

## VIEWPOINT

# Smoking Cessation—Progress, Barriers, and New Opportunities

## The Surgeon General's Report on Smoking Cessation

**Jerome M. Adams,  
MD, MPH**

Office of the Surgeon  
General, Public Health  
Service, Department  
of Health and  
Human Services,  
Washington, DC.

**The reduction in cigarette smoking** is one of the most significant public health successes in modern US history. As noted in the landmark 50th anniversary report of the surgeon general, more than an estimated 8 million deaths were averted over the past half century through evidence-based tobacco control efforts,<sup>1</sup> and recent data show that cigarette smoking among US adults is now at an all-time low of 14%.<sup>2</sup> However, 34 million US adults continue to smoke cigarettes, with marked disparities across the population.<sup>2</sup> Moreover, 16 million adults in the United States currently live with a smoking-related disease.<sup>1</sup> In addition to these human costs, smoking places a significant burden on the US economy, with estimated societal costs of smoking projected at more than \$300 billion annually, including an estimated \$170 billion in health care spending.<sup>1</sup>

In 1964, US Surgeon General Luther Terry released *Smoking and Health: Report of the Advisory Committee of the Surgeon General of the Public Health Service*.<sup>3</sup> Since then, more than 30 reports on tobacco have been released by the Office of the Surgeon General. For decades, the evidence reviewed in these reports has served as a catalyst for action at the national, state, and

of the lesbian, gay, bisexual, transgender community; Alaska Natives; and American Indians). Individuals with mental health disorders and substance use disorders consume approximately 40% of the cigarettes smoked in the United States. In addition, less than one-third of smokers who try to quit use the counseling and US Food and Drug Administration (FDA)-approved medications shown to work. The report covers the immediate and long-term health and economic benefits of smoking cessation for individuals and for society as a whole. The report presents biological insights, including findings on nicotine addiction and genetic factors that may influence smoking behaviors. The report also discusses interventions proven to increase cessation.<sup>6</sup>

The new report includes new evidence on the health benefits of smoking cessation over the last 3 decades.<sup>6</sup> Previous reports released by the Office of the Surgeon General have reviewed the evidence that smoking increases the risk of adverse health outcomes; this report is the first to review the evidence on how cessation reduces risks of these outcomes, including poor reproductive health, cardiovascular diseases, chronic obstructive pulmonary disease (COPD), and 12 types of cancer.<sup>6</sup> One of the most important actions people can take to improve their health is to quit smoking. Although quitting smoking earlier in life yields the greatest health benefits, quitting at any age is beneficial, and quitting even helps people who have already been diagnosed with heart disease or COPD. In addition to health benefits, smoking cessation also reduces the financial burden that smoking places on individual smokers, health care systems, and society.<sup>6</sup>

What methods work to help people quit smoking is also known. Quitting smoking can be difficult, but proven treatments and strategies are available to help achieve success. At the individual level, the report concludes that behavioral counseling and cessation medications approved by the FDA increase the likelihood of quitting successfully, particularly when used in combination.<sup>6</sup> Newer strategies, including text messaging, web-based interventions, and combined use of long-acting (ie, nicotine patch) and short-acting (eg, nicotine gum or lozenge) nicotine-replacement therapies, can also increase the likelihood of successful smoking cessation.<sup>6</sup>

When discussing interventions and innovations that can help individuals quit smoking, the question inevitably arises about e-cigarettes. There are powerful accounts from some individuals who have used e-cigarettes to assist with smoking cessation, and some studies have documented that certain types of

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local levels to reduce the health and economic burden of tobacco product use.<sup>4</sup> These reports also offer an important blueprint for the scientific community by highlighting critical gaps for future research.

The 1990 report, *The Health Benefits of Smoking Cessation*, was the first to focus on cessation.<sup>5</sup> In the 3 decades since, none of the surgeon general reports have comprehensively reviewed and updated the scientific evidence on the benefits of cessation or strategies that can facilitate cessation. However, that pattern changed in January 2020 with the release of the new report—*Smoking Cessation: A Report of the Surgeon General*.<sup>6</sup> The report was compiled using a long-standing, peer-reviewed, and comprehensive process to ensure scientific rigor and practical relevance.<sup>4</sup> The report discusses patterns of smoking cessation in the United States and includes key statistics that every clinician and public health professional needs to know. For instance, 70% of current smokers want to quit. Smoking rates are higher among subsets of the US population (such as members

### Corresponding

**Author:** Jerome M. Adams, MD, MPH, Office of the Surgeon General, US Public Health Service, US Department of Health and Human Services, 200 Independence Ave SW, Washington, DC 20201 ([surgeongeneral@hhs.gov](mailto:surgeongeneral@hhs.gov)).

e-cigarettes may be associated with quitting in some adult smokers.<sup>6</sup> However, the entire body of available scientific evidence must be used to guide public health recommendations. To that end, this report reviews the totality of scientific data available and concludes, "E-cigarettes are a continually changing and diverse group of products that are used in a variety of ways. Therefore, it is difficult to make generalizations about their effectiveness for cessation based on studies of a particular e-cigarette, and there is presently inadequate evidence to conclude that e-cigarettes, in general, increase smoking cessation."<sup>6</sup> Ongoing research is critical to inform the role of e-cigarettes as a potential cessation tool for adult smokers, but in the midst of epidemic use of e-cigarettes among adolescents, the public health message must be crystal clear: use of any tobacco product by adolescents, including e-cigarettes, is unsafe.<sup>7</sup>

Proven treatments for smoking cessation, including counseling and FDA-approved medications, are necessary but not sufficient to fully achieve meaningful population-level progress. Interventions are most effective when complemented by actions taken at the clinical and health systems levels. These strategies include ensuring insurance coverage for all evidence-based cessation treatments, removing treatment barriers such as prior authorization, and using health information technology to systematically recommend covered treatments to smokers.<sup>6</sup>

In addition to the individual and clinical health systems interventions, population-based policies and actions serve a critical role in influencing the behavior of smokers contemplating cessation. Effective strategies include increasing the price of cigarettes, adopting comprehensive smoke-free policies, implementing

mass media campaigns, requiring pictorial health warnings on packaging, and fully funding comprehensive statewide tobacco control programs.<sup>6</sup> Quitlines (smoking cessation support via toll-free telephone numbers) are an evidence-based strategy that increases the accessibility and use of proven cessation support, including cessation counseling and medication.

Taken together, the findings in this report underscore that more is known about the science of quitting smoking than ever before. It is time to put this science into use in medical clinics and practices, health departments, and hospitals, with support from city councils and civic organizations all around the US. Clinicians and health care teams can ask every patient if they smoke and advise every smoker to quit. Clinicians should refer smokers to 1-800-QUIT-NOW, prescribe the counseling and medications proven to help, and encourage smokers to keep trying until they quit for good. Clinicians and health care organizations also should be mindful of the burden of smoking on certain populations and persist in efforts to support their attempts to quit; the evidence is strong that these populations can be successful in quitting smoking and that they will reap large and lasting health benefits. Payers and employers can provide ready access to an ample supply of cessation interventions at low or no cost. Community leaders, organizations, and public health professionals can support smoke-free environments, pricing strategies, and mass media campaigns that discourage initiation and protect new nonsmokers from relapse. As the current report from the Surgeon General states, it is never too late to quit, and it is time to make death and disability related to smoking a thing of the past.

#### ARTICLE INFORMATION

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