



Legislative Council Staff

Nonpartisan Services for Colorado's Legislature

Demographic Note

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BILL TOPIC: **PROHIBIT FLAVORED TOBACCO**

Demographics Analyzed:	• Socioeconomic Status	• Gender Identity
	• Race/Ethnicity	• Sexual Orientation
	• Sex	• Disability

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| <input checked="" type="checkbox"/> Economic | <input checked="" type="checkbox"/> Health | <input type="checkbox"/> Public Safety |
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Bill Impacts: To the extent that the bill results in decreased use of tobacco products, health outcomes may improve for several populations in the state. Economic outcomes may also improve for these populations, while businesses and employees selling or supporting the sale of tobacco products may see reduced economic outcomes.

Report Status: The demographic note reflects the introduced bill.

Demographic Impact Summary

This demographic note¹ analyzes potential impacts of HB 22-1064 on disparities in economic and health outcomes based on available data, including by race, ethnicity, socioeconomic status as measured by income and education, sex, sexual orientation, gender identity, and disability.² HB 22-1064 prohibits the sale of flavored cigarettes, tobacco products, and nicotine products. Economic and health outcomes for those who successfully quit using these products are expected to improve, potentially reducing economic and health disparities by ethnicity, race, socioeconomic status, gender identity, sexual orientation, and disability, particularly for younger users. Businesses and employees selling or supporting the sale of flavored tobacco products may see reduced economic and employment outcomes due to a reduction in the sale of tobacco products if other business or employment opportunities are not available to offset the reduction in sales.

¹Pursuant to Section 2-2-322.5, C.R.S., this demographic note uses available data to outline the potential impacts of proposed legislation on disparities within the state. Disparities are defined by statute as the difference in economic, employment, health, education, or public safety outcomes between the state population as a whole and subgroups of the population, as defined by socioeconomic status, race, ethnicity, sex, gender identity, sexual orientation, disability, geography, or any other relevant characteristic for which data are available. It is beyond the scope of this analysis to examine each of the varied causes contributing to a given disparity. For further information on the contents of demographic notes, see "Demographic Notes Overview" Memorandum available at https://leg.colorado.gov/sites/default/files/images/lcs/demographic_notes_overview.pdf.

² Terminology used to distinguish demographic groups (e.g., black/African American, Hispanic or Latina/Latino) is based on the terminology used in the data sources referenced. These terms may differ from the self-identification of these populations.

Demographic characteristics of existing and potential consumers of cigarettes and e-cigarettes suggest that the following demographics are more likely to be impacted by HB 22-1064:

- People who are Hispanic/LatinX;
- People who are black or African American, indigenous people of color, or multiracial;
- People of lower socioeconomic status as measured by income and education;
- People who report having a physical, mental, or emotional disability;
- People who identify as LGBTQIA+.

Key Provisions Impacting Demographic Disparities

The bill prohibits retailers from selling, offering for sale, advertising, displaying, or marketing flavored cigarettes, tobacco products, and nicotine products. Flavored products are those that impart a taste or smell other than that of tobacco, including menthol, mint, wintergreen, fruit, herb, candy, and spice, among other flavors. It also requires the Division of Prevention Services in the Colorado Department of Public Health and Environment (CDPHE) to create a grant program to provide resources to communities disproportionately impacted by the marketing, sale, and prevalence of tobacco and nicotine product use.

Background

Existing health disparities. Existing health disparities, or differences in health status experienced by different groups, are well-documented, both in the U.S. and Colorado. Many factors contribute to disparities including inadequate access to care, quality of care, poor air quality, language barriers, community features such as poverty, access to healthy foods, and availability of safe and stable housing, as well as individual factors such as genetics and personal behavior. Racial and ethnic minority communities, rural communities, people with disabilities, populations with lower socioeconomic status, and LGBTQIA+ communities are often disproportionately exposed to adverse conditions, environments, and health risks and more likely to experience health disparities.³

Tobacco related health impacts. Disease and death from tobacco use in the U.S. is overwhelmingly caused by cigarettes and other combustible tobacco products. Cigarette smoking causes diseases of almost every organ of the human body, including cancer, stroke, diabetes, and chronic obstructive pulmonary disease (COPD).⁴ Nicotine is a highly addictive drug found in all tobacco products and most e-cigarettes. Exposure to nicotine can interfere with adolescent brain development, and e-cigarette aerosols can contain substances that harm the lungs. E-cigarette use among youth is associated with the use of other tobacco products.⁵

³ NCSL. 2020. "Health Disparities Overview." Available at: <https://www.ncsl.org/research/health/health-disparities-overview.aspx>

⁴ U.S. Department of Health and Human Services. The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014

⁵ U.S. Department of Health and Human Services. E-cigarette Use Among Youth and Young Adults: A Report of the Surgeon General. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2016

Flavored tobacco products. The federal 2009 Family Smoking Prevention and Tobacco Control Act prohibits cigarettes from containing characterizing flavors other than tobacco or menthol.⁶ Non-cigarette tobacco products, such as cigars, smokeless tobacco products, hookah, and e-cigarettes are available in a variety of fruit, candy, and other flavors, such as berry, cherry, apple, cotton candy, bubble gum, crème, mint, and menthol. Flavored tobacco products mask the harshness of tobacco, and are particularly appealing to youth.⁷ Compared to adults who smoke non-menthol cigarettes, adults who smoke menthol cigarettes make more attempts to quit smoking and have a harder time quitting.⁸

The tobacco industry has historically used flavored products, including menthol, to make their products more attractive to specific communities, including Black/African American, youth, Hispanics, and LGBTQIA+ communities. The industry intentionally markets these products to these communities through the use of cultural experiences, events, and icons, as well as through financial contributions to community organizations.⁹

Similar legislation in other jurisdictions. As of September 2021, 344 U.S. jurisdictions and 3 Native American tribes have some type of restriction on flavored tobacco product sales, including 7 states and 6 local jurisdictions in Colorado. Of these, 124 jurisdictions have comprehensive flavor bans prohibiting sales of all types of flavors across all products.¹⁰ Some flavor bans have been implemented at the national level, including in Canada, Ethiopia, Senegal, and Uganda.¹¹

As many of these bans have been implemented in recent years, research on their impacts is ongoing and rapidly evolving. In general, researchers have found evidence that such bans result in shifts in consumer behavior, including some increase in cessation rates and reduction in initiation of use resulting in the decreased consumption of flavored products and decreased prevalence of tobacco use. These impacts are particularly strong for youth users. Offsetting these impacts are consumer shifts to non-flavored products or shifts to purchases from alternative jurisdictions or illicit sources.¹²

Demographic Comparisons

The following analysis compares the populations affected by the bill to the statewide population across different demographic groups. Pursuant to statute and based on available data on demographic differences between affected and statewide populations, this analysis identifies potential effects of the bill on existing disparities.

⁶ 21 U.S.C. § 387g(a)(1)(A)

⁷ U.S. Department of Health and Human Services. The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014

⁸ Villanti AC, Collins LK, Niaura RS, Gagosian SY, Abrams DB. "Menthol cigarettes and the public health standard: a systematic review." *BMC Public Health* 2017;17:983

⁹ Centers for Disease Control. 2020. Tobacco Industry Marketing. Available at:

https://www.cdc.gov/tobacco/data_statistics/fact_sheets/tobacco_industry/marketing/index.htm

¹⁰ Truth Initiative. 2021. "Flavored Tobacco Policy Restrictions." Available at: [Q3 2021 draft FINAL-Sept302021.pdf \(truthinitiative.org\)](#)

¹¹ Chaloupka, F.J. 2022. "Potential Effects on Tobacco Tax Revenues of a Ban on the Sale of Flavored Tobacco Products 2022 Update." University of Illinois at Chicago.

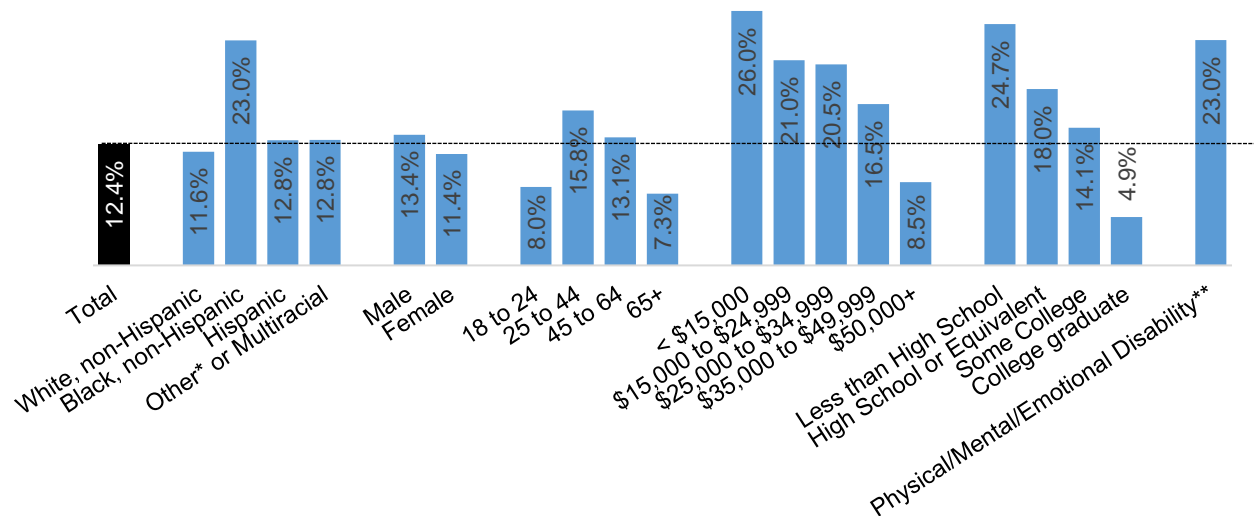
¹² Rogers, T., and Brown, E. et al. 2021. "A Comprehensive Qualitative Review of Studies Evaluating the Impact of Local US Laws Restricting the Sale of Flavored and Menthol Tobacco Products." *Nicotine & Tobacco Research*. Available at: [Comprehensive Qualitative Review of Studies Evaluating the Impact of Local US Laws Restricting the Sale of Flavored and Menthol Tobacco Products | Nicotine & Tobacco Research | Oxford Academic \(oup.com\)](#); Cadham, C., Sanchez-Romero, L.M., and Fleisher, N., et al. 2020. "The Actual and Anticipated Effects of a Menthol Cigarette Ban: A Scoping Review." *BMC Public Health*. Available at: [The actual and anticipated effects of a menthol cigarette ban: a scoping review | BMC Public Health | Full Text \(biomedcentral.com\)](#)

Demographics of Cigarette and E-cigarette Use in Colorado

Adult cigarette use. Figure 1 presents data on the prevalence of cigarette smoking among adult Coloradans by different demographic groups using data from the 2020 Behavioral Risk Factor Surveillance System (BRFSS). Among all Colorado adults, 12.4 percent report currently smoking daily or some days, compared to 15.5 percent of adults nationwide who do so. Among demographic groups, those who have a higher prevalence of smoking include those who are:

- Hispanic/LatinX, multiracial, or of non-white race, particularly those who are black or African American;
- men;
- adults aged 25 to 44;
- of lower socioeconomic status as measured by income and education; and
- individuals who report a physical, mental, or emotional disability.

Figure 1
Adult Cigarette Use in Colorado
Share Using Cigarettes by Demographic Group



Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2020.
*Includes Asian, American Indian or Native Alaskan, Native Hawaiian or other Pacific Islander, non-Hispanic.
**Respondent has difficulty doing errands alone because of physical, mental, or emotional condition.

Data from the 2018 Adult Tobacco Use and Exposure Colorado report, compiled from the Attitudes and Behaviors Survey (TABS) on Health, complement these findings. Compared to the prevalence of smoking among the statewide adult population (15.2 percent), significantly higher smoking prevalence was found among those who have low socioeconomic status (23.7 percent), those who are black or African American (24.2 percent) or American Indian/Alaska Native (25.5 percent), those who identify as lesbian, gay, bisexual, or transgender (LGBT) (22.5 percent), those who have poor mental health (24.2 percent), and men (17.6 percent).¹³

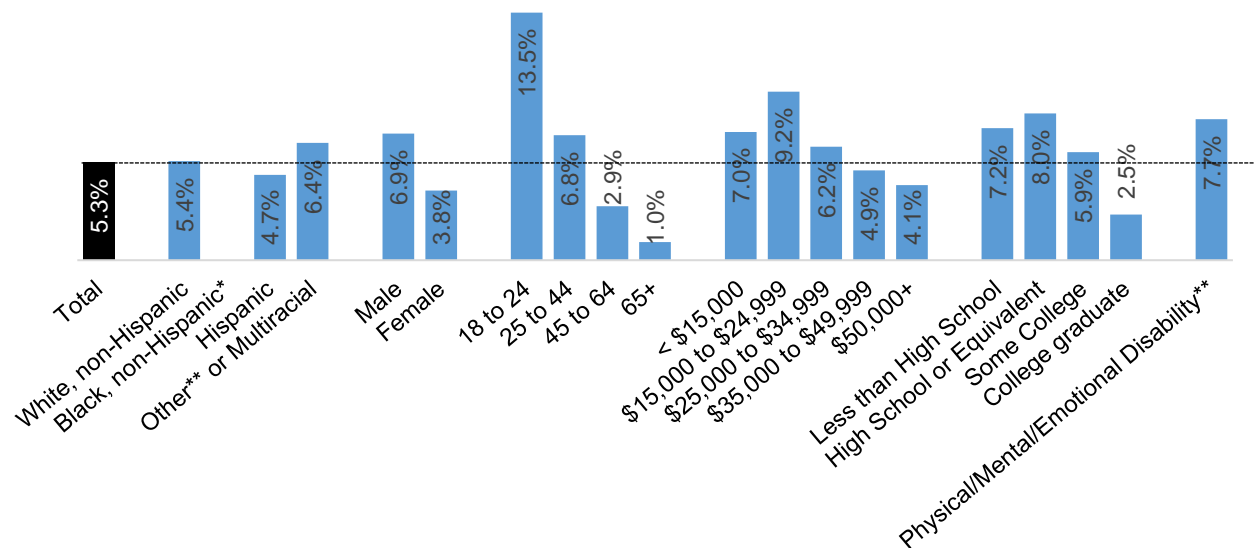
¹³ Significance is defined as having less than 5 percent likelihood of being an accidental difference (p<.05).

Adult use of other tobacco products. There is little data available on the prevalence of the use of other tobacco products among Coloradans. Available data suggests that current cigar smoking prevalence is 3.7 percent, and that of chewing tobacco is 3.6 percent, with use of the latter more prevalent among men younger than 64 (7.6 percent), men living in rural areas (13.2 percent), and heterosexual men (7.7 percent).¹⁴

Adult e-cigarette use. Figure 2 presents data on the prevalence of e-cigarette use among adult Coloradans by different demographic groups from the 2017 BRFSS, the most recent year for which e-cigarette data for Colorado are available. Among all Colorado adults, 5.3 percent report currently using e-cigarettes daily or some days, compared to 4.6 percent of adults nationwide who do so. Among demographic groups, those who have a higher prevalence of using e-cigarettes include those who are:

- multiracial, or of “other” race;
- men;
- younger adults, particularly those aged 18 to 24;
- of lower socioeconomic status as measured by income and education; and
- individuals who report a physical, mental, or emotional disability.

Figure 2
Adult E-cigarette Use in Colorado
Share Using Cigarettes by Demographic Group



Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2017

*Not enough data to calculate.

**Includes Asian, American Indian or Native Alaskan, Native Hawaiian or other Pacific Islander, non-Hispanic.

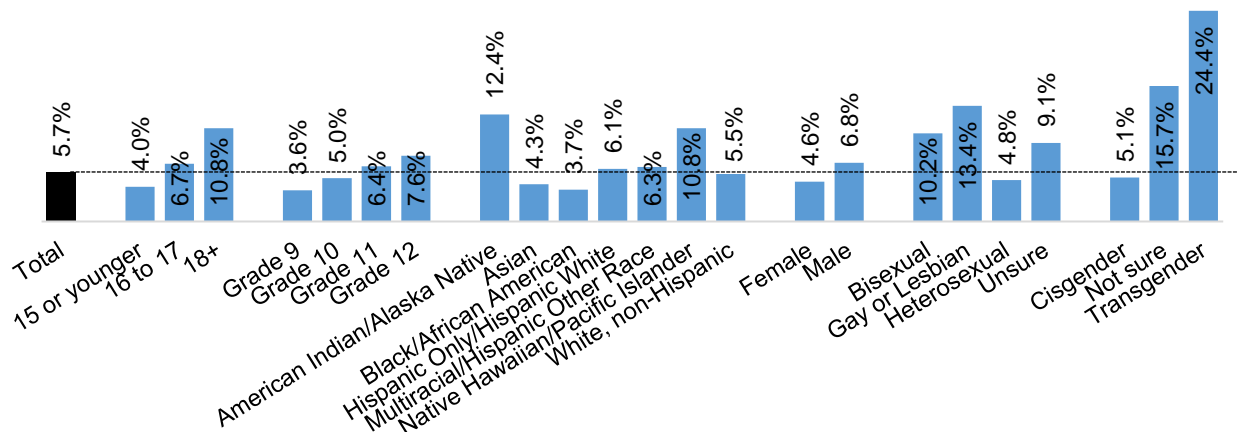
¹⁴ James, K., Li, Y., Zwick, N., Cooper, S., and Levinson, A. 2020. “Adult Tobacco Use and Exposure, Colorado 2018.” Community Epidemiology and Program Evaluation Group, Colorado School of Public Health, University of Colorado Cancer Center.

The 2018 TABS data support these findings, with the overall prevalence of e-cigarette use among Colorado adults found to have increased between 2015 and 2018, from 5.6 percent to 6.9 percent. Current e-cigarette use is more prevalent among people aged 18 to 24 and 25 to 44 (22.8 percent and 7.7 percent, respectively), those with a lower socioeconomic status (9.4 percent), and those who identify as LGBTQIA+ (17.1 percent).

Youth cigarette use. Figure 3 presents data on the prevalence of cigarette smoking among Colorado high school students by different demographic groups. These data are collected by the 2019 Healthy Kids Colorado Survey (HKCS), a statewide tool to assess the health behaviors and well-being of 9th through 12th graders. These data suggest that while 5.7 percent of Colorado youth statewide use cigarettes, the prevalence of smoking is significantly higher among youth belonging to the following demographic groups:

- those aged 16 to 18 and over and in grades 11 and 12;
- American Indian/Alaska Native, or Native Hawaiian/Other Pacific Islander
- males; and
- those who identify as LGBTIA+.

Figure 3
Youth Cigarette Use in Colorado
Share of Cigarette Use by Demographic Group



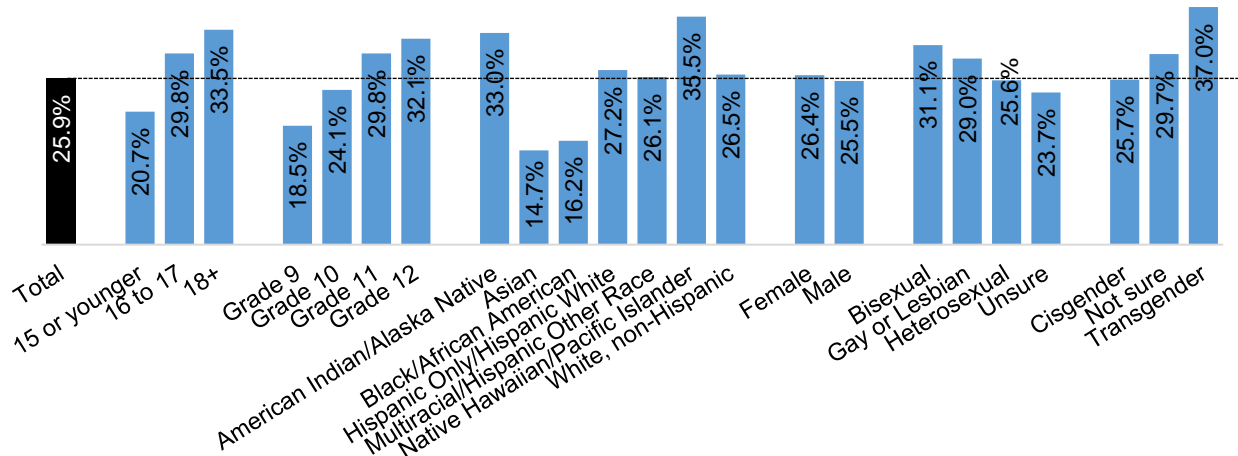
Source: Healthy Kids Colorado Survey, 2019.

Youth e-cigarette use. Figure 4 presents data on the prevalence of e-cigarette use among Colorado high school students by different demographic groups from the 2019 HKCS. These data suggest that at 25.9 percent, the use of e-cigarettes among high school students is much higher than for cigarettes. Among those who use e-cigarettes, the prevalence is significantly higher among youth belonging to the following demographic groups:

- those aged 16 to 18 and over and in grades 11 and 12;
- American Indian/Alaska Native, or Native Hawaiian/Other Pacific Islander; and
- those who identify as LGBTQIA+.

Additionally, geographic data indicate that high school students who live in Pueblo County have the highest reported current vaping rate (41 percent) among high school students compared with high school students statewide.

Figure 4
Youth E-cigarette Use in Colorado
Share of Cigarette Use by Demographic Group



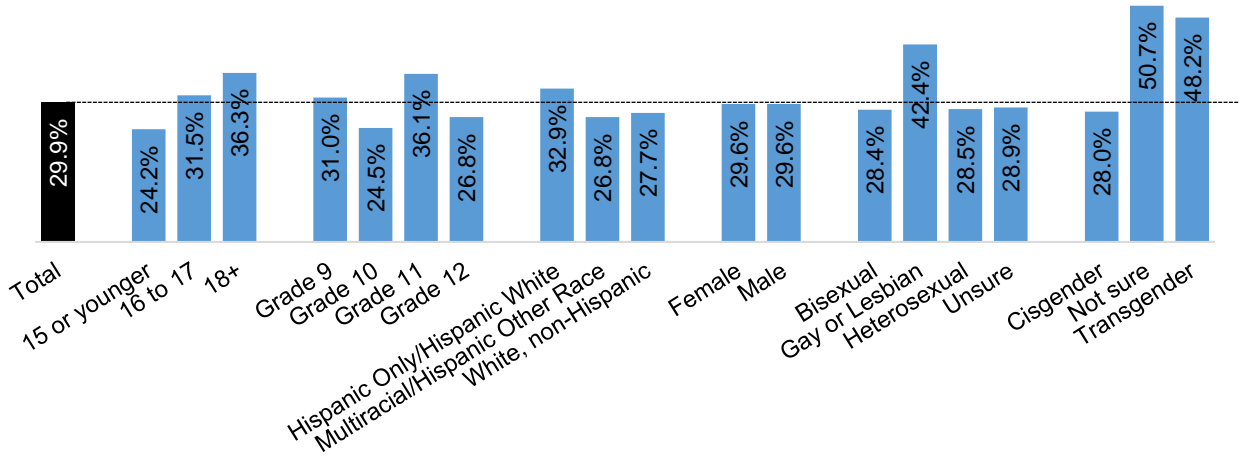
Source: Healthy Kids Colorado Survey, 2019.

Demographics of Flavored Cigarette and E-cigarette Use in Colorado.

Adult menthol cigarette and other tobacco use. According to data collected in the 2018 TABS survey, 22.9 percent of current Colorado smokers use menthol cigarettes all or most of the time. Prevalence of use is higher among smokers who are black or African American (61.1 percent), Asian (37.1 percent), younger adults aged 25 to 29 (30.5 percent), women (28.4 percent), and the LGBTQIA+ community (35 percent). Of those who reported use of other tobacco products including hookahs, chewing tobacco, or cigars, 26.9 percent reported using flavored products. Demographic data on adult users of flavored e-cigarettes in Colorado are limited. Of those that reported ever using an e-cigarette, 82.0 percent reported using a flavored one.

Youth menthol cigarette and flavored e-cigarette use. Figure 5 presents data on the prevalence of menthol cigarette use among Colorado high school students by demographic group. Among high school students who smoke, 29.9 percent smoke menthol cigarettes. The use of menthol cigarettes is higher among youth who are older, Hispanic, and identify as LGBTQIA+, but the difference is statistically significant only for those who identify as transgender.

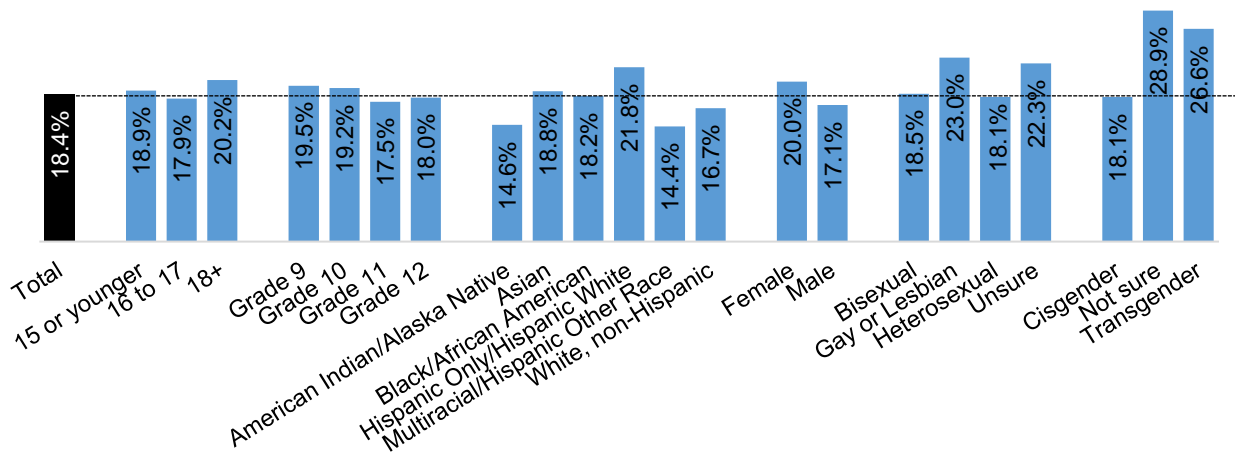
Figure 5
Youth Menthol Cigarette Use
Share of Menthol Cigarette Use by Demographic Group



Source: Healthy Kids Colorado Survey, 2019.

Figure 6 presents data on the prevalence of flavored e-cigarette use by Colorado high school students by demographic group. Specifically, 18.4 percent who reported current use of e-cigarette products said they use them because they are flavored. Compared to the statewide share, high school students who are Hispanic or female are more likely to say that they use e-cigarettes because they are flavored, compared to the statewide share of high school students who do so. The prevalence of flavored use among students who identify as LGBTQIA+ is nominally higher but is not statistically significant given the small sample size.

Figure 6
Youth Flavored E-cigarette Use
Share of E-cigarette Use by Demographic Group



Source: Healthy Kids Colorado Survey, 2019.

Demographics of Cessation

Based on nationwide data, research suggests that smokers who have a lower socioeconomic status as measured by income and education have lower smoking cessation rates. Additionally, menthol smokers have lower odds of smoking cessation relative to non-menthol smokers, with non-Hispanic Black or African American menthol smokers having lower quit rates than non-Hispanic white or Hispanic menthol smokers, relative to non-menthol smokers in their respective racial/ethnic groups.¹⁵

In Colorado, TABS data indicate that successful quit rates (at least three months abstinent at interview) are 16.6 percent overall in 2018, with several groups increasing successful quit rates between 2015 and 2018, including those aged 25 to 29 (increased cessation from 5.2 percent in 2015 to 21.0 percent in 2018), whites (10.2 percent to 19.0 percent), English-dominant Hispanic/LatinXs (7.9 percent to 20.6 percent), males (7.7 percent to 16.0 percent), and those of lower socioeconomic status (7.2 percent to 15.7 percent). A cessation gap persists among Spanish-dominant Hispanic/LatinX quit-attempters (4.4 percent). Over 33 percent of Colorado adults report using e-cigarettes as an aid to quit or reduce smoking or because they had recently quit smoking.

Analysis and Findings

Flavored tobacco consumers. Based on tobacco product prohibitions in other geographic areas, this bill is expected to result in shifts in consumer behavior and to deter some potential consumers from starting to use flavored tobacco products. These impacts may be stronger for younger populations of users, particularly for those who are using vapor products because they are flavored. Other consumers may quit using affected products, but instead shift their consumption to other cigarette, tobacco, nicotine, or other products that may be more or less expensive or have higher or lower health risks. Finally, some consumers may not quit using affected products, but may instead pay higher prices and/or obtain these products from other jurisdictions, online, or from other sources. Based on the demographic composition of consumers of the tobacco products impacted by the bill, some demographic groups are more likely to be impacted than others, which may reduce existing health and economic disparities. However, these impacts will depend on the cessation and consumption choices of these consumers.

Demographic characteristics of Coloradans who smoke suggest that they are more likely to be Hispanic, black or African American, indigenous people of color, multiracial, of lower socioeconomic status as measured by income and education, younger adults, people who report having a physical, mental, or emotional disability, or to identify as LGBTQIA+. Demographic characteristics of Coloradans who use e-cigarettes suggest that they are more likely to be indigenous people of color, youths and young adults, of lower socioeconomic status as measured by income and education, people who report having a physical, mental, or emotional disability, or to identify as LGBTQIA+.

Based on the available data on successful smoking cessation, demographic disparities in cessation in Colorado have been closing in recent years, with the exception of Spanish-speaking Hispanic/LatinX quit-attempters. If we assume that the demographics of those who quit or abstain from initiating consumption of these products largely reflects the demographics of users of cigarettes and e-cigarettes in general, with lower prevalence of Spanish-speaking Hispanic/LatinX smokers among the quitting affected population, demographics of existing consumers suggest that the bill will reduce tobacco-

¹⁵ Cook, S., et al. 2021. "A Longitudinal Study of Menthol Cigarette Use and Smoking Cessation Among Adult Smokers in the U.S.: Assessing the Roles of Racial Disparities and E-cigarette Use." *Preventative Medicine*.

related health disparities and the associated economic disparities, such as lost productivity due to health conditions, and higher health care costs. Based on a comparison between the statewide and affected populations, this analysis suggests that the bill may reduce existing health and economic disparities by socioeconomic status, race, ethnicity, gender identity, sexual orientation, and disability, particularly for younger users of cigarettes and e-cigarettes. These impacts may be reduced to the extent that demographic differences in cessation instead magnify existing disparities, or to the extent that the availability of flavored e-cigarettes impacts successful smoking cessation.

For consumers who do not quit but instead switch to other products or continue to purchase flavored products in spite of the ban, the impact on economic and health disparities is indeterminate. It is unknown the extent to which these consumers will pay higher prices for tobacco products or to what extent their health outcomes will worsen relative to consumption under current law.

Vaping and flavored tobacco producers and retailers. Businesses producing, selling, or supporting the sale of products impacted by the bill may see a reduction in revenue, employment loss, or business closure depending on their reliance on the affected products. The demographic composition of affected businesses and employees cannot be determined based on available data and because impacts depend on business decisions that are unknown. For example, retailers may substitute sales of other types of products in response to the bill or may increase costs for other products rather than incur reduced profits.

“Vape shops”, or businesses that specialize in the sales and promotion of e-cigarette, e-juice, and other vaping products, may be particularly affected by this bill. For example, shortly after the city of Boulder implemented a ban on the sales of flavored vaporized products, the city’s only vape shop closed citing the city’s new regulations.¹⁶

Based on national geolocation data, vape shops tend to have a higher density in areas with a higher proportion of black, Asian, and Hispanic individuals. In addition, areas with higher rates of poverty also tend to have a greater density of vape shops.¹⁷ To the extent that the bill results in a reduction in business revenue, employment opportunities, or local tax revenue to these communities that are not offset by other business activity, the bill may impose additional economic costs to affected populations. To the extent that the closure of shops in these areas shifts consumption behavior of residents, the bill could have offsetting impacts on economic and health disparities due to reduced consumption as discussed above.

Disparities in context. While HB 22-1064 may reduce health and associated economic disparities for some groups of cigarette and e-cigarette users who quit using these products, it is unlikely to influence other factors that contribute to health or other disparities. It is important to note that health disparities such as those discussed here have multiple and interacting causes, including not only individual behavior and choices, but also historical and structural factors that can shape or constrain individual choices and distribute economic and other opportunities unevenly to individuals on the basis of their membership in particular demographic groups. One such factor may be HB 20-1001, which raised the

¹⁶ Sam Lounsberry, “Boulder’s flavored vaping ban kicks in, takes quick toll,” Denver Post, October 18, 2019, <https://www.denverpost.com/2019/10/18/boulder-colorado-flavored-vaping-ban-begins/>.

¹⁷ Dai H, Hao J, Catley D, 2017, “Vape Shop Density and Socio-Demographic Disparities: A US Census Tract Analysis.” Nicotine Tobacco Research, <https://pubmed.ncbi.nlm.nih.gov/28371830/>. Venugopal P, Morse A, Tworek C, Chang H, 2018, “Socioeconomic Disparities in Vape Shop Density and Proximity to Public Schools in the Conterminous United States, Health Promotion Practice, <https://pubmed.ncbi.nlm.nih.gov/31908194/>.

minimum age to purchase cigarettes, tobacco products, and nicotine products from 18 years old to 21 years old. The impacts of this bill on youth smoking behavior cannot be determined at this time.

State budgetary trade-offs. The bill is expected reduce excise tax revenue that may have been spent in other ways that would affect economic, health, or other disparities. Portions of the cigarette, tobacco and nicotine tax revenue is allocated to programs for tobacco education and prevention, health-related grant programs, health related services, local governments, state education, and preschool programs. To the extent that reduced revenue reduces the reach of state programs or renders these programs less effective, economic and health disparities may increase. Offsetting impacts may occur to the extent that this bill results in reduced health care and other costs for affected populations, which result in reduced state expenditures.

Other impacts. The bill requires the Division of Prevention Services in CDPHE to create a grant program to provide resources to communities disproportionately impacted by the marketing, sale, and prevalence of tobacco and nicotine product use. The demographic impacts of this grant program will depend on future policy decisions and therefore cannot be determined at this time. To the extent that the grant program improves health and economic outcomes for communities disproportionately impacted by tobacco and nicotine product use more than would otherwise have occurred, economic and health disparities may decrease.

Demographics Not Included

Data on the relevant populations delineated by geography are limited at the time of the analysis. Data that was available could not be meaningfully interpreted in the context of economic or health disparities. Should additional data become available, this analysis may be updated.

Data Sources and Agencies Contacted

Public Health and Environment