CALIFORNIA
HEALTH CARE ALMANAC

Substance Use in California: A Look at Addiction and Treatment

OCTOBER 2018

Executive Summary

Substance use and substance use disorders (SUDs) are often part of conversations, but not as frequently considered for their place in the health care system. Still clouded by stigma, substance use disorders are slowly beginning to be more broadly understood as chronic illnesses — and the health care system is (also slowly) beginning to identify, treat, and pay for them that way.

Substance use disorders are common. About 8% of Californians met criteria for substance use disorder, but only 10% of people with a substance use disorder received any type of treatment.

Substance Use in California: A Look at Addiction and Treatment is CHCF's first Almanac publication to address this topic. It uses the most recent data available to provide an overview of substance use and addiction in California. Topics include prevalence of substance use disorder, use of alcohol and other drugs, mortality, emergency department use, treatment, workforce, and spending.

KEY FINDINGS INCLUDE:

- Alcohol use disorder was more prevalent than other types of substance use disorders. Six percent of Californians reported meeting the criteria for dependence on alcohol, compared to 3% for illicit drugs.
- Substance use disorders were most prevalent among young adults 18 to 25, occurring at nearly twice the state average rate.
- Use of alcohol and other drugs often begins in adolescence. By 11th grade, more than half of California students have used alcohol and almost 40% have used marijuana.
- Alcohol accounted for more nonfatal emergency department visits than all other drug diagnoses combined.
- The number of heroin-related emergency department visits in California more than tripled between 2006 and 2017.
- California is undertaking a major effort to expand and improve its SUD services in Medi-Cal through the Drug Medi-Cal Organized Delivery System (DMC-ODS) pilot program.

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About Substance Use Disorders

Substance use disorders (SUDs) occur when repeated use of alcohol and/or other drugs causes significant problems, such as failure to meet major responsibilities at work, school, or home; health problems; and/or disability. Frequent, long-term use of substances can result in physical changes in the brain that may increase the likelihood of compulsive and destructive behaviors, and make it more difficult for people to recover, even when they are ready to quit.

Like other chronic diseases, SUDs can be prevented, treated, and managed. The chronic nature of addiction means that relapse is a continuing risk. However, treatment and support help people to recover from the effects of SUDs. Behavioral therapy, which seeks to identify and help change potentially self-destructive or unhealthy behaviors, can benefit people with a wide range of disorders. For some substances, including alcohol and opioids, behavioral therapy is best combined with medications that can manage withdrawal, reduce craving, and decrease the physical "reward" from substance use. Peer support is another highly valued component of SUD recovery.

Note that the term *substance use disorder* replaced the terms *substance dependency*, *substance addiction*, and *substance abuse disorder* in the diagnostic lexicon beginning in 2014. Both old and new terms are used in this publication based on the diagnostic categories in use for data collection.

Substance use disorders are common, recurrent, and often serious illnesses, but they can be prevented, treated, and managed.

Sources: "Drug Misuse and Addiction," National Institute on Drug Abuse, www.drugabuse.gov; "Drugs and the Brain," National Institute on Drug Abuse, www.drugabuse.gov; "Treatment and Recovery," National Institute on Drug Abuse, www.drugabuse.gov; and Sharon Reif et al., "Peer Recovery Support for Individuals with Substance Use Disorders: Assessing the Evidence," *Psychiatric Services* 65, no. 7 (July 2014): 853–61, doi:10.1176/appi.ps.201400047.

Substance Use Disorder Definitions

DSM-5 (IN USE BEGINNING 2014)

Substance use disorder is a problematic pattern of substance use leading to clinically significant impairment or distress as manifested by at least 2 of 11 symptoms occurring in a 12-month period. Presence of 2 to 3 symptoms is considered *mild*; presence of 4 to 5 symptoms is considered *moderate*; presence of 6 or more symptoms is considered *severe*. (See Appendix A for the full definition.)

DSM-IV TR (IN USE 2000 – 2014)

Abuse of or dependence on alcohol or illicit drugs is a maladaptive pattern of substance use leading to clinically significant impairment or distress occurring within a 12-month period.

Substance abuse is a pattern of substance use that leads to the failure to fulfill responsibilities at work, home, or school and/or repeated use in situations in which it is physically hazardous.

Substance dependence may include a user's increase in tolerance, withdrawal syndrome, unsuccessful attempts to cut down or quit using, loss of control over substance use, and consistent use of more substances and for longer than intended.

Other

Binge alcohol use, unless otherwise defined, is drinking five or more drinks for males, or four or more drinks for females, on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least one day in the past 30 days.

Illicit drugs are marijuana/hashish, cocaine (including crack), inhalants, hallucinogens, heroin, methamphetamine, or prescription-type drugs used nonmedically.

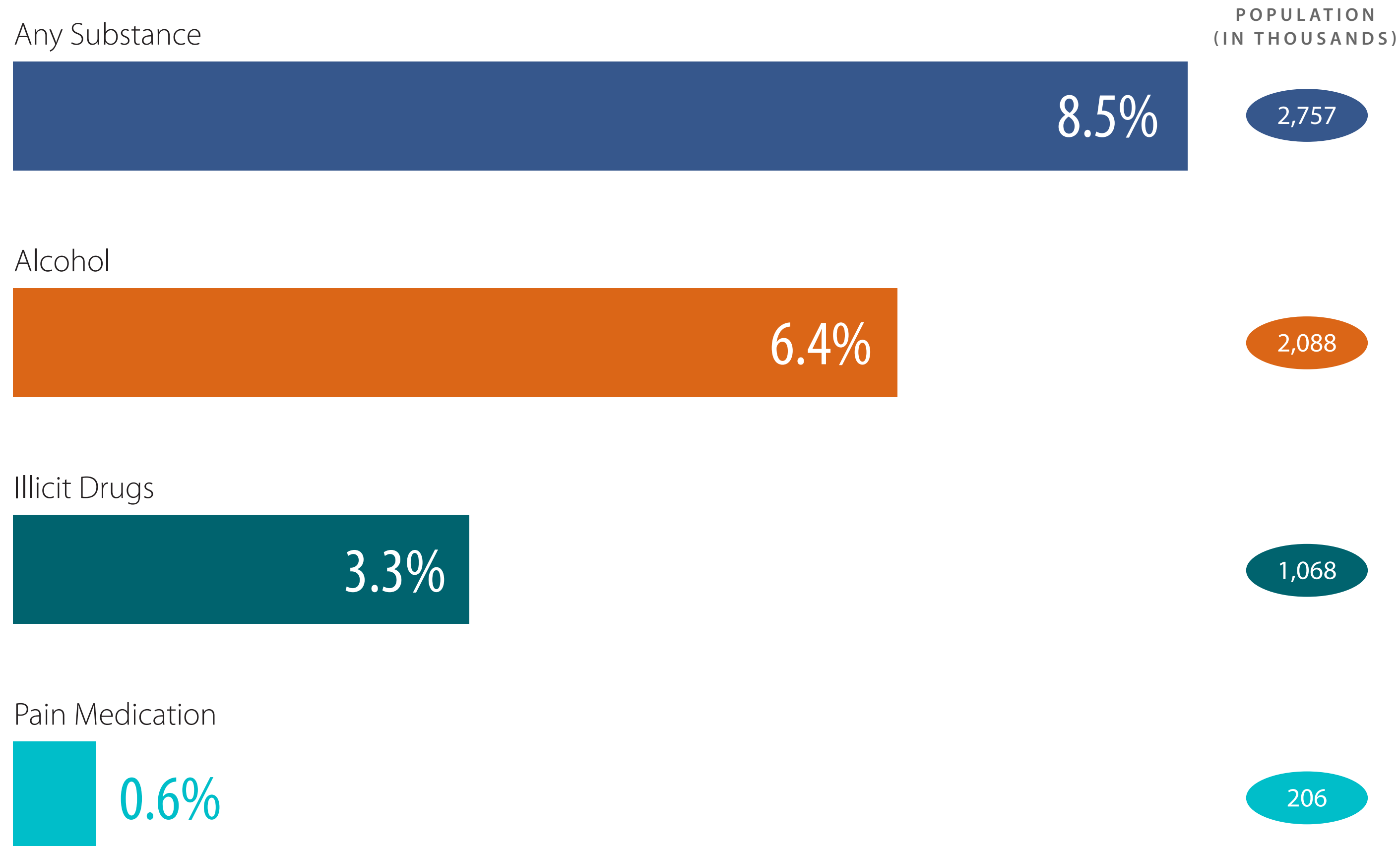
Notes: *DSM* is *Diagnostic and Statistical Manual of Mental Disorders*. Some of the measures for prevalence presented in this document reflect the diagnostic terminology in use at the time of data collection, which was the DSM-IV-TR. The definition for illicit drugs includes marijuana, which was legalized for adult use in California effective January 1, 2018.

Sources: *Diagnostic and Statistical Manual of Mental Disorders, 5th Edition: DSM-5* (Washington, DC: American Psychiatric Association [APA], 2013); *Diagnostic and Statistical Manual of Mental Disorders, 4th Edition, Text Revision: DSM-IV-TR* (Washington, DC: APA, 2003); and *Behavioral Health Barometer: California, 2015*, Substance Abuse and Mental Health Services Administration, www.samhsa.gov (PDF).

The American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders (DSM)* provides the standard definitions of substance use disorder for the United States. These have changed over the last five years.

Prevalence of Substance Use Disorder, by Drug Type

California, Annual Average, 2015 to 2016



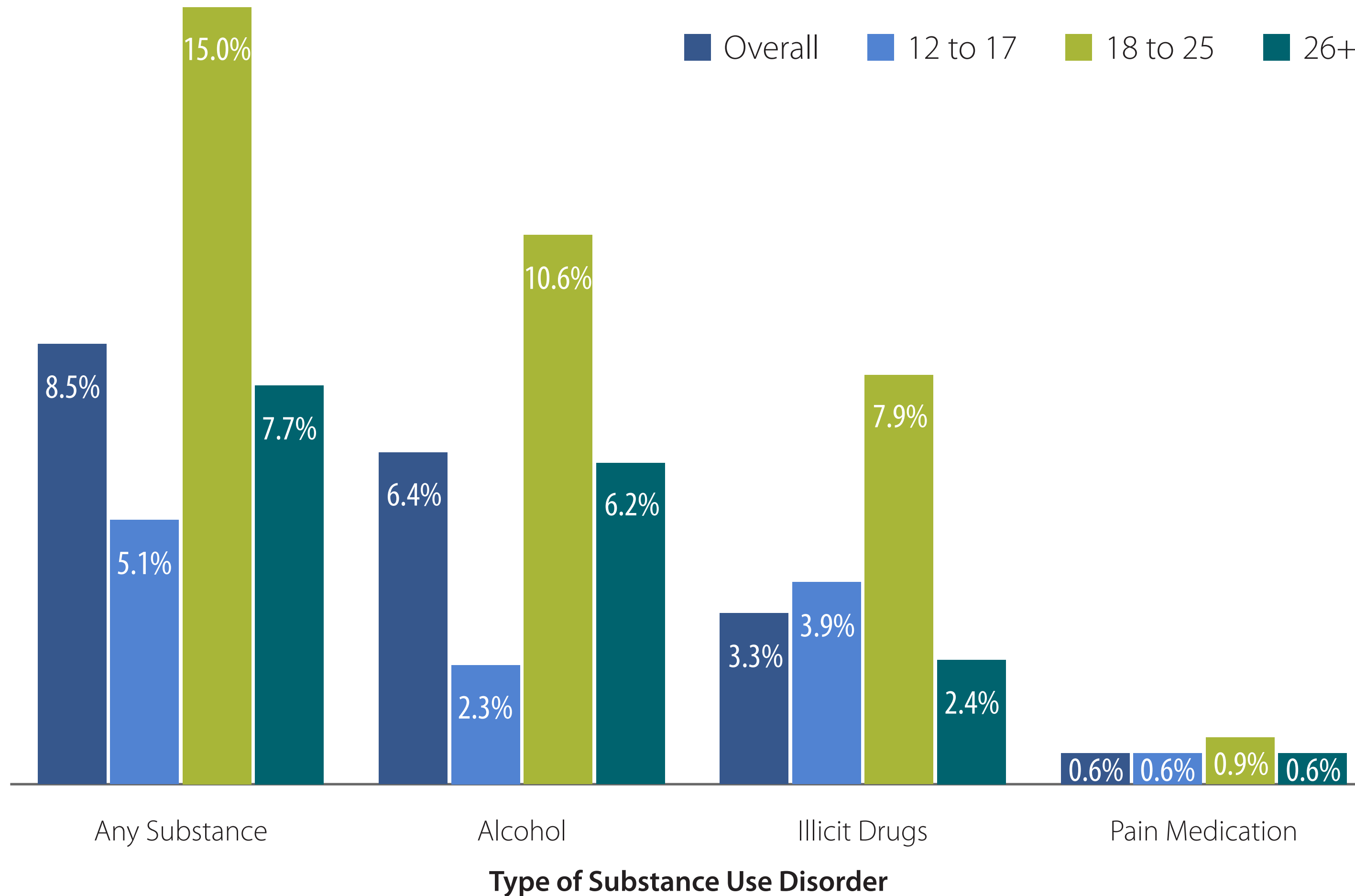
Notes: *Illicit drugs* includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, methamphetamine, and nonmedical use of prescription drugs. *Pain medication* is referred to as *pain reliever* in the survey and is defined as use in any way not directed by a doctor. See page 4 for further definition of *dependence*, *abuse*, and *illicit drugs*.

Source: "Table 20" in *National Survey on Drug Use and Health*, Substance Abuse and Mental Health Services Administration, www.samhsa.gov.

About 8% of Californians, or 2.7 million people, met the criteria for substance use disorder in the past year. Six percent reported meeting criteria for abuse of or dependence on alcohol, and 3% reported meeting criteria for abuse of or dependence on illicit drugs.

SUD in the Past Year, by Drug Type and Age Group

California, 2015 to 2016

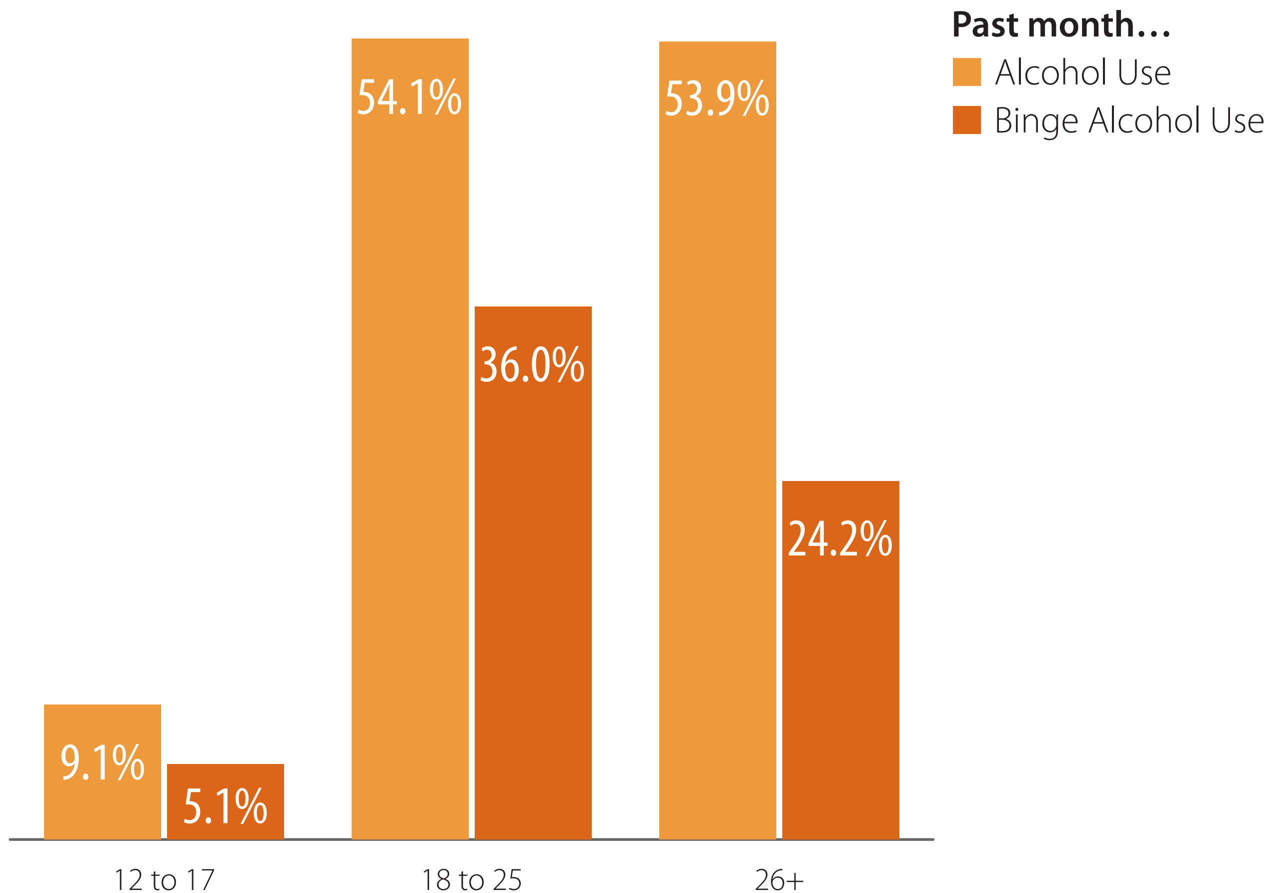


Notes: *SUD* (substance use disorder) is defined as meeting criteria for illicit drug or alcohol dependence or abuse. *Illicit drugs* includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, methamphetamine, and nonmedical use of prescription drugs. *Pain medication* is referred to as *pain reliever* in the survey. See page 4 for further definitions.

Source: "Table 20" in *National Survey on Drug Use and Health*, Substance Abuse and Mental Health Services Administration, www.samhsa.gov.

The rate of substance use disorder among young adults (18 to 25 years) was approximately twice the overall average. Adults 26 and older were nearly three times more likely to have alcohol use disorders than illicit drug use disorders.

Alcohol Use, by Age Group
California, 2015 to 2016



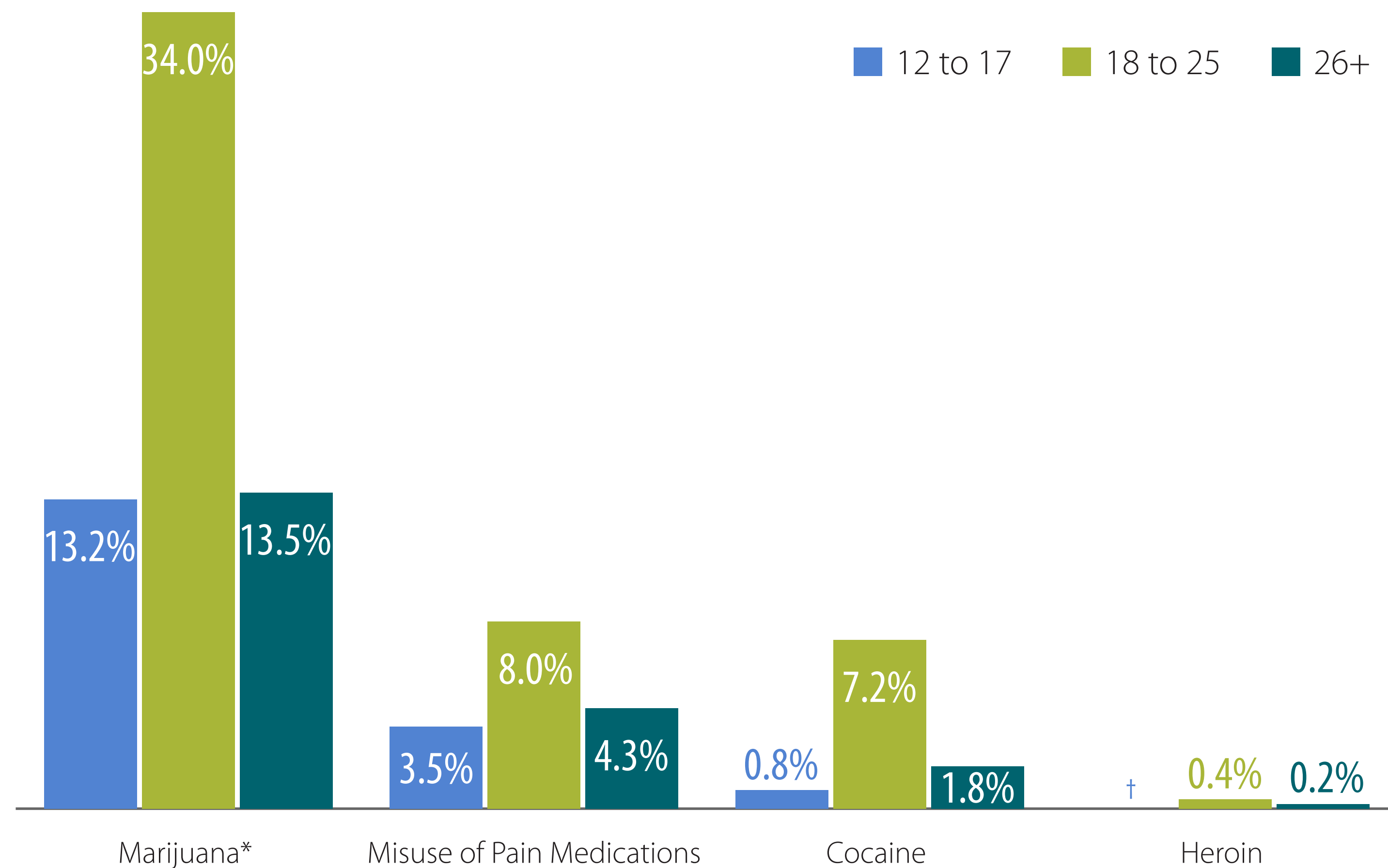
Note: *Binge alcohol use* is defined as drinking five or more drinks for males or four or more drinks for females on the same occasion (i.e., at the same time or within a couple hours of each other) on at least 1 day in the past 30 days.

Source: "Table 20" in *National Survey on Drug Use and Health*, Substance Abuse and Mental Health Services Administration, www.samhsa.gov.

Over half of all adults reported using alcohol in the past month, compared to 9% of adolescents 12 to 17. More than one-third of young adults 18 to 25 reported binge alcohol use — multiple drinks on a single occasion — in the past month.

Drug Use, by Selected Type and Age Group

California, 2015 to 2016



*California Proposition 64 (2016) legalized recreational use of marijuana for adults over age 21, effective January 1, 2018.
†Heroin use for age 12 to 17 was 0.004%.

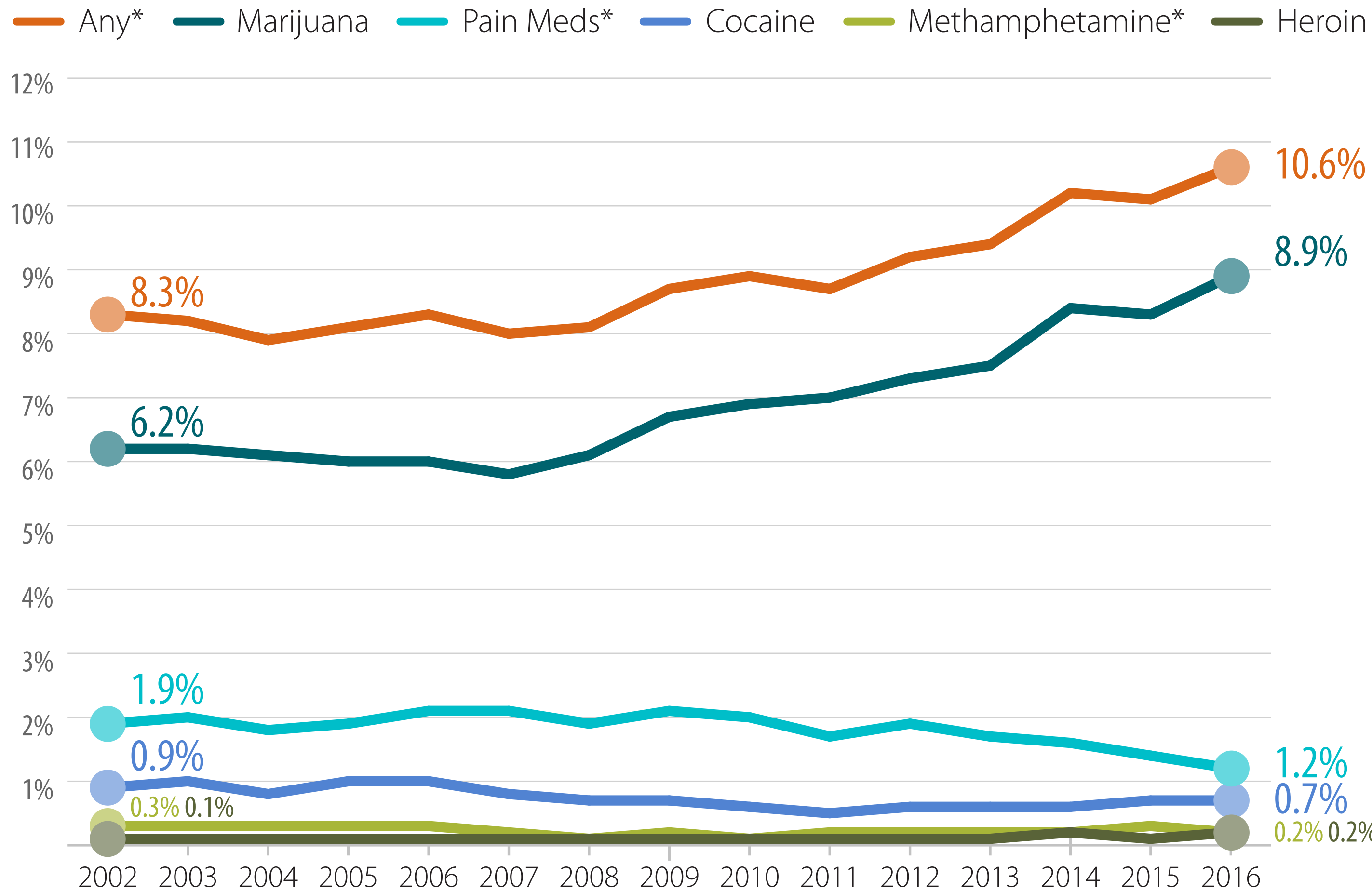
Notes: *Pain medications* are referred to as *pain relievers* in the survey. See page 4 for further definitions.

Source: "Table 20" in *National Survey on Drug Use and Health*, Substance Abuse and Mental Health Services Administration, www.samhsa.gov.

Marijuana was the most commonly used illicit drug among all age groups, with young adults reporting the highest rate of use (34%) in the past year. Seven percent of young adults reported use of cocaine in the past year. Less than 1% of all age groups reported heroin use.

Drug Use, by Selected Type

United States, 2002 to 2016



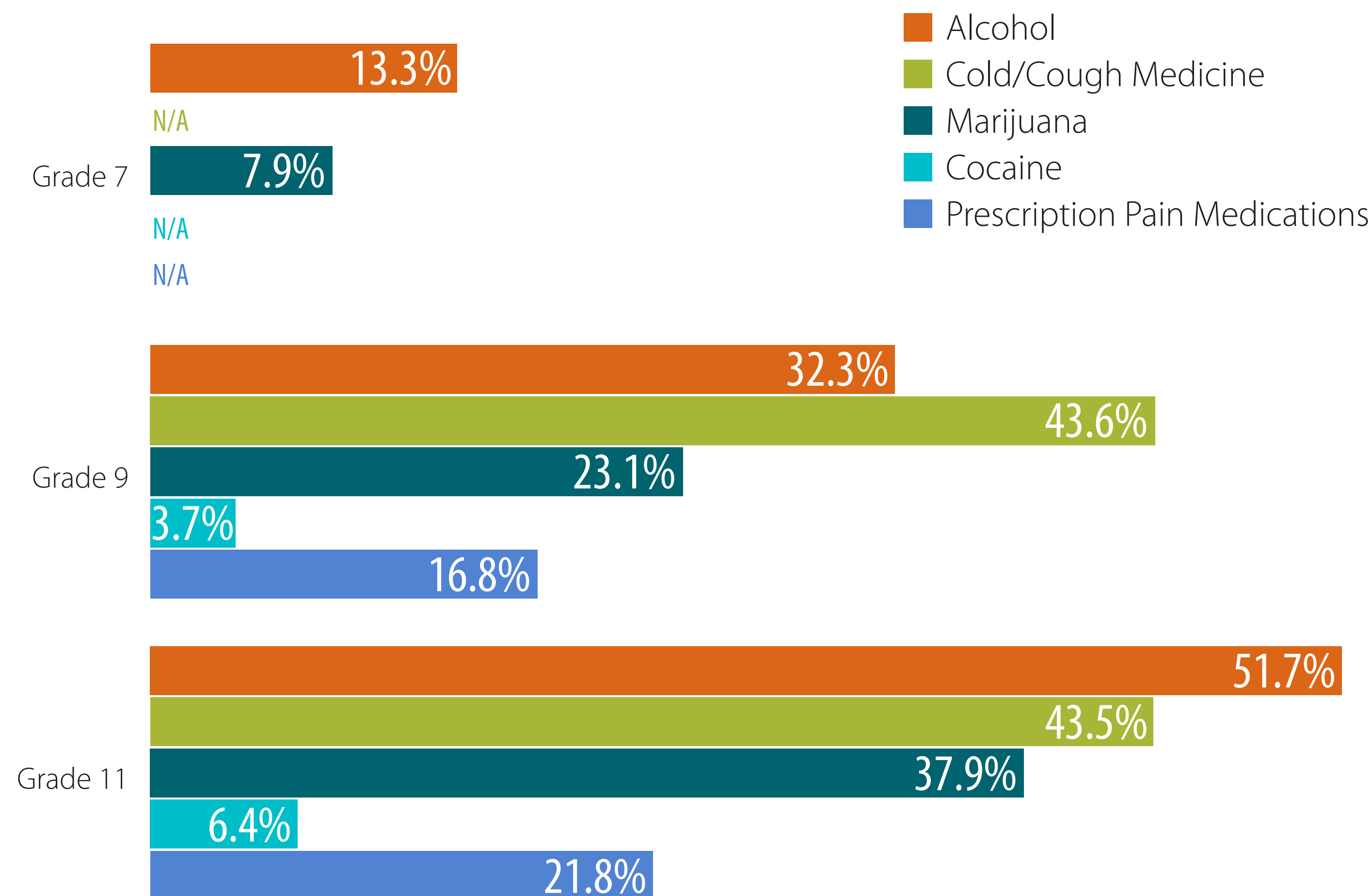
*Not comparable from 2002 to 2014 due to methodological changes.

Notes: Estimates of *methamphetamine* use include data from new items added in 2005 and 2006 and are not comparable with estimates presented in NSDUH reports prior to the 2007 national findings report. *Pain meds* (medications) are referred to as *pain relievers* in the survey. *Cocaine* includes crack. Excludes tranquilizers, stimulants, hallucinogens, sedatives, inhalants, over-the-counter drugs, and legitimate use of prescription drugs.

Sources: "Table A.1B," in *Behavioral Health Trends in the United States: Results from the 2014 National Survey on Drug Use and Health*, Substance Abuse and Mental Health Services Administration (SAMHSA), 2015, www.samhsa.gov (PDF); and "Table A.7B" in *Key Substance Use and Mental Health Indicators in the United States: Results from the 2016 National Survey on Drug Use and Health*, SAMHSA, 2017, www.samhsa.gov.

Nationally, past-month marijuana use increased by over 40% between 2002 and 2016. In contrast, the rate of past-month cocaine use fell by more than 20% during the same period. Of all the drugs shown, heroin was used least frequently.

Adolescent Lifetime Use of Substances
by Type and School Grade, California, 2013 to 2015

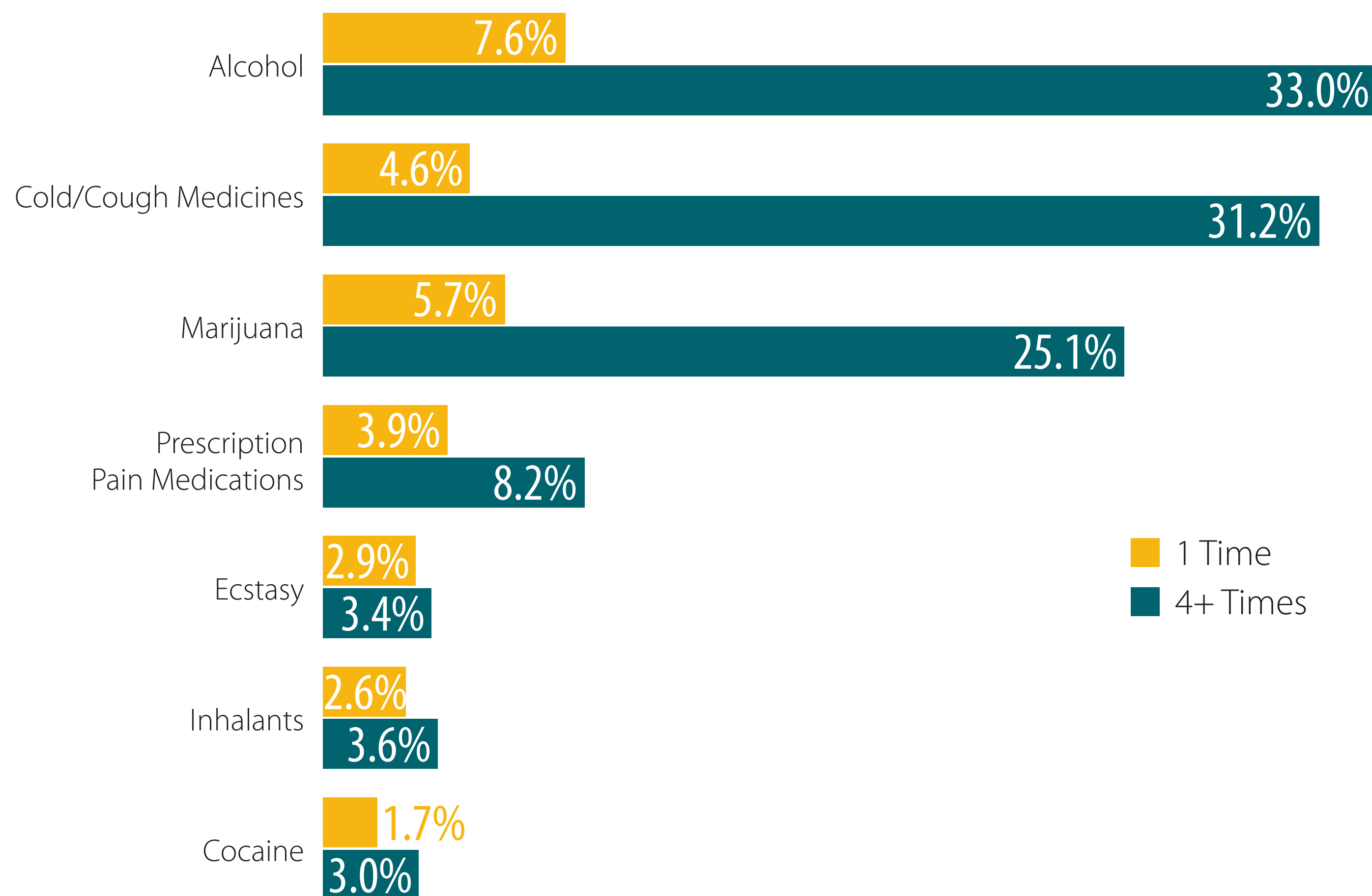


Notes: Includes students who indicated that they used substances to get high or for other than medical reasons. *Cocaine* includes methamphetamines or any amphetamines. *Prescription pain medications* (referred to as *painkillers* in the source) includes tranquilizers or sedatives, diet pills, or other prescription stimulants. *N/A* is not asked.

Source: Gregory Austin et al., *School Climate, Substance Use, and Well-Being Among California Students, 2013–2015: Results of the Fifteenth Biennial Statewide Student Survey, Grades 7, 9, and 11*, WestEd Health & Human Development Program, 2016, surveydata.wested.org (PDF).

California students' reported use of alcohol or drugs to get high increased dramatically from grade 7 to grade 11. A majority of high school juniors reported having used alcohol and more than one-third reported having used marijuana in their lifetimes. One in five juniors reported having used prescription pain medications to get high.

Adolescent Lifetime Use of Substances
by Number of Times Used, California, 2013 to 2015



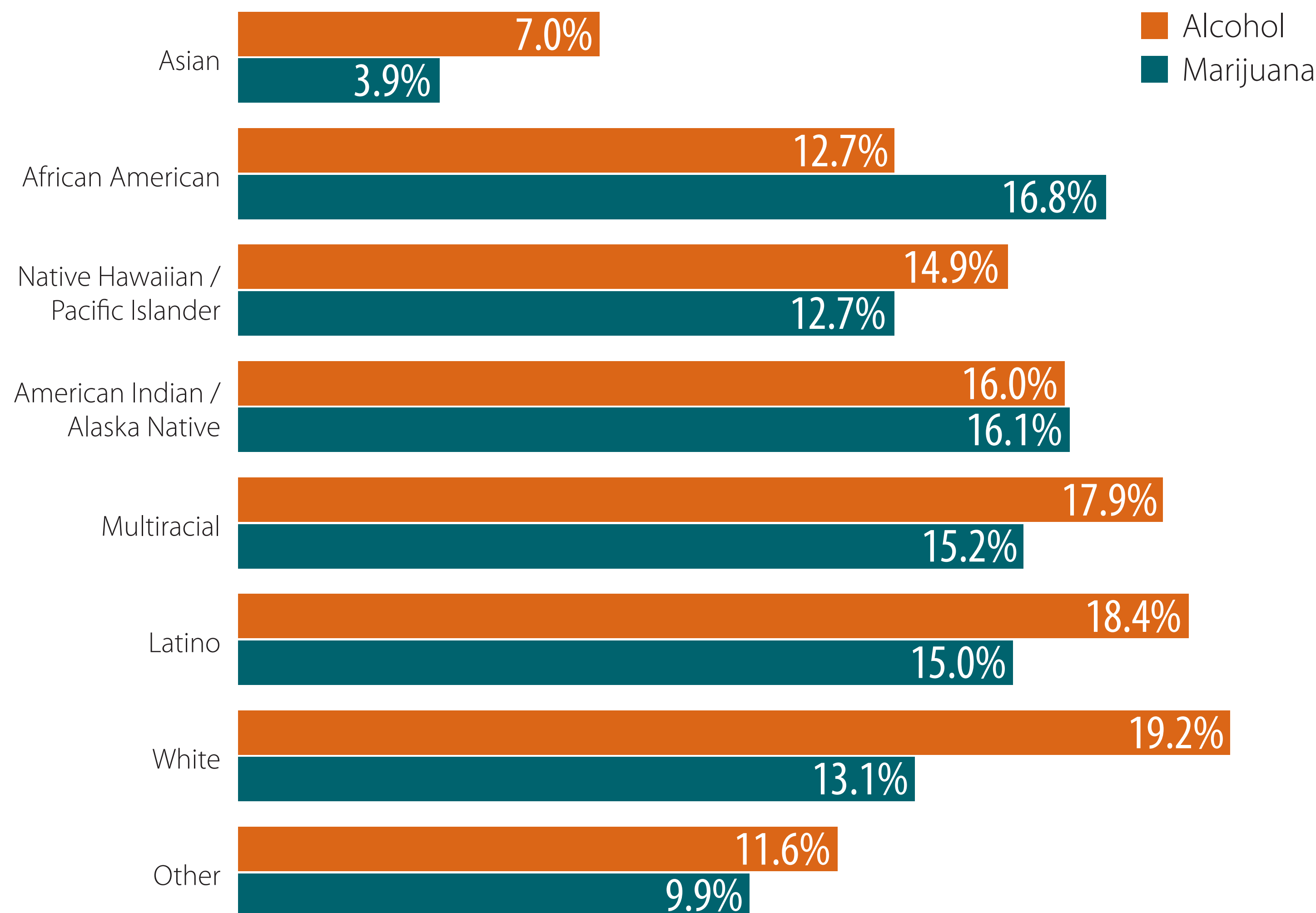
Notes: Includes students who indicated that they used substances to get high or for other than medical reasons. *Cold/cough medicines* includes other over-the-counter medicines. *Prescription pain medications* (referred to as *painkillers* in the source) includes tranquilizers or sedatives, diet pills, or other prescription stimulants. *Ecstasy* includes LSD and other psychedelics. *Cocaine* includes methamphetamines or any amphetamines.

Source: Gregory Austin et al., *School Climate, Substance Use, and Well-Being Among California Students, 2013–2015: Results of the Fifteenth Biennial Statewide Student Survey, Grades 7, 9, and 11*, WestEd Health & Human Development Program, 2016, surveydata.wested.org (PDF).

Alcohol, cold/cough medicines, and marijuana were the most frequently used substances among California 11th graders. About one in three reported having used alcohol or cold/cough medicines to get high four or more times in their lifetimes, and one in four had used marijuana four or more times.

Adolescent Lifetime Use of Alcohol and Marijuana
by Race/Ethnicity, California, 2013 to 2015

PERCENTAGE OF 7TH, 9TH, AND 11TH GRADE PUBLIC SCHOOL STUDENTS WHO USED … FOUR OR MORE TIMES

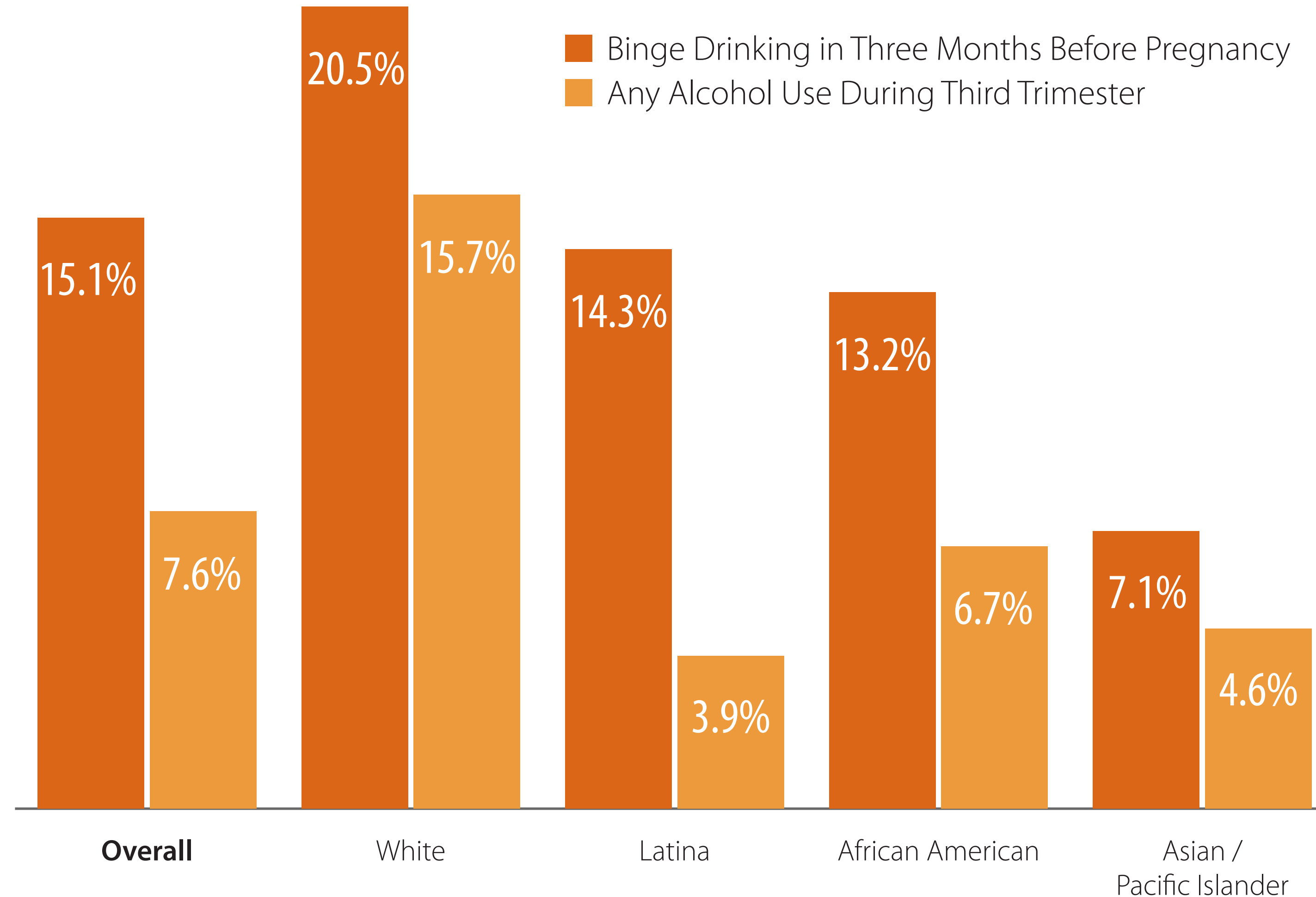


Nearly one in five California Latino and white high school students reported drinking alcohol four or more times in their lifetimes. Of all racial/ethnic groups, Asian students were least likely to report having used either alcohol or marijuana four or more times.

Sources: "Alcohol Use in Lifetime, by Race/Ethnicity," kidsdata.org, 2015, www.kidsdata.org; "Marijuana Use in Lifetime, by Race/Ethnicity," kidsdata.org, 2015, www.kidsdata.org; and "What Is Marijuana," National Institute on Drug Abuse, last modified February 2018, www.drugabuse.gov.

Alcohol Use Before and During Pregnancy
by Race/Ethnicity, California, 2013 to 2014

PERCENTAGE OF WOMEN WITH A LIVE BIRTH



Notes: Data from population-based survey of 13,963 California-resident women with a live birth in 2013–2014. Data are weighted to represent all women with a live birth in California. *Binge drinking* is consuming four or more alcoholic drinks in one sitting (within about two hours) at least one time during the three months before pregnancy.

Source: *MIHA Data Snapshot, by Race/Ethnicity, 2013–2014*, California Department of Public Health, 2016, www.cdph.ca.gov.

One in 6 California women reported binge drinking in the three months before pregnancy, and 1 in 13 reported using alcohol during the third trimester of pregnancy. Both of these practices can have a negative impact on the health of the fetus, and were more common in white women, 1 in 5 of whom reported binge drinking before pregnancy.

Co-Occurring SUD and Mental Illness in Adults

by Age Group, United States, 2016

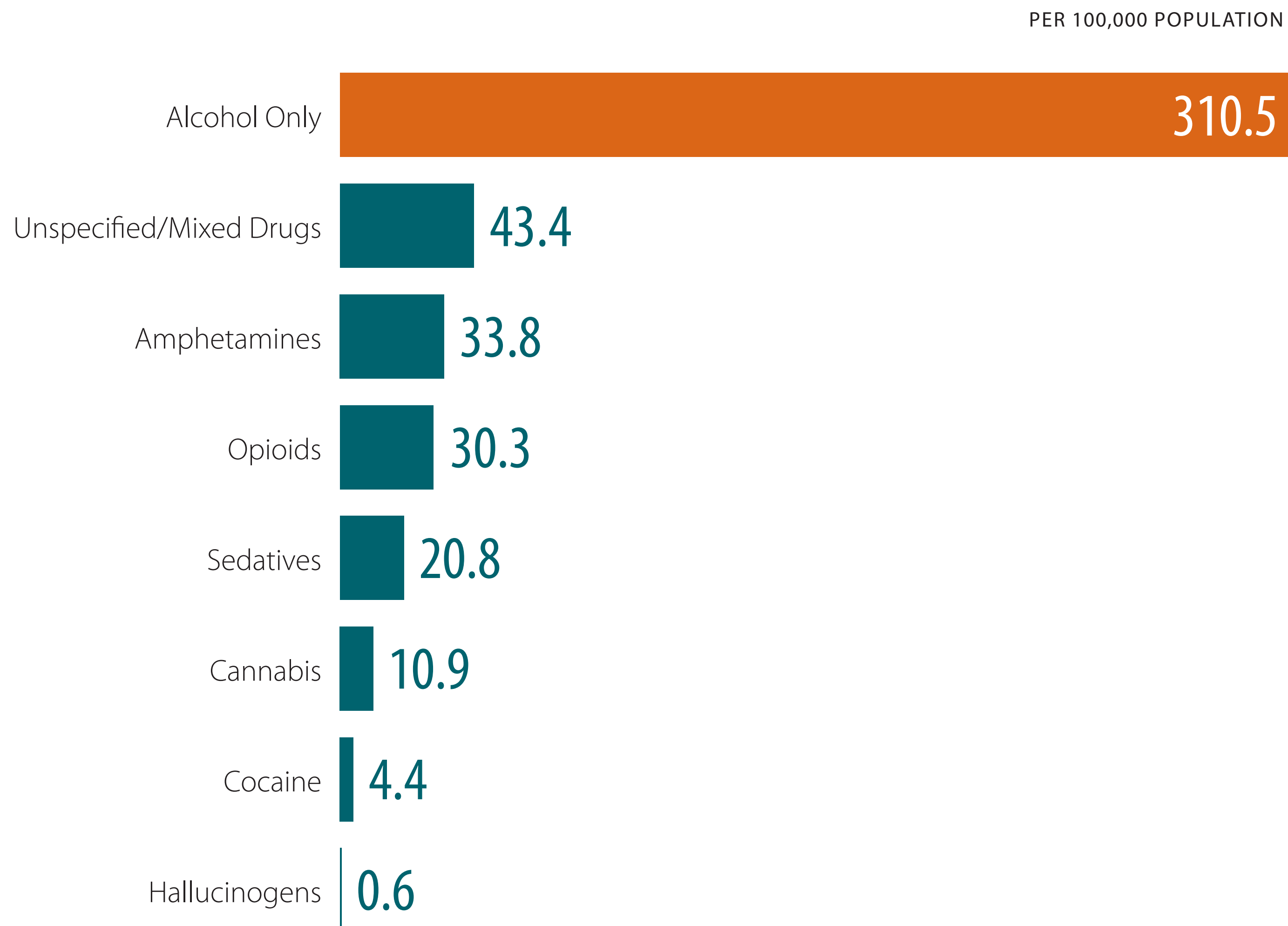
Notes: *SUD* is substance use disorder. An adult with *any mental illness* (AMI) is a person 18 or older who currently has, or at any time in the past year had, a diagnosable mental, behavioral, or emotional disorder, regardless of the level of impairment in carrying out major life activities. *Serious mental illness* (SMI), a categorization for adults age 18 and older, is any mental illness that results in substantial impairment in carrying out major life activities.

Source: "Table A.32B," in *Key Substance Use and Mental Health Indicators in the United States: Results from the 2016 National Survey on Drug Use and Health*, Substance Abuse and Mental Health Services Administration, 2017, www.samhsa.gov (PDF).

In the US, about 3% of adults had both a substance use disorder (SUD) and any mental illness during the past year — representing about one-third of all people with an SUD — and 1% had both an SUD and a serious mental illness. Those ages 18 to 25 were more likely than older adults to have these co-occurring conditions.

Nonfatal ED Visits for Alcohol or Other Drug Diagnoses

California, Annual Average, 2012 to 2014

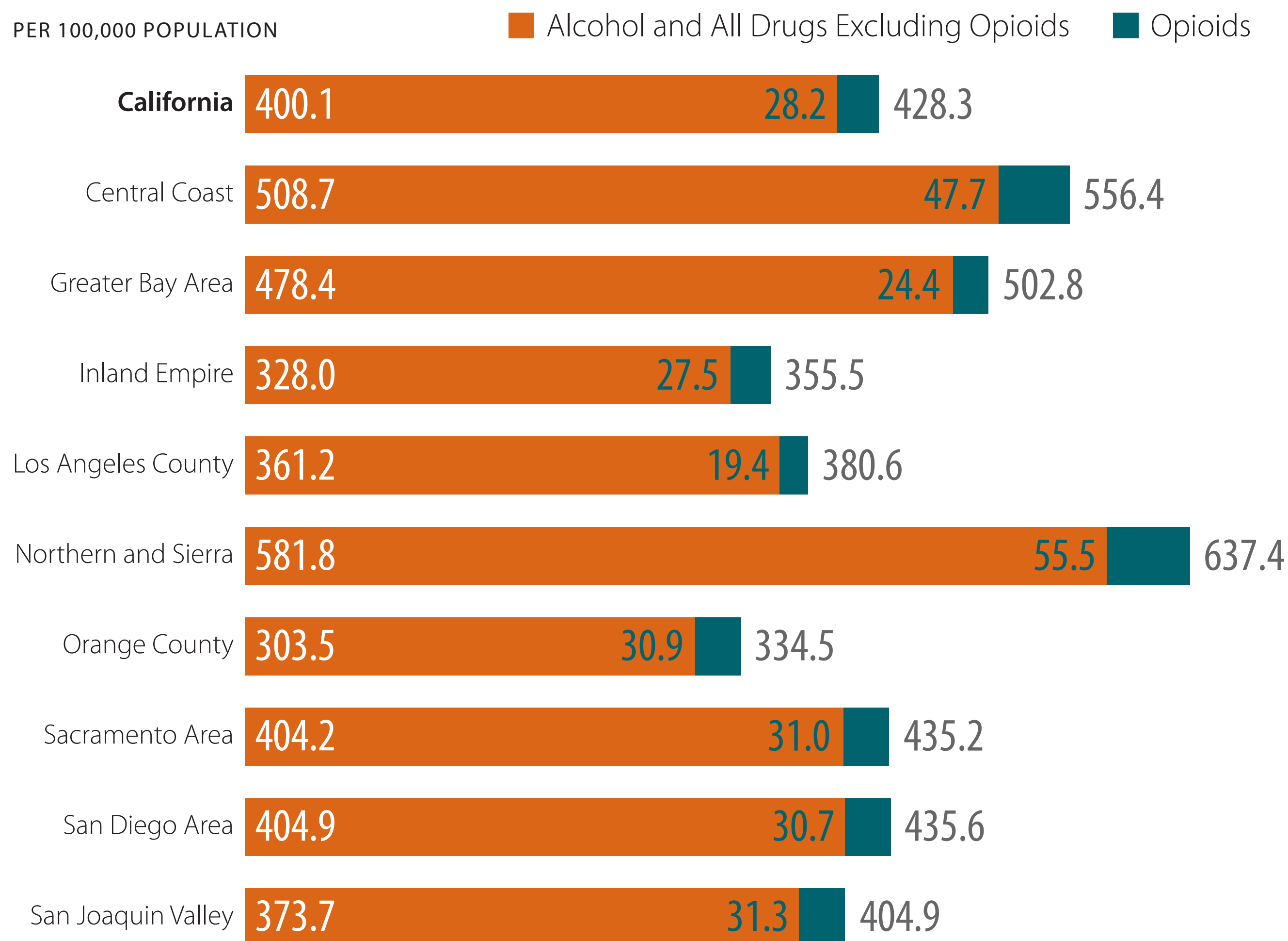


Alcohol accounted for more nonfatal emergency department visits than all other drug diagnoses combined.

Notes: *Nonfatal ED visits* refers to patients treated in emergency departments but not admitted to that hospital. Substance determined from principal diagnosis at discharge. *Opioids* includes heroin, methadone, prescription opioids, other opioids, other illegal narcotics, and other pharmaceutical drugs.

Source: Author-generated report, California Department of Public Health, epicenter.cdph.ca.gov.

Nonfatal ED Visits for Alcohol and Other Drug Diagnoses
by Region, California, Annual Average, 2012 to 2014



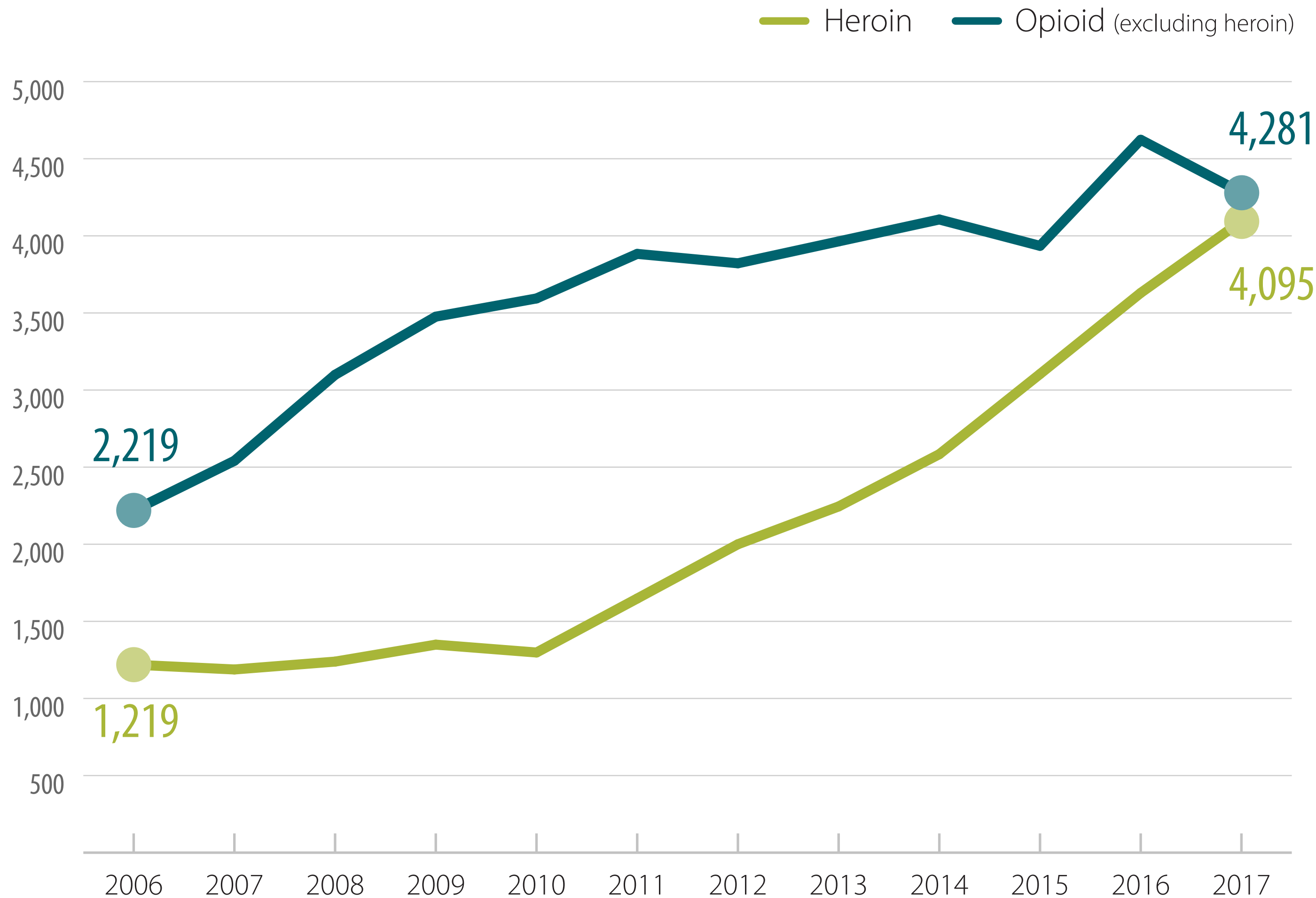
Notes: *Nonfatal ED visits* refers to patients treated in emergency departments but not admitted to that hospital. Alcohol and other drug-related visits were identified as having an ICD-9-CM principal diagnostic code or principal E-code related to alcohol or any other drug, including opioids. Excludes indirect consequences of substance use, such as motor vehicle injuries due to substance impairment, nonresidents, patients who died, newborns, and patients with unknown ages. *Opioids* includes heroin, methadone, prescription opioids, other opioids, other illegal narcotics, and other pharmaceutical drugs. Segments may not add to totals due to rounding. See Appendix F for a list of counties within each region.

Sources: Author calculations based on custom data set prepared by California Department of Public Health's Safe and Active Communities Branch, September 10, 2016, epicenter.cdph.ca.gov; and State and County Population Projections by Race/Ethnicity and Age (5-year groups) 2010–2060, California Department of Finance, www.dof.ca.gov.

Emergency department (ED) visits due to alcohol and other drug diagnoses varied geographically, with the Northern and Sierra region experiencing rates substantially above the state average. Opioid-related visits accounted for 5% to 9% of all substance-related ED visits in every region (not shown).

Nonfatal ED Visits for Opioids

California, 2006 to 2017



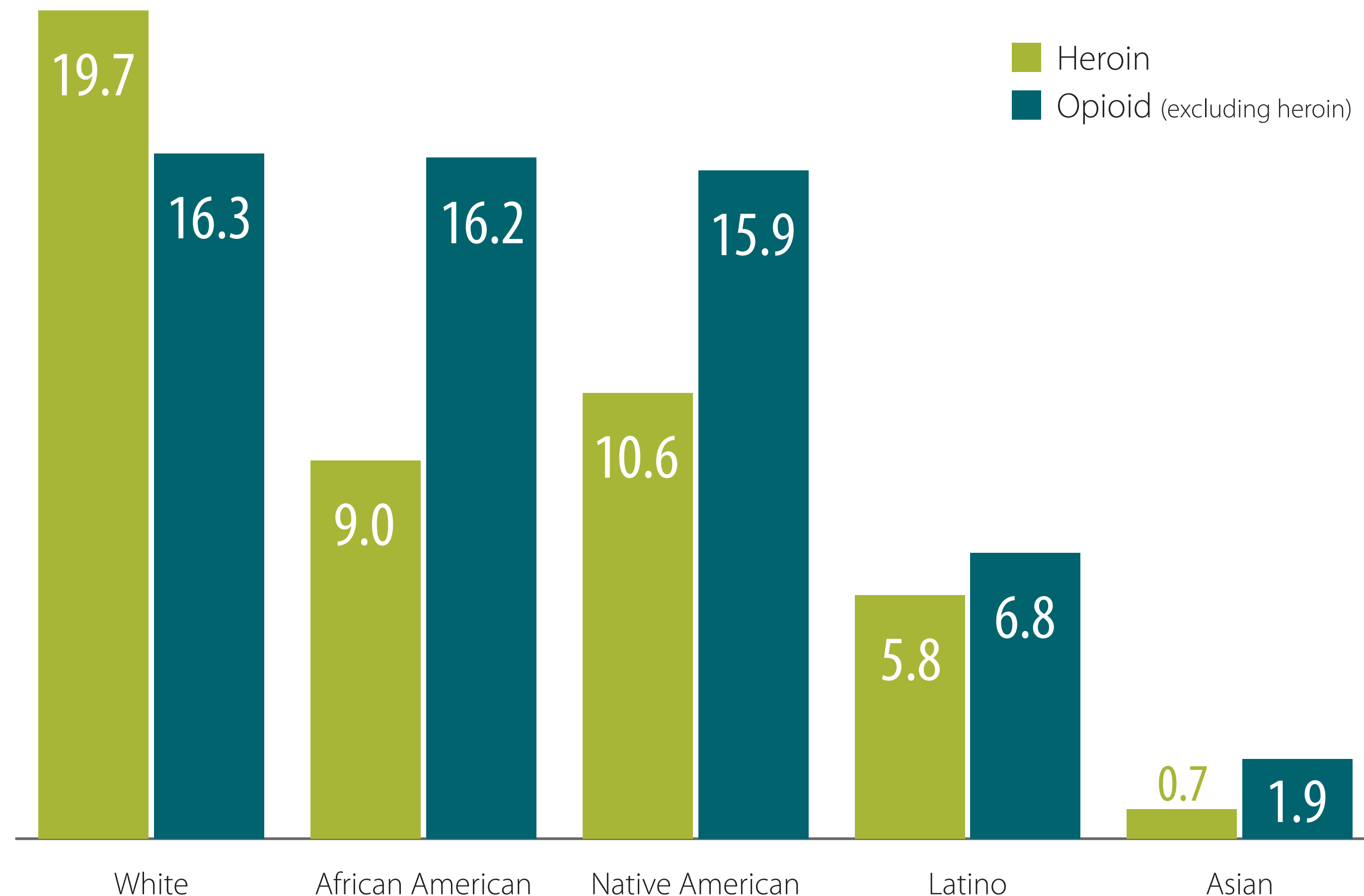
Notes: *Nonfatal ED visits* refers to emergency department visits caused by nonfatal acute poisonings due to the effects of opioid drugs regardless of intent (e.g., suicide, unintentional, or undetermined).

Source: "California Opiod Overdose Surveillance Dashboard," California Department of Public Health, accessed August 6, 2018, discovery.cdph.ca.gov.

Opioid use has been increasing in California, though the rates of use and overdose are lower than in many states (not shown). The number of heroin-related emergency department visits in California more than tripled between 2006 and 2017. Non-heroin opioid-related ED visits nearly doubled during the same time.

Nonfatal ED Visits for Opioids, by Race/Ethnicity

California, 2017



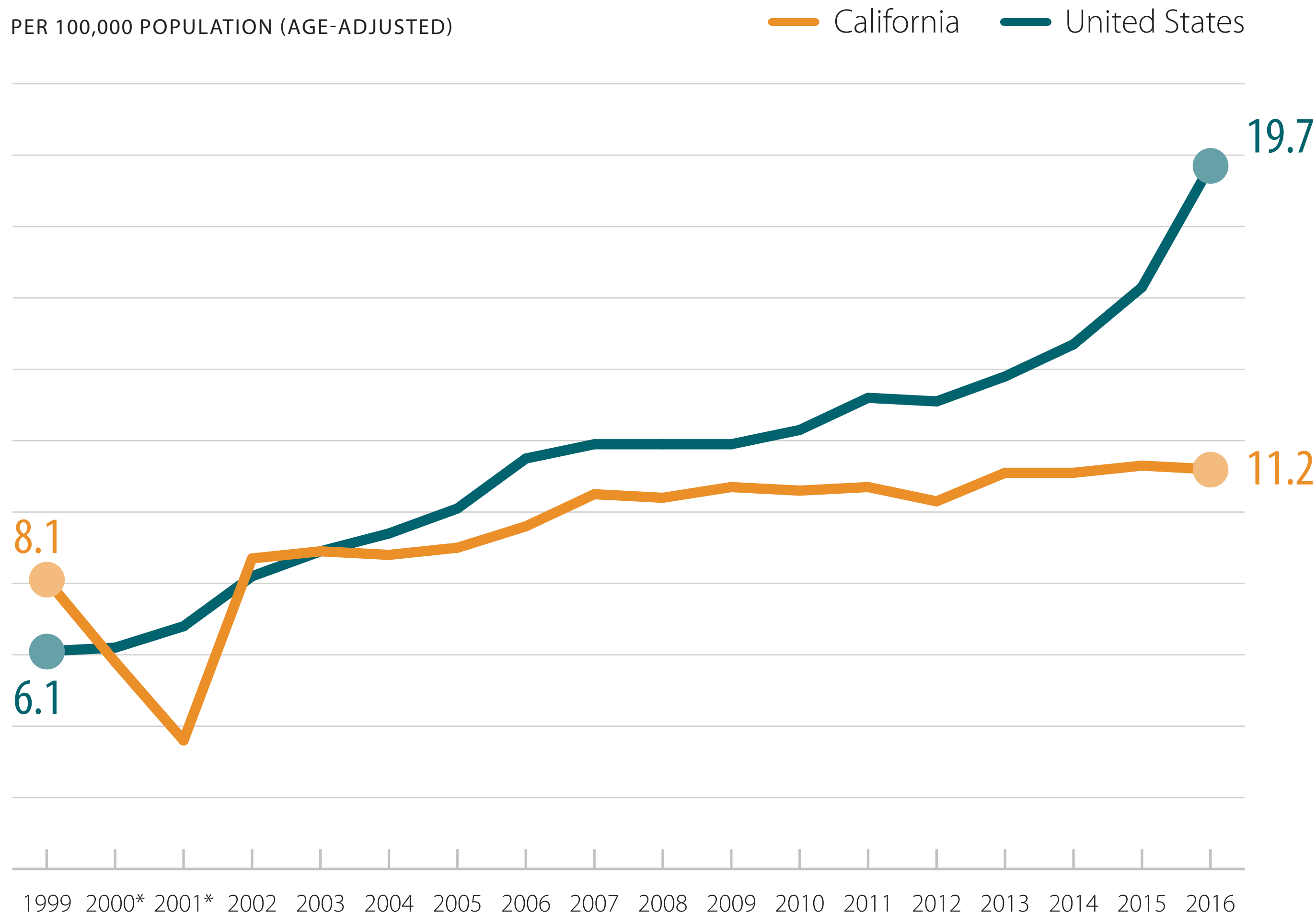
The rate of nonfatal emergency department (ED) visits for heroin overdose was substantially higher for whites than other races, while the rate of ED visits for non-heroin opioids was nearly the same between whites, African Americans, and Native Americans.

Notes: *Nonfatal ED visits* refers to emergency department visits caused by nonfatal acute poisonings due to the effects of opioid drugs regardless of intent (e.g., suicide, unintentional, or undetermined).

Source: "California Opiod Overdose Surveillance Dashboard," California Department of Public Health, accessed August 6, 2018, discovery.cdph.ca.gov.

Drug Poisoning Deaths

California vs. United States, 1999 to 2016



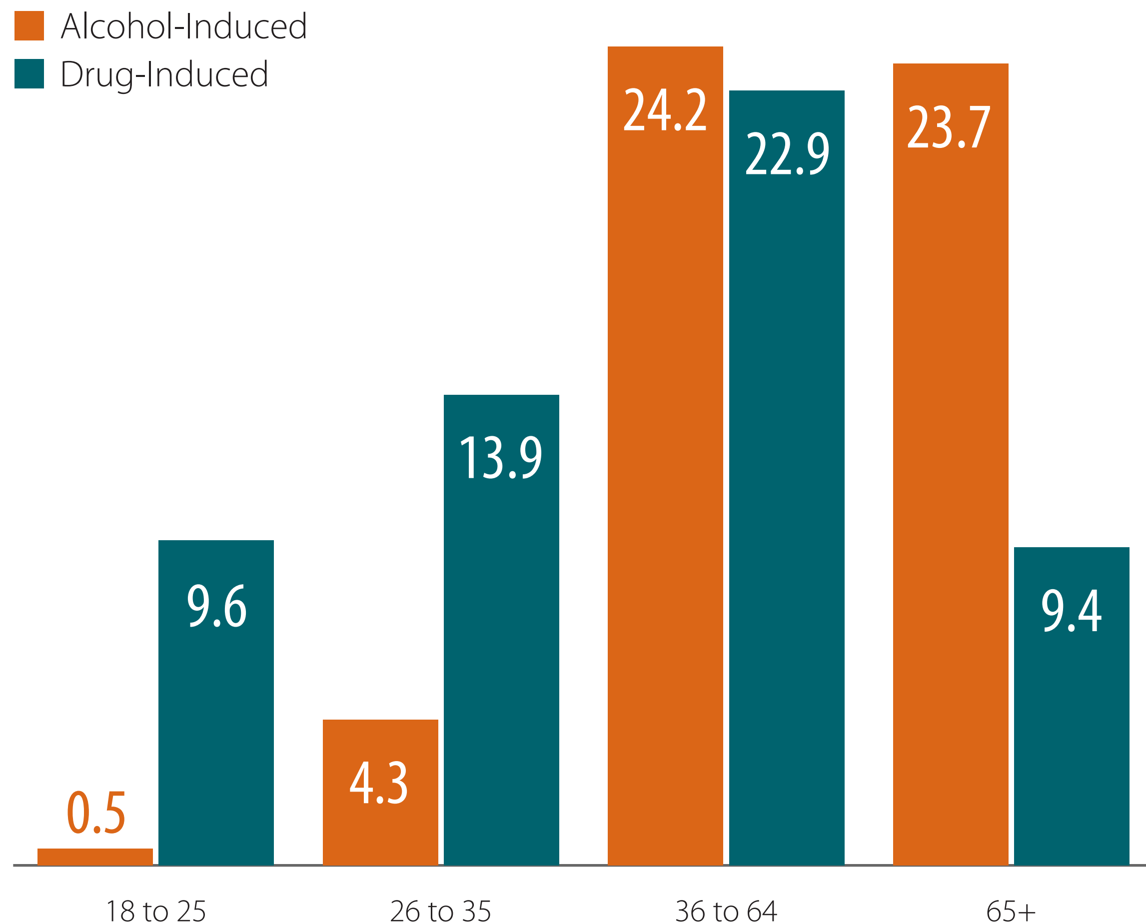
*The decline in drug poisoning mortality in California in 2000 and 2001 was an artifact of data collection. In those years, CDC was unable to obtain updated information on a large proportion of California death records that were submitted with cause and manner of death pending investigation.

Notes: California data come from registered death certificates. Excludes deaths when age is not indicated. Includes accidental, intentional, and undetermined poisoning by and exposure to (1) nonopioid analgesics, antipyretics, and antirheumatics; (2) antiepileptic, sedative-hypnotic, antiparkinsonism, and psychotropic drugs not elsewhere classified; (3) narcotics and psychodysleptics/hallucinogens not elsewhere classified; (4) other drugs acting on the autonomic nervous system; and (5) other and unspecified drugs, medicaments, and biological substances.

Source: "NCHS - Drug Poisoning Mortality by State: United States," Centers for Disease Control and Prevention, data.cdc.gov.

In California and nationally, the rate of deaths from drug poisoning from all illicit and prescribed drugs has grown since 1999. In 2016, there were 4,700 drug poisoning deaths in California, up from 2,700 in 1999 (not shown). California's rate of drug poisoning deaths has been lower than the national rate since 2004 and stable since 2013, while the national rate has increased.

Drug- and Alcohol-Induced Deaths
by Age Group, California, 2016



Deaths resulting from drugs and alcohol were highest for those between 36 and 64. The rate of drug-induced deaths for young adults was significantly greater than the rate of alcohol-induced deaths. The reverse was true for those over 65.

Notes: Data come from registered death certificates. Excludes deaths when age not indicated. *Drug-induced deaths* are those with ICD-10 codes that cover unintentional, suicide, homicide, and undetermined poisoning. *Alcohol-induced deaths* include accidental or intended poisoning, in addition to other conditions directly induced by use of alcohol.

Source: "Underlying Cause of Death 1999–2016," Centers for Disease Control and Prevention, released December 2017, accessed August 22, 2018, wonder.cdc.gov.

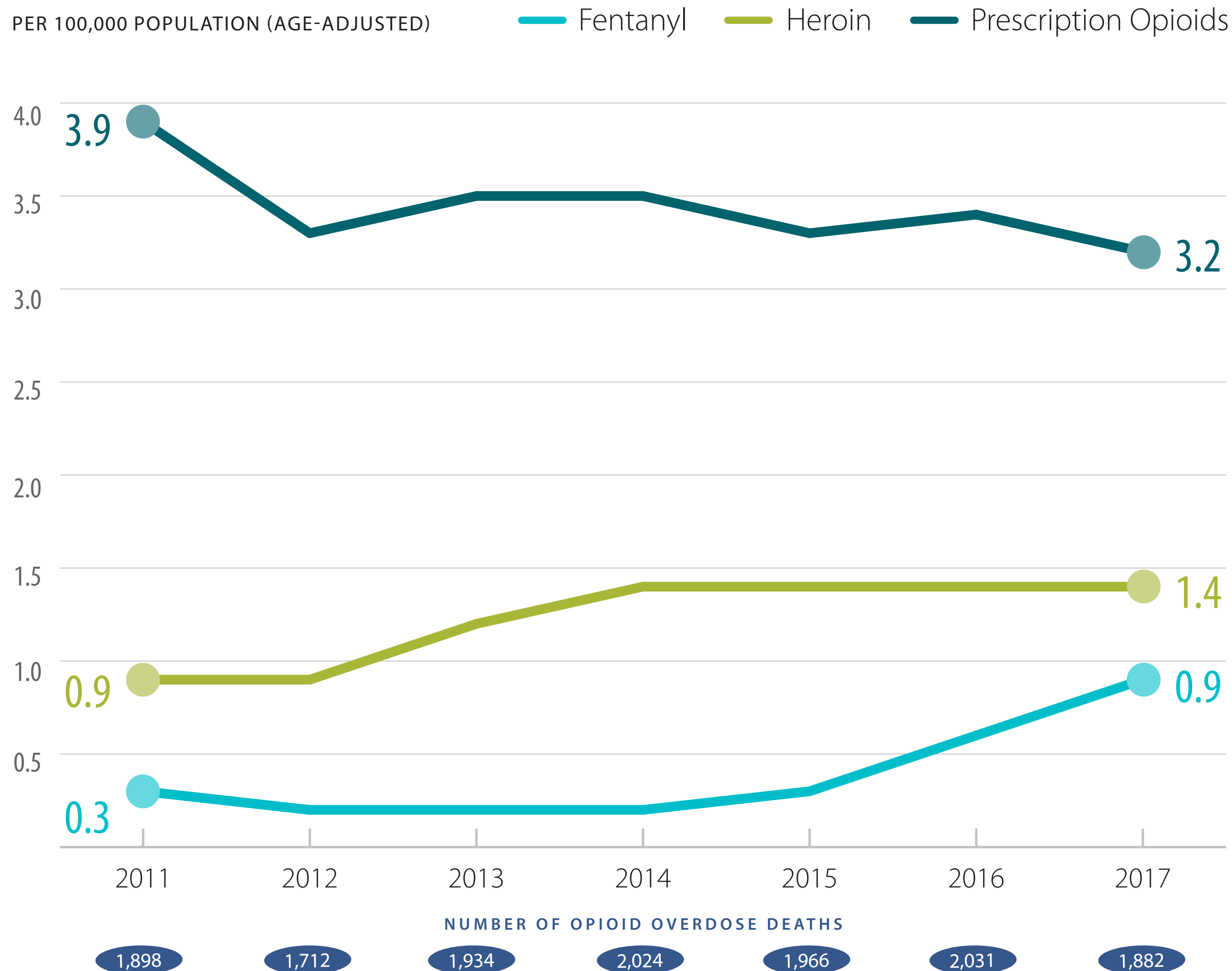
Drug- and Alcohol-Induced Deaths
by Gender and Race/Ethnicity, California, 2016

The rate of alcohol-induced deaths was almost three times higher among males than females; males were two times as likely as females to die as a result of drug use. Drug- and alcohol-induced death rates differed considerably by ethnicity, with American Indians / Alaska Natives having the highest rates.

Notes: Data come from registered death certificates. Excludes deaths when age not indicated. *Drug-induced deaths* are those with ICD-10 codes that cover unintentional, suicide, homicide, and undetermined poisoning. *Alcohol-induced deaths* include accidental or intended poisoning, in addition to other conditions directly induced by use of alcohol.

Source: "Underlying Cause of Death 1999–2016," Centers for Disease Control and Prevention, released December 2017, accessed August 22, 2018, wonder.cdc.gov.

Opioid Overdose Deaths
California, 2011 to 2017



Notes: *Fentanyl* is a strong synthetic opioid that may be prescribed or obtained illegally. *Prescription opioid deaths* are based on an underlying cause of death being ICD-10 codes X40–X44 (unintentional), X60–X64 (suicide), X85 (homicide), or Y10–Y14 (undetermined intent) plus at least one of these multiple cause-of-death codes: T40.2, T40.3, or T40.4.

Source: "California Opioid Overdose Surveillance Dashboard," California Department of Public Health, accessed August 2, 2018, discovery.cdph.ca.gov.

In 2017, 1,335 of the 1,882 deaths from opioid overdose in California involved prescription opioids. Death rates from heroin overdose have remained flat since 2014, after annual increases from 2011 to 2014. Deaths resulting from fentanyl overdose increased by more than 50% between 2016 and 2017.

About Substance Use Disorder Treatment

Treatment for substance use disorders is comprised of multiple service components. Some of these, which may be provided in outpatient or inpatient settings, include the following:

Behavioral Therapies

Motivational enhancement therapy helps people resolve their ambivalence about engaging in treatment and stopping drug use, in order to evoke internally motivated change.

Cognitive behavioral therapy teaches skills to identify and change problem behaviors and address other life challenges that may influence use of substances.

Family therapy addresses a youth's substance use problems while considering family dynamics that may influence the youth's substance use and other risky behaviors.

Medication-Assisted Treatment

Medicated-assisted treatment (MAT) is the use of FDA-approved medications, in combination with counseling and behavioral therapies, to treat opioid or alcohol use disorder. Methadone and buprenorphine are two commonly used medications to treat opioid addiction. Naltrexone is used to treat alcohol and opioid use disorder.

Recovery Support Services

Recovery support services are nonclinical services that are used with treatment to support individuals in their recovery goals. These services are often provided by peers or others who are already in recovery.

There are numerous approaches to treating substance use disorders (SUDs), depending on the primary substance being used and the severity of the SUD, as well as the preferences and needs of the person in treatment.

Sources: "Drugs, Brains, and Behavior: The Science of Addiction," National Institute on Drug Abuse, www.drugabuse.gov; A. Thomas McLellan et al., "Drug Dependence, a Chronic Medical Illness: Implications for Treatment, Insurance, and Outcomes Evaluation," *JAMA* 284, no. 13 (October 4, 2000): 1689–95; "Medication-Assisted Treatment," Substance Abuse and Mental Health Services Administration (SAMHSA), www.samhsa.gov; and "Treatments for Substance Use Disorders," SAMHSA, www.samhsa.gov.

Medication Assisted Treatment Expansion in California

California's **Medication Assisted Treatment (MAT) Expansion Project** aims to serve over 20,000 individuals with opioid use disorder (OUD), prevent drug overdoses, and treat OUD as a chronic disease. The project focuses on populations with limited MAT access, including rural areas and American Indian and Alaskan Native tribal communities, and statewide access to buprenorphine. California is receiving $90 million over a two-year period (May 2017 to May 2019) from the federal 21st Century Cures Act for this project.

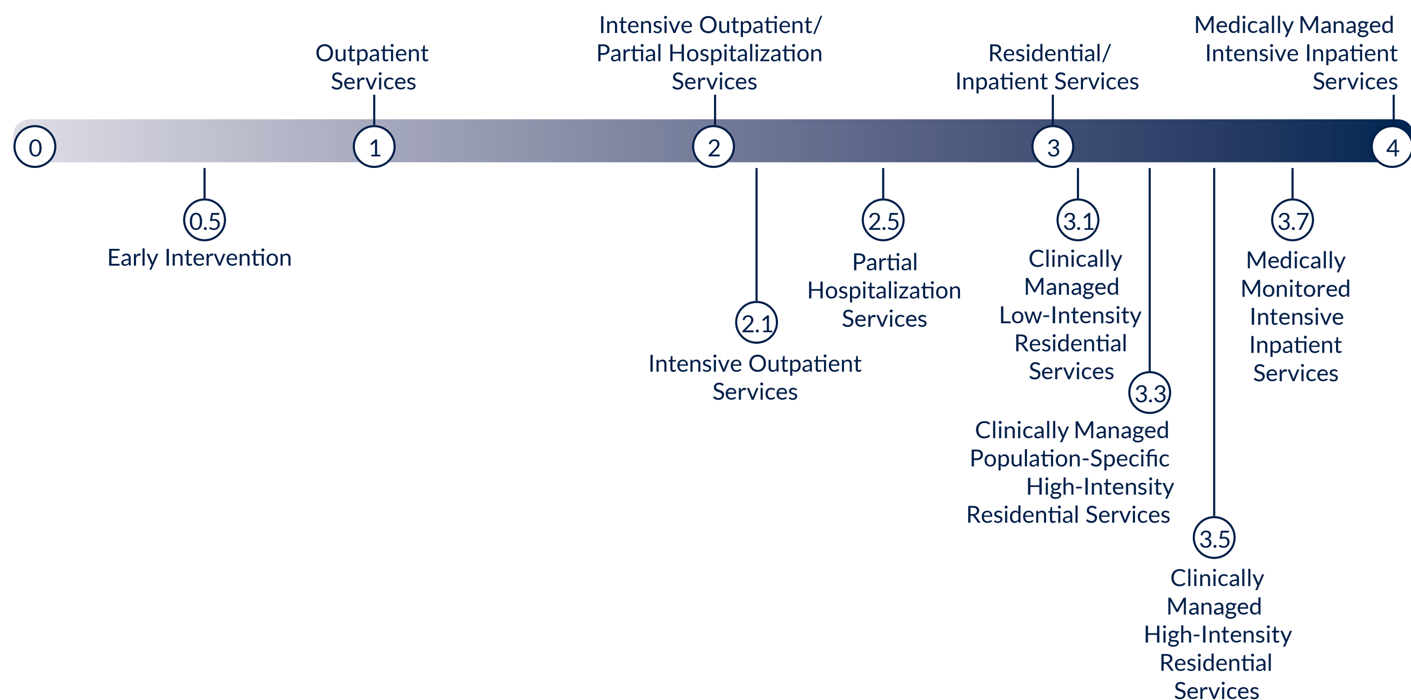
The **Medication Assisted Treatment Expansion Project 2.0** seeks to address the opioid crisis by increasing access to MAT using three FDA-approved medications for the treatment of OUD, reducing unmet treatment need, and reducing opioid overdose–related deaths through the provision of prevention, treatment, and recovery activities. The Substance Abuse Mental Health Services Administration has allocated $69 million per year for up to two years (September 2018 to September 2020) to fund this MAT expansion project.

Medication-assisted treatment (MAT) is considered the standard of care for opioid and alcohol use disorder. California is in the process of implementing major expansions in MAT access using federal grant funds.

Source: "California's Medication Assisted Treatment Expansion Project 2.0 (State Opioid Response)," California Department of Health Care Services, www.dhcs.ca.gov.

ASAM Levels of Substance Use Disorder Care

The ASAM Criteria is a collection of objective guidelines that allow clinicians to standardize treatment planning and where patients are placed in treatment, as well as how to provide continuing, integrated care and ongoing service planning.



The American Society for Addiction Medicine (ASAM) has defined levels of substance use disorder treatment, ranging from early intervention to address risky use of substances, to medically managed intensive inpatient services to treat severe withdrawal symptoms.

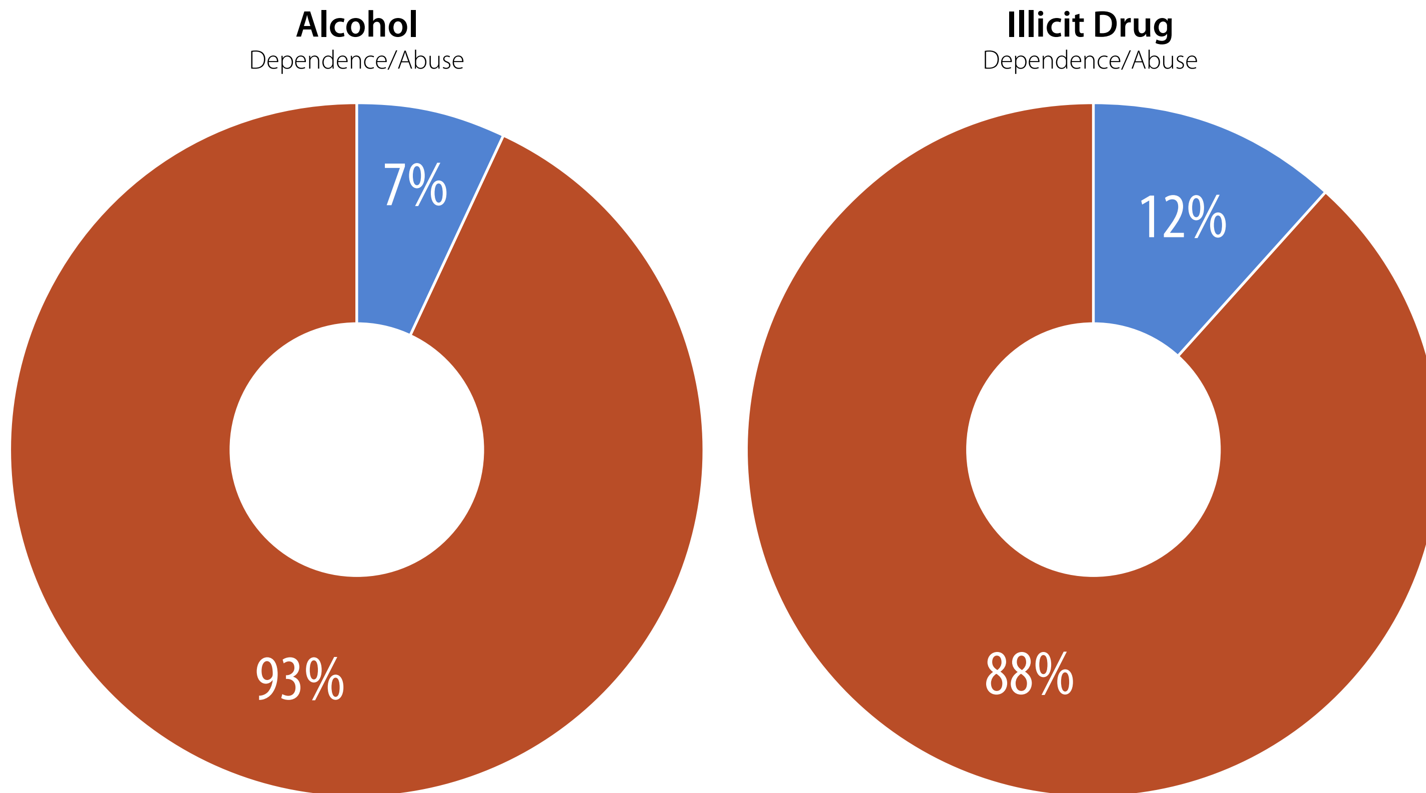
Notes: Within the five broad levels of care (0.5, 1, 2, 3, and 4), decimal numbers are used to further express gradations of intensity of services. The decimals listed here represent benchmarks along a continuum, meaning patients can move up or down in terms of intensity without necessarily being placed in a new benchmark level of care.
See Appendices C and D for definitions of each level of care, and the type of licensure required for each in California.

Source: "What Are the ASAM Levels of Care?," American Society of Addiction Medicine, asamcontinuum.org.

Treatment for Alcohol or Illicit Drug Dependence or Abuse

California, Annual Average, 2010 to 2014

PERCENTAGE OF POPULATION WITH ALCOHOL/DRUG DEPENDENCE/ABUSE AGE 12 AND OVER WHO…



About 1 in 10 people age 12 and over who were dependent on or misused alcohol or illicit drugs, received treatment at some time during the year prior to being surveyed. California's treatment rate for illicit drug use disorder is lower than the national rate of 14.6%, but the state's rate of treatment for alcohol use disorder is similar to the national average (not shown).

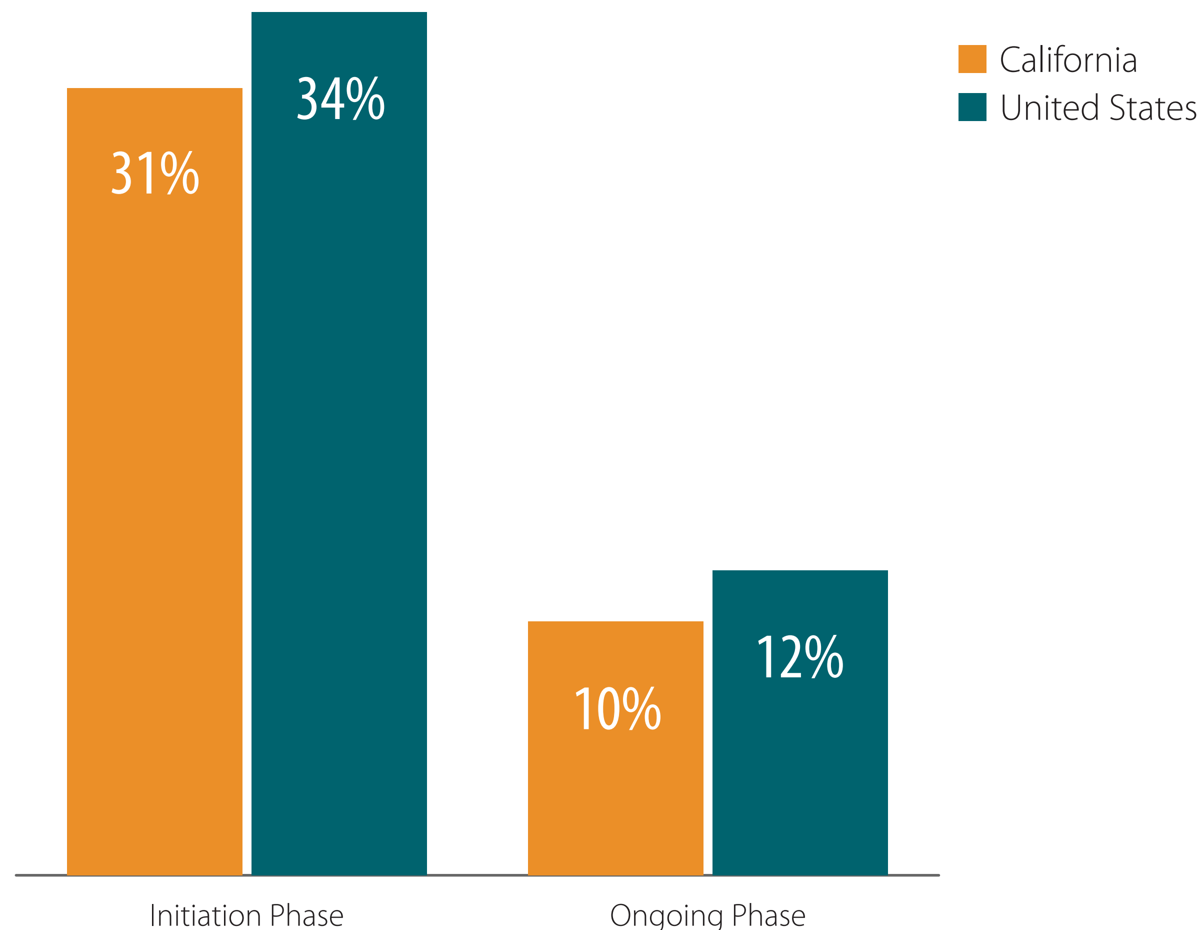
Notes: *Illicit drugs* includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, methamphetamine, and nonmedical use of prescription drugs. See page 4 for further definition of *dependence*, *abuse*, and *illicit drugs*.

Source: *Behavioral Health Barometer: California, 2015*, Substance Abuse and Mental Health Services Administration, www.samhsa.gov (PDF).

Alcohol and Drug Dependence Treatment

Commercial Health Plans, California vs. United States, 2016

PERCENTAGE WITH A NEW EPISODE OF ALCOHOL OR DRUG DEPENDENCE WHO RECEIVED TREATMENT

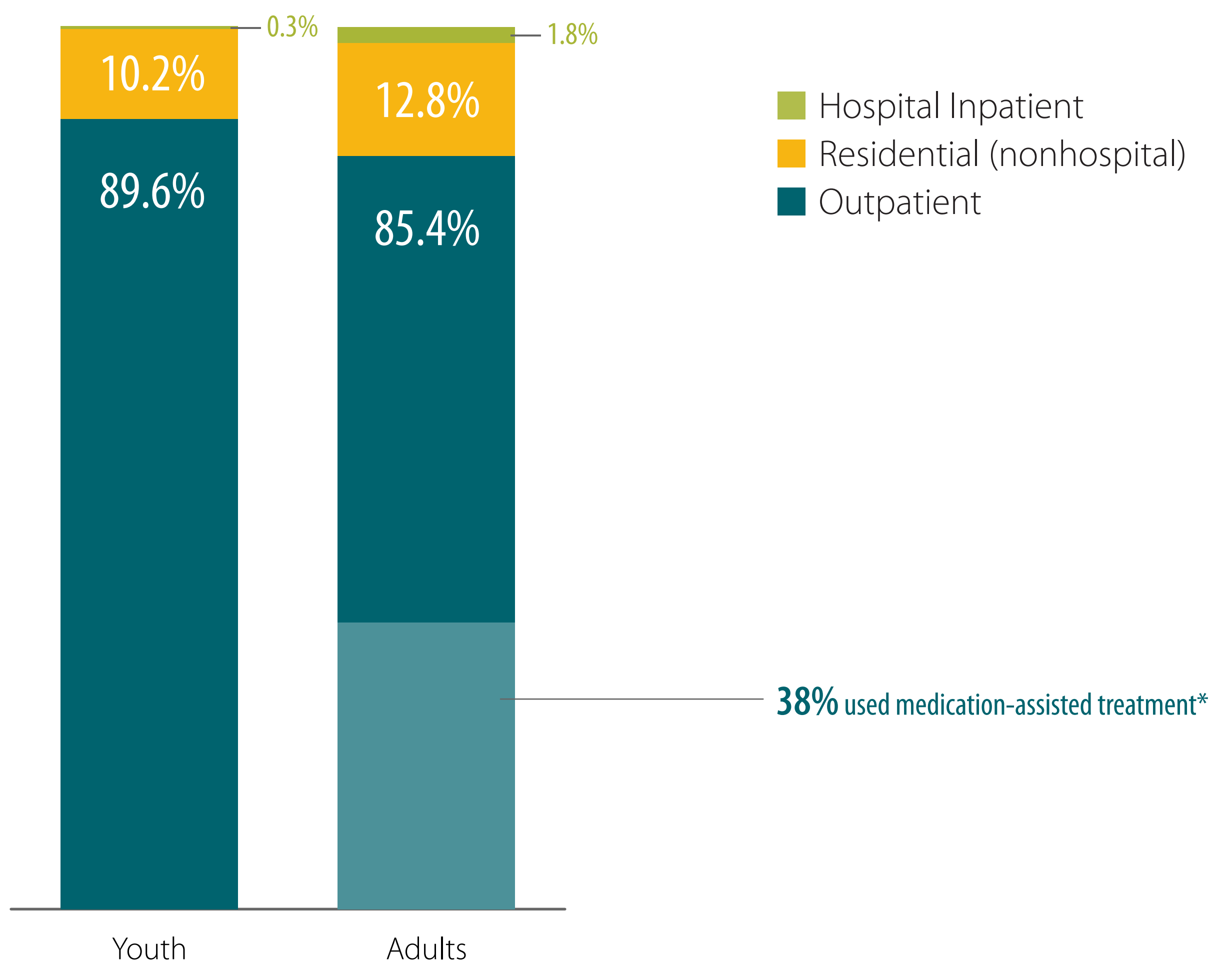


Relatively few commercial health plan members received substance use disorder (SUD) treatment consistent with National Committee for Quality Assurance standards. Only 1 in 3 California members with an SUD had an initial treatment visit within two weeks of diagnosis, and only about 1 in 10 had at least two follow-up visits within a month of initial treatment. National rates were slightly higher than California rates.

Notes: The National Committee on Quality Assurance (NCQA) standard for the prompt *initiation* of SUD treatment is to start alcohol or other drug services within 14 days of the patient being diagnosed with alcohol or drug dependence. An accepted standard for engagement in *ongoing* treatment is to have at least two follow-up treatment services within 30 days of an initial treatment visit. Health plan scores include PPO plans as well as several managed health care insurance products, which are commonly called HMO and POS (point of service).

Source: "California Health Plans Compared to Health Plans Nationwide," Office of the Patient Advocate, accessed April 12, 2018, reportcard.opa.ca.gov.

Clients in Substance Use Disorder Treatment
by Level of Care, California, 2015



*Data on use of medication-assisted treatment for youth are not available.

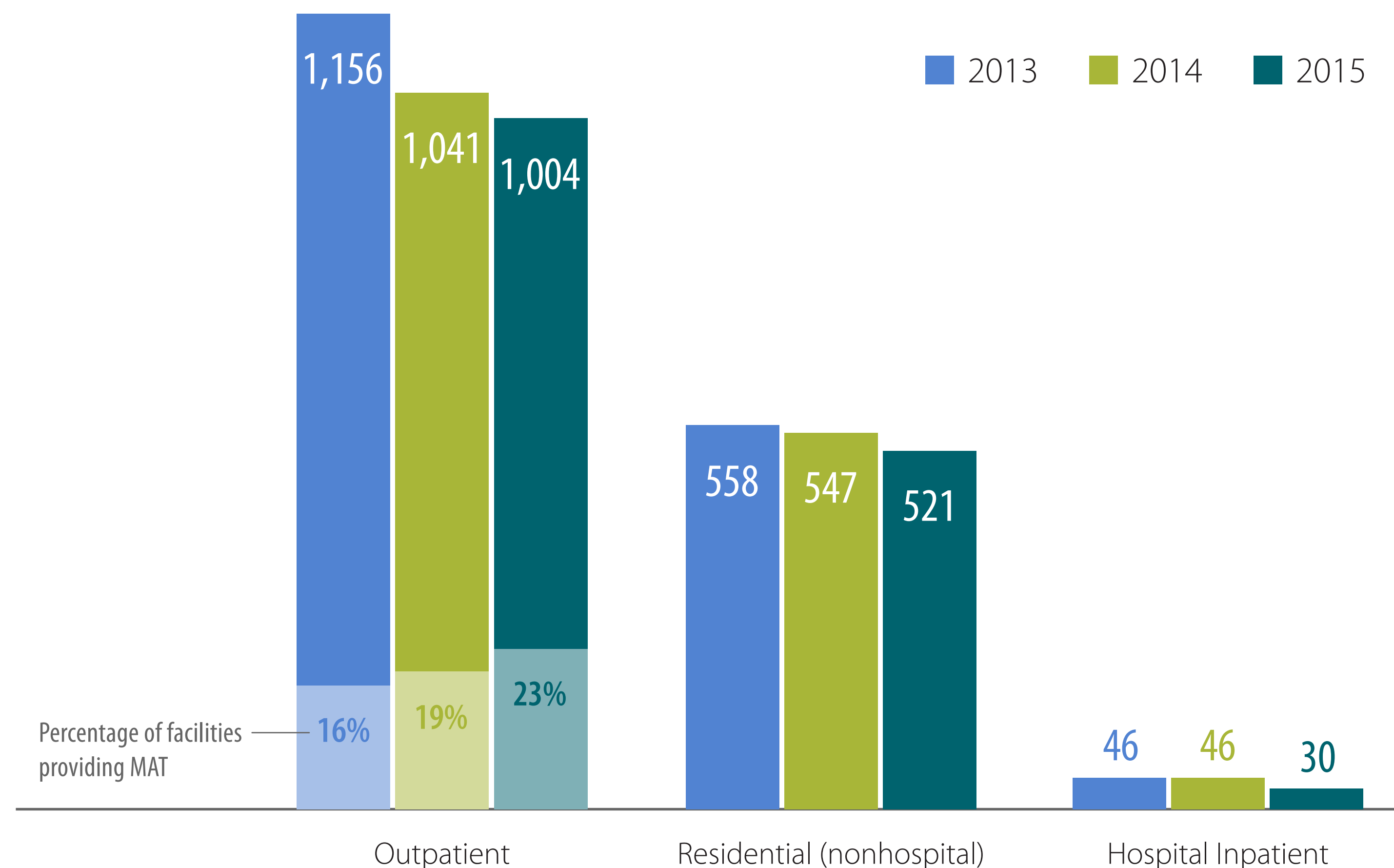
Notes: The Substance Abuse and Mental Health Services Administration (SAMHSA) administers this annual survey to public and private alcohol and drug abuse treatment facilities, collecting data for a designated point in time (March 31, 2015). The California survey rate of response for 2015 was 90.3%.

Sources: Author calculations based on *National Survey of Substance Abuse Treatment Services (N-SSATS): 2015 — Data on Substance Abuse Treatment Facilities*, SAMHSA, March 2017, www.samhsa.gov (PDF); and "Narcotic Treatment Programs (NTP)," California Department of Health Care Services, last modified October 3, 2013, www.dhcs.ca.gov.

Most clients who received substance use disorder (SUD) treatment used outpatient services. One in three adults being treated for SUD received MAT. One in eight adults being treated received residential care and 2% received hospital care. About 90% of California adolescents with SUD received outpatient treatment.

SUD Treatment Facilities, by Level of Care

California, 2013 to 2015

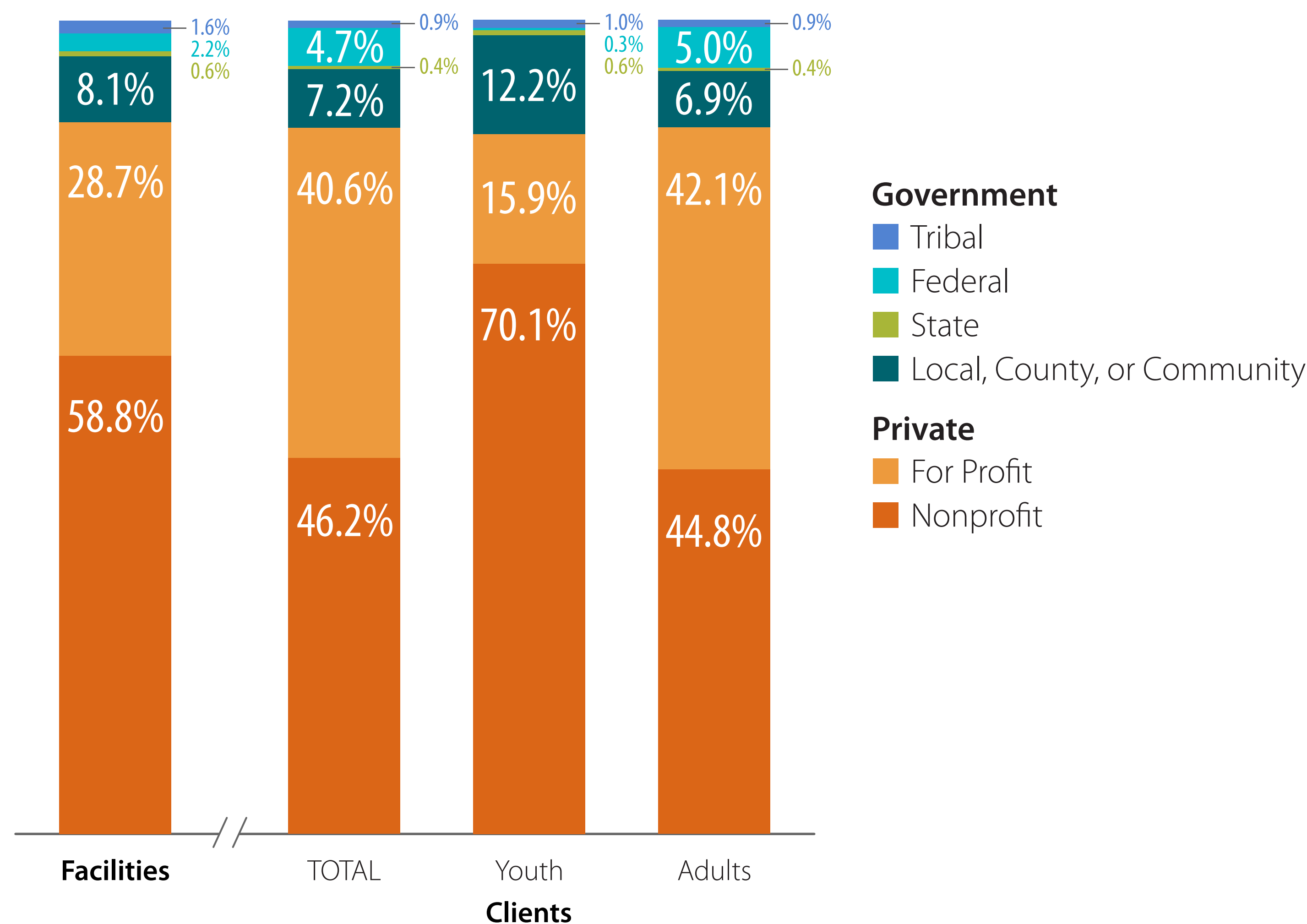


The number of California SUD treatment facilities decreased across all categories — outpatient, residential, and hospital inpatient — from 2013 to 2015. However, the number of outpatient facilities that provided medication-assisted treatment (MAT) with methadone, buprenorphine, and/or naltrexone increased from 180 to 233 over the same period.

Notes: The Substance Abuse and Mental Health Services Administration (SAMHSA) administers this annual survey to public and private alcohol and drug abuse treatment facilities, collecting data for a designated point in time (March 31). The California survey response rate was 94.1% in 2013, 93.8% in 2014, and 90.3% in 2015. A facility may provide more than one type of care. *SUD* is substance use disorder. *MAT* is medication-assisted treatment with methadone/buprenorphine and/or injectable naltrexone. See Appendix E for a description of California SUD treatment programs and services.

Sources: *2013 State Profile — California National Survey of Substance Abuse Treatment Services (N-SSATS)*, SAMHSA, wwwdasis.samhsa.gov (PDF); *2014 State Profile — United States and Other Jurisdictions National Survey of Substance Abuse Treatment Services (N-SSATS)*, SAMHSA, wwwdasis.samhsa.gov (PDF); *National Survey of Substance Abuse Treatment Services (N-SSATS): 2015 — Data on Substance Abuse Treatment Facilities*, SAMHSA, March 2017, www.samhsa.gov (PDF); and "Narcotic Treatment Programs (NTP)," California Department of Health Care Services, last modified October 3, 2013, www.dhcs.ca.gov.

SUD Treatment Facilities and Clients in Treatment
by Owner Type, California, 2015



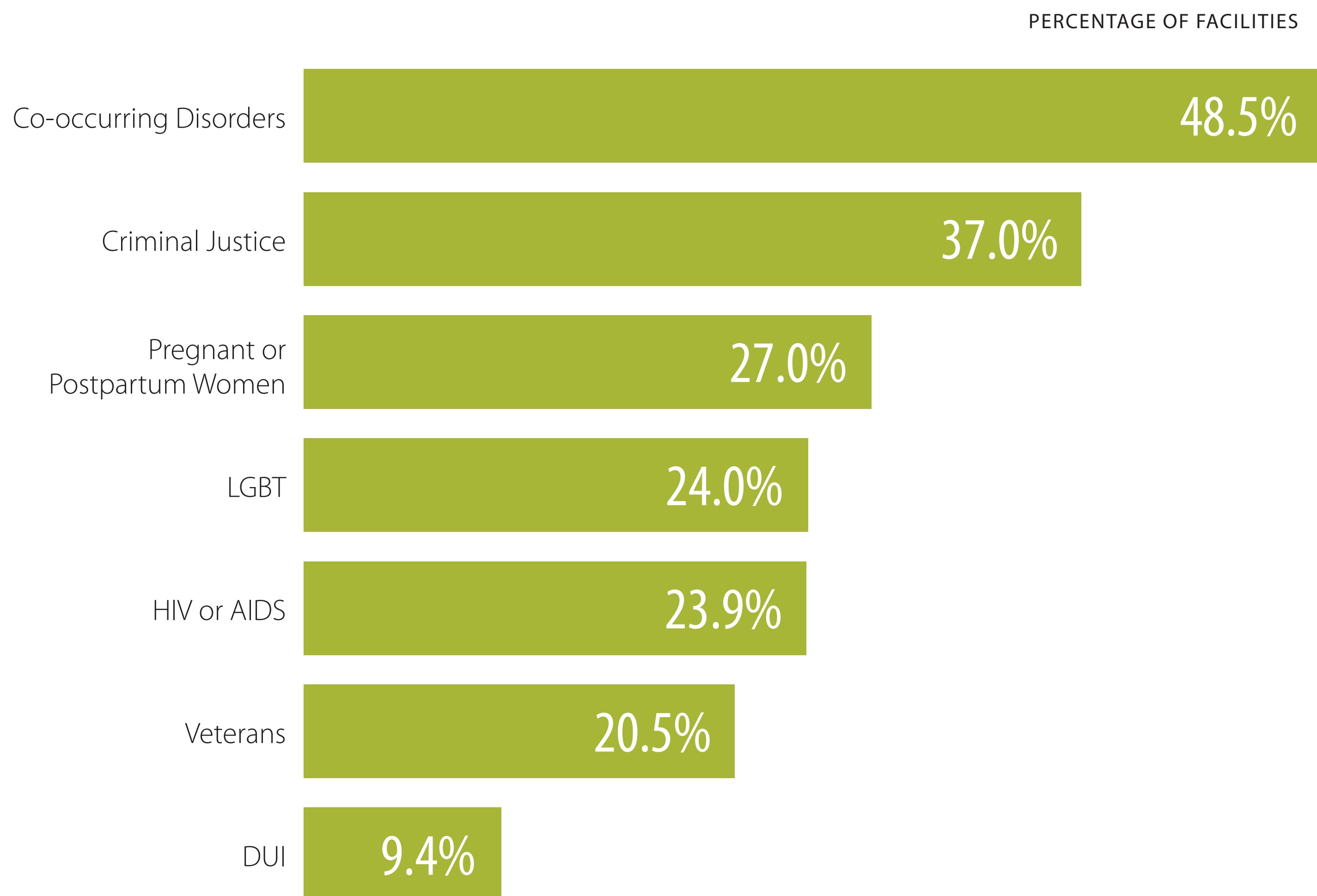
The majority (88%) of California substance use disorder (SUD) treatment facilities were privately owned. Of these private facilities, two-thirds were nonprofit. Local, county, and community-operated facilities accounted for 8% of total facilities and 7% of clients. Youth were more likely to be treated in nonprofit facilities than in other facility types.

Notes: The Substance Abuse and Mental Health Services Administration (SAMHSA) administers this annual survey to public and private alcohol and drug abuse treatment facilities, collecting data for a designated point in time (March 31, 2015). The California survey rate of response for 2015 was 90.3%. *SUD* is substance use disorder. *Youth* is under age 18.

Source: Author calculations based on *National Survey of Substance Abuse Treatment Services (N-SSATS): 2015 — Data on Substance Abuse Treatment Facilities*, SAMHSA, March 2017, www.samhsa.gov (PDF).

SUD Treatment Facilities, Programs Offered

by Selected Client Types, California, 2015

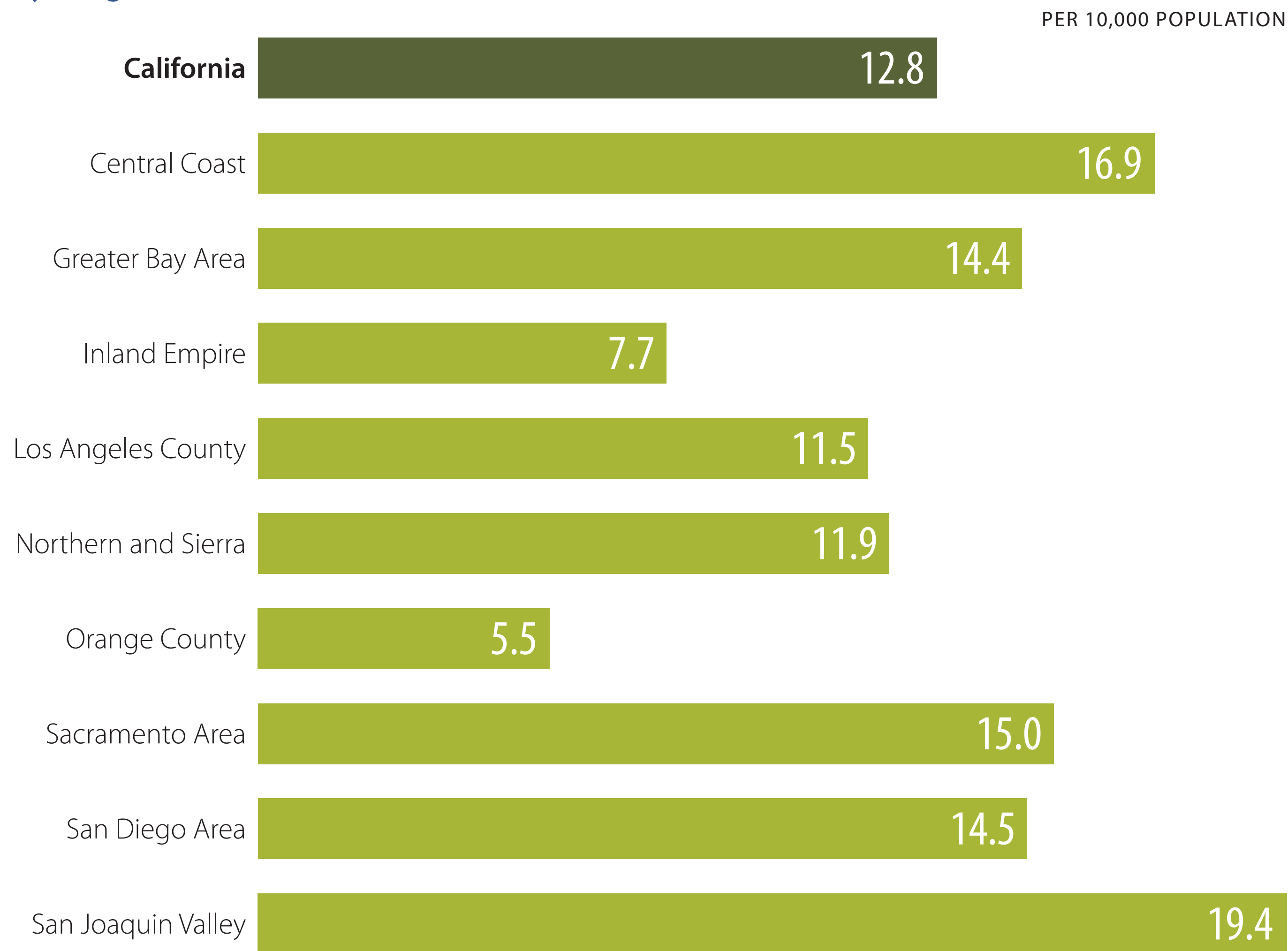


Notes: The Substance Abuse and Mental Health Services Administration (SAMHSA) administers this annual survey to public and private alcohol and drug abuse treatment facilities, collecting data for a designated point in time (March 31, 2015). The California survey response rate was 90.3% in 2015. A facility may provide more than one type of care. *SUD* is substance use disorder. *LGBT* is lesbian/gay/bisexual/transgender. *DUI* is driving under the influence.

Source: *National Survey of Substance Abuse Treatment Services (N-SSATS): 2015 — Data on Substance Abuse Treatment Facilities*, SAMHSA, March 2017, www.samhsa.gov (PDF).

Nearly half of California's substance use disorder treatment facilities had programs tailored for clients diagnosed with co-occurring mental health disorders, and nearly 40% had programs for criminal justice clients.

Licensed Narcotic Treatment Program Slots
by Region, California, 2018

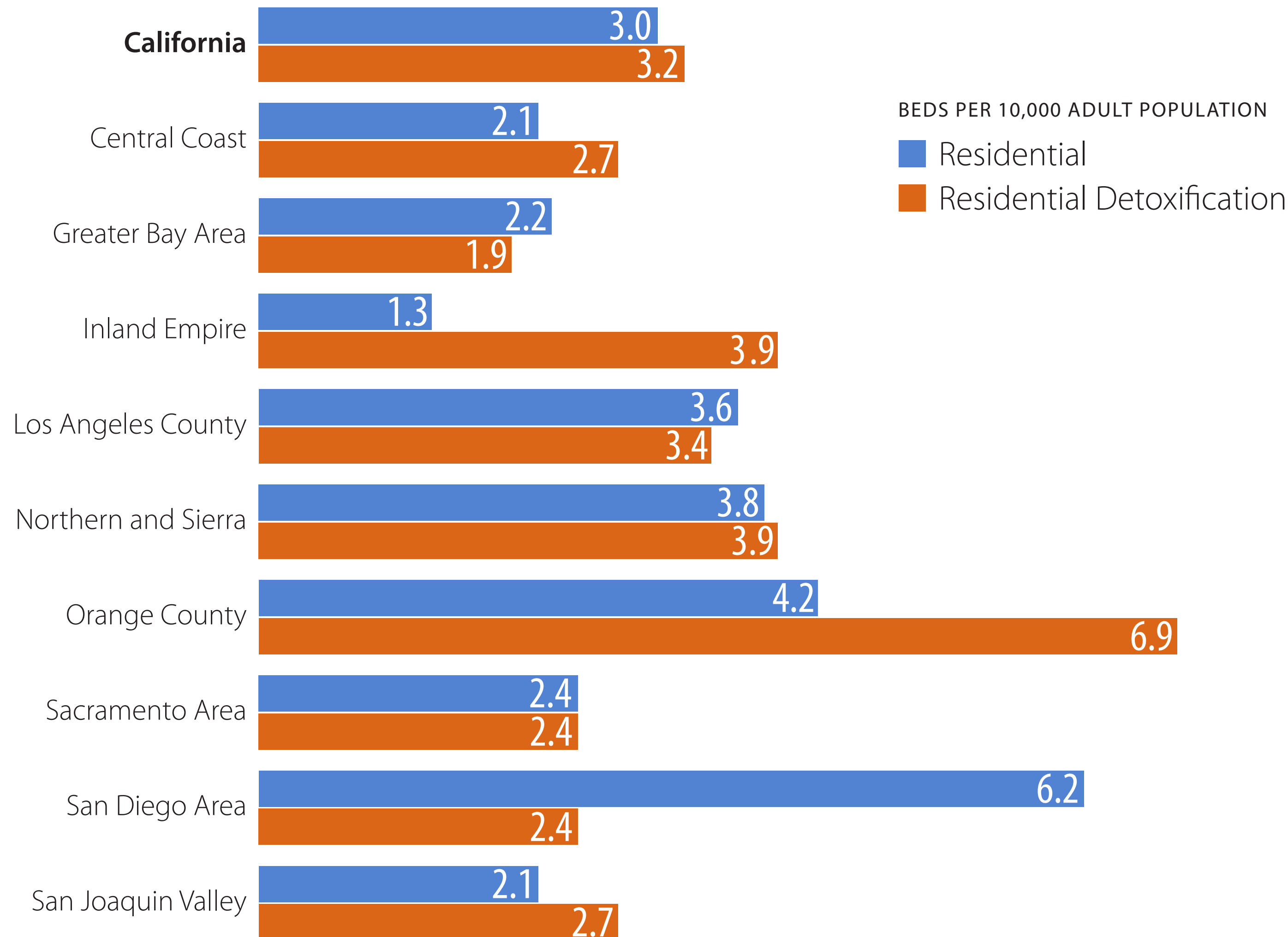


Notes: Narcotic replacement therapy is administered as part of a comprehensive treatment program including a medical evaluation and counseling for medical, alcohol, criminal, and psychological problems. Patients undergo regular urinalysis to ensure that illicit drugs are not being used during treatment. Only narcotic treatment programs (NTPs) licensed by the Department of Health Care Services, Substance Use Disorder Compliance Division, Narcotic Treatment Programs Section with approval from the US Drug Enforcement Administration (DEA) and the Substance Abuse and Mental Health Services Administration (SAMHSA) may provide this service. See Appendix F for a list of counties within each region.

Sources: Author calculations based on *State of California Narcotic Treatment Program Directory*, April 9, 2018, www.dhcs.ca.gov (PDF); *Report P-2: State and County Projections by Race/Ethnicity and Age (5-year groups) 2010 through 2060 (as of July 1)*, California Department of Finance, www.dof.ca.gov; and "Narcotic Treatment Programs (NTP)," California Department of Health Care Services, last modified October 3, 2013, www.dhcs.ca.gov.

People who receive methadone treatment typically attend narcotic treatment programs (NTPs) every day — so proximity and access is critical. NTP capacity varied considerably by region. Compared to the state average, the San Joaquin Valley had 50% more treatment slots per population, while Orange County had less than half the state average. Twenty-eight of 58 California counties had no NTP services (see Appendix G).

Residential Capacity at Nonmedical Treatment Facilities
by Region, California, 2018

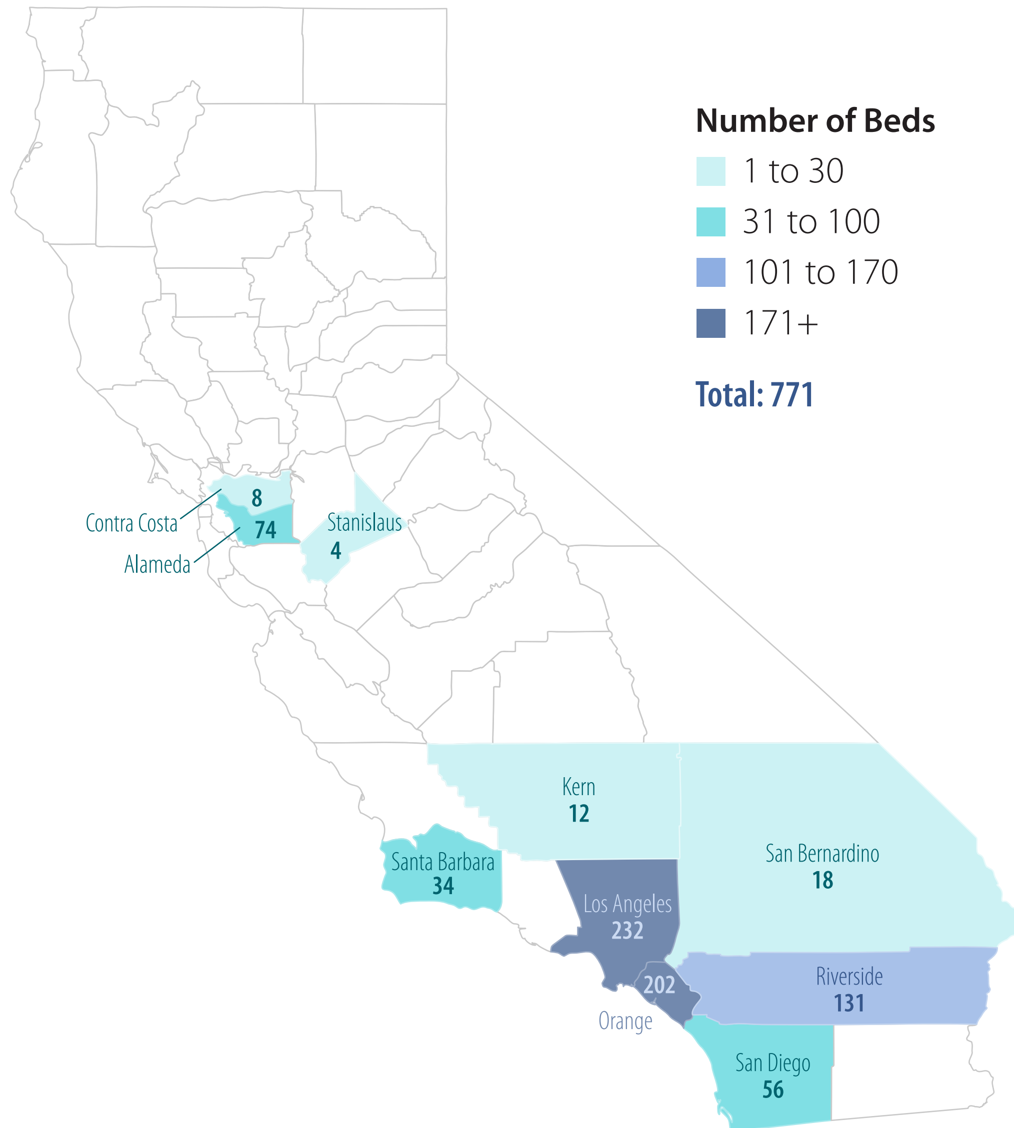


Notes: These are nonmedical alcoholism and drug abuse recovery or treatment facilities licensed and/or certified by the Department of Health Care Services (DHCS). *Residential* beds provide recovery services corresponding to ASAM levels 3.1, 3.3, and 3.5. *Detoxification* beds correspond to ASAM level 3.2-WM and provide clinical management of the withdrawal process. See Appendix C for more detail on ASAM levels. As of 2018, residential facilities, with approval from DHCS, may provide incidental medical services (medical issues associated with detoxification, treatment, or recovery services). See Appendix F for a list of counties within each region.

Sources: Author calculation based on *DHCS Licensed Residential Facilitites and/or Certified Alcohol and Drug Programs*, DHCS, accessed April 23, 2018, data.chhs.ca.gov; *Report P-2: County Population Projections (2010–2060) — County Population by Age (1-year increments)*, California Department of Finance, www.dof.ca.gov.

The Department of Health Care Services licenses nonmedical residential facilities that provide recovery and treatment services to adults. Regional capacity for residential services varied considerably. The San Diego area had the greatest per population residential recovery capacity, and Orange County had the greatest per population residential detoxification capacity.

Chemical Dependency Recovery Beds
by County, California, 2016



Although most people receive detoxfication care in residential settings, some require inpatient medical management. As of 2016, California had 26 hospitals with 771 beds licensed to provide inpatient chemical dependency services, located in only 10 counties.

Source: Author analysis of Office of Statewide Health Planning and Development Automated Licensing Information and Report Tracking System, www.alirts.oshpd.ca.gov.

SUD Counselor Certification in California
by Degree Required

	CALIFORNIA CONSORTIUM OF ADDICTION PROGRAMS AND PROFESSIONALS (CCAPP)	CALIFORNIA ASSOCIATION OF DUI TREATMENT PROGRAMS (CADTP)	CALIFORNIA ASSOCIATION FOR ALCOHOL/DRUG EDUCATORS (CAADE)*
No degree required	Registered Alcohol Drug Technician I and II	Certified Alcohol and Other Drug Counselor Associate (CAODC)	Certified Addictions Treatment Counselor (CATC) and CATC N
	Certified Alcohol Drug Counselor (CADC)-CAS and CADC-I	CAODC-A and CAODC-CS	CATC I and CATC N I
Associate's	CADC-II		CATC II and CATC N II
Bachelor's	CADC-CCS (clinical supervisor)		CATC III and CATC N III
Master's	LAADC and LAADC-S		CATC IV and CATC N IV
Doctoral			CATC V and CATC N V

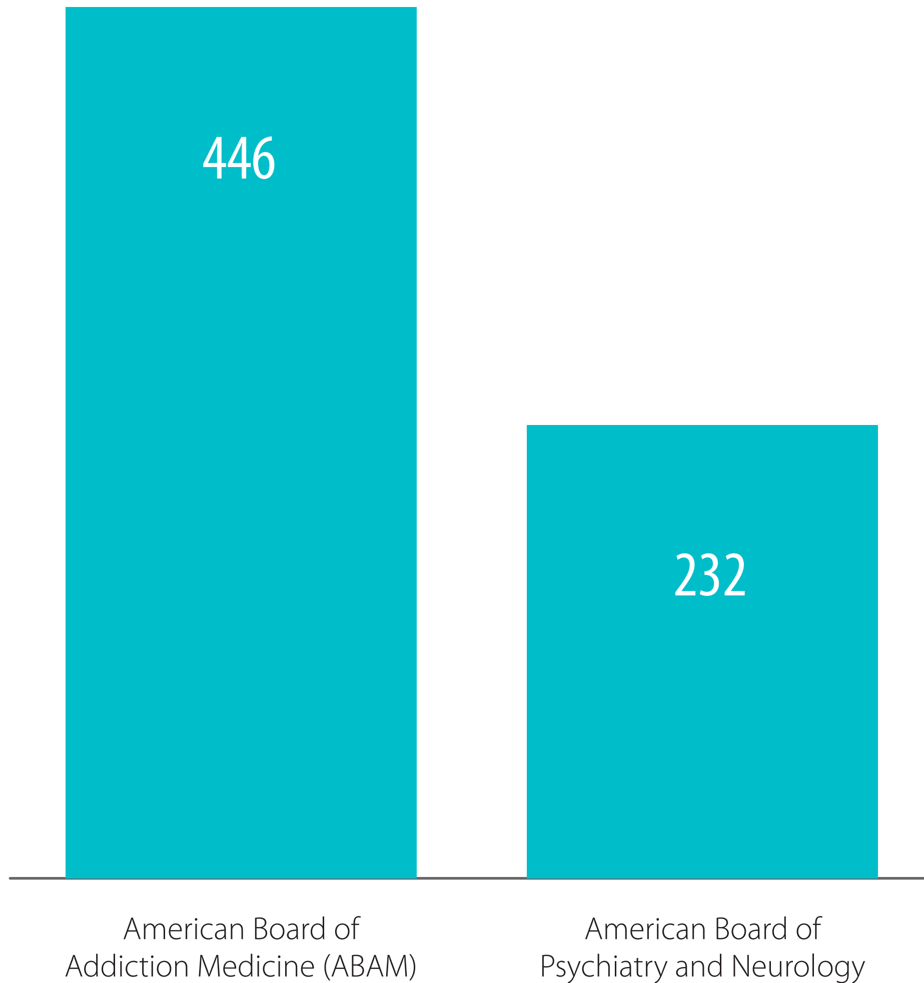
In California, substance use disorder (SUD) professionals are not licensed by the state and are not billable to most insurance companies. However, California SUD treatment programs licensed by the state must employ counseling staff that are certified or become certified within five years. In 2015, 1,671 people graduated from substance abuse/addiction counseling programs in California, approximately 75% of whom completed nondegree certificate programs.

*The Addiction Counselor Certification Board of California that registers and certifies addiction treatment counselors for the state for CAADE schools lost its accreditation as of December 1, 2017.

Notes: In addition to degree, certifications are based on hours of alcohol and drug education, hours of supervised experience, and exams. *SUD* is substance use disorder.

Sources: "Becoming an Addictions Counselor in California," California Association for Alcohol/Drug Educators (CAADE), 2015; "Registry and Certification," California Consortium of Addiction Programs and Professionals, accessed October 23, 2016, ccappcredentialing.org; "Certification as an Alcohol and Other Drug Abuse Counselor (CAODC)," California Association of DUI Treatment Programs, accessed October 23, 2016, www.cadtp.org; and Janet Coffman et al., *California's Current and Future Behavioral Health Workforce*, Healthforce Center at UCSF, 2018, healthforce.ucsf.edu.

Physicians with Addiction Specialties
by Certification Group, California, 2018



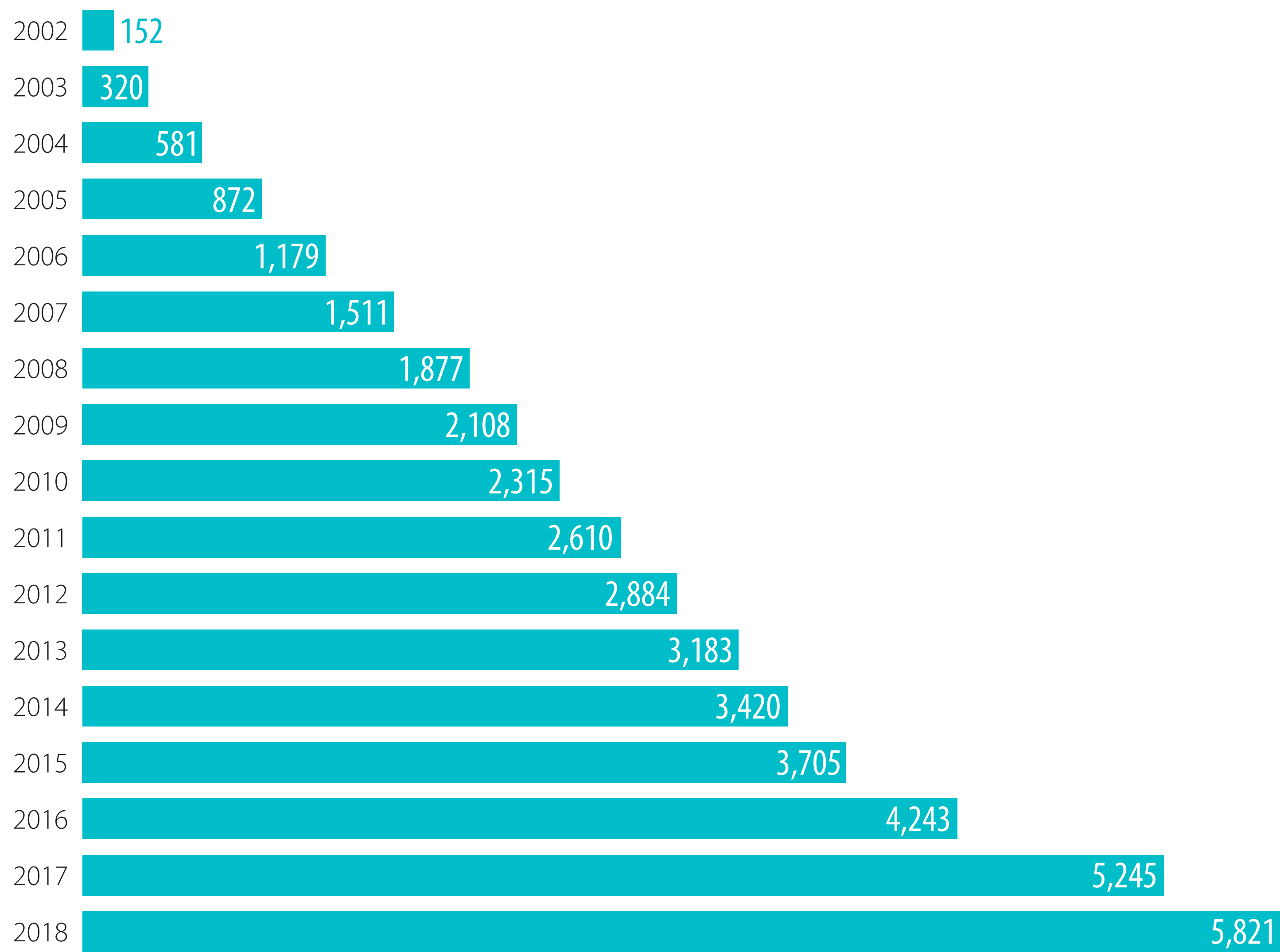
Addiction specialists may be psychiatrists or other physicians who hold certification in addiction medicine. In California, fewer than 700 of the nearly 140,000 physicians who hold a California license maintain an addiction specialty certification.

Notes: Maintaining addiction specialty certification does not indicate that the physician is actively working in the field. American Society of Addiction Medicine certifies through ABAM.

Sources: "Find a Doctor," American Board of Addiction Medicine, accessed May 4, 2018, www.abam.net; "Welcome to verifyCERT," American Board of Psychiatry and Neurology, accessed May 4, 2018, application.abpn.com.

Physicians Waivered to Prescribe Buprenorphine

California, 2002 to 2018

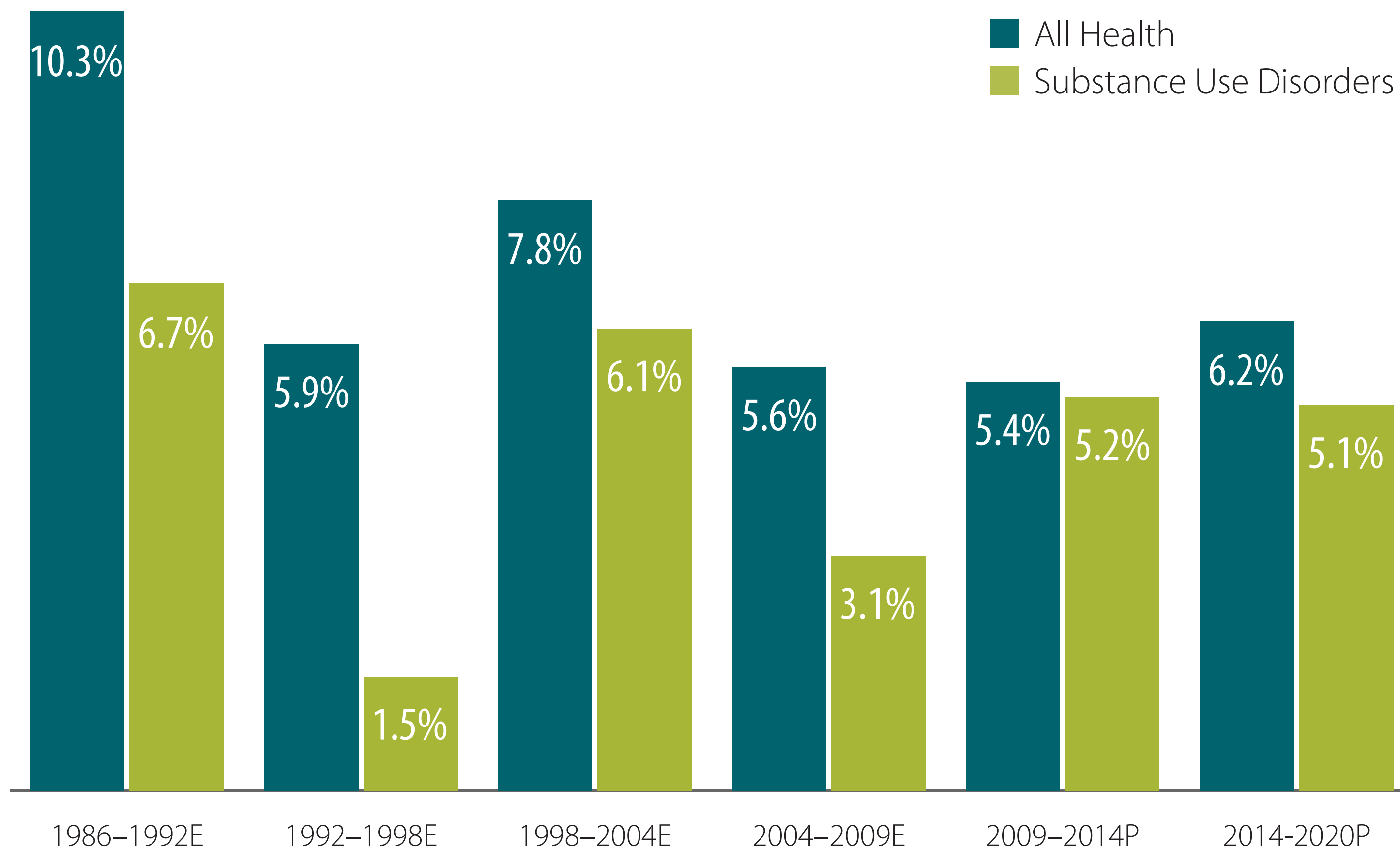


Source: "Number of DATA-Waived Practitioners Newly Certified Per Year," Substance Abuse and Mental Health Services Administration, accessed August 1, 2018, www.samhsa.gov.

In October 2002, the Food and Drug Administration approved buprenorphine for clinical use in treating opioid dependency. The number of California physicians certified to prescribe buprenorphine increased from 152 in 2002 to 5,821 in 2018. The Drug Addiction Treatment Act of 2000 (DATA 2000) sets eligibility and certification requirements. Between 2011 and 2017, the number of prescriptions written for buprenorphine increased by 64% to nearly 625,000 (not shown).

All Health and SUD Treatment Expenditure Growth

United States, 1986 to 2020

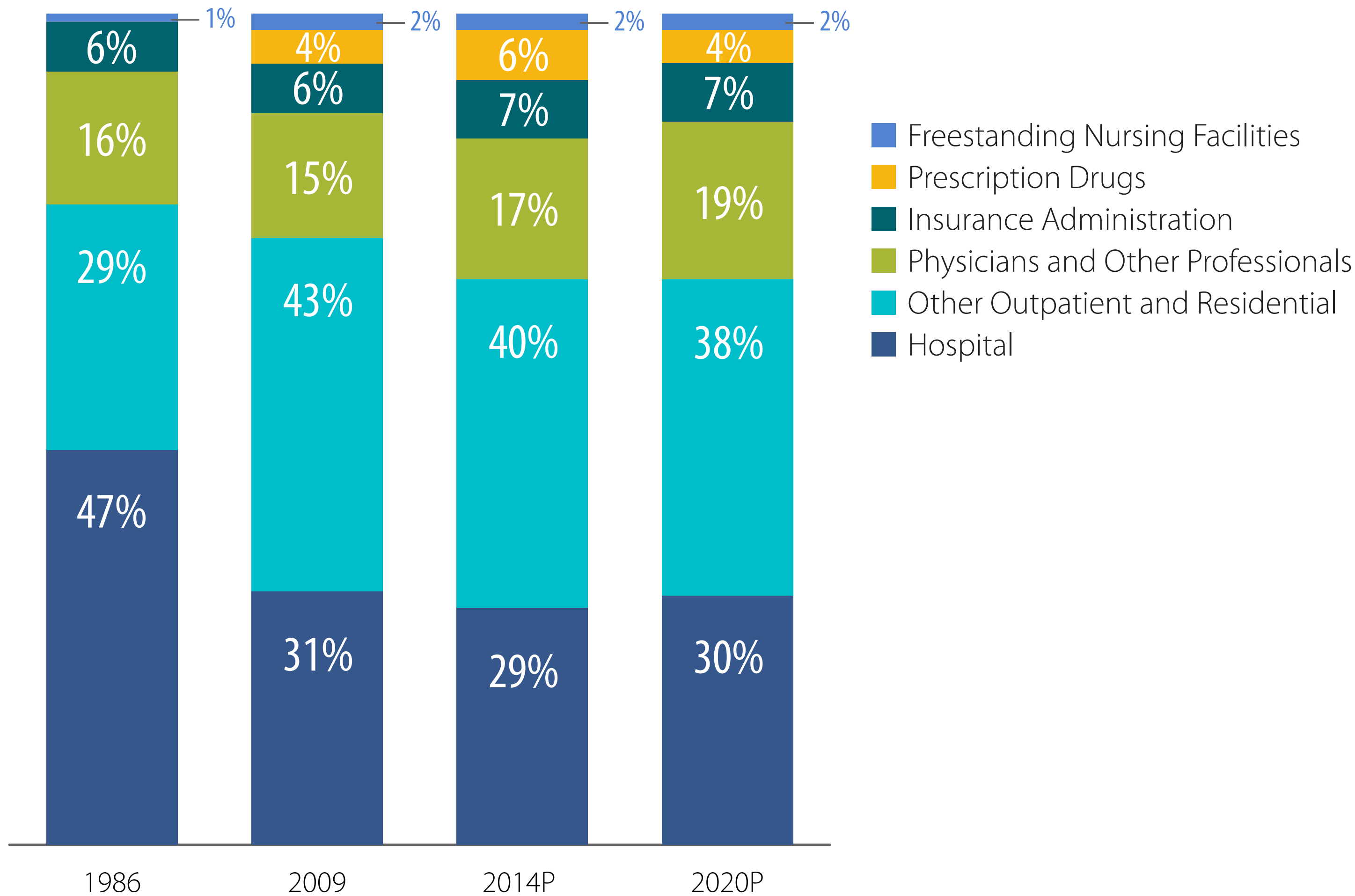


Nationally from 1986 to 2009, estimated expenditures for substance use disorder (SUD) treatment grew more slowly than did total health care expenditures. From 2009 to 2020, SUD and all health expenditures are projected to grow at similar rates.

Notes: *SUD* is substance use disorder. Estimates shown as *E*; projections shown as *P*. Spending includes clinical treatment and rehabilitative services and medications and excludes both activities to prevent SUDs and peer support services for which there is no cost. Projections incorporate expansion of coverage through the Affordable Care Act, implementation of the provisions of behavioral health parity regulations, and expectations about the expiration of patents for certain psychotropic medications.

Sources: "Table A.7," in *National Expenditures for Mental Health Services and Substance Abuse Treatment, 1986–2009*, Substance Abuse and Mental Health Services Administration (SAMHSA), 2013, store.samhsa.gov; "Table A.4," in *Projections of National Expenditures for Treatment of Mental and Substance Use Disorders, 2010–2020*, SAMHSA, 2014, store.samhsa.gov.

SUD Treatment Expenditures, by Service Category
United States, 1986 to 2020, Selected Years



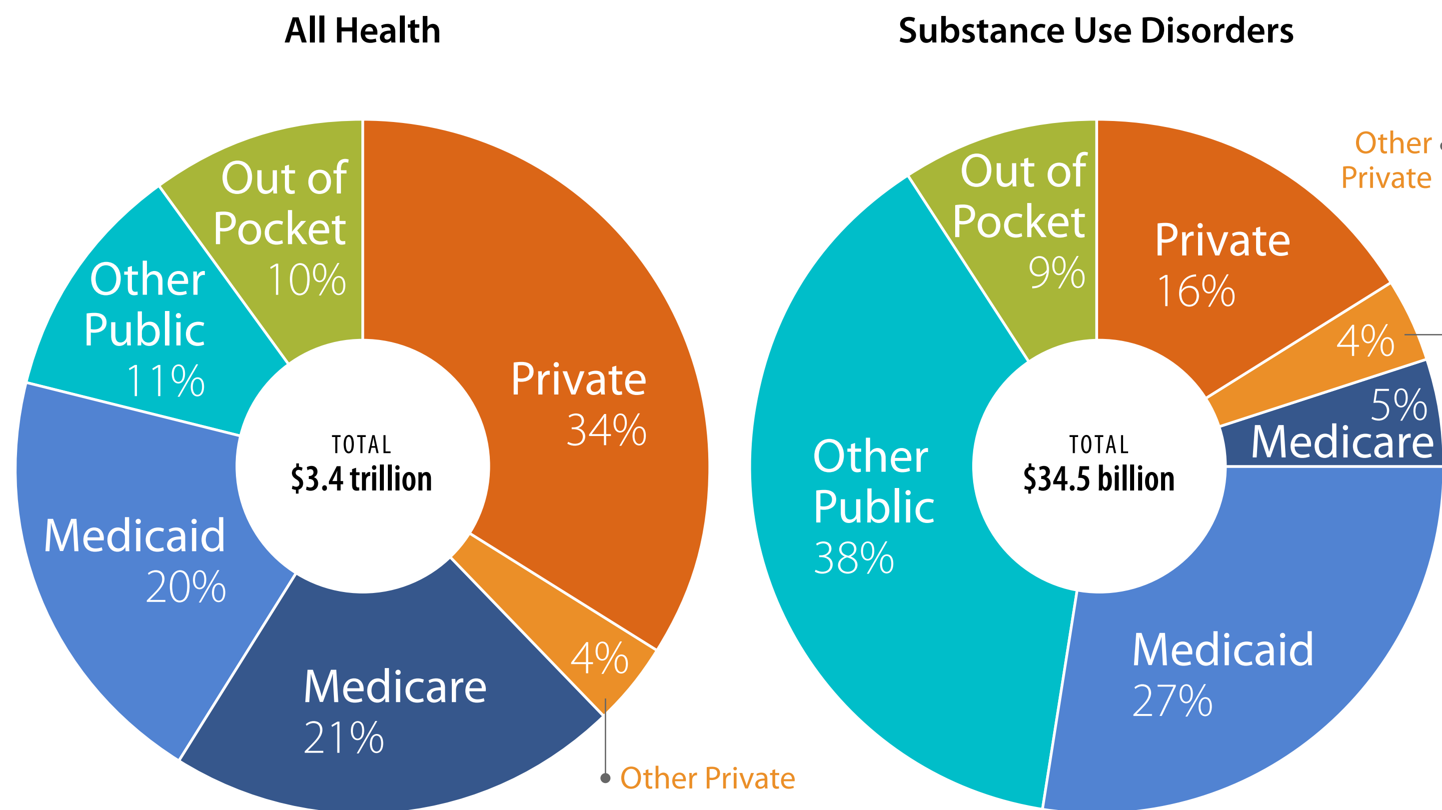
Spending on substance use disorder (SUD) treatment changed between 1986 and 2009, with SUD hospital expenditures dropping from almost half of total expenditures in 1986 to just 31% in 2009. The share of spending for outpatient and residential treatment increased substantially over the same period.

Notes: Projections shown with *P*. Estimates of treatment expenditures for substance use disorder (*SUD*) include expenditures for clinical treatment and rehabilitative services and medications and exclude both peer support services and activities to prevent substance abuse. *Other outpatient and residential* includes freestanding home health, specialty mental health centers, and specialty substance abuse centers. Totals may not add to 100% due to rounding.

Sources: "Table A.6," in *National Expenditures for Mental Health Services and Substance Abuse Treatment, 1986–2009*, Substance Abuse and Mental Health Services Administration (SAMHSA), 2013, store.samhsa.gov; "Table A.3," in *Projections of National Expenditures for Treatment of Mental and Substance Use Disorders, 2010–2020*, SAMHSA, 2014, store.samhsa.gov.

All Health and SUD Treatment Expenditures, by Payer
United States, 2016

PERCENTAGE OF TOTAL PROJECTED SPENDING

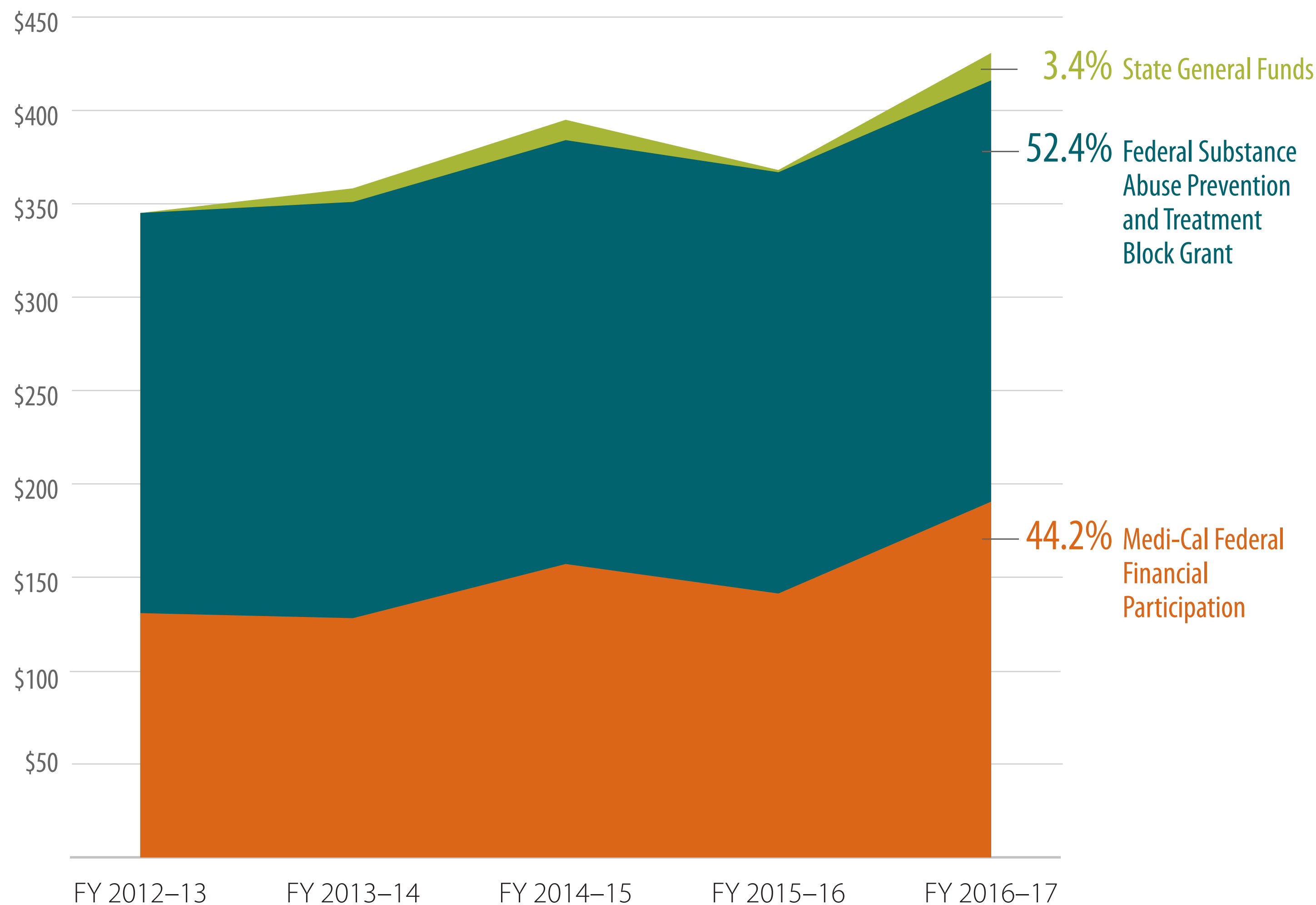


Notes: Expenditures are projections. *SUD* is substance use disorder. *Other public* includes other federal, state, and local payers. Spending includes clinical treatment and rehabilitative services and medications and excludes both activities to prevent SUDs and peer support services for which there is no cost. Projections incorporate expansion of coverage through the Affordable Care Act, implementation of the provisions of behavioral health parity regulations, and expectations about the expiration of patents for certain psychotropic medications. Segments may not total 100% due to rounding.

Source: "Table A.7," in *Projections of National Expenditures for Treatment of Mental and Substance Use Disorders, 2010–2020*, Substance Abuse and Mental Health Services Administration, 2014, store.samhsa.gov.

US expenditures for substance use disorders (SUDs) were predicted to account for just 1% of total health care spending in 2016. Although new health plan standards and parity laws are expanding SUD coverage, Medicare and private payers were still projected to spend a considerably smaller share on SUD than they do on overall health care services. Other public payers, including federal and state grants funding, account for a disproportionate share of SUD treatment spending.

Public Substance Use Disorder Treatment Financing Trends
California, FY 2012–13 to FY 2016–17



Notes: All numbers are estimates. Excludes share of 2011 relignment funds that are designated for substance use disorder.

Source: *California Behavioral Health Revenue Update*, California Institute for Behavioral Health Solutions, May 24, 2016, www.cibhs.org (PDF).

The federal Substance Abuse Prevention and Treatment Block Grant and the Medi-Cal program fund most public substance use disorder services in California. Medi-Cal is jointly funded by California and the federal government. Only the growing federal Medi-Cal share is shown, but the nonfederal share is also expected to increase.

California's Public SUD Treatment Delivery System

	COUNTY ALCOHOL AND DRUG PROGRAMS			
	LOCAL SPECIALTY SUD PLANS			
	STANDARD DRUG MEDI-CAL STATE PLAN SERVICES	DRUG MEDI-CAL ORGANIZED DELIVERY SYSTEM PILOTS	NON MEDI-CAL LOCAL SUD PROGRAMS	MEDI-CAL MANAGED CARE AND FEE-FOR-SERVICE PLANS
Payer	Medi-Cal (federal and state/local)	Medi-Cal (federal and state/local)	Substance Abuse Prevention and Treatment Block Grant, county, 2011 realignment funds,* state general fund, and other funding sources	Medi-Cal (federal and state/local)
People Served	Medi-Cal enrollees with SUD	Medi-Cal enrollees with SUD	Uninsured individuals with SUD	Medi-Cal enrollees needing preventive services, addiction medication management, or inpatient withdrawal management
Services Provided	Outpatient and intensive outpatient SUD services, perinatal residential SUD treatment, narcotic treatment programs	Standard Drug Medi-Cal benefit plus targeted case management, residential SUD treatment (not limited to perinatal), withdrawal management continuum, recovery services, physician consultation, and at county option, additional medication-assisted treat-ment and partial hospital	Outpatient and intensive outpatient SUD services, perinatal residential SUD treatment, narcotic treatment programs	Prevention and early intervention, Screening, Brief Intervention, and Referral to Treatment (SBIRT), medication-assisted treatment provided in medical settings, inpatient withdrawal management in general and freestanding facilities

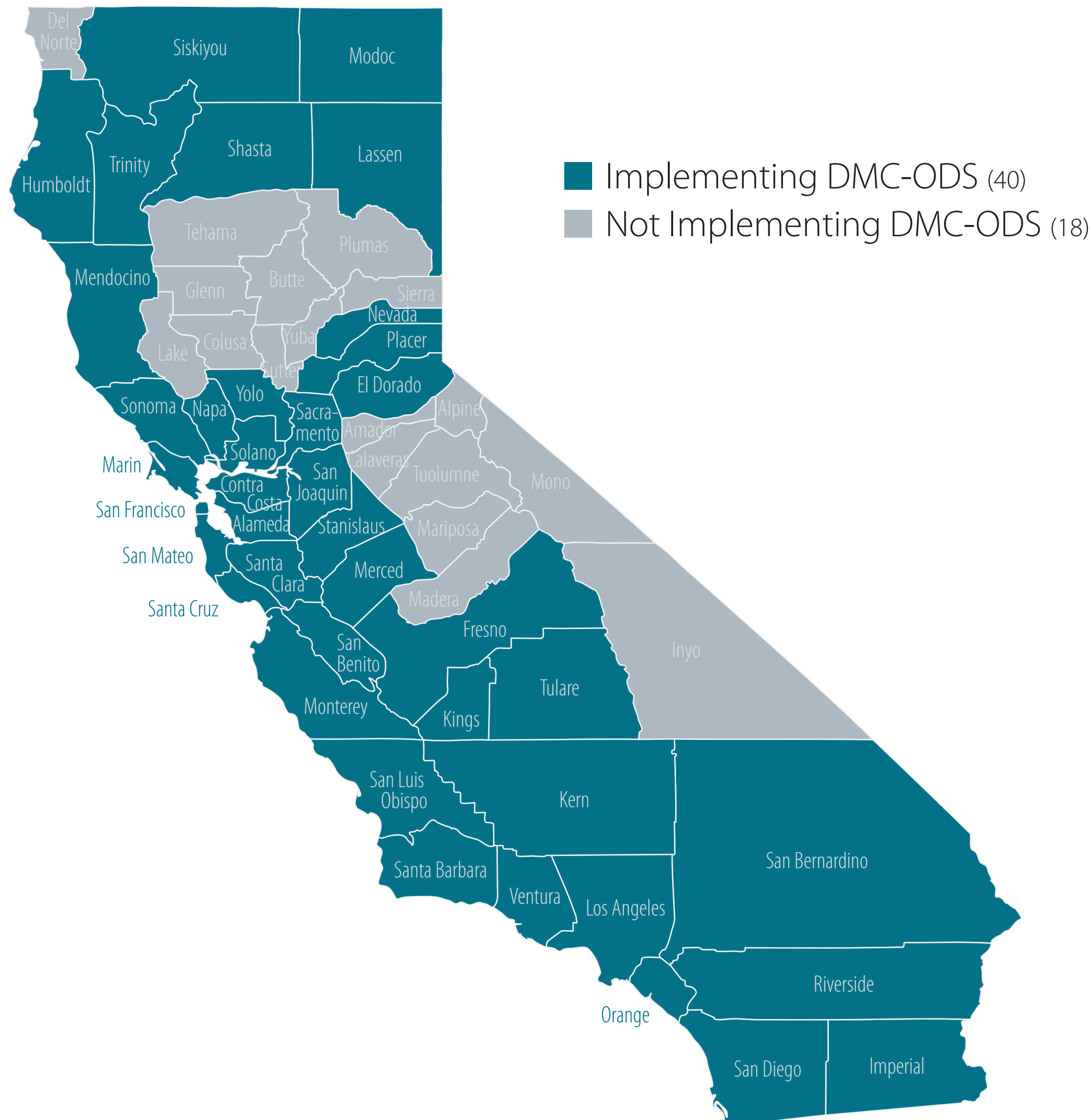
Realignment is the transfer of administrative and financial control from the state to counties. California underwent two major mental health system realignments, in 1991 and in 2011.

Note: *SUD* is substance use disorder.

Sources: WIC § 5600–5623.5; *California Mental Health and Substance Use System Needs Assessment and Service Plan — Volume 2: Service Plan*, California Department of Health Care Services (DHCS), September 30, 2013, www.dhcs.ca.gov (PDF); and *The Drug Medi-Cal Organized Delivery System Pilot Program*, DHCS, last modified December 2016, www.dhcs.ca.gov (PDF).

Counties provide the majority of substance use disorder (SUD) treatment services to Medi-Cal enrollees and uninsured individuals in California. Medi-Cal managed health care plans have only limited responsibility for SUD services.

Drug Medi-Cal Organized Delivery System (DMC-ODS)
by California County, 2018



Source: "Counties Participating in DMC-ODS," California Department of Health Care Services, last modified August 27, 2018, www.dhcs.ca.gov.

The Drug Medi-Cal Organized Delivery System (DMC-ODS) is California's effort to expand, improve, and reorganize treatment of SUDs in Medi-Cal. Forty counties are participating in this pilot program.

Drug Medi-Cal Organized Delivery System

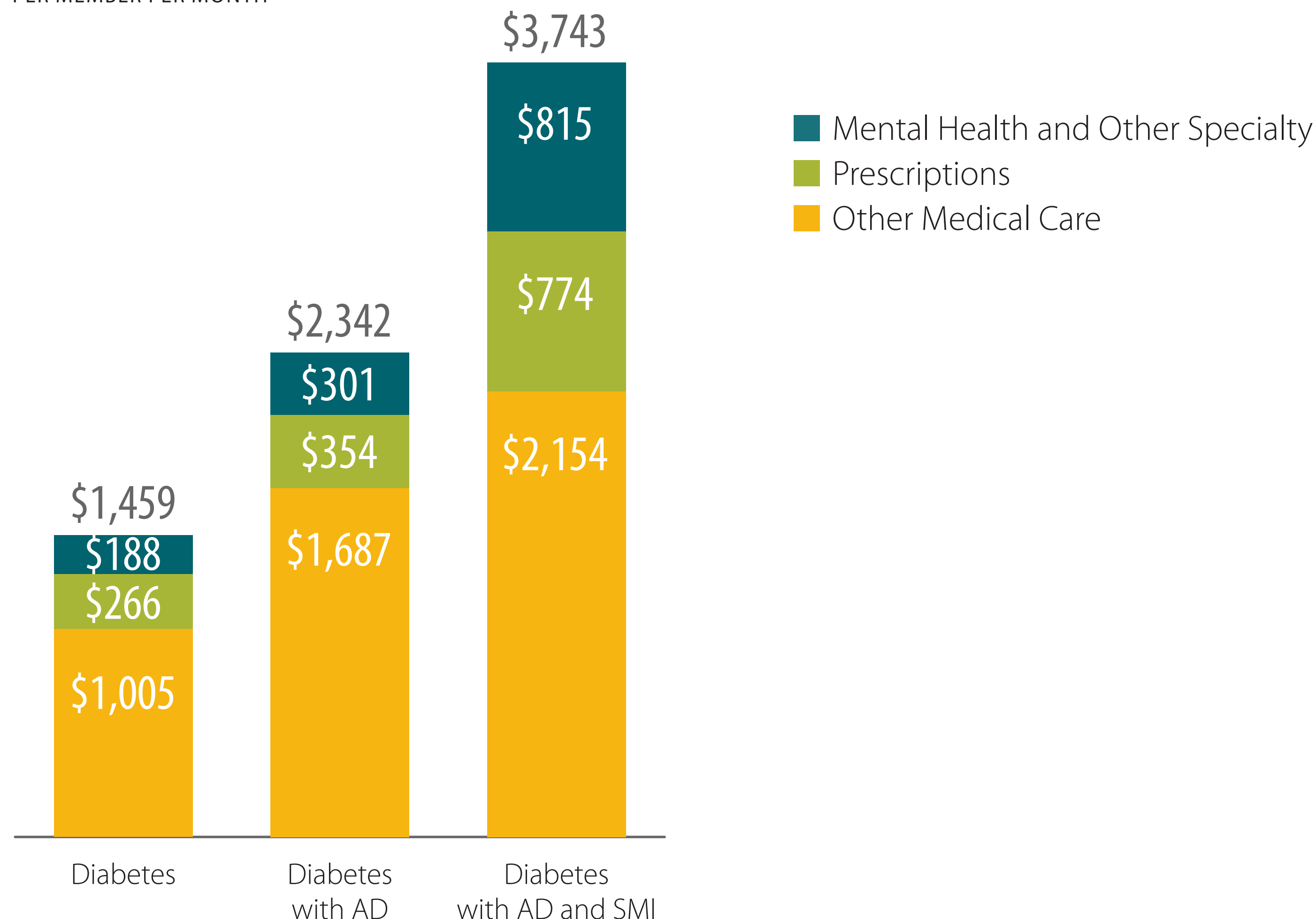
STANDARD DRUG MEDI-CAL STATE PLAN SERVICES	DRUG MEDI-CAL ORGANIZED DELIVERY SYSTEM WAIVER PROJECT
Providers contract with: Counties or state	**Providers contract with:** Counties
Services: • Outpatient drug-free treatment • Intensive outpatient treatment • Residential SUD services for perinatal women only (limited to facilities with 16 beds or fewer) • Naltrexone treatment • Narcotic treatment programs (methadone only) • Detoxification in a hospital	**Services:** All services provided in the standard Drug Medi-Cal program, *plus*: • Multiple levels of residential SUD treatment (not limited to perinatal women or to facilities with 16 beds or fewer) • Narcotic treatment programs expanded to include buprenorphine, disulfiram, and naloxone • Withdrawal management (at least one ASAM level) • Recovery services • Case management • Physician consultation Optional: • Partial hospitalization • Additional medication-assisted treatment

Under the Drug Medi-Cal Organized Delivery System (DMC-ODS) pilot program, part of California's section 1115 Medicaid waiver, a broad spectrum of SUD services is provided through county-based managed care plans. The DMC-ODS represents a major expansion of benefits compared to the standard Medi-Cal SUD program.

Source: Molly Brassil, Carol Backstrom, and Erynne Jones, *Medi-Cal Moves Addiction Treatment into the Mainstream*, California Health Care Foundation, August 2018, www.chcf.org.

Medi-Cal Spending on Diabetes, by Service Category

With and Without AD or SMI, California, 2011



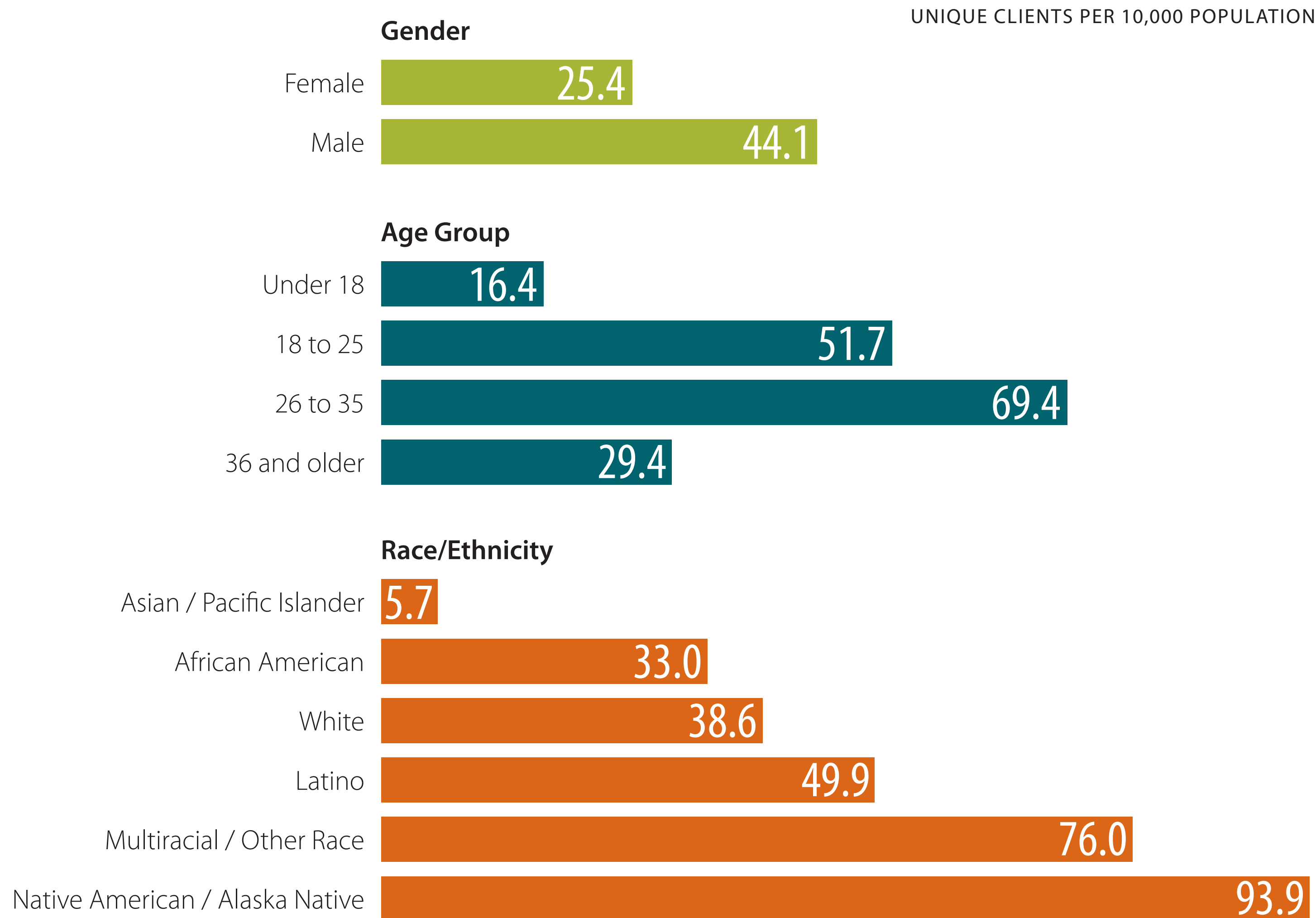
Diabetes is one of the most common chronic conditions in the adult Medi-Cal population. The total monthly cost of care for members with diabetes and no behavioral health condition averaged $1,459 in 2011. Costs for people who also received alcohol and drug treatment were 60% higher. Spending was more than two and a half times higher if serious mental illness was present along with diabetes and alcohol and drug treatment.

Notes: Fee-for-service expenditures for adults with Medi-Cal coverage only. *AD* is alcohol and drug treatment, *SMI* is serious mental illness. *Mental health and other specialty* includes mental health, in-home support services, dental, home- and community-based services for developmental disabilities, and other. *Other medical care* includes outpatient services, hospital inpatient services, nursing facility, and emergency medical transportation.

Source: Jim Watkins, *Understanding Medi-Cal's High-Cost Populations*, California Department of Health Care Services, March 2015, 39, www.chcf.org.

Admission Rate, State- or County-Contracted SUD Programs

by Gender, Age Group, and Race/Ethnicity, California, FY 2014

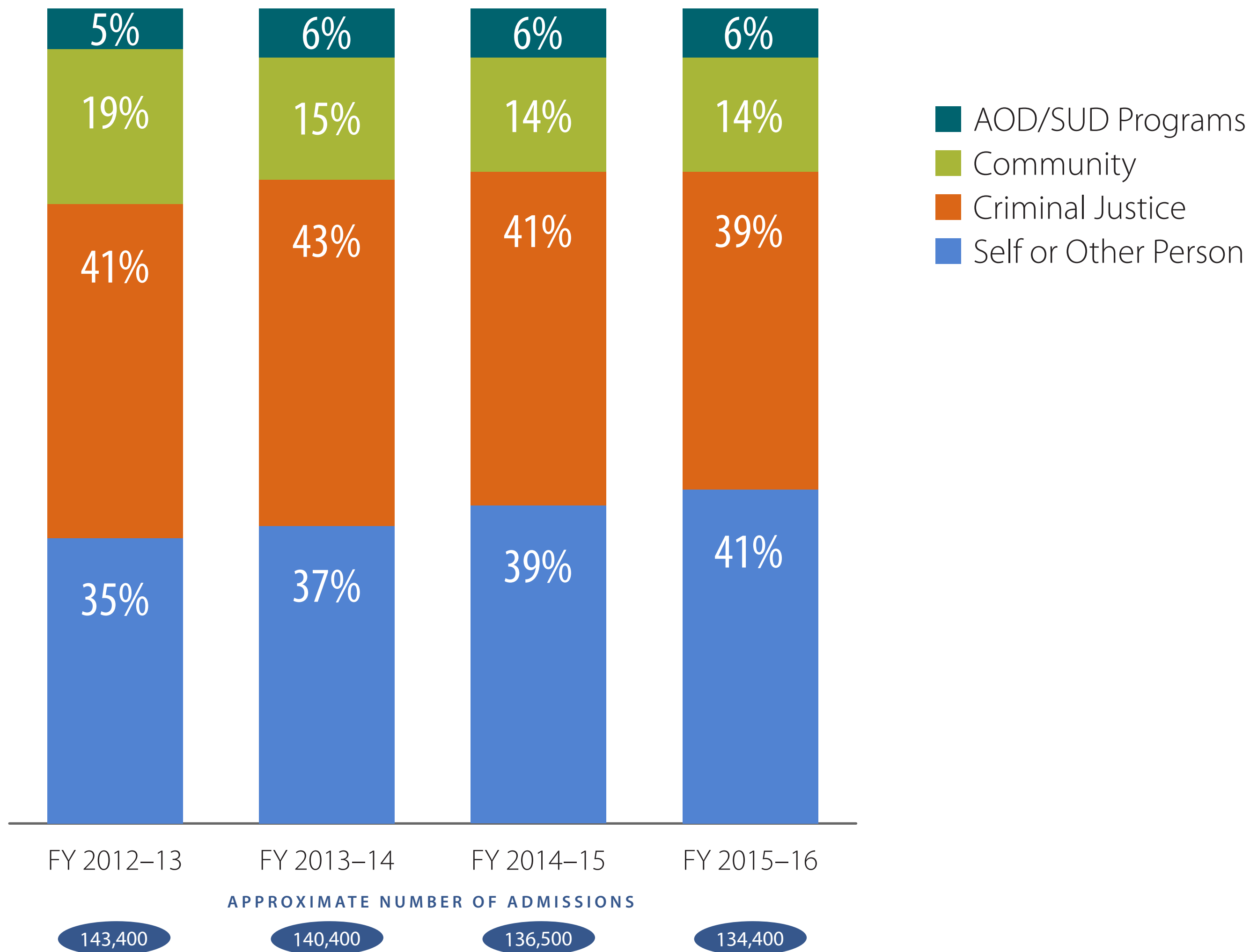


Over 130,000 people were treated in state- and county-contracted substance use disorder (SUD) programs in fiscal year 2014. Men were treated at a higher rate than women in these programs. Adults age 26 to 35 had the highest rates of admission of any age group. Native American and multiracial Californians had the highest rates of admission per population.

Notes: Unduplicated count of individuals for their first admission for substance use disorder (*SUD*) treatment during fiscal year 2014 to publicly monitored alcohol and other drug treatment programs.

Sources: Author calculations based on *Statewide Overview Report 2015: Data Notebook Project on Behavioral Health in California*, California Mental Health Planning Council, December 15, 2015, www.dhcs.ca.gov (PDF); and *Report P-3: State and County Total Population Projections by Race/Ethnicity and Detailed Age, 2010 through 2060 (as of July 1)*, California Department of Finance.

Admissions to State- or County-Contracted SUD Programs
by Referral Source, California, FY 2012–13 to FY 2015–16



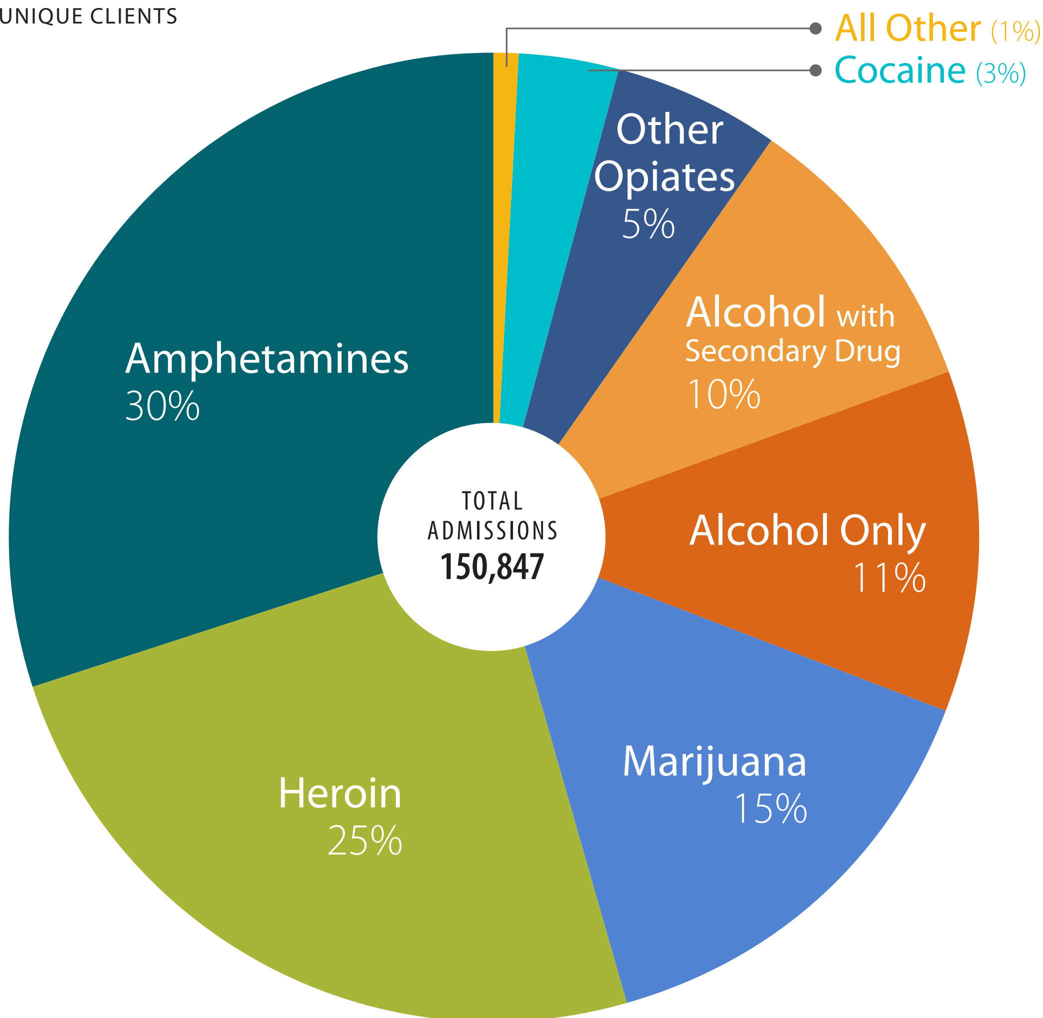
Notes: Data used for this report are based on client admissions, not unique client counts. A client is counted more than once if the client has more than one treatment admission and discharge during the selected reporting period. Admissions are calculated for residential and outpatient only, not detox. *AOD* is alcohol and other drugs. *SUD* is substance use disorder. Totals may not add to 100% due to rounding.

Source: Special data request to the California Department of Health Care Services, Mental Health and Substance Use Disorder Services, Office of Applied Research and Analysis for CalOMS Treatment, received August 16, 2017.

Approximately 40% of referrals to state- or county-contracted substance use disorder (SUD) services were from the criminal justice system, for people mandated to receive treatment. Self-referrals or referrals from other people have been increasing.

Admissions to State- and County-Contracted SUD Programs
by Primary Substance Used, California, 2015

PERCENTAGE OF UNIQUE CLIENTS



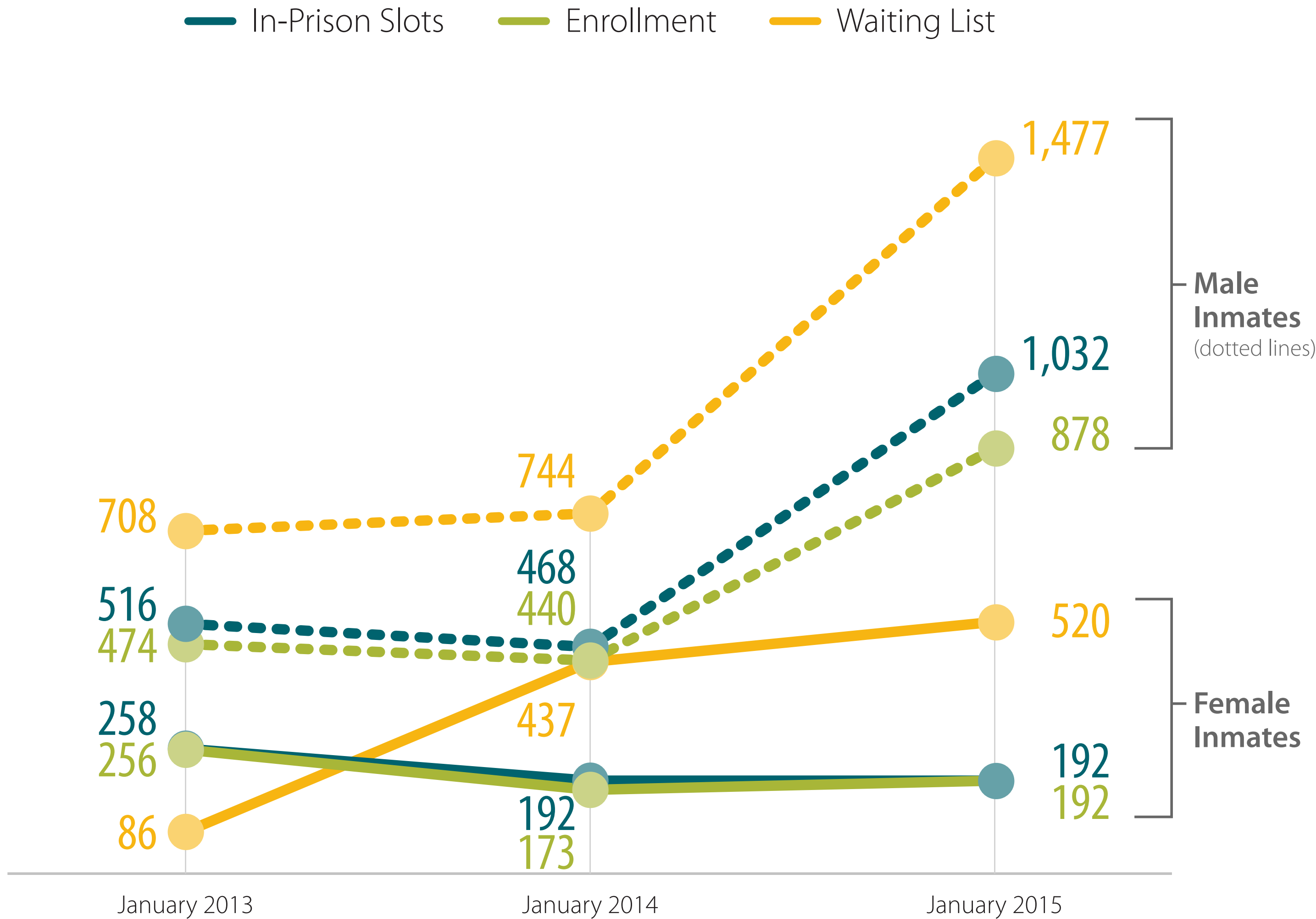
Amphetamines were the primary drug used by 30% of people admitted to state- and county-contracted substance use disorder (SUD) treatment programs. Heroin accounted for 25% of admissions. Although alcohol is the most common SUD in California, alcohol (either alone or with a secondary drug) represented only one-fifth of admissions.

Notes: State- and county-contracted alcohol and other drug programs report on all clients admitted. *SUD* is substance use disorder. *Cocaine* includes cocaine smoked or administered by other routes. *All other* includes PCP, hallucinogens, other stimulants, tranquilizers, sedatives, inhalants, and other/unknown. See Appendix B for full definitions of drug categories.

Source: *Substance Use Treatment Admissions by Primary Substance of Abuse, According to Sex, Age Group, Race, and Ethnicity Among Admissions Aged 12 and Older, Year = 2015*, Substance Abuse and Mental Health Services Administration, last modified January 2, 2018, wwwdasis.samhsa.gov.

Use of Prison SUD Treatment Programs, by Gender

California Department of Corrections, 2013 to 2015



Notes: *SUD* is substance use disorder. Data on substance use disorder services are not available for jail populations.

Sources: Special request to Office of Audits and Court Compliance, California Department of Corrections and Rehabilitation for *COMPSTAT DAI Statistical Report - 13 Month for Females and for General Population - Males*, received May 12, 2016; and *Behind Bars II: Substance Abuse and America's Prison Population*, Center on Addiction and Substance Abuse, February 2010, www.centeronaddiction.org.

Nationally, approximately 65% of state prison inmates met criteria for substance use disorder (SUD) (not shown). SUD treatment capacity in California prisons is not sufficient to meet demand. In January 2015, more than 500 women and 1,400 men in prison were on waiting lists for SUD treatment programs. Between 2013 and 2015, the number of slots for women decreased by 25% while the number of male slots doubled.

Methodology

The charts were developed through review of numerous public sources of data on substance use disorder prevalence, treatment resources, use of treatment, and state and national expenditures. In some cases, the author calculated rates per population using estimates and projections of the California Department of Finance.

ABOUT THIS SERIES

The California Health Care Almanac is an online clearinghouse for data and analysis examining the state's health care system. It focuses on issues of quality, affordability, insurance coverage and the uninsured, and the financial health of the system with the goal of supporting thoughtful planning and effective decisionmaking. Learn more at **www.chcf.org/almanac**.

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Appendix A. Diagnostic Criteria for Substance Use Disorder, *DSM-5*

The DSM-5 describes a problematic use of an intoxicating substance leading to clinically significant impairment or distress, as manifested by at least two of the following, occurring within a 12-month period.

1. The substance is often taken in larger amounts or over a longer period than was intended.
2. There is a persistent desire or unsuccessful effort to cut down or control use of the substance.
3. A great deal of time is spent in activities necessary to obtain the substance, use the substance, or recover from its effects.
4. Craving, or a strong desire or urge to use the substance.
5. Recurrent use of the substance resulting in a failure to fulfill major role obligations at work, school, or home.
6. Continued use of the substance despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of its use.
7. Important social, occupational, or recreational activities are given up or reduced because of use of the substance.
8. Recurrent use of the substance in situations in which it is physically hazardous.
9. Use of the substance is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance.
10. Tolerance, as defined by either of the following:
    a. A need for markedly increased amounts of the substance to achieve intoxication or desired effect.
    b. A markedly diminished effect with continued use of the same amount of the substance.
11. Withdrawal, as manifested by either of the following:
    a. The characteristic withdrawal syndrome for that substance (as specified in the DSM-5 for each substance).
    b. The substance (or a closely related substance) is taken to relieve or avoid withdrawal symptoms.

Notes: The DSM-5 was issued in May 2013, and was accepted as the standard for diagnosing beginning in 2014, and required as the standard for diagnosing in 2015. Most of the data included in this document were collected according to the earlier DSM-IV-TR diagnoses.

Source: "The Science of Drug Abuse and Addiction: The Basics," National Institute on Drug Abuse, www.drugabuse.gov.

Appendix B. SAMHSA TEDS Primary Substance Definitions

Alcohol Only	Admissions for abuse of alcohol alone, with no secondary substance use
Alcohol with Secondary Drug	Admissions for primary abuse of alcohol with secondary substance use
Cocaine (smoked)	Admissions for cocaine/crack administered through smoking
Cocaine (other route)	Admissions for cocaine/crack taken by routes other than smoking
Marijuana	Admissions for abuse of THC and any other cannabis sativa preparation
Heroin	Admissions for heroin
Other Opiates	Admissions for abuse of nonprescription methadone, or use of codeine, morphine, oxycodone, hydromorphone, meperidine, opium, and other drugs with morphine-like effects
PCP	Admissions for phencyclidine
Hallucinogens	Admissions for lysergic acid diethylamide (LSD), dimethyltryptamine (DMT), dimethoxyphenylethylamine (STP), mescaline, psilocybin, peyote, and other hallucinogens
Amphetamines	Admissisions for methamphetamine/speed and other amphetamines including other amines and related drugs
Other Stimulants	Admissions for all other stimulants
Tranquilizers	Admissions for benzodiazepines, which include diazepam, flurazepam, chlordiazepoxide, clorazepate, lorazepam, alprazolam, oxazepam, temazepam, prazepam, triazolam, clonazepam, halazepam, and other tranquilizers
Sedatives	Admissions for barbiturates including phenobarbital and other sedatives/hypnotics such as chloral hydrate, and other nonbarbiturate sedatives and hypnotics
Inhalants	Admissions for ether, glue, chloroform, nitrous oxide, gasoline, paint thinner, and other inappropriately inhaled products
Other/Unknown	Admissions for use of other or unknown substances not listed above and admissions for non-substance abuse problems

Note: *TEDS* (treatment episode data set) includes information about individuals admitted to treatment, primarily by providers receiving public funding.

Source: "Categories for Primary Substance of Abuse," Substance Abuse and Mental Health Services Administration (SAMHSA), wwwdasis.samhsa.gov.

Appendix C. ASAM Levels

Continuum of Care

ASAM LEVEL / TITLE	DESCRIPTION	SPECIALIZED SERVICES
0.5 Early Intervention	Interventions for individuals with a known risk of developing substance-related problems, or a service for those for whom there is not yet sufficient information to document a diagnosable substance use disorder.	N/A
1 Outpatient Services	Recovery or motivational enhancement therapies/strategies needed for less than 9 hours/week (adults) or 6 hours/week (adolescents).	N/A
2.1 Intensive Outpatient Services	An organized outpatient service that delivers treatment services during the day, before or after work or school, in the evening, and/or on weekends to treat multiple dimensions of instability needed 9 or more hours/week (adults) or 6 or more hours/week (adolescents).	N/A
2.5 Partial Hospitalization Services	An organized outpatient service that delivers treatment services during the day, before or after work or school, in the evening, and/or on weekends to treat multiple dimensions of instability. Provides treatment for multiple dimensions of instability and for addiction and co-occurring conditions. Services needed 20 or more hours/week but not requiring 24-hour care.	N/A
3.1 Clinically Managed Low-Intensity Residential Services	24-hour living support and structure with available trained personnel that offers at least 5 hours of clinical service a week.	Encompasses residential services that are described as co-occurring capable, co-occurring enhanced, and complexity-capable services, which are staffed by designated addiction treatment, mental health, and general medical personnel who provide a range of services in a 24-hour living support setting.
3.3 Clinically Managed Population-Specific High-Intensity Residential Services	24-hour care to stabilize multiple dimensions with imminent danger. Offers less-intense milieu and group treatment for those with cognitive or other impairments.	
3.5 Clinically Managed High-Intensity Residential Services	Adult-only level of care typically offers 24-hour care with trained counselors to stabilize multidimensional imminent danger along with less-intense milieu and group treatment for those with cognitive or other impairments unable to use full active milieu or therapeutic community.	
3.7 Medically Monitored Intensive Inpatient Services	24-hour care with trained counselors to stabilize multidimensional imminent danger and prepare for outpatient treatment. Patients in this level are able to tolerate and use full active milieu or therapeutic communities.	
4 Medically Managed Intensive Inpatient Services	24-hour nursing care and daily physician care for severe, unstable problems in ASAM Dimensions 1, 2, or 3. Counseling is available to engage patients in treatment.	N/A
OTP Opioid Treatment Program	Daily or several times weekly opioid agonist medication and counseling to maintain stability in multiple dimensions for those with severe opioid use disorder.	N/A

Notes: *ASAM* is the American Society of Addiction Medicine. *N/A* is not applicable.

Source: "What Are the ASAM Levels of Care?," American Society of Addicition Medicine, accessed October 31, 2016, asamcontinuum.org.

Withdrawal Services

ASAM LEVEL / TITLE	SEVERITY	LEVEL / TYPE OF SUPERVISION
1-WM Ambulatory Withdrawal Management Without Extended On-site Monitoring	Mild	Daily or less than daily outpatient supervision.
2-WM Ambulatory Withdrawal Management with Extended On-site Monitoring	Moderate	All-day withdrawal management and support and supervision; nighttime supportive family or living situation.
3.2-WM Clinically Managed Residential Withdrawal Management	Moderate	24-hour support to complete withdrawal management and increase likelihood of continuing treatment or recovery.
3.7-WM Medically Monitored Inpatient Withdrawal Management	Severe	24-hour nursing care and physician visits; unlikely to complete withdrawal management without medical monitoring.
4-WM Medically Managed Intensive Inpatient Withdrawal Management	Severe	24-hour nursing care and daily physician visits to modify withdrawal management regimen and manage medical instability.

Source: *California Medi-Cal 2020 Demonstration: Special Terms and Conditions* (no. 11-W-00193/9), Centers for Medicare & Medicaid Services, www.dhcs.ca.gov (PDF).

Appendix D. Drug Medi-Cal Organized Delivery System Continuum of SUD Care

ASAM LEVEL / TITLE		PROVIDER
0.5	Early Intervention	Managed care or fee-for-service provider
1	Outpatient Services	DHCS certified outpatient facilities
2.1	Intensive Outpatient Services	DHCS certified intensive outpatient facilities
2.5	Partial Hospitalization Services	DHCS certified intensive outpatient facilities
3.1	Clinically Managed Low-Intensity Residential Services	DHCS licensed and DHCS/ASAM designated residential providers
3.3	Clinically Managed Population-Specific High-Intensity Residential Services	DHCS licensed and DHCS/ASAM designated residential providers
3.5	Clinically Managed High-Intensity Residential Services	DHCS licensed and DHCS/ASAM designated residential providers
3.7	Medically Monitored Intensive Inpatient Services	Chemical dependency recovery hospitals; hospitals; freestanding psychiatric hospitals
4	Medically Managed Intensive Inpatient Services	Chemical dependency recovery hospitals; hospitals; freestanding psychiatric hospitals
OTP	Opioid Treatment Program	DHCS licensed OTP maintenance providers, licensed prescriber

Notes: Provider types by the American Society of Addiction Medicine (ASAM). Refer to Appendix C for ASAM level of care descriptions. *SUD* is substance use disorder. Elsewhere in this report, *OTP* is referred to as *narcotic treatment program (NTP)*.

Source: *California Medi-Cal 2020 Demonstration: Special Terms and Conditions* (no. 11-W-00193/9), Centers for Medicare & Medicaid Services, www.dhcs.ca.gov (PDF).

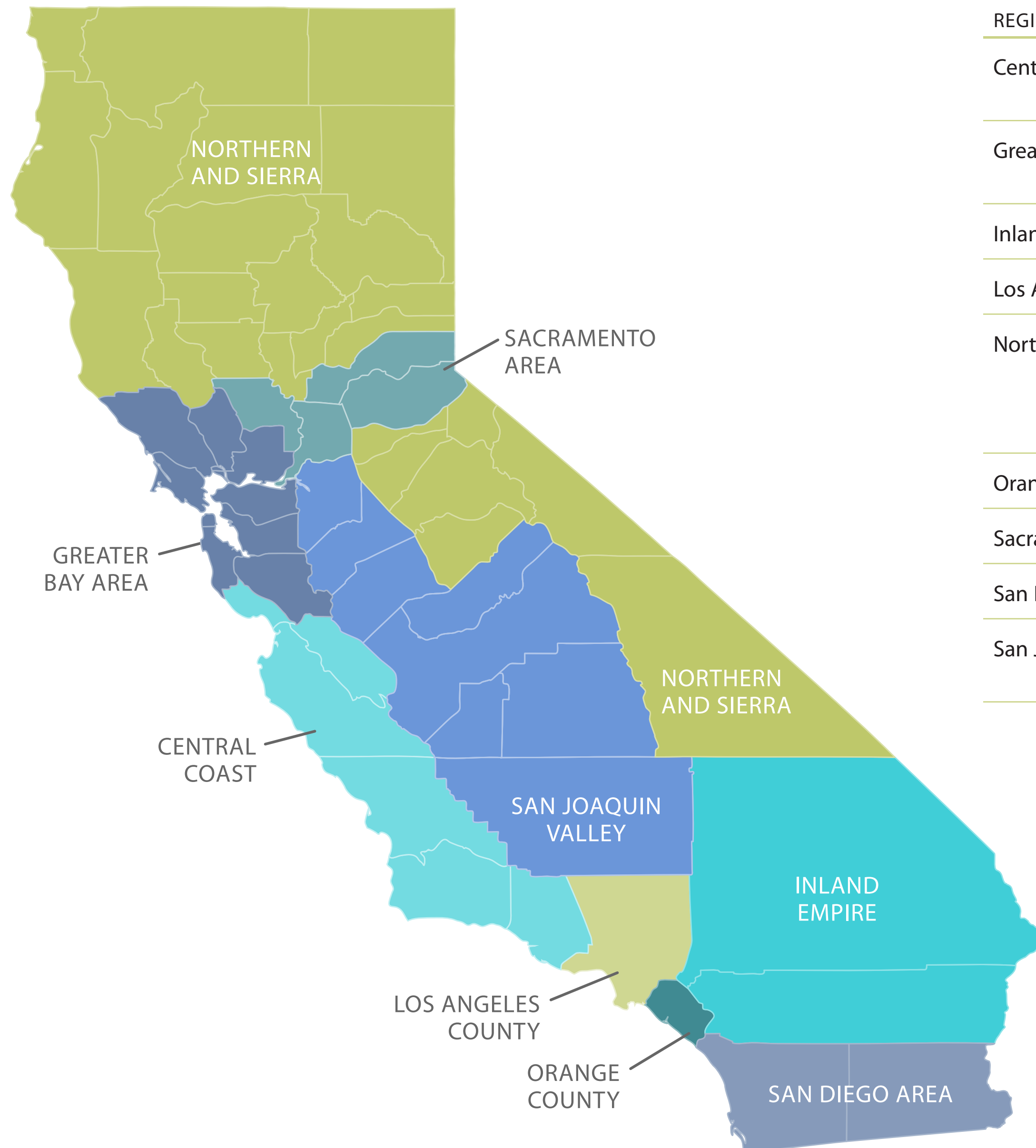
Appendix E. California SUD Treatment Programs and Services

	DESCRIPTION	LICENSING AUTHORITY	DHCS SUD COMPLIANCE DIVISION PROGRAM CERTIFICATION
Driving Under the Influence (DUI) Programs	Providing court-mandated educational sessions to individuals convicted of driving under the influence.	Department of Health Care Services (DHCS) Substance Use Disorder Compliance Division	N/A
Emergency Medical Services	Hospital emergency medical services for people suffering from SUD issues.	Department of Public Health (DPH)	Voluntary
Narcotic Treatment Programs (NTP)	Providing replacement narcotic therapy to individuals overcoming opioid dependency.	DHCS Substance Use Disorder Compliance Division	Voluntary
Outpatient SUD Services	Any outpatient medical facility licensed by DPH may also provide SUD outpatient services.	Department of Public Health	Voluntary
	Nonhospital outpatient SUD providers offering nonmedical SUD care.	No licensure required or available	Voluntary
Residential Medical Services	Medical services in a hospital residential setting to people overcoming alcohol and/or other drug issues.	Department of Public Health	Voluntary
Residential Nonmedical Services	Nonmedical care and/or recovery services to adults for the treatment of alcohol and other drug issues in a residential setting, including alcohol or drug detoxification; group, individual, or educational sessions; and/or recovery or treatment planning.	DHCS Substance Use Disorder Compliance Division	Voluntary for DHCS SUD Compliance Division licensed facilities, and DSS or other state agency licensed residential nonmedical facilities that have an SUD treatment component.

Note: *SUD* is substance use disorder. *N/A* is not applicable.

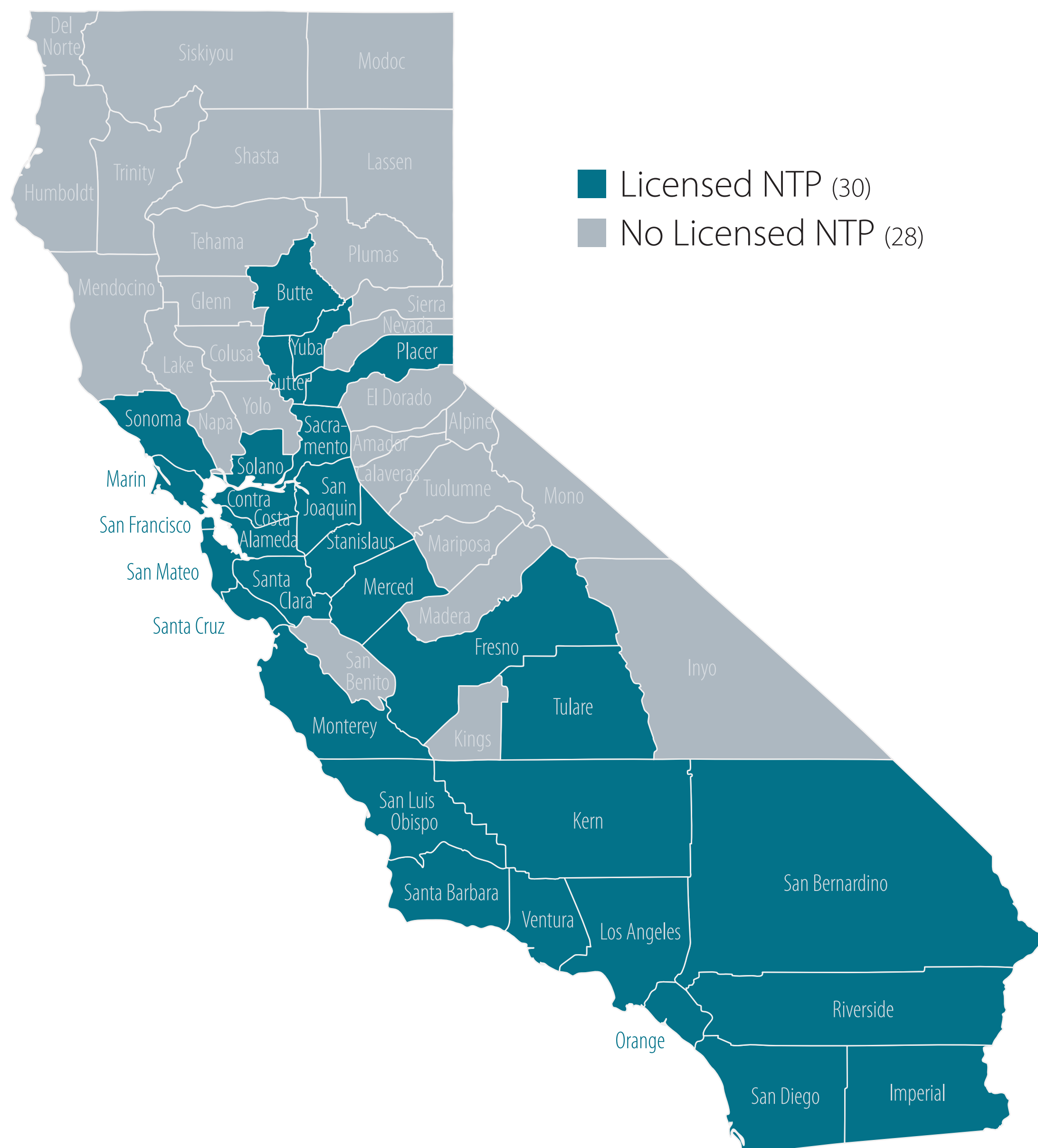
Source: Cal. Code Regs. tit. 9, § 9000 et seq., govt.westlaw.com.

Appendix F. California Counties Included in Regions



REGION	COUNTIES
Central Coast	Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz, Ventura
Greater Bay Area	Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma
Inland Empire	Riverside, San Bernardino
Los Angeles County	Los Angeles
Northern and Sierra	Alpine, Amador, Butte, Calaveras, Colusa, Del Norte, Glenn, Humboldt, Inyo, Lake, Lassen, Mariposa, Mendocino, Modoc, Mono, Nevada, Plumas, Shasta, Sierra, Siskiyou, Sutter, Tehama, Trinity, Tuolumne, Yuba
Orange County	Orange
Sacramento Area	El Dorado, Placer, Sacramento, Yolo
San Diego Area	Imperial, San Diego
San Joaquin Valley	Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare

Appendix G: Licensed Narcotic Treatment Programs, by California County



Source: *State of California Narcotic Treatment Program Directory*,
California Department of Health Care Services, April 9, 2018, www.dhcs.ca.gov.