

Tobacco and Cannabis Use Among California Youth by General Mental Health

Poor mental health among youth is an increasing public health concern.¹ Youth with pre-existing mental health conditions are at an increased risk of tobacco and nicotine use.^{2, 3, 4, 5} Further, cannabis use in youth increases the risk of depression and anxiety.⁶

This factsheet uses data from the 2023 California Youth Tobacco Survey (CYTS)⁷ to explore youth tobacco and cannabis* use, secondhand exposure, home rules about tobacco use, and tobacco related attitudes by general mental health status. The CYTS has been administered annually to 8th-, 10th-, and 12th-grade students from California middle and high schools since 2021 and once every 2 years prior to 2021. This factsheet includes data for the high school student respondents in the 10th and 12th grade.

¹ Centers for Disease Control and Prevention. Mental Health. www.cdc.gov/healthyyouth/mental-health/index.htm. Accessed 06/20/2024.

² Smith CL, Cooper BR, Miguel A, Hill L, Roll J, McPherson S. Predictors of cannabis and tobacco co-use in youth: exploring the mediating role of age at first use in the population assessment of tobacco health (PATH) study. *J Cannabis Res.* 2021;3(1):16. doi: 10.1186/s42238-021-00072-2.

³ Becker TD, Arnold MK, Ro V, Martin L, Rice TR. Systematic Review of Electronic Cigarette Use (Vaping) and Mental Health Comorbidity Among Adolescents and Young Adults. *Nicotine Tob Res.* 2021;23(3):415-425. doi: 10.1093/ntr/ntaa171.

⁴ Becker TD, Rice TR. Youth vaping: a review and update on global epidemiology, physical and behavioral health risks, and clinical considerations. *Eur J Pediatr.* 2022;181(2):453-462. doi: 10.1007/s00431-021-04220-x.

⁵ DeHay T, Morris C, May MG, Devine K, Waxmonsky. Tobacco use in youth with mental illnesses. *J Behav Med.* 2012;35(2):139-48. doi: 10.1007/s10865-011-9336-6.

⁶ Patton GC, Coffey C, Carlin JB, Degenhardt L, Lynskey M, Hall W. Cannabis use and mental health in young people: cohort study. *BMJ.* 2002;325(7374):1195-8. doi: 10.1136/bmj.325.7374.1195.

⁷ Clodfelter R, Dutra LM, Bradfield B, Russell S, Levine B, & von Jaglinsky A. Annual results report for the California Youth Tobacco Survey 2023. RTI International.

* The term “marijuana” was used in the CYTS when asking youth about their cannabis use. This is a term recognizable and most often used by youth.

MENTAL HEALTH CLASSIFICATION

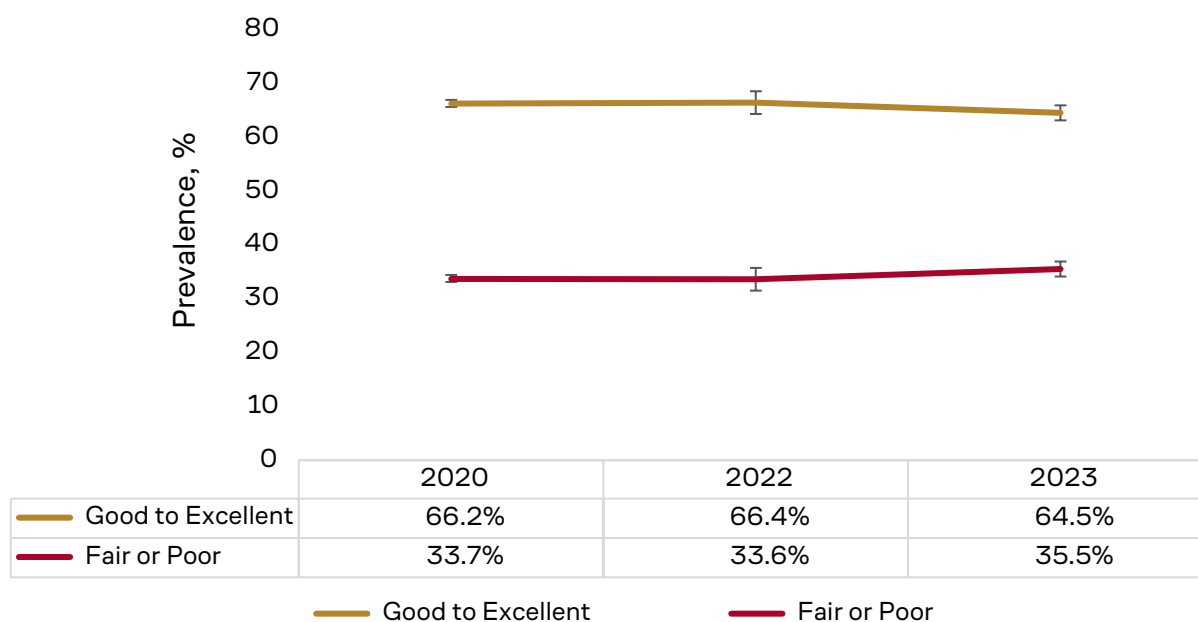
In the 2023 CYTS, participants general mental health was assessed by asking, “In general, how would you rate your mental health?” For this factsheet, response options were grouped as following:

- **Good to excellent:** Participants who rated their mental health as “good,” “very good,” or “excellent” were classified under this category.
- **Fair or Poor:** Participants who rated their mental health as “fair” or “poor” were classified under this category.

MENTAL HEALTH PREVALENCE OVER TIME

- From 2020 to 2023, there was little change in youth reporting fair or poor mental health status (33.7% to 35.5%) and youth reporting good to excellent mental health status (66.2% to 64.5%) (Figure 1).

Figure 1. Prevalence of General Mental Health Status Among High School Respondents, 2020-2023



Note. Error bars represent 95% confidence intervals.

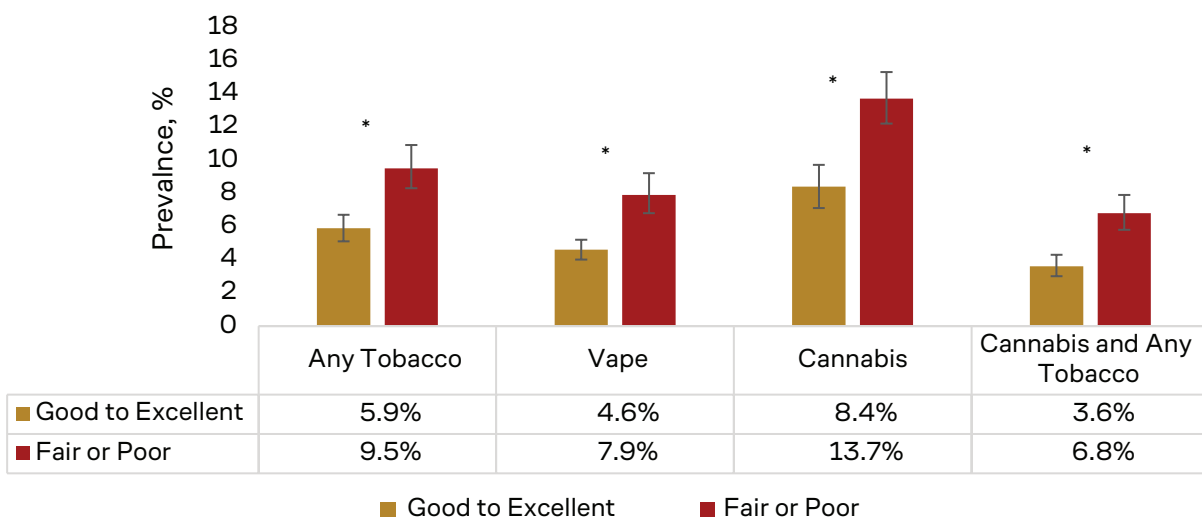
Data Source. California Student Tobacco Survey (CSTS), 2020; California Youth Tobacco Survey (CYTS), 2022-2023.

TOBACCO USE PREVALENCE

Current Tobacco Use:

- Respondents who rated their mental health as fair or poor reported significantly higher current use (past 30-day use) of any tobacco product (9.5%) compared to those who reported their mental health as good to excellent (5.9%) in 2023.
- This pattern was also true for vape use (7.9% vs. 4.6%), cannabis use (13.7% vs. 8.4%) and cannabis and tobacco co-use (6.8% vs. 3.6%) (Figure 2).

Figure 2. Prevalence of Current Use of Tobacco Products Among High School Respondents, by General Mental Health, 2023.



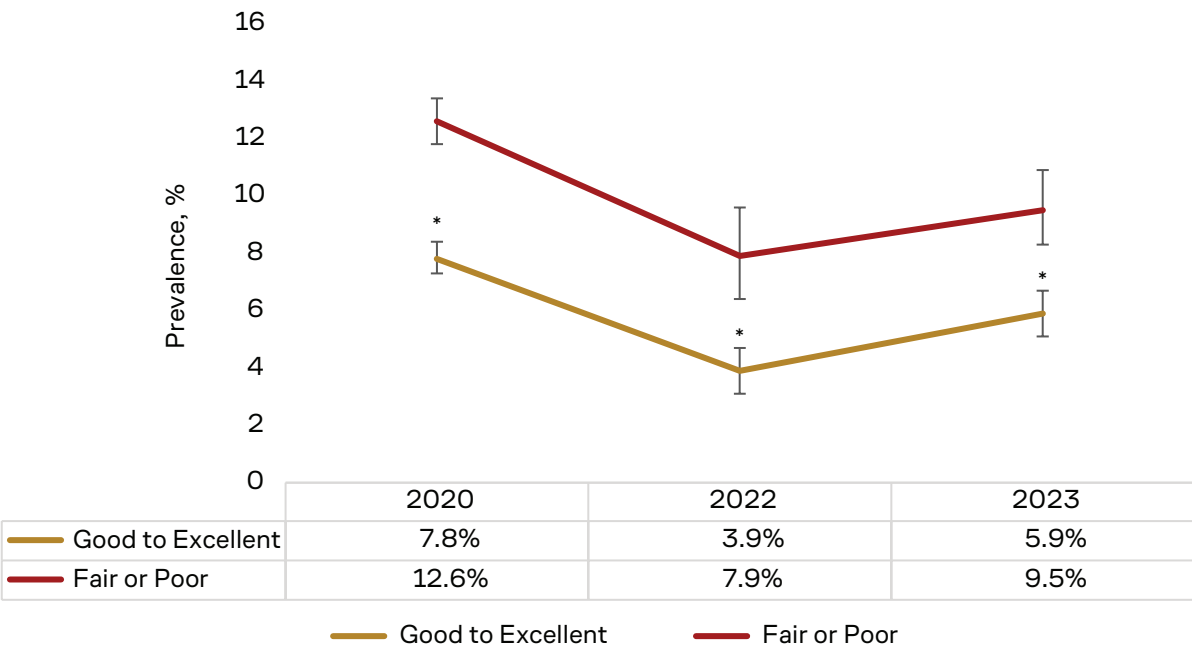
Note. Current use refers to using a product within the last 30 days. Any tobacco use refers to the use of one or more of the following products: vapes, cigarettes, little cigars or cigarillos, cigars, hookah, smokeless tobacco, heated tobacco products, or nicotine pouches. An asterisk (*) indicates that the difference between good to excellent vs. fair or poor was statistically significant. Error bars represent 95% confidence intervals.

Data Source. California Youth Tobacco Survey (CYTS), 2023.

Current Any Tobacco Product Use Over Time:

- As shown in Figure 3, there was a disparity in current any tobacco use from 2020 to 2023. Current any tobacco use was significantly higher for youth reporting fair or poor versus good to excellent mental health across all years.

Figure 3. Prevalence of Current Any Tobacco Product Use Over Time Among High School Respondents by General Mental Health Status, 2020-2023.



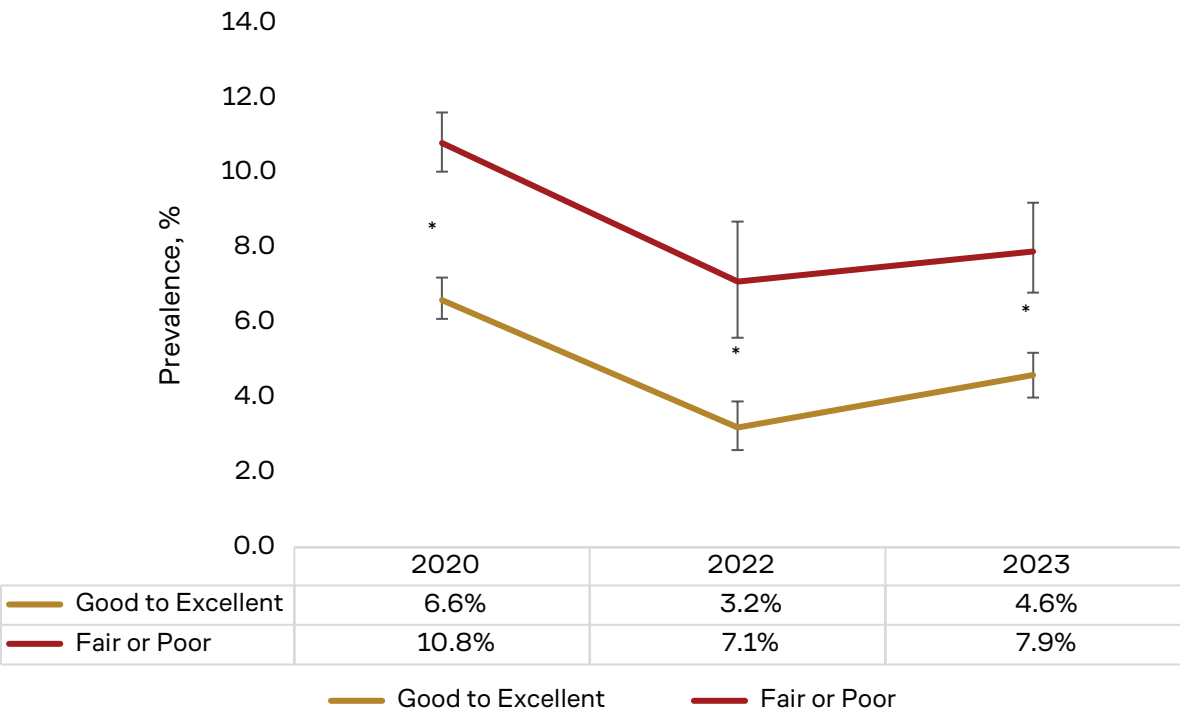
Note. Any tobacco product use includes students who reported using e-cigarettes/vapes, cigarettes, little cigars or cigarillos, big cigars, smokeless tobacco, hookah, and/or heated tobacco products in the past 30 days. In 2022 and 2023, nicotine pouches were also included in the definition of any tobacco use. Current use refers to using a product within the last 30 days. An asterisk (*) indicates that the difference between youth reporting good to excellent vs. fair or poor general mental health was statistically significant for that data collection year. Error bars represent 95% confidence intervals. **Comparisons across years should be interpreted with caution due to changes in methodology.**

Data source. California Student Tobacco Survey (CSTS), 2020; California Youth Tobacco Survey (CYTS), 2022-2023.

Current Vape use Over Time:

- As shown in Figure 4, there was a disparity in current vape use from 2020 to 2023. Current vape use was significantly higher for youth reporting fair or poor versus good to excellent mental health across all years.

Figure 4. Prevalence of Current Vape Use Over Time Among High School Respondents by General Mental Health Status, 2020-2023.



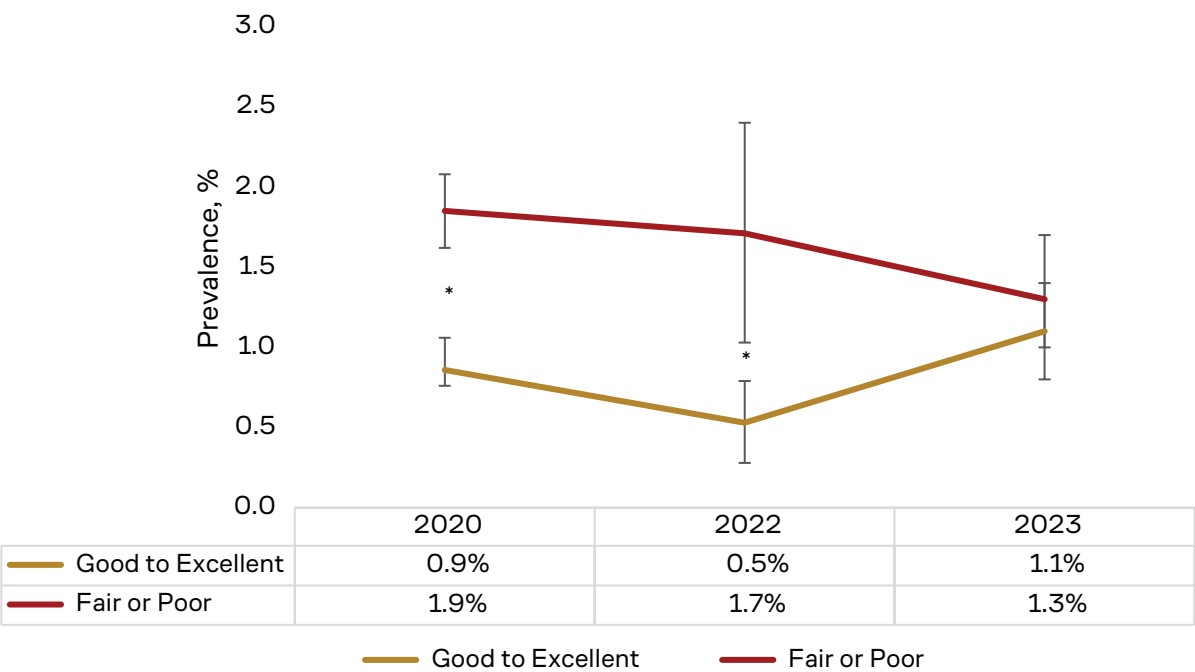
Note. Current use refers to using a product within the last 30 days. An asterisk (*) indicates that the difference between youth reporting good to excellent vs. fair or poor general mental health was statistically significant for that data collection year. Error bars represent 95% confidence intervals. **Comparisons across years should be interpreted with caution due to changes in methodology.**

Data source. California Student Tobacco Survey (CSTS), 2020; California Youth Tobacco Survey (CYTS), 2022-2023.

Current Cigarette Use Over Time:

- As shown in Figure 5, there was a disparity in cigarette use from 2020 to 2022. Current cigarette use was significantly higher for youth reporting fair or poor versus good to excellent mental health.
- In 2023, there was evidence that this disparity gap decreased, as there was no longer a significant difference in current cigarette use for youth reporting fair or poor versus good to excellent mental health.

Figure 5. Prevalence of Current Cigarette Use Over Time Among High School Respondents by General Mental Health Status, 2020-2023.



Note. Current use refers to using a product within the last 30 days. An asterisk (*) indicates that the difference between youth reporting good to excellent vs. fair or poor general mental health was statistically significant for that data collection year. Error bars represent 95% confidence intervals. **Comparisons across years should be interpreted with caution due to changes in methodology.**

Data source. California Student Tobacco Survey (CSTS), 2020; California Youth Tobacco Survey (CYTS), 2022-2023.

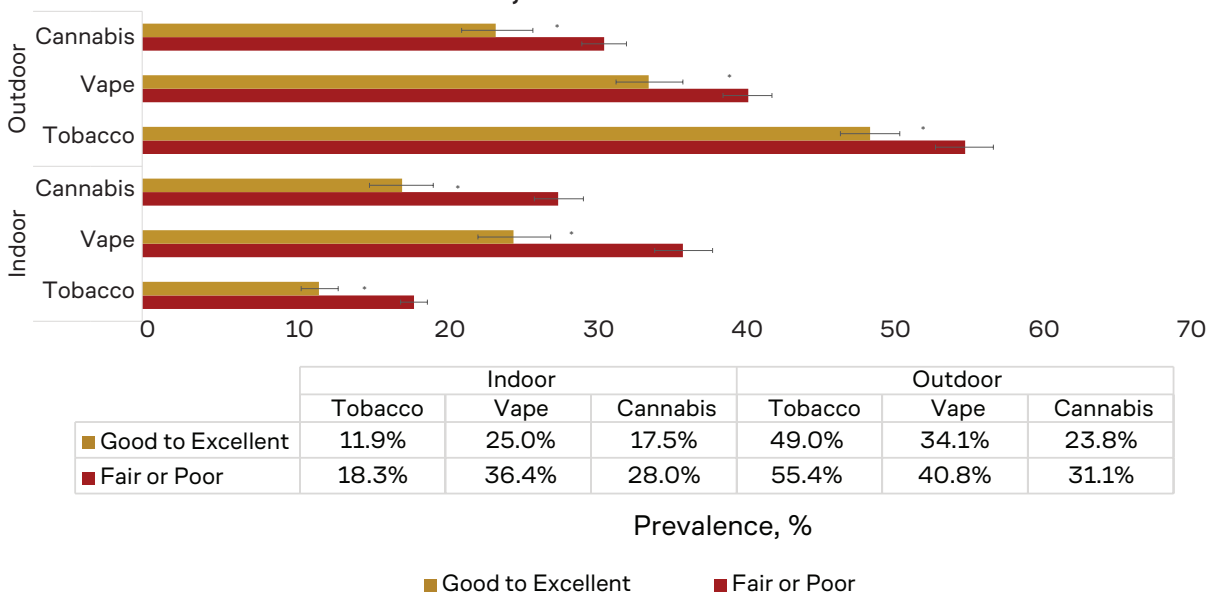
SECONDHAND EXPOSURE

Secondhand smoke is unsafe, and even brief exposure can cause serious health problems such as coronary heart disease, stroke, and lung cancer in adults who do not smoke.⁸ Infants and young children are especially impacted by health problems caused by secondhand smoke.⁹ Secondhand smoke from cannabis has similar cancer-causing chemicals as tobacco smoke.¹⁰ Secondhand aerosol from vapes contain nicotine, ultrafine particles, and low levels of toxins that are also known to cause cancer.¹¹

Outdoor and Indoor Secondhand Exposure:

- Figure 6 shows that there is significantly higher outdoor and indoor secondhand exposure to tobacco, vape, and cannabis among youth reporting fair or poor versus good to excellent mental health.

Figure 6. California High School Student Outdoor and Indoor Secondhand Exposure by General Mental Health Status, 2023.



Note. Outdoor secondhand smoke exposure refers to exposure outside of a restaurant, store, park, playground, beach, or sidewalk in the last 2 weeks. Indoor secondhand smoke exposure is exposure in a car or room in the last 2 weeks. An asterisk (*) indicates that the difference between youth reporting good to excellent vs. fair or poor general mental health was statistically significant for that data collection year. Error bars represent 95% confidence intervals.

Data source. California Youth Tobacco Survey (CYTS), 2023.

⁸ Office on Smoking and Health (US). The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General. Atlanta (GA): Centers for Disease Control and Prevention (US); 2006.

⁹ Centers for Disease Control and Prevention. General information about secondhand smoke. September 14, 2022. Accessed April 26, 2024. https://www.cdc.gov/tobacco/secondhand-smoke/?CDC_AAref_Val=https://www.cdc.gov/tobacco/secondhand-smoke/about.html.

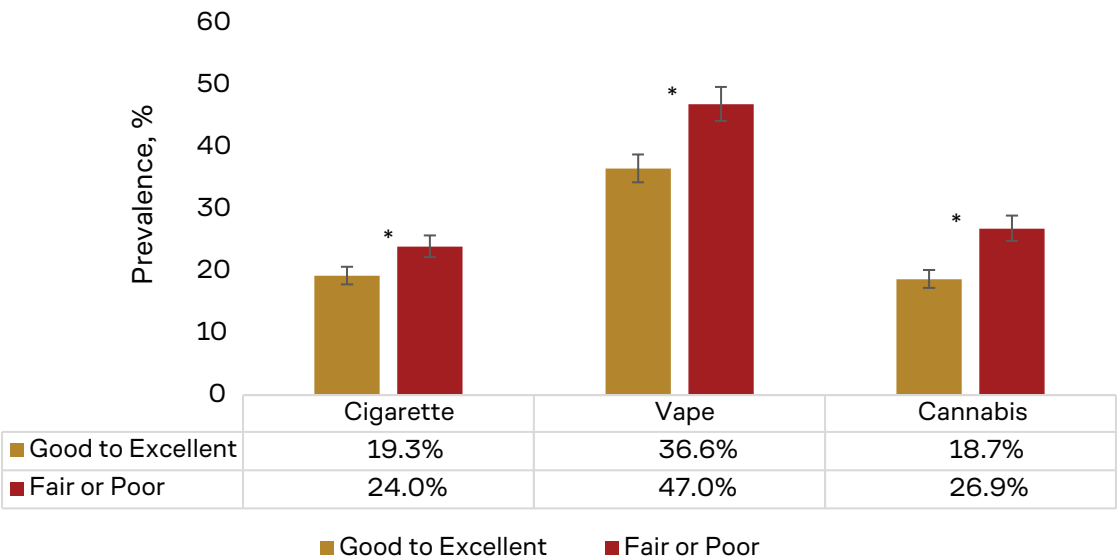
¹⁰ American Nonsmokers' Rights Foundation. Secondhand Marijuana Smoke. April 1, 2024. Accessed June 26, 2024. <https://no-smoke.org/secondhand-marijuana-smoke-fact-sheet/>

¹¹ American Nonsmokers' Rights Foundation. Electronic Smoking Devices And Secondhand Aerosol. April 1, 2024. Accessed June 26, 2024. <https://no-smoke.org/electronic-smoking-devices-secondhand-aerosol/>

Secondhand Exposure at School:

- Figure 7 shows that in 2023, youth with fair or poor mental health reported significantly higher rates of being near someone using cigarettes, vapes, or cannabis at school versus youth reporting good to excellent mental health.
- In 2023, among youth reporting fair or poor mental health status, 47.0% reported being near someone using vapes, 26.9% reporting being near someone using cannabis, and 24.0% of youth reported being near someone using cigarettes at school.

Figure 7. California High School Students Who Were Near Someone Using Cigarettes, Vapes or Cannabis at School by General Mental Health Status, 2023.



Note. An asterisk (*) indicates that the difference between youth reporting good to excellent vs. fair or poor general mental health was statistically significant for that data collection year. Error bars represent 95% confidence intervals.

Data source. California Youth Tobacco Survey (CYTS), 2023.

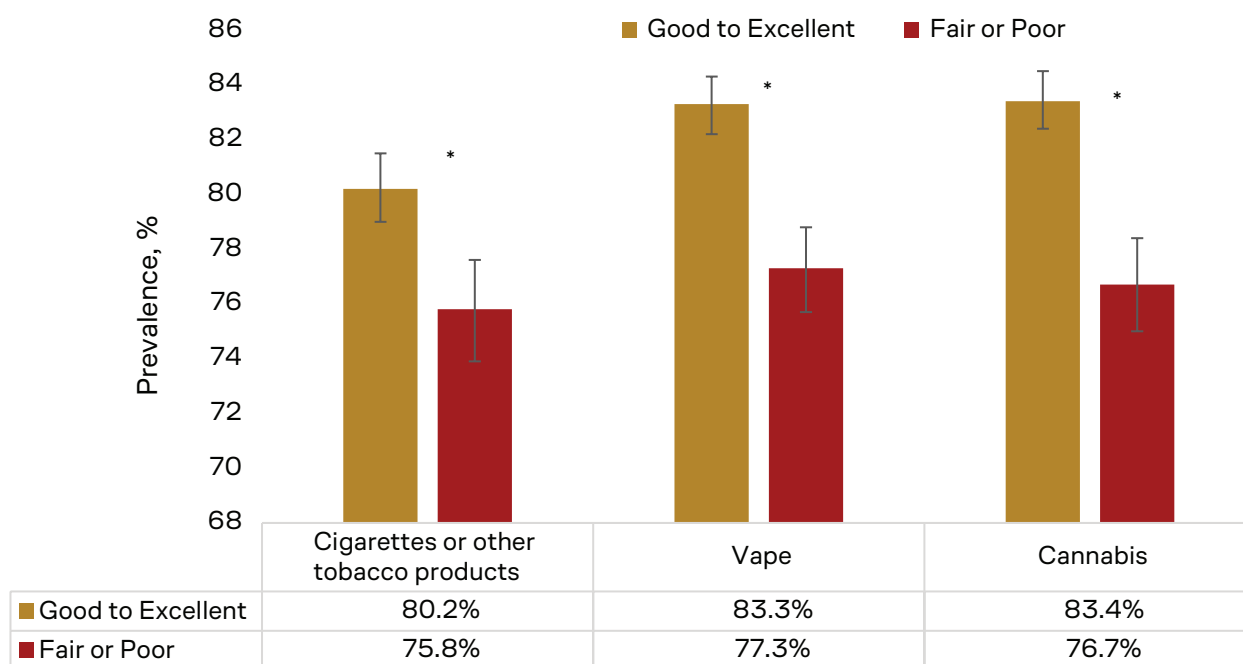
BANS IN THE HOME

Home smoking bans are a well-recognized strategy for protecting the health of children. For example, one study found that youth who lived in households with a complete home smoking ban were less likely to perceive a high prevalence of adult smoking in their town and were less likely to consider adult smoking to be socially acceptable compared with youth who lived in households without complete home smoking bans.¹²

In Figure 8, youth reported if smoking cigarettes or other tobacco products*, vaping, or smoking cannabis was not allowed anywhere or at any time inside their home.

- Youth with fair or poor mental health reported significantly lower rates of home bans versus those with good to excellent mental health for bans on cigarettes or other tobacco products, vapes, and cannabis use.
- For example, 80.2% of youth with good to excellent mental health reported a complete ban of smoking cigarettes or other tobacco products inside their home versus 75.8% of youth with fair or poor mental health.

Figure 8. California High School Students Complete Home Ban on Cigarettes, Vapes and Cannabis by General Mental Health Status, 2023.



Note. An asterisk (*) indicates that the difference between youth reporting good to excellent vs. fair or poor general mental health was statistically significant for that data collection year. Other tobacco products include big cigars, little cigars or cigarillos, and hookah. Error bars represent 95% confidence intervals.

Data source. California Youth Tobacco Survey (CYTS), 2023.

¹² Yuan NP, Nair US, Crane TE, Krupski L, Collins BN, Bell ML. Impact of changes in home smoking bans on tobacco cessation among Quitline callers. *Health Education Research*. 2019;34(3):345-355. doi:10.1093/her/cyz008

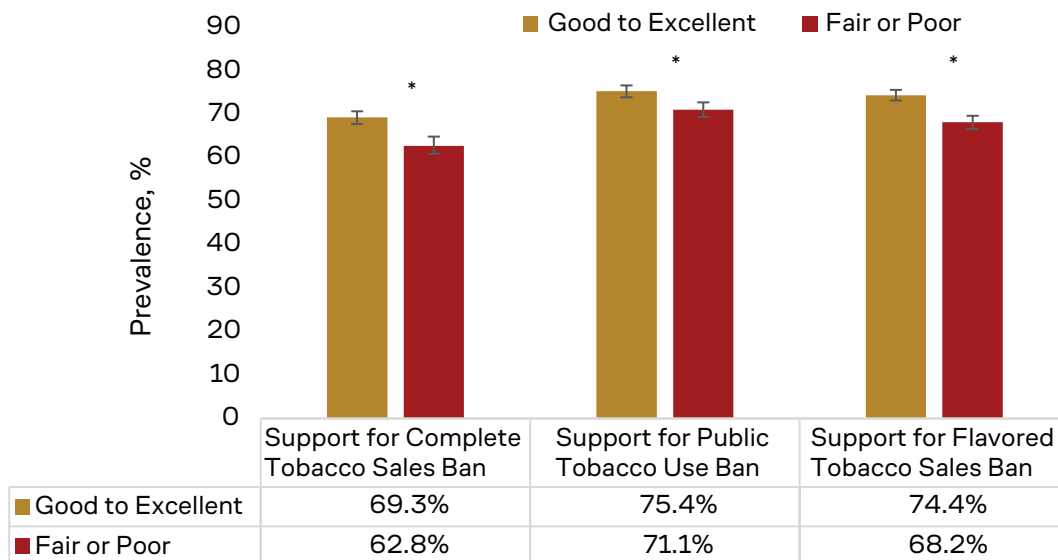
*Other tobacco products include big cigars, little cigars or cigarillos, and hookah.

YOUTH SUPPORT FOR POLICIES RELATED TO ENDING THE TOBACCO EPIDEMIC, 2023

The CYTS asked respondents about several tobacco related bans. The **complete tobacco sales ban** (the sale of all tobacco products, including cigarettes, cigars, chewing tobacco, and vapes should end), **public tobacco use ban** (using vapes in all public places should end), and **flavored tobacco sales ban** (the sale of flavored tobacco, like cigarettes, chew, cigars, and vapes that taste like mint, fruit, candy, or liquor should end). Response options were “strongly agree,” “agree,” “disagree,” and “strongly disagree.”

- Respondents with good to excellent mental health reported significantly higher rates of support versus respondents with fair or poor mental health for a complete sales ban (69.3% vs. 62.8%), public tobacco use ban (75.4% vs. 71.1%), and flavored tobacco sales ban (74.4% vs. 68.2%).

Figure 9. Support For Policies Related to Ending the Tobacco Epidemic by General Mental Health Status, 2023.



Note. Respondents were considered supporting these policies if they responded, “strongly agree” or “agree.” An asterisk (*) indicates that the difference between youth reporting good to excellent vs. fair or poor general mental health was statistically significant for that data collection year. Error bars represent 95% confidence intervals.

Data source. California Youth Tobacco Survey (CYTS), 2023.