessment Methods, Risk Perceptions and Policy Options: Studies in Risk and Uncertainty. Kluwer Academic Publishers, Boston, MA, 1999, pp 205-218. http://tigger.uic.edu/~fjc/Presentations/Papers/taxes_consump_rev.pdf. Last accessed on 4/1/03

29. U.S. Department of Health and Human Services: Reducing the Health Consequences of Smoking: 25 Years of Progress. Atlanta, GA, U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, DHHS publication (CDC) 89-8411, 1989

30. U.S. General Accounting Office: Teenage Smoking, Higher Excise Tax Should Significantly Reduce the Number of Smokers. Washington, DC, GAO publication HRD-89-119, June 1989

31. Canadian Cancer Society, Non-Smokers Rights Association, Physicians for a Smoke-Free Canada: Surveying the Damage: Cut Rate Tobacco Products and Public Health in the 1990s. October 1999. http://www.nsr-aadnf.ca/news_info.php?cPath=27&news_id=51. Last accessed 4/1/03

32. \$2 a Pack Increase in Tax on Cigarettes Is Rejected. *Washington Post* February 27, 2003, p A25

33. American Heart Association: State of Tobacco Control: 2002. http://www.lungusa.org/press/tobacco/tobacco_010703.html. Last accessed 4/1/03

34. Campaign for Tobacco-Free Kids, American Lung Association, American Cancer Society, American Heart Association: SmokeLess States National Tobacco Policy Initiative. SHOW US THE MONEY: A Report On The States' Allocation of the Tobacco Settlement Dollars. January 22, 2003. <http://tobaccofreekids.org/reports/settlements/>. Last accessed 4/1/03

35. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention: Morbidity and Mortality Weekly Report. Declines in Lung Cancer Rates: California, 1988 to 1997. December 1, 2000, vol 49, no. 47

36. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention: Morbidity and Mortality Weekly Report. Oregon Reducing Cigarette Consumption through a Comprehensive Tobacco Control Program. February 26, 1999, vol 48, no. 7

37. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention: Morbidity and Mortality Weekly Report. Cigarette Smoking Before and After an Excise Tax Increase and an Antismoking Campaign Massachusetts, 1990-1996. November 8, 1996, vol 45, no. 44

38. U.S. Department of Commerce, Federal Trade Commission: Cigarette Report for 2000. Issued in 2002. <http://www.ftc.gov/os/2002/05/2002cigrpt.pdf>. Last accessed 4/1/03

39. Campaign for Tobacco-Free Kids: Tobacco Company Marketing to Kids. October 24, 2002. <http://tobaccofreekids.org/research/factsheets/pdf/0008.pdf>. Last accessed on 4/1/03
40. U.S. Department of Health and Human Services: Risks Associated With Smoking Cigarettes With Low Machine-Measured Yields of Tar and Nicotine. Smoking and Tobacco Control Monograph No. 13. Bethesda, MD, U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute, October 2001
41. Tickle JJ, Sargent JD, Dalton MA, et al: Favourite movie stars, their tobacco use in contemporary movies, and its association with adolescent smoking. *Tobacco Control* 10:16-22, 2001
42. Tobacco Control Resource Centre, International Union Against Cancer (IICC): Tobacco Control Factsheets: Youth and Cigarette Smoking. http://www.tobacco-control.org/tcrc_Web_Site/Pages_tcrc/Resources/Factsheets/Factsheets_main_page.htm. Last accessed 4/1/03
43. Simons-Morton BG: Prospective analysis of peer and parent influences on smoking initiation among early adolescents. *Prev Sci* 3:275-283, 2002.
44. U.S. National Institute of Child Health and Human Development, December 23, 2002, press release. <http://www.nichd.nih.gov/new/releases/smoking.cfm>. Last accessed 4/1/03
45. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention: Morbidity and Mortality Weekly Report. Youth Risk Behavior Surveillance: United States, 1999. June 9, 2000, vol 49, no. SS-5
46. Action on Smoking and Health UK: Tobacco Explained: Chronology 3 Marketing to Children. <http://www.ash.org.uk/html/conduct/html/chronologies.html>. Last accessed 4/1/03
47. Austin S, Gortmaker S: Dieting and smoking initiation in early adolescent girls and boys: A prospective study. *Am J Public Health* 91:446-450, 2001
48. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention: Morbidity and Mortality Weekly Report. Surveillance for Selected Tobacco-Use Behaviors: United States, 1900-1994. November 18, 1994, vol 43, no. SS-03
49. Jemal A, Murray T, Samuels A, et al: Cancer statistics, 2003. *CA Cancer J Clin* 53:5-26, 2003
50. Husten CG, Chrismon JH, Roddy MN, et al: Trends and effects of cigarette smoking among girls and women in the United States, 1965-1993. *J Am Med Womens Assoc* 51:11-18, 1996
51. U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute: Smoking Cessation and Continued Risk in Cancer Patients. January 23, 2003. <http://www.nci.nih.gov/cancerinfo/pdq/supportivecare/smokingcessation/healthprofessional>. Last accessed 4/1/03
52. Fiore MC, Bailey WC, Cohen SJ, et al: Treating Tobacco Use and Dependence: Clinical Practice Guideline. Rockville, MD, U.S. Department of Health and Human Services, Public Health Service, June 2000
53. McAfee T: Presentation to the August 2001 meeting of the Department of Health and Human Services' Interagency Committee on Smoking and Health. <http://www.cdc.gov/tobacco/ICSH/summary081401.htm>. Last accessed 4/1/03
54. Campaign for Tobacco-Free Kids: Medicaid and Medicare Costs & Savings from Covering Tobacco Cessation. <http://tobaccofreekids.org/research/factsheets/pdf/0192.pdf>
55. Spanger G, George G, Foley KL, et al: Tobacco intervention training: Current efforts and gaps in US medical schools. *JAMA* 288:1102-1109, 2002
56. U.S. Department of Health and Human Services, Public Health Service: Treating Tobacco Use and Dependence: A Systems Approach. November 2000. <http://www.surgeongeneral.gov/tobacco/systems.pdf>. Last accessed 4/1/03
57. Hong WK, Khuri F: May 18, 1999. <http://www.mdanderson.org/topics/smoking/display.cfm?id=F9CC020B-A905-11D4-80FB00508B603A14&method=displayFull&pn=38E0F12B-79D5-11D4-AEC700508BDCCE3A>. Last accessed 4/1/03
58. Browman, GP, Wong G, Hodson I, et al: Influence of cigarette smoking on the efficacy of radiation therapy in head and neck cancer. *N Engl J Med* 328:159-163, 1993
59. U.S. Department of Health and Human Services: The Health Consequences of Using Smokeless Tobacco: A Report of the Advisory Committee to the Surgeon General. Bethesda, MD, U.S. Department of Health and Human Services, Public Health Service, NIH publication 86-2874, April 1986
60. U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute: Questions and Answers About Smokeless Tobacco and Cancer. October 23, 1998. http://cis.nci.nih.gov/fact/3_63.htm. Last accessed 4/1/03
61. Iribarren C, Tekawa IS, Sidney S, et al: Effect of cigar smoking on the risk of cardiovascular disease, chronic obstructive pulmonary disease, and cancer in men. *N Engl J Med* 340:1773-1780, 1999
62. U.S. Department of Health and Human Services: Cigars: Health Effects and Trends. Smoking and Tobacco Control Monograph 9. Bethesda, MD, U.S. Department of Health and Human Services, Public Health Services, National Institutes of Health, National Cancer Institute. February 1998
63. U.S. Department of Health and Human Services: Cigars: Health Effects and Trends. Smoking and Tobacco Control Monograph 9. Bethesda, MD, U.S. Department of Health and Human Services, Public Health Services, National Institutes of Health, National Cancer Institute. February 1998, p 3
64. U.S. Department of Health and Human Services, Office of Inspector General: Youth Use of Cigars: Federal, State Regulation and Enforcement, OEI-06-98-00020. February 1999
65. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention: Facts about Cigar Smoking. May 23, 1997. <http://www.cdc.gov/od/oc/media/fact/cigars.htm>. Last accessed 4/1/03
66. Nelson DE, Davis RM, Chrismon JH, et al: Pipe smoking in the United States, 1965-1991: Prevalence and attributable mortality. *Prev Med* 25:91-99, 1996
67. Boffetta P, Pershagen G, Jockel KH, et al: Cigar and pipe smoking and lung cancer risk: A multicenter study from Europe. *J Natl Cancer Inst* 91:697-701, 1999
68. Glantz SA, Parmley W: Passive smoking and heart disease: Epidemiology, physiology, and biochemistry. *Circulation* 83:1-12, 1991
69. Taylor A, Johnson D, Kazemi H: Environmental tobacco smoke and cardiovascular disease: A position paper from the Council on Cardiopulmonary and Critical Care, American Heart Association. *Circulation* 86:699-702, 1992
70. Glantz SA, Barnes DE, Bero L, et al: Looking through a keyhole at the tobacco industry: The Brown and Williamson documents. *JAMA* 273:219-224, 1995
71. Campaign for Tobacco-Free Kids: Smoke-Free Workplace Laws Reduce Smoking and the Cigarette Companies Know It. <http://tobaccofreekids.org/research/factsheets/pdf/0196.pdf>. Last accessed 4/2/03
72. President's Commission on Improving Economic Opportunity in Communities Dependent on Tobacco Production While Protecting Public Health: May 14, 2001. <http://www.fsa.usda.gov/tobcom/FRFiles/FinalReport.htm>. Last accessed 4/2/03
73. U.S. General Accounting Office: Trade and Health Issues: Dichotomy Between U.S. Tobacco Export Policy and Antismoking Initiatives. GAO/NSIAD-90-190 and GAO/T-NSIAD-90-42, General Accounting Office, Washington, DC, May 1990
74. U.S. Department of Agriculture, Economic Research Service: Briefing Room: Tobacco. <http://www.ers.usda.gov/Briefing/tobacco/>. Last accessed 4/2/03
75. U.S. Department of Agriculture, Economic Research Service: U.S. Tobacco Import Update. February 2003. <http://www.ers.usda.gov/publications/tbs/feb03/tbs200202/tbs2002-02.pdf>. Last accessed 4/2/03