A Story of Inequity: Tobacco's Impact on Health Disparities in California

Methodology Report
Updated October 2019

Introduction

Development of *A Story of Inequity: Tobacco's Impact on Health Disparities in California* was pursued as a result of the Health Equity Summit convened by the California Tobacco Control Program (CTCP) in June 2013. Additional guidance from stakeholders on the development of *A Story of Inequity* was obtained from three regional Health Equity Roundtables held in 2014.

A Story of Inequity is used to track and communicate the progress made in reducing tobacco-related disparities among priority populations, foster accountability and transparency in the progress made, and assist in refining CTCP activities around reducing tobacco-related disparities. Measures used in *A Story of Inequity* are grouped into the following five categories:

- Adult Tobacco Use
- Youth Tobacco Use
- Availability of Tobacco & Tobacco Industry Influence
- Secondhand Smoke
- Cessation

It is CTCP's intent to align *A Story of Inequity* with the tobacco-related priority populations identified in the Tobacco Education and Research Oversite Committee (TEROC) Master Plan. These groups have higher rates of tobacco use and tobacco-related disease compared to the general population, experience greater secondhand smoke exposure at work and at home, and are disproportionately targeted by the tobacco industry. The priority population groups outlined in the TEROC Master Plan include:

- African Americans, other people of African descent, American Indian and Alaska Natives, Native Hawaiians and Pacific Islanders, some Asian American men and Latinos
- People of low socioeconomic status, including the homeless, who are at or below 185% of the federal poverty level
- People with limited education, including high school non-completers
- Lesbian, gay, bisexual, and transgender (LGBT)
- Rural residents

- Current members of the military and veterans
- Individuals employed in jobs or occupations not covered by smoke-free workplace laws
- People with substance use disorders or behavioral health issues
- People with disabilities
- Formerly incarcerated individuals

CTCP's *Initiative to Reduce Tobacco-Related Disparities*, which funds projects to address tobacco-related disparities, focuses on the following eight population groups:

- African American/Black
- American Indian
- Hispanic/Latino
- Asian/Pacific Islander
- Low Income
- Lesbian, Gay, Bisexual, Transgender, Queer (LGBTQ)
- People with Mental Health Challenges
- Rural Communities

Measure Selection and Methodology

Twenty measures were chosen to be included in *A Story of Inequity* based on internal and external stakeholder input, data availability, and CTCP's priorities. Table 1 identifies each measure and its data source. Several data sources were used. Not all measures will have data for all priority populations due to limitations of each data source. However, data are available for the majority of measures highlighted on *A Story of Inequity*.

For each measure, a "thumbs up" (👍) or "thumbs down" (👎) icon may appear next to the result for a priority population. This indicates that the population's result is significantly more ("thumbs up") or less ("thumbs down") favorable compared to the general California population. Details about how "thumbs up" or "thumbs down" is defined for each measure is outlined below.

Table 1. Measures and data sources in *A Story of Inequity*

Measure	Data Source
ADULT TOBACCO USE	
• **Adult Cigarette Use**: Adult cigarette smoking prevalence..	CHIS
• **Change in Adult Cigarette Use**: Rate of change in adult cigarette smoking, 2014 to 2017..	CHIS
• **Adult Tobacco Use**: Adult tobacco use prevalence (e.g. cigarettes, e-cigarettes and other vaping products, other tobacco products)..	BRFSS
YOUTH TOBACCO USE	
• **Youth Cigarette Use**: Youth cigarette smoking prevalence	CSTS
• **Change in Youth Cigarette Use**: Rate of change in youth cigarette smoking, 2016 to 2018..	CSTS
• **Youth Tobacco Use**: Youth tobacco use prevalence (e.g. cigarettes, e-cigarettes and other vaping products, other tobacco products)..	CSTS
AVAILABILITY OF TOBACCO & TOBACCO INDUSTRY INFLUENCE	
• **Cheapest Cigarettes**: Average price for the cheapest pack of cigarettes.........................	HSHC[1]
• **Flavored Little Cigar Price**: Average price for a single flavored little cigar/cigarillo	HSHC[1]
• **Tobacco Retail Licensing**: Proportion of population protected by a strong tobacco retail licensing law	PETS[1,2]
• **Tobacco Stores**: Density of stores selling tobacco per 100,000 residents	CDTFA[1,2]
• **Flavored Tobacco**: Proportion of stores that sell flavored non-cigarette tobacco products...	HSHC[1]
• **Menthol Cigarettes**: Proportion of stores that sell menthol cigarettes............................	HSHC[1]
• **Tobacco Advertising**: Proportion of stores that keep 90% of their storefront free from any advertising...	HSHC[1]
SECONDHAND SMOKE	
• **Smoke-free Multi-unit Housing**: Proportion of population protected by a smoke-free multi-unit housing law	PETS[1,2]
• **Smoke-free Homes**: Proportion of adults with smoke-free homes	BRFSS
• **Adult Secondhand Tobacco Exposure**: Proportion of adults exposed to secondhand smoke..	BRFSS
• **Youth Secondhand Tobacco Exposure**: Proportion of youth exposed to secondhand smoke or vape...	CSTS
CESSATION	
• **California Smokers' Helpline Enrollees**: Proportion of California Smokers' Helpline enrollees	CSH[3]
• **Quitting**: Proportion of smokers who tried quitting in the last 12 months	CHIS
• **Doctor Advice to Quit**: Proportion of smokers whose doctors advised them to quit	Online CATS

Abbreviations: BRFSS, Behavioral Risk Factor Surveillance System; CDTFA, California Department of Tax and Fee Administration; CHIS, California Health Interview Survey; CSH, California Smokers' Helpline; CSTS, California Student Tobacco Survey; HSHC, Healthy Stores for a Health Community; Online CATS, Online California Adult Tobacco Survey; PETS, Policy Evaluation Tracking System.
Notes: (1) Matched to data from the American Community Survey (ACS). (2) Matched to data from the 2010 Decennial Census. (3) CSH data compared to percent of smokers from CHIS and not the general population.

A. <u>Behavioral Risk Factor Surveillance System Measures</u>

The 2017 [California Behavioral Risk Factor Survey](#) data, also known as the California Behavioral Risk Factor Surveillance System (BRFSS), were analyzed to produce results for the following measures:

- **Adult Tobacco Use**: Adult tobacco use prevalence (e.g. cigarettes, e-cigarettes and other vaping products, other tobacco products)
- **Smoke-free Homes**: Proportion of adults with smoke-free homes
- **Adult Secondhand Tobacco Exposure**: Proportion of adults exposed to secondhand smoke

The California BRFSS is an annual telephone health survey of randomly selected California adults to gather data on health-related risk behaviors, chronic health conditions, and preventive service usage. The 2017 survey was conducted by the Public Health Survey Research Program of the California State University, Sacramento in collaboration with the California Department of Public Health (CDPH) and the Centers for Disease Control and Prevention (CDC).

The final sample size for the 2017 survey was 9,357 adult respondents aged 18 and over. The 2017 survey was structured into two tracks, with respondents only answering questions in one of the two tracks that had been randomly selected for them. All tracks contain the CDC core survey, but individual tracks may contain different California-specific questions. The measures utilizing BRFSS data had questions located on both tracks. The data were weighted to represent the non-institutionalized California population.

Adult tobacco use prevalence was based on current use of either cigarettes, cigars, little cigars or cigarillos, chewing tobacco, snuff, snus, hookah, or e-cigarettes and other vaping products. A smoke-free home was defined as a household policy in which smoking and vaping is wholly prohibited inside the house. Exposure to secondhand smoke was based on exposure in the past two weeks in California.

Results were calculated for priority populations using the definitions defined in the BRFSS:

- **African American/Black**: Black or African American, not Hispanic or Latino
- **American Indian**: American Indian or Alaska Native, not Hispanic or Latino
- **Asian/Pacific Islander**: Asian or Pacific Islander, not Hispanic or Latino
- **Hispanic/Latino**: Hispanic or Latino
- **Low Income**: People living in households at or below 185 percent of the Federal Poverty Level
- **Lesbian, Gay, Bisexual, Transgender, Queer (LGBTQ)**: People who identify as lesbian, gay, bisexual, or transgender and gender non-conforming. Data is not available for people identifying as queer.

- **People with Mental Health Challenges:** People experiencing one or more days when their mental health was not good in the past 30 days.'
- **Rural Communities:** People who do not live in a Metropolitan or a Micropolitan Statistical Area, as defined by the National Center for Health Statistics (NCHS). NCHS definition is based on the Office of Management and Budget's February 2013 delineation.

For the "Adult Tobacco Use" and "Adult Secondhand Tobacco Exposure" measures, a "thumbs up" icon indicates that the estimate is *lower* than the California general population and the 95 percent confidence interval for both the priority population and the California general population do not overlap. A "thumbs down" icon indicates that the estimate is *higher* than the California general population and the 95 percent confidence interval for both the priority population and the California general population do not overlap.

For the "Smoke-free Homes" measure, a "thumbs up" icon indicates that the estimate is *higher* than the California general population and the 95 percent confidence interval for both the priority population and the California general population do not overlap. A "thumbs down" icon indicates that the estimate is *lower* than the California general population and the 95 percent confidence interval for both the priority population and the California general population do not overlap.

B. **California Department of Tax and Fee Administration Measures**

The September 2018 list of licensed tobacco retailers from the California Department of Tax and Fee Administration (CDTFA) was matched to the 2013-2017 American Community Survey (ACS) data and the 2010 Decennial Census. The data were analyzed to produce results for the following indicator:

- **Tobacco Stores**: Density of stores selling tobacco per 100,000 residents

ACS is a mixed-mode survey conducted by the U.S. Census Bureau and provides estimates of community characteristics at the census-tract level. For each priority population (with the exception of the Rural Communities), ACS data were used to estimate the proportion of the priority population among census tracts in California. The number of stores in the highest five percent of census tracts for each priority population was then divided by the total population in those census tracts and multiplied by 100,000. The total population in each census tract includes all residents, both those in the priority population group and those not in the group. Census tracts with zero population were removed from the analysis.

Results for the rural priority population group were calculated by dividing the number of stores in ZIP Code Tabulation Areas (ZCTAs) with fewer than 500 people per square mile by the total population for those ZCTAs, multiplied by 100,000. ZCTAs with zero population were removed

from analysis. ZCTAs are geographical approximations of zip codes developed by the U.S. Census Bureau. The U.S. Census Bureau generated county-level land area in square miles for the 2010 Decennial Census.

Results were calculated for priority populations using the definitions from ACS and the U.S. Census Bureau:

- **African American/Black**: Black or African American, not Hispanic or Latino
- **American Indian**: American Indian or Alaska Native, not Hispanic or Latino
- **Asian/Pacific Islander**
  - **Asian**: Asian alone, not Hispanic or Latino
  - **Pacific Islander**: Native Hawaiian or other Pacific Islander, not Hispanic or Latino
- **Hispanic/Latino**: Hispanic or Latino
- **Low Income**: People living in households below 185% of the Federal Poverty Level.
- **LGBTQ**: Unmarried-partner same-sex households (male household and male partner, and female household and female partner).
- **Rural Communities**: People living in ZCTAs with fewer than 500 people per square mile.

These data were not available for the following priority population: **People with Mental Health Challenges**.

For the "Tobacco Stores" measure, a "thumbs up" icon indicates that the estimate is *lower* than 69.6 stores per 100,000 residents (10.0 stores per 100,000 less than the California general population's density of 79.6 stores per 100,000). A "thumbs down" icon indicates that the estimate is *higher* than 89.6 stores per 100,000 residents (10.0 stores per 100,000 more than the California general population's density of 79.6 stores per 100,000).

C. California Health Interview Survey Measures

The 2013, 2014, 2016, and 2017 California Health Interview Survey (CHIS) data were analyzed to produce results for the following measures:

- **Adult Cigarette Use**: Adult cigarette smoking prevalence
- **Change in Adult Cigarette Use**: Rate of change in adult cigarette smoking, 2014 to 2017
- **Quitting**: Proportion of smokers who tried quitting in the last 12 months

CHIS is a population-based random-digit dial telephone survey of the residential, non-institutionalized population in California. CHIS utilizes a large sample size in order to increase the statistical power and provide county-level health and health-related estimates for adults in most counties. The survey is conducted by the University of California, Los Angeles (UCLA) Center for Health Policy Research in partnership with the California Department of Health Care Services

(DHCS), CDPH, and other public and private organizations. Since 2011, CHIS data have been collected on a continuous basis with annual data releases. Prior to 2011, CHIS data were collected during a seven- to nine-month period every other year.

The final sample size was 20,724 adult respondents for the 2013 survey, 19,516 adult respondents for the 2014 survey, 21,055 adult respondents for the 2016 survey, and 21,153 adult respondents for the 2017 survey. To achieve statistically stable estimates for priority population groups, the 2013 and 2014 survey data were pooled together, and the 2016 and 2017 survey data were pooled together. The data is weighted to represent the non-institutionalized California population, and to compensate for the probability of selection and factors from the sampling design and administration of the survey.

Adult cigarette prevalence was based on current smoking habits. Adults who have not smoked more than 100 or more cigarettes in their lifetime are classified as non-smokers. Quit attempts was based on current smokers who had stopped smoking for one day or longer to try to quit smoking during the past 12 months.

Results were calculated for priority populations using the definitions from CHIS:

- **African American/Black**: Black or African American, not Hispanic or Latino
- **American Indian**: American Indian or Alaska Native, not Hispanic or Latino
- **Asian/Pacific Islander**: Asian, Native Hawaiian, or other Pacific Islander, not Hispanic or Latino
- **Hispanic/Latino**: Hispanic or Latino
- **Low Income**: People living in households below 185 percent of the Federal Poverty Level.
- **LGBTQ**: People who identify as lesbian, gay, bisexual, or transgender.[1] Data is not available for people identifying as queer.
- **People with Mental Health Challenges**: People who likely had serious psychological distress during the past month based on the Kessler Psychological Distress Scale (K6).
- **Rural Communities**: People who live in an area with fewer than 1,000 people per square mile, as defined by the Nielsen Consumer Activation.

For the "Adult Cigarette Use" measure, a "thumbs up" icon indicates that the estimate is *lower* than the California general population and the 95 percent confidence interval for both the priority population and the California general population do not overlap. A "thumbs down" icon indicates that the estimate is *higher* than the California general population and the 95 percent confidence interval for both the priority population and the California general population do not overlap.

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[1] For the "Change in Adult Cigarette Use" measure, data only includes people who identify as lesbian, gay, or bisexual as gender identity was not asked in 2013 or 2014.

For the "Change in Adult Cigarette Use" measure, a "thumbs up" icon indicates that the 2017 estimate is *lower* than the priority population's 2014 adult cigarette smoking prevalence and the 95 percent confidence interval for both the 2014 rate and the 2017 rate do not overlap. A "thumbs down" icon indicates that the 2017 estimate is *higher* than the priority population's 2014 adult cigarette smoking prevalence and the 95 percent confidence interval for both the priority population and the California general population do not overlap.

For the "Quitting" measure, a "thumbs up" icon indicates that the estimate is *higher* than the California general population and the 95 percent confidence interval for both the priority population and general population do not overlap. A "thumbs down" icon indicates that the estimate is *lower* than the California general population and the 95 percent confidence interval for both the priority population and the California general population do not overlap.

D. California Smokers' Helpline Measures

Data from the January to December 2018 California Smokers' Helpline (CSH) call reports were analyzed to produce results for the following indicator:

- **California Smokers' Helpline Enrollees**: Proportion of California Smokers' Helpline enrollees

CSH publishes aggregate data about callers who completed intake when contacting the Helpline biannually. Reports include age, gender, ethnicity, language spoken, referral source, and caller's county of residence. Data on Medi-Cal enrollees was provided to CTCP from the California Smokers' Helpline. The total number of CSH enrollees between January and December 2018 was 19,890.

Results were calculated for priority populations using the definitions from CSH:

- **African American/Black**: Black or African American, not Hispanic or Latino
- **American Indian**: American Indian or Alaska Native, not Hispanic or Latino
- **Asian/Pacific Islander**: Asian or Pacific Islander, not Hispanic or Latino
- **Hispanic/Latino**: Hispanic or Latino
- **Low Income**: People who are enrolled in Medi-Cal, a program that offers free or low-cost health coverage for children and adults with limited income and resources.
- **LGBTQ**: People who identify as lesbian, gay, or bisexual. Data is not available for people identifying as transgender or queer.
- **People with Mental Health Challenges**: People reported having one or more of the following conditions: anxiety, depression, bipolar disorder, schizophrenia, or substance abuse disorder.

These data were not available for the following priority population: **Rural Communities**.

For the "California Smokers' Helpline Enrollees" measure, a "thumbs up" icon indicates that the estimate is *higher* than the priority population's make-up of California's adult smokers and does not overlap with the 95 percent confidence interval. A "thumbs down" icon indicates that the estimate is *lower* than the priority population's make-up of California's adult smokers and does not overlap with the 95 percent confidence interval.

E. California Student Tobacco Survey Measures

The 2015-16 and 2017-18 California Student Tobacco Survey (CSTS) data were analyzed to produce results for the following indicators:

- **Youth Cigarette Use**: Youth cigarette smoking prevalence
- **Change in Youth Cigarette Use**: Rate of change in youth cigarette smoking, 2016 to 2018[2]
- **Youth Tobacco Use**: Youth tobacco use prevalence (including all tobacco products, e.g. cigarettes, e-cigarettes and other vaping products, other tobacco products)
- **Youth Secondhand Tobacco Exposure**: Proportion of youth exposed to secondhand smoke or vape

The CSTS assesses behavior, attitude, and tobacco usage from middle school and high school students in California. The University of California, San Diego has conducted the CSTS survey, in collaboration with CTCP, since the 2015-16 survey. The 2015-16 survey was conducted using both paper surveys and online surveys before switching to an online only survey in 2017-18. The latest cycle utilizes a multi-stage cluster sampling design. The sample only consists of public and non-sectarian schools. Schools that were special education only, juvenile court schools, district/county community schools, continuation high schools, online-only schools, or other alternative schools were excluded.

The final sample size is 47,981 students from 117 randomly selected schools for the 2015-16 survey and 151,404 students from 333 randomly selected schools for the 2017-18 survey. The analytic sample for the CSTS measures of interest are only of high school students (2015-16, n=41,821; 2017-18, n=130,387). The data were weighted to account for the probability of selection.

Youth cigarette prevalence was based on past 30-day use of cigarettes. Youth tobacco use prevalence was based on past 30-day use of either cigarettes, little cigars or cigarillos, big cigars, hookah, e-cigarettes and other vaping products (including vape pens, tanks, mods, e-hookah, and

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[2] Caution should be utilized for the "Change in Youth Cigarette Use" measure as respondent had the option to select "I prefer not to answer" for the race/ethnicity questions in the 2017-18 CSTS. This option was not provided in the 2015-16 CSTS.

hookah pens), or smokeless tobacco (including chew, dip, snuff, and snus). Secondhand smoke or vape exposure is based on being in a car or in a room where someone was either smoking a cigarette, little cigar, or cigarillo in the past 30 days, or using an e-cigarette or other vaping product in the past 30 days.

Results were calculated for priority populations using the definitions from CSTS:

- **African American/Black**: Black or African American, not Hispanic or Latino
- **American Indian**: American Indian or Alaska Native, not Hispanic or Latino
- **Asian/Pacific Islander**
  - **Asian**: Asian, not Hispanic or Latino
  - **Pacific Islander**: Native Hawaiian or other Pacific Islander, not Hispanic or Latino
- **Hispanic/Latino**: Hispanic or Latino
- **LGBTQ:** People who identify as LGBTQ.
- **Rural Communities**: People who currently attend a school located in a town or a rural locale, as defined by the National Center for Education Statistics.

These data were not available for the following priority population: **Low Income** or **People with Mental Health Challenges**.

For the "Youth Cigarette Use", "Youth Tobacco Use", and "Youth Secondhand Tobacco Exposure" measures, a "thumbs up" icon indicates that the estimate is *lower* than the California general population and the 95 percent confidence interval for both the priority population and general population do not overlap. A "thumbs down" icon indicates that the estimate is *higher* than the California general population and the 95 percent confidence interval for both the priority population and the California general population do not overlap.

For the "Change in Youth Cigarette Use" measure, a "thumbs up" icon indicates that the 2018 estimate is *lower* than the priority population's 2016 youth cigarette smoking prevalence and the 95 percent confidence interval for both the 2016 rate and the 2018 rate do not overlap. A "thumbs down" icon indicates that the 2018 estimate is *higher* than the priority population's 2016 youth cigarette smoking prevalence and the 95 percent confidence interval for both the priority population and the California general population do not overlap.

F. <u>Healthy Stores for a Healthy Community Measures</u>

The 2016 [Healthy Stores for a Healthy Community](#) (HSHC) retail survey data were matched to the 2011-2015 ACS data and analyzed to produce results for the following measures:

- **Cheapest Cigarettes**: Average price for the cheapest pack of cigarettes
- **Flavored Little Cigar Price**: Average price for a single flavored little cigar/cigarillo

- **Flavored Tobacco**: Proportion of stores that sell flavored non-cigarette tobacco products
- **Menthol Cigarettes**: Proportion of stores that sell menthol cigarettes
- **Tobacco Advertising**: Proportion of stores that keep 90 percent of their storefronts free from any advertising

The HSHC retail survey is a statewide data collection effort conducted by CTCP in coordination with the Nutrition Education and Obesity Prevention, Chronic Disease Control Branch, and the Sexually Transmitted Diseases Control Branches at CDPH, as well as the Substance Use Disorders Program at the California DHCS. The observational survey of tobacco retail stores began in 2013 and is conducted every three years, measuring the availability of a range of unhealthy and healthy products, as well as marketing practices for tobacco, alcohol, and food and beverage items. HSHC retail survey data were used to estimate the average price for the cheapest pack of cigarettes sold in stores, the average price of a single flavored Swisher Sweet cigarillo, retail availability of flavored tobacco and menthol cigarettes, and the proportion of stores with less than 10 percent of the storefront covered by signs.

The sampling frame for the HSHC retail survey was based on the CDTFA list of licensed tobacco retailers. Zip codes were randomly selected within each county as well as in three funded municipal agencies to ensure a sufficient sample size for each county and funded municipality. The final statewide random sample size in 2016 was 7,152 stores.

ACS data were used to estimate the proportion of the priority population among census tracts in California. Store neighborhoods were defined by their census tract characteristics. Results for HSHC measures were generated for each group by ranking all stores in the sample by their neighborhood characteristics. Stores ranked in the highest 20 percent for each neighborhood characteristic were included in the analysis. For example, the results for the average price of the cheapest pack of cigarettes for the African American/Black population is the average price sold in the 20 percent of surveyed stores with the largest proportion of non-Hispanic African American/Black residents.

Results for the rural group were calculated by analyzing HSHC survey results in only rural ZCTAs, where a rural zip code was defined as a ZCTA with less than 500 people per square mile.

Results were calculated for priority populations using the definitions from ACS:

- **African American/Black**: Black or African American, not Hispanic or Latino
- **American Indian**: American Indian or Alaska Native, not Hispanic or Latino
- **Asian/Pacific Islander**
    - **Asian**: Asian alone, not Hispanic or Latino
    - **Pacific Islander**: Native Hawaiian or other Pacific Islander, not Hispanic or Latino
- **Hispanic/Latino**: Hispanic or Latino

- **Low Income**: People living in households below 185 percent of the Federal Poverty Level
- **LGBTQ**: Unmarried-partner same-sex households (male household and male partner, and female household and female partner). Data is not available for people identifying as transgender or queer.
- **Rural Communities**: People living in ZCTAs with fewer than 500 people per square mile.

These data were not available for the following priority population: **People with Mental Health Challenges**.

For the "Flavored Tobacco" and "Tobacco Menthol Cigarettes" measures, a "thumbs up" icon indicates that the estimate is *lower* than the California general population and the 95 percent confidence interval for both the priority population and the California general population do not overlap. A "thumbs down" icon indicates that the estimate is *higher* than the California general population and the 95 percent confidence interval for both the priority population and the California general population do not overlap.

For the "Cheapest Cigarettes", "Flavored Little Cigar Price", and "Tobacco Advertising" measures, a "thumbs up" icon indicates that the estimate is *higher* than the California general population and the 95 percent confidence interval for both the priority population and the California general population do not overlap. A "thumbs down" icon indicates that the estimate is *lower* than the California general population and the 95 percent confidence interval for both the priority population and the California general population do not overlap.

G. Online California Adult Tobacco Survey Measures

The 2018 Online California Adult Tobacco Survey (Online CATS) data were analyzed to produce results for the following indicator:

- **Doctor Advice to Quit**: Proportion of smokers whose doctors advised them to quit

The GfK Group, in collaboration with CTCP, conducted the 2018 survey. The Online CATS is a probability-based online health survey aimed at assessing tobacco-related behaviors and attitudes of California adults ages 18 through 64 years old through GfK's KnowledgePanel.

The final sample size was 3,048 adult respondents. The analytic sample size was 655 adult respondents, as the Online CATS indicator of interest was only asked of current and former smokers who had smoked within the past year and who saw a doctor or other health provider in the past 12 months. The sample was weighted to the California population using benchmarks from the March 2017 Current Population Survey.

Results were calculated for priority populations using the definitions from Online CATS:

- **African American/Black**: Black or African American, not Hispanic or Latino
- **Hispanic/Latino**: Hispanic or Latino
- **LGBTQ**: People who identify as lesbian, gay, bisexual, or transgender. Data not available for people identifying as queer.
- **Low Income**: People living below 185 percent of the Federal Poverty Level.

These data were not available for the following priority population: **American Indian**, **Asian**, **Pacific Islander**, **People with Mental Health Challenges**, or **Rural Communities**.

For the "Doctor Advice to Quit" measure, a "thumbs up" icon indicates that the estimate is *higher* than the California general population and the 95 percent confidence interval for both the priority population and general population do not overlap. A "thumbs down" icon indicates that the estimate is *lower* than the California general population and the 95 percent confidence interval for both the priority population and general population do not overlap.

H. <u>Policy Evaluation Tracking System Measures</u>

The Policy Evaluation Tracking System (PETS) is a longitudinal policy surveillance database of tobacco control policies in local jurisdictions in California. It was developed for CTCP to meet its tobacco control policy evaluation needs in the areas of tobacco retail licensing (TRL), outdoor secondhand smoke (OSHS), multi-unit housing (MUH), and sampling. Policies are scored in PETS according to a set of instructions on a scoring rubric for each policy type. PETS data were matched to the 2013-2017 ACS data and the 2010 Decennial Census data. The data were analyzed to produce results for the following measures:

- **Tobacco Retail Licensing**: Proportion of population protected by a strong tobacco retail licensing law
- **Smoke-free Multi-unit Housing**: Proportion of population protected by a smoke-free multi-unit housing law

Data on TRL policies and MUH policies included policies passed as of December 2018. The database contains 143 total local MUH laws and 112 total local "strong" TRL laws, defined as a policy with language that dictates sufficient fees to cover enforcement.

Results were calculated for each priority population group by adding up the total population for each group in jurisdictions with the policy type of interest and then dividing that by the total population for each group statewide. The rural population was defined as people living in jurisdictions with fewer than 500 total population per square mile. The U.S. Census Bureau generated county-level land area in square miles for the 2010 Decennial Census. Unincorporated

county land areas were calculated by subtracting the land area for all incorporated areas in that county from the total county land area.

Results were calculated for priority populations using the following definitions from the ACS and the U.S. Census Bureau:

- **African American/Black**: Black or African American, not Hispanic or Latino
- **American Indian**: American Indian or Alaska Native, not Hispanic or Latino
- **Asian/Pacific Islander**
  - **Asian**: Asian alone, not Hispanic or Latino
  - **Pacific Islander**: Native Hawaiian or other Pacific Islander, not Hispanic or Latino
- **Hispanic/Latino**: Hispanic or Latino
- **Low Income**: People living in households below 185 percent of the Federal Poverty Level.
- **Rural Communities**: People living in jurisdictions with fewer than 500 people per square mile.

These data were not available for the following priority population: **LGBTQ** or **People with Mental Health Challenges**.

For the "Tobacco Retail Licensing" measure, a "thumbs up" icon indicates that the estimate is *higher* than 46.9 percent (10.0 percent more than the California general population's estimate of 36.9 percent). A "thumbs down" icon indicates that the estimate is *lower* than 26.9 percent (10.0 percent less than the California general population's estimate of 36.9 percent).

For the "Smoke-free Multi-unit Housing" measure, a "thumbs up" icon indicates that the estimate is *higher* than 39.0 percent (10.0 percent more than the California general population's estimate of 29.0 percent). A "thumbs down" icon indicates that the estimate is *lower* than 19.0 percent (10.0 percent less than the California general population's estimate of 29.0 percent).