California's Youth:

A Look at Tobacco, Drug, and Alcohol Use

August 2023





Executive Summary

High-risk substance use among California's youth is a public health crisis, and most substance use disorders go untreated. Influenced by targeted marketing and often unable to access quality prevention, harm reduction, and treatment services, California's youth are set up to fail and faced with a largely punitive approach to substance use which is not only ineffective but harmful. By adopting and investing in evidence-based prevention, harm reduction, and treatment services, California can realize better health outcomes for youth. It is up to the State to address the social determinants of health that are associated with high-risk substance use and improve access to quality, youth-focused, culturally congruent services for substance use disorder.

Youth Drug Use Penalization, Race, Class, and Public Health

There is no denying that racial disparities exist in drug use penalization in the United States, particularly when it comes to youth of color and youth living in poverty. For example, despite similar rates of drug use among different racial and socioeconomic groups, Black, brown, and poor youth are more likely to be targeted, arrested, and prosecuted for drug offenses than their white and higher-income peers.¹ This shows how drug policies have often been used as a tool of oppression against Black and brown communities, who have been disproportionately targeted and penalized for drug use and possession. Drug penalization has also entered the K-12 education system, with an explosion of School Resource Officers across the country. With the increased presence of police on school campus, arrests of young people due to "drug-related offenses" have also increased.²

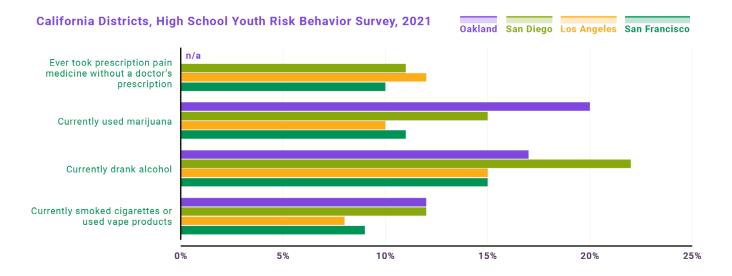
The evidence is clear; criminalization hasn't stopped substance dependence. A punitive response rarely comes with comprehensive healthcare services so criminalization has only made it harder for people who use drugs to access the help they need.³ This systemic injustice has not only perpetuated racial disparities in the prison system but has also maintained the stigmatization and criminalization of drug use, which has often been viewed as a moral failing rather than an issue of wellness, health access, community supports, and opportunity.

Today, youth are still feeling the effects of this failure. California youth are facing mental health challenges at alarming rates, and the number of youth without stable housing has increased. Many youth turn to substances to manage varying stressors and yet, most youth who have a substance use disorder do not receive treatment. Addressing high-risk substance use in California will require a multi-faceted approach that avoids criminalization and addresses the root causes of the problem, including the housing and mental health crises, systemic inequities, and poverty, while making prevention and treatment services accessible and designed for youth of all backgrounds.

Background

High-risk substance use: "Any use by adolescents of substances with a high risk of adverse outcomes (i.e., injury, criminal justice involvement, school dropout, loss of life). This includes but is not limited to: misuse of prescription drugs, use of illicit drugs (i.e., cocaine, heroin, methamphetamines, inhalants, hallucinogens, or ecstasy), and use of injection drugs which have a high risk of infection of blood-borne diseases such as HIV and hepatitis".⁵

By 11th grade, nearly a quarter of California teens actively use alcohol and drugs.⁶ The substances most abused by youth are alcohol and marijuana, which have lasting harmful effects. The use of alcohol during adolescence increases the likelihood of alcohol dependence in adulthood, and over time excessive alcohol consumption can have long-term health consequences including liver disease, cardiovascular disease, and cancer.⁷ Marijuana use is linked to adverse health effects such as respiratory problems, anxiety attacks, cognitive difficulties, coordination loss, and poor academic performance.⁸



While not as commonly used, the abuse of prescription medications has also proven to be deadly. Prescription medications, like opioids, are abused when taken in a manner other than prescribed. People who misuse opioids during adolescence are more likely to pick up non-prescription opioids like heroin later in life. Abusing opioids can lead to addiction, increased emergency room visits, and even fatal overdose. Abusing opioids can lead to addiction, increased emergency room visits, and even fatal overdose.

Similarly, while cigarette use has declined due to years of effective public health campaigns, smoking with vape pens is now more common and can have disastrous effects. Over half of California's 12th grade students have used tobacco vape products, with 96% of users inhaling flavored tobacco.^{16, 17} Research suggests cigarette smoking and e-cigarette or vape use can have negative effects on brain development,¹⁸ and long-term smoking increases the risk of stroke, lung cancer, and heart disease.¹⁹

Understanding the various risk and protective factors that affect the likelihood of high-risk substance use among youth is integral for establishing effective and informed prevention and treatment services that can mitigate these dangerous health outcomes. For instance, students who report low levels of school connectedness are more likely to abuse substances, as are LGBTQ+ youth who experience familial rejection of their sexual orientation or gender identity.²⁰

Similarly, there are several protective factors that can help steer youth away from high-risk substances. Those include but are not limited to school connectedness, family support, and parental disapproval of substance use. See the table below.

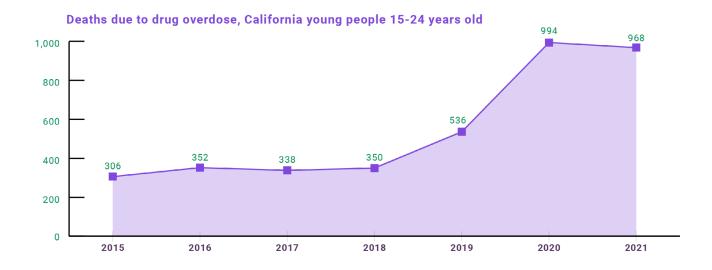
Risk and Protective Factors Associated with Youth High Risk Substance Use²¹

| Risk Factors For High-Risk Substance Use | Protective Factors to Prevent High-Risk Substance Use |
|---|--|
| Family history of substance use | Parent or family engagement |
| Favorable parental attitudes towards the behavior | Family support |
| Poor parental monitoring | Parental disapproval of substance use |
| Family rejection of sexual orientation or gender identity | Parental monitoring |
| Association with delinquent or substance-using peers | School connectedness |
| Lack of school connectedness | |
| Low academic achievement | |
| Childhood sexual abuse | |
| Mental health issues | |

The Opioid Crisis

Although overall drug use among youth has decreased over time, nationally, fatal overdoses remain a leading cause of injury-related death for all ages. The majority of fatal overdoses are due to opioids, and deaths involving synthetic opioids, such as fentanyl, have increased exponentially in recent years.²²

Unfortunately, in 2021, 968 young people under the age of 25 died from opioid-related overdose deaths.²³ Research shows that overdose deaths disproportionately occur in Black and American Indian/Alaska Native individuals, due to long-standing inequities in access to mental health and substance use care compared to their white peers.^{24, 25, 26, 27}



While youth are less likely to use substances in recent years, they are at higher risk of an overdose death due to increased presence of opioids (such as fentanyl) in other drugs.²⁸

Youth Substance Access and Direct Marketing

The marketing of tobacco, drugs, and alcohol has been targeted towards young people. These corporate marketing campaigns often target youth based on race/ethnicity and sexual identity.

Since the 1950s, tobacco companies have targeted the Black community, especially youth, in their menthol cigarette marketing campaigns.²⁹ Nationally in 2019, about 58% of Black youth aged 12 to 17 who reported smoking cigarettes used menthol cigarettes. Stores located near schools with more Black students have been more likely to promote menthol cigarettes through advertising and discounts. These advertising tactics and the subsequent prevalence of menthol cigarette use amongst Black youth demonstrate the harmful effectiveness of these campaigns.^{30,31}

Tobacco companies have also misappropriated American Indian/Alaskan Native (AIAN) culture in campaigns to sell the idea of "natural tobacco." ^{32, 33, 34} For example, studies show that young people are more likely to perceive American Spirit, a tobacco brand that uses AIAN cultural imagery on its packaging, as the "healthier" option compared to other brands. Cigarettes marketed as "natural" are more likely to be perceived by youth as less harmful to health, and research analyzing perceptions about American Spirit has found that the brand appeals more to younger smokers (aged 18–34 years) than to older smokers. ³⁵



Figure 1: Retrieved from Stanford's Research Into the Impact of Tobacco Advertising (SRITA) repository. Santa Fe Natural Tobacco Company's advertising strategy targets the young, progressive, and environmentally conscious, by promoting "natural" tobacco using AIAN imagery.



Figure 2: Retrieved from Stanford's Research Into the Impact of Tobacco Advertising (SRITA) repository. A 2015 Blu e-cigarette advertisement.

The tobacco industry has spent millions targeting the LGBTQ+ community in advertisements and funding LGBTQ+ community activities. Advertisements for flavored tobacco products have used LGBTQ symbolism and imagery to implicitly suggest flavored tobacco use is a "normal" way of life for this community. 36 In addition, for decades, "big tobacco" has contributed to election campaigns of LGBTQ political hopefuls, donations to AIDS and LGBTQ nonprofit organizations, and the sponsoring of Pride marches, gay bars and clubs, street fairs and film festivals.). 37, 3839 These investments have allowed broad access to the LGBTQ community, while LGBTQ youth struggle with greater rates of tobacco use than their straight and cisgender counterparts. 40, 41

In 2022, LGBTQ+ high school students in California had a higher prevalence of any kind of current tobacco use (10.8%) than non-LGBTQ+ high school students (5.2%) and those of unclear LGBTQ+ status (6.3%).42

The tobacco industry has also continued to employ tactics in how e-cigarette companies advertise, using candy-flavored products and specific marketing campaigns to attract young users.

Less formal mediums, like social media sites, are saturated with advertisements targeted at youth from drug dealers. Drug dealers usually send photos of large quantities of drugs along with prices and even use emojis, a form of communication common among young people, to discreetly signify the drugs they sell.⁴³ Although fentanyl is usually sold as a light blue pill, a new way for drug dealers to grab the interest of youth is to sell a wider variety of brightly colored fetanyl pills resembling candy.⁴⁴

While corporate entities have heavily invested in convincing young people to use harmful substances, state resources have not been sufficient to steer young people away from drugs. This history of targeted marketing highlights a need for an effective state policy response and comprehensive prevention and treatment programs to protect California's youth.

California's Response to Youth Drug Use and Addiction

California has responded to youth drug use and addiction through fiscal and policy reforms. Most notably, in 2016, Proposition 64 was passed by voters allowing adults, aged 21 years or older, to possess and use marijuana for non-medicinal purposes. With this passage, current law mandates that after other specified disbursements, sixty percent of the remaining California Cannabis Tax Fund is to be deposited into the Youth Education Prevention, Early Intervention and Treatment Account, funding youth education programs that specialize in accurate information, prevention, early intervention, school retention, and timely treatment services for substance use disorder.⁴⁵

In 2022, Californians voted to approve Prop 31 to uphold the state's ban on flavored tobacco products, hindering the tobacco industry's ability to sell products that are shown to addict young people. ⁴⁶ The Department of Health Care Services (DHCS) has also invested millions to support prevention, treatment, and recovery services for youth (ages 12-24) with, or at risk of, opioid use disorder or stimulant use disorder in response to the opioid crisis. ⁴⁷

More recently, as a part of the 2023-2024 state budget, Governor Newsom proposed additional investments to distribute the opioid-reversal medication naloxone and make fentanyl-identification test strips available to all middle and high schools as well as provide grants for education, testing, recovery, and support services to improve access to harm reduction services for youth.⁴⁸

However, even though there is some progress in providing treatment services for youth, California's response to high-risk substance use among youth remains largely punitive. Many California schools deploy zero-tolerance policies resulting in suspensions or expulsions for issues related to substance use, and the State often puts youth engaged in substance use into the juvenile justice system.

Nearly one in five out-of-school suspensions and 17% of expulsions were drug-related in California's 2021-22 school year. Overall, suspensions and expulsions disproportionately impact students of color, exacerbating educational disparities—73% of drug-related suspensions involve Hispanic or Black students even though these students only make up 61% of the overall student population. Further, drug and alcohol offenses make up 16.5% of California's juvenile misdemeanor arrests. The proportion of youth arrested for misdemeanor drug and alcohol offenses increases with age, as do referrals to probation departments for the same offense.

Research indicates that this punitive response is not effective in deterring high-risk substance use, does not address the associated health needs, and only exacerbates racial disparities.⁵¹ Generally, those who are seeking substance use treatment turn to their health insurance provider to obtain coverage for care. However, although 97 percent of California's youth have health insurance, only 10% of youth with substance use disorders receive treatment.^{52,53}

Recommendations

California needs to improve its approach to youth high-risk substance use, by focusing on prevention, harm reduction, and treatment. Each of these components must bring culturally competent approaches to specific populations such as LGBTQ+ youth and youth of color.

Focus on Prevention. Prevention of high-risk substance use would help many youth avoid dire consequences, but very few California youth are currently accessing prevention services. Evidence shows that effective substance use prevention programs are school-based, family-based, or digitally-based and provide a combination of skills development, drug-resistance strategies, information about drug policies and the effects of substances, and connection to services such as counseling or healthcare. While schools are ideally positioned to intervene early in youth substance use, the education system cannot be prevention-based until it dismantles its punitive approach and takes a public health approach. This starts by eliminating school suspension and expulsion policies for drug-related infractions, and instead creating policies that require schools to connect youth to the substance use disorder services they need.

SPOTLIGHT: The Orange County Health Agency's Alcohol and Drug Prevention Team provides staff training, parent workshops, a school-based curriculum, community education, and outreach to prevent alcohol and drug use. Their school-based program, Friday Night Live, uses federal funds from the Substance Abuse Block Grant, administered by the Department of Health Care Services. The program supports youth in making healthy lifestyle choices free of alcohol, tobacco, and other drugs in several schools in the state. ^{56, 57, 58}

Since substance abuse is at its worst among 18-25-year-olds, intervening early—before high school—is critical. Individuals who begin using alcohol or tobacco when they are very young are more likely to abuse substances later in life, when it becomes much more difficult to guit.^{59,60}

Evidence suggests that prevention programs should be designed to resonate with the sociocultural factors of specific communities. For example, Living 2 Worlds is a prevention program focused on tobacco use amongst AIAN youth. Incorporating knowledge from AIAN community members and professionals in the design of the curriculum, the program focuses on building the participants' decision-making skills, communication competence, and education about the risk factors associated with tobacco use while walking through how AIAN youth often encounter tobacco. Living 2 Worlds has been effective in reducing cigarette use among this population.⁶¹

Focus on Harm Reduction. Harm reduction is a set of strategies aimed at reducing the negative consequences of drug use that can include safer use, managed use, meeting people who use drugs "where they're at," and addressing conditions of use along with the use itself.⁶²

Some see educating youth on harm reduction as a controversial approach. However, harm reduction approaches have been proven to prevent death, injury, disease, overdose, and substance misuse. Harm reduction also offers avenues to healthcare, social services, and treatment as well as fostering a realistic route to recovery.

Providing harm reduction supplies—such as drug test kits to detect fentanyl or other harmful substances in commonly abused drugs to prevent overdose, or naloxone kits which can rapidly reverse opioid overdose—is critical for saving lives.

For example, the Adolescent Health Working Group (AHWG) is a coalition of youth-serving providers, youth, and caregivers that provides youth-centered and culturally congruent healthcare to youth ages 11-24.63 Partnered with the Drug Policy Alliance, their Safety First: Real Drug Education for Teens curriculum adopted in the San Francisco Unified School District (SFUSD) is a comprehensive tool designed for teachers to have honest conversations about drugs with their students. Their pilot evaluation indicates that young people in their program have an increased knowledge of alcohol, cannabis, opioids, harm reduction, and how to detect and respond to a drug-related overdose.64

Healthcare providers and community programs also miss opportunities to engage young people by focusing on abstinence-based messaging. Many harm reduction programs exclude youth by setting minimum age limits at 18 or 21.65 By creating more youth-centered programs and offering harm reduction services in clinical and school settings, healthcare providers can save lives and create more opportunities for treatment and healthcare for young people who use drugs. These evidence-based practices should not be inaccessible to young people just because of their age.

Focus on Treatment. Too few treatment programs are designed or tailored for youth. Evidence-based treatment options for substance use disorder include:

Medication-assisted treatment, for example, the use of prescription medications for opioid and cessation medications and nicotine replacement therapy for tobacco dependency; ⁶⁶

Behavioral interventions and psychosocial treatment such as family-based therapy, 12-step programs, and cognitive behavioral therapy;

Prescription digital therapeutics (PDTs) are FDA-approved behavioral health software -based treatments, often delivered on mobile devices. They provide telehealth services such as cognitive behavioral therapy, educational courses, or contingency management systems to support a patient throughout their recovery. These treatments are meant to be used in tandem with in-office treatment with a patient's clinician.

An example is reSET-O, a 12-week software application intended to increase the retention of patients with opioid use disorder (OUD) in outpatient treatment by providing cognitive behavioral therapy, as an adjunct to outpatient treatment that includes transmucosal buprenorphine and contingency management, for patients 18 years or older who are currently under the supervision of a clinician.⁶⁸

Rehabilitation, 69 including detoxification, which can help stabilize a patient as they navigate the symptoms of withdrawal from substances in the short-term, and transition to long-term inpatient or outpatient programs. 70

Too often, state-funded treatment programs utilizing these methods are only available to adults and only offered in some counties. There is growing research demonstrating how standard treatment methods can be tailored to address the unique needs of youth. Recent evidence suggests that psychosocial treatments and multi-step approaches remain the most effective methods of treatment for youth; however, youth may respond best to digital and culturally competent innovations in these strategies. Seeking substance use disorder treatment can be daunting and stigmatizing for many adolescents. Digital interventions are not only perceived as more accessible and less stigmatized than traditional clinical evaluations, but have also been found to facilitate participant motivation, self-efficacy, relapse prevention, and social support. Research also suggests that augmenting these evidence-based practices with pharmacotherapy, exercise, mindfulness, or recovery-oriented educational centers may have some clinical uses for youth substance use disorder treatment.⁷¹

Treatment programs must consist of effective wraparound treatment methods that connect youth to the community and ongoing psychiatric supports and consider the co-occurring mental health needs of youth with substance disorders.⁷²

Conclusion

The State must improve how it prevents, responds to, and treats youth substance use disorder by addressing the social determinants that influence high-risk substance use and investing in accessible comprehensive prevention and treatment options that are youth-focused and culturally congruent. Policy and budget efforts towards that end will support the health and wellbeing of California's youth and position them to thrive as they enter adulthood.

This brief was funded with the generous support of Kaiser Permanente.

Endnotes

- 1 Ashtiani, M. (2021). The Racially Disparate Effects of Drug Arrest on High School Dropout. Socius, 7. https://doi.org/10.1177/23780231211027097
- 2 Gottfredson, DC, Crosse, S, Tang, Z, et al (2020). Effects of School Resource Officers on School Crime and Responses to School Crime. Criminal Public Policy. 2020; 19: 905– 940. Retrieved from https://doi.org/10.1111/1745-9133.12512
- 3 American Civil Liberties Union (2016). It's Time to Decriminalize Personal Drug Use and Possession, Basic Human Rights and Public Health Demand It. Retrieved from https://www.aclu.org/news/smart-justice/its-time-decriminalize-personal-drug-use-and-possession-basic-rights-and-public
- 4 Keavy, M. (2023, April 5) Getting Answers: Why have California Homeless Youth Increased Since the Pandemic? CBS Sacramento. https://www.cbsnews.com/sacramento/news/getting-answers-why-have-california-homeless-youth-numbers-increased-since-pandemic/
- Centers for Disease Control and Prevention (2022). High-Risk Substance Use Among Youth. Retrieved from https://www.cdc. gov/healthyyouth/substance-use/index.htm. 6 California School Climate, Health, and Learning Survey (2019). Most Recent State Data: Current Alcohol and Drug Use, by Grade Level. Retrieved from https://calschls.org/reports-data/public-dashboards/ secondary-student/
- 6 California School Climate, Health, and Learning Survey (2019). Most Recent State Data: Current Alcohol and Drug Use, by Grade Level. Retrieved from https://calschls.org/reports-data/public-dashboards/secondary-student/
- 7 Interagency Coordinating Committee on the Prevention of Underage Drinking. (2020). Report to Congress on the prevention and reduction of underage drinking. Retrieved from: https://www.stopalcoholabuse.gov/about-iccpud/data/national-reports/report-to-congress
- 8 National Institute on Drug Abuse (2020). Cannabis (Marijuana) Research Report. https://nida.nih.gov/download/1380/cannabis-marijuana-research-report.pdf?v=7fc7d24c3dc120a03cf26348876bc1e4
- 9 National Institute on Drug Abuse (2023). Drug Overdose Death Rates. Retrieved from https://nida.nih.gov/research-topics/trends-statistics/overdose-death-rates.
- 10 National Institute on Drug Abuse (2020). Misuse of Prescription Drugs Research Report. https://nida.nih.gov/publications/research-reports/misuse-prescription-drugs/overview
- 11 Cerdá M, Santaella J, Marshall BD, Kim JH, Martins SS. (2015). Nonmedical Prescription Opioid Use in Childhood and Early Adolescence Predicts Transitions to Heroin Use in Young Adulthood: A National Study. J Pediatr. 2015 Sep;167(3):605-12.e1-2. doi: 10.1016/j.jpeds.2015.04.071. Epub 2015 Jun 6. PMID: 26054942; PMCID: PMC4714948.
- 12 Jones CM. (2017). Trends and key correlates of prescription opioid injection misuse in the United States. Addict Behav. 2018 Mar;78:145-152. doi: 10.1016/j.addbeh.2017.10.018. Epub 2017 Nov 22. PMID: 29175290.
- 13 Jones CM, Christensen A, Gladden RM. (2017). Increases in prescription opioid injection abuse among treatment admissions in the United States, 2004-2013. Drug Alcohol Depend. 2017 Jul 1;176:89-95. doi: 10.1016/j.drugalcdep.2017.03.011. Epub 2017 May 16. PMID: 28531769; PMCID: PMC9244861.
- 14 Patel S, Sheikh A, Nazir N, Monro S, Anwar A (2020). The Opioid Crisis: How to Lessen the Burden on Emergency Departments by At-risk Populations. Cureus. 2020 Nov 16;12(11):e11498. Retrieved from doi: 10.7759/cureus.11498.
- 15 U.S Department of Labor (2023). Risk Use for Opioid Misuse, Addiction, and Overdose. Retrieved from https://www.dol.gov/agencies/owcp/opioids/riskfactors#:~:text=Prolonged%20use%20is%20associated%20with,setting%20struggles%20with%20opioid%20addiction.
- 16 Centers for Disease Control and Prevention (2019). Youth Risk Behavior Surveillance System Data query: Ever used electronic vapor products (including e-cigarettes, vapes, vape pens, e-cigars, e-hookahs, hookah pens, and mods) and Ever tried cigarette smoking (even one or two puffs), California, High School Youth Risk Behavior Survey. Retrieved from https://nccd.cdc.gov/Youthonline/App/Default.aspx
- 17 Zhu S-H, Braden K, Zhuang Y-L, Gamst A, Cole AG, Wolfson T, Li S. (2021). Results of the statewide 2019-20 California student tobacco survey. Center for Research and Intervention in Tobacco Control, University of California San Diego. Retrieved from https://www.cdph.ca.gov/Programs/CCDPHP/DCDIC/CTCB/CDPH%20Document%20Library/ResearchandEvaluation/FactsandFigures/2019-20CSTSBiennialReport_7-27-2021.pdf
- 18 Marynak KL, Gammon DG, Rogers T, Coats EM, Singh T, King BA. (2015). Sales of Nicotine-Containing Electronic Cigarette Products: United States, 2015. American Journal of Public Health 2017; 107(5):702-705.
- 19 U.S Department of Health and Human Services (2014). The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General. Retrived from https://www.cdc.gov/tobacco/sgr/50th-anniversary/index.htm?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Ftobacco%2Fdata_statistics%2Fsgr%2F50th-anniversary%2Findex.htm.
- 20 Centers for Disease Control and Prevention (2022). High-Risk Substance Use Among Youth. Retrieved from https://www.cdc.gov/healthyyouth/substance-use/index.htm.

Endnotes continued

- 21 Centers for Disease Control and Prevention (2022). High-Risk Substance Use Among Youth. Retrieved from https://www.cdc.gov/healthyyouth/substance-use/index.htm.
- 22 Centers for Disease Control and Prevention (2022). Understanding Drug Overdoses and Deaths. Retieved from https://www.cdc.gov/drugoverdose/epidemic/index.html
- 23 California Overdose Surveillance Dashboard (2021). Any Opioid-Related Overdose Death by Age Group, 2021. Retrieved from https://skylab.cdph.ca.gov/ODdash/?tab=CA
- 24 Centers for Disease Control and Prevention (2022). Vital Signs: Drug Overdose Deaths by Selected Sociodemographic and Social Determinants of Health Characteristics 25 States and the District of Columbia, 2019 2020. https://www.cdc.gov/mmwr/volumes/71/wr/mm7129e2.htm?s_cid=mm7129e2_w
- 25 G. G. Ramos, A. E. West, C. Begay, V. M. Telles, J. D'Isabella, V. Antony & C. Soto (2021): Substance use disorder and homelessness among American Indians and Alaska Natives in California, Journal of Ethnicity in Substance Abuse, DOI: 10.1080/15332640.2021.1952125.
- 26 Jennifer B. Unger, Steve Sussman, Cynthia Begay, Lou Moerner & Claradina Soto (2020) Spirituality, Ethnic Identity, and Substance Use among American Indian/Alaska Native Adolescents in California, Substance Use & Misuse, 55:7, 1194-1198, DOI: 10.1080/10826084.2020.1720248
- 27 Park JN, Rouhani S, Beletsky L, Vincent L, Saloner B, Sherman SG. Situating the continuum of overdose risk in the social determinants of health: a new conceptual framework. Milbank Q 2020;98:700–46. PMID:32808709 https://doi.org/10.1111/1468-0009.12470
- 28 National Institute on Drug Abuse (2023). Drug Overdose Death Rates. Retrieved from https://nida.nih.gov/research-topics/trends-statistics/overdose-death-rates.
- 29 Stopping Menthol, Saving Lives: Ending Big Tobacco's Predatory Marketing to Black Communities (2021). Retrieved from: https://www.tobaccofreekids.org/assets/content/what_we_do/industry_watch/menthol-report/2021_02_tfk-menthol-report.pdf
- 30 Centers for Disease Control and Prevention (2022). Unfair and Unjust Practices and Conditions Harm African American People and Drive Health Disparities. Retrieved from https://www.cdc.gov/tobacco/health-equity/african-american/unfair-and-unjust. html
- 31 Stanford Medicine (2022). How menthol cigarette ads target Black people, women and teens. Retrieved from https://scopeblog.stanford.edu/2022/10/18/how-menthol-cigarette-ads-target-black-people-women-and-teens%EF%BF%BC/
- 32 Stanford Medicine (2022). How menthol cigarette ads target Black people, women and teens. Retrieved from https://scopeblog.stanford.edu/2022/10/18/how-menthol-cigarette-ads-target-black-people-women-and-teens%EF%BF%BC/
- 33 D'Silva J, O'Gara E, Villaluz NT. (2018). Tobacco industry misappropriation of American Indian culture and traditional tobacco, Tobacco Control 2018;27:e57-e64. http://dx.doi.org/10.1136/tobaccocontrol-2017-053950
- 34 Truth Initiative (2020). Tobacco use in the American Indian/Alaska Native community. https://truthinitiative.org/research-resources/targeted-communities/tobacco-use-american-indianalaska-native-community
- 35 Epperson AE, Johnson TO, Schleicher NC, Henriksen L. (2019). The Price of Natural American Spirit Relative to Other Cigarette Brands. Nicotine Tob Res. 2019 Nov 19;21(12):1715-1720. doi: 10.1093/ntr/ntz018. PMID: 30759248; PMCID: PMC6861830.
- 36 Smith EA, Malone RE (2003). The Outing of Philip Morris: Advertising Tobacco to Gay Men. American Journal of Public Health. 2003;93(6):988-993. Retrieved from https://ajph.aphapublications.org/doi/full/10.2105/AJPH.93.6.988.
- 37 Offen N, Smith EA, Malone RE. (2003). From adversary to target market: the ACT-UP boycott of Philip Morris. Tob Control. 2003 Jun;12(2):203-7. doi: 10.1136/tc.12.2.203. PMID: 12773732; PMCID: PMC1747705.
- 38 Cesena, D, Kozlovich, S, Walker, PM, & Guzman, I. (2022). Tobacco Control: An Intersectional Approach, 2022. We Breathe: Supporting LGBTQ+ Tobacco-Control Communities Project. Retrieved from https://californialgbtqhealth.org/wp-content/uploads/2022/10/We-Breathe-Policy-Platform_FINAL-2022.pdf
- 39 Stevens P, Carlson LM, Hinman JM (2004). An analysis of tobacco industry marketing to lesbian, gay, bisexual and transgender (LGBT) populations: strategies for mainstream tobacco control and prevention. Health Promot Pract 2004;5(Suppl):129S-34S. Retrieved from https://doi.org/10.1177/1524839904264617.
- 40 Gentzke AS, Wang TW, Cornelius M, et al (2022). Tobacco Product Use and Associated Factors Among Middle and High School Students National Youth Tobacco Survey, United States, 2021. MMWR Surveill Summ. 2022; 71(No. SS-5):1–29. Retrieved from http://dx.doi.org/10.15585/mmwr.ss7105a1.
- 41 Gentzke AS, Wang TW, Jamal A, Park-Lee E, Ren C et al (2020). Tobacco Product Use Among Middle and High School Students United States, 2020. Morb Mortal Wkly Rep, 2020;69(50): 1881-88. Retrieved from http://dx.doi.org/10.15585/mmwr.mm6950a1.
- 42 Dutra, L. M., Ingold-Smith, M., Rotermund, S., Clodfelter, R., & Levine, B (2022). Annual results report for the California Youth

Endnotes continued

- Tobacco Survey 2022. RTI International. Retrieved from https://www.cdph.ca.gov/Programs/CCDPHP/DCDIC/CTCB/CDPH%20 Document%20Library/ResearchandEvaluation/FactsandFigures/CYTS2022AnnualReportFinal.pdf
- 43 Wasu, S. (2021. May 31). Child safety advocates warn about drug dealers targeting children on social media. ABC 15 Arizona. https://www.abc15.com/news/state/child-safety-advocates-warn-about-drug-dealers-targeting-children-on-social-media
- 44 Drug Enforcement Administration (2022). DEA Warns of Brightly-Colored Fentanyl used to Target Young Americans. Retrieved from https://www.dea.gov/press-releases/2022/08/30/dea-warns-brightly-colored-fentanyl-used-target-young-americans#:~:text=Dubbed%20%E2%80%9Crainbow%20fentanyl%E2%80%9D%20in%20the,to%20children%20and%20young%20 people.
- 45 California Department of Healthcare Services (2023). Prop 64 Advisory Group. https://www.dhcs.ca.gov/provgovpart/Pages/Prop-64-Advisory-Group.aspx
- 46 Noguchi, Y. (2022, November 10). Proposition 31 passes in California: flavored tobacco will be banned. National Public Radio. https://www.npr.org/2022/11/10/1135718993/proposition-31-passes-in-california-flavored-tobacco-will-be-banned
- 47 California Department of Healthcare Services (2022). News Release: DHCS to invest millions to tackle youth opioid use. Retrieved from https://www.dhcs.ca.gov/formsandpubs/publications/oc/Documents/2022/22-16-CA-YOR-12-14-22.pdf
- 48 Office of Governor Gavin Newsom (2023). California Invests \$52 Million in Opioid Prevention and Treatment. Retrieved from https://www.gov.ca.gov/2023/01/11/california-invests-52-million-in-opioid-prevention-and-treatment/
- 49 California Department of Education (2022). Expulsion and Supension Data 2021-2022. Retrieved from https://dq.cde.ca.gov/dataquest/Expulsion/ExpSearchName.asp?TheYear=2021-22&cTopic=Expulsion&cLevel=State&cName=&cCounty=&cTimeFrame=S
- 50 California Department of Education (2023). Fingertip Facts on Education in California. Retrieved from https://www.cde.ca.gov/ds/ad/ceffingertipfacts.asp
- 51 American Psychological Association Zero Tolerance Task Force (2008). Are Zero Tolerance Policies Effective in Schools. Retrieved from https://www.apa.org/pubs/reports/zero-tolerance.pdf
- 52 California Department of Healthcare Services (2017). Medi-Cal Children's health Advisory Panel (MCHAP) Recommendation. Retrieved from https://www.dhcs.ca.gov/services/Documents/MCHAP_Recommendation_CHIP.pdf
- 53 California Health Care Foundation (2018). Mental health and substance use: A crisis for California's youth. Retrieved from https://www.chcf.org/wp-content/uploads/2018/12/AlmanacMentalHealthSUDYouth.pdf
- 54 The Interagency Working Group on Youth Programs (2022). Substance Abuse Prevention. Retrieved from https://youth.gov/youth-topics/substance-abuse/evidence-based-programs-youth-substance-abuse-prevention-and-treatment
- 55 California School-Based Health Alliance (n.d) School-Based Health Centers Help Prevent & Treat Substance Use. Retrieved from https://www.schoolhealthcenters.org/resources/student-impact/substance-use/
- 56 Orange County Healthcare Agency (n.d). Alcohol and Substance Use Prevention School-Based Programs. Retrieved from https://ochealthinfo.com/services-programs/mental-health-crisis-recovery/wellness-promotion-prevention/alcohol-substance-0
- 57 California Department of Healthcare Services (n.d). Substance Abuse Prevention and Treatment Block Grant. Retrieved from https://www.dhcs.ca.gov/provgovpart/Pages/Substance-Abuse-Block-Grant-SABG.aspx
- 58 County of Santa Cruz Health Services Agency (n.d). Friday Night Live and Club Live. Retrieved from https://www.santacruzhealth.org/HSAHome/HSADivisions/BehavioralHealth/SubstanceUseDisordersServices/SantaCruzFridayNightLiveClubLive.aspx
- 59 The Interagency Working Group on Youth Programs (2022). Substance Abuse Prevention. Retrieved from https://youth.gov/ youth-topics/substance-abuse/evidence-based-programs-youth-substance-abuse-prevention-and-treatment
- 60 California Health Care Foundation (2022). California Health Care Almanac Substance Use in California: Prevalence and Treatment. Retrieved from https://www.chcf.org/wp-content/uploads/2022/01/SubstanceUseDisorderAlmanac2022.pdf
- 61 Kulis SS, Ayers SL, Harthun ML. (2017). Substance Use Prevention for Urban American Indian Youth: A Efficacy Trial of the Culturally Adapted Living in 2 Worlds Program. J Prim Prev. 2017 Apr;38(1-2):137-158. doi: 10.1007/s10935-016-0461-4. PMID: 27943031; PMCID: PMC5313372.
- 62 National Harm Reduction Coalition (2023). Principles of Harm Reduction. Retrieved from https://harmreduction.org/about-us/principles-of-harm-reduction/
- 63 Adolescent Health Working Group (n.d). About Adolescent Health Working Group. Retrieved from https://ahwg.org/
- 64 Adolescent Health Working Group (n.d). Substance Use and Harm Reduction. Retrieved from https://ahwg.org/substance-use-and-harm-reduction/

Endnotes continued

- 65 Loomis, L. (2021). Principles of harm reduction in young adults with substance use disorder. Health City. Retrieved from https://healthcity.bmc.org/population-health/principles-harm-reduction-young-adults-sud
- 66 National Institute on Drug Abuse (n.d). Substance Use Treatment. Retrieved from https://nida.nih.gov/research-topics/treatment
- 67 Brezing CA, Brixner DI. (2022). The Rise of Prescription Digital Therapeutics in Behavioral Health. Adv Ther. 2022 Dec;39(12):5301-5306. doi: 10.1007/s12325-022-02320-0. Epub 2022 Oct 15. PMID: 36242730; PMCID: PMC9569000.
- 68 Pear Therapeutics (n.d). reSET. Retrieved from https://peartherapeutics.com/products/reset-reset-o/#:~:text=reSET%2D0%20 prescription%20digital%20therapeutic,includes%20transmucosal%20buprenorphine%20and%20contingency
- 69 Jhanjee S. (2014). Evidence based psychosocial interventions in substance use. Indian J Psychol Med. 2014 Apr;36(2):112-8. doi: 10.4103/0253-7176.130960. PMID: 24860208; PMCID: PMC4031575.
- 70 Detoxification and Substance Abuse Treatment. Rockville (MD): Substance Abuse and Mental Health Services Administration (US); 2006. (Treatment Improvement Protocol (TIP) Series, No. 45.) 1 Overview, Essential Concepts, and Definitions in Detoxification. Retrieved from: https://www.ncbi.nlm.nih.gov/books/NBK64119/
- 71 Fadus MC, Squeglia LM, Valadez EA, Tomko RL, Bryant BE, Gray KM. Adolescent Substance Use Disorder Treatment: an Update on Evidence-Based Strategies. Curr Psychiatry Rep. 2019 Sep 14;21(10):96. doi: 10.1007/s11920-019-1086-0. PMID: 31522280; PMCID: PMC7241222.
- 72 The Interagency Working Group on Youth Programs (2022). Substance Abuse Treatment. Retrieved from https://youth.gov/ youth-topics/substance-abuse/critical-elements-substance-abuse-prevention-efforts