

# The American Cancer Society Public Health Statement on Eliminating Combustible Tobacco Use in the United States

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## Introduction

Eliminating cancer caused by tobacco use is the highest public health priority of the American Cancer Society (ACS). Cigarette smoking is the leading cause of cancer mortality in the United States,<sup>1</sup> accounting for as much as 98% of all tobacco-related deaths.<sup>2</sup> The 50th anniversary Surgeon General's Report calls for the rapid elimination of the use of all combusted tobacco products and states: "The burden of death and disease from tobacco use in the United States is overwhelmingly caused by cigarettes and other combusted tobacco products; rapid elimination of their use will dramatically reduce this burden."<sup>3</sup> (Combustible tobacco and smoking include cigarettes, roll-your-own, cigars, pipe tobacco, bidis, kreteks, hookah tobacco, and any other product that burns tobacco for human consumption.)

In 2016, 15.5%—37.8 million—of US adults were current cigarette smokers. Much higher smoking prevalence was found among those living below the poverty level; American Indians/Alaska Natives; those with lower educational attainment; lesbian, gay, bisexual, and transgender persons; Medicaid enrollees; and adults suffering from serious psychological distress.<sup>4</sup> These findings highlight the need for more effective approaches to mitigate the harms of tobacco use in the United States and particularly, as emphasized by the Surgeon General and others,<sup>2</sup> to dramatically reduce and eventually eliminate the use of combustible (burned) tobacco products.

In recognition of the disproportionately large role that combustible tobacco use plays in causing morbidity and mortality in the United States, ACS will expand its existing tobacco-control efforts and execute new comprehensive strategies to eliminate *all combustible tobacco use*, with the goal of substantially reducing cancer incidence and mortality and other adverse health effects.

In this rapidly changing tobacco landscape, it is critical that consumers receive accurate information about different tobacco products and the role of nicotine in tobacco-related disease. Many consumers are misinformed about the harms of electronic nicotine delivery systems (ENDS). (In this document, the term ENDS refers to the variety of products that heat, but do not burn, liquids that contain nicotine, water, and other constituents, such as propylene glycol and flavorants.) Many adults believe, erroneously, that ENDS are as harmful as combustible tobacco products, and the level of public understanding has deteriorated over time. In 2012, only 11.5% of respondents to a national survey held this view. By 2015, 35.7% of respondents mistakenly believed that the harm associated with electronic cigarettes (e-cigarettes) was "about the same" as that of smoking conventional cigarettes.<sup>5</sup> At the same time, the Monitoring the Future study reports that, as of 2017, "e-cigarettes have one of the lowest levels of perceived risk for regular use of all drugs, including alcohol" among adolescents.<sup>6</sup>

Although many ENDS deliver nicotine, flavor additives, and other chemicals, they do not burn tobacco, a process that yields an estimated 7000 chemicals, including at least 70 carcinogens.<sup>3</sup> Thus, public misunderstanding underscores the urgent need for consumer education about the absolute and relative risks posed by different

tobacco products and to reinvigorate smokers' understanding of the importance of quitting combustible tobacco. Whereas complete information on all the potential risks and benefits of ENDS is not yet available, there is sufficient information to allow ACS to act now with a clear focus on the primary goal of ending deadly combustible tobacco use, which is responsible for approximately a one-half million deaths per year and 30% of all cancer deaths in the United States.

Given this imperative, ACS will provide smokers and the public with clear and accurate information available on the absolute and relative health impact of combustible tobacco products, nicotine-based medications, ENDS and other novel tobacco products.<sup>7,8</sup> In partnership with others, ACS will increase its efforts to guide smokers toward evidence-based cessation options that enable them to quit as quickly as possible and eliminate their exposure to combustible tobacco smoke. At the same time, ACS will deliver a clear and vital message: All smokers should cease combustible tobacco use as soon as possible and ACS will aid them in achieving that goal.

### Accelerate Efforts to End Combustible Tobacco Use: Key Strategies and Actions

ACS is committed to a comprehensive approach to tobacco prevention and control and will be led by the best available science to keep future generations from initiating the use of any tobacco or nicotine-containing product and to understand the role that potentially less harmful tobacco products could play in allowing currently addicted smokers to quit.<sup>7,9</sup> The strategies set forth here, therefore, will continue to be refined based on emerging science.

#### Strategy 1. Promote Increased Access and Utilization of Cessation Options for Smokers, With an Emphasis on Preventing Dual Use

Each year, approximately 20 million American smokers try to quit, representing about 55% of the 36 million smokers in the United States.<sup>10</sup> Only about 1.4 million (7%) succeed. An even greater percentage of smokers (68%) report being interested in quitting. Thus, many smokers are poised to quit successfully, and their success will be enhanced if a supportive set of clinical and public policy interventions is in place to encourage and assist them. Cessation success is highly influenced by the public policy and regulatory environments, as well as by the individual's prior quit attempts.<sup>11</sup>

Helping smokers to quit is the job of the whole health care system. Over 70% of smokers, more than 25 million Americans, visit a health care setting each year, providing an unequalled opportunity to deliver evidence-based cessation treatments.<sup>10,12,13</sup> As with treatment for diabetes and hypertension, health care settings allow for repeated

interventions, including counseling and prescribing medication, with the goal of assisting the smoker in achieving long-term abstinence.

Currently, the health care system is not maximizing opportunities to help smokers. Only 57% of smokers who visited a health care setting in 2015 had been advised to quit in the previous year. Less than one-third of these smokers left their health care visits with one or more of the evidence-based cessation treatments. Less than 5% reported using both counseling and medication—the treatment combination that is regarded as most effective in boosting quit rates—during their last quit attempt.<sup>10,14</sup>

Promoting smoking cessation is one of the most effective actions a clinician can take to improve the health of smokers. Most smokers require multiple quit attempts before achieving long-term abstinence, given the chronic disease nature of tobacco dependence. The recognition of tobacco dependence as a chronic disease calls for ongoing public policy and health system strategies that promote and increase the demand for evidence-based cessation counseling and medications.

Health care settings provide an opportunity to markedly increase the reach of evidence-based cessation treatment. Even cessation interventions that yield modest boosts in quit rates, if universally implemented, have the potential to drive down combustible tobacco use rates and thus reduce mortality. The potential reach and population impact of increasing the quit rate of millions of smokers will not be realized until cessation interventions are more fully integrated into health care settings.

As a top priority, ACS will vigorously encourage smokers to quit, recognizing that individual smokers use many approaches to quit, including self-quitting. However, ACS will continue to urge smokers, their clinicians, and health systems to use evidence-based cessation treatments that can substantially boost the success rate of any quit attempt.

ACS is well positioned to strengthen its public education efforts to communicate with health care professionals, advocates, media, and consumers about the changing tobacco-control landscape and the importance of ending combustible tobacco use. Through our programs, services, and collaboration with health systems partners, ACS will promote tobacco-cessation strategies and develop both health care provider and consumer-facing materials that:

- Provide accurate, up-to-date information about combustible tobacco products, ENDS, and other novel tobacco products to smokers—making clear that use of any tobacco product can be harmful, but cigarette smoking is by far the most dangerous form of tobacco use; the main goal is to stop combustible use;
- Encourage smokers to quit and avoid relapse to smoking, guiding those willing to quit toward evidence-

based cessation treatment options, including physician advice and counseling, quitline and Web-based or app-based counseling, and US Food and Drug Administration (FDA)-approved medications;

- Encourage smokers who are not willing to quit completely to reduce their combustible tobacco use to the furthest extent possible, informing them that FDA-approved medications can help them reduce and eventually cease their combustible tobacco use;
- Communicate that, although the long-term effects of ENDS are not known, current-generation ENDS are markedly less harmful than combustible tobacco products;
- Counsel against sustained dual use (the concurrent use of both ENDS and combustibles) because of the risk that long-term dual use of combustible tobacco products with e-cigarettes may deter complete cessation—making clear that, because smoking duration has a strong effect on lung cancer risk, the ongoing dual use of ENDS and cigarettes is extremely detrimental to smokers' health versus the substantial benefits of quitting smoking entirely<sup>2</sup>; and
- Contribute to the research to determine how or whether ENDS might be integrated into evidence-based cessation options.

ACS will help boost health care-based interventions by:

- Promoting a *health system-wide approach* by working with ACS's health systems partners (eg, federally qualified health centers, primary care networks, hospitals, and health plans) to integrate evidence-based tobacco cessation to reach a greater number of smokers who visit health care settings regularly;
- Promoting system-level changes to increase access to and use of cessation treatments by advocating for inclusion of smoking status as a vital sign and providing training to health care providers on effective cessation options;
- Advocating for the development and integration into value-based payment models of meaningful quality measures linked to the determination of smoking status and evidence-based cessation counseling for smokers;
- Increasing the use of technological approaches to enhance the delivery of smoking-cessation treatments, including quitlines and Web-based or app-based cessation services;
- Promoting the use of electronic health record technology—now present in more than 90% of health care settings<sup>15</sup>—to systematically identify smokers and guide the delivery of cessation treatment;
- Promoting and supporting wide-scale integration of evidence-based cessation treatments into oncology care to increase cessation services for patients with newly

diagnosed cancer and cancer survivors—a setting with lower rates of cessation interventions; and

- Promoting and supporting better coordinated and integrated cessation treatments with behavioral services for people with mental health and substance use disorders.

ACS Cancer Action Network (ACS CAN), the non-profit, nonpartisan advocacy affiliate of the ACS, will continue to advocate that:

- All public and private health care coverage include a comprehensive, lifetime tobacco-cessation benefit with access to evidence-based counseling and all FDA-approved medications, without cost-sharing to the patient or other barriers, for all enrollees.

## Strategy 2. Prevent Initiation of ENDS by Youth and Other High-Risk Demographic Groups (eg, Former Smokers, Nondaily Smokers, Never-Smokers)

The public health community's ongoing concern is that ENDS could contribute to primary nicotine addiction and may serve as a gateway for the use of tobacco products, particularly by youth. The use and marketing of flavors in ENDS, which is one of the several product-appeal factors that influences youth interest in experimenting with these products, also remains a key concern.

Protecting youth from cigarette smoking and the use of novel tobacco products remains a high priority for ACS. Encouragingly, recent data indicate that cigarette smoking declined to a new low of 8% among high school students, while youth use of ENDS also declined to 11.3% in 2016 after a rapid increase from 2.8% in 2012 to 16% in 2015, based on a survey of more than 80,000 individuals from 2012 through 2015.<sup>16</sup>

Overall, there has been substantial growth in ever and current ENDS use among certain adult subpopulations over the last decade, although there was a decline from peak levels during the last year reported. As of 2015, 29.8% of both daily and nondaily smokers reported that they currently use e-cigarettes, compared with 5.3% of former smokers and 3.0% of never-smokers. In contrast, among all e-cigarette users, 22.8% reported that they were never smokers.<sup>17</sup>

The role played by taxation to prevent youth initiation and promote smoking cessation is a key area of scientific inquiry and tobacco-control practice.<sup>18</sup> Chaloupka et al report that, in view of the rapidly evolving nicotine-product marketplace, differential tax rates have the potential to maximize incentives for tobacco users to switch from the most harmful to the least harmful products (eg, ENDS).<sup>19</sup>

ACS CAN will continue to advocate for:

- Comprehensive smoke-free and tobacco-free policies, including ENDS in all cases, for workplaces, public

places, and public transportation, both indoors and outdoors;

- Retail policies that include raising the minimum age for sale of all tobacco products, including ENDS, to age 21 years, strong retailer compliance and active enforcement, prohibitions against couponing and other price discounts, and restrictions on the sale of flavored products;
- Regular and significant increases in federal, state, and local excise taxes that will increase the price of tobacco products, particularly for cigarettes and other combustible tobacco products; and
- Full and sustained funding for evidence-based tobacco-control programs at the federal, state, and local levels, including funding for mass-media education campaigns.

ACS and ACS CAN also will continue to monitor and oppose the tobacco industry's efforts to prevent the adoption of effective tobacco-control policies. Of particular concern is the tremendous growth in the marketing of ENDS and the widespread exposure of youth to e-cigarette advertising, which are highly likely to be contributing to increases in e-cigarette use among youth.<sup>20</sup> ENDS are the most widely advertised, noncombustible products and sometimes are marketed as healthier alternatives to conventional cigarettes. Some advertising for ENDS has promoted these products as a means for circumventing smoke-free laws and/or as smoking cessation aids. A report by the Truth Initiative shows that e-cigarette advertising expenditures have increased dramatically, from \$5.6 million in 2010 to \$115.3 million in 2014.<sup>21,22</sup> Other studies also have documented this significant increase in spending.<sup>23</sup> The exposure of youth and young adults to e-cigarette advertisements increased by 256% from 2011 to 2013, and young adult exposure increased by 321%.<sup>24</sup>

### Strategy 3: Promote and Support a Comprehensive Tobacco and Nicotine Regulatory Framework

The wide variety of tobacco products and nicotine-containing cessation medications exists along a continuum of risk. Nicotine is responsible for addicting users and for fueling the tobacco epidemic, but it is the smoke from combustible tobacco products—not nicotine—that injures and kills millions of smokers.<sup>25</sup> Tobacco products are designed and intended to deliver nicotine to the user, but the toxicity associated with these products varies widely. At one end is the conventional cigarette, which, when burned and inhaled, delivers more than 7000 chemicals to the user, including at least 70 carcinogens, and is designed to cause and sustain addiction to nicotine while killing one-half of all long-term users. At the other end are medicinal nicotine products, which pose minimal risk and have been approved by FDA

as safe and effective for tobacco cessation.<sup>26</sup> Along the spectrum—and closer to nicotine-replacement therapies than to combustible tobacco products—are current-generation ENDS, which are likely to be much less harmful than combustible tobacco products.<sup>3,8,27-31</sup>

Over 47% of current smokers have tried e-cigarettes.<sup>32</sup> Some early evidence suggests that e-cigarettes may help some smokers reduce or quit combustible tobacco use.<sup>2,9</sup> Other evidence indicates that e-cigarettes are unhelpful or may deter cessation.<sup>33-35</sup> The science is mixed.<sup>36</sup> The diversity of nicotine-based product types, from combusted and smokeless tobacco products to novel tobacco products and nicotine-replacement therapies, continues to grow. One of the newer novel products is a “heat-not-burn” product called “IQOS,” manufactured by Philip Morris International, which heats tobacco without combustion and is currently heavily promoted in Europe and Asia. The manufacturer claims in promotional materials that IQOS emits lower levels of harmful substances than do combusted tobacco products. However, there is little research on what substances are released after the device heats the tobacco-based paste, and the health impact on users is not yet known.<sup>37</sup> The rapidly changing tobacco marketplace today underscores the need for a comprehensive tobacco and nicotine regulatory strategy.

In July 2017, the FDA announced its intention to pursue a new comprehensive plan for tobacco and nicotine regulation that will serve as a multiyear roadmap to better protect youth and significantly reduce tobacco-related disease and death. This approach places nicotine, and the issue of addiction, at the center of the agency's scientific and regulatory foundation to efficiently and effectively implement the Family Smoking Prevention and Tobacco Act, including the agency's authority to lower the nicotine content of combustible tobacco products to nonaddictive levels. Making cigarettes and all combustible tobacco products nonaddictive offers the potential of assisting current smokers in quitting and substantially reducing the number of smokers over time.<sup>25,38</sup> The FDA also recognizes the need to work toward a greater role for medicinal nicotine and other therapeutic products in helping smokers to quit and remain nonsmokers.

ACS will:

- Conduct research to strengthen our scientific understanding of the attitudes, perceptions, and knowledge of multiple audiences, including youth, young adults, adult tobacco users, former tobacco users, and nonusers, about ENDS and novel tobacco products;
- Increase awareness by developing effective messages about the health impact of nicotine and the continuum of risk among combustible tobacco products, ENDS and other novel tobacco products, and nicotine-containing cessation medications;

- Increase awareness by developing effective messages targeted to youth to prevent use of any tobacco or nicotine-containing products;
- Participate in the public dialogue about lowering nicotine levels in combustible cigarettes to nonaddictive levels through achievable product standards;
- Participate in the public dialogue about the role that flavors in tobacco products play in attracting youth and may play in helping some smokers switch to potentially less harmful forms of nicotine-containing products;
- Continue to evaluate the evidence on nicotine-containing products and communicate clear information about what is known, and not known, about the short-term and long-term risks of using ENDS and other novel tobacco products compared with using combustible tobacco products and the relative and absolute risk to youth, former smokers, never-smokers, nondaily smokers, and bystanders; and
- Conduct selected research to assess the impact of ENDS and other novel tobacco products on tobacco use behavior, including perceptions, susceptibility, experimentation, adoption, switching, and dual use.

ACS CAN will:

- Advocate for and defend against attacks on the full implementation of the FDA's authority over the manufacture, marketing, and distribution of tobacco products granted by the Family Smoking Prevention and Tobacco Control Act; and
- Advocate that the FDA's new comprehensive plan should leverage the collective authorities of its different centers to work collaboratively toward the goal of decreasing the number of people who use and are harmed by tobacco.<sup>39</sup>

## Conclusions

"The American Cancer Society's mission is to save lives, celebrate lives, and lead the fight for a world without cancer."<sup>40</sup>

It is in the spirit of that inspirational message that this Public Health Statement is framed. Of the many significant causes of cancer in our society, cigarette smoking holds the

dubious distinction of being the leading preventable cause of death, fueled by decades of aggressive industry efforts to target the most vulnerable populations and thwart public health policies. Combustible tobacco use by itself is responsible for nearly 29% of all cancer deaths and up to 98% of tobacco-related deaths in the United States.<sup>1,2,41</sup> Globally, tobacco causes more than 7 million deaths and costs society more than \$2 trillion (purchasing power parity) annually.<sup>41</sup> Cigarette smoking is *the* reason that, in 1985, lung cancer surpassed breast cancer as the number one killer of women—a distinction that still holds today. Indeed, lung cancer kills more Americans than the next 3 leading types of cancer (breast, prostate, and colon) *combined*.

For these reasons, eliminating cancer caused by tobacco use is the highest public health priority of ACS. The landscape of tobacco use has shifted dramatically, and tobacco control has increasingly become a social justice issue. The percentage of smokers who are at greatest risk—because of low socioeconomic status, lower educational attainment, behavioral health challenges, or the fact that they are members of certain other high-risk populations—has risen markedly.<sup>42</sup>

Almost all adult smokers began smoking as a child or adolescent. Today, e-cigarettes are by far the most common nicotine-containing product being used by young people. This widespread use is contributing to nicotine addiction, and some of these young users will start smoking. In light of these concerns, ACS will continue to work aggressively to prevent youth initiation of all nicotine-containing products.

ACS adopts this bold new framework for action to enhance its effectiveness in combating the evolving tobacco epidemic through evidence-based, comprehensive tobacco-control strategies. ACS will emphasize that, above all, to protect their health and to prevent cancer, *smokers must cease all combustible tobacco use*. In this way, ACS will strive to most effectively protect the public's health and intensify its efforts to eliminate cancer harm and death. ■

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