

Eliminating Tobacco-Related Disease and Death: Addressing Disparities

A Report of the Surgeon General

Executive Summary



U.S. Department of Health and Human Services

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Message from Xavier Becerra

Secretary, U.S. Department of Health and Human Services

Twenty-five years after the release in 1998 of the first Surgeon General's report to focus specifically on racial and ethnic disparities in commercial tobacco use, we have made substantial progress in reducing tobacco use at the population level. However, many disparities in the use of tobacco products continue to be observed by race and ethnicity, level of income, level of education, sexual orientation and gender identity, occupation, geography, behavioral health status, and disability status.

Everyone deserves to live a healthy life free from commercial tobacco-related disease and premature death. Using a multidisciplinary perspective, this Surgeon General's report reviews the latest scientific evidence about drivers of tobacco-related health disparities and interventions to prevent and reduce them. It concludes with a bold vision to advance tobacco-related health equity.

At the federal level, pivotal steps are being taken to advance public health across the whole population through both regulatory and administrative actions, including actions that will also promote tobacco-related health equity. The U.S. Food and Drug Administration (FDA) has announced that it intends to advance a product standard that would establish a maximum nicotine yield to reduce the addictiveness of cigarettes and certain other combusted tobacco products to minimally addictive or nonaddictive levels (*Federal Register* 2018; FDA 2022). This action would have significant impact on public health if promulgated. Additionally, the FDA has proposed product standards to prohibit menthol as a characterizing flavor in cigarettes and prohibit characterizing flavors (except tobacco) in cigars (*Federal Register* 2022a,b)—actions with strong potential to benefit public health.

Many people who now use commercial tobacco products have the least resources for, and face the greatest barriers to, quitting. It is critical to couple any regulatory efforts to reduce the appeal and addictiveness of commercial tobacco products with evidence-based, accessible support to help people quit their use of these products. To advance this goal, the U.S. Department of Health and Human Services (USDHHS) released the USDHHS Framework to Support and Accelerate Smoking Cessation (USDHHS 2024). This framework provides direction to enhance collaboration and coordination across USDHHS, drive further progress toward smoking cessation, and ensure equitable outcomes for all persons in America.

In addition to these critical efforts to address the use of combusted tobacco products—which are responsible for the overwhelming burden of tobacco-related death and disease in the United States—additional efforts are also underway to prevent and reduce youth access to and use of all tobacco products, including e-cigarettes. In June 2024, the Justice Department and FDA announced the creation of a federal multi-agency task force to combat the illegal distribution and sale of e-cigarettes (U.S. Department of Justice 2024). This report underscores the importance of such actions to curb harmful industry tactics, documenting how tobacco companies, including e-cigarette manufacturers, have attempted to circumvent national, state, and local tobacco prevention and control policies—such as by introducing products containing synthetic nicotine—and to use litigation to challenge policies proven to benefit the public's health.

Taken together, these initiatives are expected to meaningfully advance efforts to eliminate the burden of death and disease caused by commercial tobacco use. But to be successful, we must engage all sectors of society. Now is the time to close the gap in tobacco-related health disparities in the United States—for everyone.

Foreword

This decade, cigarette smoking among youth and adults reached the lowest levels ever recorded, representing a major public health milestone. Yet over 36 million U.S. adults (as of 2022) and 760,000 middle and high school students (as of 2024) smoke combustible tobacco products—including cigarettes, cigars, and other smoked products (Jamal et al. 2024; Centers for Disease Control and Prevention [CDC] 2024), and these products continue to have an enormous impact on health. E-cigarettes emerged in 2014 as the most commonly used tobacco product among U.S. youth and young adults and remain so in 2024, despite recent declines in use among high school students (Jamal et al. 2024). These and other noncombustible tobacco products such as nicotine pouches have the potential to undermine overall progress in preventing and reducing young people’s use of tobacco products.

This Surgeon General’s report documents the persistence of disparities in tobacco product use and exposure to secondhand tobacco smoke. As was true in the 1998 Surgeon General’s report—the first to exclusively examine racial and ethnic disparities in tobacco use—the present report finds that American Indian and Alaska Native people experience the highest prevalence of smoking of any racial and ethnic group. Even while overall youth tobacco product use declined between 2023 to 2024, use among American Indian and Alaska Native youth increased (Jamal et al. 2024). People who identify as lesbian, gay, bisexual, or transgender use tobacco products at substantially higher rates than those who identify as heterosexual or cisgender, respectively. Evidence in this report substantiates that menthol-flavored tobacco products increase the likelihood of tobacco initiation, addiction, and sustained use; are target marketed to certain population groups; and are disproportionately used by Black people, Native Hawaiian and Pacific Islander people, women, and people who identify as lesbian, gay, or bisexual. Disparities in exposure to secondhand tobacco smoke by race and by poverty level have persisted for at least three decades.

Preventing future generations from starting tobacco use and helping people quit is key to advancing the CDC’s mission to protect health and improve lives. Preventing and reducing tobacco use and tobacco-related health disparities not only reduces preventable death and disease caused by smoking but also enhances our protections against infectious disease and other disease risks. CDC engages in specific efforts to prevent and reduce tobacco use among groups disproportionately burdened by tobacco use through our expertise, response, and investments, including:

- Funding the National Tobacco Control Program (NTCP), which supports all 50 states, the District of Columbia, 28 tribes and tribal-serving organizations, and 8 territories and freely associated states. NTCP includes advancing health equity as one of four goals.
- Funding a consortium of national organizations (the National Networks) that works to reduce tobacco use and cancer incidence among minoritized racial and ethnic groups; people with lower socioeconomic status; people who identify as lesbian, gay, bisexual, transgender, queer or questioning, intersex, and other sexual orientation and gender identities (LGBTQI+); people with mental health conditions and substance use disorders; and various geographically defined populations. Operating since 1997, the National Networks consortium is the longest running federally funded initiative designed to address tobacco-related health disparities in diverse populations.
- Investing in the Good Health and Wellness in Indian Country (GHWIC) initiative that supports tribes, tribal organizations, and Tribal Epidemiology Centers across the United States through community-driven strategies to reduce tobacco use and other risk factors in tribal communities.

- Reaching people who smoke through *Tips From Former Smokers (Tips)*, the first federally funded national tobacco education campaign. The campaign features real stories from real people living with serious long-term health effects from smoking and exposure to secondhand tobacco smoke. *Tips* advertisements have featured people from multiple population groups who experience tobacco-related health disparities and include specific placement designed to reach people who experience tobacco-related health disparities.
- Supporting culturally competent and free quitline services in every state, the District of Columbia, Guam, and Puerto Rico; in multiple languages; and with unique services or outreach to groups who are facing tobacco-related health disparities.
- Funding and supporting a \$15 million initiative in 2023 to 8 communities to build a community of practice for state tobacco control programs and collaborators to develop and advance culturally competent interventions that (a) reduce initiation and use of menthol and other flavored tobacco products and (b) support and encourage sustained cessation among people who use menthol-flavored tobacco products.

CDC's support to states and communities for tobacco prevention and cessation is a vital component to advancing health across all communities. This support serves as a foundational component of comprehensive efforts from USDHHS to prevent and reduce the harms of commercial tobacco use and their impact on other health conditions. Working in partnership across sectors, we must sustain and build upon these important efforts to prevent and reduce tobacco use and tobacco-related health disparities, measure collective progress, and be jointly accountable for results.

Mandy Cohen, M.D., M.P.H.
 Director
 Centers for Disease Control and Prevention

Preface

from the Surgeon General

In 1964, the year of the first Surgeon General's report on smoking and health, nearly one in two U.S. adults smoked cigarettes. We've made remarkable progress since then. Today, about one in nine adults smokes cigarettes. Sixty years later, the elimination of all tobacco-related disease and death for our nation is a bold yet attainable goal.

To reach this ambitious public health goal, we must first acknowledge that progress has not been even. In his 1998 report, then U.S. Surgeon General Dr. David Satcher marked a historic step in recognizing the disproportionate burdens of tobacco-related disease, disability, and death among certain racial and ethnic groups (U.S. Department of Health and Human Services [USDHHS] 1998). Today, as we show in this report, cigarette smoking among men and women living in poverty is more than twice as common compared to those not living in poverty. American Indian and Alaska Native adults and youth have the highest prevalence of cigarette smoking by race and ethnicity in the United States, and among people who do not smoke, exposure to secondhand tobacco smoke remains disproportionately higher among Black people than among people in other racial and ethnic groups. Youth who identify as lesbian, gay, or bisexual have a prevalence of cigarette smoking that is nearly double that of their heterosexual peers. The gap in tobacco use between youth living in rural areas and those living in urban areas has widened since 1998. Across the country, income, race and ethnicity, level of education, sexual orientation and gender identity, geography, and mental health play a significant role in determining who uses tobacco and who suffers from its harmful health consequences.

Industry-designed tobacco products such as menthol cigarettes and flavored cigars also contribute to tobacco-related health disparities. Today, the tobacco industry continues to outspend tobacco control efforts by a factor of at least 12 to 1 annually with more than \$8.5 billion spent in tobacco-related advertising and promotion (Campaign for Tobacco-Free Kids 2023; Federal Trade Commission 2023a,b).

It doesn't have to be this way. We have the chance and the choice to free our society from tobacco industry influence and create a tobacco-free America for all. This Surgeon General's report—the 35th on smoking and health—summarizes key progress at national, state, and local levels toward eliminating tobacco-related disparities in the United States. Protecting public health for the whole population, including eliminating disparities, requires equitable access to evidence-based strategies, such as cessation programs and quitlines; mass media campaigns; and retail, product, and marketing regulations. There are additional concrete steps we can support today. A product standard that establishes a maximum nicotine yield to reduce the addictiveness of cigarettes and other combusted tobacco products could prevent more than 33 million people from starting to smoke, avert more than 8 million deaths, and result in an adult smoking prevalence of under 2% by year 2100 (Apelberg et al. 2018). A product standard to prohibit the sales and marketing of menthol cigarettes could avert up to 654,000 deaths over the next four decades (Levy et al. 2023). As of 2024, two states and nearly 200 U.S. communities prohibit the sale of menthol cigarettes and other flavored tobacco products, protecting about one-sixth of the population (Truth Initiative 2023; Campaign for Tobacco-Free Kids 2024). And, in the boldest step yet, two communities have chosen to eliminate the sale of all commercial tobacco products (City of Beverly Hills 2019; Action on Smoking & Health 2020; City of Manhattan Beach n.d.). Importantly and appropriately, these strategies focus on product manufacturing, distribution, and sales—and do not include a prohibition on individual consumer possession or use.

Today, cigarette smoking and exposure to secondhand tobacco smoke continue to cause nearly half a million deaths in the United States each year—nearly one in five of all deaths. It is difficult to adequately describe the profound human toll of these deaths on loved ones who are left behind. The financial consequences of tobacco-related death and disease are also staggering—nearly \$600 billion in healthcare spending and lost economic productivity in 2018 (Shrestha et al. 2022). More work remains

to close key gaps and finally eliminate the leading cause of preventable disease and death for Americans today. This report offers a vision for a tobacco-free future, focused on those who bear the greatest burden, and a call to action for all sectors of society to realize that vision.

As a father of two young children, few things are more important to me than ensuring they have the best possible chance of good health and a bright future. I want this for all our kids. I believe the vast majority of Americans feel the same about our sacred responsibility to protect our kids. Nine in 10 adults who smoke began smoking as youth (USDHHS 2012, 2014). Children should not have to worry about a multibillion-dollar commercial tobacco industry that profits at the expense of their health. The time is now to accelerate a whole-of-society effort to reach the tobacco endgame: a world in which zero lives are harmed by or lost to tobacco use. By driving down the appeal, availability, and addictiveness of tobacco products, we can make this more than just a possibility. We can make it a reality. Can we summon the moral courage as a nation to do so, for one another, for our children, and for generations to come?

Vivek H. Murthy, M.D., M.B.A.
Vice Admiral, U.S. Public Health Service
Surgeon General of the United States

Overview

In 1998, then Surgeon General David Satcher challenged “federal and state agencies as well as researchers and practitioners . . . to join . . . in the pursuit of effective strategies to prevent and control tobacco use among racial [and] ethnic groups” (U.S. Department of Health and Human Services [USDHHS] 1998, p. iv). Substantial progress toward reducing tobacco use at the population level has been made in the United States, as the prevalence of smoking has declined by more than 70% since 1965. But progress in the form of improvements in tobacco-related policies, regulations, programs, research, surveillance, evaluation, health education, health systems, and clinical care and practices has not resulted in equitable outcomes across all U.S. population groups (National Cancer Institute [NCI] 2017b).

This current Surgeon General’s report—the 35th on tobacco—summarizes information about the risk factors and patterns of commercial tobacco use and the progress toward eliminating tobacco-related health disparities in the United States. The report examines tobacco-related health disparities among minoritized racial, ethnic, sexual orientation, and gender identity groups; people with lower incomes; people with lower educational attainment; occupational groups, including workers in manual labor or service sector jobs; people with mental health conditions or substance use disorders; and people who reside in rural areas or the Midwest or South. Except where noted, the term *tobacco* in this report refers to commercial tobacco products and not to the sacred and traditional use of ceremonial tobacco by some American Indian communities (Unger et al. 2006; Keep It Sacred n.d.).

This report defines *tobacco-related health disparities*, based on Dr. Pebbles Fagan and colleagues’ (2004, p. 211) definition, as “differences in

- the patterns, prevention, and treatment of tobacco use;
- the risk, incidence, morbidity, mortality, and burden of tobacco-related illness that exist among specific population groups in the United States; and
- related differences in capacity and infrastructure, access to resources, and [exposure to secondhand tobacco smoke].”

Disparities can occur throughout the tobacco use continuum—from initiation to current tobacco use, to cessation-seeking behaviors, and ultimately to cessation—and

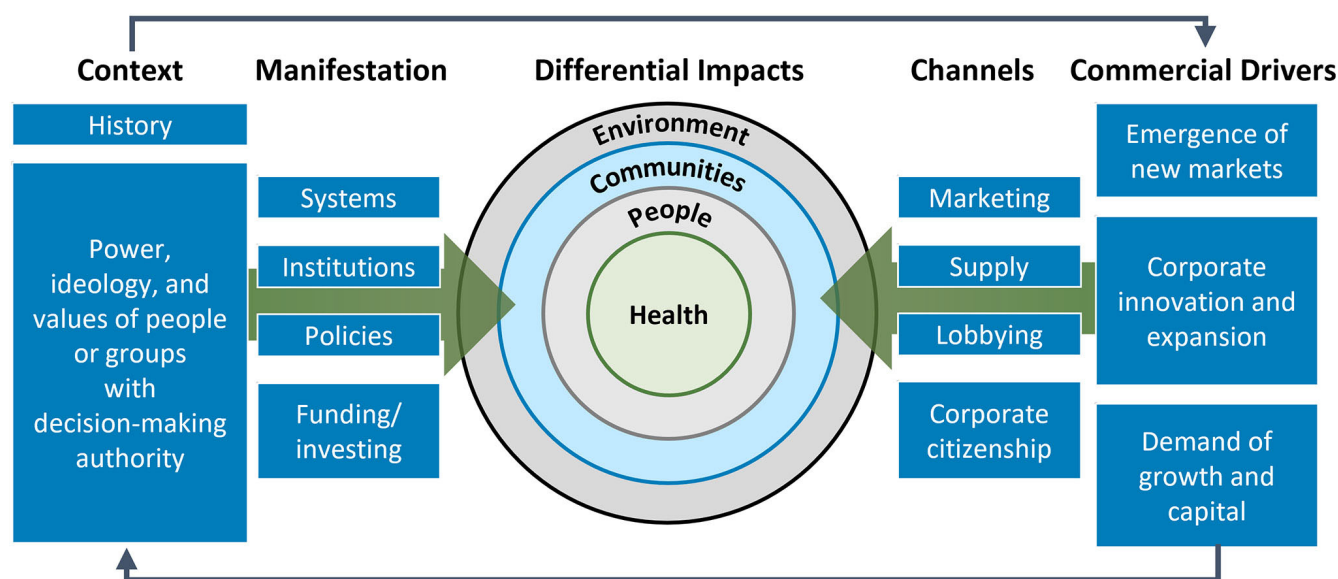
exist for numerous indicators (Fagan et al. 2004) including the number of cigarettes smoked per day, access to and utilization of screening for tobacco product use and treatment for dependence, rates of cessation and relapse, health consequences of tobacco use, exposure to tobacco marketing, and exposure to secondhand tobacco smoke.

Tobacco-related health disparities are not simply differences in the prevalence of tobacco product use between population groups. The definition extends to account for historical and societal factors that affect differential exposure to tobacco products and marketing and tobacco-related outcomes. Although many communities disproportionately burdened by tobacco-related health disparities have notable strengths—such as a social support infrastructure and social cohesion (Munford et al. 2020)—poverty, systemic discrimination, and other social determinants of poor health have resulted in cumulative and compounding disadvantages over the lifespan of community members (Smith et al. 1997; Graham et al. 2006; Mitchell et al. 2019; The Lancet Healthy Longevity 2021). These disadvantages include differences in access to and quality of healthcare and access to other vital conditions—such as education, transportation, healthy food, and safe jobs that provide living wages—that, if absent or compromised in quality or quantity, can lead to health disparities (Institute of Medicine 2003; NCI 2017b; Stepanikova and Oates 2017; Office of the Assistant Secretary of Health 2020).

This report serves dual purposes. First, it summarizes progress toward reducing commercial tobacco use, exposure to secondhand tobacco smoke, and tobacco-related disease among groups historically subjected to inequitable policies, practices, and conditions. Second, it provides a vision for eliminating tobacco-related health disparities while simultaneously advancing the goal of eliminating tobacco-related morbidity and mortality for all. Preparation of this report was guided by and responds to core principles emerging from the theory of social justice, including knowledge and understanding, equal respect, and sharing power (Powers and Faden 2019; Wallerstein et al. 2019). Social justice is concerned with securing well-being in all of its essential dimensions for everyone (Powers and Faden 2006).

Tobacco-related health disparities have multilayered influences that go beyond individual factors, including the tobacco industry’s aggressive, targeted marketing and promotion of flavored products, such as mentholated products. Chapters in this report that examine evidence about influences on tobacco product use and relevant

Figure ES.1 Dynamics that can predispose, enable, and reinforce health disparities



protective interventions are organized around a socioecological model. This model situates individual factors and behaviors within a multilevel framework of individual, community, or neighborhood environments and larger societal, systemic, and policy contexts (McLeroy et al. 1988; NCI 2017b). Central to the report's organization is the premise that individual use of commercial tobacco products is heavily influenced by the social determinants of health, defined as “conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life risks and outcomes to pursue healthy, thriving lives” (Office of Disease Prevention and Health Promotion n.d.).

This report builds on the socioecological model by acknowledging that multiple, multilevel social and commercial dynamics predispose, enable, and reinforce health disparities. Figure ES.1 illustrates how historical context, differential power structures, and the ideology and values of people and groups with decision-making authority manifest as systems, institutions, policies, and investment in research, interventions, and markets. Leveraging this model, the report concludes by identifying opportunities to advance commercial tobacco-related health equity—that is, fair, equitable, and just opportunities and conditions for all people to live a healthy life that is free from commercial tobacco-related disease, disability, and death (Centers for Disease Control and Prevention [CDC] 2015).

Major Conclusions of the Report

1. Despite strong progress in reducing tobacco use at the population level, disparities in use persist by race and ethnicity, level of income, level of education, sexual orientation, gender identity, type of occupation, geography, and behavioral health status. Exposure to secondhand tobacco smoke remains disproportionately higher among Black people than among people in other racial and ethnic groups, youth than among adults, and people from lower socioeconomic backgrounds than among those from higher socioeconomic backgrounds.
2. Tobacco-related health disparities are a social injustice, in addition to an economic and health burden. Addressing disparities requires reflection on the complex history of the commercialization of tobacco and both past and present-day experiences of racism, discrimination, and targeted marketing by the tobacco industry.
3. Social, structural, and commercial determinants of health—such as persistent poverty and inequitable economic and social conditions—lead to inequitable

opportunities for living a life free from tobacco-related death and disease. Racism, discrimination, and targeted marketing by the tobacco industry; geographic disparities in evidence-based policy protections; preemptive laws that thwart communities from protecting their residents' health and safety; and financial and other structural barriers to accessing cessation treatments also drive tobacco-related health disparities.

4. The tobacco industry has designed, engineered, and marketed menthol cigarettes and other tobacco products that deliver multisensory flavor experiences which increase the likelihood of tobacco initiation, addiction, and sustained use. Policies that restrict the availability of menthol cigarettes can reduce smoking initiation and prevalence among adolescents, young adults, Black people, and other population groups that have disproportionately higher use of menthol cigarettes.
5. For decades, the tobacco industry has targeted its products and marketing to specific groups, including through concentrated marketing in neighborhoods with greater percentages of Black people, Hispanic people, and residents with lower incomes. Tobacco companies employ multiple tactics to undermine tobacco prevention and control efforts and enhance their corporate image.
6. Cigarette smoking remains a major cause of death and disease—including cancer, cardiovascular disease, and chronic obstructive pulmonary disease—among all racial and ethnic groups. More than 490,000 deaths attributable to cigarette smoking and exposure to secondhand tobacco smoke are estimated to occur in the United States each year—about one in five of all deaths in the United States. This includes more than 473,000 deaths attributable to cigarette smoking and more than 19,000 deaths attributable to exposure to secondhand tobacco smoke.
7. Each year, more than 50,000 Black adults, 15,000 Hispanic adults, and 400,000 White adults are estimated to die from causes attributable to cigarette smoking. Despite large absolute differences in the numbers of smoking-attributable deaths by race and ethnicity, smoking accounts for a similar proportion of deaths among non-Hispanic Black (18%) and non-Hispanic White (20%) people and for approximately 10% of deaths among Hispanic people.
8. Data from surveillance and intervention research are limited for many groups known to be at high risk for tobacco use, exposure to secondhand tobacco smoke, and targeted marketing by the tobacco industry. While protecting recent gains in measurement, further efforts are warranted to assess structural and social determinants of health across the lifespan, disaggregate data, oversample disparate populations, and increase understanding of the impact of interventions on tobacco-related health disparities.
9. Endgame efforts to eliminate tobacco-related disease, disability, and death should create opportunities and conditions for all people to live healthy lives that are free from commercial tobacco. Interventions designed to reduce the use of tobacco products and the influences of the tobacco industry on society should accompany efforts to remove the underlying social, structural, commercial, and political drivers of health inequities.
10. In addition to social and structural interventions, a comprehensive and multilevel effort toward health equity must include a combination of complementary approaches to reduce the affordability, accessibility, appeal, and addictiveness of tobacco products; eliminate exposure to secondhand tobacco smoke; conduct high-impact media campaigns; and promote barrier-free access to cessation support with broad reach to disparate populations. Strategies should be implemented equitably and with fidelity in all jurisdictions.

Chapter Summaries and Conclusions

Chapter 1. Introduction, Overview, Conclusions, and History of Tobacco-Related Health Disparities

Chapter 1 introduces the report and presents its major conclusions and the conclusions from each chapter.

The chapter describes the report's purposes, introduces the report's underlying framework, and defines tobacco-related health disparities. The report's organization, process of preparation, and scientific basis for conclusions are described. Additionally, terminology used in the report about tobacco products, population groups, and other key concepts are defined in the glossary of terms. The final

section, with accompanying chapter conclusions, provides an overview of the history of tobacco-related health disparities in the United States and offers context for understanding patterns of tobacco-related health disparities in the changing landscape of commercial tobacco prevention and control.

Conclusions

1. The complex and centuries-long historical context of tobacco commercialization is a foundational driver of present-day tobacco-related health disparities.
2. For decades, tobacco-related health disparities have not received the necessary investments of research, time, and resources.
3. Poverty, racism, and discrimination are important and long-standing social and structural determinants that marginalize minoritized racial, ethnic, gender identity, and sexual orientation groups and provide the context in which tobacco-related health disparities have occurred for many decades.
4. Not all vulnerable groups are disparate groups. A disparate group is not only vulnerable to tobacco use but may also face social determinants of poor health (e.g., poverty), cumulative indicators of social disadvantage across the lifespan, and historical injustices (e.g., discrimination, colonization).
5. Tobacco industry marketing has historically targeted minoritized racial and ethnic groups and minoritized sexual orientation and gender identity groups.
6. States and localities have helped to build momentum to enact and implement policies that prohibit the sale of menthol cigarettes and other flavored tobacco products.

Chapter 2. Disparities in Tobacco Use and Exposure to Secondhand Tobacco Smoke

Chapter 2 presents patterns and trends in commercial tobacco use and exposure to secondhand tobacco smoke by various sociodemographic characteristics. It documents substantial progress in reducing tobacco use at the population level. However, many of the racial and ethnic disparities in tobacco use described in the 1998 Surgeon General's report persist today (Figure ES.2), and disparities in tobacco product use continue to be

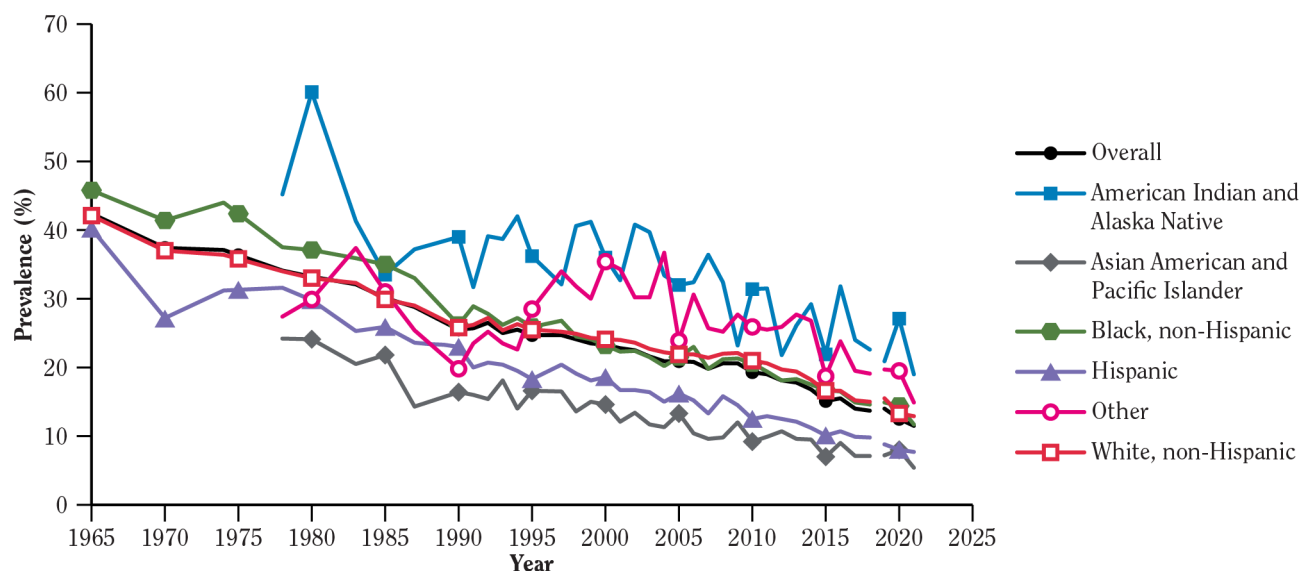
observable by level of income (Figure ES.3), level of education, sexual orientation and gender identity, type of occupation, geography, and behavioral health status.

Continued action should be taken to address the disparities described in this chapter. Recent gains in measurement have permitted better understanding of patterns among some population groups, but data from surveillance and intervention research remain limited for many groups known to be at high risk for tobacco use, exposure to secondhand tobacco smoke, and targeted marketing by the tobacco industry. Further efforts are warranted to assess structural and social determinants of health across the lifespan, disaggregate data, and oversample disparate populations. Actions should go beyond estimating population-level results to include examinations of the effects of strategies for reducing tobacco-related disparities and advancing health equity.

Conclusions

1. Racial and ethnic disparities in cigarette smoking have persisted since 2000, with prevalence remaining highest among American Indian and Alaska Native adults. Frequency, type, and amount of tobacco use; long-term cessation success; and patterns of use across the life course also differ by race and ethnicity. Within aggregate racial and ethnic groupings, disparities in tobacco use vary by ethnic group, nativity, and acculturation in the United States.
2. Disparities in cigarette smoking by educational attainment have notably widened in the past 50 years; the prevalence of smoking is substantially higher among people without college diplomas than it is among those with college diplomas.
3. The prevalence of tobacco use is higher among adults living in poverty than it is among adults living at or above the poverty level. Disparities in cigarette smoking by poverty status have persisted over four decades, and these differences remain when looking at the prevalence of smoking by poverty status and other demographic characteristics, including sex, race, ethnicity, and sexual orientation.
4. The prevalence of tobacco use is higher overall among youth and adults who identify as gay, lesbian, and bisexual than it is among youth and adults who identify as heterosexual, but the prevalence of tobacco use varies by different populations, such as gay, lesbian, or bisexual populations, and by specific tobacco products. Increased availability and improvements in the measures to assess sexual orientation and gender identity in federal, state, and

Figure ES.2 Trends in the prevalence of current cigarette smoking^a among adults, 18 years of age and older, by race and ethnicity;^{b,c} National Health Interview Survey (NHIS) 1965–2021,^{d,e} United States



Source: NHIS, National Center for Health Statistics, public use data, 1965–2021.

^aFor NHIS survey years 1965–1991, people who currently smoked included adults who reported having smoked 100 or more cigarettes in their lifetimes and specified that they currently smoked. Since 1992, people who currently smoked included adults who reported having smoked at least 100 cigarettes in their lifetimes and specified that they currently smoked “every day” or “some days.”

^bAll other categories, not necessarily Hispanic (NHIS Survey did not code for Hispanic as a separate demographic from 1965 to 1974).

^cBeginning with the 1999 NHIS, “Asian American and Pacific Islander” was assessed separately as “Asian” and “Native Hawaiian and Other Pacific Islander.” For purposes of trends, these categories are combined here.

^dFor the “Overall” category, data for White, non-Hispanic; Black, non-Hispanic, and Hispanic people were not reported for 1966–1969, 1971–1973, 1975–1977, 1979, 1981, 1982, 1984, 1986, 1988, 1989, and 1996. For the specific races/ethnicities, data were not reported for people who were American Indian and Alaska Native and Asian American and Pacific Islander for 1965–1977, 1979, 1981, 1982, 1984, 1986, 1988, 1989, and 1996.

^eThe NHIS underwent a redesign in 2019. Because of the changes in weighting and design methodology, direct comparisons between estimates beginning in 2019 and earlier years should be made with caution because the effects of these changes have not been fully evaluated yet. This change is represented by a break in the trend lines between 2018 and 2019.

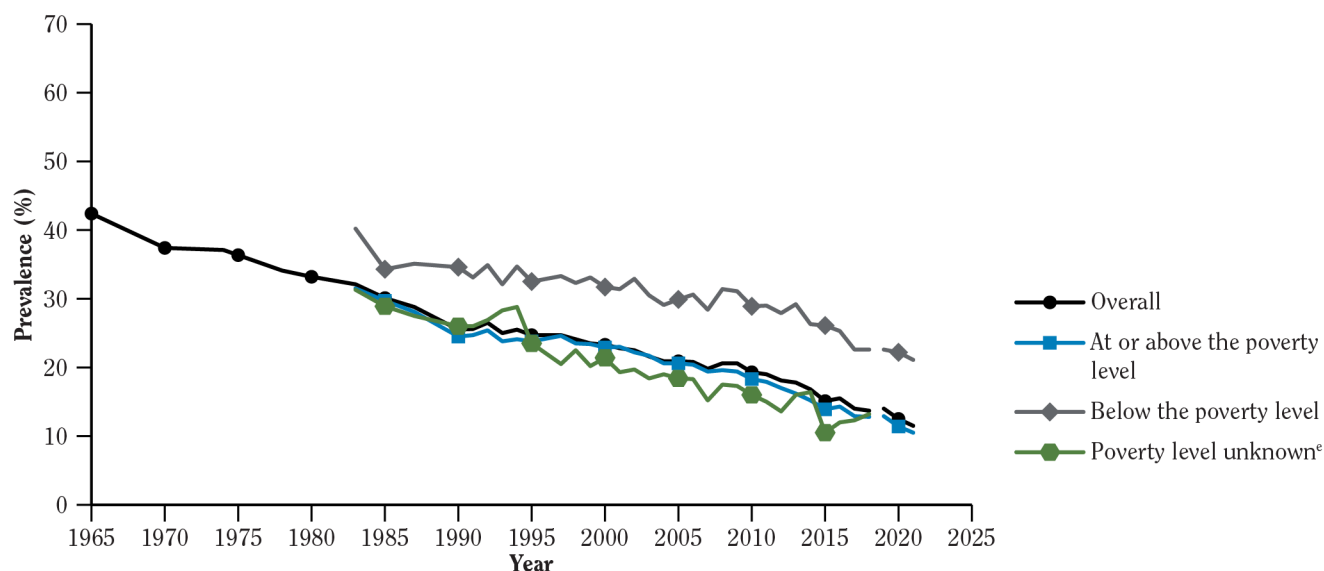
local surveillance systems will assist efforts to better address disparities among these populations.

5. The prevalence of ever and current smoking is higher among manual labor and service workers than it is among workers in other occupational groups. Conversely, the prevalence of cigarette smoking cessation is lower among manual labor and service workers than it is among workers in other occupational groups. Accommodation and food service, construction, and mining are the occupation groups with the highest prevalence of current cigarette smoking. These settings may warrant greater support for smoking cessation interventions.
6. The prevalence of tobacco use is generally higher in the South and Midwest than it is in other regions

of the United States. Additionally, the prevalence of cigarette and smokeless tobacco use is higher among people living in rural areas than it is among people living in urban areas.

7. People living with any mental health condition or substance use disorder are at increased risk of tobacco use. The intersection of mental health, substance use, and sociodemographic characteristics—such as age, sex, race and ethnicity, sexual orientation, and socioeconomic status—adds to the risk of tobacco use.
8. Despite progress in the adoption of smokefree policies, the prevalence of exposure to secondhand tobacco smoke remains disproportionately high among (a) children compared with adults, (b) nonsmoking African American youth and adults compared with

Figure ES.3 Trends in the prevalence of current cigarette smoking^a among adults, 18 years of age and older, by poverty status;^b National Health Interview Survey 1965–2021,^{c,d} United States



Source: NHIS, National Center for Health Statistics, public use data, 1965–2021.

^aPeople who reported having smoked 100 or more cigarettes during their lifetime and who, at the time of the interview, reported smoking “every day” or “some days.”

^bBased on self-reported family income and poverty thresholds published by the U.S. Census Bureau (n.d.).

^cFor the *Overall* category, data for poverty status were not reported for 1966–1969, 1971–1973, 1975–1977, 1979, 1981, 1982, 1984, 1986, 1988, 1989, and 1996. Data on the specific levels of poverty status were collected starting in 1983. Thereafter, data on the specific levels of poverty status were not reported for 1984, 1986, 1988, 1989, and 1996.

^dThe NHIS underwent a redesign in 2019. Because of the changes in weighting and design methodology, direct comparisons between estimates beginning in 2019 and earlier years should be made with caution because the effects of these changes have not been fully evaluated yet. This change is represented by a break in the trend lines between 2018 and 2019.

^eData for *poverty level unknown* are not available for 2019–2021.

nonsmoking White or Mexican American youth and adults, (c) families in lower income groups compared with families in higher income groups, and (d) adults without college diplomas compared with adults with college diplomas. The magnitude of these disparities has increased since 2000.

Chapter 3. Physiological, Chemosensory, and Genetic Influences of Flavors and Menthol in Tobacco Products

Chapter 3 summarizes the current knowledge about the chemosensory and physiological mechanisms through which menthol and other flavor chemicals in tobacco products act, and the genetic factors that may influence these mechanisms and may contribute to flavored tobacco product use disparities. The use of flavored tobacco

products can be explained by a range of factors, including prior conditioning to prefer certain flavors, differences in taste status and genetics, and targeted marketing by the tobacco industry. The review in this chapter, in conjunction with prevalence data and marketing data presented elsewhere in the report, provides a greater understanding of why certain groups of people may be more likely to use flavored tobacco products than other groups and how this use influences tobacco-related health disparities along the tobacco use continuum.

Flavor includes the entirety of sensations perceived when one eats food, drinks a beverage, or consumes a tobacco product—including taste, smell, and the physical sensations one feels in the mouth, such as hot, cold, tingling, crispness, fluidity, or oiliness. The tobacco industry adds flavors, including menthol, to its products; flavors help to increase the appeal of tobacco products among individuals and groups with higher aversions to the effects of tobacco smoke (Figure ES.4). Industry documents demonstrate that tobacco companies have known for decades that

Figure ES.4 Examples of flavored tobacco products



Source: Centers for Disease Control and Prevention.

the sensory (e.g., cooling, numbing) properties of menthol play a central role in increasing the appeal of smoking.

The emerging science on the role of genetics in flavor experiences should be understood from a multidisciplinary perspective and in context with the multilevel factors influencing tobacco-related health disparities across the lifespan and across the tobacco use continuum (NCI 2017b, Figure 1.1, p. 8). These multilevel factors include targeted marketing and tobacco product engineering tactics by the tobacco industry, differential pricing, and marketing of flavored tobacco products in specific neighborhoods, structural and systemic racism and discrimination, policies, interpersonal relationships, stress, and societal and cultural influences.

Understanding flavor chemicals and their multisensory effects has important implications for the regulation of tobacco products. Many chemical additives that have been identified in tobacco products are devoid or nearly devoid of taste and/or odor but can elicit sensory effects such as cooling. Efforts to reduce the appeal of tobacco products could maximize public health benefits and minimize risks by considering odorless flavorants (such as sweeteners), synthetic cooling agents, and the pharmacologic actions of flavorants and chemical additives. Science-based regulations of flavorants and other chemical additives that make tobacco products more palatable to new and existing consumers are important for protecting the public's health.

Conclusions

1. The evidence is sufficient to infer that some natural and synthetic chemicals and flavorants that are added to tobacco products have pharmacological effects; act as cues and reinforcers; and, in some cases, act centrally to modulate the brain reward circuitry.
2. Natural and synthetic chemicals and flavorants added to tobacco products elicit multisensory experiences, including odorant (olfactory) effects; basic taste perceptions (e.g., sweet, bitter); and somatosensory effects, such as cooling.
3. Sweeteners are used in tobacco products to mask aversive tastes and have been detected at high levels in certain oral tobacco products. Sweet taste appeals more to young people than it does to older people.
4. Smoking status; use of flavored tobacco products; and related disparities by age, gender, and race and ethnicity result from multilevel influences. Targeted marketing, societal and cultural factors, and genetic variations that affect underlying chemosensory and physiological mechanisms result in differences in the appeal of and ability to perceive certain flavor qualities, such as bitter taste.

5. Determinations that flavorants are “generally recognized as safe” for use in foods are not applicable to the inhalation of tobacco products. These ingredients, when inhaled, may be directly toxic to the lungs or could result in higher absorption of toxicants. Commonly used natural and synthetic chemicals and flavorants may be safe to ingest in foods but might be harmful when inhaled.
6. Animal studies suggest that menthol and sweeteners influence nicotine uptake. Menthol and other flavorants, such as farnesene and farnesol, directly affect the dopaminergic reward circuitry and may potentiate the addictive effects of nicotine.
7. Natural and synthetic cooling agents that have been found in some tobacco products (a) act on different parts of the oral cavity and the respiratory system to enhance the experience of smoking or use of other tobacco products and (b) can mimic the pharmacological and somatosensory effects of menthol but may not have a distinguishing taste or odor. Cooling agents, even those without a taste or odor, have the potential to increase the appeal of tobacco products, facilitate their use, and contribute to tobacco-related health disparities. Comprehensive flavor policies that account for these agents will better protect public health.
8. Genetic studies provide suggestive evidence that variations in genes involved in sensory mechanisms and taste perception may influence menthol smoking in youth, women, and some minoritized racial and ethnic groups. The emerging science on the role of genes in flavor experiences should be understood in context with multilevel commercial, societal, and cultural factors that influence tobacco-related health disparities.

Chapter 4. Social and Environmental Influences on Tobacco-Related Health Disparities

Chapter 4 describes the evidence for many of the multifaceted influences on tobacco-related health disparities that go beyond individual factors. Specifically, Chapter 4 examines the social and environmental factors that influence tobacco-related health disparities by race and ethnicity, sexual orientation and gender identity, socioeconomic status, age, sex, geographic location, and occupation. The chapter leverages a causal loop diagram and

theoretical model that visualizes the complex and interconnected structural, environmental, commercial, individual, and root causes of smoking that lead to tobacco-related health disparities (Mills et al. 2023).

Early life experiences and chronic stressors, such as discrimination, can influence the tobacco use continuum, including initiation, current use and the frequency and intensity of use; quitting and relapse, exposure to second-hand tobacco smoke, and ultimately morbidity and mortality. Social, environmental, and tobacco industry influences can affect patterns of tobacco product use over time at the individual level and at the societal level. Social influences explored in the chapter include peer and family influences and their interactions, religion, discrimination experiences, and acculturation. Environmental influences reviewed include homes, schools, work environments, and healthcare settings.

Conclusions

1. Tobacco use among peer groups increases the likelihood of smoking initiation for White, Black, and Hispanic adolescents.
2. For adolescents, participating in extracurricular activities or feeling a sense of belonging at school can reduce the likelihood of cigarette smoking initiation. However, Black and Hispanic adolescents report lower school connectedness than White adolescents, which may increase the likelihood of smoking initiation.
3. As Asian American and Hispanic or Latino immigrants undergo acculturation to life in the United States, there is a greater risk of cigarette smoking among women and a reduced risk of smoking among men.
4. Inequitable smokefree protections for people living in multi-unit housing contribute to disparities in exposure to secondhand tobacco smoke.
5. Although smokefree policies in the workplace can reduce the use of tobacco products and encourage quitting, not everyone is evenly protected by these policies. Work-related stress and exposure to occupational hazards are linked to smoking initiation and difficulty quitting smoking.
6. Disparities in utilization of evidence-based cessation treatments exist, including by race and ethnicity, socioeconomic status, and health insurance status. Disparities persist in having received advice to quit smoking from a healthcare professional, particularly among minoritized racial and ethnic groups and lower socioeconomic status groups.

Chapter 5. Tobacco Industry Influences on Tobacco-Related Health Disparities

The tobacco industry strongly influences the promotion and use of tobacco products. Chapter 5 draws on the Host-Agent-Vector-Environment (HAVE) model to examine influences on tobacco use, with a particular focus on influences from the tobacco industry—or the “vector” (Giovino et al. 2009; Samet and Wipfli 2013; Hyland et al. 2017; McKee and Stuckler 2018; Garcia-Cazarin et al. 2020). The HAVE model, which is based on an epidemiological infectious disease perspective, situates individuals as the “host;” tobacco products as the “agent;” the tobacco industry as the “vector;” and the broader context, including policies, as the “environment.” As the vector, the tobacco industry influences individual (or host) tobacco use behaviors through the development and marketing of tobacco products (agent) and by taking actions—including social, community, legal, and political tactics (e.g., counteracting tobacco control policy or programmatic efforts)—that may influence the broader environment (Cruz 2009; Farrelly 2009; Giovino et al. 2009; Garcia-Cazarin et al. 2020).

Chapter 5 explores disparities through the lens of tobacco retailing and the marketing and promotion of tobacco products through new and traditional media. It reviews the influences of the tobacco retail environment, including relationships between the density of tobacco retailers, race and ethnicity, and income; the consumer or store environment; and disparities in violations of retail regulations. Next, the chapter explores tobacco product marketing on social, digital, and mass media. Finally, it considers tactics by the tobacco industry to counter tobacco prevention and control efforts, including political, legal, economic, corporate social responsibility, and community tactics that specifically target Black or African American, Hispanic or Latino, American Indian and Alaska Native, and Asian American and Pacific Islander communities; minoritized sexual orientation and gender identity groups; rural communities; people experiencing homelessness, and people with behavioral health conditions. The chapter also includes a suite of contemporary images that exemplify tobacco companies’ targeted marketing to specific populations, grassroots lobbying efforts to oppose tobacco prevention and control initiatives, community engagement tactics, and advertising that misappropriates cultures and promotes harmful stereotypes.

Conclusions

1. Tobacco marketing in general and marketing for menthol cigarettes in particular are more prevalent

in neighborhoods with greater percentages of African American residents or of residents with lower incomes compared with neighborhoods with lower percentages of African American residents or of residents with higher incomes.

2. Communities with high concentrations of people from diverse racial and ethnic population groups, residents with lower income, and adolescents tend to have greater availability of cheaper tobacco products, including menthol cigarettes, that are widely available at local retailers.
3. Members of the LGBTQI+ community and people with lower socioeconomic status are more likely to receive and use a coupon or price discount code to purchase tobacco products compared with their heterosexual and cisgender counterparts and those of higher socioeconomic status. Use of coupons appears to increase the likelihood of tobacco initiation among people who have never used tobacco and to reduce the likelihood of quitting among people who use tobacco.
4. Seismic shifts in the media environment have produced rapid changes in marketing strategies for commercial tobacco. Tactics such as influencer marketing that allow more focused and segmented targeting have the potential to exacerbate existing disparities in tobacco initiation and use.
5. The tobacco industry continues to employ political, legal, economic, corporate social responsibility, and community tactics to enhance its image among the communities it targets in marketing—including minoritized racial and ethnic groups and sexual orientation and gender identity groups that are subject to tobacco-related health disparities—and/or to counter efforts that would benefit public health and advance health equity.

Chapter 6. Disparities in Smoking-Caused Disease Outcomes and Smoking-Attributable Mortality

Chapter 6 describes disparities in disease outcomes and mortality due to smoking-caused diseases—including cancer, chronic obstructive pulmonary disease, and cardiovascular disease—as well as disparities in smoking- and secondhand-tobacco-smoke-attributable mortality, using various analytic and modeling techniques. The

chapter begins by providing a brief overview of differences in select smoking-related health outcomes by sociodemographic characteristics.

Additionally, mathematical modeling is used to conduct a comprehensive analysis of recent trends and disparities in smoking-attributable mortality by sex and age, race and ethnicity, level of educational attainment, geographic region, and rural or urban residency. Data from multiple sources are used to estimate the number of deaths caused by cigarette smoking and exposure to secondhand tobacco smoke in the United States overall and by race and ethnicity. Most smoking-attributable deaths occur when people are in their late 60s and 70s—ages that are not attainable for people who have died early due to competing causes (Jha et al. 2013). Relative risks are a function of the mortality from smoking and nonsmoking-related causes, such that some population groups with higher competing causes of death may have lower relative risks from current smoking (Cunningham et al. 2017; Jeon et al. 2023). The chapter also reviews the findings from various simulation models, which are important tools to project the potential effects of large-scale interventions on smoking-attributable morbidity and mortality and on disparities in tobacco use. The chapter concludes with a discussion about gaps in data and research that can be used to further assess the health impacts of tobacco-related health disparities.

Conclusions

1. Smoking is the primary cause of lung and bronchus cancers—the leading cause of cancer death in the United States. Recent declines in the lung and bronchus cancer death rate have occurred among both men and women. Among men, the death rate for lung and bronchus cancer is highest among Black men, followed by White men, American Indian and Alaska Native men, Asian and Pacific Islander men, and Hispanic men. Among women, the death rate for lung and bronchus cancer is highest among White women, followed by American Indian and Alaska Native women, Black women, Asian and Pacific Islander women, and Hispanic women.
2. Cigarette smoking is a primary cause of COPD and the primary risk factor for the worsening of COPD. The overall prevalence of COPD is highest among American Indian and Alaska Native adults and lowest among Asian adults. There is a clear socioeconomic gradient for COPD prevalence and mortality, with higher prevalence and mortality occurring among people with lower income and lower educational attainment.
3. Cigarette smoking and exposure to secondhand tobacco smoke have adverse effects on overall cardiovascular health and cause cardiovascular disease. Among men, the prevalence of cardiovascular disease in 2017–2020 was highest among non-Hispanic Black (11.3%) and non-Hispanic White (11.3%) men, followed by Hispanic (8.7%) and non-Hispanic Asian (6.9%) men. Among women, the prevalence of cardiovascular disease was highest among non-Hispanic Black women (11.1%), followed by non-Hispanic White (9.2%), Hispanic (8.4%), and non-Hispanic Asian (4.9%) women.
4. From 2010 to 2018, an estimated 4.26 million smoking-attributable deaths occurred among non-Hispanic Black, Hispanic, and non-Hispanic White adults in the United States. Among those groups, at least 473,000 cigarette smoking-attributable deaths are estimated to have occurred each year. The number of smoking-attributable deaths is likely underestimated due to insufficient data among additional racial and ethnic groups.
5. Smoking causes about 1 in 5 deaths among non-Hispanic White and non-Hispanic Black people and about 1 in 10 deaths among Hispanic people.
6. An estimated 19,600 deaths attributable to exposure to secondhand tobacco smoke occurred among non-smoking people in the United States based on data from 2019 and 2020. Deaths attributable to exposure to secondhand tobacco smoke have declined considerably since 2006, but this is largely due to the declines in death observed among non-Hispanic White people. Declines occurred at lower rates during this period among non-Hispanic Black, Hispanic, and other non-Hispanic racial groups.
7. Simulation models can be useful tools to project the potential effects of large-scale interventions on smoking-attributable morbidity and mortality and on disparities in tobacco use across various populations. Future modeling efforts would benefit from (a) more detailed data on patterns of smoking and the use of noncigarette tobacco products; and (b) more robust data for racial and ethnic groups; minoritized sexual orientation and gender identity groups; urban and rural communities; and other focused populations.
8. Aggregation of data on tobacco product use, disease incidence, and mortality may mask disparities within population groups, such as within Asian

American and Native Hawaiian and Other Pacific Islander groups. Disaggregation of data reporting and oversampling among disparate populations will foster greater understanding of tobacco-related health disparities.

Chapter 7. Promising Interventions to Reduce Tobacco-Related Health Disparities

Multiple tobacco control policies and practices—implemented at the federal, tribal, territorial, state, community, organizational, interpersonal, and individual levels—can reduce tobacco use and exposure to secondhand tobacco smoke, increase access to tobacco cessation treatment, and increase successful cessation. Chapter 7 summarizes evidence on those policies and practices that can, or have the potential to, reduce tobacco use and exposure to secondhand tobacco smoke and increase cessation among priority populations experiencing disparities in the United States. The extent to which certain types of interventions close gaps in the disparities in tobacco-related health *outcomes* is an important area for future research.

Many of the interventions reviewed in this chapter are strategies that have been proven to prevent or reduce tobacco use in the general population (USDHHS 2014). However, these strategies have not been equitably implemented (National Cancer Institute 2017a) and continued monitoring, evaluation, and research regarding the impact of these interventions on specific populations experiencing health disparities remain important. In some cases, it may be appropriate to tailor or focus programmatic activities to better address tobacco-related health disparities among disparate population groups. Rigorous evaluation of such programs is critical to determine their effectiveness and to identify the most effective implementation strategies.

The effectiveness of some interventions to reduce disparities may vary based on the population demographics of the jurisdiction, the characteristics or type of community (e.g., rural, urban, or suburban); legal and political landscape; and other factors. Combining complementary strategies, including those with broad reach and impact and those with specific reach to priority populations, may have the greatest potential to maximize the impact on public health. Such strategies include (a) ensuring that effective whole-population interventions, such as price increases and barrier-free cessation services, equitably reach population groups with the greatest needs and (b) complementing those where necessary with focused interventions for population groups that may still be experiencing disparities.

Most adults who use tobacco products start doing so during adolescence (USDHHS 2012), regardless of such characteristics as race or ethnicity, sexual orientation, geographic location, or behavioral health condition. Given this and the rapidly changing tobacco product market in the United States, continued research is needed to further inform future tobacco prevention and control efforts and to understand how policies and programs aimed at reducing youth initiation impact different population groups.

Many people who smoke have the least resources and therefore face substantial obstacles to quitting. Tobacco-related disparities can be addressed by increasing access to comprehensive and barrier-free tobacco cessation services and by eliminating social and structural barriers to obtaining cessation treatment services. Availability, accessibility, and promotion of cessation services are critical to maximizing the impact and equitable implementation of all tobacco control policies.

The evidence presented in Chapter 7 demonstrates that the tobacco industry has successfully lobbied in favor of preemption as a policy tool to block or override local, and sometimes state, tobacco control policies aimed at protecting public health. Community engagement—and authority—is necessary to achieve and accelerate progress in tobacco-related health equity.

Conclusions

1. Preemption at the federal and state levels can pose a significant obstacle for pursuing innovative policies to advance tobacco-related health equity and limits the ability of population groups that experience disparities to benefit from proven tobacco control interventions.
2. The evidence is sufficient to infer that comprehensive smokefree laws that apply to all indoor areas of public places and workplaces, including casinos, as well as smokefree policies for multi-unit housing would reduce disparities in smokefree protections and reduce exposure to secondhand tobacco smoke if fully and equitably adopted, implemented, and enforced.
3. Reducing nicotine in cigarettes and other combustible tobacco products to minimally addictive or nonaddictive levels should reduce tobacco use among many population groups experiencing tobacco-related disparities.
4. The evidence is sufficient to infer that policies that prohibit the sale of flavored tobacco products reduce sales of tobacco products and can reduce tobacco use. Eliminating the sale of flavored tobacco products, including flavored cigars, should also reduce

tobacco use among groups experiencing disparities in tobacco use, especially if the policies are comprehensive and equitably implemented.

5. The evidence is sufficient to infer that policies that prohibit the sale of menthol cigarettes reduce the sale of cigarettes and increase smoking cessation. Given the disproportionate burden of menthol cigarette use among some population groups, removing menthol cigarettes from the marketplace should also reduce disparities in tobacco initiation, nicotine dependence, cessation success, and tobacco-related health outcomes, especially if policies are comprehensive and equitably implemented.
6. Policies that regulate the location of and reduce the number of tobacco retailers in neighborhoods with a high proportion of lower income, Black, or Hispanic people could help reduce disparities in retailer density, exposure to tobacco product advertisements and displays, and sales and use of tobacco products.
7. The evidence is sufficient to conclude that increases in tobacco product prices will reduce tobacco use to a greater extent among people of lower SES than they do for people of higher SES. Youth are especially price-sensitive, and price increases could help reduce tobacco use among people from all population groups at the age when they are most likely to begin smoking.
8. The evidence is sufficient to infer that quitlines can increase access to cessation treatments among population groups affected by tobacco-related disparities, particularly when quitline promotion and services are developed, delivered, and evaluated with attention to their reach and relevance to these groups.
9. The evidence is sufficient to infer that mass media countermarketing campaigns are effective at increasing quit attempts among many population groups affected by tobacco-related disparities, particularly when designed and delivered with attention to reach and relevance to these groups. However, it remains unclear if campaigns designed specifically for a single focus population are more or less effective at decreasing disparities in initiation or cessation than campaigns designed for multiple focus populations.
10. Cultural tailoring of cessation interventions (versus nontailored interventions) shows promise for increasing quitting readiness and quit attempts

among African American adults and for increasing successful quitting among Asian American adults, though tailoring may not increase long-term cessation among African American adults.

11. The evidence is suggestive, but not sufficient, to conclude that incentives paired with cessation treatments increase smoking cessation among populations with lower socioeconomic status.
12. As additional research is undertaken to advance understanding of the impacts of tobacco control interventions—including cessation, media campaign, and policy interventions—on health disparities, extra considerations should be taken to ensure that such research is designed to allow for the examination of the impact of interventions among populations experiencing health disparities (e.g., ensuring enrollment of diverse populations, oversampling of population groups, attention to sample recruitment and retention, and community-engaged participatory research approaches).

Chapter 8. A Vision for Eliminating Commercial Tobacco-Related Health Disparities

The 50th anniversary Surgeon General's report published in 2014 posed the question, "As future generations look back on our current actions and knowledge of the tobacco epidemic, will current efforts show the commitment to public health and social justice set forth in our national plans and objectives?" (USDHHS 2014, p. 875). Chapter 8 establishes a vision and call to action for all to commit to advancing tobacco-related health equity. Supporting communities that are disproportionately burdened by commercial tobacco use involves (1) acknowledging the historical context of tobacco-related health disparities; (2) removing the underlying causes of tobacco-related health disparities, including structural racism and discrimination and other social and structural factors that influence this burden; (3) ensuring that populations subject to targeted marketing by commercial tobacco companies and to tobacco-related health disparities are not blamed for these disparities or burdened with the responsibility to ameliorate them; and (4) undertaking a "both/and" approach to addressing tobacco-related disparities by advancing tobacco-specific interventions and social and structural interventions. Chapter 8 reflects on the past, present, and future of tobacco-related health disparities and provides present-day and historic examples of

targeted community engagement tactics. This report reinforces the evidence that long-standing, core population-level strategies—such as implementing price increases, smokefree air policies, and hard-hitting media campaigns and providing cessation resources—are effective components of a comprehensive tobacco prevention and control strategy. Further, this report acknowledges inequitable progress in implementing these strategies and reveals the dearth of evaluations to assess the impact of population-level strategies on reducing tobacco-related health disparities. But even if core tobacco prevention and control strategies, such as smokefree protections, were implemented equitably and comprehensively, they would not be sufficient to end the epidemic of tobacco-related death and disease (USDHHS 2014, 2020).

Interventions focused solely on tobacco product use and exposure to secondhand tobacco smoke, without concurrent attention to social and structural drivers of multidimensional disparities, are unlikely to sustainably promote health equity across its multiple dimensions (including but not limited to such other risk factors for chronic disease as poor diet, physical inactivity, and excessive alcohol use). As such, the vision described in this report makes clear that a “both/and” approach—combining tobacco-specific interventions with social and structural determinant interventions—is warranted to maximize the pro-equity impact of tobacco prevention and control efforts.

The 2014 and 2020 Surgeon General’s reports on tobacco (USDHHS 2014, 2020) offered recommendations to advance tobacco endgame efforts to eliminate the burden of death and disease caused by commercial tobacco use. The vision described in this current report notes that the overriding objective of endgame efforts should be to advance health equity by creating and promoting fair and just opportunities and social, structural, and political conditions for all people to live a healthy life that is free from commercial tobacco-related disease, disability, and death. Endgame approaches to simultaneously address the appeal, addictiveness, and availability of commercial tobacco products include

- Reducing the nicotine in cigarettes and certain other combustible tobacco products to minimally addictive or nonaddictive levels;
- Restricting the manufacture and/or sale of flavored tobacco products, including policies that prohibit the sale of all flavored tobacco products, and establishing product standards that prohibit menthol as

a characterizing flavor in cigarettes and prohibit characterizing flavors (except tobacco) in cigars;

- Restricting consumer marketing of tobacco products;
- Restricting the sale of entire categories of tobacco products, such as combustible tobacco products; and
- Preventing sales of tobacco products to future generations.

The chapter outlines health equity safeguards in endgame approaches so that population groups subject to disadvantage are given primary consideration. It also notes that tobacco-specific endgame interventions should complement, not replace, efforts to curtail the social, structural, and political dynamics that perpetuate the tobacco industry’s influence on society. Finally, a call to action identifies strategies to address root causes of tobacco-related health disparities and their social, structural, economic, and political dimensions. It includes actions that can be undertaken by governments, funders, public health practitioners, healthcare professionals and healthcare organizations, researchers and research institutions, businesses and employers, schools and academic institutions, communities, and individuals and families to advance tobacco-related health equity. The call to action concludes with the following actions that *everyone* can take:

- Collaborate to advance a commercial tobacco endgame with the goal of enabling all people to live a healthy life that is free from tobacco use and exposure and from tobacco-related disease, disability, and death.
- Work together and be accountable. Accountability includes aligning resources, stated commitments, and actions to advance health equity.
- Measure progress, reward successes, acknowledge and learn from mistakes, and deploy resources when shortcomings need to be addressed.

Now is the time to move beyond envisioning to realizing a society with equitable opportunities and conditions for all people to live a life free from tobacco use, exposure to secondhand tobacco smoke, and death, disability, and disease caused by commercial tobacco use. Through our plans, objectives, and actions, together we can achieve tobacco-related health equity.

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