Tobacco-Related Disparity Indicators Dashboard Technical Notes

Updated: May 2023

Introduction

First introduced in the [California Tobacco Facts and Figures 2021](#) report, the California Tobacco Control Program tracks 17 tobacco-related disparity indicators (Table 1) to highlight California's progress made since the implementation of Proposition 56 in 2016 to accelerate the decline in tobacco-related disparities. This dashboard is an extension of data found in the Facts and Figures report, providing updates to the single-year rates for each of the 17 indicators.

The main data sources used for this dashboard includes the [California Health Interview Survey](#) (CHIS), the [California Youth Tobacco Survey](#) (CYTS) (formerly the [California Student Tobacco Survey](#) (CSTS) between 2016-2020), and the [Policy Evaluation Tracking System](#) (PETS).

Table 1. Tobacco-Related Disparity Indicators List

Indicators	Data Source
Current Tobacco Use, Adult (Age 18-64)	CHIS
Current Cigarette Smoking, Adult (Age 18+)	CHIS
Current Vape Use, Adult (Age 18-64)	CHIS
Current Tobacco Use, Youth (10th and 12th Grade)	CYTS
Current Cigarette Smoking, Youth (10th and 12th Grade)	CYTS
Current Vape Use, Youth (10th and 12th Grade)	CYTS
Secondhand Tobacco Smoke or Vape Exposure, Adult (Age 18+)	CHIS
Secondhand Cigarette or Little Cigar/Cigarillo Smoke Exposure, Youth (10th and 12th Grade)	CYTS
Secondhand Vape Exposure, Youth (10th and 12th Grade)	CYTS
Cigarette Quit Attempt, Adult (Age 18+)	CHIS
Cigarette Quit Intent, Adult (Age 18+)	CHIS
Vape Quit Attempt, Youth (10th and 12th Grade)	CYTS
Vape Quit Intent, Youth (10th and 12th Grade)	CYTS
Local Multi-Unit Housing Policy Population Coverage	PETS
Local Secondhand Smoke Policy Population Coverage	PETS
Local Flavored Tobacco Sales Restriction Policy Population Coverage	PETS
Local Tobacco Retail Sales Policy Population Coverage	PETS

Abbreviations: CHIS, California Health Interview Survey; CYTS, California Youth Tobacco Survey; PETS, Policy Evaluation Tracking System.

Indicator Definitions

This section details the definition used for each indicator from the three main data sources. When there are definitional changes, caution should be utilized in trending data (e.g., comparing multiple years of data). In addition, caution should be utilized when trending data for CHIS indicators due to a change in data collection methodology in 2019.

Indicator 1. Current Tobacco Use, Adult (Age 18-64)
Current tobacco use was established from one of the following CHIS questions:

- **2016 to 2017:**
    1. "Do you now smoke cigarettes every day, some days, or not at all?" with a response of either *Every day* or *Some days*; or
    2. "During the past 30 days, how many days did you use electronic cigarettes?" with a numeric response between 1 and 30.
- **2018:**
    1. "Do you now smoke cigarettes every day, some days, or not at all?" with a response of either *Every day* or *Some days*; or
    2. "During the past 30 days, how many days did you use electronic cigarettes?" with a numeric response between 1 and 30; or
    3. "During the past 30 days, on how many days did you smoke big cigars?" with a response of either *1-2 days*, *3-5 days*, *6-9 days*, *10-19 days*, *20-29 days*, or *30 days*; or
    4. "During the past 30 days, on how many days did you use a hookah water pipe?" with a response of either *1-2 days*, *3-5 days*, *6-9 days*, *10-19 days*, *20-29 days*, or *30 days*; or
    5. "During the past 30 days, on how many days did you smoke cigarillos, or little cigars?" with a response of either *1-2 days*, *3-5 days*, *6-9 days*, *10-19 days*, *20-29 days*, or *30 days*; or
    6. "During the past 30 days, on how many days did you use chewing tobacco, snuff, or snus?" with a response of either *1-2 days*, *3-5 days*, *6-9 days*, *10-19 days*, *20-29 days*, or *30 days*.
- **2019 to 2021:**
    1. "Do you now smoke cigarettes every day, some days, or not at all?" with a response of either *Every day* or *Some days*; or
    2. "In the past 30 days, on how many days did you use an e-cigarette or other electronic vaping product?" with a numeric response between 1 and 30; or
    3. "During the past 30 days, on how many days did you smoke big cigars?" with a response of either *1-2 days*, *3-5 days*, *6-9 days*, *10-19 days*, *20-29 days*, or *30 days*; or

4. "During the past 30 days, on how many days did you use a hookah water pipe?" with a response of either *1-2 days*, *3-5 days*, *6-9 days*, *10-19 days*, *20-29 days*, or *30 days*; or
5. "During the past 30 days, on how many days did you smoke cigarillos, or little cigars?" with a response of either *1-2 days*, *3-5 days*, *6-9 days*, *10-19 days*, *20-29 days*, or *30 days*; or
6. "During the past 30 days, on how many days did you use chewing tobacco, snuff, or snus?" with a response of either *1-2 days*, *3-5 days*, *6-9 days*, *10-19 days*, *20-29 days*, or *30 days*.

Indicator 2. Current Cigarette Smoking, Adult (Age 18+)
Current cigarette smoking was established from the CHIS question "Do you now smoke cigarettes every day, some days, or not at all?" with a response of either *Every day* or *Some days*.

Indicator 3. Current Vape Use, Adult (Age 18-64)
Current vape use was established from the following CHIS questions:

- **2016 to 2018**: "During the past 30 days, how many days did you use electronic cigarettes?" with a numeric response between 1 and 30.
- **2019 to 2021**: "In the past 30 days, on how many days did you use an e-cigarette or other electronic vaping product?" with a numeric response between 1 and 30.

Indicator 4. Current Tobacco Use, Youth (10th and 12th Grade)
Current tobacco use was established from one of the following CYTS questions:

- **2016**:
  1. "Have you used any of the following products… In the last 30 days? Cigarettes" with a response of *Yes*; or
  2. "Have you used any of the following products… In the last 30 days? Big cigars" with a response of *Yes*; or
  3. "Have you used any of the following products… In the last 30 days? E-cigarettes" with a response of *Yes*; or
  4. "Have you used any of the following products… In the last 30 days? Hookah" with a response of *Yes*; or
  5. "Have you used any of the following products… In the last 30 days? Kreteks (clove cigars)" with a response of *Yes*; or
  6. "Have you used any of the following products… In the last 30 days? Little cigars or cigarillos" with a response of *Yes*; or
  7. "Have you used any of the following products… In the last 30 days? Smokeless tobacco (chew, dip, snuff, or snus)" with a response of *Yes*.

- **2018**:
    1. "Have you smoked cigarettes in the last 30 days?" with a response of *Yes*; or
    2. "Have you smoked big cigars in the last 30 days?" with a response of *Yes*; or
    3. "Have you used e-cigarettes in the last 30 days?" with a response of *Yes*; or
    4. "Have you used hookah (water pipe) in the last 30 days?" with a response of *Yes*; or
    5. "Have you smoked little cigars or cigarillos in the last 30 days?" with a response of *Yes*; or
    6. "Have you used smokeless tobacco in the last 30 days?" with a response of *Yes*.
- **2020**:
    1. "Have you smoked cigarettes in the last 30 days?" with a response of *Yes*; or
    2. "Have you smoked big cigars in the last 30 days?" with a response of *Yes*; or
    3. "Which of the following have you vaped in the last 30 days?" with a response of either *Nicotine (with or without flavor)* or *Just flavoring (without nicotine, marijuana, or another drug)*; or
    4. "In the last 30 days when you used a hookah pen, what was in it?" with a response of either *Nicotine (with or without flavor)* or *Just flavoring (without nicotine, marijuana, or another drug)*; or
    5. "Make your best guess. What do you think was in it?" with a response of either *Nicotine (with or without flavor)* or *Just flavoring (without nicotine, marijuana, or another drug)*; or
    6. "Have you used a heat-not-burn tobacco product in the last 30 days?" with a response of *Yes*; or
    7. "Have you smoked hookah water pipe in the last 30 days?" with a response of *Yes*; or
    8. "Have you smoked little cigars or cigarillos in the last 30 days?" with a response of *Yes*; or
    9. "Have you used smokeless tobacco in the last 30 days?" with a response of *Yes*.
- **2022**:
    1. "Have you smoked cigarettes in the last 30 days?" with a response of *Yes*; or
    2. "Have you smoked big cigars in the last 30 days?" with a response of *Yes*; or
    3. "Have you vaped in the last 30 days?" with a response of *Yes*; or

4. "Have you smoked little cigars or cigarillos in the last 30 days?" with a response of *Yes*; or
5. "Which of the following tobacco products have you used in the last 30 days?" with a response of either *Chewing tobacco, snuff, snus, dip, or dissolvable tobacco*, *Heated tobacco / Heat-not-burn products like IQOS*, *Hookah, waterpipe, or shisha*, or *Nicotine pouches like Zyn, On, or Velo*.

Indicator 5. Current Cigarette Smoking, Youth (10th and 12th Grade)
Current cigarette smoking was established from one of the following CYTS questions:

- **2016**: "Have you used any of the following products… In the last 30 days? Cigarettes" with a response of *Yes*.
- **2018 to 2022**: "Have you smoked cigarettes in the last 30 days?" with a response of *Yes*.

Indicator 6. Current Vape Use, Youth (10th and 12th Grade)
Current vape use was established from the following CYTS questions:

- **2016**: "Have you used any of the following products… In the last 30 days? E-cigarettes" with a response of *Yes*.
- **2018**: "Have you used e-cigarettes in the last 30 days?" with a response of *Yes*.
- **2020**:
    1. "Which of the following have you vaped in the last 30 days?" with a response of *Nicotine (with or without flavor)* or *Just flavoring (without nicotine, marijuana, or another drug)*; or
    2. "In the last 30 days when you used a hookah pen, what was in it?" with a response of either *Nicotine (with or without flavor)* or *Just flavoring (without nicotine, marijuana, or another drug)*; or
    3. "Make your best guess. What do you think was in it?" with a response of either *Nicotine (with or without flavor)* or *Just flavoring (without nicotine, marijuana, or another drug)*.
- **2022**: "Have you vaped in the last 30 days?" with a response of *Yes*.

Indicator 7. Secondhand Tobacco Smoke or Vape Exposure, Adult (Age 18+)
Secondhand smoke or vape exposure were established from the CHIS question:

- **2016 to 2020**: "In the last two weeks, have you ever been exposed to secondhand tobacco smoke or e-cigarette vapor in California?" with a response of *Yes*.
- **2021**: "During the past year, when has someone else smoked tobacco or vaped around you in California?" with a response of either *In the past week* or *In the past two weeks*.

Indicator 8. Secondhand Cigarette or Little Cigar/Cigarillo Smoke Exposure, Youth (10th and 12th Grade)

Secondhand smoke exposure was established from the following CYTS questions:

- **2020**:
    1. "In the last 2 weeks, were you in a car when someone was smoking a cigarette, little cigar, or cigarillo?" with a response of *Yes*; or
    2. "In the last 2 weeks, were you in a room when someone was smoking a cigarette, little cigar, or cigarillo?" with a response of *Yes*.
- **2022**: "In the last 2 weeks, were you in a car or room when someone was using a cigarette, little cigar, or cigarillo?" with a response of *Yes*.

Indicator 9. Secondhand Vape Exposure, Youth (10th and 12th Grade)

Secondhand vape exposure was established from the following CYTS questions:

- **2020**:
    1. "In the last 2 weeks, were you in a car when someone was using a vape?" with a response of *Yes*; or
    2. "In the last 2 weeks, were you in a room when someone was using a vape?" with a response of *Yes*.
- **2022**: "In the last 2 weeks, were you in a car or room when someone was using a vape?" with a response of *Yes*.

Indicator 10. Cigarette Quit Attempt, Adult (Age 18+)

Cigarette quit attempt was established from the question in CHIS "During the past 12 months, have you stopped smoking for one day or longer because you were trying to quit smoking?" with a response of *Yes*. This question was restricted to adults who reported current cigarette smoking.

Indicator 11. Cigarette Quit Intent, Adult (Age 18+)

Cigarette quit intent was established from the question in CHIS "Are you thinking about quitting smoking in the next six months?" with a response of *Yes*. This question was restricted to adults who reported current cigarette smoking.

Indicator 12. Vape Quit Attempt, Youth (10th and 12th Grade)

Vape quit attempt was established from the following CYTS questions:

- **2018**: "In the last 12 months, did you try to quit using e-cigarettes?" with a response of *Yes*.
- **2020**:
    1. "In the last 12 months, did you try to... Quit using vapes with nicotine (with or without flavor)?" with a response of *Yes*; or
    2. "In the last 12 months, did you try to... Quit using vapes with just flavoring?" with a response of *Yes*.

- **2022**: "Which products have you tried to completely stop using in the past 12 months?" with a response of *Vapes*.

These questions were restricted to high school youth who reported current vape use.

Indicator 13. Vape Quit Intent, Youth (10th and 12th Grade)
Vape quit intent was established from the following CYTS questions:

- **2018**: "Do you plan to quit using e-cigarettes?" with a response of either *I already quit* or *Yes--I plan to quit in the next month*.
- **2020**:
    1. "Do you plan to quit using vapes with nicotine (with or without flavor)?" with a response of either *I already quit* or *Yes--I plan to quit in the next month*.
    2. "Do you plan to quit using vapes with just flavoring (without nicotine, marijuana, or another drug)?" with a response of either *I already quit* or *Yes--I plan to quit in the next month*.
- **2022**: "Do you plan to quit using any of the following products in the next 30 days?" with a response of *Vapes*.

These questions were restricted to high school youth who reported current vape use.

Due to changes to the question wording used in the 2022 CYTS, the California Department of Public Health, California Tobacco Control Program (CDPH/CTCP) have revised the previously released data for 2018-2020 for comparability.

Indicator 14. Local Multi-Unit Housing Policy Population Coverage
Includes California jurisdictions with smokefree multi-unit housing policies. Population coverage is based on the policy's key enactment date. The key enactment date is typically the enactment date of the law regulating smoking in multi-unit housing units. Jurisdictions with only lower-level multi-unit housing policies, such as policies covering common areas only, show the earliest year for the key enactment date.

Due to changes to the data source and methodology, CDPH/CTCP have revised the previously released data for 2016-2020.

Indicator 15. Local Secondhand Smoke Policy Population Coverage
Includes California jurisdictions with smokefree or clean air policies. These policies may or may not include smokefree multi-unit housing policies. Population coverage is based on the policy's most recent enactment date.

Due to changes to the data source and methodology, CDPH/CTCP have revised the previously released data for 2016-2020.

Indicator 16. Local Flavored Tobacco Sales Restriction Policy Population Coverage

Includes California jurisdictions with policies related to the sale of flavored tobacco products. Population coverage is based on the policy's most recent enactment date.

Due to changes to the data source and methodology, CDPH/CTCP have revised the previously released data for 2016-2020.

Indicator 17. Local Tobacco Retail Sales Policy Population Coverage

Includes California jurisdictions with tobacco sales or tobacco distribution policies. These policies may or may not include flavored tobacco sales restrictions. Population coverage is based on the policy's most recent enactment date.

Due to changes to the data source and methodology, CDPH/CTCP have revised the previously released data for 2016-2020.

California Health Interview Survey (CHIS) Demographic Definitions

This section details the definition used for demographic analysis for indicators using data from CHIS. When there are definitional changes, caution should be utilized in trending data (e.g., comparing multiple years of data). In addition, caution should be utilized when trending data for CHIS indicators due to a change in data collection methodology in 2019.

Age
Age was recoded from a CHIS-created variable based on the respondent's self-reported age or date of birth.

Education
Education was recoded from a CHIS-created variable based on the respondent's self-reported highest education completed.

Gender
Gender was established from a CHIS-created variable based on the respondent's self-reported gender.

LGBTQ+
LGBTQ+ was established from the question "Do you think of yourself as straight or heterosexual, as gay {, lesbian,} or homosexual, or bisexual?" Gender identity was not included as part of the LGBTQ+ definition as CHIS require users to combine multiple years for gender identity due to small sample sizes. For the Tobacco-Related Disparity Dashboard project, only single-year data was used.

Medi-Cal Coverage
Medi-Cal coverage was established from a CHIS-created variable based on the respondent's self-reported health insurance coverage. In addition to respondents who reported being covered by Medi-Cal, respondents who self-reported receiving Temporary Assistance to Needy Families (TANF), California Work Opportunities and Responsibilities to Kids (CalWORKs), or Supplemental Security Income (SSI) are classified as covered by Medi-Cal.

Mental and Emotional Health
Mental and emotional health was established from a CHIS-created variable evaluating whether the respondent was likely to have serious psychological distress in the past month. This variable was 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.

Poverty Level

Poverty level was recoded from a CHIS-created variable based on the respondent's self-reported household income and household size.

Race/Ethnicity

Race/ethnicity were established from a CHIS-created variable based on the respondent's self-reported Hispanic or Latino ethnicity and race. Respondents who reported any Hispanic or Latino ethnicity are classified as Hispanic or Latino. Respondents who reported not being Hispanic or Latino and reported multiple races are classified as *Two or more races, non-Hispanic*. All other race categories are single-race non-Hispanic or Latino unless stated otherwise.

Race/Ethnicity: American Indian or Alaska Native

American Indian or Alaska Native race were established from a CHIS-created variable based on the respondent's self-reported American Indian or Alaska Native race.

Urban/Rural

Urban/rural was established from a CHIS-created variable based on the respondent's zip code population density.

California Youth Tobacco Survey (CYTS) Demographic Definitions

This section details the definition used for demographic analysis for indicators using data from CYTS. When there are definitional changes, caution should be utilized in trending data (e.g., comparing multiple years of data).

Education
Education level was established from the question "What grade are you in?"

Gender
Gender was established from the following questions:

- **2016 and 2018**: "What is your gender?"
- **2020 and 2022**: "How do you describe yourself?"

LGBTQ+
LGBTQ+ was established from the following questions:

- **2018**:
    1. "What is your gender?" with a response of *I identify my gender in another way*; or
    2. "Do you identify yourself as LGBTQ?" with a response of *Yes*.
- **2020**:
    1. "How do you describe yourself?" with a response of either *Female-to-male (FTM)/Transgender male/Trans man*, *Male-to-female (MTF)/Transgender female/Trans woman*, *Genderqueer--neither exclusively male nor female*, or *Additional gender category or other*; or
    2. "Do you consider yourself to be…?" with a response of either *Lesbian, gay, or homosexual*, *Bisexual*, or *Something else*.
- **2022**:
    1. "How do you describe yourself?" with a response of either *Transgender* or *Something else*; or
    2. "Which of the following best represents how you think of yourself?" with a response of either *Gay or lesbian*, *Bisexual*, or *Something else*.

Mental and Emotional Health
Mental and emotional health was established from the question "In general, how would you rate your mental health?"

Race/Ethnicity

Race/ethnicity were established based on the respondent's self-reported Hispanic or Latino ethnicity and race. Respondents who reported any Hispanic or Latino ethnicity are classified as Hispanic or Latino. Respondents who reported not being Hispanic or Latino and reported multiple races are classified as *Non-Hispanic--Multiple races*. All other race categories are single-race non-Hispanic or Latino unless stated otherwise.

Race/Ethnicity: American Indian or Alaska Native

American Indian or Alaska Native race was established based on the respondent's self-reported American Indian or Alaska Native race.

Urban/Rural

Urban/rural was established from a CYTS-created variable based on the respondent's school location.

Policy Evaluation Tracking System (PETS)

This section details the definition used for demographic analysis for indicators using data from the Policy Evaluation Tracking System (PETS). Jurisdictional data from PETS were linked to data from the U.S. Census Bureau's American Community Survey 2016-2020.

Age
Age was established from a U.S. Census Bureau summary table (Table B01001: Sex by Age) based on the respondent's self-reported age.

Education
Education was established from a U.S. Census Bureau summary table (Table B15002: Sex by Educational Attainment for the Population 25 Years and Over) based on the respondent's self-reported highest education attained.

Poverty Level
Poverty level was established from a U.S. Census Bureau summary table (Table C17002: Ratio of Income to Poverty Level in the Past 12 Months) based on the respondent's self-reported household income and household size.

Race/Ethnicity
Race/ethnicity were established from a U.S. Census Bureau summary table (Table B03002: Hispanic or Latino Origin by Race) based on the respondent's self-reported Hispanic or Latino ethnicity and race. Respondents who reported any Hispanic or Latino ethnicity are classified as Hispanic or Latino. Respondents who reported not being Hispanic or Latino and reported multiple races are classified as *Not Hispanic or Latino-- Two or more races*. All other race categories are single-race non-Hispanic or Latino unless stated otherwise.

Race/Ethnicity: American Indian or Alaska Native
American Indian or Alaska Native race was established from a U.S. Census Bureau summary table (Table B02010: American Indian and Alaska Native Alone or in Combination with One or More Other Races) based on the respondent's self-reported American Indian or Alaska Native race.

Sex
Sex was established from a U.S. Census Bureau summary table (Table B01001: Sex by Age) based on the respondent's self-reported sex.