

California Tobacco Facts & Figures 2021



This publication was prepared by staff members of the California Tobacco Control Program, a branch in the Center for Healthy Communities of the California Department of Public Health.

Several data sources are used in this document. Each data source is based on a different survey or surveillance tool, and therefore readers may see slightly different rates throughout this report. However, these rate differences are not statistically significant and represent the most accurate and complete picture of California.

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ABBREVIATIONS AND ACRONYMS

CA	California
CHIS	California Health Interview Survey
CSTS	California Student Tobacco Survey
CTCP	California Tobacco Control Program
LGB{TQ}	Lesbian, Gay, Bisexual, {Transgender, Queer}
NRT	Nicotine Replacement Therapy
Proposition 56	California Healthcare, Research and Prevention Tobacco Tax Act of 2016
Online CATS	Online California Adult Tobacco Survey
SGM	Sexual and Gender Minority
TEROC	Tobacco Education and Research Oversight Committee
UCLA	University of California Los Angeles
UCSD	University of California San Diego

INTRODUCTION

Using the tobacco industry's products has a substantial negative impact to health. Tobacco use, specifically cigarette smoking, remains the leading cause of preventable death in the United States.¹ Tobacco use accounts for approximately 40,000 deaths annually in California.² Tobacco use also has a negative impact on the economy, costing the state \$9.8 billion in direct medical care (e.g., healthcare services, medications) and \$8.2 billion in lost productivity from illness and premature death.³

Since 1989, the California Department of Public Health (CDPH), California Tobacco Control Program (CTCP) has served the people of California with a comprehensive tobacco control program. CTCP leads the fight to keep the tobacco industry from targeting youth and keeping the industry's products out of youth's hands, helps people who use tobacco quit, and ensures that all Californians can live, work, play, and learn in tobacco-free environments. CTCP is committed to reducing tobacco disparities among populations disproportionately impacted by tobacco industry predation. In fact, California voters created a strong mandate for CTCP to reduce tobacco-related disparities when they overwhelmingly approved the California Healthcare, Research and Prevention Tobacco Tax Act of 2016 ("Proposition 56"). Proposition 56 added a \$2.00 tax per cigarette pack and a proportional increase to other tobacco products beginning in April 2017. Proposition 56 additionally required that at least 15 percent of these tax funds appropriated to CTCP be designated for accelerating and monitoring declines in tobacco-related disparities.

The Tobacco Education and Research Oversight Committee (TEROC), a legislatively-mandated oversight committee, advises CTCP and other state programs with respect to tobacco prevention and reduction policy, integration, and evaluation efforts. In TEROC's 2021-2022 state plan, [*Achieving Health Equity: Toward a Commercial Tobacco-Free California*](#), more than 15 priority population groups were identified that are disproportionately impacted by tobacco because they use tobacco at higher rates, experience greater secondhand smoke exposure, are disproportionately targeted by the tobacco industry, and/or have higher rates of tobacco-related disease. These include racial and ethnic minority groups, sexual and gender groups, people of low socioeconomic status, rural residents, military

¹ US Department of Health and Human Services. The Health Consequences of Smoking: 50 Years of Progress. A Report of the Surgeon General. Atlanta, GA: US 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.

² Centers for Disease Control and Prevention. Smoking-Attributable Mortality, Morbidity, and Economic Costs (SAMMEC) - Smoking Attributable Mortality (SAM). 2020; <https://chronicdata.cdc.gov/Health-Consequences-and-Costs/Smoking-Attributable-Mortality-Morbidity-and-Econo/4yyu-3s69>. Accessed March 1, 2021.

³ Max W, Sung H-Y, Shi Y, Stark B. The cost of smoking in California. *Nicotine Tob Res.* 2016;18(5):1222-1229.

personnel and veterans, workers not covered by smokefree workplace laws, people with behavioral health conditions, people with disabilities, and school-age youth. Among these groups, CTCP focuses its greatest efforts on American Indian; African American or Black; Asian; Pacific Islander; Hispanic or Latino; LGBTQ; rural; lower socioeconomic status; and behavioral health populations due to the crossover between groups and to achieve the greatest public health population impact.

The *California Tobacco Facts and Figures* showcases the most recently available California data on tobacco use behavior, attitudes, and local tobacco control policies. Unlike past *California Tobacco Facts and Figures*, this report emphasizes overall tobacco use prevalence rates rather than cigarette smoking prevalence. Over the past decade, there has been considerable growth and diversity in tobacco products, therefore, focusing on tobacco use prevalence better communicates the tobacco use burden. Additionally, the *California Tobacco Facts and Figures 2021* includes a section on the progress made to accelerate declines in tobacco-related disparities since the implementation of Proposition 56 began in July 2017. Overall, the findings indicate an acceleration in the decline of tobacco use in youth and adults, except for African American or Black where a slower decline was observed. In general, more work is still needed in reducing tobacco cessation disparities across all populations.

A handwritten signature in black ink, reading "April Roeseler". The signature is fluid and cursive, with the first name "April" and last name "Roeseler" clearly distinguishable.

April Roeseler, BSN, MSPH
Chief, California Tobacco Control Program

PROGRESS TOWARDS ACCELERATING THE DECLINE IN TOBACCO-RELATED DISPARITIES

The California Healthcare, Research and Prevention Tobacco Tax Act of 2016 ("Proposition 56") requires CTCP to award a minimum of 15 percent of its Proposition 56 funding that is designated for health promotion, health communication and evaluation and surveillance funds to accelerate and monitor the rate of decline in tobacco-related disparities with the goal of eliminating tobacco-related disparities.⁴ In response to this requirement, CTCP created the Priority Population Initiative.

At this time, the [Priority Population Initiative](#) includes funding for 98 community-based priority population specific projects with awards, totaling \$137.4 million (Table 1). In addition to the community-based projects, CTCP funds four evaluation and surveillance projects (\$9.8 million) to evaluate the effectiveness of the Priority Population Initiative and to monitor tobacco-related disparities in vulnerable populations.

Table 1. Number of community intervention projects with objectives meeting CTCP's Priority Population Initiative goals—December 2020

Population	Number of Projects	Project Funding
African American or Black	10	\$17.7 million
American Indian	21	\$30.1 million
Asian or Pacific Islander	6	\$11.5 million
Behavioral Health*	19	\$4.6 million
Hispanic or Latino	9	\$20.0 million
LGBTQ	9	\$15.6 million
Low-Income	13	\$9.1 million
Multi-Cultural	2	\$12.0 million
Rural Communities	9	\$16.8 million
Overall	98	\$137.4 million

* Projects are working in behavioral health treatment facilities to promote wellness policies that include tobacco cessation.

Source: California Department of Public Health, California Tobacco Control Program. CTCP Priority Population Initiative. Updated December 21, 2020. Accessed February 17, 2021.

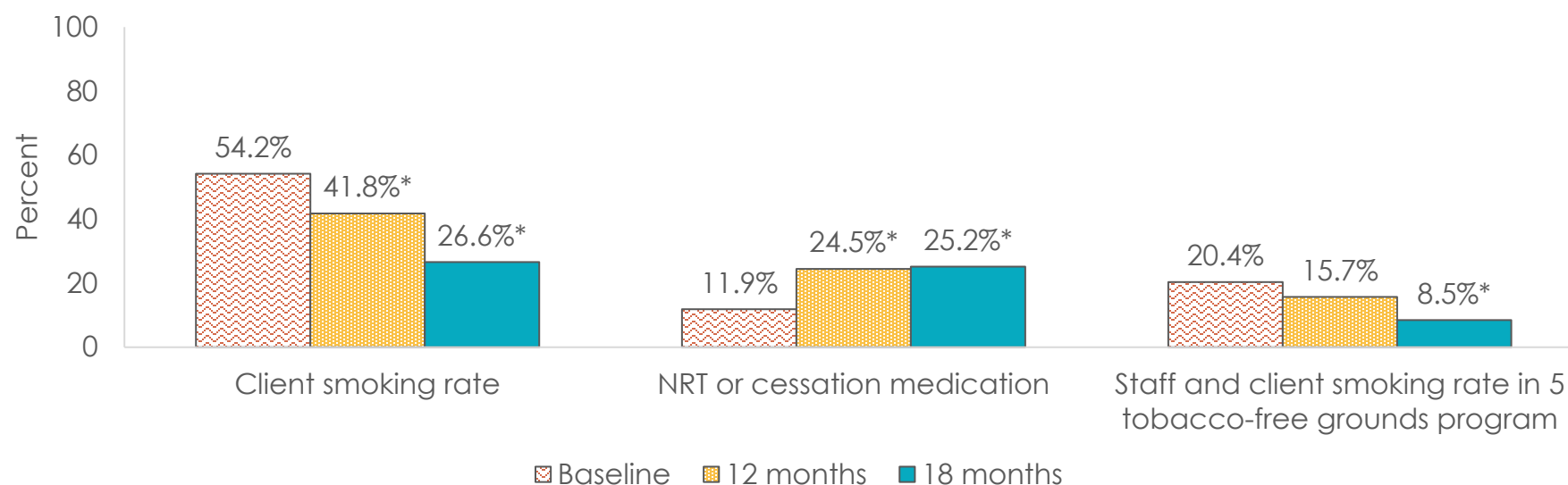
⁴ California Healthcare, Research and Prevention Tobacco Tax Act of 2016. Cal. Rev. Tax. Code § 30130.55(b)(1) (2016).

Promoting Wellness Policies at Mental Health and Substance Abuse Facilities

To promote wellness policies and reduce tobacco use among people with substance use disorders and mental illness, CTCF funds 19 wellness quality improvement projects at residential behavioral treatment facilities as part of the Behavioral Health Initiative. The initiative includes regional trainings for local health departments and county behavioral services.

Five of the seven behavioral health programs that participated in the Behavioral Health Initiative's first cohort implemented a tobacco-free grounds policy between January 2019 and April 2020. The tobacco-free policy was associated with decreases in cigarette smoking rates and increases in use of NRT or other cessation medication among clients who smoke cigarettes and quit while in treatment (Figure 1).

Figure 1. Cohort 1 client results from Behavioral Health Initiative evaluation—2019 to 2020



Abbreviation: NRT, nicotine replacement therapy.

* Significantly different from baseline.

Source: McCuistian C, Straus E, Kapiteni K, Guydish J, Kelley T. Preliminary results from behavioral health residential treatment intervention. San Francisco, CA: University of California, San Francisco; 2021.

Launched in 2018, the '[Story of Inequity](#)' website provides detailed information about the tobacco use epidemic among eight populations disproportionately impacted by the tobacco industry and use of its products. The website is used to monitor progress towards reducing tobacco-related disparities. The website is unique in that it places the data within context, highlighting the tobacco industry's central role in promoting tobacco use among these populations.

This Facts and Figures report provides additional information highlighting California's progress made since the implementation of Proposition 56 to accelerate the decline in tobacco-related disparities among American Indian, African American or Black, Asian, Hispanic or Latino, Pacific Islander, sexual and gender minorities, individuals of lower socioeconomic status, rural, and behavioral health populations. Data are provided for the 17 tobacco-related disparity indicators listed below.

1. Current tobacco use – adults aged 18 to 64 years
2. Current cigarette smoking – adults aged ≥18 years
3. Current vape use – adults aged 18 to 64 years
4. Current tobacco use – high school youth
5. Current cigarette smoking – high school youth
6. Current vape use – high school youth
7. Secondhand tobacco and vape aerosol exposure – adults aged ≥18 years
8. Secondhand cigarette or little cigar/cigarillo smoke exposure – high school youth
9. Secondhand vape aerosol exposure – high school youth
10. Cigarette quit attempt – adults aged ≥18 years who currently smoke cigarettes
11. Cigarette quit intent – adults aged ≥18 years who currently smoke cigarettes
12. Vape quit attempt – high school youth who currently use vapes
13. Vape quit intent – high school youth who currently use vapes
14. Population coverage for local multi-unit housing policies
15. Population coverage for local secondhand smoke policies
16. Population coverage for local flavored tobacco sales restriction policies
17. Population coverage for local tobacco retail sales policies

Current Tobacco Use – Adults Aged 18 to 64 Years

Table 2. Prevalence and percent change in current tobacco use among adults aged 18 to 64 years, by population—California Health Interview Survey, 2016 to 2019

Population		2016‡	2017‡	2018	2019	Percent Change, 2018§ vs. 2019	Percentage Difference, 2018§ vs. 2019
Race and Ethnicity	Hispanic or Latino*	13.3%	13.0%	19.9%	10.1%	-49.2%	-9.8%
	African American or Black*	25.2%	16.2%†	22.0%	20.8%	-5.5%	-1.2%
	American Indian*	20.1%†	22.6%	57.9%	19.3%†	-66.7%†	-38.6%†
	Asian*	11.8%	10.5%	16.1%	8.0%	-50.3%	-8.1%
	White	17.8%	17.3%	23.5%	17.8%	-24.3%	-5.7%
	Other or multiracial	26.5%	22.8%	27.5%	15.9%	-42.2%	-11.6%
Sexual Orientation	Lesbian, Gay, or Bisexual*	21.9%	26.5%	30.3%	20.8%	-31.4%	-9.5%
	Straight	15.6%	13.8%	20.4%	12.5%	-38.7%	-7.9%
Income	<185% FPL*	20.7%	18.1%	24.4%	17.1%	-29.9%	-7.3%
	≥185% FPL	13.3%	13.0%	19.8%	11.5%	-41.9%	-8.3%
Mental Health	SPD likely*	33.7%	35.2%	47.3%	23.0%	-51.4%	-24.3%
	SPD not likely	15.0%	13.5%	19.7%	12.4%	-37.1%	-7.3%
Area	Urban	15.4%	14.1%	20.8%	12.9%	-38.0%	-7.9%
	Rural*	20.2%	18.9%	24.6%	16.5%	-32.9%	-8.1%
Overall		15.8%	14.6%	21.2%	13.2%	-37.7%	-8.0%

Abbreviations: FPL, federal poverty level; SPD, serious psychological distress.

Restricted to adults aged 18 to 64 years as vape use was not asked of all adults in 2016. Racial groups include only non-Hispanic or Latino of a single race unless otherwise noted. Hispanic or Latino includes all racial groups. See [Additional Notes](#) section for more information.

* Indicates a CTCP priority population.

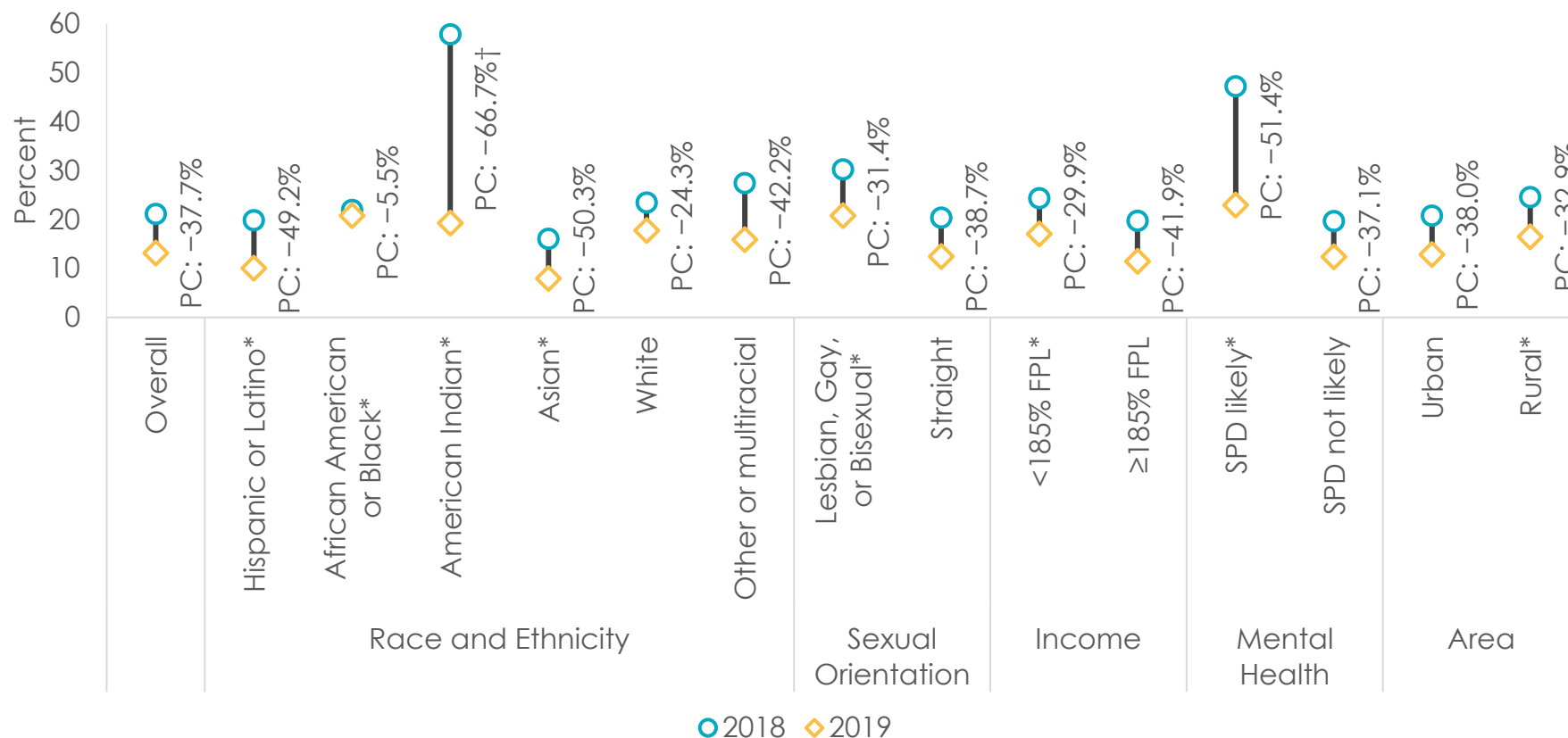
† Caution should be used as estimate is statistically unreliable.

‡ CTCP recommends that readers not trend 2016-2017 data with 2018-2019 data due to changes to the tobacco use definition. Prior to 2018, tobacco use only included cigarettes or vapes. Starting in 2018, tobacco use included cigarettes, cigars, hookah, little cigars or cigarillos, smokeless tobacco, or vapes.

§ Baseline established in 2018 for tobacco use definition consistency; however, comparison between 2018 and 2019 are for informational purposes only and should not be treated as scientifically or statistically accurate. CTCP recommends that readers not compare or trend the tobacco use rates due to methodology change that significantly impacted the cigarette smoking rates.

Source: California Health Interview Survey. CHIS 2016 to CHIS 2019 Adult Files. Los Angeles, CA: UCLA Center for Health Policy Research; October 2020.

Figure 2. Percent change in current tobacco use among adults aged 18 to 64 years, by population—California Health Interview Survey, 2018 vs. 2019



Abbreviations: FPL, federal poverty level; PC, percent change; SPD, serious psychological distress.

Baseline was established in 2018 for tobacco use definition consistency; however, comparison between 2018 and 2019 are for informational purposes only and should not be treated as scientifically or statistically accurate. CTCP recommends that readers not compare or trend the tobacco use rates due to methodology change that significantly impacted the cigarette smoking rates. Tobacco use includes cigarettes, cigars, hookah, little cigars or cigarillos, smokeless tobacco, or vapes. Racial groups include only non-Hispanic or Latino of a single race unless otherwise noted. Hispanic or Latino includes all racial groups. See [Additional Notes](#) section for more information.

* Indicates a CTCP priority population.

† Caution should be used as estimate is statistically unreliable.

Source: California Health Interview Survey. CHIS 2018 and CHIS 2019 Adult Files. Los Angeles, CA: UCLA Center for Health Policy Research; October 2020.

Current Cigarette Smoking – Adults Aged ≥18 Years

Table 3. Prevalence and percent change in current cigarette smoking among adults aged ≥18 years, by population—California Health Interview Survey, 2016 to 2019

Population		2016	2017	2018	2019	Percent Change‡, 2016 vs. 2019	Percentage Difference‡, 2016 vs. 2019
Race and Ethnicity	Hispanic or Latino*	10.9%	9.6%	10.8%	6.2%	-43.1%	-4.7%
	African American or Black*	22.0%	12.0%	12.3%	12.2%	-44.5%	-9.8%
	American Indian*	20.4%†	17.8%	45.0%	8.6%†	-57.8%†	-11.8%†
	Asian*	7.3%	6.7%	8.7%	4.1%	-43.8%	-3.2%
	White	12.4%	11.2%	11.5%	7.9%	-36.3%	-4.5%
	Other or multiracial	18.7%	18.1%	17.0%	6.3%	-66.3%	-12.4%
Sexual Orientation	Lesbian, Gay, or Bisexual*	15.8%	18.2%	17.9%	9.5%	-39.9%	-6.3%
	Straight	11.8%	9.8%	10.6%	6.6%	-44.1%	-5.2%
Income	<185% FPL*	16.9%	13.9%	15.7%	10.5%	-37.9%	-6.4%
	≥185% FPL	9.3%	8.6%	9.1%	5.4%	-41.9%	-3.9%
Mental Health	SPD likely*	26.1%	27.2%	32.5%	10.4%	-60.2%	-15.7%
	SPD not likely	11.3%	9.4%	10.1%	6.6%	-41.6%	-4.7%
Area	Urban	11.5%	9.8%	10.7%	6.7%	-41.7%	-4.8%
	Rural*	15.8%	14.2%	15.4%	8.4%	-46.8%	-7.4%
Overall		11.9%	10.2%	11.2%	6.9%	-42.0%	-5.0%

Abbreviations: FPL, federal poverty level; SPD, serious psychological distress.

Racial groups include only non-Hispanic or Latino of a single race unless otherwise noted. Hispanic or Latino includes all racial groups. See [Additional Notes](#) section for more information.

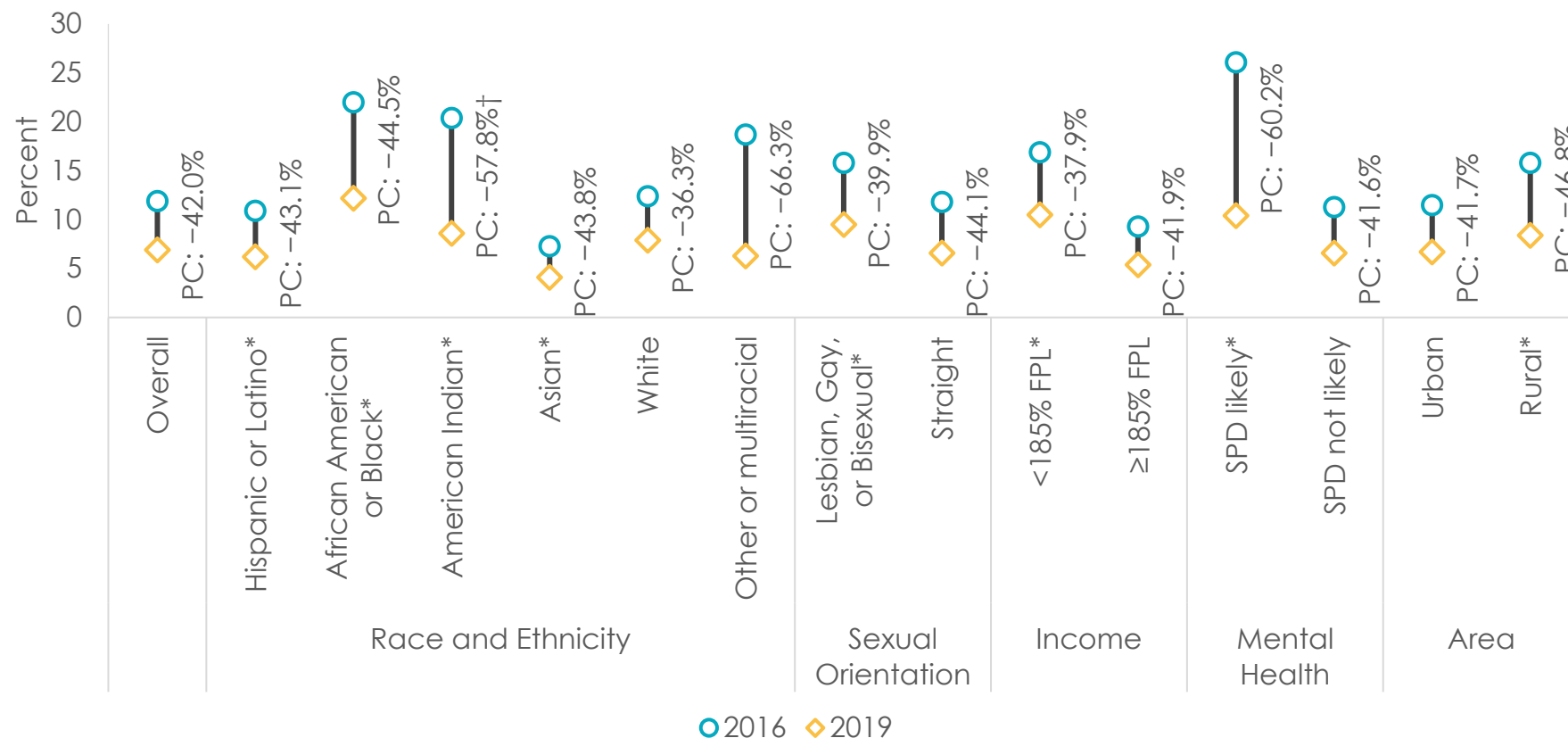
* Indicates a CTCP priority population.

† Caution should be used as estimate is statistically unreliable.

‡ Comparison between 2016 and 2019 are for informational purposes only and should not be treated as scientifically or statistically accurate. CTCP recommends that readers not compare or trend the cigarette use rates due to methodology change that significantly impacted the cigarette smoking rates.

Source: UCLA Center for Health Policy Research. AskCHIS 2016-2019. Current smoking status. <https://ask.chis.ucla.edu/>. Accessed August 16, 2021.

Figure 3. Percent change in current cigarette smoking among adults aged ≥18 years, by population—California Health Interview Survey, 2016 vs. 2019



Abbreviations: FPL, federal poverty level; PC, percent change; SPD, serious psychological distress.

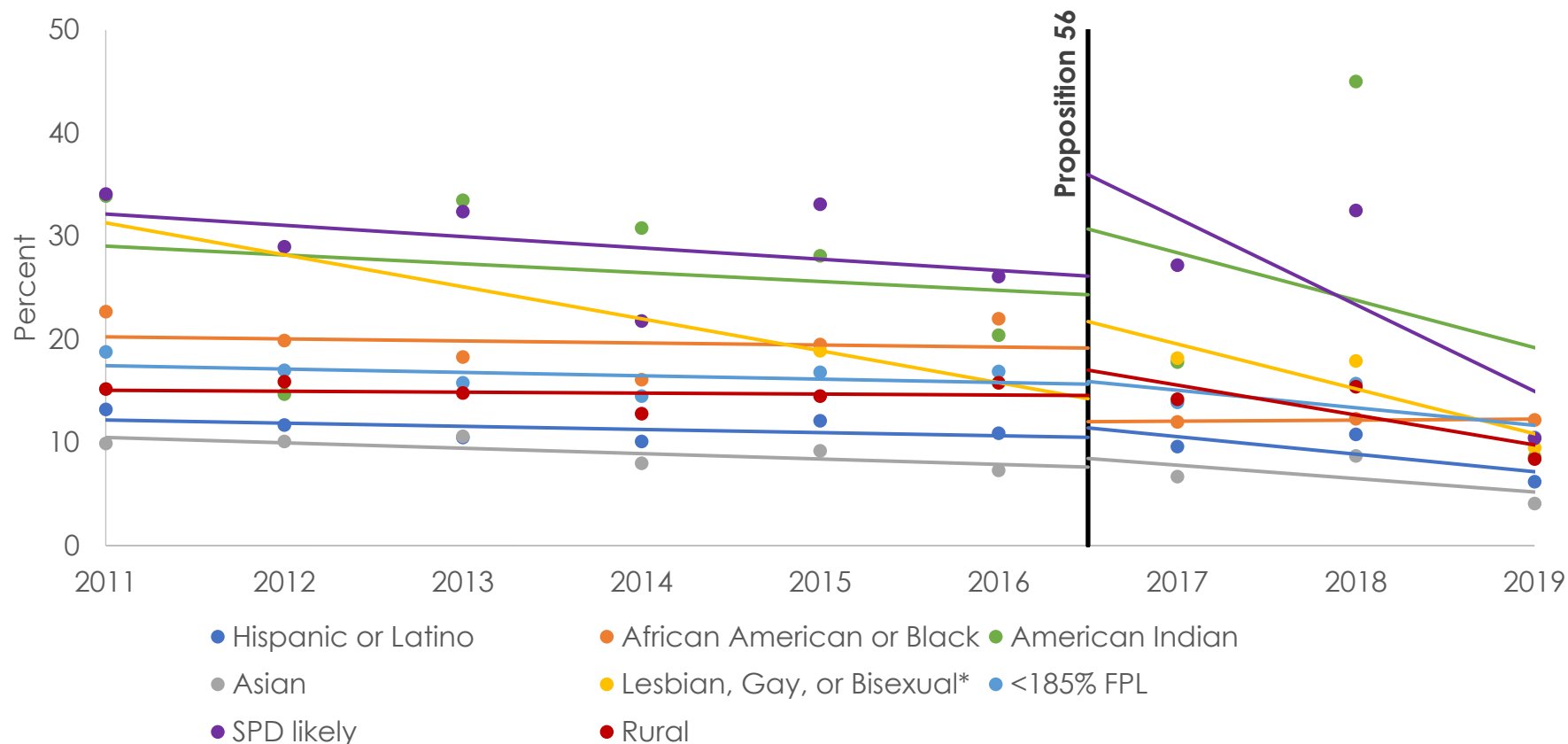
Comparison between 2016 and 2019 are for informational purposes only and should not be treated as scientifically or statistically accurate. CTCPC recommends that readers not compare or trend the cigarette use rates due to methodology change that significantly impacted the cigarette smoking rates. Racial groups include only non-Hispanic or Latino of a single race unless otherwise noted. Hispanic or Latino includes all racial groups. See [Additional Notes](#) section for more information.

* Indicates a CTCPC priority population.

† Caution should be used as estimate is statistically unreliable.

Source: UCLA Center for Health Policy Research. AskCHIS 2016-2019. Current smoking status. <https://ask.chis.ucla.edu/>. Accessed August 16, 2021.

Figure 4. Trend in current cigarette smoking among adults aged ≥ 18 years, by population—California Health Interview Survey, 2011-2016 vs. 2017-2019



Abbreviations: FPL, federal poverty level; SPD, serious psychological distress.

Comparison between 2011 to 2018 and 2019 are for informational purposes only and should not be treated as scientifically or statistically accurate. CTCR recommends that readers not compare or trend the cigarette use rates due to methodology change that significantly impacted the cigarette smoking rates. Racial groups include only non-Hispanic or Latino of a single race unless otherwise noted. Hispanic or Latino includes all racial groups. See [Additional Notes](#) section for more information.

* Sexual orientation was not asked in 2011 to 2014.

Source: UCLA Center for Health Policy Research. AskCHIS 2011-2019. Current smoking status. <https://ask.chis.ucla.edu/>. Accessed August 16, 2021.

Current Vape Use – Adults Aged 18 to 64 Years

Table 4. Prevalence and percent change in current vape use among adults aged 18 to 64 years, by population—California Health Interview Survey, 2016 to 2019

Population		2016	2017	2018	2019	Percent Change, 2016 vs. 2019	Percentage Difference, 2016 vs. 2019
Race and Ethnicity	Hispanic or Latino*	3.4%	4.5%	6.2%	3.6%	+5.9%	+0.2%
	African American or Black*	3.6%	4.5%†	6.0%	6.9%	+91.7%	+3.3%
	American Indian*	2.7%†	8.7%†	16.7%†	13.6%†	+403.7%†	+10.9%†
	Asian*	5.4%	5.0%	8.4%	4.0%	-25.9%	-1.4%
	White	6.4%	7.1%	7.3%	7.0%	+9.4%	+0.6%
	Other or multiracial	9.6%†	8.5%†	12.5%†	5.1%†	-46.9%†	-4.5%†
Sexual Orientation	Lesbian, Gay, or Bisexual*	8.4%	11.8%†	13.6%	11.0%	+31.0%	+2.6%
	Straight	4.9%	5.2%	6.6%	4.6%	-6.1%	-0.3%
Income	<185% FPL*	5.1%	6.2%	7.2%	6.6%	+29.4%	+1.5%
	≥185% FPL	4.9%	5.4%	7.1%	4.5%	-8.2%	-0.4%
Mental Health	SPD likely*	12.0%	14.9%	16.9%	11.9%	-0.8%	-0.1%
	SPD not likely	4.7%	5.1%	6.6%	4.5%	-4.3%	-0.2%
Area	Urban	4.9%	5.7%	7.3%	5.1%	+4.1%	+0.2%
	Rural*	5.8%	5.4%	5.5%	5.2%	-10.3%	-0.6%
Overall		5.0%	5.6%	7.1%	5.1%	+2.0%	+0.1%

Abbreviations: FPL, federal poverty level; SPD, serious psychological distress.

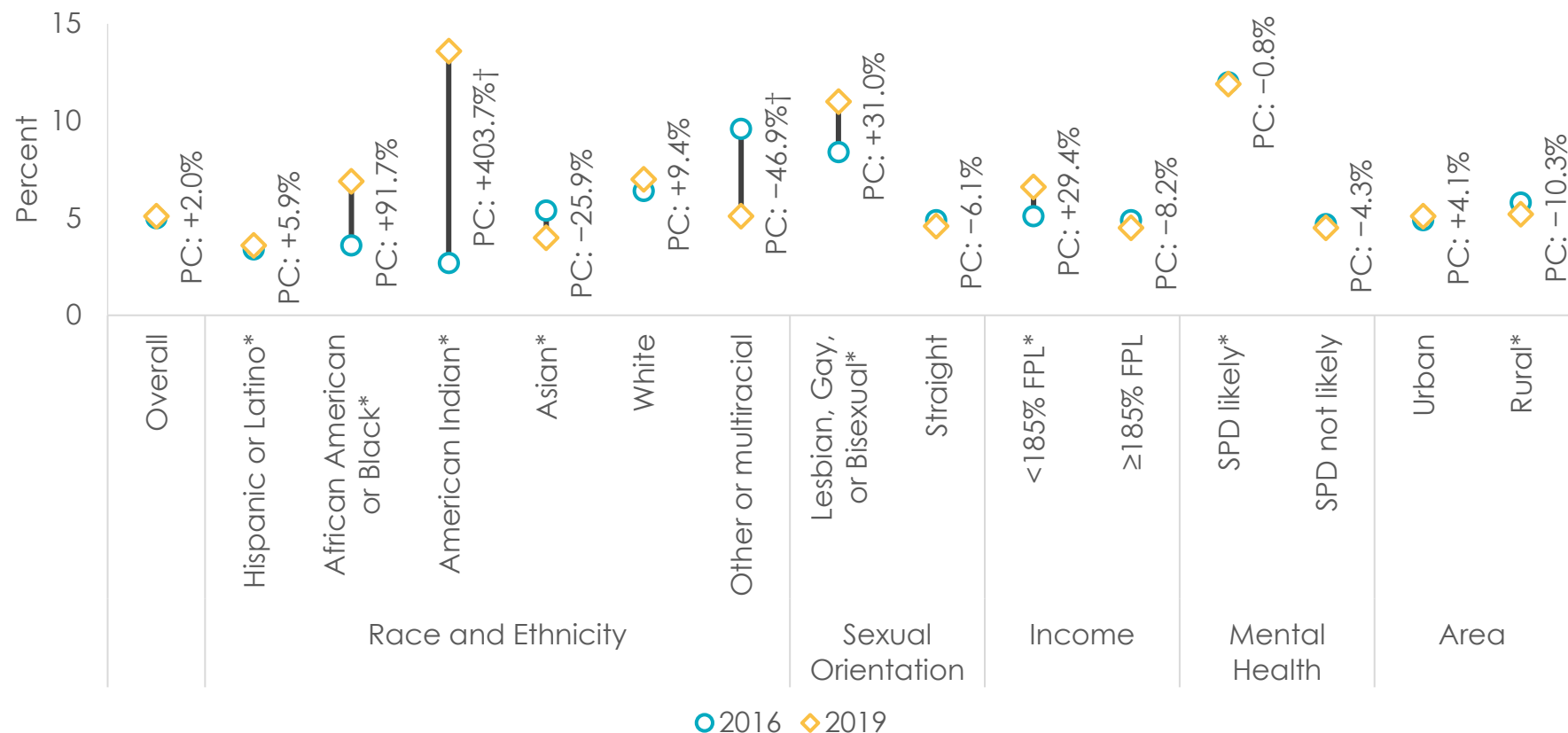
Restricted to adults aged 18 to 64 years as vape use was not asked of all adults in 2016. Racial groups include only non-Hispanic or Latino of a single race unless otherwise noted. Hispanic or Latino includes all racial groups. See [Additional Notes](#) section for more information.

* Indicates a CTCP priority population.

† Caution should be used as estimate is statistically unreliable.

Source: UCLA Center for Health Policy Research. AskCHIS 2016-2019. Current e-cigarette user status. <https://ask.chis.ucla.edu/>. Accessed August 16, 2021.

Figure 5. Percent change in current vape use among adults aged 18 to 64 years, by population—California Health Interview Survey, 2016 vs. 2019



Abbreviations: FPL, federal poverty level; PC, percent change; SPD, serious psychological distress.

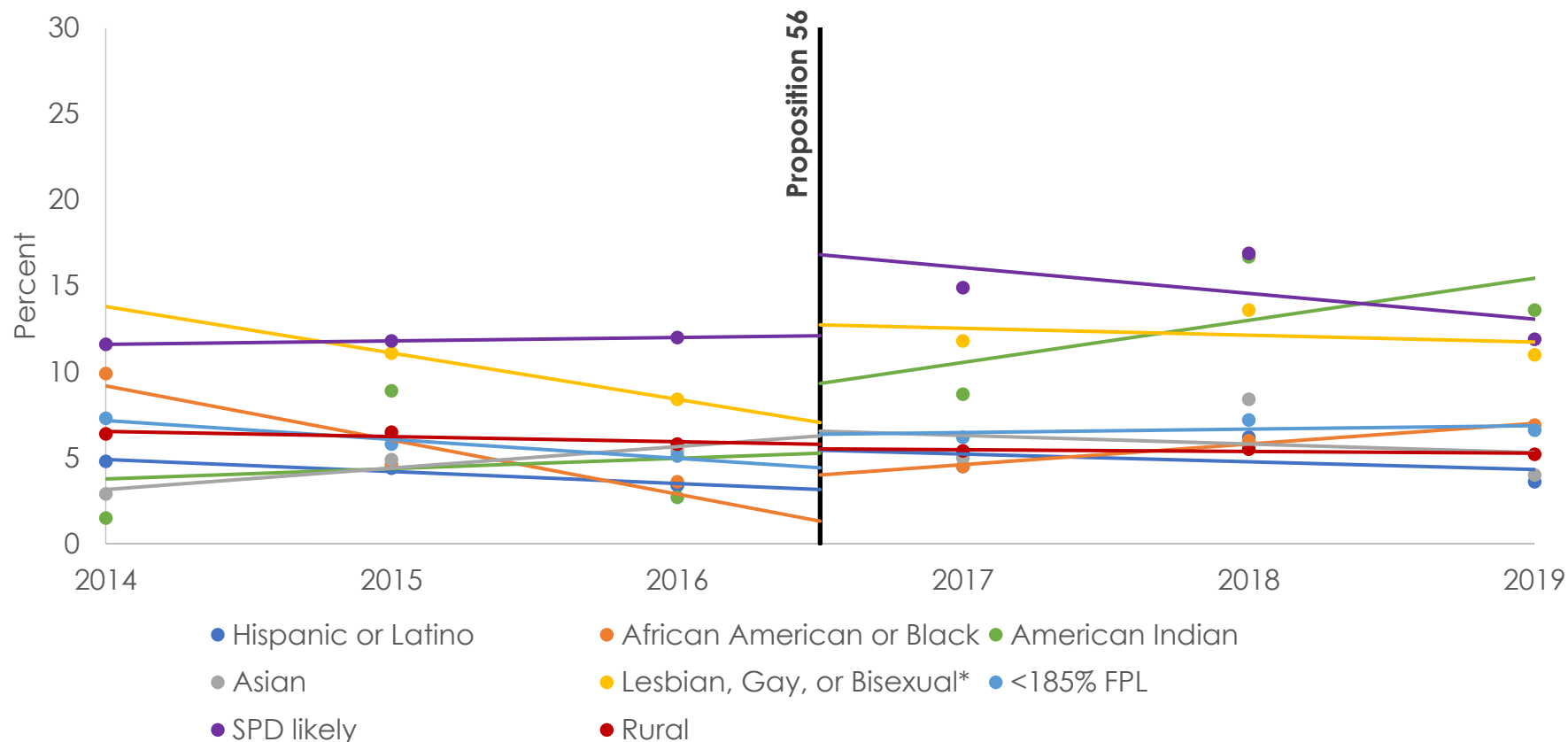
Restricted to adults aged 18 to 64 years as vape use was not asked of all adults in 2016. Racial groups include only non-Hispanic or Latino of a single race unless otherwise noted. Hispanic or Latino includes all racial groups. See [Additional Notes](#) section for more information.

* Indicates a CTCP priority population.

† Caution should be used as estimate is statistically unreliable.

Source: UCLA Center for Health Policy Research. AskCHIS 2016-2019. Current e-cigarette user status. <https://ask.chis.ucla.edu/>. Accessed August 16, 2021.

Figure 6. Trend in current vape use among adults aged 18 to 64 years, by population—California Health Interview Survey, 2014-2016 vs. 2017-2019



Abbreviations: FPL, federal poverty level; SPD, serious psychological distress.

Comparison between 2014 to 2015 and 2016 to 2019 are for informational purposes only and should not be treated as scientifically or statistically accurate. CTCF recommends that readers not compare or trend the vape use rates due to question wording. Racial groups include only non-Hispanic or Latino of a single race unless otherwise noted. Hispanic or Latino includes all racial groups. See [Additional Notes](#) section for more information.

* Sexual orientation was not asked in 2014.

Source: UCLA Center for Health Policy Research. AskCHIS 2014-2019. Current e-cigarette user status. <https://ask.chis.ucla.edu/>. Accessed August 16, 2021.

Current Tobacco Use – Youth

Table 5. Prevalence and percent change in current tobacco use among high school youth, by population—California Student Tobacco Survey, 2016 to 2020

Population		2016	2018	2020	Percent Change, 2016‡ vs. 2020	Percentage Difference, 2016‡ vs. 2020
Race and Ethnicity	Hispanic or Latino*	13.5%	9.9%	8.0%	–40.7%	–5.5%
	African American or Black*	10.6%	8.8%	10.2%	–3.8%	–0.4%
	American Indian*	23.9%	19.1%	13.9%	–41.8%	–10.0%
	Asian*	5.6%	7.0%	5.7%	+1.8%	+0.1%
	Pacific Islander*	12.3%	16.4%	14.6%	+18.7%	+2.3%
	White	18.9%	17.8%	14.3%	–24.3%	–4.6%
	Other	18.8%	13.9%	12.5%	–33.5%	–6.3%
	Multiracial	15.8%	13.9%	12.4%	–21.5%	–3.4%
Sexual and Gender Minority	SGM*	–†	15.4%	14.1%	ID†	ID†
	Non-SGM	–†	11.3%	8.9%	ID†	ID†
Mental Health	Poor*	–†	–†	16.1%	ID†	ID†
	Fair	–†	–†	10.6%	ID†	ID†
	Good to excellent	–†	–†	7.9%	ID†	ID†
Area	City	12.7%	11.6%	8.5%	–33.1%	–4.2%
	Suburban	13.8%	12.3%	10.0%	–27.5%	–3.8%
	Rural*	15.1%	13.0%	12.6%	–16.6%	–2.5%
Overall		13.6%	12.2%	9.7%	–28.7%	–3.9%

Abbreviations: ID, insufficient data; SGM, sexual and gender minority.

The CSTS was fielded biannually from 2016 to 2020. Tobacco use includes cigarettes, cigars, heated tobacco (2020 only), hookah, kreteks (2016 only), little cigars or cigarillos, smokeless tobacco, or vapes (nicotine or just flavoring). Racial groups include only non-Hispanic or Latino of a single race unless otherwise noted. Hispanic or Latino includes all racial groups. See [Additional Notes](#) section for more information.

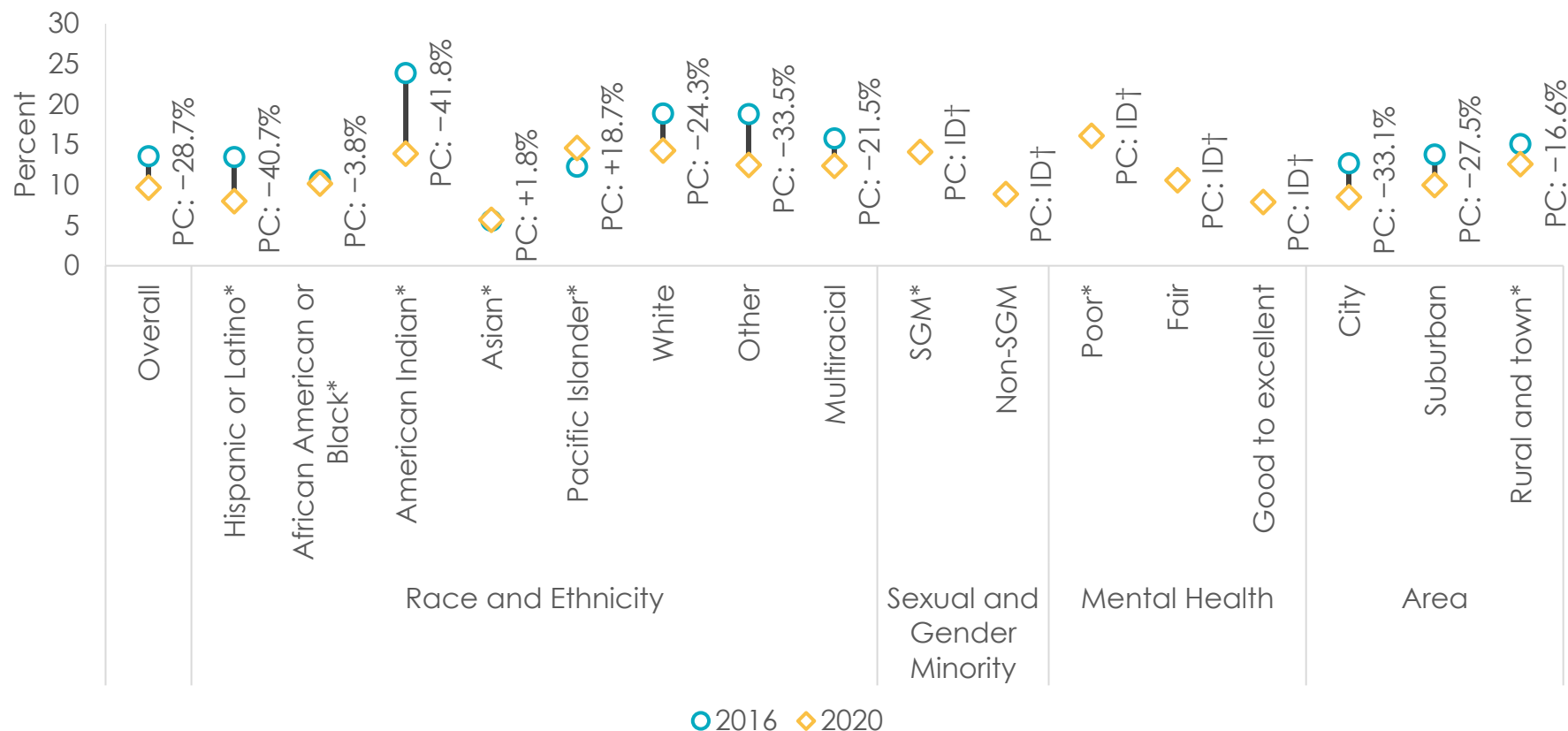
* Indicates a CTCP priority population.

† Sexual orientation and gender identity was not asked in 2016. Mental health was not asked in 2016 or 2018.

‡ Comparison between 2016 and 2020 are for informational purposes only and should not be treated as scientifically or statistically accurate. CTCP recommends that readers not compare the tobacco use rates due to changes to the tobacco use definition.

Source: California Student Tobacco Survey. CSTS 2016 to CSTS 2020. San Diego, CA: University of California, San Diego, Center for Research and Intervention in Tobacco Control; 2021.

Figure 7. Percent change in current tobacco use among high school youth, by population—California Student Tobacco Survey, 2016 vs. 2020



Abbreviations: ID, insufficient data; SGM, sexual and gender minority.

Comparison between 2016 and 2020 are for informational purposes only and should not be treated as scientifically or statistically accurate. CTCPC recommends that readers not compare the tobacco use rates due to changes to the tobacco use definition. Tobacco use includes cigarettes, cigars, heated tobacco (2020 only), hookah, kreteks (2016 only), little cigars or cigarillos, smokeless tobacco, or vapes (nicotine or just flavoring). Racial groups include only non-Hispanic or Latino of a single race unless otherwise noted. Hispanic or Latino includes all racial groups. See [Additional Notes](#) section for more information.

* Indicates a CTCPC priority population.

† Sexual orientation and gender identity was not asked in 2016. Mental health was not asked in 2016.

Source: California Student Tobacco Survey. CSTS 2016 and CSTS 2020. San Diego, CA: University of California, San Diego, Center for Research and Intervention in Tobacco Control; 2021.

Current Cigarette Smoking – Youth

Table 6. Prevalence and percent change in current cigarette smoking among high school youth, by population—California Student Tobacco Survey, 2016 to 2020

Population		2016	2018	2020	Percent Change, 2016 vs. 2020	Percentage Difference, 2016 vs. 2020
Race and Ethnicity	Hispanic or Latino*	4.3%	1.5%	1.0%	-76.7%	-3.3%
	African American or Black*	1.8%	1.1%	1.0%	-44.4%	-0.8%
	American Indian*	5.7%†	5.0%	2.4%	-57.9%†	-3.3%†
	Asian*	1.6%	0.8%	0.5%	-68.8%	-1.1%
	Pacific Islander*	4.6%	2.7%	1.9%	-58.7%	-2.7%
	White	6.0%	2.9%	2.0%	-66.7%	-4.0%
	Other	7.5%	1.8%	2.4%	-68.0%	-5.1%
	Multiracial	5.3%	2.3%	1.4%	-73.6%	-3.9%
Sexual and Gender Minority	SGM*	—‡	4.3%	2.9%	ID‡	ID‡
	Non-SGM	—‡	1.5%	0.9%	ID‡	ID‡
Mental Health	Poor*	—‡	—‡	3.0%	ID‡	ID‡
	Fair	—‡	—‡	1.2%	ID‡	ID‡
	Good to excellent	—‡	—‡	0.9%	ID‡	ID‡
Area	City	3.7%	1.7%	1.1%	-70.3%	-2.6%
	Suburban	4.7%	1.9%	1.2%	-74.5%	-3.5%
	Rural*	4.3%	3.2%	1.7%	-60.5%	-2.6%
Overall		4.3%	2.0%	1.2%	-72.1%	-3.1%

Abbreviations: ID, insufficient data; SGM, sexual and gender minority.

The CSTS was fielded biannually from 2016 to 2020. Racial groups include only non-Hispanic or Latino of a single race unless otherwise noted. Hispanic or Latino includes all racial groups. See [Additional Notes](#) section for more information.

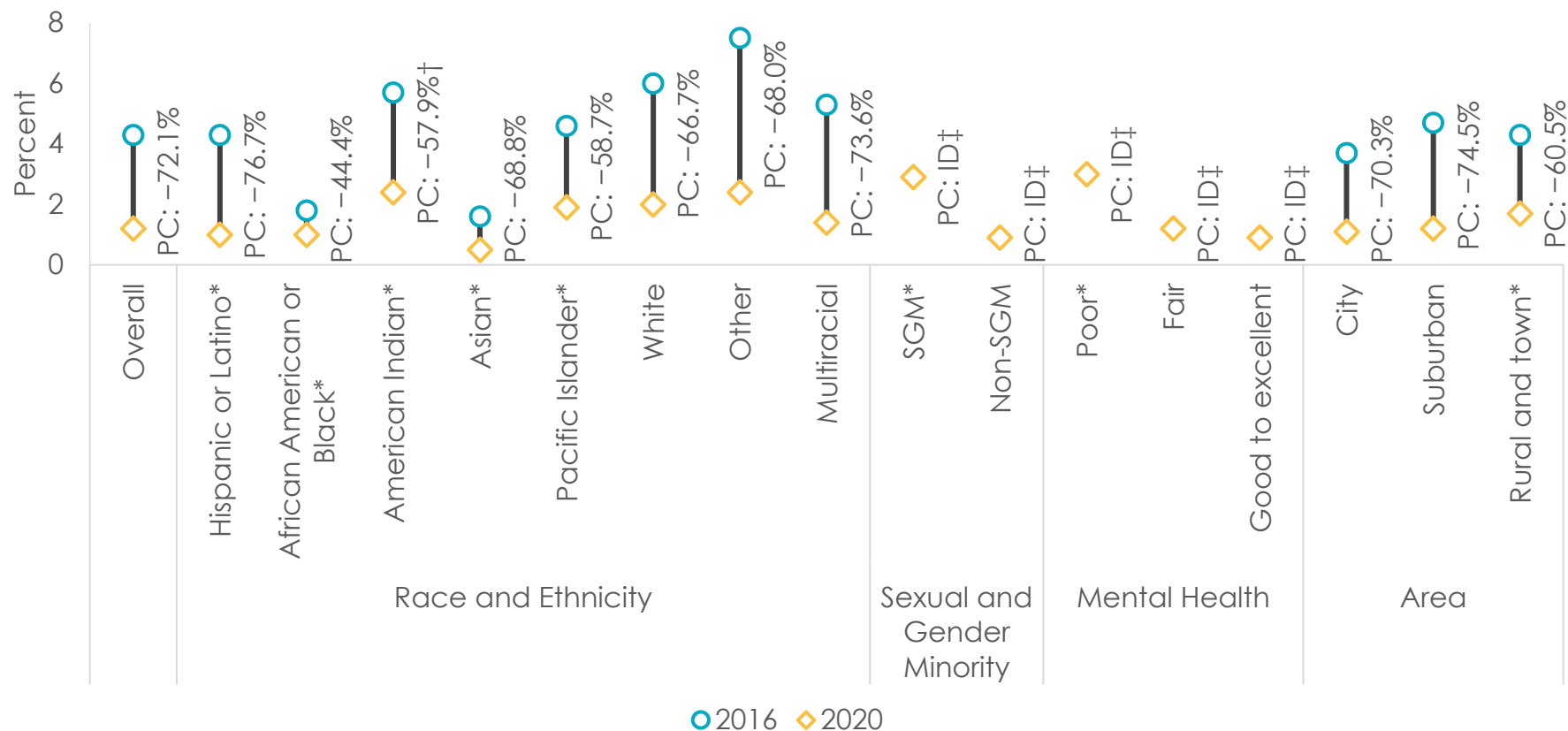
* Indicates a CTCP priority population.

† Caution should be used as estimate is statistically unreliable.

‡ Sexual orientation and gender identity was not asked in 2016. Mental health was not asked in 2016 or 2018.

Source: California Student Tobacco Survey. CSTS 2016 to CSTS 2020. San Diego, CA: University of California, San Diego, Center for Research and Intervention in Tobacco Control; 2021.

Figure 8. Percent change in current cigarette smoking among high school youth, by population—California Student Tobacco Survey, 2016 vs. 2020



Abbreviations: ID, insufficient data; SGM, sexual and gender minority.

Racial groups include only non-Hispanic or Latino of a single race unless otherwise noted. Hispanic or Latino includes all racial groups. See [Additional Notes](#) section for more information.

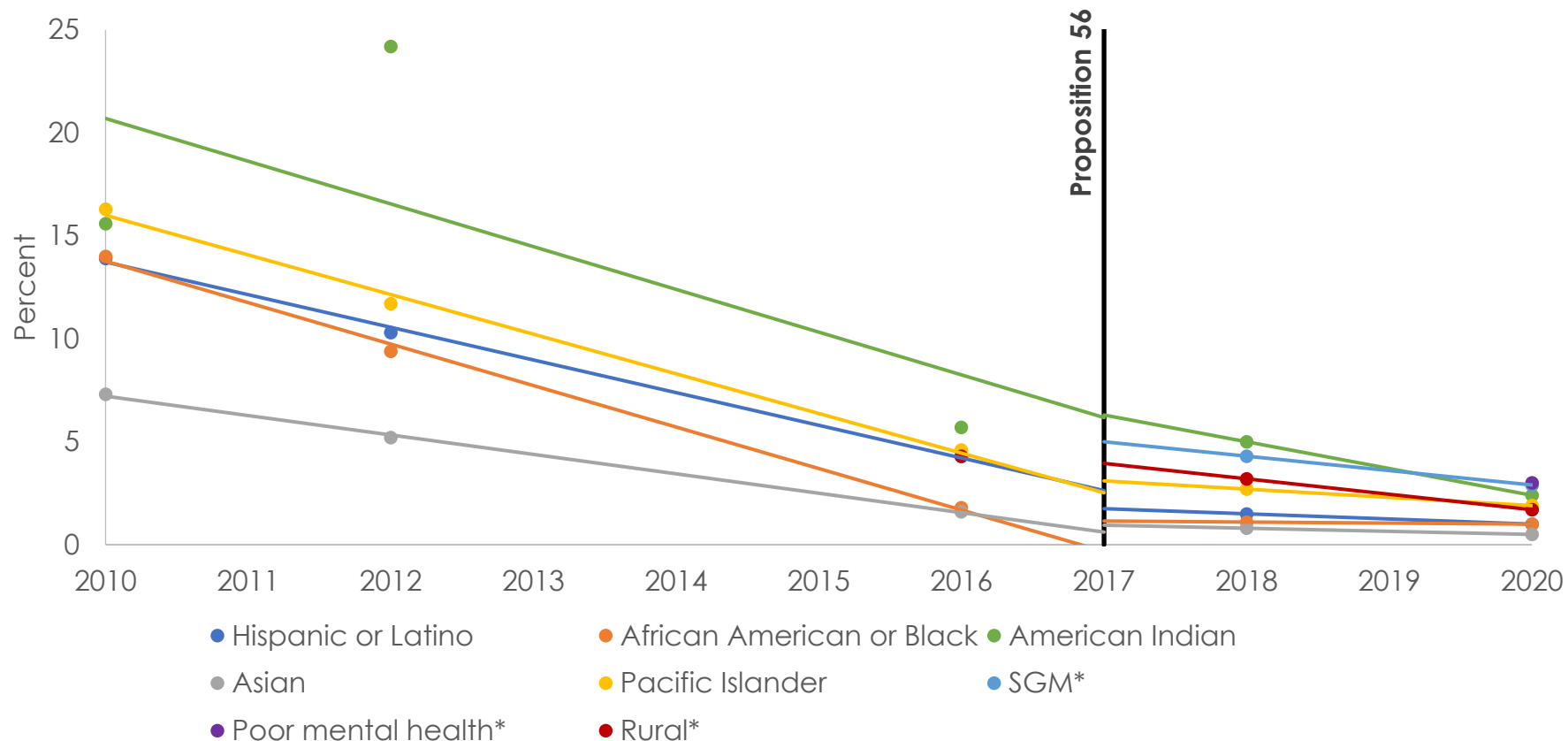
* Indicates a CTCP priority population.

† Caution should be used as estimate is statistically unreliable.

‡ Sexual orientation and gender identity was not asked in 2016. Mental health was not asked in 2016.

Source: California Student Tobacco Survey. CSTS 2016 and CSTS 2020. San Diego, CA: University of California, San Diego, Center for Research and Intervention in Tobacco Control; 2021.

Figure 9. Trend in current cigarette smoking among high school youth, by population—California Student Tobacco Survey, 2010-2016 vs. 2018-2020



Abbreviations: SGM, sexual and gender minority.

The data collection methodology for the CSTS changed. Prior to 2016, the survey was administered to 9th to 12th graders. Starting in 2016, the survey was administered to only 10th and 12th graders. Comparison between 2010 to 2012 and 2016 to 2020 are for informational purposes only and should not be treated as scientifically or statistically accurate. CTCP recommends that readers not compare or trend due to the methodology change. Racial groups include only non-Hispanic or Latino of a single race unless otherwise noted. Hispanic or Latino includes all racial groups. See [Additional Notes](#) section for more information.

* Sexual orientation and gender identity was not asked from 2010 to 2016. Rurality was not ascertained in 2010 or 2012. Mental health was not asked from 2010 to 2018.

Source: [1] California Student Tobacco Survey. CSTS 2010 to CSTS 2012. Sacramento, CA: California Department of Public Health; 2014. [2] California Student Tobacco Survey. CSTS 2016 to CSTS 2020. San Diego, CA: University of California, San Diego, Center for Research and Intervention in Tobacco Control; 2021.

Current Vape Use – Youth

Table 7. Prevalence and percent change in current vape use among high school youth, by population—California Student Tobacco Survey, 2016 to 2020

Population		2016	2018	2020	Percent Change, 2016‡ vs. 2020	Percentage Difference, 2016‡ vs. 2020
Race and Ethnicity	Hispanic or Latino*	8.3%	8.3%	6.5%	–21.7%	–1.8%
	African American or Black*	4.5%	6.6%	6.3%	+40.0%	+1.8%
	American Indian*	11.8%	14.3%	11.2%	–5.1%	–0.6%
	Asian*	4.1%	6.5%	5.3%	+29.3%	+1.2%
	Pacific Islander*	9.6%	14.6%	11.2%	+16.7%	+1.6%
	White	12.8%	16.0%	13.1%	+2.3%	+0.3%
	Other	11.1%	10.6%	9.7%	–12.6%	–1.4%
	Multiracial	10.2%	12.4%	10.7%	+4.9%	+0.5%
Sexual and Gender Minority	SGM*	–†	12.7%	11.6%	ID†	ID†
	Non-SGM	–†	9.9%	7.7%	ID†	ID†
Mental Health	Poor*	–†	–†	13.7%	ID†	ID†
	Fair	–†	–†	9.1%	ID†	ID†
	Good to excellent	–†	–†	6.6%	ID†	ID†
Area	City	8.0%	10.0%	6.9%	–13.8%	–1.1%
	Suburban	9.0%	10.7%	8.7%	–3.3%	–0.3%
	Rural*	8.4%	10.7%	10.7%	+27.4%	+2.3%
Overall		8.6%	10.5%	8.2%	–4.7%	–0.4%

Abbreviations: ID, insufficient data; SGM, sexual and gender minority.

The CSTS was fielded biannually from 2016 to 2020. Racial groups include only non-Hispanic or Latino of a single race unless otherwise noted. Hispanic or Latino includes all racial groups. See [Additional Notes](#) section for more information.

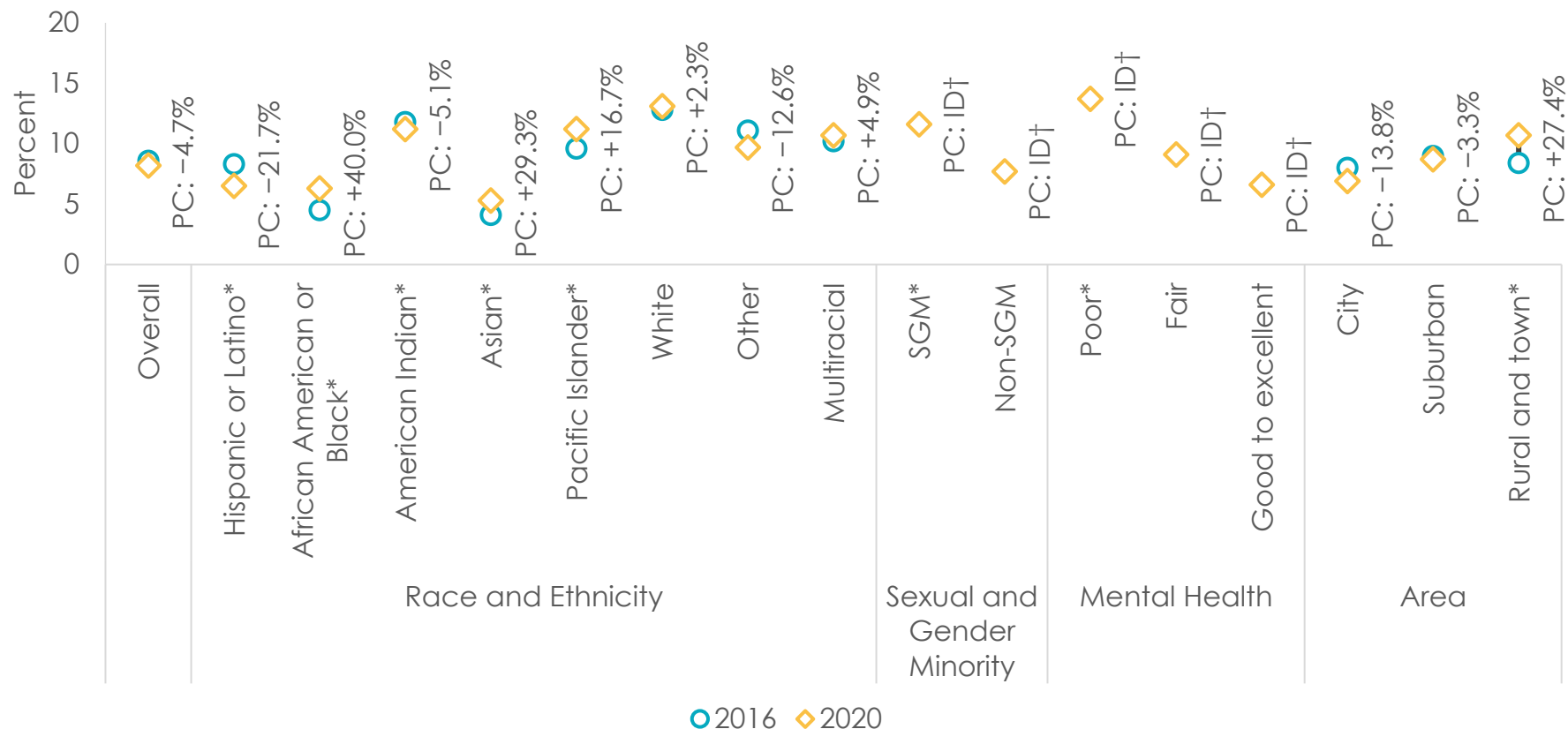
* Indicates a CTCP priority population.

† Sexual orientation and gender identity was not asked in 2016. Mental health was not asked in 2016 or 2018.

‡ Comparison between 2016 and 2020 are for informational purposes only and should not be treated as scientifically or statistically accurate. CTCP recommends that readers not compare the vape use rates due to changes to the question wording.

Source: California Student Tobacco Survey. CSTS 2016 to CSTS 2020. San Diego, CA: University of California, San Diego, Center for Research and Intervention in Tobacco Control; 2021.

Figure 10. Percent change in current vape use among high school youth, by population—California Student Tobacco Survey, 2016 vs. 2020



Abbreviations: ID, insufficient data; SGM, sexual and gender minority.

Comparison between 2016 and 2020 are for informational purposes only and should not be treated as scientifically or statistically accurate. CTCPC recommends that readers not compare the vape use rates due to changes to the question wording. Racial groups include only non-Hispanic or Latino of a single race unless otherwise noted. Hispanic or Latino includes all racial groups. See [Additional Notes](#) section for more information.

* Indicates a CTCPC priority population.

† Sexual orientation and gender identity was not asked in 2016. Mental health was not asked in 2016.

Source: California Student Tobacco Survey. CSTS 2016 and CSTS 2020. San Diego, CA: University of California, San Diego, Center for Research and Intervention in Tobacco Control; 2021.

Secondhand Tobacco Smoke and Vape Exposure – Adults Aged ≥18 Years

Table 8. Prevalence and percent change in exposure to secondhand tobacco smoke or vape aerosol exposure in the past two weeks among adults aged ≥18 years, by population—California Health Interview Survey, 2016 to 2019

Population		2016†	2017†	2018	2019	Percent Change, 2018† vs. 2019	Percentage Difference, 2018† vs. 2019
Race and Ethnicity	Hispanic or Latino*	—	—	55.6%	45.8%	–17.6%	–9.8%
	African American or Black*	—	—	53.2%	48.4%	–9.0%	–4.8%
	American Indian*	—	—	60.8%	71.2%	+17.1%	+10.4%
	Asian*	—	—	46.9%	39.8%	–15.1%	–7.1%
	White	—	—	51.4%	42.5%	–17.3%	–8.9%
	Other or multiracial	—	—	71.4%	59.6%	–16.5%	–11.8%
Sexual Orientation	Lesbian, Gay, or Bisexual*	—	—	68.3%	61.6%	–9.8%	–6.7%
	Straight	—	—	51.9%	43.1%	–17.0%	–8.8%
Income	<185% FPL*	—	—	53.1%	46.1%	–13.2%	–7.0%
	≥185% FPL	—	—	52.8%	43.2%	–18.2%	–9.6%
Mental Health	SPD likely*	—	—	68.2%	60.6%	–11.1%	–7.6%
	SPD not likely	—	—	52.1%	42.9%	–17.7%	–9.2%
Area	Urban	—	—	53.1%	44.4%	–16.4%	–8.7%
	Rural*	—	—	51.4%	40.5%	–21.2%	–10.9%
Overall		—	—	52.9%	44.1%	–16.6%	–8.8%

Abbreviations: FPL, federal poverty level; SPD, serious psychological distress.

Racial groups include only non-Hispanic or Latino of a single race unless otherwise noted. Hispanic or Latino includes all racial groups. See [Additional Notes](#) section for more information.

* Indicates a CTCP priority population.

† Secondhand exposure was not asked in 2016 or 2017. Baseline established in 2018.

Source: UCLA Center for Health Policy Research. AskCHIS 2018-2019. Ever been exposed to secondhand tobacco smoke or e-cigarette vapor in California. <https://ask.chis.ucla.edu/>. Accessed August 16, 2021.

Figure 11. Percent change in exposure to secondhand tobacco smoke or vape aerosol exposure in the past two weeks among adults aged ≥18 years, by population—California Health Interview Survey, 2018 vs. 2019



Abbreviations: FPL, federal poverty level; PC, percent change; SPD, serious psychological distress.

Baseline established in 2018 as secondhand exposure was not asked in 2016 or 2017. Racial groups include only non-Hispanic or Latino of a single race unless otherwise noted. Hispanic or Latino includes all racial groups. See [Additional Notes](#) section for more information.

* Indicates a CTCP priority population.

Source: UCLA Center for Health Policy Research. AskCHIS 2018-2019. Ever been exposed to secondhand tobacco smoke or e-cigarette vapor in California. <https://ask.chis.ucla.edu/>. Accessed August 16, 2021.

Secondhand Cigarette or Little Cigar/Cigarillo Smoke Exposure – Youth

Table 9. Prevalence and percent change in exposure to secondhand cigarette or little cigar/cigarillo smoke in the past two weeks among high school youth, by population—California Student Tobacco Survey, 2016 to 2020

Population		2016†	2018†	2020	Percent Change†	Percentage Difference†
Race and Ethnicity	Hispanic or Latino*	—	—	10.6%	ID	ID
	African American or Black*	—	—	16.3%	ID	ID
	American Indian*	—	—	16.0%	ID	ID
	Asian*	—	—	10.8%	ID	ID
	Pacific Islander*	—	—	17.9%	ID	ID
	White	—	—	14.0%	ID	ID
	Other	—	—	15.3%	ID	ID
	Multiracial	—	—	16.1%	ID	ID
Sexual and Gender Minority	SGM*	—	—	18.2%	ID	ID
	Non-SGM	—	—	11.0%	ID	ID
Mental Health	Poor*	—	—	18.7%	ID	ID
	Fair	—	—	14.2%	ID	ID
	Good to excellent	—	—	10.0%	ID	ID
Area	City	—	—	11.2%	ID	ID
	Suburban	—	—	11.5%	ID	ID
	Rural*	—	—	16.1%	ID	ID
Overall		—	—	12.0%	ID	ID

Abbreviations: ID, insufficient data; SGM, sexual and gender minority.

The CSTS was fielded biannually from 2016 to 2020. Racial groups include only non-Hispanic or Latino of a single race unless otherwise noted. Hispanic or Latino includes all racial groups. See [Additional Notes](#) section for more information.

* Indicates a CTCP priority population.

† Secondhand exposure was not asked in 2016 or 2018. Baseline established in 2020; therefore, percent change and percentage difference cannot be calculated.

Source: California Student Tobacco Survey. CSTS 2016 to CSTS 2020. San Diego, CA: University of California, San Diego, Center for Research and Intervention in Tobacco Control; 2021.

Secondhand Vape Exposure – Youth

Table 10. Prevalence and percent change in exposure to secondhand vape aerosol in the past two weeks among high school youth, by population—California Student Tobacco Survey, 2016 to 2020

Population		2016†	2018†	2020	Percent Change†	Percentage Difference†
Race and Ethnicity	Hispanic or Latino*	—	—	22.7%	ID	ID
	African American or Black*	—	—	20.7%	ID	ID
	American Indian*	—	—	26.7%	ID	ID
	Asian*	—	—	24.3%	ID	ID
	Pacific Islander*	—	—	29.5%	ID	ID
	White	—	—	44.0%	ID	ID
	Other	—	—	25.7%	ID	ID
	Multiracial	—	—	37.2%	ID	ID
Sexual and Gender Minority	SGM*	—	—	32.9%	ID	ID
	Non-SGM	—	—	28.4%	ID	ID
Mental Health	Poor*	—	—	37.6%	ID	ID
	Fair	—	—	32.1%	ID	ID
	Good to excellent	—	—	24.8%	ID	ID
Area	City	—	—	25.4%	ID	ID
	Suburban	—	—	29.9%	ID	ID
	Rural*	—	—	29.3%	ID	ID
Overall		—	—	27.9%	ID	ID

Abbreviations: ID, insufficient data; SGM, sexual and gender minority.

The CSTS was fielded biannually from 2016 to 2020. Racial groups include only non-Hispanic or Latino of a single race unless otherwise noted. Hispanic or Latino includes all racial groups. See [Additional Notes](#) section for more information.

* Indicates a CTCP priority population.

† Secondhand exposure was not asked in 2016 or 2018. Baseline established in 2020; therefore, percent change and percentage difference cannot be calculated.

Source: California Student Tobacco Survey. CSTS 2016 to CSTS 2020. San Diego, CA: University of California, San Diego, Center for Research and Intervention in Tobacco Control; 2021.

Cigarette Quit Attempt – Adults Aged ≥18 Years

Table 11. Proportion and percent change in quit attempt among adults aged ≥18 years who currently smoke cigarettes, by population—California Health Interview Survey, 2016 to 2019

Population		2016	2017	2018	2019	Percent Change, 2016 vs. 2019	Percentage Difference, 2016 vs. 2019
Race and Ethnicity	Hispanic or Latino*	62.8%	63.2%	58.7%	55.0%	−12.4%	−7.8%
	African American or Black*	71.8%	56.4%†	56.3%	61.4%	−14.5%	−10.4%
	American Indian*	59.4%†	66.1%†	33.8%†	84.5%†	+42.3%†	+25.1%†
	Asian*	63.8%†	53.9%	66.9%	69.0%	+8.2%	+5.2%
	White	55.8%	50.0%	53.3%	57.6%	+3.2%	+1.8%
	Other or multiracial	63.1%	58.9%	57.6%†	77.0%†	+22.0%†	+13.9%†
Sexual Orientation	Lesbian, Gay, or Bisexual*	66.7%	54.8%	58.2%	74.4%	+11.5%	+7.7%
	Straight	60.4%	55.7%	56.5%	56.3%	−6.8%	−4.1%
Income	<185% FPL*	59.8%	61.0%	55.8%	59.1%	−1.2%	−0.7%
	≥185% FPL	61.6%	51.9%	57.4%	58.6%	−4.9%	−3.0%
Mental Health	SPD likely*	64.7%	69.1%	44.4%	72.8%	+12.5%	+8.1%
	SPD not likely	60.4%	53.9%	58.7%	57.2%	−5.3%	−3.2%
Area	Urban	62.1%	56.0%	55.7%	59.1%	−4.8%	−3.0%
	Rural*	51.7%	54.0%	63.1%	56.1%	+8.5%	+4.4%
Overall		60.7%	55.7%	56.7%	58.8%	−3.1%	−1.9%

Abbreviations: FPL, federal poverty level; SPD, serious psychological distress.

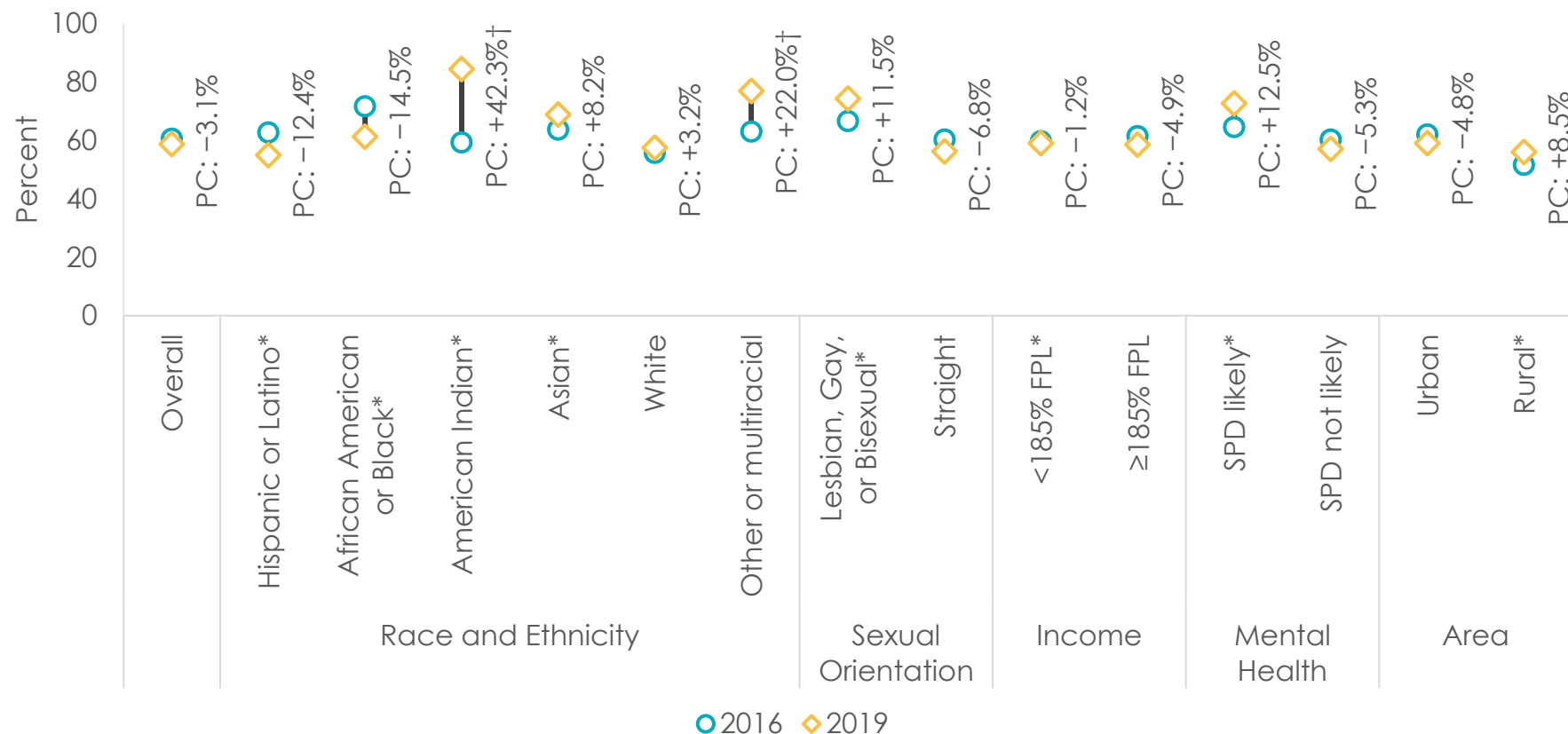
Cigarette quit attempt is an attempt to quit smoking cigarettes for one day or longer in the past 12 months. Racial groups include only non-Hispanic or Latino of a single race unless otherwise noted. Hispanic or Latino includes all racial groups. See [Additional Notes](#) section for more information.

* Indicates a CTCP priority population.

† Caution should be used as estimate is statistically unreliable.

Source: UCLA Center for Health Policy Research. AskCHIS 2016-2019. Stopped smoking for one or more days in past year to quit. <https://ask.chis.ucla.edu/>. Accessed August 16, 2021.

Figure 12. Percent change in quit attempt among adults aged ≥ 18 years who currently smoke cigarettes, by population—California Health Interview Survey, 2016 vs. 2019



Abbreviations: FPL, federal poverty level; PC, percent change; SPD, serious psychological distress.

Cigarette quit attempt is an attempt to quit smoking cigarettes for one day or longer in the past 12 months. Racial groups include only non-Hispanic or Latino of a single race unless otherwise noted. Hispanic or Latino includes all racial groups. See [Additional Notes](#) section for more information.

* Indicates a CTCP priority population.

† Caution should be used as estimate is statistically unreliable.

Source: UCLA Center for Health Policy Research. AskCHIS 2016-2019. Stopped smoking for one or more days in past year to quit. <https://ask.chis.ucla.edu/>. Accessed August 16, 2021.

Cigarette Quit Intent – Adults Aged ≥18 Years

Table 12. Proportion and percent change in cigarette quit intent among adults aged ≥18 years who currently smoke cigarettes, by population—California Health Interview Survey, 2016 to 2019

Population		2016	2017	2018	2019	Percent Change, 2016 vs. 2019	Percentage Difference, 2016 vs. 2019
Race and Ethnicity	Hispanic or Latino*	73.6%	70.2%	73.2%	63.9%	-13.2%	-9.7%
	African American or Black*	77.1%†	67.1%†	86.4%†	66.0%	-14.4%†	-11.1%†
	American Indian*	65.8%†	83.2%†	48.7%†	82.1%†	+24.8%†	+16.3%†
	Asian*	74.4%†	56.9%	72.5%	55.3%	-25.7%†	-19.1%†
	White	72.7%	64.7%	71.6%	70.4%	-3.2%	-2.3%
	Other or multiracial	72.4%†	57.1%	86.5%†	65.3%†	-9.8%†	-7.1%†
Sexual Orientation	Lesbian, Gay, or Bisexual*	69.3%	66.9%†	72.9%	71.1%	+2.6%	+1.8%
	Straight	73.9%	65.5%	73.6%	65.8%	-11.0%	-8.1%
Income	<185% FPL*	75.6%	66.5%	71.4%	66.4%	-12.2%	-9.2%
	≥185% FPL	71.6%	65.2%	74.9%	66.3%	-7.4%	-5.3%
Mental Health	SPD likely*	78.6%	71.2%	72.7%	81.8%	+4.1%	+3.2%
	SPD not likely	73.1%	65.0%	73.5%	64.6%	-11.6%	-8.5%
Area	Urban	74.7%	66.0%	73.3%	67.4%	-9.8%	-7.3%
	Rural*	65.6%	64.0%	73.9%	57.7%	-12.0%	-7.9%
Overall		73.5%	65.7%	73.4%	66.4%	-9.7%	-7.1%

Abbreviations: FPL, federal poverty level; SPD, serious psychological distress.

Cigarette quit intent is intent to quit smoking cigarettes in the next six months. Racial groups include only non-Hispanic or Latino of a single race unless otherwise noted. Hispanic or Latino includes all racial groups. See [Additional Notes](#) section for more information.

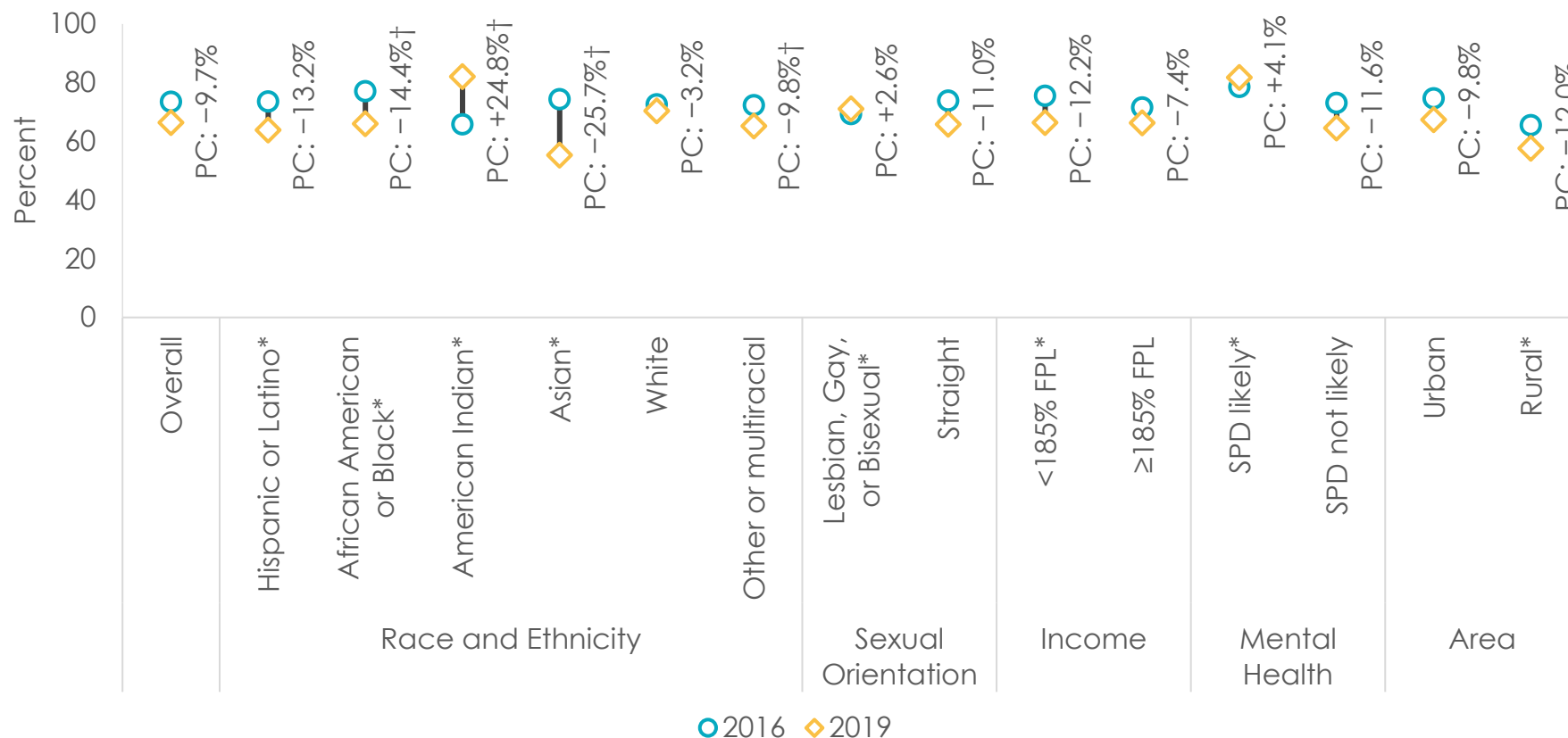
* Indicates a CTCP priority population.

† Caution should be used as estimate is statistically unreliable.

Source: UCLA Center for Health Policy Research. AskCHIS 2016-2019. Thinking about quitting smoking in the next six months.

<https://ask.chis.ucla.edu/>. Accessed August 16, 2021.

Figure 13. Percent change in cigarette quit intent among adults aged ≥18 years who currently smoke cigarettes, by population—California Health Interview Survey, 2016 vs. 2019



Abbreviations: FPL, federal poverty level; PC, percent change; SPD, serious psychological distress.

Cigarette quit intent is intent to quit smoking cigarettes in the next six months. Racial groups include only non-Hispanic or Latino of a single race unless otherwise noted. Hispanic or Latino includes all racial groups. See [Additional Notes](#) section for more information.

* Indicates a CTCP priority population.

† Caution should be used as estimate is statistically unreliable.

Source: UCLA Center for Health Policy Research. AskCHIS 2016-2019. Thinking about quitting smoking in the next six months.

<https://ask.chis.ucla.edu/>. Accessed August 16, 2021.

Vape Quit Attempt – Youth

Table 13. Proportion and percent change in vape quit attempt among high school students who currently use vapes, by population—California Student Tobacco Survey, 2018 vs. 2020

Population		2016†	2018	2020	Percent Change, 2018† vs. 2020	Percentage Difference, 2018† vs. 2020
Race and Ethnicity	Hispanic or Latino*	—	28.8%	53.8%	+86.8%	+25.0%
	African American or Black*	—	32.6%	54.0%	+65.6%	+21.4%
	American Indian*	—	30.9%	60.7%	+96.4%	+29.8%
	Asian*	—	30.4%	59.3%	+95.1%	+28.9%
	Pacific Islander*	—	32.4%	65.1%	+100.9%	+32.7%
	White	—	22.7%	55.9%	+146.3%	+33.2%
	Other	—	28.9%	49.5%	+71.3%	+20.6%
	Multiracial	—	25.9%	52.7%	+103.5%	+26.8%
Sexual and Gender Minority	SGM*	—	25.4%	53.3%	+109.8%	+27.9%
	Non-SGM	—	26.2%	55.0%	+109.9%	+28.8%
Mental Health	Poor*	—	—‡	51.6%	ID‡	ID‡
	Fair	—	—‡	57.8%	ID‡	ID‡
	Good to excellent	—	—‡	54.5%	ID‡	ID‡
Area	City	—	29.3%	54.2%	+85.0%	+24.9%
	Suburban	—	26.1%	54.6%	+109.2%	+28.5%
	Rural*	—	25.2%	55.5%	+120.2%	+30.3%
Overall		—	27.0%	54.6%	+102.2%	+27.6%

Abbreviations: ID, insufficient data; SGM, sexual and gender minority.

The CSTS was fielded biannually from 2016 to 2020. Vape quit attempt is an attempt to quit vaping in the past 12 months. Racial groups include only non-Hispanic or Latino of a single race unless otherwise noted. Hispanic or Latino includes all racial groups. See [Additional Notes](#) section for more information.

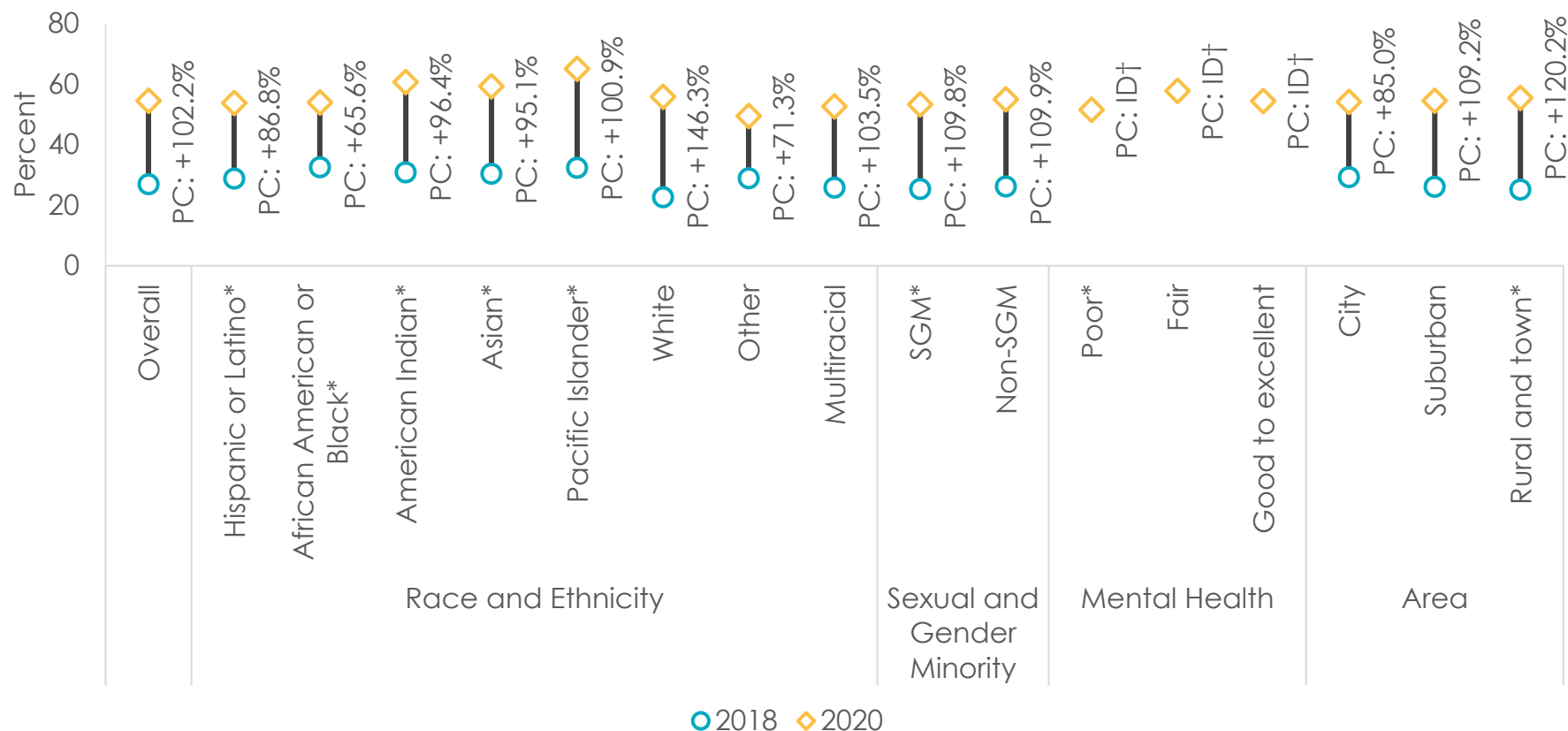
* Indicates a CTCP priority population.

† Vape quit attempt was not asked in 2016. Baseline established in 2018.

‡ Mental health was not asked in 2016 or 2018.

Source: California Student Tobacco Survey. CSTS 2016 to CSTS 2020. San Diego, CA: University of California, San Diego, Center for Research and Intervention in Tobacco Control; 2021.

Figure 14. Percent change in vape quit attempt among high school students who currently use vapes, by population—California Student Tobacco Survey, 2018 vs. 2020



Abbreviations: ID, insufficient data; SGM, sexual and gender minority.

Baseline established in 2018 as vape quit attempt was not asked in 2016. Vape quit attempt is an attempt to quit vaping in the past 12 months. Racial groups include only non-Hispanic or Latino of a single race unless otherwise noted. Hispanic or Latino includes all racial groups. See [Additional Notes](#) section for more information.

* Indicates a CTCP priority population.

† Mental health was not asked in 2018.

Source: California Student Tobacco Survey. CSTS 2018 and CSTS 2020. San Diego, CA: University of California, San Diego, Center for Research and Intervention in Tobacco Control; 2021.

Vape Quit Intent – Youth

Table 14. Proportion and percent change in vape quit intent among high school students who currently use vapes, by population—California Student Tobacco Survey, 2018 vs. 2020

Population		2016†	2018	2020	Percent Change, 2018† vs. 2020	Percentage Difference, 2018† vs. 2020
Race and Ethnicity	Hispanic or Latino*	—	61.1%	81.6%	+33.6%	+20.5%
	African American or Black*	—	67.0%	83.0%	+23.9%	+16.0%
	American Indian*	—	72.3%	82.6%	+14.2%	+10.3%
	Asian*	—	60.1%	85.6%	+42.4%	+25.5%
	Pacific Islander*	—	58.0%	81.9%	+41.2%	+23.9%
	White	—	56.1%	84.5%	+50.6%	+28.4%
	Other	—	62.8%	70.0%	+11.5%	+7.2%
	Multiracial	—	56.9%	80.3%	+41.1%	+23.4%
Sexual and Gender Minority	SGM*	—	51.0%	75.4%	+47.8%	+24.4%
	Non-SGM	—	59.9%	84.9%	+41.7%	+25.0%
Mental Health	Poor*	—	—‡	75.1%	ID‡	ID‡
	Fair	—	—‡	84.5%	ID‡	ID‡
	Good to excellent	—	—‡	84.4%	ID‡	ID‡
Area	City	—	60.9%	81.8%	+34.3%	+20.9%
	Suburban	—	59.6%	83.1%	+39.4%	+23.5%
	Rural*	—	52.2%	80.2%	+53.6%	+28.0%
Overall		—	59.0%	82.1%	+39.2%	+23.1%

Abbreviations: ID, insufficient data; SGM, sexual and gender minority.

The CSTS was fielded biannually from 2016 to 2020. Vape quit intent is an intent to quit vaping sometime in the future. Racial groups include only non-Hispanic or Latino of a single race unless otherwise noted. Hispanic or Latino includes all racial groups. See [Additional Notes](#) section for more information.

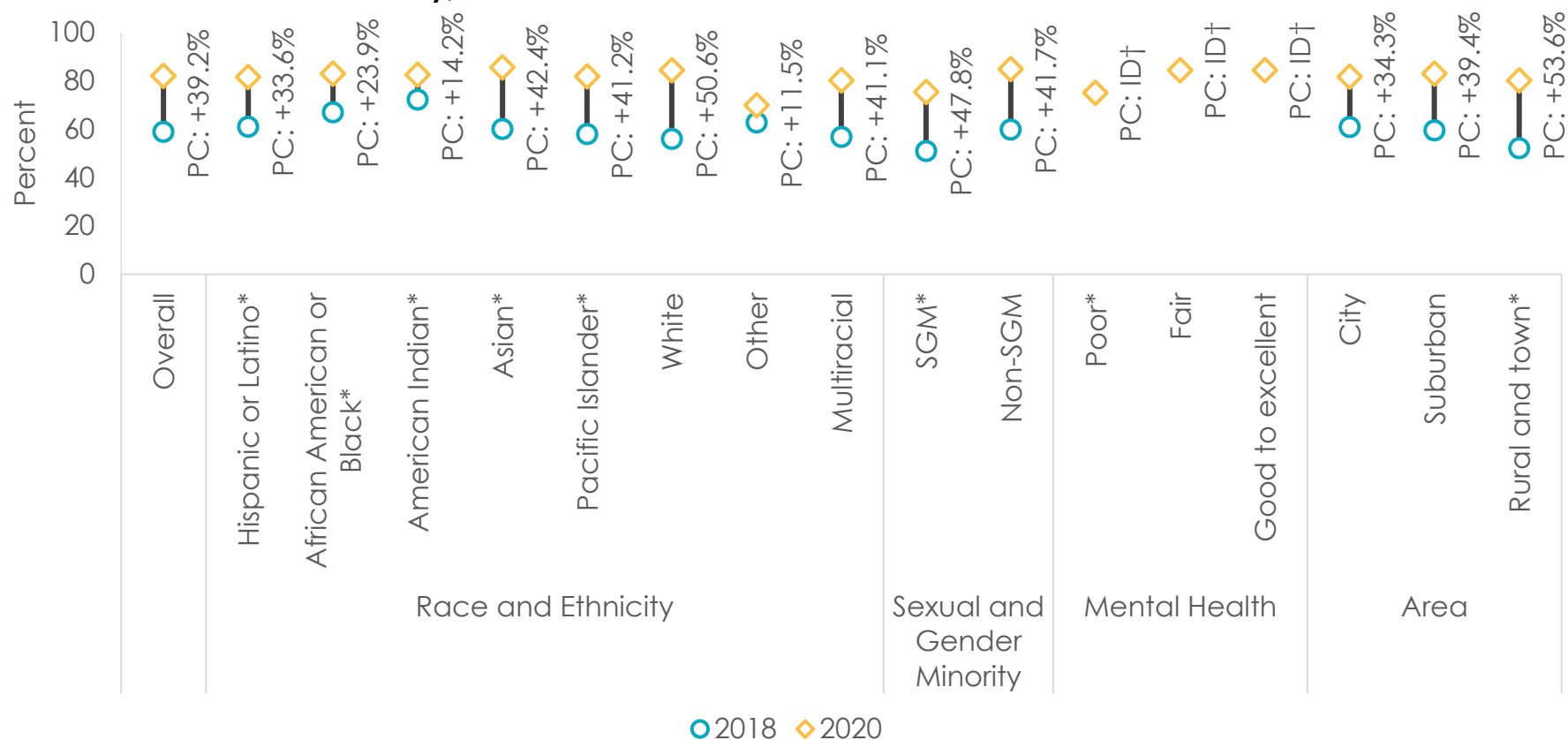
* Indicates a CTCP priority population.

† Vape quit intent was not asked in 2016. Baseline established in 2018.

‡ Mental health was not asked in 2016 or 2018.

Source: California Student Tobacco Survey. CSTS 2016 to CSTS 2020. San Diego, CA: University of California, San Diego, Center for Research and Intervention in Tobacco Control; 2021.

Figure 15. Percent change in vape quit intent among high school students who currently use vapes, by population—California Student Tobacco Survey, 2018 vs. 2020



Abbreviations: ID, insufficient data; SGM, sexual and gender minority.
 Baseline established in 2018 as vape quit intent was not asked in 2016. Vape quit intent is an intent to quit vaping sometime in the future.
 Racial groups include only non-Hispanic or Latino of a single race unless otherwise noted. Hispanic or Latino includes all racial groups. See [Additional Notes](#) section for more information.
 * Indicates a CTCP priority population.
 † Mental health was not asked in 2018.

Source: California Student Tobacco Survey. CSTS 2018 and CSTS 2020. San Diego, CA: University of California, San Diego, Center for Research and Intervention in Tobacco Control; 2021.

Population Coverage for Local Smokefree Multi-Unit Housing Policies

Table 15. Population coverage for any local smokefree multi-unit housing policies, by population—2016 to 2020

Population		2016	2017	2018	2019	2020	Percent Change, 2016 vs. 2020	Percentage Difference, 2016 vs. 2020
Age	<18 years	60.8%	61.5%	62.7%	63.9%	64.4%	+5.9%	+3.6%
	≥18 years	63.8%	64.4%	65.5%	66.8%	67.4%	+5.7%	+3.6%
Race and Ethnicity	Hispanic or Latino*	58.5%	59.1%	60.3%	61.0%	61.4%	+5.1%	+2.9%
	African American or Black*	69.6%	69.9%	70.5%	70.9%	71.5%	+2.7%	+1.9%
	American Indian*	57.5%	58.1%	58.7%	59.2%	60.0%	+4.4%	+2.5%
	American Indian, any mention*	60.2%	60.7%	61.5%	62.2%	62.8%	+4.4%	+2.6%
	Asian*	68.0%	68.4%	69.4%	71.9%	72.1%	+6.1%	+4.1%
	Pacific Islander*	68.5%	69.3%	70.2%	71.3%	71.6%	+4.6%	+3.1%
	White	64.7%	65.7%	66.6%	68.2%	69.0%	+6.7%	+4.3%
	Other or multiracial	67.4%	68.1%	69.2%	71.0%	71.6%	+6.2%	+4.2%
Income	<185% FPL*	61.9%	62.4%	63.3%	64.2%	64.7%	+4.5%	+2.8%
	≥185% FPL	63.7%	64.4%	65.6%	67.0%	67.6%	+6.2%	+3.9%
Overall		63.1%	63.8%	64.8%	66.1%	66.7%	+5.7%	+3.6%

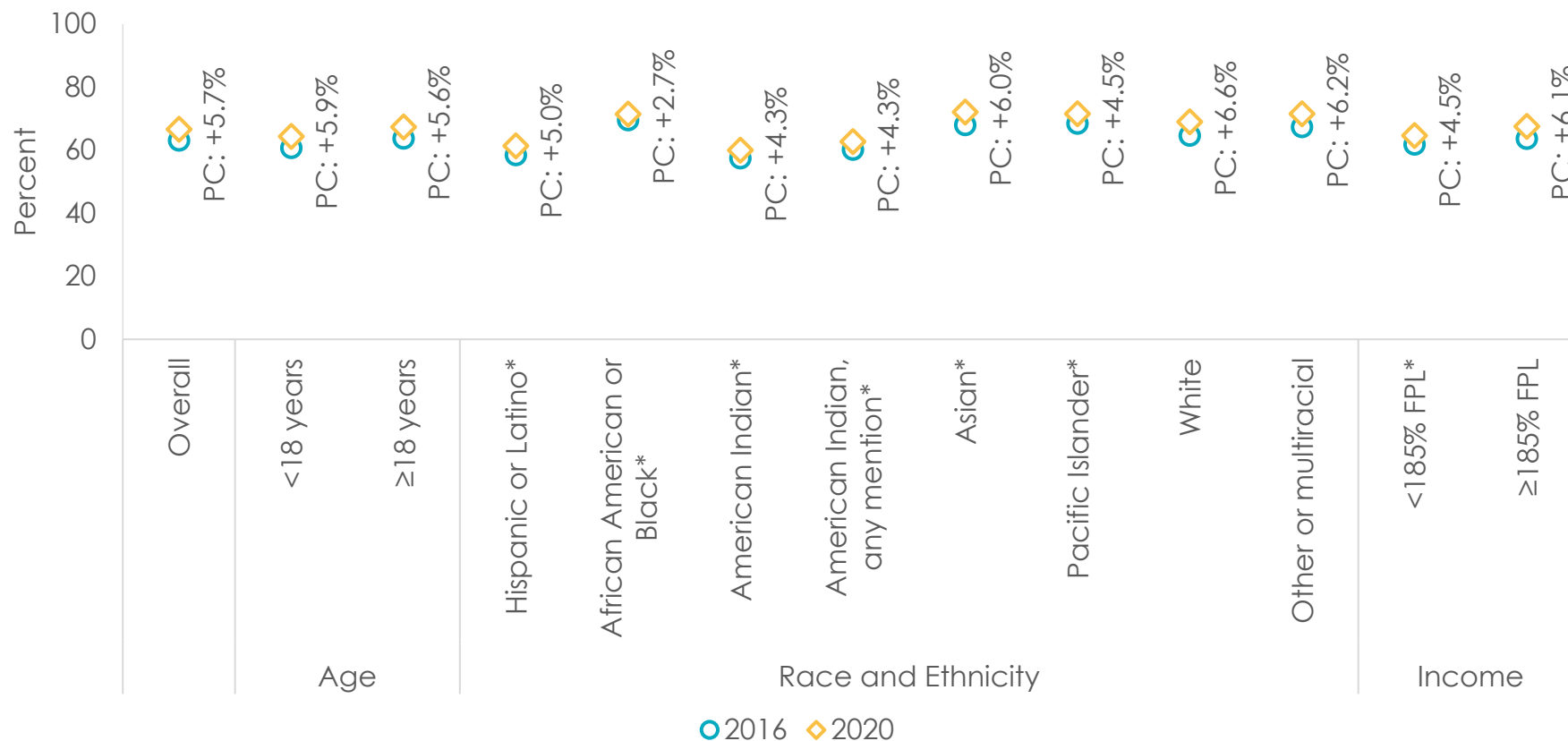
Abbreviation: FPL, federal poverty level.

Includes any policies that regulate smoking and/or vaping in multi-unit housing. Racial groups include only non-Hispanic or Latino of a single race unless otherwise noted. Hispanic or Latino includes all racial groups. Population based on estimates from the US Census Bureau's 2015-2019 American Community Survey. See [Additional Notes](#) section for more information.

* Indicates a CTCP priority population.

Source: American Nonsmoker's Rights Foundation. Tobacco Control Laws Database.

Figure 16. Percent change in local smokefree multi-unit housing policy population coverage, by population—2016 vs. 2020



Abbreviations: FPL, federal poverty level; PC, percent change.

Includes any policies that regulate smoking and/or vaping in multi-unit housing. Racial groups include only non-Hispanic or Latino of a single race unless otherwise noted. Hispanic or Latino includes all racial groups. Population coverage based on estimates from the US Census Bureau's 2015-2019 American Community Survey. See [Additional Notes](#) section for more information.

* Indicates a CTCP priority population.

Source: American Nonsmoker's Rights Foundation. Tobacco Control Laws Database.

Population Coverage for Local Secondhand Smoke Policies

Table 16. Population coverage for any local secondhand smoke policies, by population—2016 to 2020

Population		2016	2017	2018	2019	2020	Percent Change, 2016 vs. 2020	Percentage Difference, 2016 vs. 2020
Age	<18 years	91.7%	91.9%	92.0%	92.2%	92.2%	+0.5%	+0.5%
	≥18 years	93.0%	93.2%	93.2%	93.9%	94.4%	+1.5%	+1.4%
Race and Ethnicity	Hispanic or Latino*	90.3%	90.6%	90.7%	91.4%	91.6%	+1.4%	+1.3%
	African American or Black*	94.7%	94.7%	94.7%	95.0%	95.1%	+0.4%	+0.4%
	American Indian*	91.3%	91.5%	91.6%	92.1%	92.4%	+1.2%	+1.1%
	American Indian, any mention*	92.4%	92.5%	92.6%	93.3%	93.6%	+1.3%	+1.2%
	Asian*	95.3%	95.3%	95.3%	95.6%	97.1%	+1.9%	+1.8%
	Pacific Islander*	94.7%	94.9%	95.0%	95.2%	95.4%	+0.7%	+0.7%
	White	93.8%	93.9%	94.0%	94.8%	95.4%	+1.7%	+1.6%
	Other or multiracial	94.8%	94.8%	94.8%	95.6%	96.3%	+1.6%	+1.5%
Income	<185% FPL*	91.7%	92.0%	92.0%	92.7%	92.9%	+1.3%	+1.2%
	≥185% FPL	93.2%	93.3%	93.4%	94.1%	94.8%	+1.7%	+1.6%
Overall		92.7%	92.9%	92.9%	93.6%	94.2%	+1.6%	+1.5%

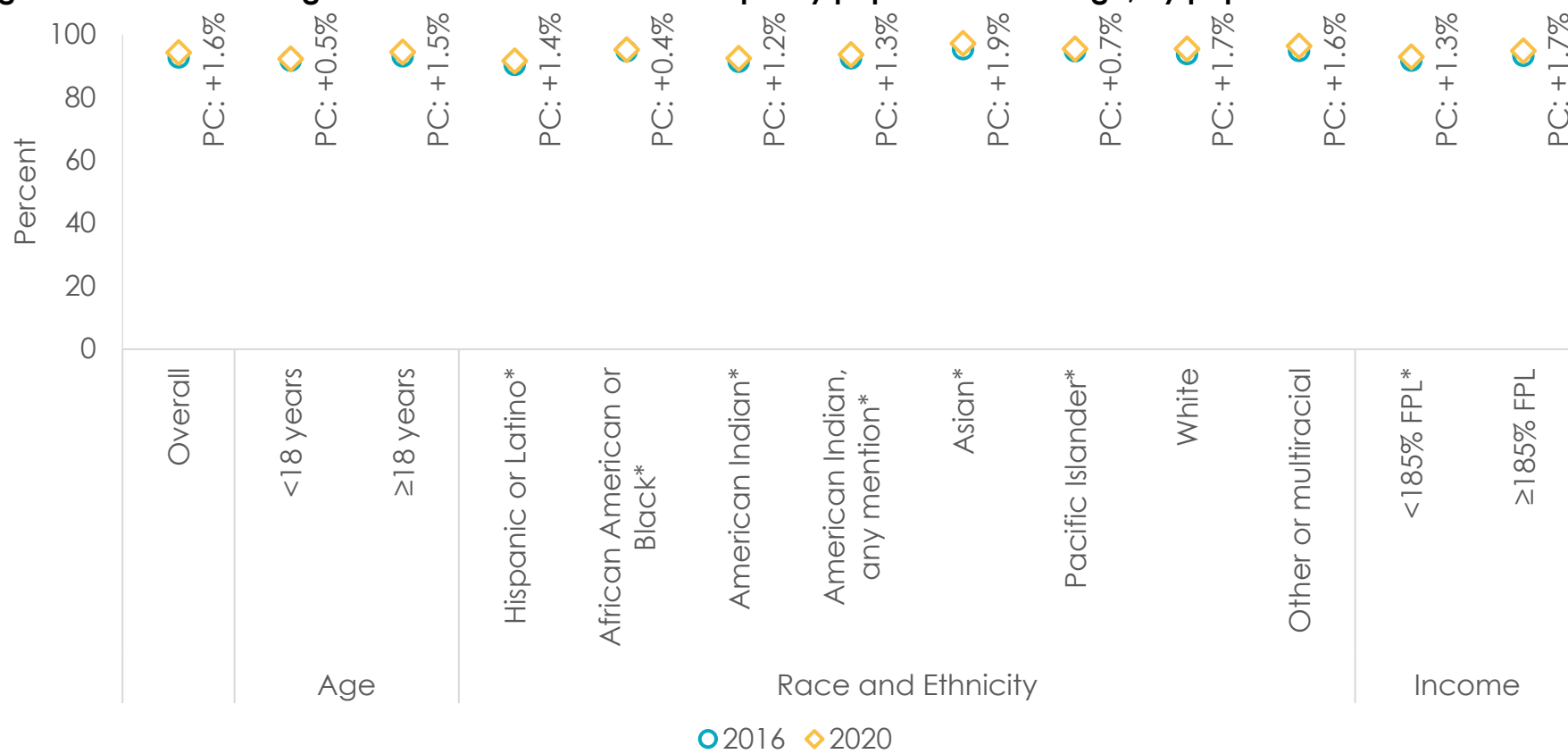
Abbreviation: FPL, federal poverty level.

Includes any policies that regulate smoking and/or vaping. Racial groups include only non-Hispanic or Latino of a single race unless otherwise noted. Hispanic or Latino includes all racial groups. Population based on estimates from the US Census Bureau's 2015-2019 American Community Survey. See [Additional Notes](#) section for more information.

* Indicates a CTCP priority population.

Source: American Nonsmoker's Rights Foundation. Tobacco Control Laws Database.

Figure 17. Percent change in local secondhand smoke policy population coverage, by population—2016 vs. 2020



Abbreviations: FPL, federal poverty level; PC, percent change.

Includes any policies that regulate smoking and/or vaping. Racial groups include only non-Hispanic or Latino of a single race unless otherwise noted. Hispanic or Latino includes all racial groups. Population coverage based on estimates from the US Census Bureau's 2015-2019 American Community Survey. See [Additional Notes](#) section for more information.

* Indicates a CTCP priority population.

Source: American Nonsmoker's Rights Foundation. Tobacco Control Laws Database.

Population Coverage for Local Flavored Tobacco Sales Restriction Policies

Table 17. Population coverage for any local flavored tobacco sales restriction policies, by population—2016 to 2020

Population		2016	2017	2018	2019	2020	Percent Change, 2016 vs. 2020	Percentage Difference, 2016 vs. 2020
Age	<18 years	1.0%	4.2%	5.4%	17.1%	20.6%	+1960.0%	+19.6%
	≥18 years	1.4%	6.1%	7.5%	18.9%	22.6%	+1514.3%	+21.2%
Race and Ethnicity	Hispanic or Latino*	0.8%	3.1%	3.9%	15.8%	18.2%	+2175.0%	+17.4%
	African American or Black*	1.3%	9.0%	10.6%	23.4%	26.8%	+1961.5%	+25.5%
	American Indian*	0.9%	3.9%	4.8%	14.3%	20.3%	+2155.6%	+19.4%
	American Indian, any mention*	1.1%	4.6%	5.8%	16.7%	20.3%	+1745.5%	+19.2%
	Asian*	1.8%	9.8%	11.3%	23.2%	28.0%	+1455.6%	+26.2%
	Pacific Islander*	3.1%	8.1%	8.9%	23.4%	31.0%	+900.0%	+27.9%
	White	1.5%	6.2%	7.9%	18.4%	22.9%	+1426.7%	+21.4%
	Other or multiracial	2.0%	8.4%	10.3%	21.8%	26.1%	+1205.0%	+24.1%
Income	<185% FPL*	0.9%	4.4%	5.4%	16.2%	18.7%	+1977.8%	+17.8%
	≥185% FPL	1.3%	6.2%	7.6%	19.4%	23.4%	+1700.0%	+22.1%
Overall		1.3%	5.7%	7.0%	18.5%	22.1%	+1600.0%	+20.8%

Abbreviation: FPL, federal poverty level.

Includes any policies that restrict flavored tobacco sales. Racial groups include only non-Hispanic or Latino of a single race unless otherwise noted. Hispanic or Latino includes all racial groups. Population coverage based on estimates from the US Census Bureau's 2015-2019 American Community Survey. See [Additional Notes](#) section for more information.

* Indicates a CTCP priority population.

Source: American Nonsmoker's Rights Foundation. Tobacco Control Laws Database.

Figure 18. Percent change in local flavored tobacco sales restriction policy population coverage, by population—2016 vs. 2020



Abbreviations: FPL, federal poverty level; PC, percent change.

Includes any policies that restrict flavored tobacco sales. Racial groups include only non-Hispanic or Latino of a single race unless otherwise noted. Hispanic or Latino includes all racial groups. Population coverage based on estimates from the US Census Bureau's 2015-2019 American Community Survey. See [Additional Notes](#) section for more information.

* Indicates a CTCP priority population.

Source: American Nonsmoker's Rights Foundation. Tobacco Control Laws Database.

Population Coverage for Local Tobacco Retail Sales Policies

Table 18. Population coverage for any local tobacco retail sales policies, by population—2016 to 2020

Population		2016	2017	2018	2019	2020	Percent Change, 2016 vs. 2020	Percentage Difference, 2016 vs. 2020
Age	<18 years	76.1%	76.7%	76.8%	77.5%	78.0%	+2.5%	+1.9%
	≥18 years	77.4%	78.2%	78.2%	78.9%	79.4%	+2.6%	+2.0%
Race and Ethnicity	Hispanic or Latino*	77.2%	77.6%	77.6%	78.4%	78.6%	+1.8%	+1.4%
	African American or Black*	86.3%	87.2%	87.2%	87.4%	87.6%	+1.5%	+1.3%
	American Indian*	72.6%	73.4%	73.6%	74.1%	74.4%	+2.5%	+1.8%
	American Indian, any mention*	71.8%	72.6%	72.7%	73.4%	73.7%	+2.6%	+1.9%
	Asian*	77.2%	78.4%	78.4%	78.8%	80.2%	+3.9%	+3.0%
	Pacific Islander*	82.5%	83.4%	83.5%	83.7%	83.9%	+1.7%	+1.4%
	White	75.5%	76.3%	76.4%	77.3%	77.8%	+3.0%	+2.3%
	Other or multiracial	78.6%	79.7%	79.7%	80.5%	81.2%	+3.3%	+2.6%
Income	<185% FPL*	77.6%	78.1%	78.2%	78.8%	79.0%	+1.8%	+1.4%
	≥185% FPL	77.0%	77.8%	77.8%	78.5%	79.2%	+2.9%	+2.2%
Overall		77.1%	77.8%	77.9%	78.6%	79.1%	+2.6%	+2.0%

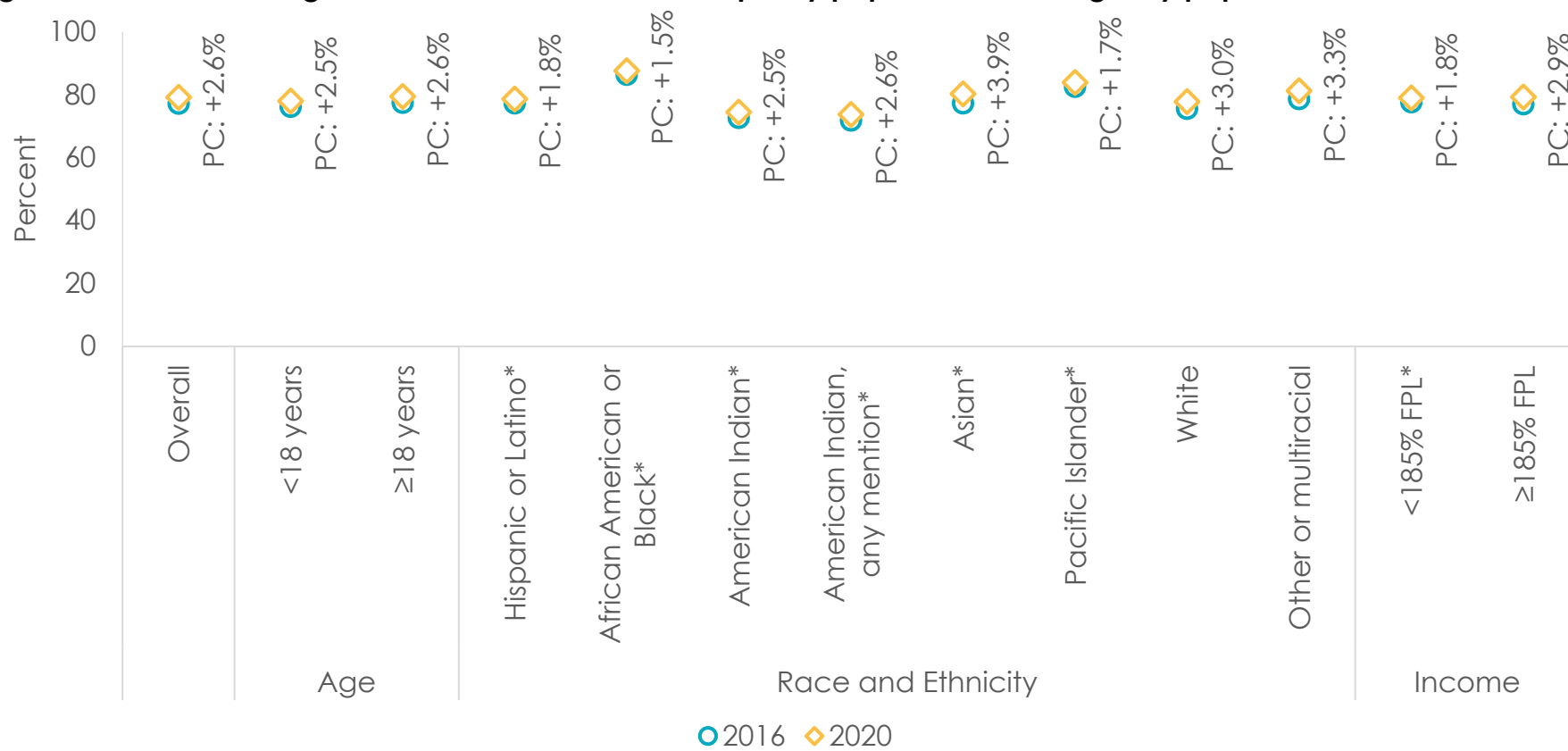
Abbreviation: FPL, federal poverty level.

Includes any policies that regulate tobacco retail sales. Racial groups include only non-Hispanic or Latino of a single race unless otherwise noted. Hispanic or Latino includes all racial groups. Population based on estimates from the US Census Bureau's 2015-2019 American Community Survey. See [Additional Notes](#) section for more information.

* Indicates a CTCP priority population.

Source: American Nonsmoker's Rights Foundation. Tobacco Control Laws Database.

Figure 19. Percent change in local tobacco retail sales policy population coverage, by population—2016 vs. 2020



Abbreviations: FPL, federal poverty level; PC, percent change.

Includes any policies that regulate tobacco retail sales. Racial groups include only non-Hispanic or Latino of a single race unless otherwise noted. Hispanic or Latino includes all racial groups. Population coverage based on estimates from the US Census Bureau's 2015-2019 American Community Survey. See [Additional Notes](#) section for more information.

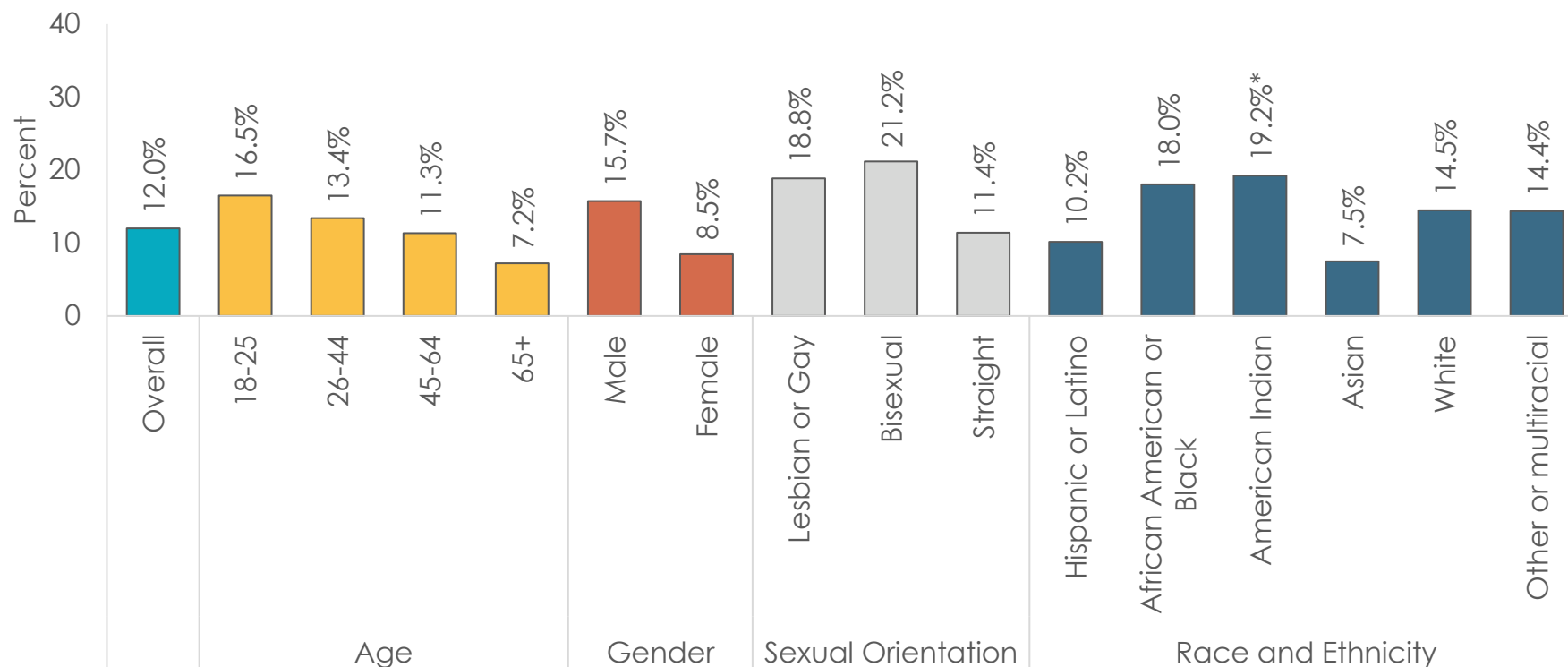
* Indicates a CTCP priority population.

Source: American Nonsmoker's Rights Foundation. Tobacco Control Laws Database.

TOBACCO USE

Figure 20 and Figure 21 describe disparities in tobacco use across multiple groups defined by age, gender, sexual orientation, race, ethnicity, educational attainment, socioeconomic status, mental health status, housing, and geographical areas.

Figure 20. Current tobacco use among adults aged ≥18 years, by age, gender, sexual orientation, and race and ethnicity—California Health Interview Survey, 2019

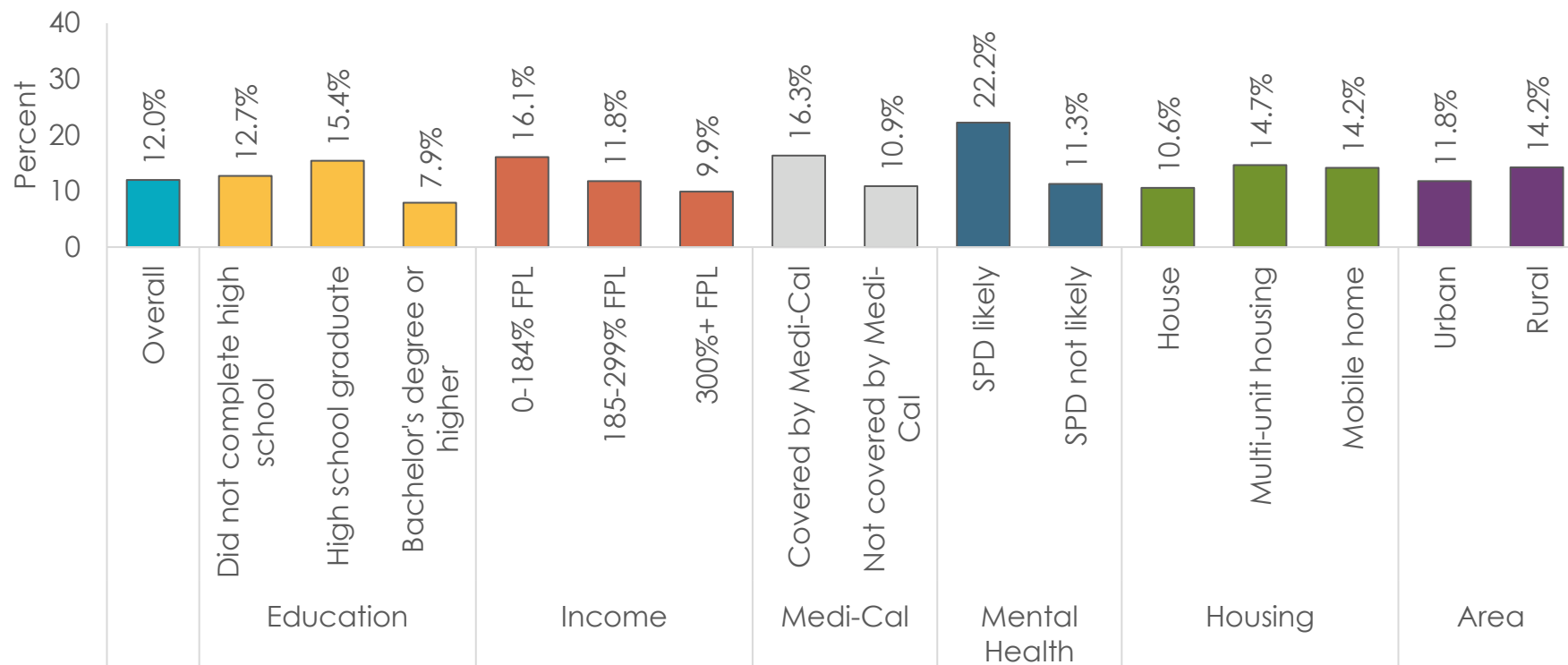


Tobacco use includes cigarettes, cigars, hookah, little cigars or cigarillos, smokeless tobacco, or vapes. Racial groups include only non-Hispanic or Latino of a single race unless otherwise noted. Hispanic or Latino includes all racial groups. See [Additional Notes](#) section for more information.

* Caution should be used as estimate is statistically unreliable.

Source: California Health Interview Survey. CHIS 2019 Adult Files. Los Angeles, CA: UCLA Center for Health Policy Research; October 2020.

Figure 21. Current tobacco use among adults aged ≥18 years, by education, income, Medi-Cal coverage, mental health, housing, and area—California Health Interview Survey, 2019



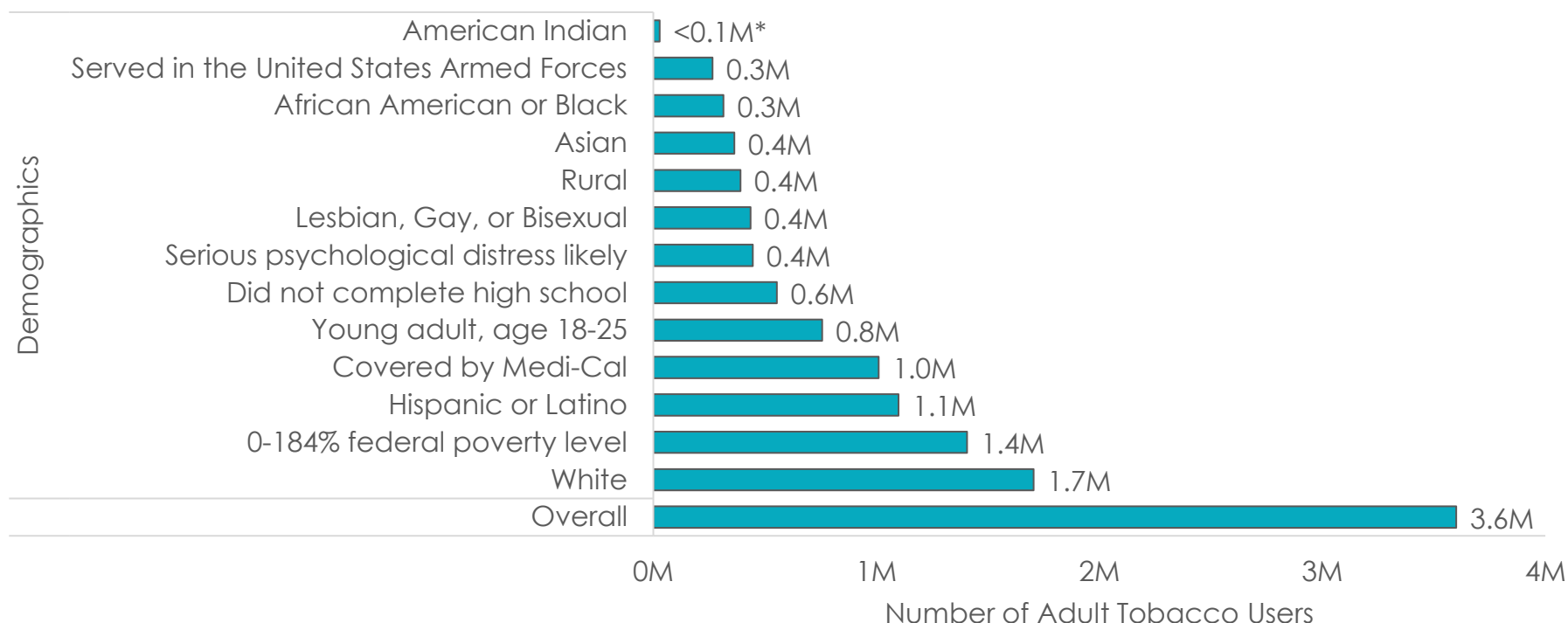
Abbreviations: FPL, federal poverty level; SPD, serious psychological distress.

Tobacco use includes cigarettes, cigars, hookah, little cigars or cigarillos, smokeless tobacco, or vapes. See [Additional Notes](#) section for more information.

Source: California Health Interview Survey. CHS 2019 Adult Files. Los Angeles, CA: UCLA Center for Health Policy Research; October 2020.

It is critical to look at the demographic characteristics of adults who use tobacco to inform and guide tobacco use prevention and cessation efforts. An estimated 3.6 million adults reported current tobacco use in California (Figure 22). Although Hispanic or Latino adults had a current tobacco use rate of 10.2% (Figure 20), Hispanic or Latino adults made up 30.5% (1.1 million) of all adults who reported current use of tobacco. This shows that despite a lower rate, tobacco use is a significant burden within the Hispanic or Latino population.

Figure 22. Number of adults aged ≥18 years who reported current tobacco use—California Health Interview Survey, 2019



Tobacco use includes cigarettes, cigars, hookah, little cigars or cigarillos, smokeless tobacco, or vapes. Racial groups include only non-Hispanic or Latino of a single race unless otherwise noted. Hispanic or Latino includes all racial groups. See [Additional Notes](#) section for more information.

* Caution should be used as estimate is statistically unreliable.

Source: California Health Interview Survey. CHIS 2019 Adult Files. Los Angeles, CA: UCLA Center for Health Policy Research; October 2020.

Regional differences in tobacco use also exist, with tobacco use higher in California's more rural counties (Table 19). The Northern and Sierra Counties region had the highest rate (18.3%) of adults who reported current tobacco use. The Greater Bay Area region had the lowest rate (9.2%).

Table 19. Current tobacco use among adults aged ≥18 years, by geographic regions—California Health Interview Survey, 2019

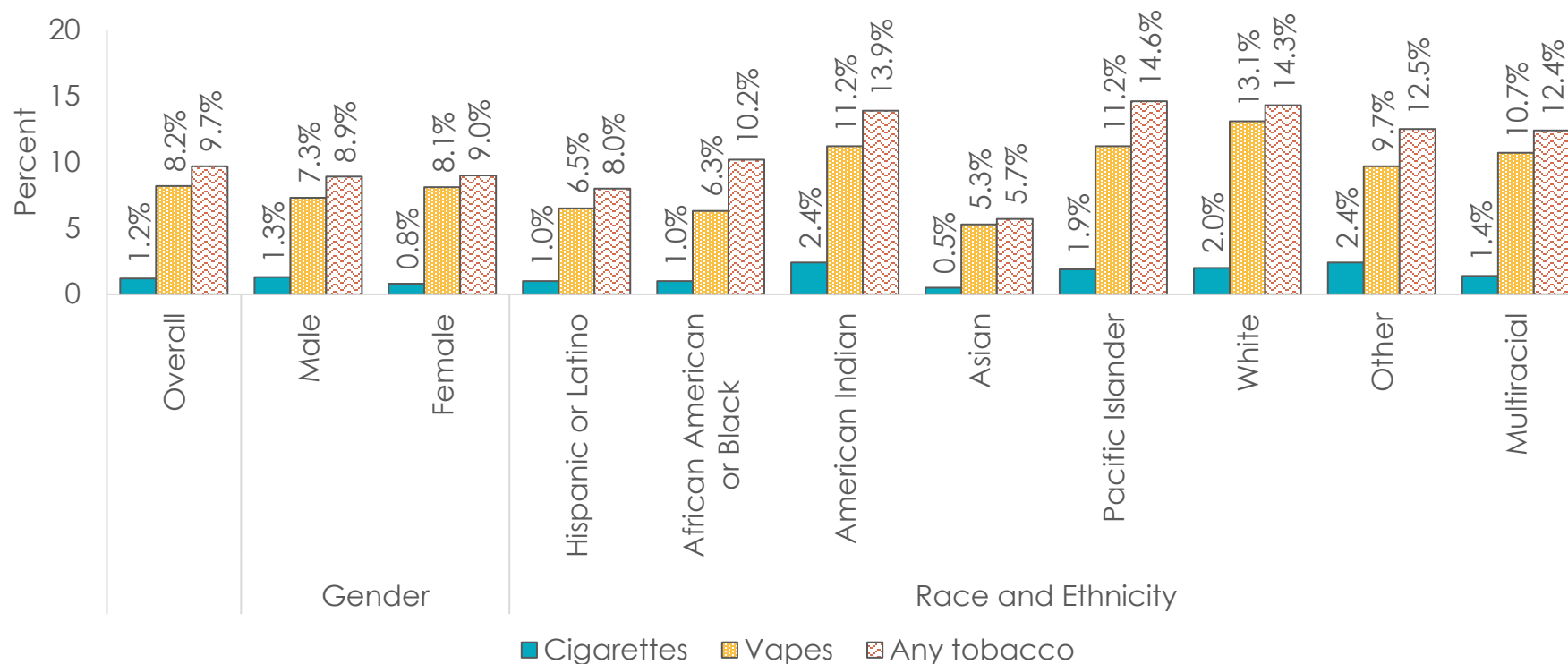
Region	Tobacco Use Rate
Central Coast: Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz, Ventura	13.2%
Greater Bay Area: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma	9.2%
Los Angeles: Los Angeles	11.7%
Northern and Sierra Counties: Alpine, Amador, Butte, Calaveras, Colusa, Del Norte, Glenn, Humboldt, Inyo, Lake, Lassen, Mariposa, Mendocino, Modoc, Mono, Nevada, Plumas, Shasta, Sierra, Siskiyou, Sutter, Tehama, Trinity, Tuolumne, Yuba	18.3%
Other Southern California: Imperial, Orange, Riverside, San Bernardino, San Diego	11.7%
Sacramento Area: El Dorado, Placer, Sacramento, Yolo	13.7%
San Joaquin Valley: Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare	15.6%
Overall	12.0%

Tobacco use includes cigarettes, cigars, hookah, little cigars or cigarillos, smokeless tobacco, or vapes. Geographic region based on UCLA-defined regions. See [Additional Notes](#) section for more information.

Source: California Health Interview Survey. CHIS 2019 Adult Files. Los Angeles, CA: UCLA Center for Health Policy Research; October 2020.

Tobacco use among youth is a major concern in California, driven by the popularity of vapes among this population (Figure 23). Current tobacco use among California high school students in 2020 was highest among Pacific Islander youth (14.6%), followed by White youth (14.3%) and American Indian youth (13.9%).

Figure 23. Current tobacco use among high school students, by gender and race and ethnicity—California Student Tobacco Survey, 2020



Tobacco use includes cigarettes, cigars, heated tobacco, hookah, little cigars or cigarillos, smokeless tobacco, or vapes (nicotine or just flavoring). Racial groups include only non-Hispanic or Latino of a single race unless otherwise noted. Hispanic or Latino includes all racial groups. See [Additional Notes](#) section for more information.

Source: Zhu S-H, Braden K, Zhuang Y-L, et al. Results of the Statewide 2019-20 California Student Tobacco Survey. San Diego, CA: University of California, San Diego, Center for Research and Intervention in Tobacco Control; 2021.

Similar to adults (Table 19), regional disparities exist for high school tobacco use (Table 20). Tobacco use was higher in California's more rural counties: the North Coast region had the highest rate (19.9%) of high school youth who reported current tobacco use, followed by the North Valley region (17.1%) and the High Country region (16.2%).

Table 20. Current tobacco use among high school students, by geographic regions—California Student Tobacco Survey, 2020

Region	Tobacco Use Rate
Bay Area: Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, Solano	10.0%
Central Coast: Monterey, San Benito, Santa Cruz	7.6%
Central Valley: Fresno, Kern, Kings, Madera, Mariposa, Merced, Tulare	8.7%
Gold Country: Alpine, Amador, Calaveras, El Dorado, Inyo, Mono, Nevada, Placer, Sacramento, San Joaquin, Stanislaus, Sutter, Tuolumne, Yolo	11.2%
High Country: Lassen, Modoc, Plumas, Sierra, Siskiyou, Trinity	16.2%*
Los Angeles: Los Angeles	7.7%
North Coast: Del Norte, Humboldt, Lake, Mendocino, Napa, Sonoma	19.9%
North Valley: Butte, Colusa, Glenn, Shasta, Tehama, Yuba	17.1%
South Coast: Orange, San Diego	10.0%
Tri-County: San Luis Obispo, Santa Barbara, Ventura	11.5%
Tri County South: Imperial, Riverside, San Bernardino	9.3%
Overall	9.7%

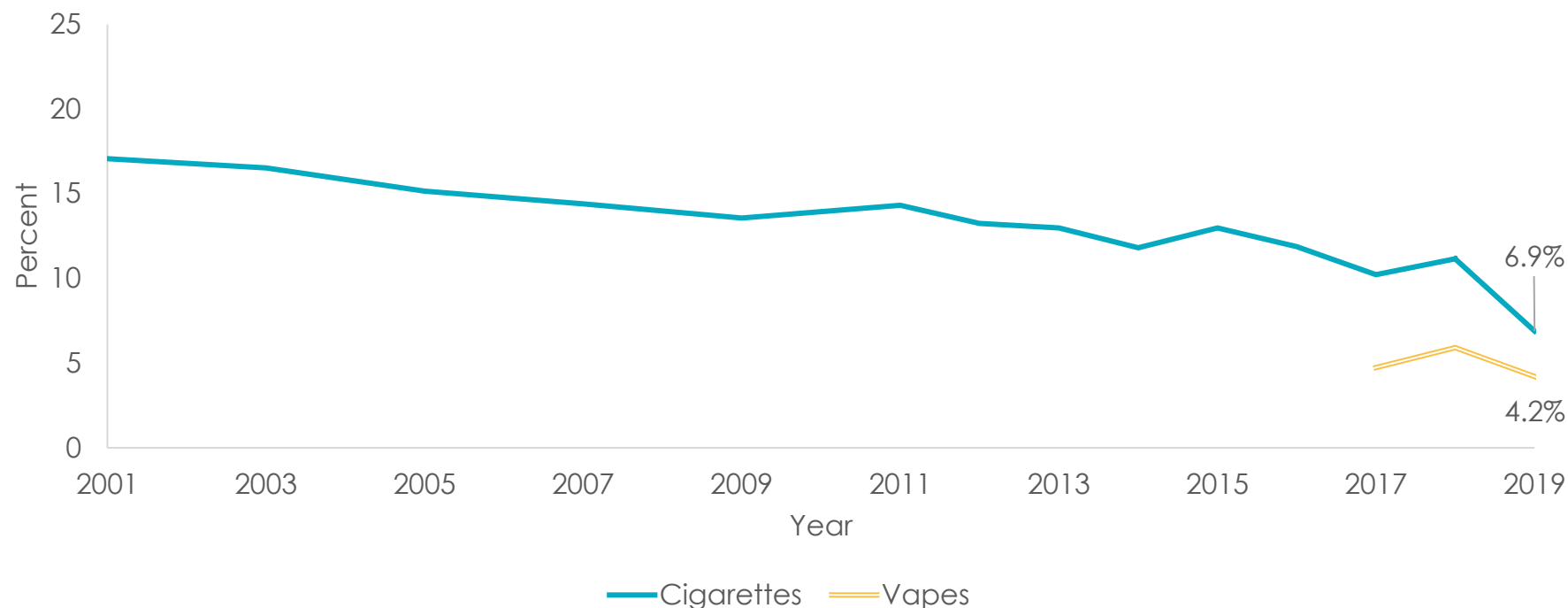
Tobacco use includes cigarettes, cigars, heated tobacco, hookah, little cigars or cigarillos, smokeless tobacco, or vapes (nicotine or just flavoring). Geographic region based on CTCP-defined region for the Priority Population Initiative. See [Additional Notes](#) section for more information.

* Caution should be used as estimate is statistically unreliable.

Source: Zhu S-H, Braden K, Zhuang Y-L, et al. Results of the Statewide 2019-20 California Student Tobacco Survey. San Diego, CA: University of California, San Diego, Center for Research and Intervention in Tobacco Control; 2021.

Fewer adults smoke cigarettes than ever before; however, vaping has remained constant over the past three years. In 2019, 6.9% (2.1 million) of California adults reported current cigarette smoking and 4.2% (1.3 million) reported current vaping (Figure 24).

Figure 24. Current cigarette smoking and current vaping among adults aged ≥ 18 years —California Health Interview Survey, 2001 to 2019

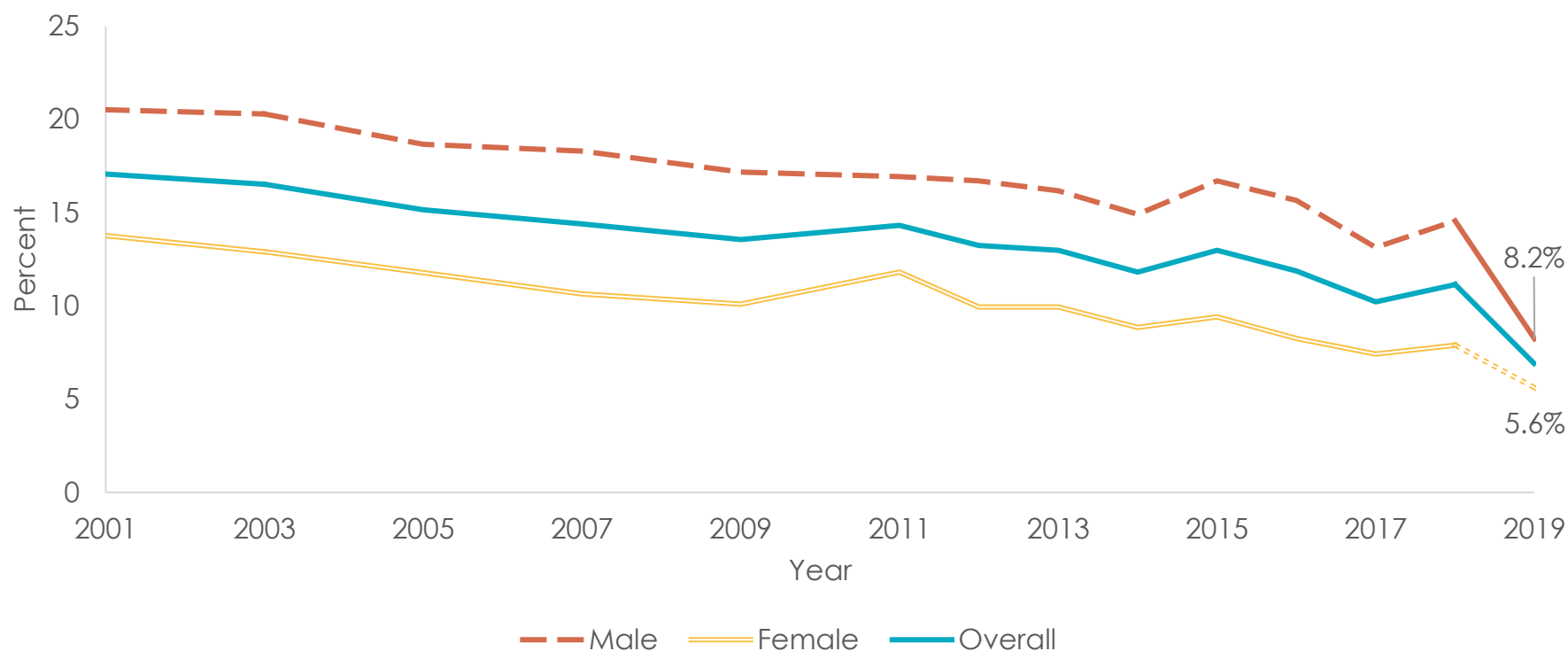


The data collection methodology for the CHIS changed. Prior to 2019, the survey was administered via computer-assisted telephone interview. Starting in 2019, the survey was administered via computer-assisted web interview and computer-assisted telephone interview. This methodology change significantly impacted cigarette smoking rates. Current vape use was first collected of all adults in 2017. The dotted lines indicate a break in trend. See [Additional Notes](#) section for more information.

Source: California Health Interview Survey. CHIS 2001 to CHIS 2019 Adult Files. Los Angeles, CA: UCLA Center for Health Policy Research; October 2020.

Males smoke cigarettes and vape at a higher rate than females (Figure 25). In 2019, 8.2% of male adults (1.2 million) reported current cigarette smoking versus 5.6% of female adults (861,000) and 5.5% of male adults (802,000) reported current vaping versus 3.0% of female adults (459,000).

Figure 25. Current cigarette smoking among adults aged ≥18 years, by gender—California Health Interview Survey, 2001 to 2019

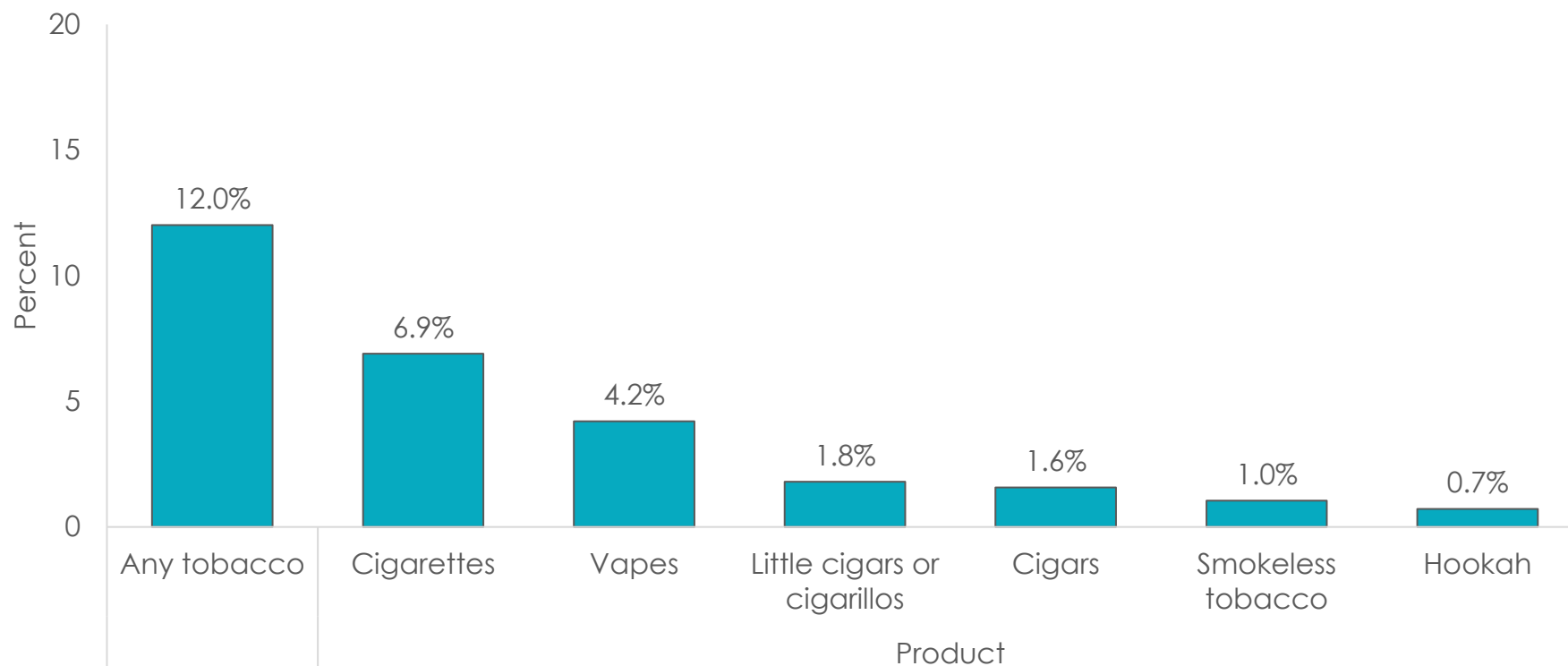


The data collection methodology for the CHIS changed. Prior to 2019, the survey was administered via computer-assisted telephone interview. Starting in 2019, the survey was administered via computer-assisted web interview and computer-assisted telephone interview. This methodology change significantly impacted cigarette smoking rates. The dotted line indicates a break in trend. See [Additional Notes](#) section for more information.

Source: California Health Interview Survey. CHIS 2001 to CHIS 2019 Adult Files. Los Angeles, CA: UCLA Center for Health Policy Research; October 2020.

Cigarettes were the most reported tobacco product used by California adults, followed by vapes, little cigars or cigarillos, big cigars, hookah, and smokeless tobacco (Figure 26). Overall, 12.0% of California adults (about 3.6 million adults) reported current use of one or more tobacco products.

Figure 26. Current tobacco use among adults aged ≥ 18 years, by product—California Health Interview Survey, 2019



Tobacco use includes cigarettes, cigars, hookah, little cigars or cigarillos, smokeless tobacco, or vapes. See [Additional Notes](#) section for more information.

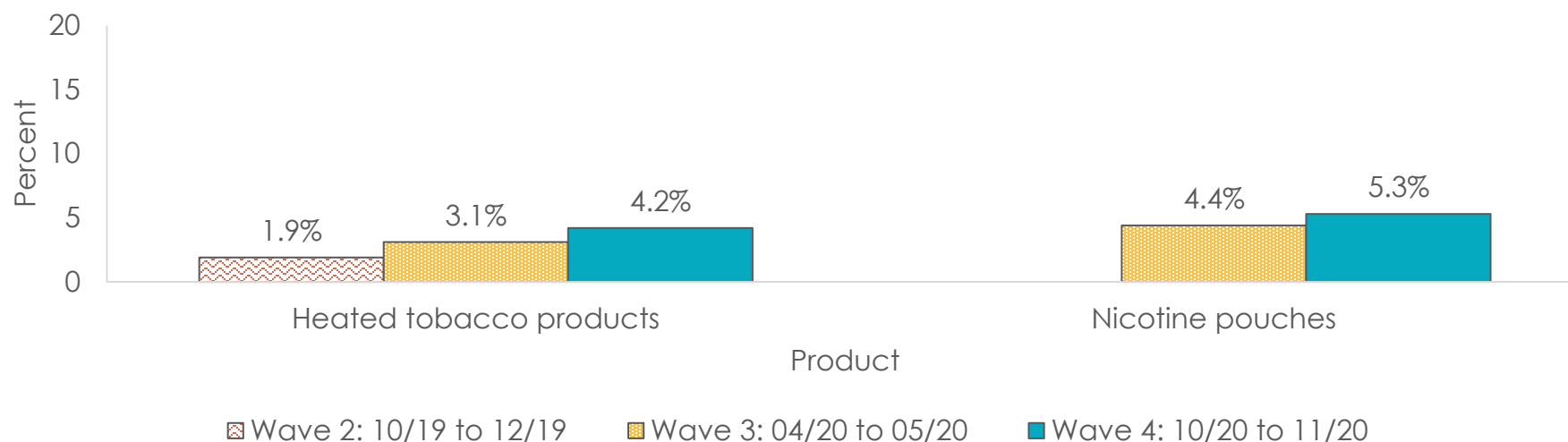
Source: California Health Interview Survey. CHIS 2019 Adult Files. Los Angeles, CA: UCLA Center for Health Policy Research; October 2020.

The tobacco industry continues to develop new tobacco products. Two products that are becoming more widespread are heated tobacco products and nicotine pouches.^{5,6}

Heated tobacco products are devices that heat tobacco leaves to produce an inhalable aerosol. Nicotine pouches are pouches that are placed in the mouth and contain nicotine-containing powder. These pouches are often advertised as “tobacco-free,” although the nicotine powder may be derived from tobacco leaves.⁶

In a survey among California adults, 4.2% reported using heated tobacco products in the past 30 days and 5.3% reported using nicotine pouches in the past 30 days (Figure 27).

Figure 27. Current emerging tobacco product use among adults aged 18 to 64 years—Online California Adult Tobacco Survey, 2019 to 2020



See [Additional Notes](#) section for more information.

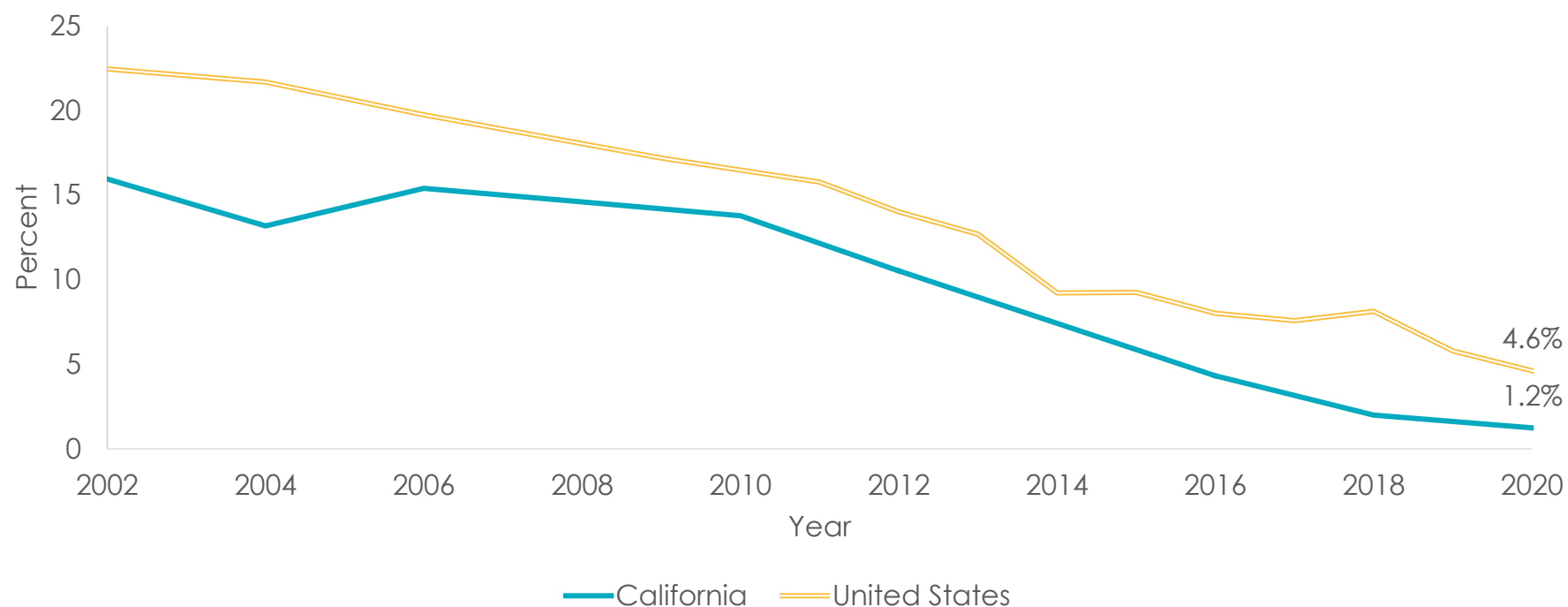
Source: Online California Adult Tobacco Survey. Online CATS 2019-2020 (Wave 2-4). Sacramento, CA: California Department of Public Health; February 2021.

⁵ Caputi TL. Industry watch: heat-not-burn tobacco products are about to reach their boiling point. *Tob Control*. 2017;26(5):609-610.

⁶ Robichaud MO, Seidenberg AB, Byron MJ. Tobacco companies introduce ‘tobacco-free’ nicotine pouches. *Tob Control*. 2020;29(e1):e145-146.

Current cigarette smoking rate for California high school students continued to decrease, with 1.2% of California high school youth reported current cigarette smoking in 2020 (Figure 28). The cigarette smoking rate remained lower than the national high school smoking rate (4.6%).

Figure 28. Current cigarette smoking among high school students—California Student Tobacco Survey, 2002 to 2020, National Youth Tobacco Survey, 2002 to 2020

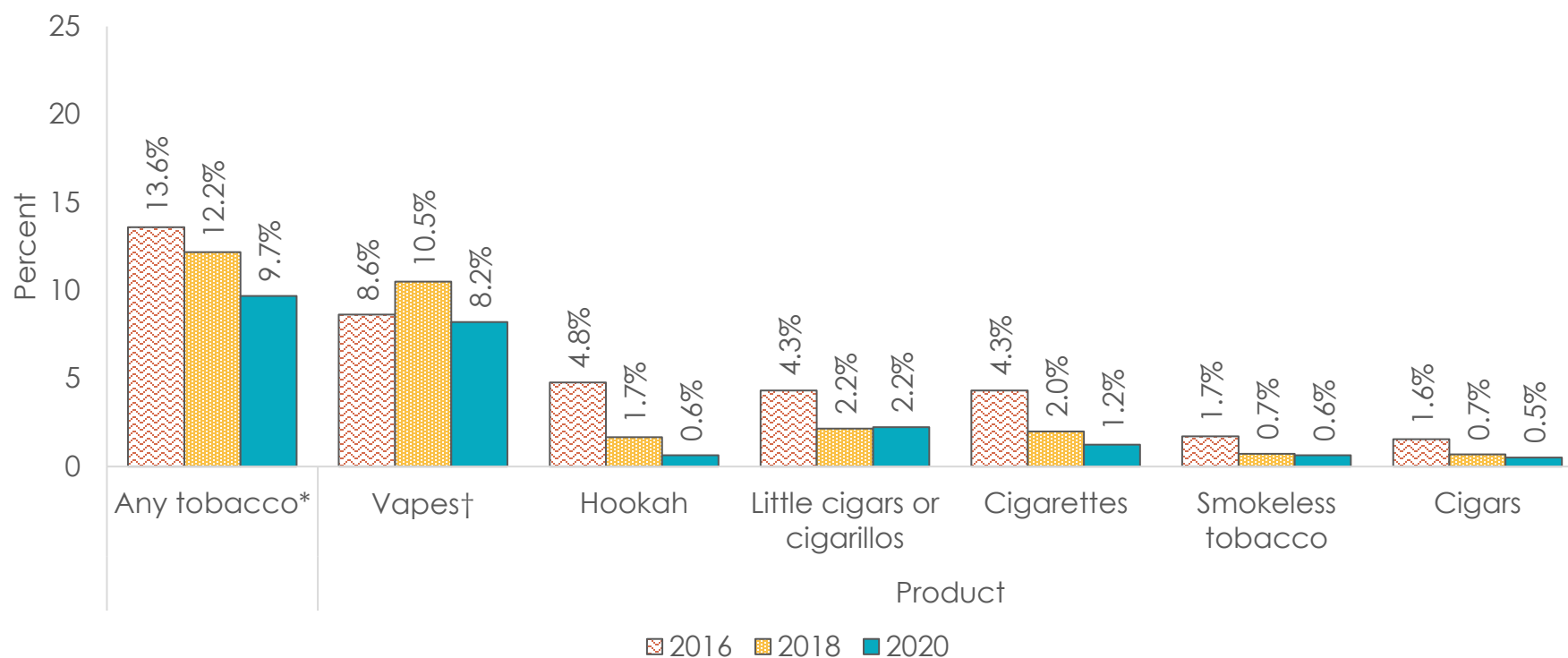


The data collection methodology for the CSTS changed. Prior to 2016, the survey was administered to 9th to 12th graders. Starting in 2016, the survey was administered to only 10th and 12th graders. The dotted line indicates a break in trend. CSTS was not fielded in 2014. Comparison between California and United States are for informational purposes only and should not be treated as scientifically or statistically accurate due to methodological differences between the two surveys. See [Additional Notes](#) section for more information.

Source: [1] California Student Tobacco Survey. CSTS 2002 to CSTS 2012. Sacramento, CA: California Department of Public Health; 2014. [2] California Student Tobacco Survey. CSTS 2016 to CSTS 2020. San Diego, CA: University of California, San Diego, Center for Research and Intervention in Tobacco Control; 2021. [3] National Youth Tobacco Survey. NYTS 2002 to NYTS 2020. Atlanta, GA: Centers for Disease Control and Prevention; December 2020.

In California, significant reductions in any tobacco use were observed between 2016 and 2020 among high school students (Figure 29). Overall tobacco use was 9.7% among high school youth in 2020. Vapes were the most common tobacco product used among California high school youth, with 8.2% of high school youth vaping.

Figure 29. Current tobacco use among high school students, by product—California Student Tobacco Survey, 2016 to 2020



Tobacco use includes cigarettes, cigars, heated tobacco (2020 only, data not shown), hookah, kreteks (2016 only, data not shown), little cigars or cigarillos, smokeless tobacco, or vapes (nicotine or just flavoring). See [Additional Notes](#) section for more information.

* Comparison between 2016, 2018, and 2020 are for informational purposes only and should not be treated as scientifically or statistically accurate. CTCPC recommends that readers not compare the tobacco use rates due to changes to the tobacco use definition.

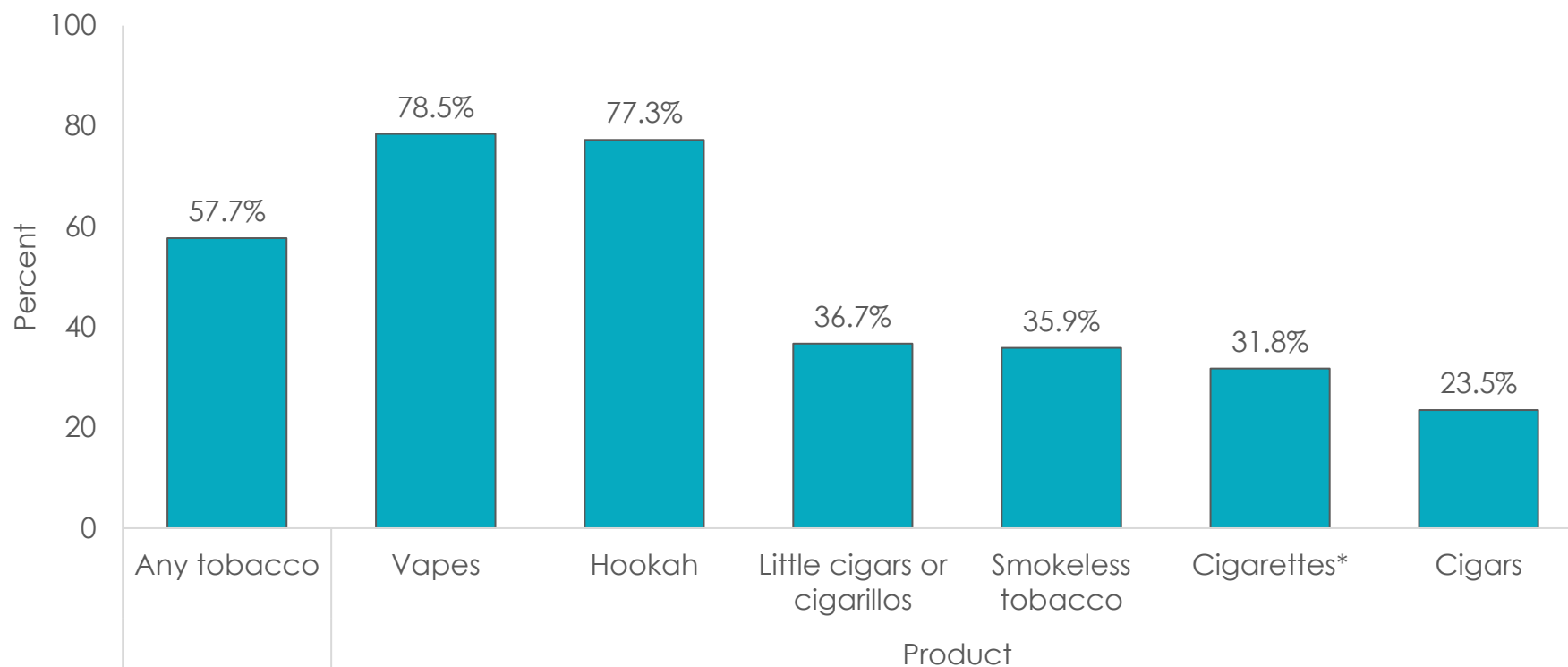
† Comparison between 2016, 2018, and 2020 are for informational purposes only and should not be treated as scientifically or statistically accurate. CTCPC recommends that readers not compare the vape use rates due to changes to the question wording.

Source: California Student Tobacco Survey. CSTS 2016 to CSTS 2020. San Diego, CA: University of California, San Diego, Center for Research and Intervention in Tobacco Control; 2021.

FLAVORED TOBACCO PRODUCTS

Among adults who reported current tobacco use, 57.7% used flavored tobacco products (Figure 30). Most people who vaped (78.5%) or used hookah (77.3%) used flavored varieties.

Figure 30. Flavored tobacco use among adults aged ≥ 18 years who currently use tobacco, by product—California Health Interview Survey, 2019



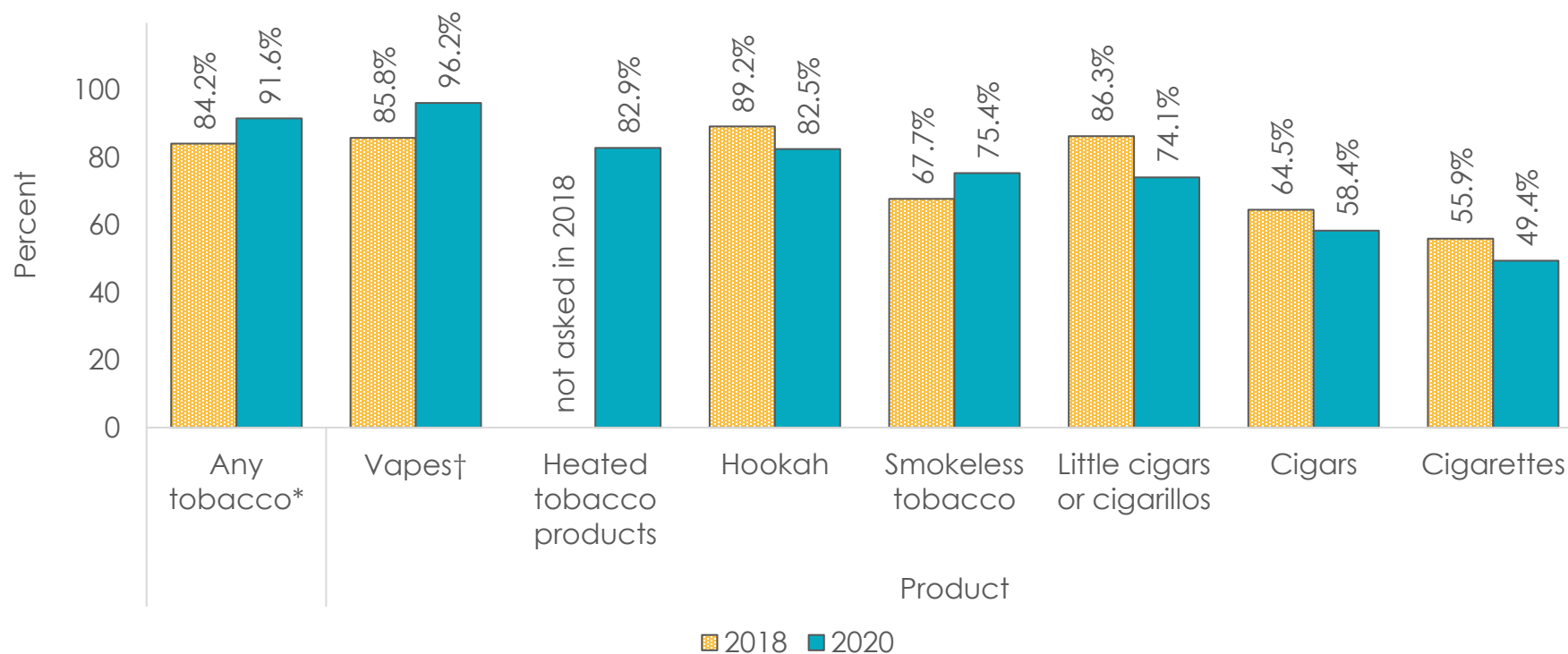
Tobacco use includes cigarettes, cigars, hookah, little cigars or cigarillos, smokeless tobacco, or vapes. See [Additional Notes](#) section for more information.

* The question used to assess menthol cigarette use was based on usual use and not any use.

Source: California Health Interview Survey. CHIS 2019 Adult Files. Los Angeles, CA: UCLA Center for Health Policy Research; October 2020.

Use of flavored vapes and smokeless tobacco among California high school students increased between 2018 and 2020, while use of flavored hookah, cigarettes, little cigars or cigarillos, and big cigars decreased over the same period (Figure 31).

Figure 31. Flavored tobacco use among high school students who currently use tobacco, by product—California Student Tobacco Survey, 2018 and 2020



Tobacco use includes cigarettes, vapes (nicotine or just flavoring), smokeless tobacco, little cigars or cigarillos, cigars, hookah, or heated tobacco products (2020 only). See [Additional Notes](#) section for more information.

* Comparison between 2018 and 2020 are for informational purposes only and should not be treated as scientifically or statistically accurate. CTCPC recommends that readers not compare the tobacco use rates due to changes to the tobacco use definition.

† Comparison between 2018 and 2020 are for informational purposes only and should not be treated as scientifically or statistically accurate. CTCPC recommends that readers not compare the vape use rates due to changes to the question wording.

Source: California Student Tobacco Survey. CSTS 2018 and CSTS 2020. San Diego, CA: University of California, San Diego, Center for Research and Intervention in Tobacco Control; 2021.

Flavored tobacco products pose a public health risk as the products appeal to youth.⁷ Three in four (76.8%) California adults agreed that flavored tobacco products are intentionally designed to appeal to youth and a slight majority (58.6%) would support a law that would prohibit the sale of all flavored tobacco products (Table 21).

Table 21. Beliefs on flavored tobacco products among adults aged 18 to 64 years—Online California Adult Tobacco Survey, 2019 to 2020

Statement	2019	2020
Flavored e-cigarettes and other flavored tobacco products are intentionally designed to appeal to youth. (% agree)	78.5%	76.8%
The sale of flavored tobacco products like candy-flavored little cigars should not be allowed. (% agree)	59.7%	61.0%
Do you support or oppose a law that would prohibit the sale of all flavored tobacco products, with flavors such as mint, menthol, cherry, and cotton candy, in California? (% support)	—*	58.6%†
Do you support or oppose a law that would prohibit the sale of flavored e-cigarette and vaping products, including flavors such as mint, menthol, cherry, and cotton candy, in California? (% support)	—*	60.0%†

Response option of “agree” (or “support”) and “strongly agree” (or “strongly support”) were combined. See [Additional Notes](#) section for more information.

* Statement not asked in 2019.

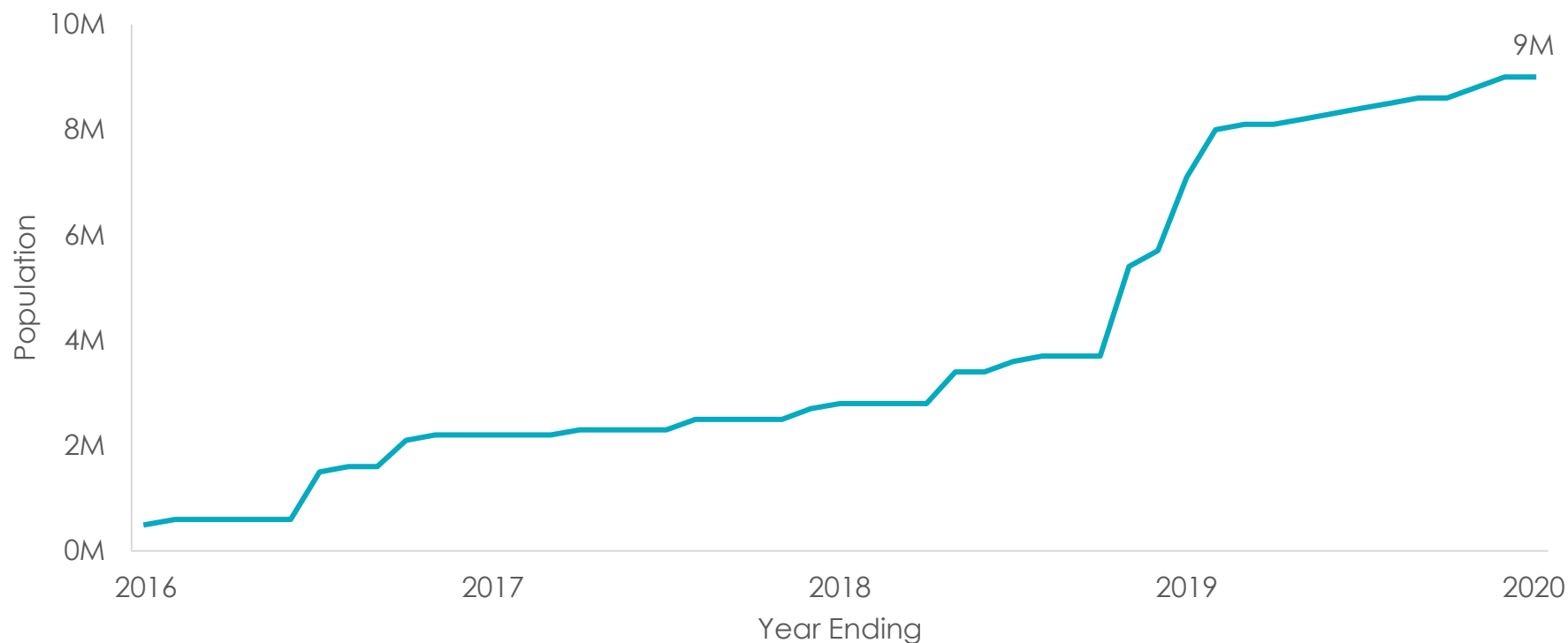
† Data from only one wave; all other data are from two waves.

Source: Online California Adult Tobacco Survey. Online CATS 2019-2020 (Wave 1-4). Sacramento, CA: California Department of Public Health; February 2021.

⁷ Ambrose BK, Day HR, Rostron B, et al. Flavored tobacco product use among us youth aged 12-17 years, 2013-2014. JAMA. 2015;314(17):1871.

California communities have worked to reduce the availability and accessibility of flavored tobacco products. As of December 2020, 98 California communities have passed local laws restricting the sale of flavored tobacco products in some form, covering 7.1 million adults and 1.9 million youth (Figure 32).

Figure 32. Population coverage for any local flavored tobacco sales restriction policies, by month—Policy Evaluation Tracking System, 2016 to 2020



Abbreviation: M, million.

Population based on estimates from the US Census Bureau's 2015-2019 American Community Survey.

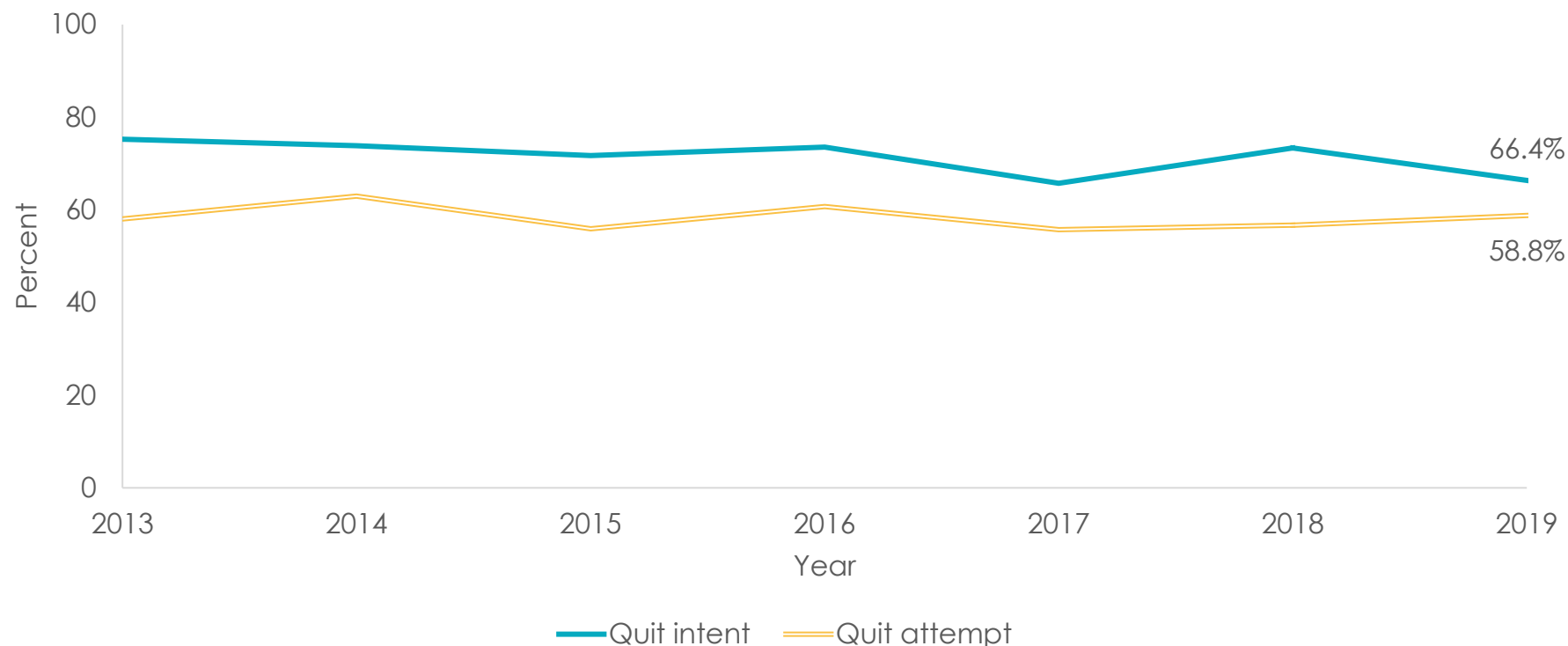
Source: California Department of Public Health, California Tobacco Control Program. Policy Evaluation Tracking System. List of Tobacco Retail License or Other Policies with a Provision Restricting the Sale of Flavored Tobacco Products and/or Menthol Cigarettes.

<https://pets.tcspartners.org>. Accessed August 25, 2021.

TOBACCO CESSATION AND HEALTH

Cigarette quit intents and quit attempts have decreased or remained constant over the past seven years among adults who currently smoke cigarettes (Figure 33). Approximately two out of three (66.4%) adults who currently smoke cigarettes reported an intent to quit smoking cigarettes in the next six months.

Figure 33. Cigarette quit intent and quit attempt among adults aged ≥ 18 years who currently smoke cigarettes—California Health Interview Survey, 2013 to 2019

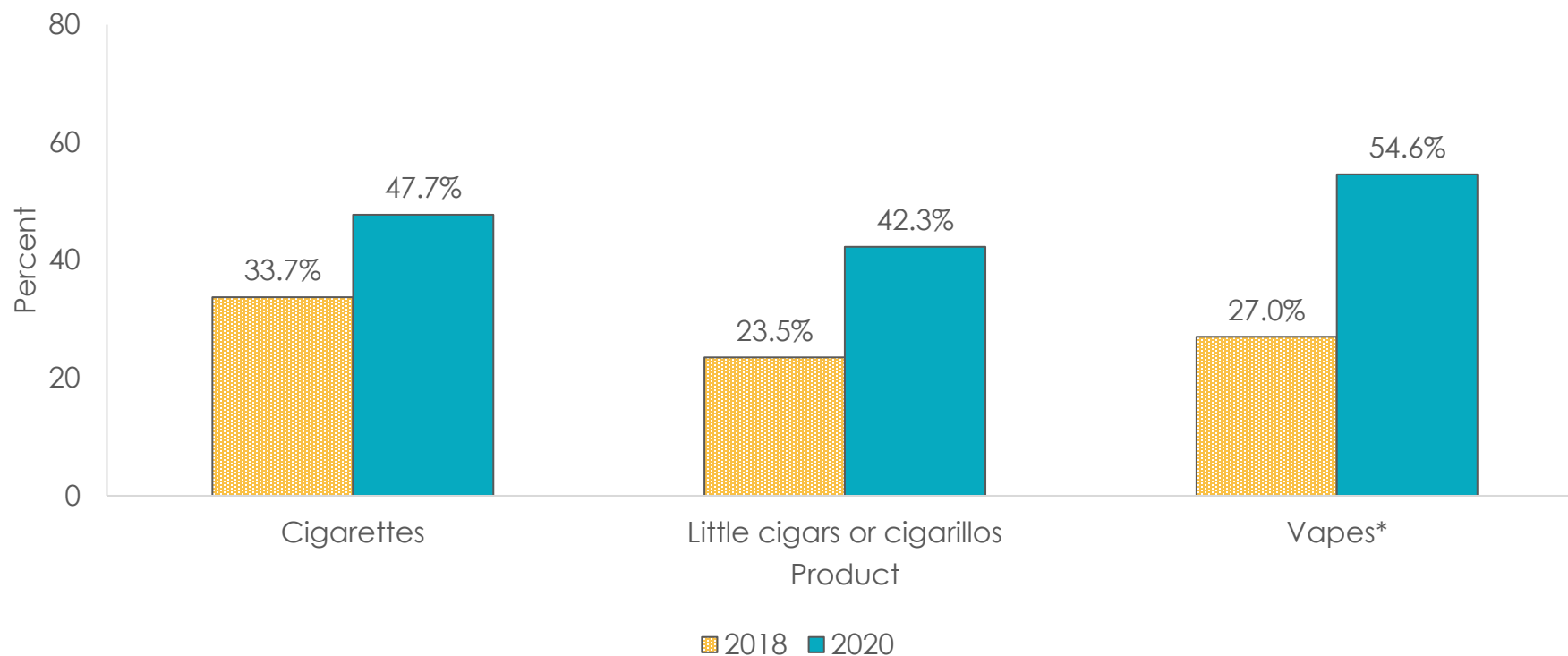


Cigarette quit intent is intent to quit smoking cigarettes in the next six months. Cigarette quit attempt is an attempt to quit smoking cigarettes for one day or longer in the past 12 months. See [Additional Notes](#) section for more information.

Source: California Health Interview Survey. CHIS 2013 to CHIS 2019 Adult Files. Los Angeles, CA: UCLA Center for Health Policy Research; October 2020.

Among California high school youth who reported current tobacco use, the percent of youth trying to quit cigarettes, little cigars or cigarillos, and/or vapes increased between 2018 and 2020. Attempts to quit vaping more than doubled in two years (Figure 34).

Figure 34. Quit attempt among high school students who currently use tobacco, by product—California Student Tobacco Survey, 2018 to 2020



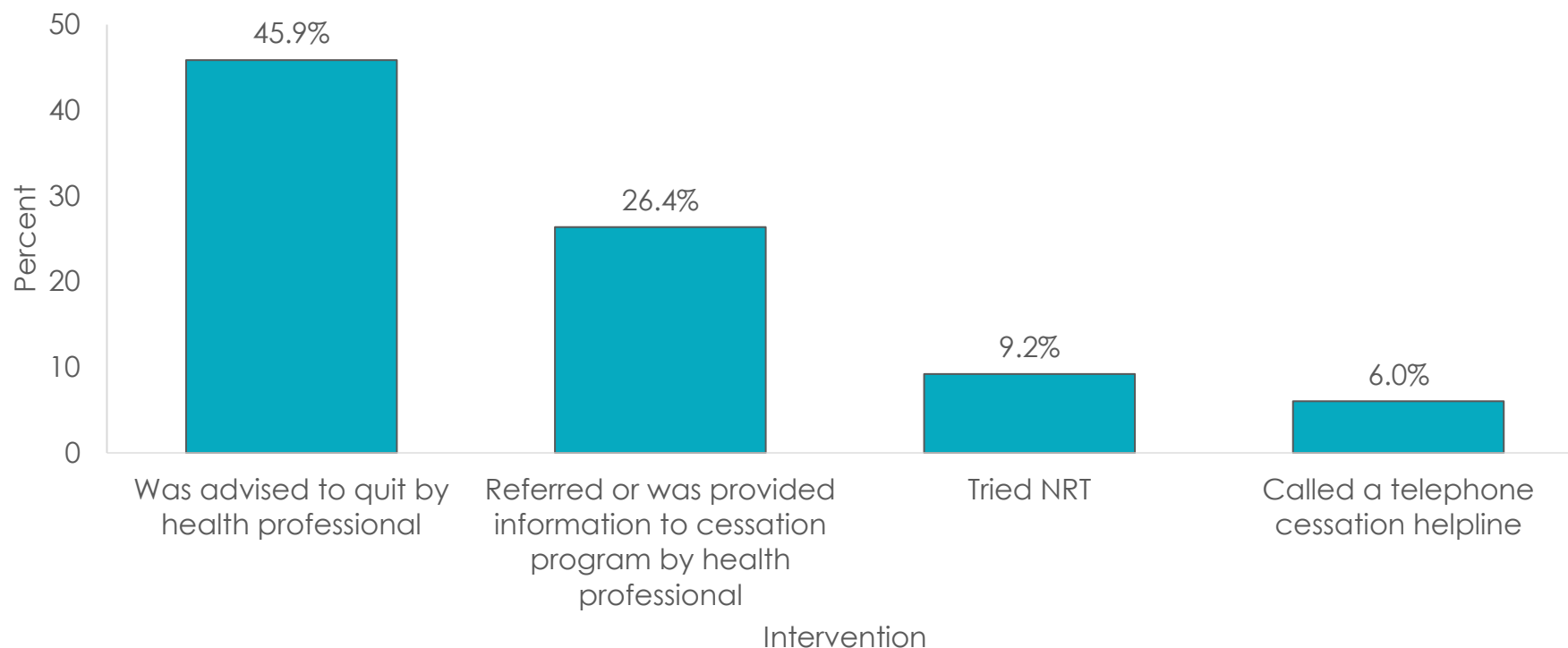
Quit attempt is an attempt to quit in the past 12 months. See [Additional Notes](#) section for more information.

* Comparison between 2018 and 2020 are for informational purposes only and should not be treated as scientifically or statistically accurate. CTCR recommends that readers not compare the vape quit attempt rates due to changes to the question wording for vape use.

Source: California Student Tobacco Survey. CSTS 2018 and CSTS 2020. San Diego, CA: University of California, San Diego, Center for Research and Intervention in Tobacco Control; 2021.

Health professionals should follow the [“5 A’s”](#) (ask, advise, assess, assist, and arrange) when treating patients to improve delivery of cessation treatments. However, among adults who reported current cigarette use, only 45.9% reported being advised to quit smoking cigarettes by a health professional (Figure 35).

Figure 35. Cessation intervention in the past year among adults aged ≥18 years who currently smoke cigarettes, by cessation intervention—California Health Interview Survey, 2018

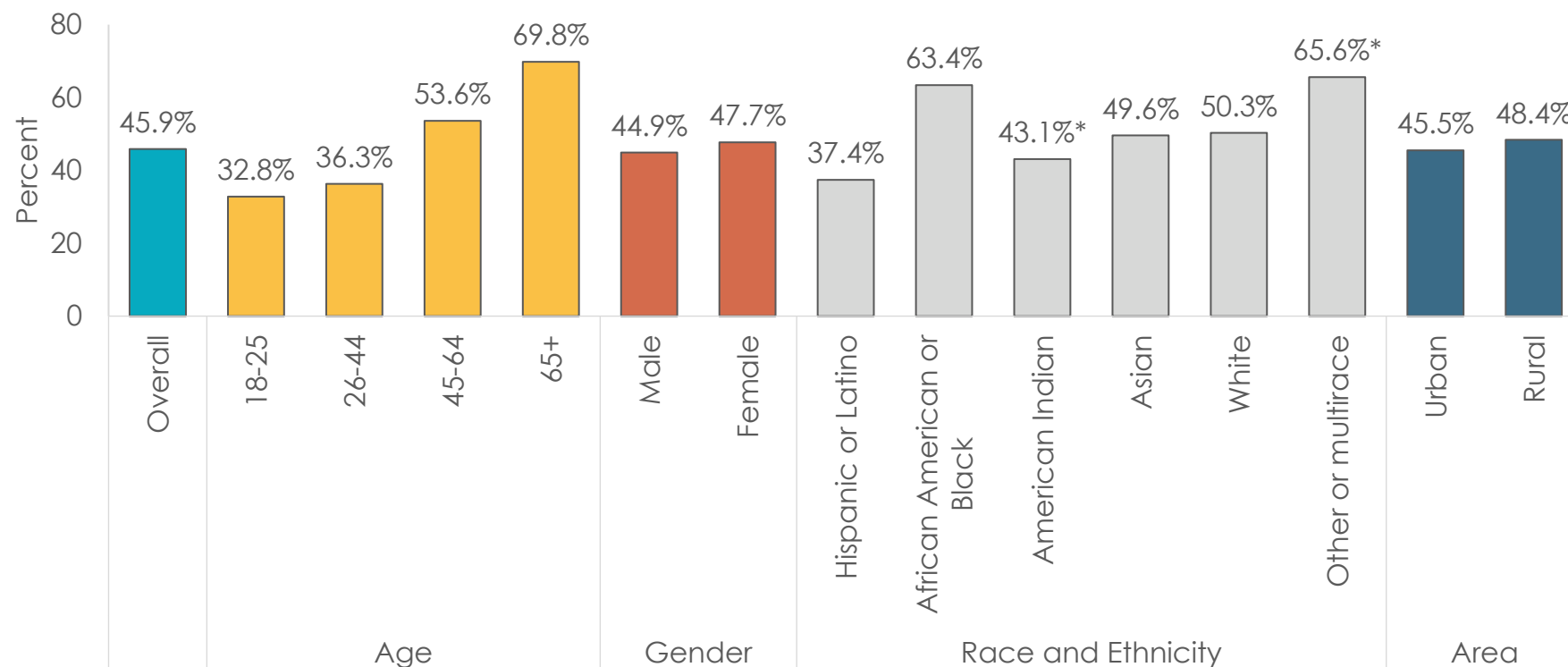


Abbreviation: NRT, nicotine replacement therapy.
See [Additional Notes](#) section for more information.

Source: California Health Interview Survey. CHIS 2018 Adult Files. Los Angeles, CA: UCLA Center for Health Policy Research; February 2020.

Racial disparities were observed when it comes to health care professionals advising their patients to quit smoking cigarettes (Figure 36). Among adults who reported current cigarette use, only 37.4% of Hispanic or Latino were advised to quit smoking cigarettes compared to 50.3% of White adults.

Figure 36. Advised to quit smoking cigarettes among adults aged ≥ 18 years who currently smoke cigarettes, by age, gender, race and ethnicity, and area—California Health Interview Survey, 2018



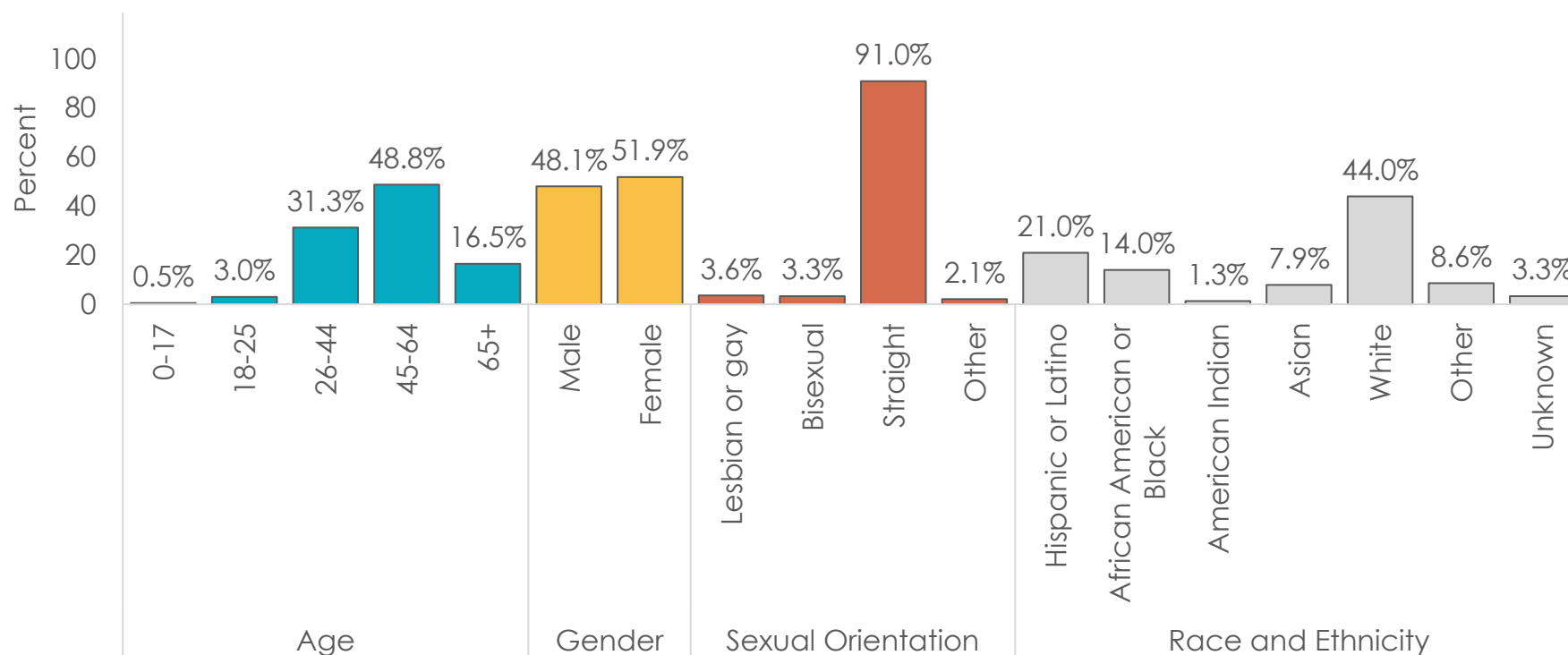
See [Additional Notes](#) section for more information.

* Caution should be used as estimate is statistically unreliable.

Source: UCLA Center for Health Policy Research. AskCHIS 2016-2019. Health professional gave advice to quit smoking. <https://ask.chis.ucla.edu/>. Accessed August 16, 2021.

The [California Smokers' Helpline](#), rebranded as Kick It California in September 2021, is a free cessation program, offering cessation services by telephone, text messaging, chat sessions, and through a mobile app. Approximately 6.0% of adults who currently smoke cigarettes reported calling a cessation helpline (Figure 35). Among the approximately 20,000 California residents who called the Helpline in 2020, 48.8% were between the age of 45 and 64, 51.9% were female, and 44.0% were White (Figure 37).

Figure 37. Demographic characteristics of callers to the California Smokers' Helpline, by age, gender, and race and ethnicity—California Smokers' Helpline, 2020

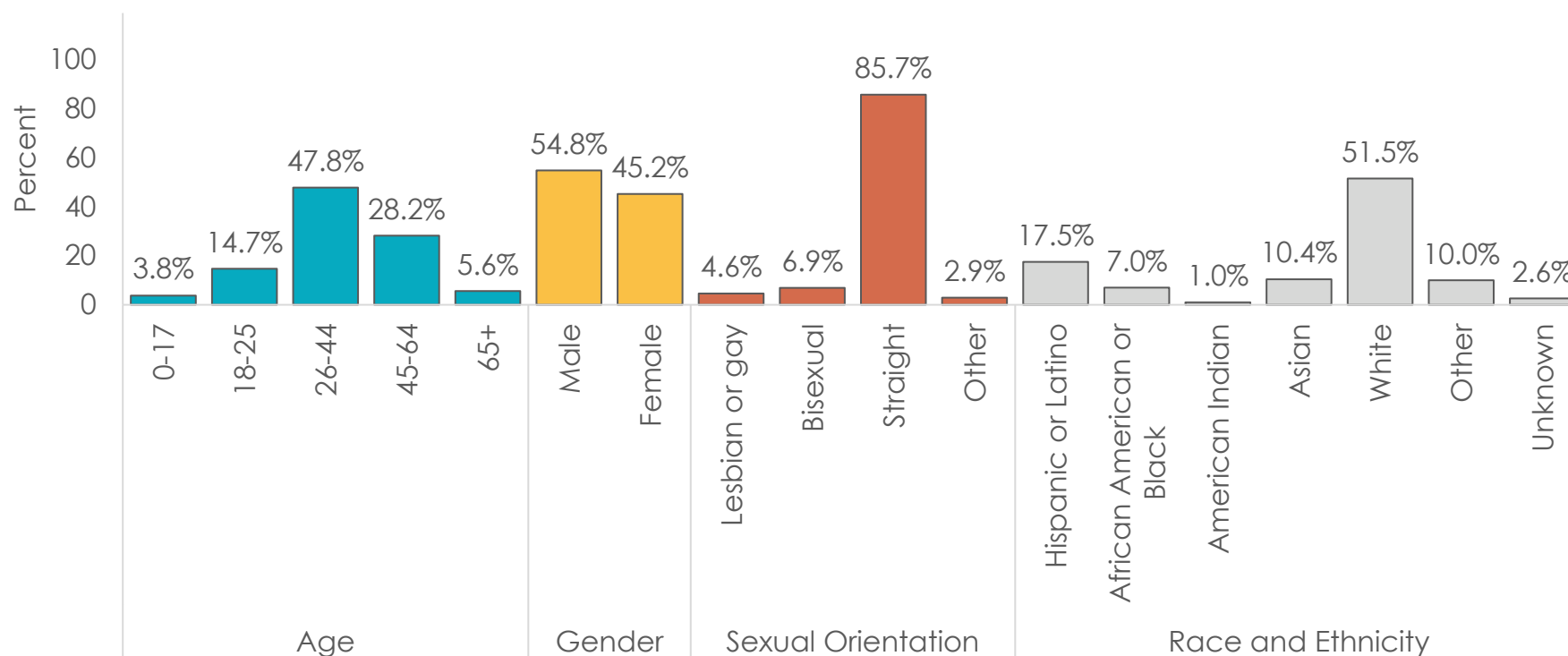


Racial groups include only non-Hispanic or Latino of a single race unless otherwise noted. Hispanic or Latino includes all racial groups.

Source: Helpline Caller Intake Reports, January-December 2020. San Diego, CA: California Smokers' Helpline, University of California, San Diego.

Kick it California has dedicated resources to help people who want to quit vaping. Among California residents who called Kick it California for help to quit vaping, 47.8% were between the age of 25 and 44, 54.8% were male, and 51.5% were White (Figure 38).

Figure 38. Demographic characteristics of callers to the California Smokers' Helpline for vaping cessation, by age, gender, and race and ethnicity—California Smokers' Helpline, 2020

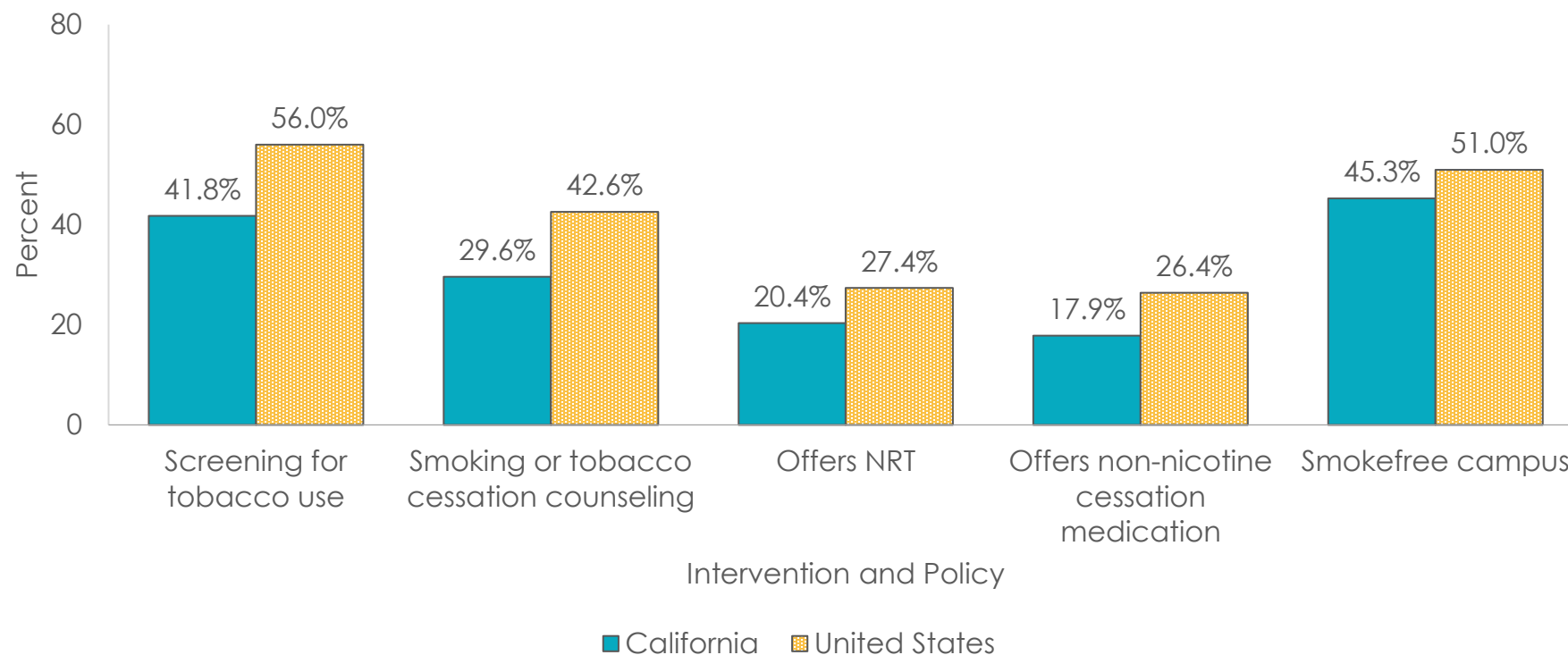


Racial groups include only non-Hispanic or Latino of a single race unless otherwise noted. Hispanic or Latino includes all racial groups.

Source: Helpline Caller Intake Reports, January-December 2020. San Diego, CA: California Smokers' Helpline, University of California, San Diego.

California lagged in implementing tobacco interventions and smokefree policies at mental health treatment facilities compared to the United States (Figure 39). The largest difference was found in screening for tobacco use. Only two in five (41.8%) of California's mental health facilities screened for tobacco use.

Figure 39. Tobacco cessation interventions and use policies among mental health treatment facilities—National Mental Health Services Survey, 2019



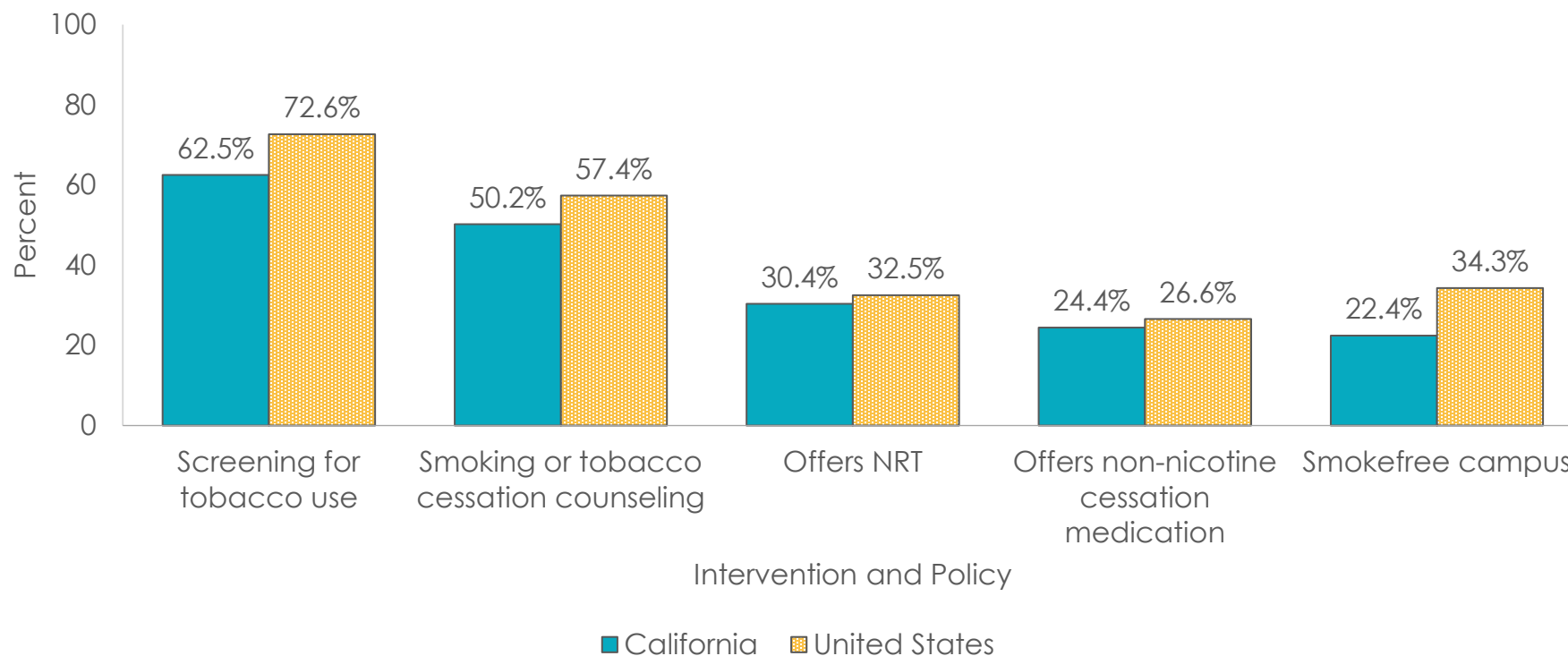
Abbreviation: NRT, nicotine replacement therapy.

Facilities operated by federal agencies are included in the states in which the facilities are located. See [Additional Notes](#) section for more information.

Source: Substance Abuse and Mental Health Services Administration. National Mental Health Services Survey (N-MHSS): 2019. Data on mental health treatment facilities. Rockville, MD: Substance Abuse and Mental Health Services Administration; 2020.

At substance abuse treatment facilities, California was also behind compared to the United States in implementing tobacco interventions and smokefree policies (Figure 40). The largest difference was found in smokefree treatment facilities. About one in five (22.4%) of California's substance abuse treatment facilities were smokefree.

Figure 40. Tobacco cessation interventions and use policies among substance abuse treatment facilities—National Survey of Substance Abuse Treatment Services, 2019



Abbreviation: NRT, nicotine replacement therapy.

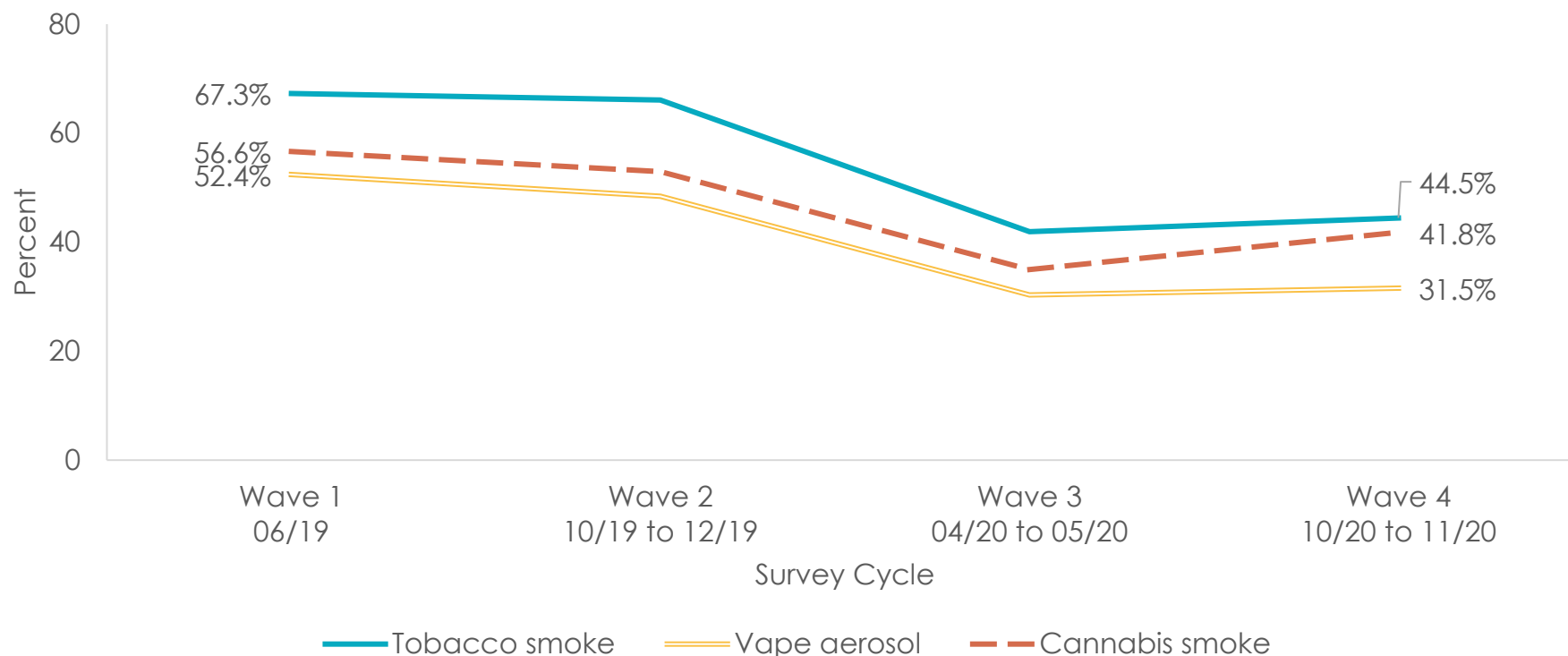
Facilities operated by federal agencies are included in the states in which the facilities are located. See [Additional Notes](#) section for more information.

Source: Substance Abuse and Mental Health Services Administration. National Survey of Substance Abuse Treatment Services (N-SSATS); 2019. Data on substance abuse treatment facilities. Rockville, MD: Substance Abuse and Mental Health Services Administration; 2020.

SECONDHAND SMOKE AND VAPE EXPOSURE AND TOBACCO-FREE POLICIES

Secondhand exposure among adults in California dropped between 2019 and 2020 (Figure 41): secondhand tobacco smoke decreased by 33.9%, secondhand vape aerosol decreased by 39.8%, and secondhand cannabis smoke decreased by 26.2%.

Figure 41. Exposure to secondhand tobacco smoke, vape aerosol, or cannabis smoke in past two weeks among adults aged 18 to 64 years—Online California Adult Tobacco Survey, 2019 to 2020

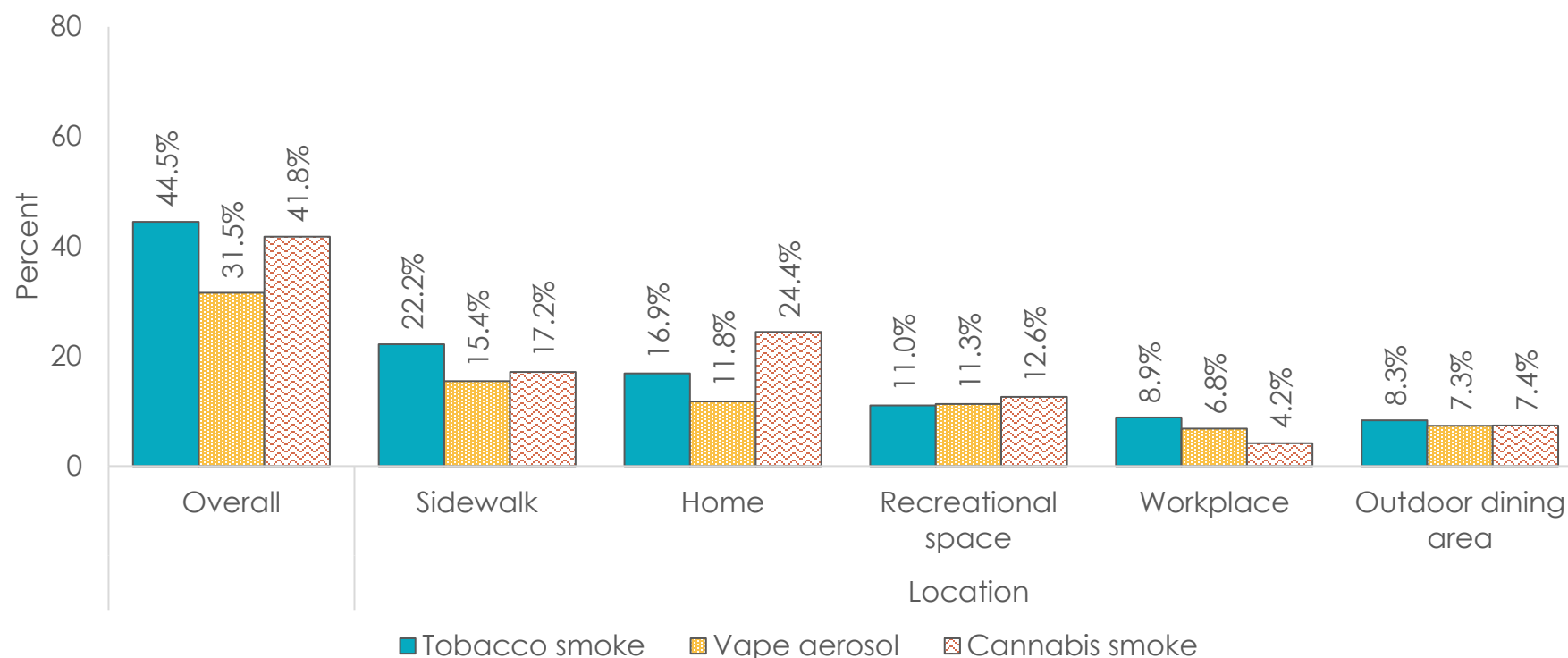


See [Additional Notes](#) section for more information.

Source: California Department of Public Health, California Tobacco Control Program. Key findings from the Online California Adult Tobacco Survey: 2019-2020 Results. Sacramento, CA: California Department of Public Health; August 2021.

Sidewalks and home exposure remain the most reported location of secondhand exposure among adults aged 18 to 64 years in California (Figure 42). Sidewalk was the most reported location for secondhand tobacco smoke exposure (22.2%) and vape aerosol exposure (15.4%). Home was the most reported location for secondhand cannabis smoke exposure (24.4%).

Figure 42. Exposure to secondhand tobacco smoke, vape aerosol, or cannabis smoke in past two weeks among adults aged 18 to 64 years, by location of exposure—Online California Adult Tobacco Survey, 2020



Data from only one wave in 2020.

Source: Online California Adult Tobacco Survey. Online CATS 2020 (Wave 4). Sacramento, CA: California Department of Public Health; February 2021.

Smokefree public places and smokefree multi-unit housing are two key strategies in ending exposure to the dangers of secondhand smoke and vapor. Half (50.1%) of California adults aged 18 to 64 years agreed that public places should be smokefree and a majority (63.8%) agreed all apartment units should be tobacco smokefree (Table 22).

Table 22. Beliefs on smokefree policies among adults aged 18 to 64 years—Online California Adult Tobacco Survey, 2019 to 2020

Statement	2019	2020
Apartment complexes should require all the units to be smokefree, vape-free, and marijuana smokefree. (% agree)	59.2%	62.0%†
Apartment complexes should require all the units to be tobacco smokefree and vape-free. (% agree)	—*	63.8%†
Apartment complexes should require all the units to be marijuana smokefree. (% agree)	—*	55.8%†
Indian casinos in California should be smokefree. (% agree)	65.3%	64.2%
People should be protected from breathing in secondhand marijuana smoke or vapor in any public places. (% agree)	81.0%	81.2%
Smoking should not be allowed in outdoor dining areas at restaurants. (% agree)	80.3%	79.2%
Smoking in all public places should be made illegal. (% agree)	—*	50.1%†

Response option of “agree” and “strongly agree” were combined. See [Additional Notes](#) section for more information.

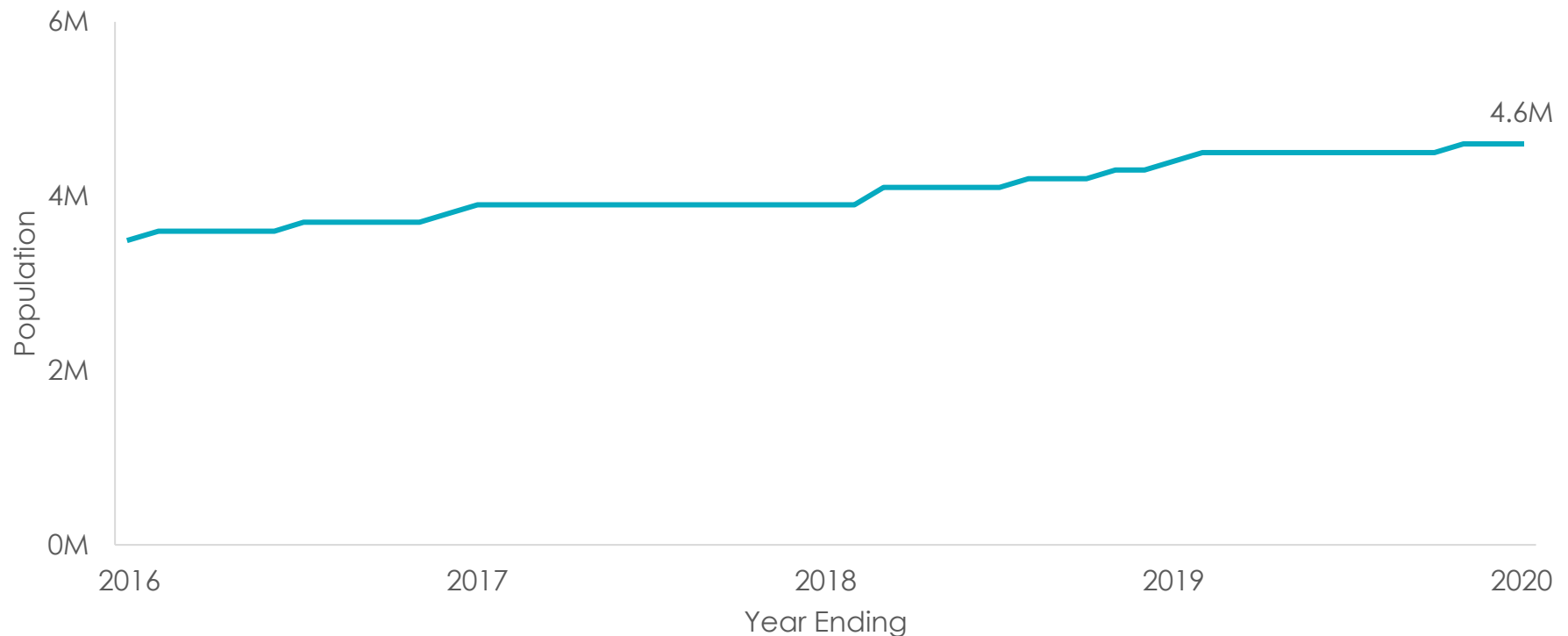
* Statement not asked in 2019.

† Data from only one wave; all other data are from two waves.

Source: Online California Adult Tobacco Survey. Online CATS 2019-2020 (Wave 1-4). Sacramento, CA: California Department of Public Health; February 2021.

Local communities are continuing to pass laws that regulate smoking in private units in multi-unit housing. These local laws are aimed at protecting residents from drifting secondhand smoke. Between 2016 and 2020, the number of Californians covered by a local law that regulates smoking in private units grew by 33%, from 3.5 million to 4.6 million (Figure 43)

Figure 43. Population coverage for any policies regulating smoking in private units in multi-unit housing, by month—Policy Evaluation Tracking System, 2016 to 2020



Abbreviation: M, million.

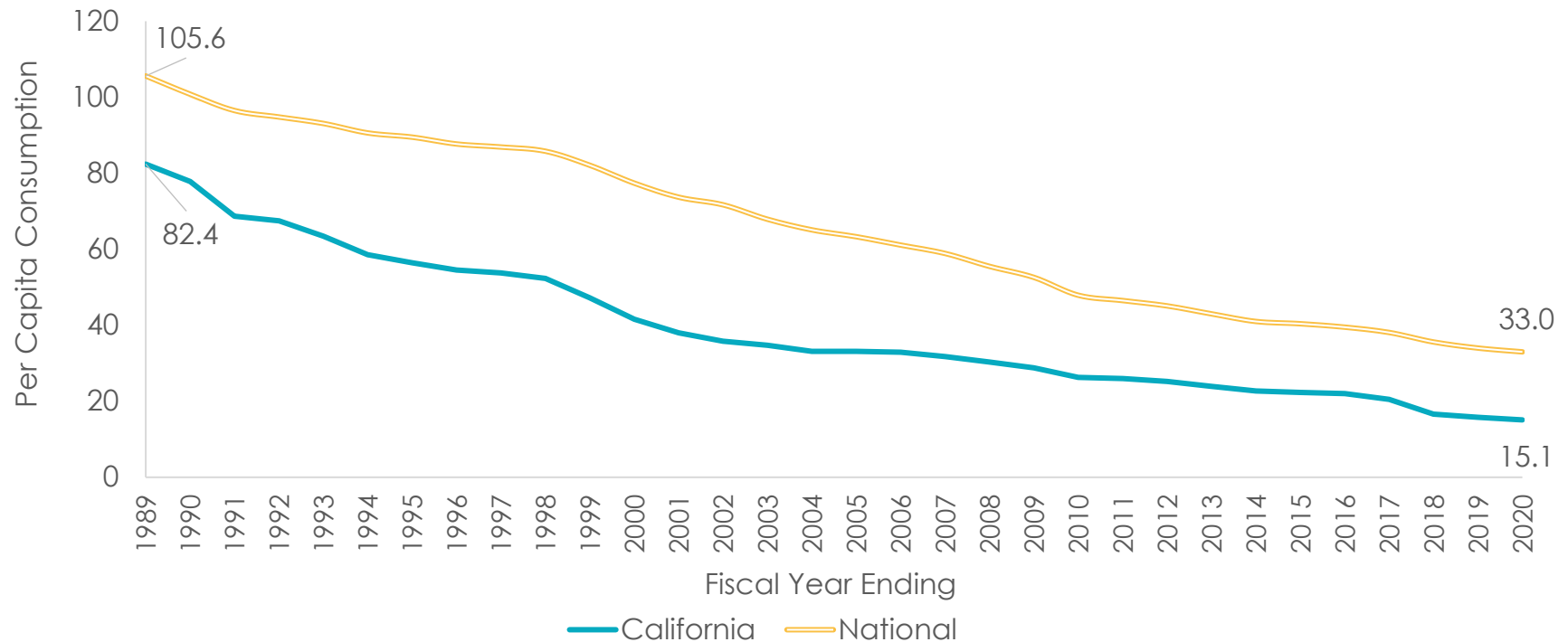
Population based on estimates from the US Census Bureau's 2015-2019 American Community Survey.

Source: California Department of Public Health, California Tobacco Control Program. Policy Evaluation Tracking System. List of Jurisdictions with Policy Prohibiting Smoking in Some or All Units of MUH, Including Balconies and Patios. <https://pets.tcpspartners.org>. Accessed August 25, 2021.

CIGARETTE SALES

Since CTCP began in 1989, per capita cigarette consumption decreased substantially and more rapidly in California compared to the nation as a whole (Figure 44). Between 1989 and 2020, the per capita cigarette pack consumption decreased by 81.7% in California (from 82.4 to 15.1) and by 68.8% nationally (from 105.6 to 33.0).

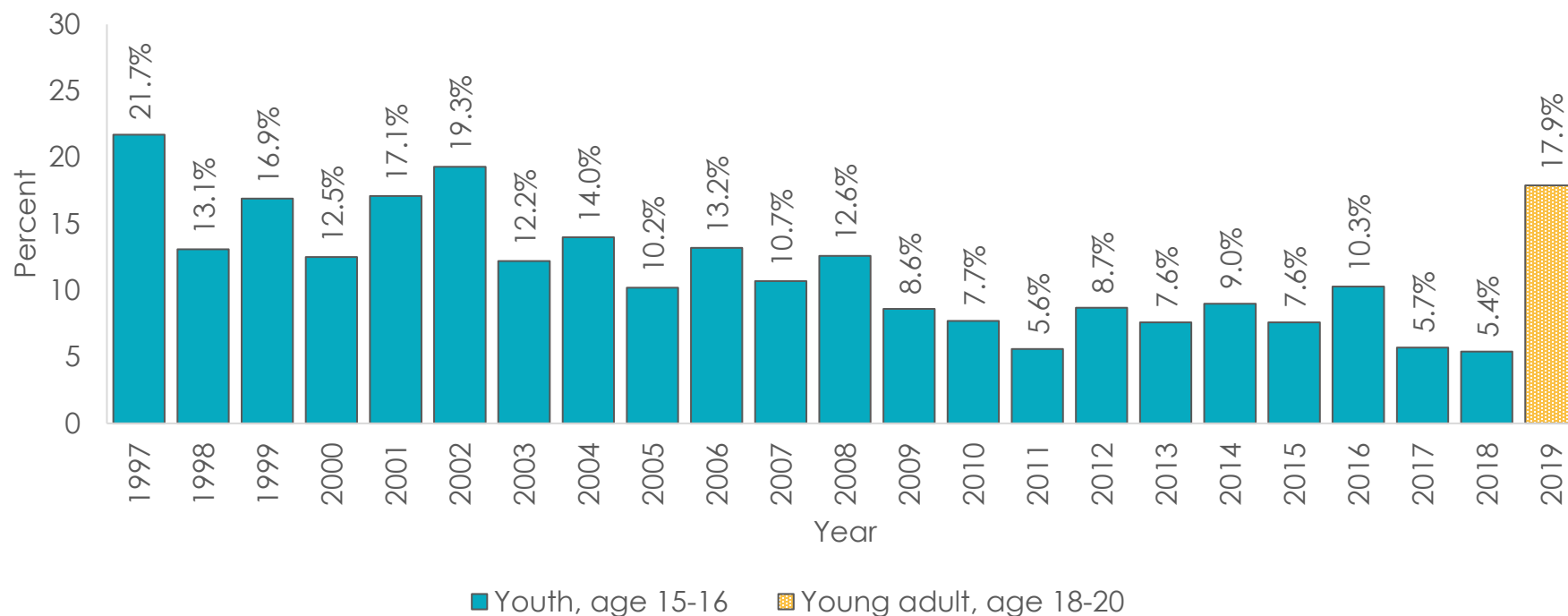
Figure 44. Per capita cigarette pack consumption—Fiscal Year 1988-89 to Fiscal Year 2019-20



Source: Orzechowski and Walker. The Tax Burden on Tobacco: Historical Compilation, Volume 55, 2020.

Even though tobacco products are only to be sold to adults over the age of 21, retailers continue to sell to underage persons (Figure 45). California is required to conduct underage tobacco purchase surveys as part of the Synar regulation. This regulation requires states to maintain a noncompliance rate of no more than 20.0%.⁸ In 2016, the minimum age of tobacco sales in California increased to 21 years. Beginning in 2019, the age of decoys participating in compliance checks increased from 15 to 16 years to 18 to 20 years to more accurately assess the increase in the age-of-sale law. In December 2019, the minimum age of tobacco sales was raised to 21 throughout the nation.

Figure 45. Tobacco products sold to underage decoys among licensed tobacco retailers—Synar Tobacco Purchase Survey, 1997 to 2019



Restricted to licensed tobacco retailers that are youth accessible.

Source: Synar Tobacco Purchase Survey. STPS 1997 to STPS 2019. Sacramento, CA: California Department of Public Health; September 2019.

⁸ Substance Abuse and Mental Health Services Administration. Tobacco regulation for Substance Abuse Prevention and Treatment block grants. Fed Regist. 1996;61(13):1492-1509.

In another tobacco purchase survey conducted by CTCP, coastal regions in California had higher rates of underage sales in 2019 (Table 23). The Central Coast region had the highest rate of underage sales at 55.2%. The Tri-County South region had the lowest rate of underage sales at 9.3%.

Table 23. Tobacco products sold to underage decoys among licensed tobacco retailers, by geographic region—Young Adult Tobacco Purchase Survey, 2019

Region	Violation Rate
Bay Area: Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, Solano	21.6%
Central Coast: Monterey, San Benito, Santa Cruz	55.2%
Central Valley: Fresno, Kern, Kings, Madera, Mariposa, Merced, Tulare	13.7%
Gold Country: Alpine, Amador, Calaveras, El Dorado, Inyo, Mono, Nevada, Placer, Sacramento, San Joaquin, Stanislaus, Sutter, Tuolumne, Yolo	13.2%
High Country and North Valley: Butte, Colusa, Glenn, Lassen, Modoc, Plumas, Shasta, Sierra, Siskiyou, Tehama, Trinity, Yuba	13.5%
Los Angeles: Los Angeles	20.4%
North Coast: Del Norte, Humboldt, Lake, Mendocino, Napa, Sonoma	11.1%
South Coast: Orange, San Diego	16.6%
Tri-County: San Luis Obispo, Santa Barbara, Ventura	25.4%
Tri-County South: Imperial, Riverside, San Bernardino	9.3%
Overall	17.9%

Protocols for the Young Adult Tobacco Purchase Survey differs from the Synar Tobacco Purchase Survey. Restricted to licensed tobacco retailers that are youth accessible.

Source: Young Adult Tobacco Purchase Survey. YATPS 2019. Sacramento, CA: California Department of Public Health; September 2019.

Minimum package size policies and minimum price policies are potential strategies to reduce youth's access to tobacco by making tobacco products less affordable.⁹ Only 45.0% of respondents agreed that little cigars and cigarillos products should be sold in packages of 10 instead of individually (Table 24).

Table 24. Beliefs on tobacco retail pricing policies among adults aged 18 to 64 years—Online California Adult Tobacco Survey, 2019 to 2020

Statement	2019	2020
Tobacco products should not be allowed to be sold at a discount. (% agree)	57.5%	57.1%
Tobacco products like cigarillos or little cigars should be sold in packages of 10 instead of individually. (% agree)	43.6%	45.0%
Coupons, rebates, buy 1 get 1 free, 2 for 1, or any other special promotions for tobacco purchases should {be banned/not be allowed}.* (% agree)	55.2%	57.2%

Response option of "agree" and "strongly agree" were combined. See [Additional Notes](#) section for more information.

* Statement was slightly revised starting in wave 3 (2020). Statement was revised from "...should be banned" to "...should not be allowed."

Source: Online California Adult Tobacco Survey. Online CATS 2019-2020 (Wave 1-4). Sacramento, CA: California Department of Public Health; February 2021.

⁹ McLaughlin I, Pearson A, Laird-Metke E, Ribisl K. Reducing tobacco use and access through strengthened minimum price laws. Am J Public Health. 2014;104(10):1844-1850.

California is building a framework to eradicate the tobacco industry's manipulative, racist and deadly influence by equitably increasing the health, environmental, and economic well-being of California's diverse populations.¹⁰ Public support for creating a tobacco-free environment, specifically on retail availability and accessibility, is one crucial aspect to reaching this goal. In a 2020 survey among California adults, a majority (56.6%) agreed that there should be a gradual ban on the sale of cigarettes (Table 25).

Table 25. Beliefs on commercial tobacco retail availability and accessibility policies among adults aged 18 to 64 years—Online California Adult Tobacco Survey, 2019 to 2020

Statement	2019	2020
There should be a gradual ban on the sale of cigarettes. (% agree)	52.8%	56.6%
There should be an immediate ban on the sale of cigarettes. (% agree)	37.3%	36.2%
Pharmacies/drug stores should not sell tobacco products. (% agree)	63.4%	63.2%
The number of stores that sell tobacco should be reduced. (% agree)	—*	61.5%
To what extent would you support a government policy to ban the sale of filtered cigarettes? (% support)	58.8%	57.4%†
Do you support or oppose a proposal that would restrict internet sales of tobacco products in California? (% support)	—*	61.7%†

Response option of "agree" (or "support") and "strongly agree" (or "strongly support") were combined. See [Additional Notes](#) section for more information.

* Statement not asked in 2019.

† Data from only one wave; all other data are from two waves.

Source: Online California Adult Tobacco Survey. Online CATS 2019-2020 (Wave 1-4). Sacramento, CA: California Department of Public Health; February 2021.

¹⁰ California Tobacco Control Program, California Department of Public Health. Local Lead Agency Campaign to End Commercial Tobacco. <https://tcfor.catcp.org/index.cfm?fuseaction=opportunities.fileFetch&docID=2199>. Accessed August 17, 2021.

The tobacco industry's products not only cause dramatic negative health consequences, they also create toxic waste that devastates California's environment. The toxic chemicals in cigarette butts that are discarded are a threat to California's aquatic ecosystems.¹¹ Cigarette butts, or filters, are also made of plastic that doesn't biodegrade contributing to plastic accumulation. Cigarettes have been the single most collected item during [California Coastal Cleanups](#). Over 7.5 million cigarettes have been cleaned off California's waterways since 1988.¹²

In a 2020 survey among California adults (Table 26), the vast majority (75.8%) agreed that the tobacco industry should be held responsible for the negative impact of tobacco product waste. A majority (67.9%) would support a policy to ban single-use tobacco products to reduce waste.

Table 26. Beliefs on tobacco product waste among adults—Online California Adult Tobacco Survey, 2019 to 2020

Statement	2019	2020
The tobacco industry should be held responsible for the negative impact of tobacco product waste on the environment. (% agree)	78.6%	75.8%*
Cigarette filters are biodegradable. (% agree)	24.1%	22.5%*
Cigarette butts damage the environment. (% agree)	90.2%	90.3%*
Cigarette butts are poisonous to children, pets, and wildlife. (% agree)	91.0%	90.3%*
To what extent would you support a government policy to ban the sale of filtered cigarettes? (% support)	58.8%	57.4%*
To what extent would you support a government policy to ban single-use tobacco products in order to reduce litter waste? (% support)	69.3%*	67.9%*

Response option of "agree" (or "support") and "strongly agree" (or "strongly support") were combined. See [Additional Notes](#) section for more information.

* Data from only one wave; all other data are from two waves.

Source: Online California Adult Tobacco Survey. Online CATS 2019-2020 (Wave 1-4). Sacramento, CA: California Department of Public Health; February 2021.

¹¹ Slaughter E, Gersberg RM, Watanabe K, Rudolph J, Stransky C, Novotny TE. Toxicity of cigarette butts, and their chemical components, to marine and freshwater fish. *Tob Control*. 2011;20(Suppl 1):i25-i29.

¹² California Coastal Commission. Statewide results for cleanups between 1988 and 2017. <https://coastal.ca.gov/publiced/ccd/stats/data.xls>. Accessed January 13, 2021.

ADDITIONAL NOTES

American Community Survey (ACS)

Age: Age was ascertained from a constructed 23-level categorical variable (options were “under 5 years”, “5 to 9 years”, “10 to 14 years”, “15 to 17 years”, “18 and 19 years”, “20 years”, “21 years”, “22 to 24 years”, “25 to 29 years”, “30 to 34 years”, “35 to 39 years”, “40 to 44 years”, “45 to 49 years”, “50 to 54 years”, “55 to 59 years”, “60 and 61 years”, “62 to 64 years”, “65 and 66 years”, “67 to 69 years”, “70 to 74 years”, “75 to 79 years”, “80 to 84 years”, or “85 years and older”) based on respondent's current age.

Percent change: Percent change (PC) between baseline and most recent estimate was calculated with the following formula: $PC = [(most\ recent\ estimate - baseline\ estimate) / (baseline\ estimate)]$.

Percentage difference: Percentage difference between the baseline and most recent estimate was calculated with the following formula: percentage difference = most recent estimate – baseline estimate.

Poverty level: Poverty level was ascertained from a constructed 7-level categorical variable (options were “under .50”, “.50 to .99”, “1.00 to 1.24”, “1.25 to 1.49”, “1.50 to 1.84”, “1.85 to 1.99”, or “2.00 and over”) based on self-reported household income and household size.

Race and ethnicity: Race and ethnicity was ascertained from a constructed 8-level categorical variable (options were “not Hispanic or Latino White alone”, “not Hispanic or Latino Black or African American alone”, “not Hispanic or Latino American Indian and Alaska Native alone”, “not Hispanic or Latino Asian alone”, “not Hispanic or Latino Native Hawaiian and other Pacific Islander alone”, “not Hispanic or Latino some other race”, “not Hispanic or Latino two or more races” , or “Hispanic or Latino”) based on self-reported Hispanic or Latino ethnicity and race.

California Health Interview Survey (CHIS)

Advised to quit: Advised to quit was ascertained from the question, “In the past 12 months, did a doctor or other health professional advise you to quit smoking?” (response options were “yes” or “no”). This question was only asked of respondents who currently smoke cigarettes.

Age: Age was ascertained from a constructed 14-level categorical variable (options were “18-25 years”, “26-29 years”, “30-34 years”, “35-39 years”, “40-44 years”, “45-49 years”, “50-54 years”, “55-59 years”, “60-64 years”, “65-69 years”, “70-74 years”, “75-79 years”, “80-84 years”, or “85+ years”) based on respondent’s current age.

Area: Area was ascertained from a constructed dichotomous variable (options were “urban” or “rural”) based on respondent’s zip code population density.

Called helpline: Called helpline was ascertained from the question, “In the past 12 months, did you call a telephone quitting helpline?” (response options were “yes” or “no”). This question was only asked of respondents who currently smoke cigarettes.

CHIS 2019: Due to publication deadline, all data from CHIS 2019 utilized the original weights released on October 29, 2020 and not the revised weights that were released September 22, 2021.

Cigarette quit attempt: Cigarette quit attempt was ascertained from the question, “During the past 12 months, have you stopped smoking for one day or longer because you were trying to quit smoking?” (response options were “yes” or “no”). This question was only asked of respondents who currently smoke cigarettes.

Cigarette quit intention: Cigarette quit intention was ascertained from the question, “Are you thinking about quitting smoking in the next six months?” (response options were “yes” or “no”). This question was only asked of respondents who currently smoke cigarettes.

Cigarette use: Cigarette smoking ascertained from a constructed dichotomous variable (options were “current smoker” or “not current smoker”) based on two questions: “Altogether, have you smoked at least 100 or more cigarettes in your entire lifetime?” (response options were “yes” or “no”) and “Do you now smoke cigarettes every day, some days, or not at all?” (response options were “every day”, “some days”, or “not at all”). Respondents who reported smoking at least 100 cigarettes in their lifetime and who reported currently smoking every day or some days are classified as current cigarette smokers.

Cigarette use, flavored: Flavored cigarette (menthol cigarette) use was ascertained from the question, “Are the cigarettes you usually smoke menthol-flavored?” (response options were “yes” or “no”). This question was only asked of respondents who currently smoke cigarettes.

Cigar use: Cigar use was ascertained from a constructed 3-level categorical variable (options were “0 days”, “1-29 days”, or “30 days or more”) based on the question: “During the past 30 days, on how many days did you smoke big cigars?” (response options were “0 days”, “1-2 days”, “3-5 days”, “6-9 days”, “10-19 days”, “20-29 days”, or “30 days”). Respondents who reported smoking big cigars in the past 30 days are classified as current cigar users.

Cigar use, flavored: Flavored cigar use was ascertained from the question, “Were any of the cigars you smoked in flavors such as mint, fruit, candy, or wine?” (response options were “yes” or “no”). This question was only asked of respondents who currently use cigars.

Education: Education was ascertained from a constructed 9-level categorical variable (options were “no formal education or grade 1-8”, “grade 9-11”, “grade 12/high school diploma”, “some college”, “vocational school”, “AA or AS degree”, “BA or BS degree/some graduate school”, “MA or MS degree”, or “PhD or equivalent”) based on respondent’s self-reported highest education completed.

Gender: Gender was ascertained from a constructed dichotomous variable (options were “male” or “female”) based on respondent’s self-reported gender.

Hookah use: Hookah use was ascertained from a constructed 3-level categorical variable (options were “0 days”, “1-29 days”, or “30 days or more”) based on the question: “During the past 30 days, on how many days did you use a hookah water pipe?” (response options were “0 days”, “1-2 days”, “3-5 days”, “6-9 days”, “10-19 days”, “20-29 days”, or “30 days”). Respondents who reported using hookah in the past 30 days are classified as current hookah users.

Hookah use, flavored: Flavored hookah use was ascertained from the question, “Were any of the hookahs you smoked in flavors such as mint, fruit, candy, or wine?” (response options were “yes” or “no”). This question was only asked of respondents who currently use hookah.

Housing: Housing was ascertained from the question, “Do you live in a house, a duplex, a building with 3 or more units, or in a mobile home?” (response options were “house”, “duplex”, “building with 3 or more units”, or “mobile home”). Respondents who live in a duplex or a building with 3 or more units are classified as living in a multi-unit housing.

Little cigar or cigarillo use: Little cigar or cigarillo use was ascertained from a constructed 3-level categorical variable (options were “0 days”, “1-29 days”, or “30 days or more”) based on the question: “During the past 30 days, on how many days did you smoke cigarillos, or little cigars?” (response options were “0 days”, “1-2 days”, “3-5 days”, “6-9 days”, “10-19 days”, “20-29 days”, or “30 days”). Respondents who reported smoking little cigars or cigarillos in the past 30 days are classified as current little cigar or cigarillo users.

Little cigar or cigarillo use, flavored: Flavored little cigar or cigarillo use was ascertained from the question, “Were any of the cigarillos you smoked in flavors such as mint, fruit, candy, or wine?” (response options were “yes” or “no”). This question was only asked of respondents who currently use little cigars or cigarillos.

Medi-Cal coverage: Medi-Cal coverage was ascertained from a constructed dichotomous variable (options were “yes” or “no”) based on the question: “Are you covered by Medi-Cal?” (response options were “yes” or “no”). Respondents who also self-reported receiving Temporary Assistance to Needy Families (TANF), California Work Opportunities and Responsibilities to Kids (CalWORKs), or Supplemental Security Income (SSI) are considered to be covered by Medi-Cal.

Percent change: Percent change (PC) between baseline and most recent estimate was calculated with the following formula: $PC = [(most\ recent\ estimate - baseline\ estimate) / (baseline\ estimate)]$.

Percentage difference: Percentage difference between the baseline and most recent estimate was calculated with the following formula: percentage difference = most recent estimate – baseline estimate.

Poverty level: Poverty level was ascertained from a constructed continuous variable based on respondent's self-reported household income and household size.

Race and ethnicity: Race and ethnicity were ascertained from a constructed 6-level categorical variable (options were “Hispanic”, “White, non-Hispanic (NH)”, “African American only, NH”, “American Indian/Alaska Native only, NH”, “Asian only, NH”, or “Other/Two or more races, NH”) based on self-reported Hispanic or Latino ethnicity and race. The race and ethnicity classification were based on the 1997 Office of Management and Budget revised guidelines. Respondents who reported any Hispanic or Latino ethnicity are classified as Hispanic or Latino. Respondents who reported not Hispanic or Latino and reported multiple races are classified as two or more races. All other race categories are single-race non-Hispanic or Latino unless stated otherwise.

Referred to cessation program: Referred to a cessation program was ascertained from the question, “In the past 12 months, did a doctor or other health professional refer you to, or give you information about, a smoking cessation program?” (response options were “yes” or “no”). This question was only asked of respondents who currently smoke cigarettes.

Secondhand tobacco smoke or vape aerosol exposure: Secondhand tobacco smoke or vape aerosol was ascertained from the question, “In the last two weeks, have you ever been exposed to secondhand tobacco smoke or e-cigarette vapor in California?” (response options were “yes” or “no”). Respondents who reported exposure in the past two weeks are classified as being recently exposed to secondhand tobacco smoke or vape aerosol.

Serious psychological distress: Serious psychological distress was ascertained from a constructed dichotomous variable (options were “yes” or “no”) based on respondent’s answer from the Kessler 6-Item Psychological Distress Scale (K6) questionnaire. A K6 score of 13 or more is classified as likely to have serious psychological distress in the past month.

Service in the United States Armed Forces: Military service was ascertained from the question, “Did you ever serve on active duty in the Armed Forces of the United States?” (response options were “yes” or “no”).

Sexual orientation: Sexual orientation was ascertained from the question, “Do you think of yourself as straight or heterosexual, as gay {, lesbian,} or homosexual, or bisexual?” (response options were “straight or heterosexual”, “gay {, lesbian,} or homosexual”, “bisexual”, “not sexual, celibate, or none of the above”, or “other”).

Smokeless tobacco use: Smokeless tobacco use was ascertained from a constructed 3-level categorical variable (options were “0 days”, “1-29 days”, or “30 days or more”) based on the question: “During the past 30 days, on how many days did you use chewing tobacco, snuff, or snus?” (response options were “0 days”, “1-2 days”, “3-5 days”, “6-9 days”, “10-19 days”, “20-29 days”, or “30 days”). Respondents who reported using chewing tobacco, snuff, or snus in the past 30 days are classified as current smokeless tobacco users.

Smokeless tobacco use, flavored: Flavored smokeless tobacco use was ascertained from the question, “Were any of the chewing tobacco you used in flavors such as mint, fruit, candy, or wine?” (response options were “yes” or “no”). This question was only asked of respondents who currently use smokeless tobacco.

Statistically unreliable data: Estimates that are statistically unreliable are due to either small sample size (frequency of less than 50 respondents) or did not past statistical reliability standards (coefficient of variance of 30% or more). An exception to the coefficient of variance guideline is made when the estimates are below 10% or above 90% and the estimates are within $\pm 5\%$ of the confidence limits.

Tobacco use: Any tobacco use is current use of any of the following tobacco products: cigarettes, cigars, hookah, little cigars or cigarillos, smokeless tobacco, or vapes.

Tobacco use, flavored: Any flavored tobacco use is current use of any of the following flavored tobacco products: menthol cigarettes, flavored cigars, flavored hookah, flavored little cigars or cigarillos, flavored smokeless tobacco, or flavored vapes.

Tried NRT: Tried NRT was ascertained from the question, "In the past 12 months, did you use nicotine gum, nicotine lozenges, or a nicotine inhaler?" (response options were "yes" or "no"). This question was only asked of respondents who currently smoke cigarettes.

Vape use: Vape use was ascertained based on the following questions:

- **2016-2018:** "Have you ever used any type of e-cigarette, vape pen or e-hookah, such as Blu, NJOY, or Vuse, or any larger devices for vaping, sometimes called vapes, tanks or mods?" (response options were "yes" or "no") and "During the past 30 days, on how many days did you use electronic cigarettes?" (response options were any number between 0 and 30).
- **2019:** "Have you ever used an e-cigarette or other electronic vaping product, even just once in your lifetime?" (response options were "yes" or "no") and "In the past 30 days, on how many days did you use an e-cigarette or other electronic vaping product?" (response options were any number between 0 and 30).

Respondents who reported ever using vapes and who reported using vapes in the past 30 days are classified as current vape users.

Vape use, flavored: Flavored vape use was ascertained from the question, "Were any of the e-cigarette you used in flavors such as mint, fruit, candy, or wine?" (response options were "yes" or "no"). This question was only asked of respondents who currently use vapes.

California Student Tobacco Survey (CSTS)

Area: Area was ascertained from a constructed variable (options were “city”, “suburban”, or “rural and town”) based on the school’s physical address.

Cigarette quit attempt: Cigarette quit attempt was ascertained from the question, “In the last 12 months, did you try to quit smoking cigarettes?” (response options were “yes” or “no”).

Cigarette use: From 2002-2012, cigarette use was ascertained from the question, “During the past 30 days, on how many days did you smoke cigarettes?” (response options were “0 days”, “1 or 2 days”, “3 to 5 days”, “6 to 9 days”, “10 to 19 days”, “20 to 29 days”, or “all 30 days”). From 2016-2020, cigarette use was ascertained from a constructed dichotomous variable (options were “yes” or “no”) based on the following questions:

- **2016:** “Have you used any of the following products in last 30 days? Cigarettes” (response options were “yes” or “no”).
- **2018-2020:** “Have you smoked cigarettes in the LAST 30 DAYS?” (response options were “yes” or “no”).

Respondents who reported smoking cigarettes in the past 30 days are classified as current cigarette smokers.

Cigarette use, flavored: Flavored cigarette (menthol cigarette) use was ascertained from the question, “Were any of the cigarettes you smoked in the last 30 days flavored, such as menthol/mint?” (response options were “yes” or “no”).

Cigar use: Cigar use was ascertained from a constructed dichotomous variable (options were “yes” or “no”) based on the following questions:

- **2016:** “Have you used any of the following products in last 30 days? Big cigars” (response options were “yes” or “no”).
- **2018-2020:** “Have you smoked big cigars in the LAST 30 DAYS?” (response options were “yes” or “no”).

Respondents who reported smoking cigars in the past 30 days are classified as current cigar users.

Cigar use, flavored: Flavored cigar use was ascertained from the following questions:

- **2018:** “Were any of the big cigars you smoked in the last 30 days flavored? (such as cherry, rum, vanilla, etc.)” (response options were “yes” or “no”).
- **2020:** “Were any of the big cigars you smoked in the last 30 days flavored (such as fruit, sweet, alcohol, mint, etc.)?” (response options were “yes” or “no”).

Gender: Gender was ascertained from a from the following questions:

- **2016:** "What is your gender?" (response options were "female" or "male").
- **2018:** "What is your gender?" (response options were "female", "male", "I identify my gender in another way", or "I prefer not to answer").
- **2020:** "How do you describe yourself?" (response options were "male", "female", "female-to-male (FTM)/transgender male/trans man", "male-to-female (MTF)/transgender female/trans woman", "genderqueer, neither exclusively male nor female", "additional gender category or other", or "choose not to disclose").

Heated tobacco product use: Heated tobacco product use was ascertained from a constructed dichotomous variable (options were "yes" or "no") based on the following questions, "Have you used a heat-not-burn tobacco products in the LAST 30 DAYS?" (response options were "yes" or "no"). Respondents who reported using heated tobacco products in the past 30 days are classified as current heated tobacco product users.

Heated tobacco product use, flavored: Flavored heated tobacco product use was ascertained from the question, "Were any of the tobacco or heat-sticks you used in the last 30 days flavored (such as fruit, sweet, alcohol, menthol, etc.)?" (response options were "yes" or "no").

Hookah use: Hookah use was ascertained from a constructed dichotomous variable (options were "yes" or "no") based on the following questions:

- **2016:** "Have you used any of the following products in last 30 days? Hookah" (response options were "yes" or "no").
- **2018:** "Have you used hookah (water pipe) IN THE LAST 30 DAYS?" (response options were "yes" or "no").
- **2020:** "Have you smoked hookah water pipe in the LAST 30 DAYS?" (response options were "yes" or "no").

Respondents who reported using hookah in the past 30 days are classified as current hookah users.

Hookah use, flavored: Flavored hookah use was ascertained from the following questions:

- **2018:** "Was any of the hookah (water pipe) you smoked in the last 30 days flavored? (such as mint, apple, blueberry, etc.)" (response options were "yes" or "no").
- **2020:** "Was any of the hookah water pipe you smoked in the last 30 days flavored (such as fruit, sweet, alcohol, mint, etc.)?" (response options were "yes" or "no").

Kretek use: Kretek use was ascertained from a constructed dichotomous variable (options were “yes” or “no”) based on the questions, “Have you used any of the following products in last 30 days? Kreteks (clove cigars)” (response options were “yes” or “no”). Respondents who reported using kreteks in the past 30 days are classified as current kretek users.

Little cigar or cigarillo quit attempt: Little cigar or cigarillo quit attempt was ascertained from the question, “In the last 12 MONTHS, did you try to quit smoking little cigars or cigarillos?” (response options were “yes” or “no”).

Little cigar or cigarillo use: Little cigar or cigarillo use was ascertained from a constructed dichotomous variable (options were “yes” or “no”) based on the following questions:

- **2016:** “Have you used any of the following products in last 30 days? Little cigars or cigarillos” (response options were “yes” or “no”).
- **2018-2020:** “Have you smoked little cigars or cigarillos in the LAST 30 DAYS?” (response options were “yes” or “no”).

Respondents who reported smoking little cigars or cigarillos in the past 30 days are classified as current little cigar or cigarillo users.

Little cigar or cigarillo use, flavored: Flavored little cigar or cigarillo use was ascertained from the following questions:

- **2018:** “Were any of the little cigars or cigarillos you smoked in the last 30 days flavored? (such as strawberry, grape, peach, etc.)” (response options were “yes” or “no”).
- **2020:** “Were any of the little cigars or cigarillos you smoked in the last 30 days flavored (such as fruit, sweet, alcohol, mint, etc.)?” (response options were “yes” or “no”).

Mental health: Mental health was ascertained from the question, “In general, how would you rate your mental health?” (response options were “excellent”, “very good”, “good”, “fair”, or “poor”).

Percent change: Percent change (PC) between baseline and most recent estimate was calculated with the following formula: $PC = [(most\ recent\ estimate - baseline\ estimate) / (baseline\ estimate)]$.

Percentage difference: Percentage difference between the baseline and most recent estimate was calculated with the following formula: percentage difference = most recent estimate – baseline estimate.

Race and ethnicity: Race and ethnicity were ascertained from a constructed 8-level categorical variable (options were “non-Hispanic (NH) White”, “NH Black”, “Hispanic”, “NH Asian”, “NH American Indian/Alaska Native”, “NH Native Hawaiian or other Pacific Islander”, “NH other”, or “NH multiple race”) based on self-reported Hispanic or Latino ethnicity and race. The race and ethnicity classification were based on the 1997 Office of Management and Budget revised guidelines. Respondents who reported any Hispanic or Latino ethnicity are classified as Hispanic or Latino. Respondents who reported not Hispanic or Latino and reported multiple races are classified as two or more races. All other race categories are single-race non-Hispanic or Latino unless stated otherwise.

Secondhand cigarette or little cigar/cigarillo smoke exposure: Secondhand cigarette or little cigar/cigarillo smoke exposure was ascertained from the following questions, “In the LAST 2 WEEKS, were you in a CAR when someone was smoking a cigarette, little cigar, or cigarillo?” (response options were “yes” or “no”) and “In the LAST 2 WEEKS, were you in a ROOM when someone was smoking a cigarette, little cigar, or cigarillo?” (response options were “yes” or “no”). Respondents who reported exposure in the car or room in the past two weeks are classified as being recently exposed to secondhand cigarette or little cigar/cigarillo smoke.

Secondhand vape aerosol exposure: Secondhand vape aerosol exposure was ascertained from the following questions, “In the LAST 2 WEEKS, were you in a CAR when someone was using a vape?” (response options were “yes” or “no”) and “In the LAST 2 WEEKS, were you in a ROOM when someone was using a vape?” (response options were “yes” or “no”). Respondents who reported exposure in the car or room in the past two weeks are classified as being recently exposed to secondhand vape aerosol.

Sexual and gender minority: Sexual and gender minority (SGM) was ascertained from the following questions:

- **2018:** “What is your gender?” (response options were “female”, “male”, “I identify my gender in another way”, or “I prefer not to answer”) and “Do you identify yourself as LGBTQ?” (response options were “yes”, “no”, or “I prefer not to answer”).
- **2020:** “How do you describe yourself” (response options were “male”, “female”, “female-to-male (FTM)/transgender male/trans man”, “male-to-female (MTF)/transgender female/trans woman”, “genderqueer, neither exclusively male nor female”, “additional gender category or other”, or “choose not to disclose”) and “Do you consider yourself to be...” (response options were “lesbian, gay, or homosexual”, “straight or heterosexual”, “bisexual”, “something else”, “I don’t know”, or “choose not to disclose”).

Respondents who identified as lesbian, gay, bisexual, transgender, queer, and gender non-conforming are classified as SGM.

Smokeless tobacco use: Smokeless tobacco use was ascertained from a constructed dichotomous variable (options were “yes” or “no”) based on the following questions:

- **2016:** “Have you used any of the following products in last 30 days? Smokeless tobacco (chew, dip, snuff, or snus)” (response options were “yes” or “no”).
- **2018-2020:** “Have you used smokeless tobacco in the LAST 30 DAYS?” (response options were “yes” or “no”). Smokeless tobacco is defined as chew, dip, snuff, or snus.

Respondents who reported using smokeless tobacco in the past 30 days are classified as current smokeless tobacco users.

Smokeless tobacco use, flavored: Flavored smokeless tobacco use was ascertained from the following questions:

- **2018:** “Was any of the smokeless tobacco you used in the last 30 days flavored? (such as fruit, menthol, cinnamon, etc.)?” (response options were “yes” or “no”).
- **2020:** “Was any of the smokeless tobacco you used in the last 30 days flavored (such as fruit, sweet, alcohol, mint, etc.)?” (response options were “yes” or “no”).

Statistically unreliable data: Estimates that are statistically unreliable did not past statistical reliability standards (coefficient of variance of 30% or more).

Tobacco use: Any tobacco use is current use of any of the following tobacco products:

- **2016:** cigarettes, cigars, hookah, kreteks, little cigars or cigarillos, smokeless tobacco, or vapes.
- **2018:** cigarettes, cigars, hookah, little cigars or cigarillos, smokeless tobacco, or vapes.
- **2020:** cigarettes, cigars, heated tobacco products, hookah, little cigars or cigarillos, smokeless tobacco, or vapes.

Tobacco use, flavored: Any flavored tobacco use is current use of any of the following flavored tobacco products:

- **2018:** menthol cigarettes, flavored cigars, flavored hookah, flavored little cigars or cigarillos, flavored smokeless tobacco, or flavored vapes.
- **2020:** menthol cigarettes, flavored cigars, flavored heated tobacco products, flavored hookah, flavored little cigars or cigarillos, flavored smokeless tobacco, or flavored vapes.

Vape quit attempt: Vape quit attempt was ascertained from the following questions:

- **2018:** “In the last 12 MONTHS, did you try to quit using e-cigarettes?” (response options were “yes” or “no”).
- **2020:** “In the last 12 MONTHS, did you try to quit using vapes with just flavoring?” (response options were “yes” or “no”) and “In the last 12 MONTHS, did you try to quit using vapes with nicotine (with or without flavor)?” (response options were “yes” or “no”).

Analyses for 2018 data was restricted to current vape users to allow for comparison with 2020 data.

Vape quit intention: Vape quit intent was ascertained from the following questions:

- **2018:** “Do you plan to quit using e-cigarettes?” (response options were “I already quit”, “yes, I plan to quit in the next month”, “yes, I plan to quit sometime, but not in the next month”, or “no, I do not plan to quit”).
- **2020:** “Do you plan to quit using vapes with just flavoring (without nicotine, marijuana, or another drug)?” (response options were “I already quit”, “yes, I plan to quit in the next month”, “yes, I plan to quit sometime, but not in the next month”, or “no, I do not plan to quit”) and “Do you plan to quit using vapes with nicotine (with or without flavor)?” (response options were “I already quit”, “yes, I plan to quit in the next month”, “yes, I plan to quit sometime, but not in the next month”, or “no, I do not plan to quit”).

Analyses for 2018 data was restricted to current vape users to allow for comparison with 2020 data.

Vape use: Vape use was ascertained from a constructed dichotomous variable (options were “yes” or “no”) based on the following questions:

- **2016:** “Have you used any of the following products in last 30 days? E-cigarettes” (response options were “yes” or “no”).
- **2018:** “Have you used e-cigarettes IN THE LAST 30 DAYS?” (response options were “yes” or “no”).
- **2020:** “Have you vaped in the LAST 30 DAYS?” (response options were “yes” or “no”) and “Which of the following have you vaped in the LAST 30 DAYS?” (response options were “nicotine (with or without flavor”, “marijuana (wax, oil, THC, or CBD), or “just flavoring (without nicotine, marijuana, or another drug)”), or “Have you used a hookah pen in the LAST 30 DAYS?” (response options were “yes” or “no”).

Respondents who reported using vapes in the past 30 days (2016-2018) or using vapes with nicotine or just flavoring in the past 30 days (2020) are classified as current vape users.

Vape use, flavored: Flavored vape use was ascertained from the following questions:

- **2018:** “Was any of the smokeless tobacco you used in the last 30 days flavored? (such as fruit, menthol, cinnamon, etc.)?” (response options were “yes” or “no”).
- **2020:** “Were any of the vapes with nicotine you used in the last 30 days flavored (such as fruit, sweet, alcohol, mint, tobacco, etc.)?” (response options were “yes” or “no”), “In the last 30 days, how many days did you vape just flavoring?” (response options were “1 or 2 days”, “3 to 5 days”, “6 to 9 days”, “10 to 19 days”, “20 to 29 days”, or “all 30 days”), or “Were any of the hookah pens you used in the last 30 days flavored (such as fruit, sweet, alcohol, mint, tobacco, etc.)?” (response options were “yes” or “no”).

National Mental Health Services Survey (N-MHSS)

Tobacco use screening: Tobacco use screening was ascertained from the following question, “Which of these services and practices are offered at this facility, at this location? Screening for tobacco use” (response options were “yes” or “no”).

Cessation counseling: Cessation counseling was ascertained from the following question, “Which of these services and practices are offered at this facility, at this location? Smoking/tobacco cessation counseling” (response options were “yes” or “no”).

Offers NRT: Offers NRT was ascertained from the following question, “Which of these services and practices are offered at this facility, at this location? Nicotine replacement therapy” (response options were “yes” or “no”).

Offers non-nicotine cessation medication: Offers non-nicotine cessation medication was ascertained from the following question, “Which of these services and practices are offered at this facility, at this location? Non-nicotine smoking/tobacco cessation medications (by prescription)” (response options were “yes” or “no”).

Smokefree campus: Smokefree campus was ascertained from the following question, “Which of the following statements BEST describes the facility’s smoking policy for clients? (response options were “not permitted to smoke anywhere outside or within any building”, “permitted in designated outdoor area(s)”, “permitted anywhere outside”, “permitted in designated indoor area(s)”, “permitted anywhere inside”, or “permitted anywhere without restriction”). Respondent who reported that clients are not permitted to smoke anywhere outside or within any building is classified as having a smokefree campus.

National Survey of Substance Abuse Treatment Services Survey (N-SSATS)

Tobacco use screening: Tobacco use screening was ascertained from the following question, “Which of the following services offered by this facility at this location, that is, the location listed on the front cover? Screening for tobacco use” (response options were “yes” or “no”).

Cessation counseling: Cessation counseling was ascertained from the following question, “Which of the following services offered by this facility at this location, that is, the location listed on the front cover? Smoking/tobacco cessation counseling” (response options were “yes” or “no”).

Offers NRT: Offers NRT was ascertained from the following question, “Which of the following services offered by this facility at this location, that is, the location listed on the front cover? Nicotine replacement” (response options were “yes” or “no”).

Offers non-nicotine cessation medication: Offers non-nicotine cessation medication was ascertained from the following question, “Which of the following services offered by this facility at this location, that is, the location listed on the front cover? Non-nicotine smoking/tobacco cessation medications (for example, bupropion, varenicline)” (response options were “yes” or “no”).

Smokefree campus: Smokefree campus was ascertained from the following question, “Which of the following statements BEST describes this facility’s smoking policy for clients? (response options were “not permitted to smoke anywhere outside or within any building”, “permitted in designated outdoor area(s)”, “permitted anywhere outside”, “permitted in designated indoor area(s)”, “permitted anywhere inside”, or “permitted anywhere without restriction”). Respondent who reported that clients are not permitted to smoke anywhere outside or within any building is classified as having a smokefree campus.

National Youth Tobacco Survey (NYTS)

Cigarette use: Cigarette use was ascertained from the following questions:

- **2002-2018:** "During the past 30 days, on how many days did you smoke cigarettes?" (response options were "0 days", "1 or 2 days", "3 to 5 days", "6 to 9 days", "10 to 19 days", "20 to 29 days", or "all 30 days").
- **2019-2020:** "During the past 30 days, on how many days did you smoke cigarettes?" (response options were any number between 0 and 30).

Respondents who reported smoking cigarettes in the past 30 days are classified as current cigarette smokers.

Online California Adult Tobacco Survey (Online CATS)

Attitudes: Attitudinal belief and policy support was ascertained by asking the following: "Please indicate whether you agree or disagree with each statement." (response options were "strongly agree", "agree", "disagree", or "strongly disagree"). Respondents who strongly agreed or agreed are classified as agreeing with the statement.

Heated tobacco product use: Heated tobacco product use was ascertained from the following questions:

- **Wave 2:** "During the past 30 days, on how many days did you use a heat-not-burn tobacco product?" (response options were "0 days", "1 or 2 days", "3 to 5 days", "6 to 9 days", "10 to 19 days", "20 to 29 days", or "all 30 days"). This question was only asked of respondents who were aware of heated tobacco products and have ever used heated tobacco products.
- **Wave 3 and 4:** "During the past 30 days, on how many days did you use a heated tobacco product?" (response options were "0 days", "1 or 2 days", "3 to 5 days", "6 to 9 days", "10 to 19 days", "20 to 29 days", or "all 30 days"). In wave 3, this question was only asked of respondents who were aware of heated tobacco products and have ever used heated tobacco products. In wave 4, this question was asked to all respondents.

Respondents who reported using a heated tobacco product in the past 30 days are classified as current heated tobacco product users.

Nicotine pouch use: Nicotine pouch use was ascertained from the question, "During the past 30 days, on how many days did you use a nicotine pouch?" (response options were "0 days", "1 or 2 days", "3 to 5 days", "6 to 9 days", "10 to 19 days", "20 to 29 days", or "all 30 days"). Respondents who reported using nicotine pouches in the past 30 days are classified as current nicotine pouch users.

Secondhand cannabis smoke exposure: Secondhand cannabis smoke exposure was ascertained from one of the following questions, "In the last two weeks, have you ever been exposed to marijuana smoke in California?" (response options were "yes" or "no") or "How recently did someone else smoke marijuana around you in California?" (response options were "in the past week", "in the past 2 weeks", "in the past month", "longer than a month, but within the past year", or "no one smoked marijuana around me within the past year"). Respondents who reported exposure to cannabis smoke in the past two weeks are classified as being recently exposed to secondhand cannabis smoke.

Secondhand tobacco smoke exposure: Secondhand tobacco smoke exposure were ascertained from one of the following questions, "In the last two weeks, have you ever been exposed to tobacco secondhand smoke in California?" (response options were "yes" or "no") or "How recently did someone else smoke cigarettes, little cigars, cigars, or hookah around you in California?" (response options were "in the past week", "in the past 2 weeks", "in the past month", "longer than a month, but within the past year", or "no one smoked tobacco around me within the past year"). Respondents who reported exposure to tobacco smoke in the past two weeks are classified as being recently exposed to secondhand tobacco smoke.

Secondhand vape aerosol exposure: Secondhand vape aerosol exposure were ascertained from one of the following questions, "In the last two weeks, have you ever been exposed to vapor from an e-cigarette or other electronic vaping product in California?" (response options were "yes" or "no") or "How recently did someone else use an e-cigarette or other electronic vaping product (including for marijuana around you in California?" (response options were "in the past week", "in the past 2 weeks", "in the past month", "longer than a month, but within the past year", or "no one vaped around me within the past year"). Respondents who reported exposure to vape aerosol in the past two weeks are classified as being recently exposed to secondhand vape aerosol.