



2026 California State of Public Health Report

Acknowledgments

This report was prepared by the California Department of Public Health (CDPH). This report is part of the State Health Assessment and Improvement Plan (SHA/SHIP) processes that include ongoing engagement with CDPH programs, California Health and Human Services (CalHHS) Agency and other State agencies, local health departments, Tribes, advisory committee members, and community partners. Report preparation included engagement with staff across CDPH, CalHHS, California Legislature, as well as local health departments, community partners, and academics within the Office of Health Equity (OHE) Advisory Committee, Community Partners and Data Disaggregation Workgroups, and Climate Change and Health Equity Advisory Group.

CDPH thanks the Governor's Office and the California State Legislature for their partnership and leadership to establish the Support for Vital Public Health Activities statutory law that authorized the biennial State of Public Health Report.

CDPH is deeply grateful to our partners that reviewed and contributed to the 2026 California State of Public Health Report.

CDPH Contributors

The report was developed in close coordination and consultation between the CDPH Director's Office, Office of Policy and Planning, and the Office of Legislative and Governmental Affairs.

This report reflects the contributions of a multitude of CDPH scientists and subject matter experts who provided guidance and data, conducted analyses, and drafted and reviewed report content. Thank you to the: Center for Environmental Health; Center for Family Health's Maternal Child and Adolescent Health Division; Center for Healthy Communities' Chronic Disease Control Branch, Chronic Disease Surveillance and Research Branch, Injury and Violence Prevention Branch, Environmental Health Investigations Branch, Nutrition and Physical Activity Branch, Occupational Health Branch, California Tobacco Control Branch, and Substance and Addiction Prevention Branch; Center for Infectious Diseases' Division of Communicable Disease Control and Office of AIDS; Center for Preparedness and Response; Financial Management Division; Office of Health Equity's Climate Change and Health Equity Branch and Health Research and Statistics Section; Office of Legal Services; Office of Policy and Planning; and Regional Public Health Office.

Drafting and development of this report was led by staff from the Research and Analysis and Policy sections within the CDPH Office of Policy Planning.

Suggested Citation:

California State of Public Health Report, 2026. Sacramento, CA: California Department of Public Health; 2026.

Table of Contents

Letter from the State Public Health Officer and CDPH Director	4
Executive Summary	6
Key Population Health Findings	8
What's New in this 2026 Report?	14
Introduction	15
Population Health Trends and Leading Causes of Morbidity and Mortality	20
Population Health Trends.....	21
Infant Mortality, Life Expectancy at Birth, and All-Cause Mortality	21
Race and Ethnicity, Age, and Sex Disparities	22
Place	26
Social Drivers of Health.....	33
Leading Causes of Morbidity and Mortality	34
Multiple Lenses	34
Mortality Over Time.....	37
Race and Ethnicity	39
Place	42
Leading Causes Across the Life Course	44
Early Life Stages: Supporting Health and Well-being for a Strong Start.....	48
Pregnancy and Maternal Health.....	49
Infant Health	53
Infant Mortality	53
Congenital Syphilis.....	57
Child Health	58
Adverse Childhood Experiences, Positive Childhood Experiences, and Flourishing	58
Asthma.....	62
Adolescence: A Time of Growth and Opportunity.....	66
Tobacco Use	67
Cannabis Use	70

Food Security.....	73
Young Adulthood: Building Skills and Positive Relationships to Thrive.....	75
Motor Vehicle Traffic Injury	75
Homicide	78
Depression.....	80
Suicide and Self-Harm.....	83
Adulthood: Managing Health and Chronic Disease Prevention	87
Cardiovascular Diseases	87
Diabetes	90
Cancer	92
Substance Use	95
Sexually Transmitted Diseases	100
Occupational Health Exposures	105
Older Adulthood: Supporting Healthy Aging.....	108
Neurodegenerative Diseases.....	108
Alzheimer's Disease and Related Dementias	108
Other Neurodegenerative Conditions Beyond Alzheimer's.....	111
Social Isolation and Suicide.....	114
Public Health Preparedness and Response	117
One Health.....	118
H5N1	119
Other Emerging and Climate-Sensitive Infectious Diseases.....	120
Climate-Driven Extreme Weather Events.....	122
Extreme Heat.....	122
Wildfire and Wildfire Smoke	125
Conclusion	128
Appendix	130
References.....	133

Letter from the State Public Health Officer and California Department of Public Health Director

Dear Governor Newsom and Honored Members of the California State Legislature:



Erica Pan, MD, MPH
Director and State Public
Health Officer
California Department of
Public Health

I am pleased to present the 2026 California State of Public Health Report. This is the second-ever State of Public Health Report, which describes the current public health environment and challenges, what it takes to sustain core public health functions and their impacts on our communities, and resources for data and public health actions on key population health indicators, trends, and disparities across our state.

Today, more than ever before, public health efforts on disease prevention and control, health promotion, and health protection are undermined due to misleading information and unsupported claims, lack of prioritization of federal funding, and politicization. While the state is taking steps to mitigate these uncertainties, it is becoming clear that California must lead the way in protecting Californians and preserving public health gains.

We are currently facing new challenges resulting from reductions in the federal workforce and federal funding cuts to healthcare, public health, and the social safety net, with already marginalized communities experiencing the greatest impacts. The full impact of these reductions is not yet apparent in our communities or in our data and we are actively planning for how to continue to support our most vulnerable residents to prevent the worst of these impacts.

Faced with federal threats and compounded by existing public health challenges like climate change and growing behavioral health issues, the public health approach is even more essential to prevent and mitigate harm to the health of our communities. Public health promotes health and well-being and prevents illness and death before they occur, increasing protective factors and reducing exposure to things that can make us sick. With this focus on prevention, we promote a healthy life course beginning with the conditions we are born into and setting foundations for wellness throughout our lives. Public health activities are investments in keeping people well.

This report describes the major gains in population health over the last few decades, as well as key strategies and investments from CDPH and this Administration to support thriving individuals, families, and communities. The data also underline areas in which we still have work to do to address long-standing health inequities as well as emerging threats to public health and federal actions that undermine our progress.

I hope this report inspires renewed collaboration across sectors and within government to build upon and sustain our successes in promoting healthy and thriving communities. Now more than ever, we must work together to protect the people we serve. We aim to empower our partners and communities with data to advance health and equity through evidence-based approaches. Clear, science-based public health communication is essential to maintaining public trust and engagement with California's institutions. I look forward to working together to achieve our shared vision of healthy communities with thriving families and individuals.

Thank you for your continued partnership and commitment to supporting a healthy California for all.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Erica Pan". The signature is fluid and cursive, with a large initial "E" and "P".

Erica Pan, MD, MPH
Director and State Public Health Officer
California Department of Public Health

Executive Summary

Public health is dedicated to preventing injury and disease before they occur to improve the health and well-being of entire communities. The California Department of Public Health (CDPH)'s mission is "to advance the health and well-being of California's diverse people and communities" with the vision that *all* Californians enjoy "healthy communities with thriving families and individuals." Public health in California encompasses a broad spectrum of activities aimed at improving the overall health and well-being of its diverse residents. California is home to over 39 million people, with a rich tapestry of cultures, languages, and geographies. California's diversity is one of the state's greatest strengths, but it requires tailored public health strategies to address the unique needs of communities. Public health efforts are all around us and the mission and vision of CDPH cannot be achieved without collective action across sectors.

In addition to critical health safety functions to protect the public, public health focuses on primary prevention and working upstream to address the social and community conditions that drive disparities and inequities in health problems, also known as the social drivers of health. Improving equitable access to the social drivers of good health requires broad involvement across government and other sectors to increase protective factors and decrease risk factors for negative health outcomes. Public health is grounded in health equity, with an emphasis on ensuring the conditions for health early in life to set the stage for lifelong health for all people.

The State of Public Health Report, as required by California Health and Safety Code ([HSC 101320.3](#)), supports the essential public health service of assessing and monitoring population health to inform policies, plans, and program strategies. The 2026 California State of Public Health Report provides a comprehensive overview of the current population health status and trends across the state, emphasizing the importance of public health initiatives and the need for multidisciplinary partnerships to achieve thriving communities. This report highlights the significant progress made in various health domains while recognizing persistent disparities remain. With a few exceptions, the report's findings draw from data through December 31, 2024. This Executive Summary highlights key findings which are described in further detail in the full report.

Emerging Threats to Public Health

California faces significant challenges to health and well-being due to federal funding cuts to core programs and federal policy changes that undermine public health and harm already marginalized communities. Disruptions to programs like Vaccines for Children and Supplemental Nutrition Assistance Program (SNAP-Ed) impact state and local public health activities and could lead to reductions in outreach, staff and systems capacity, and could have long-term effects on the rates of injury, disease, and death among Californians.

In response to federal threats, as well as other emerging challenges to public health like climate change, an aging population, and behavioral health issues, California is taking proactive steps to protect health. These include forging partnerships across states and sectors to share timely, evidence-based guidance and public health messages to safeguard vaccine access and promote health equity and well-being for all.

Population Health Trends and Leading Causes

Over the past few decades, California has seen improvements in overall health, with longer life expectancy and declines in death rates for several chronic conditions, including ischemic heart disease, stroke, lung cancer, chronic obstructive pulmonary disease (COPD), prostate cancer, and breast cancer. California also has one of the lowest all-cause mortality rates and the highest life expectancy in the nation thanks to the successes of public health, healthcare, and improved access to resources that promote good health, like education and nutrition supports. Life expectancy, all-cause mortality, and the infant mortality rate all worsened during the pandemic but have now recovered to pre-pandemic levels. Since 2000, death rates have declined for all age groups except younger adults.

There were significant long-term increases in deaths due to Alzheimer's disease, which was also the second leading cause of death overall for Californians and the leading cause of death for adults aged 85 and older. Ischemic heart disease, stroke, and hypertensive heart disease continue to be among the leading causes of death for all Californians.

Despite important gains, significant disparities persist between demographic groups, including race and ethnicity, region, gender, education level, and income. Disparities in mortality rates are evident from early life stages and continue throughout the lifespan, particularly among Black or African American, Native Hawaiian and Pacific Islander, and American Indian and Alaska Native populations. Californians living in rural areas experience higher mortality rates compared to populations within urban areas. This pattern is observed for many specific causes of death, including road injury, suicide, and drug overdose. Unequal access to the social drivers of health such as wealth, education, and healthcare access are closely linked to community health outcomes.

The 2026 State of Public Health Report organizes population health trends by life stage to highlight how health outcomes impact specific age groups and burdens accumulate across the lifespan. The life stages in this report are early life stages (from pregnancy and infancy to 17-year-olds), young adulthood (18- to 34-year-olds), adulthood (35- to 64-year-olds), and older adulthood (65 and older). Public health uses a life course perspective to tailor prevention strategies to different life stages to promote health and well-being.



Key Population Health Findings

- **All-cause mortality, cancer death** rates, and **cardiovascular death** rates dropped to **all-time lows**, and **life expectancy** reached an **all-time high**, in 2024.
- Since 2000, **death rates increased among 25- to 44-year-olds** but **decreased among all other age groups**. This increase in deaths among younger adults was driven by behavioral health and injury-related causes, especially drug overdose.
- **Drug overdose** deaths remain a leading cause of death but **decreased substantially** in 2024 for the first time in 14 years.
- Deaths from **ischemic heart disease**, the leading cause of death, **continued to decrease**.
- **Pregnancy-related mortality** and severe maternal morbidity rates have worsened in recent years.
- There are important **racial disparities in life expectancy, pregnancy-related mortality, and infant mortality** with Black or African American populations experiencing worse outcomes compared to other groups.
- **Death rates are higher in rural areas** than in urban areas, and while death rates decreased in urban areas in the decade prior to the pandemic, rates increased in rural areas.
- **Congenital syphilis rates decreased** in 2023 and 2024 but remained substantially higher than they were a decade ago.
- **Alzheimer's disease and related dementias** were the leading cause of death for older adults 85 and older. Death rates have more than doubled since 2000.
- **Kidney disease** deaths have increased sharply since 2000 (with slight, but encouraging, decreases in 2023 and 2024). Chronic kidney disease due to diabetes accounted for about half of all kidney disease deaths.
- **Septicemia** was the leading cause of hospitalization and has been increasing.
- **Back and neck pain** is, and has been for many years, the leading cause of Years Lived with Disability.
- There were nearly 12,500 cases of **Valley fever** in 2024, the highest year on record.

Early Life Stages

Pregnancy and infant health outcomes are critical indicators of social, economic, and environmental conditions. Maternal deaths related to pregnancy are tragic and have significant negative impacts on families and communities. Pregnancy-related mortality has worsened in California since 2012. Behavioral-health related causes like drug overdose, unintentional injuries, homicide, and suicide are among the drivers. Severe maternal morbidity rates have also risen in recent years.

California's infant mortality rate ranks among the lowest in the U.S. and steadily declined over the past 50 years until reaching a record low in 2020. California's innovations in public health and healthcare, such as maternal morbidity and mortality investigations, regionalization of care, high-quality group and individual interventions, and expanded Medi-Cal coverage have led to improvements in pregnancy-related and infant mortality. Yet, disparities remain, with the highest rates among American Indian and Alaska Native and Black or African American populations. Structural racism is a key driver of pregnancy-related and infant mortality. CDPH is committed to addressing structural racism through public health practice and buffering its impact on health. The [Perinatal Equity Initiative](#) centers Black community members in intervention design and implementation to identify best practices and reduce racial disparities in infant mortality.

This report addresses the increases in congenital syphilis rates over the last decade, driven by changes in who is infected with syphilis (i.e., women and their male sexual partners). The rate decreased in 2023 and 2024 but was still much higher than a decade ago. Various factors are driving decreases, including state and federally supported programs for local health department disease intervention staff to meet patients where they are and effectively test, treat, and prevent syphilis. CDPH released [updated guidance](#) supporting these efforts.

Early life experiences of adversity and trauma play an important role in influencing health throughout life. Approximately two-thirds of California adults experienced one or more Adverse Childhood Experiences (ACEs) during childhood, with nearly 20% experiencing four or more. Experiencing a greater number of ACEs increases the risk of developing long-term health problems such as heart disease, asthma, and mental health and substance use disorders, while Positive Childhood Experiences (PCEs) serve as buffers to the harmful effects of early life adversity. Promoting PCEs and reducing ACEs is a public health priority.

Adolescence is a period of significant physical, neurological, and mental development. Tobacco and cannabis use during this period is concerning as it can lead to important changes in the brain as well as increase the risk for mental health and substance use disorders. Traditional cigarette use has declined, but vaping has become more prevalent among high school students. Youth in rural areas and those identifying as lesbian, gay, bisexual, transgender, queer, intersex, asexual, and other identities (LGBTQIA+) had higher rates of

tobacco use. In 2024, there were more than 72,000 non-fatal emergency department (ED) visits related to cannabis, with more than 50% of those among adolescents and young adults.

Young Adulthood

Injury-related conditions, including drug overdose, road injury, homicide, and suicide, were the leading causes of death during this life stage. Behavioral health-related conditions are among the top causes of premature death (years of life lost), hospitalization, and years lived with disability among younger adults. This trend is driven by increases in mortality primarily from drug overdose. Depression is a growing concern among adolescents and younger adults, and depressive disorders were a leading cause of hospitalization for these age groups. Unintentional motor vehicle traffic death rates were highest for this age group.

Younger adults, as well as men and Black or African American individuals, experienced the highest rates of homicide. Racial and ethnic disparities in homicide rates were among California's largest health disparities. People living in communities with inequitable access to social, political, and economic resources are at an increased risk of exposure to multiple forms of violence.

In general, among American Indian or Alaska Native, Native Hawaiian and Pacific Islander, Black, and Latino populations, suicide rates were highest among younger adults and then decreased with age. Self-harm ED visit rates were generally highest among adolescents. Males had much higher suicide rates than females within all race and ethnicity groups. Statewide initiatives like the [Children and Youth Behavioral Health Initiative](#), [988 expansion](#), and the [Behavioral Health Services Act](#) aim to address these concerning behavioral health trends, improving the behavioral health system and preventing problems before they arise.

Adulthood

As individuals age into adulthood, they experience increased vulnerabilities for chronic diseases such as cardiovascular disease, diabetes, and cancer. Ischemic heart disease death rates declined by 62% since 2000 due to improvements in prevention and treatment, but deaths from hypertensive heart disease and congestive heart failure have increased significantly. The prevalence of diabetes among adults increased between 2011 and 2024, from 8.4 to 12.4%. Prediabetes prevalence more than doubled over the same period.

Cancer incidence and mortality rates declined for all racial and ethnic groups, but disparities persist. Black or African American populations had the highest overall mortality rates for all cancers combined. Cultural and systemic barriers, including gaps in healthcare coverage and experiences of discrimination, create serious barriers to timely cancer diagnosis and treatment.

Overdose deaths substantially decreased in 2024 for the first time in 14 years, after reaching an all-time high in 2023. Overdose remained the leading cause of death for adults aged 25-54. Individuals aged 25-34 and 35-44 had the most drug-related overdose deaths where opioids and stimulants were both detected. Disparities in drug overdose are observed in higher mortality rates among men, Black or African American and American Indian and Alaska Native individuals, as well as among rural communities.

Workplace exposures have an important influence on health during adulthood. Latino workers represent the largest segment of California's workforce and are overrepresented in high-risk industries. Workers in the highest risk, lowest wage jobs tend to be younger workers of color. These jobs often do not provide job security or employer-sponsored health insurance. Occupational health exposures like silica dust, extreme heat, and lead are a focus for public health policy and education efforts to reduce exposure and mitigate harm among workers. Workplace fatality rates increased slightly between 2016 and 2023, from 2.2 to 2.5 per 100,000 full-time equivalent for workers aged 16 years and older.

Older Adulthood

California's population is growing older, driven by the aging of baby boomers, declining birth rates, and increasing life expectancy. In 2024, about 17% of California's population was 65 years of age and older. This percentage is projected to grow to 22% in 2040. These demographic changes require adaptation in the healthcare and caregiver workforce as well as other supports for older adults to reduce the burden of isolation, housing, and healthcare.

Older adults, in particular older White males, had the highest suicide death rates. In 2024, 23% (930) of all confirmed suicide deaths were among Californians aged 65 and older.

Alzheimer's disease and related dementias were the leading cause of death for older adults aged 85 and older. Since 2000, death rates from Alzheimer's disease have more than doubled. As the population ages, the number of people living with Alzheimer's disease is estimated to rise, placing a greater strain on families, caregivers, and the healthcare system. Caregiving is essential for patients with Alzheimer's disease and related dementias, who often rely on family or friends. However, the provision of care significantly impacts caregivers' physical, mental, and overall health. California is strengthening the caregiver workforce and promoting caregiver well-being through targeted grants and training programs such as the [21st Century Nursing initiative](#).

While Alzheimer's disease and related dementias are the most common neurodegenerative conditions affecting older Californians, other disorders also contribute significantly to disability, long-term care needs, and reduced quality of life. These include Parkinson's disease, multiple sclerosis (MS), amyotrophic lateral sclerosis (ALS), and Huntington's disease.

Public Health Preparedness and the Environment

Public health emergencies and environmental disasters have important human health impacts across the life course. Emergency preparedness and response is a key public health function and addressing emergencies and other emerging issues are a strategic priority for CDPH. Climate change has increased the frequency and intensity of natural disasters. The number of annual emergency activations has risen significantly in recent years, especially due to wildfires and events like COVID-19 and H5N1.

The COVID-19 pandemic magnified gaps in public health infrastructure, leading to significant investments through the [Future of Public Health initiative](#). This investment has improved more rapid disease detection and investigation, emergency response and recovery, and health equity efforts. With the Future of Public Health, California is better prepared to respond to public health emergencies such as wildfires or emerging infectious diseases, but reductions in federal resources threaten the gains we have made.

CDPH is also investing in climate resilience programs to help communities adapt. This includes developing optional [guidance and tools](#) for local health jurisdictions to integrate climate change and health considerations into their Community Health Assessments and Community Health Improvement Plans, funding a sample of local health departments to test this guidance, and educating the public about the health risks associated with climate change.

What is Public Health Doing?

California has made substantial progress in improving public health and yet challenges remain. The effects of structural racism and other forms of structural disadvantage are evident across the lifespan, driving inequities in life expectancy and many health outcomes. There is great opportunity to mitigate health inequities by improving access to resources and opportunities necessary for good health and well-being. The Governor and Legislature's investment in the Future of Public Health have allowed CDPH to strengthen core infrastructure, build innovative systems, and continue to advance health and equity.

However, many improvements in population health and public health capacity are at risk as the current federal administration's actions undermine science-driven public health guidance, disrupt funding to critical prevention programs and healthcare services, and could worsen health outcomes for communities already experiencing marginalization and health disparities. California is taking action and leading a coordinated effort with other states, across sectors, and within California governmental agencies to strengthen vaccine and public health guidance, preventing harm from misleading information and protecting communities from disease and injury. Partnership and innovation across sectors, communities, and states is essential to address long-standing and emerging challenges and safeguard the health of all Californians.





What's New in this 2026 Report?

The **2026 State of Public Health Report** includes new topics and updates from the 2024 report, reflecting feedback from key partners (as required by statute) and recent trends. These include sections on:

1. Expanded detailed data on race and ethnicity.
2. Geographic disparities, with regional views and rural health disparities.
3. Additional hospitalization and **emergency department** trend data and by life stage.
4. Maternal mental health.
5. Food security.
6. Silicosis cases from engineered stone exposure.
7. Neurodegenerative diseases.
9. Emerging infectious diseases, including H5N1.
10. One Health and its role in emergency preparedness and response.

Introduction

What Is Public Health?

Health is not just the absence of disease or injury, but rather it is a state of complete physical, mental, and social well-being. Public health is different from healthcare in that it shifts the focus from treating disease to promoting health and preventing injury and illness before they occur (also referred to as **primary prevention** or working “upstream”).

CDPH's mission is to advance the health and well-being of all of California's diverse people. CDPH envisions healthy communities with thriving families and individuals throughout the state. To achieve this vision, CDPH strives to continuously learn and get better, prevent harm and promote healing, and protect and improve the health and well-being of communities and individuals across California (see the [CDPH Strategic Plan 2025-2030](#)).

The health and well-being of individuals is linked to the health and well-being of the communities in which they live. Factors that influence health, or **social drivers of health**, such as financial stability, education, housing, nutrition security, healthcare access, neighborhoods, and the built environment, are the conditions in which people are born, grow, live, work, and age.¹ These factors are shaped by the distribution of resources and social and institutional structures, rather than solely in individual choices and behaviors.[3] The community conditions in which an individual is born and lives influence overall life expectancy and are key drivers of disparities across communities (See [Life Expectancy at Birth by Census Tract](#)). Public health's role, therefore, is not just to mitigate the effects of these drivers but also to actively engage in collaboration with partners in transforming them in ways that promote health for all.

Equity is CDPH's north star. An equity-based approach to public health goes beyond providing the same, or equal resources to all and instead focuses on providing specific, tailored resources that individuals need to achieve health and well-being. The United States' history of colonization, chattel slavery, and racial segregation has created disparities in access to resources and community investments, leading to inequitable opportunities for well-being that have disadvantaged generations of Black and Brown families.[4] Experiences of structural disadvantage, such as poverty and living in areas with more pollution, also drive health inequities. Advancing health equity requires a multi-faceted approach that includes reducing barriers to healthcare, housing, nutrition, safe environments, and other essential resources across the lifespan. Public health uses a **life course perspective** to understand and address the unique

¹ See the [Health Equitree](#) for a visual example of how the social determinants influence health.

vulnerabilities and health impacts at each stage of life, with an emphasis on intervening early in life.

Public health covers a wide range of activities, working with partners so communities have clean air and water, safe food and roads, and accessible clinics, hospitals and healthcare facilities, as well as preventing or reducing impacts from harmful substances and infectious diseases. CDPH works with local public health departments to inform and educate people about healthy choices; prevent chronic diseases and conditions like diabetes, cardiovascular disease, and asthma through access to nutritious foods, education, and behavior change; address the health impacts of climate change; and improve behavioral health. Public health practitioners conduct research and data surveillance to track and understand disease pathways and health outcomes; collaborate with communities to promote health and provide critical services; engage in cross-sector partnerships to address the social drivers of health; and promote policies that reduce social and institutional inequities that impact our health.[5]

Public health is all around us. Although public health's most visible role may be in responding to emergencies, much day-to-day work focuses on creating the contexts most conducive to optimal health across the lifespan, for everyone. This means tackling the root causes of negative health outcomes and disparities and transforming systems to build a more just and equitable society.

What is the State of Public Health Report?

The State of Public Health Report is a biennial report established in 2022 in the California Health and Safety Code ([HSC 101320.3](#)) and supported by the [Future of Public Health investment](#). The report uses multiple health measures and data sources to highlight the major trends and disparities in health outcomes across California and presents opportunities to improve population health. The report organizes population health trends and disparities by life stage to highlight burden for specific groups and how public health supports healthy people and communities. This is the second iteration of the State of Public Health report.

This report is part of the California [State Health Assessment and Improvement Plan \(SHA/SHIP\)](#), a comprehensive process leveraging a wide-range of quantitative and qualitative inputs from various sources and partners to assess California's population health status, identify and prioritize opportunities for population health improvement, and align strategies and resources to address these shared objectives. Many data sources are used throughout this report, and it incorporates the expertise and analyses of scientists and subject matter experts from across CDPH's Programs. This report adds to a collection of CDPH reports and resources (for example, the Office of Health Equity's [Demographic Report on Health and Mental Health Equity](#)) that contribute to governmental public health's foundational function of surveillance, monitoring, and response.

Statute requires the State of Public Health Report be submitted to the Governor and California State Legislature. This report also aims to inform local health departments, public health practitioners, and the public on health outcomes and drivers of health. Public health does not and cannot act alone to achieve healthy and thriving communities across California. This report highlights opportunities for partnership and strengthened multi-sector collaboration.

Transparent, timely, and evidence-based public health communication from trusted experts is essential to regaining and maintaining public trust and engagement with California's institutions. This is more important now than ever as communities are faced with increasing misleading rhetoric and unsupported claims. With this report, CDPH aims to inform and empower state leaders and communities to partner and engage in promoting the health and well-being of Californians.

What Is Needed to Protect Public Health?

The Future of Public Health

A stable and sustainable public health system is essential to build upon and maintain the population health gains described above while promoting health and health equity and responding to emerging public health threats.

Between 2007 and 2019, public health funding in California was largely categorical, and overall, levels gradually decreased. CDPH's funding mostly comes from federal and state special funds, which historically were disease-specific funding streams defining the types of activities that could be supported.[6] State General Fund represented a small proportion of CDPH's total budget prior to the pandemic, and provided one-time appropriations for specific activities.[7] This funding landscape contributed to siloed efforts, workforce shortages, use of outdated technology and surveillance systems, and limited flexible capacity for emergency response. The pandemic exacerbated these challenges and resulted in public health professionals experiencing burnout and turnover.[8]

COVID-19 was an unprecedented challenge that underscored the importance of a strong public health workforce and the need for 21st century infrastructure. The pandemic response included a large influx of one-time state and federal funding that allowed CDPH to improve data and disease response systems and expand its workforce dramatically. In response to lessons learned from the pandemic, California provided significant support towards its public health system to advance recovery and population health. The [Future of Public Health Initiative](#) has allowed CDPH and local public health jurisdictions to further strengthen emergency response capacities and fill critical gaps in public health programming and staff.

California's Future of Public Health is a critical investment for ongoing support of public health. In a moment of great uncertainty and threats, it is a commitment to defending population health gains and the public health workforce and programs that made those possible. However, it will take continued effort to transform public health to respond to threats, protect the most vulnerable, and improve population health for future generations.

New Threats to Public Health

Following significant funding variability in recent years, public health is facing unprecedented challenges and new uncertainty. Federal policy and organizational changes within the U.S. Department of Health and Human Services (HHS), federal workforce reductions, and federal funding cuts pose a significant challenge to healthcare, public health, and the social safety net. Approximately 45 percent of the CDPH budget comes from federal funding sources supporting a range of activities, from workforce capacity to support for direct services such as the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC).

As of January 2026, terminated federal funding for CDPH includes the Supplemental Nutrition Assistance Program (SNAP-Ed), the comprehensive sexual health education program known as the Personal Responsibility Education Program, as well as disruptions to the Vaccines for Children and Epidemiology and Laboratory Capacity grants, among others. Many of the proposed federal workforce and funding reductions face legal challenges and are under injunction and ongoing litigation, causing uncertainty and impacting planning. Federal public health infrastructure and workforce cuts have wide impacts on data collection and reporting, technical assistance and communication, and knowledge and expertise.

These changes are impacting Californians in numerous ways. Funding cuts to SNAP, Medicaid, and healthcare subsidies for the Affordable Care Act marketplace will reduce support for the basic needs of millions of Californians, with the most vulnerable Californians experiencing worse impacts. Proposed Center for Disease Control and Prevention's (CDC) budget cuts and elimination of multiple public health grants would affect health programs, jobs, and services across the state. These cuts will limit efforts to manage and prevent communicable diseases through disrupted capacity for disease surveillance and detection. Long-term effects of these actions include higher healthcare costs, reduced life expectancy, and negative economic consequences.[9] Federal action undermining vaccine access and increasing levels of unsupported claims and misleading rhetoric are driving confusion regarding vaccine eligibility and access and could result in reduced vaccination rates and increases in vaccine preventable diseases.

Meanwhile, public health challenges are growing. Extreme weather events from climate change are increasing in intensity and frequency.[10] The population is

aging, and by 2040, 22% of Californians will be 65 or older.[11] Behavioral health challenges are a growing concern, particularly among young and older adult men, and include social isolation, suicide, and harms from behavioral, chemical, and digital addictions (e.g., alcohol, opiates, methamphetamines, high-potency cannabis, and social media).[12-14] At the same time, there is growing distrust in public institutions, science, and medical and healthcare systems. Populations such as LGBTQIA+ and immigrant communities are experiencing increased vulnerability due to executive actions restricting gender affirming care and heightened immigration enforcement and detention.[15, 16]

California's Leadership to Protect and Scale Public Health Improvements

Confronted with new challenges, California must work to sustain the hard-fought public health achievements of the past several decades. CDPH is assessing federal impacts and responding proactively, with a steadfast focus on maintaining commitment to core values and public health principles. For example, ahead of peak respiratory virus season in 2025, California took [decisive action to protect vaccine access and health insurance coverage](#). California, Washington, Oregon, and Hawaii united to establish the [West Coast Health Alliance](#) (WCHA) in response to federal actions undermining CDC's scientific integrity and politicizing medicine and public health. CDPH coordinated with the WCHA to [issue evidence-based immunization guidance](#) informed by trusted national medical organizations. California also updated state law (Chapter 105, Statutes of 2025 [[AB 144](#)]) establishing state-level protections to help Californians have access to life-saving vaccines and screenings.

In September 2025, CDPH became the first U.S. state to join the World Health Organization's Global Outbreak Alert and Response Network. In October, Governor Newsom joined 14 other Governors and launched the [Governors Public Health Alliance](#), a non-partisan coalition to coordinate public health guidance based in science and counter the concerning trend of increasing politicization of public health. California launched the Public Health Innovation Exchange (PHNIX) initiative in December to chart an innovative, sustainable path forward for public health amidst losses in federal resources and leadership.

For a detailed analysis of federal actions, impacts to public health, and how California is responding, see the State of Public Health Report Highlight. California continues to lead the way by providing residents with consistent, science-based recommendations, empowering them to make decisions to protect their health and prevent disease.



Population Health Trends and Leading Causes of Morbidity and Mortality

Many data sources are used in this report to assess Californians' health, including vital statistics (birth and death), surveillance systems and registries (e.g., reportable communicable/infectious diseases case and lab reporting systems, cancer registry), hospital discharge and emergency department (ED) visit data, administrative data, surveys (e.g., the California Health Interview Survey and the Behavioral Risk Factor Surveillance System), socioeconomic-related data (e.g., the American Community Survey), and more.

Over the past many decades, the health and well-being of Californians have improved, as reflected in lower infant mortality, longer life expectancy, and reductions in deaths from all causes overall and from many specific leading causes including ischemic heart disease; stroke; chronic obstructive pulmonary disease (COPD); lung, breast, prostate, and colon cancers; HIV/AIDS; and others. At the same time, challenges to the collective health and well-being of Californians persist and exacerbate existing disparities. This section of the report outlines key population health trends across the state, including the leading causes driving morbidity and mortality and important differences in health outcomes experienced by specific population groups.

Throughout this report, data and other information are often shown grouped by race and/or ethnicity. Such grouped data are important for quantifying disparities and addressing inequities. It is critically important to keep in mind that "race" and "ethnicity" are complex and subjective social constructs, and their associations with health outcomes are not driven by any innate aspect of race or ethnicity, but rather by the historic and current associations of race and ethnicity with privilege and advantage or disadvantage through a wide range of social drivers of health and place, including racism, education, wealth, safe neighborhoods, healthcare, and many others.

Data Notes

Unless otherwise noted: data in the report, including those in charts, are for California; all rates are per 100,000 population; death rates are age-adjusted;

and data are for the most recent year for which data are available. Data referred to in the text that do not appear in specific charts are sourced from the [California Community Burden of Disease Engine \(CCB\)](#) unless otherwise stated. Additional technical notes and detail are available in the Appendix.

Population Health Trends

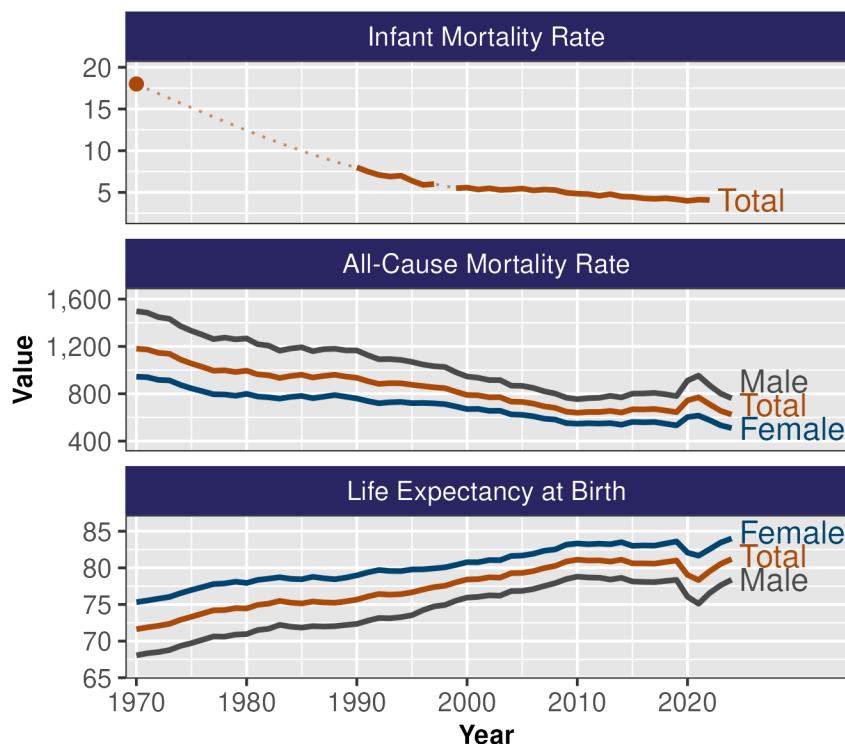
Infant Mortality, Life Expectancy at Birth, and All-Cause Mortality

Infant mortality rate, life expectancy at birth, and all-cause death rates²—are powerful metrics that summarize overall population health and disparities across groups. Due to the successes of public health and medical care, California has shown striking improvements on all three measures in the past 50+ years.

- There were about 18 infant deaths per 1,000 live births in 1970, about 8 births in 1990, just under 5.0 in 2000 and 4.1 in 2022.[17]³
- Life expectancy at birth increased from 71.6 years in 1970, to 75.7 in 1990, and to 81.2 in 2024.
- All-cause mortality dropped from 1,181.1 in 1970, to 934.6 in 1990, to 624.2 in 2024.
- While these measures all worsened during the pandemic, they are all back to the direction of improvement (Figure 1).

Figure 1

Trends in Infant Mortality Rate, All-Cause Mortality Rate (Age-Adjusted) by Sex, and Life Expectancy at Birth by Sex, 1970-2024, California



² Life expectancy at birth and all-cause death rate are key summary measures inversely related to each other. As death rates increase, life expectancy declines; conversely, as death rates decrease, life expectancy increases.

³ Data are not yet available for the most recent years due to the follow-up period required to assess infant mortality. Data are not available for 1998. Standard CDPH data are not available prior to 1990—the 1970 data point is based on special study in the published literature.

Race and Ethnicity, Age, and Sex Disparities

While there has been long-term and sustained improvement in overall health, and improvement for virtually all population subgroups⁴, strong disparities remain for many subgroups, including groups based on race and ethnicity, age, sex, and other factors. Examples of such disparities with these large summary measures—infant mortality, life expectancy, and all-cause mortality—are shown here or in other sections in the Report.

Disparities in Health Outcomes Begin in the Earliest Life Stages

Disparities in all-cause mortality are evident from the very beginning of life and continue across the life course (Figure 2). The chart below shows the *ratio* of the all-cause mortality rate for race and ethnicity groups, for specific ages, compared to the rate for the White population in those same age groups.⁵

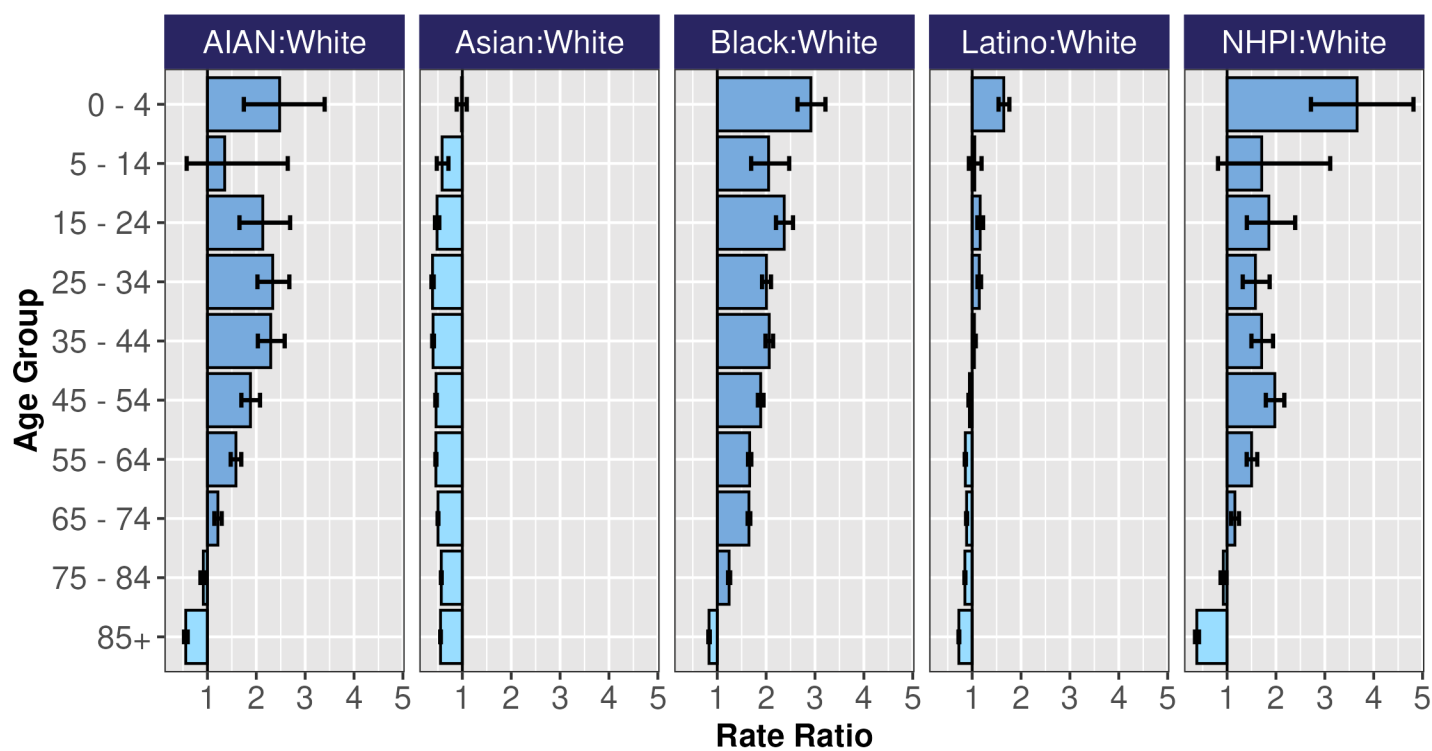
- The mortality rate among Black or African American children aged 0-4 was nearly 3 times that of White children, and this disparity was present for most other age groups. A similar pattern was observed among Native Hawaiian or Pacific Islander and American Indian or Alaska Native individuals.
- Rates among Latino populations were higher in younger years, but better (lower) than, or very similar to, those of White individuals in adulthood.

⁴ See, for example, 2000 to 2024 [mortality trends by race and ethnicity, age group, and sex](#).

⁵ Figure 2 shows the ratio of age-specific American Indian or Alaska Native, Asian, Black or African American, Latino, and Native Hawaiian or Pacific Islander all-cause death rates to the corresponding age-specific White death rates. White individuals are used as the reference group since they have historically been one of the largest groups in the state, and are, on average, relatively advantaged. A rate ratio of 1.0 means that the rates are the same for both groups.

Figure 2

Race and Ethnicity Age-Specific All-Cause Mortality Rate Ratio with White Population as Reference Group, 2022-2024, California



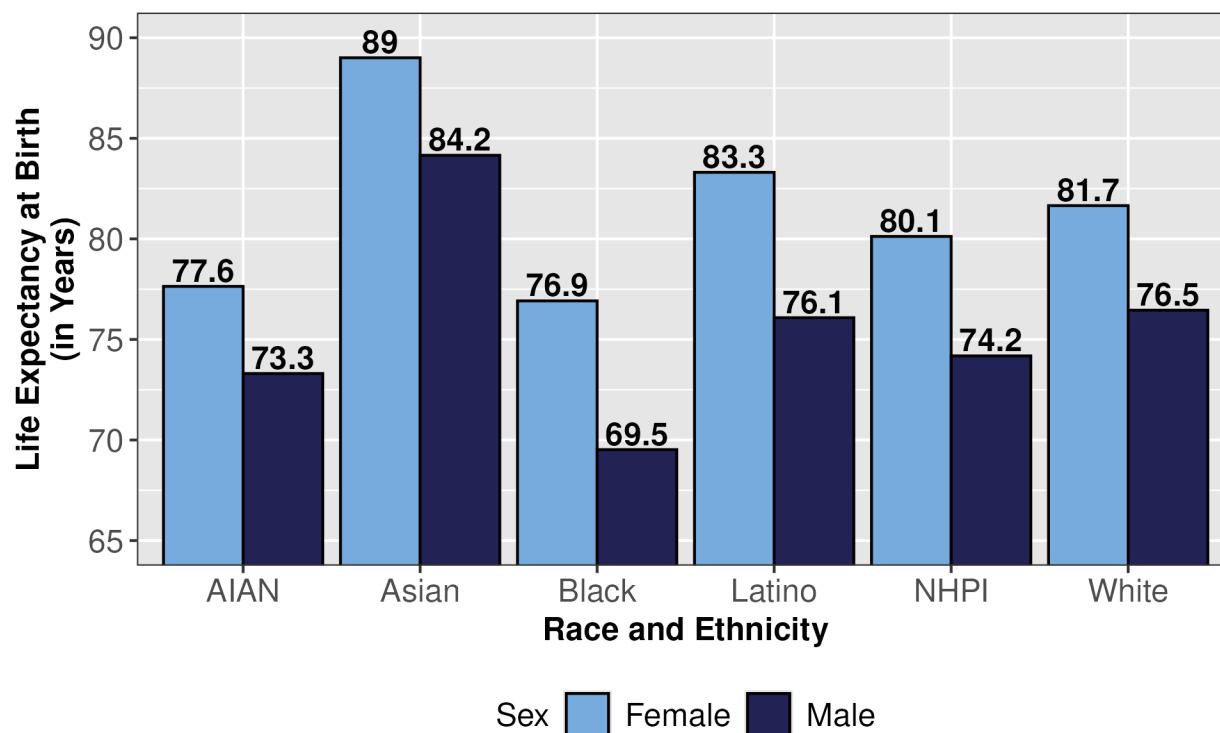
Abbreviation Notes: AIAN = American Indian or Alaska Native; NHPI = Native Hawaiian or Pacific Islander.

These higher mortality rates among Black or African American, Native Hawaiian or Pacific Islander, and American Indian or Alaska Native individuals across the life course result in disparities in life expectancy.

- The gap between the lowest and highest life expectancy (at birth) was 19.5 years in 2020-2024, with life expectancy being around 69.5 years among Black or African American males and 89.0 years among Asian females (Figure 3).

Figure 3

Life Expectancy by Race and Ethnicity and Sex, 2020-2024, California



Rising Death Rates Among Younger Adults

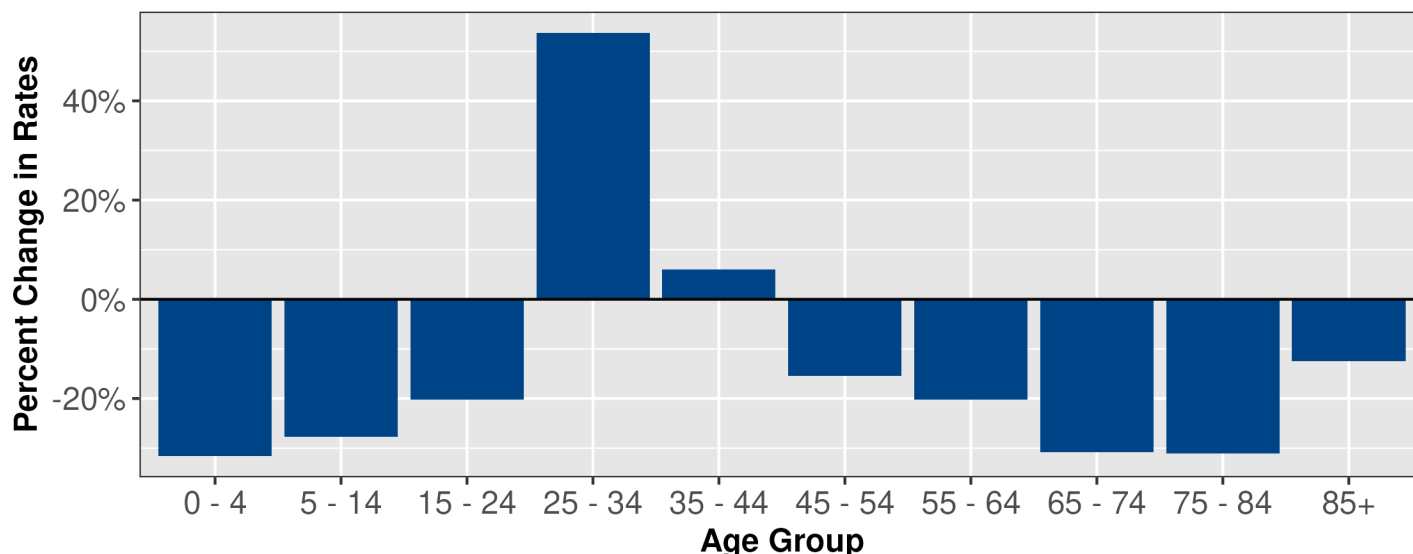
Since 2000, death rates declined for all age groups except among younger adults aged 25–44 due primarily to the rise in overdose deaths.

- Specifically, all-cause mortality rates increased by 54% among those aged 25–34, and by 6% among those aged 35–44 from 2000 to 2024 (Figure 4).
- The rate among younger adults aged 25–44 was still over 20% higher in 2024 than the pre-pandemic rate in 2019.
- While death rates were much higher in the older age groups than in these two age groups where deaths increased, the numbers of deaths are nevertheless large and concerning, with 6,251 deaths in 2024 among 25–34-year-olds and 9,754 deaths among 35–44-year-olds.

Additional detailed analysis on health disparities by age group, such as young adulthood, can be found in the corresponding life stages section of the report.

Figure 4

Percent Change in All-Cause Death Rates by Age Group, 2000 to 2024, California



Detailed (or Disaggregated) Race and Ethnicity Categories

Presenting data disaggregated by smaller, more detailed groups illuminates health disparities that can be masked when data are viewed by broader racial and ethnic categories. Detailed race and ethnicity groups differ with respect to many characteristics, including health outcomes and access to healthcare and upstream social drivers of health. Analyses based on more specific race and ethnicity groups are needed to inform public health programs and policy.

Figure 5 shows all-cause mortality by detailed race and ethnicity groups in California in 2024.⁶ There were substantial differences in rates within the broad Latino, Asian, and Pacific Islander groups.

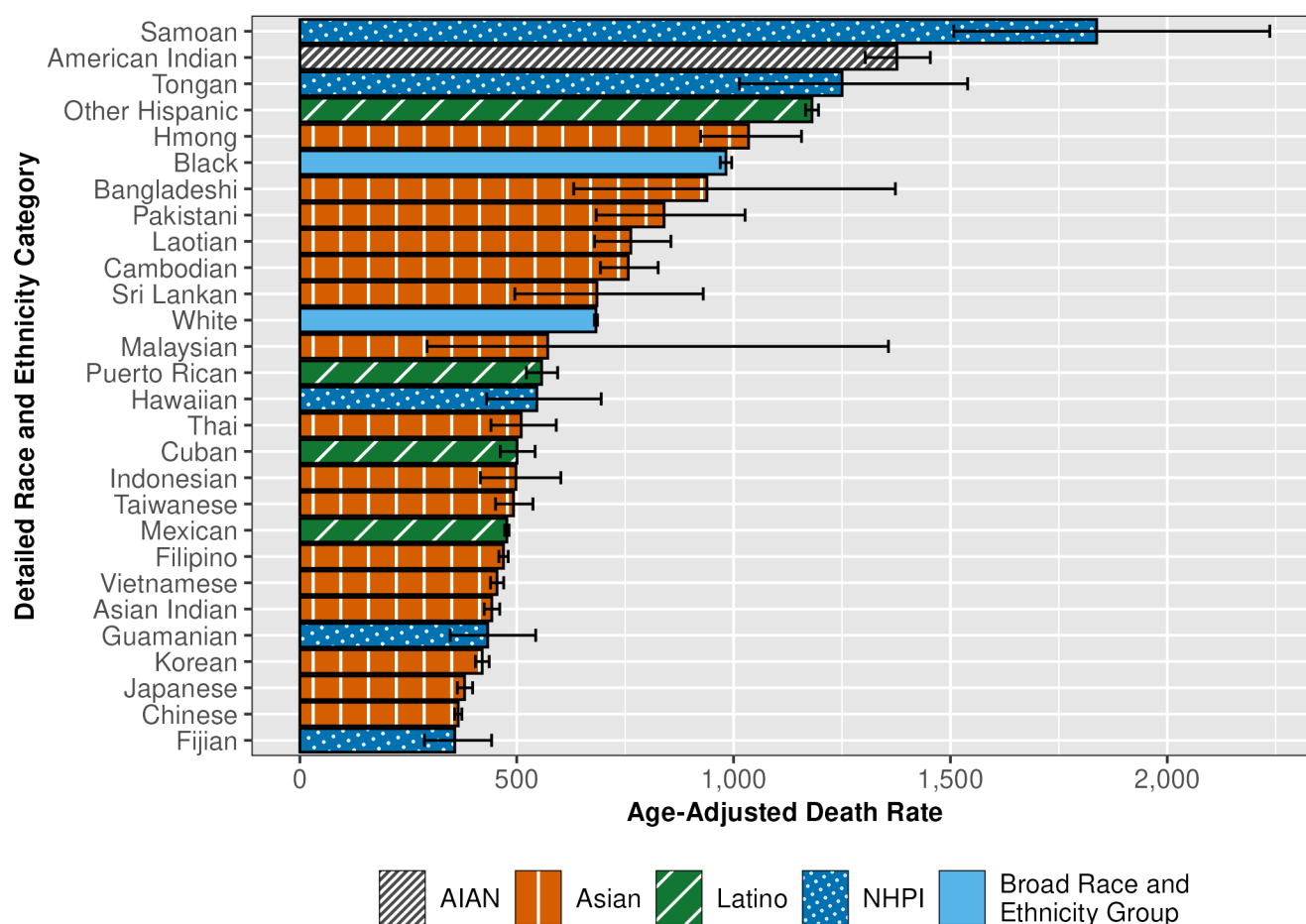
- The “Other Hispanic” population had one of the highest mortality rates, well above that of the Latino population overall.⁷
- Pacific Islander subgroups, specifically Samoan and Tongan individuals, experienced some of the highest mortality rates.
- Among Asian subgroups, mortality rates varied widely, with the highest rates being in Hmong, Bangladeshi, Pakistani, Laotian, Cambodian, and Sri Lankan populations.

⁶ Due to data quality concerns and for clarity, multi-race, multi-ethnic, and “other” race and ethnicity categories (except for “Other Hispanic”) are excluded.

⁷ The “Other Hispanic” group cannot be further disaggregated. American Community Survey 2022 5-Year estimates indicate 58% of this group were Central American.

Figure 5

All-Cause Mortality Rates by Detailed Race and Ethnicity, 2024, California



Place

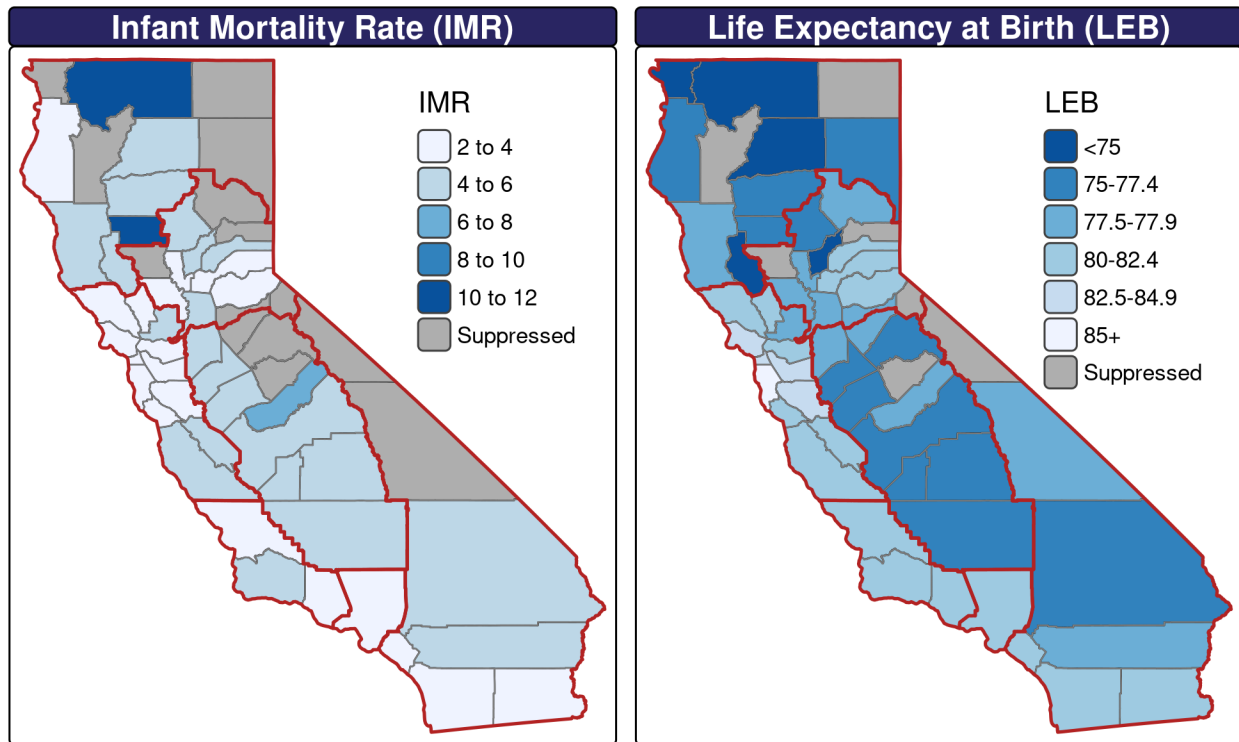
Significant geographic disparities in infant mortality and life expectancy exist within California.[18, 19] Examining place at different geographic levels leads to different insights. This section looks at the very detailed geographic level of census tracts, the larger level of counties, and aggregations of counties or “regions.” Regions in this section are defined by the [CDPH Regional Public Health Office](#) in collaboration with health officials and local health partners across California.

- Infant mortality rates were highest and life expectancy lowest in counties spanning the Central Valley and parts of Northern and inland California while Bay Area and coastal counties were doing relatively well on both measures (Figure 6).
- Glenn and Siskiyou counties had particularly elevated infant mortality rates exceeding 10 deaths per 1,000 live births (Figure 6).

- In general, life expectancy is lower in the Central, Northern, and Inland counties of the state and higher in the Bay Area and Coastal counties (Figure 6).

Figure 6

California County-Level Maps - Infant Mortality Rate (2020-2022) and Life Expectancy at Birth (2022-2024)

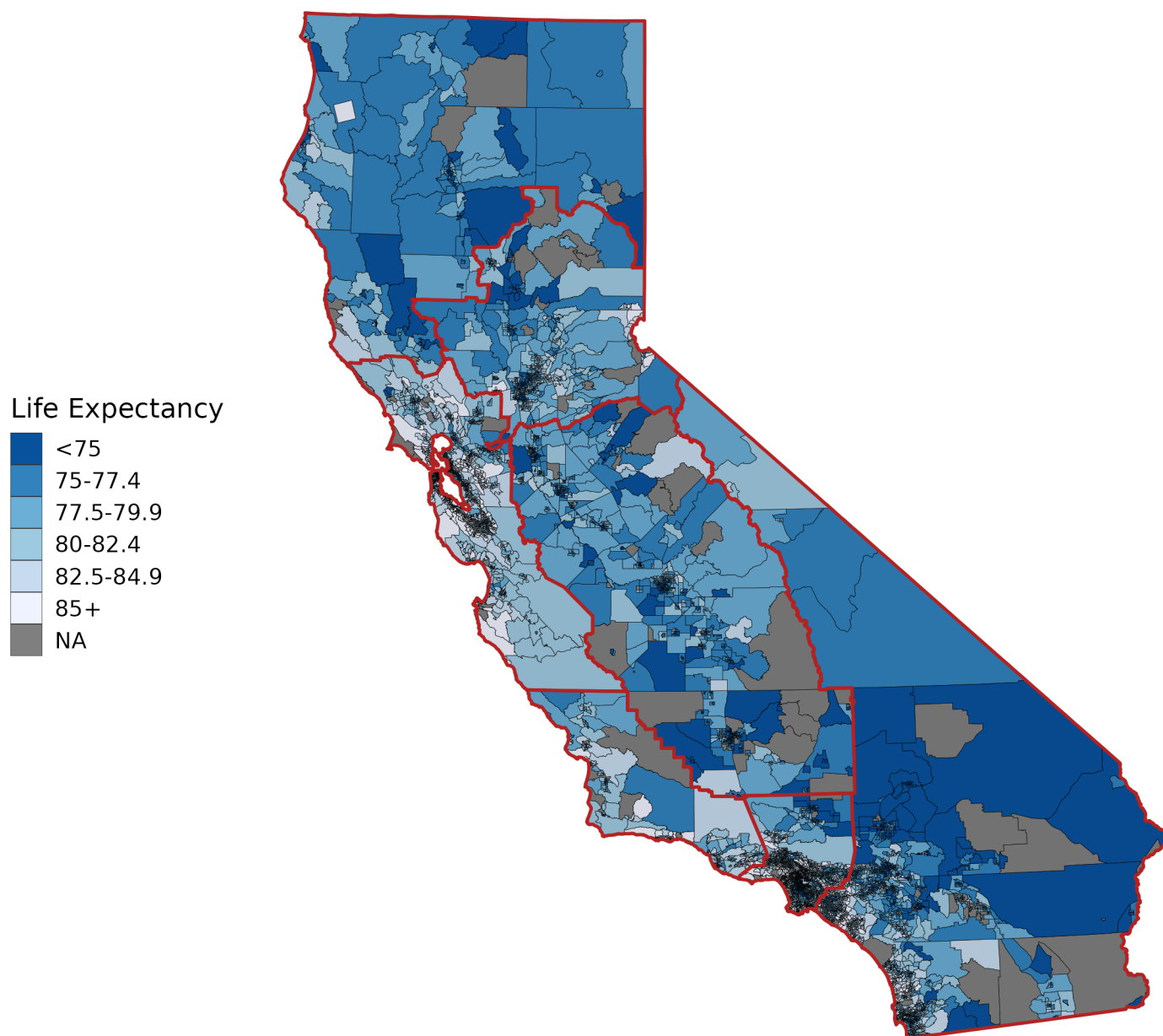


Note: California regional boundaries are shown in red

When viewed based on the finer-grained geography of census tract (Figure 7), there is substantial variation in life expectancy between communities within counties. For example, while Central Valley counties have relatively low life expectancies, several communities within those counties have relatively high life expectancies. While Los Angeles County overall has a relatively high life expectancy, many communities have relatively low life expectancies in concentrated areas.

Figure 7

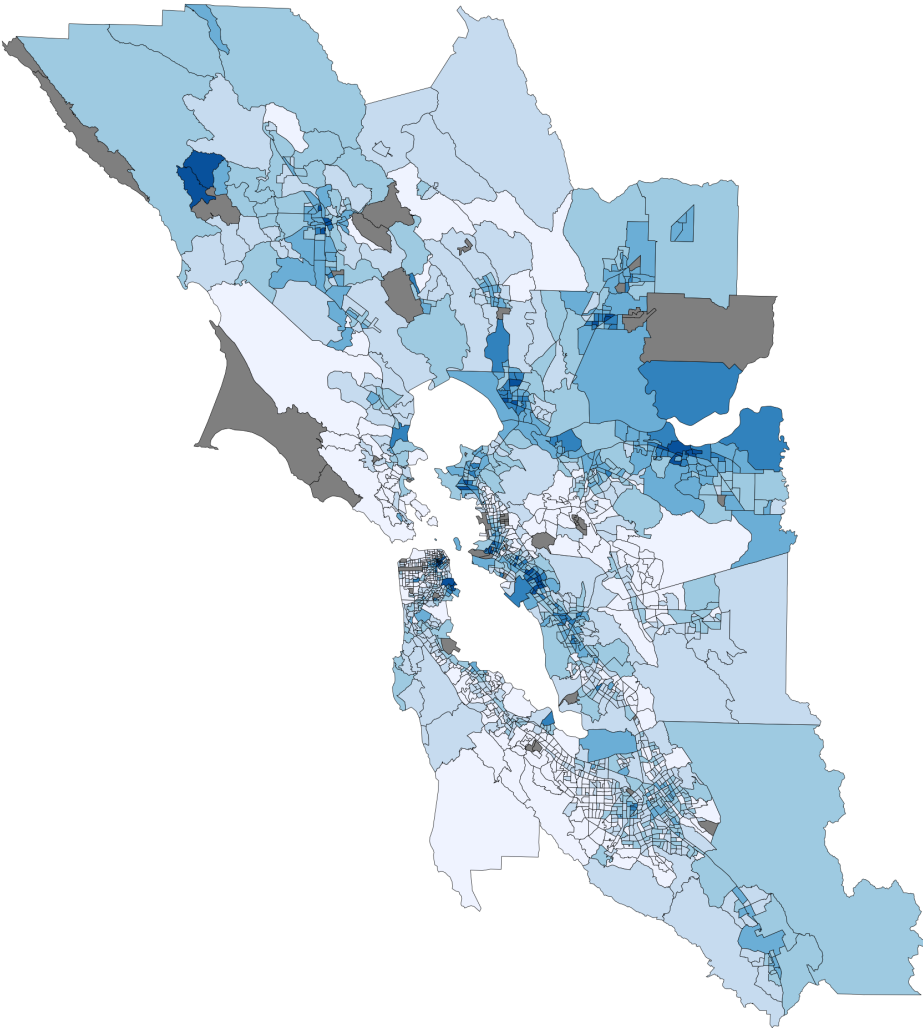
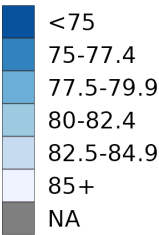
Life Expectancy at Birth by Census Tract, 2020-2024



*Region boundaries highlighted in red

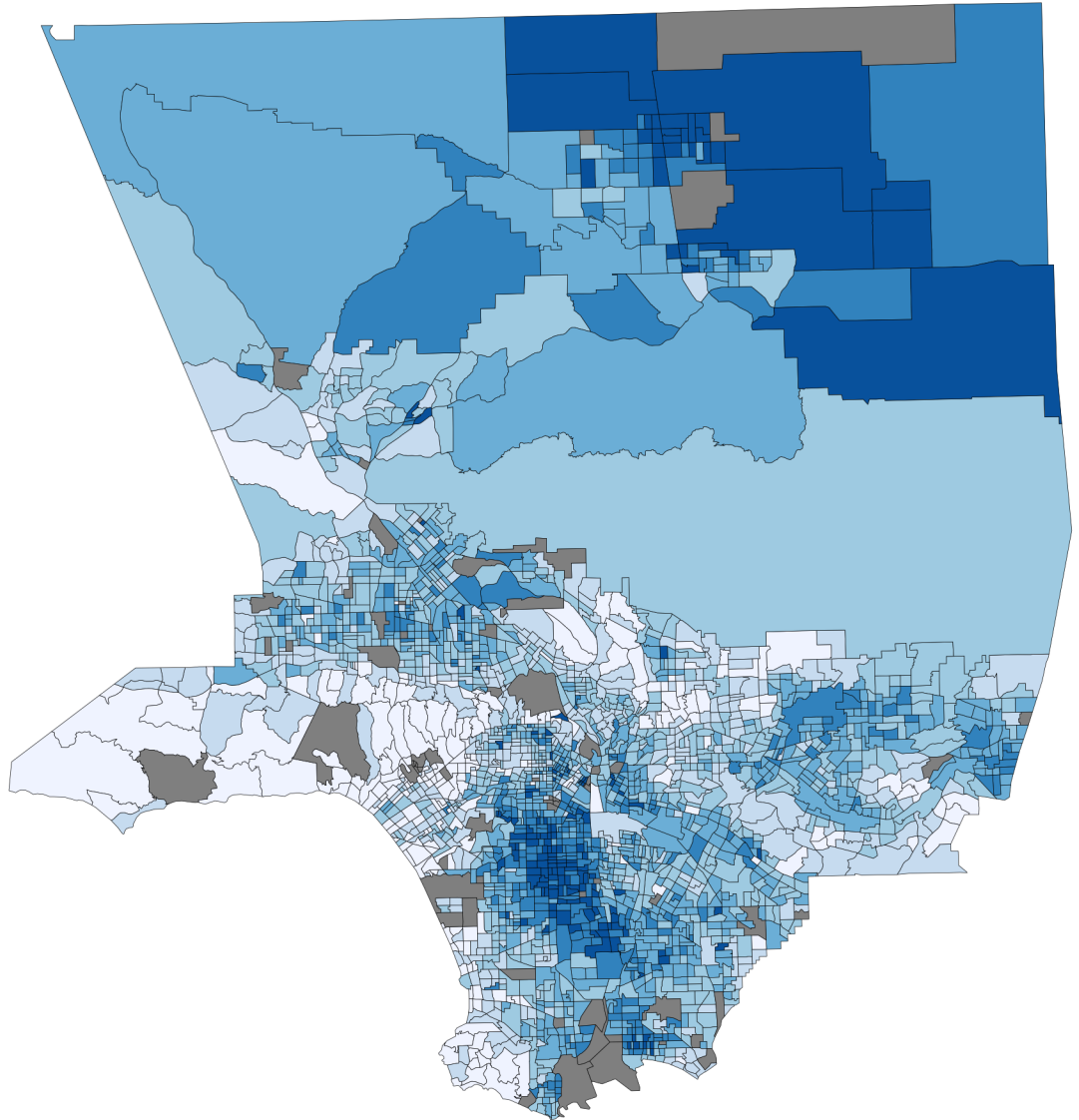
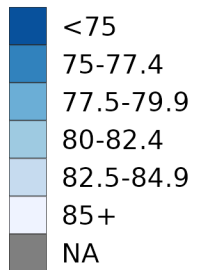
Bay Area

Life Expectancy



Los Angeles County

Life Expectancy



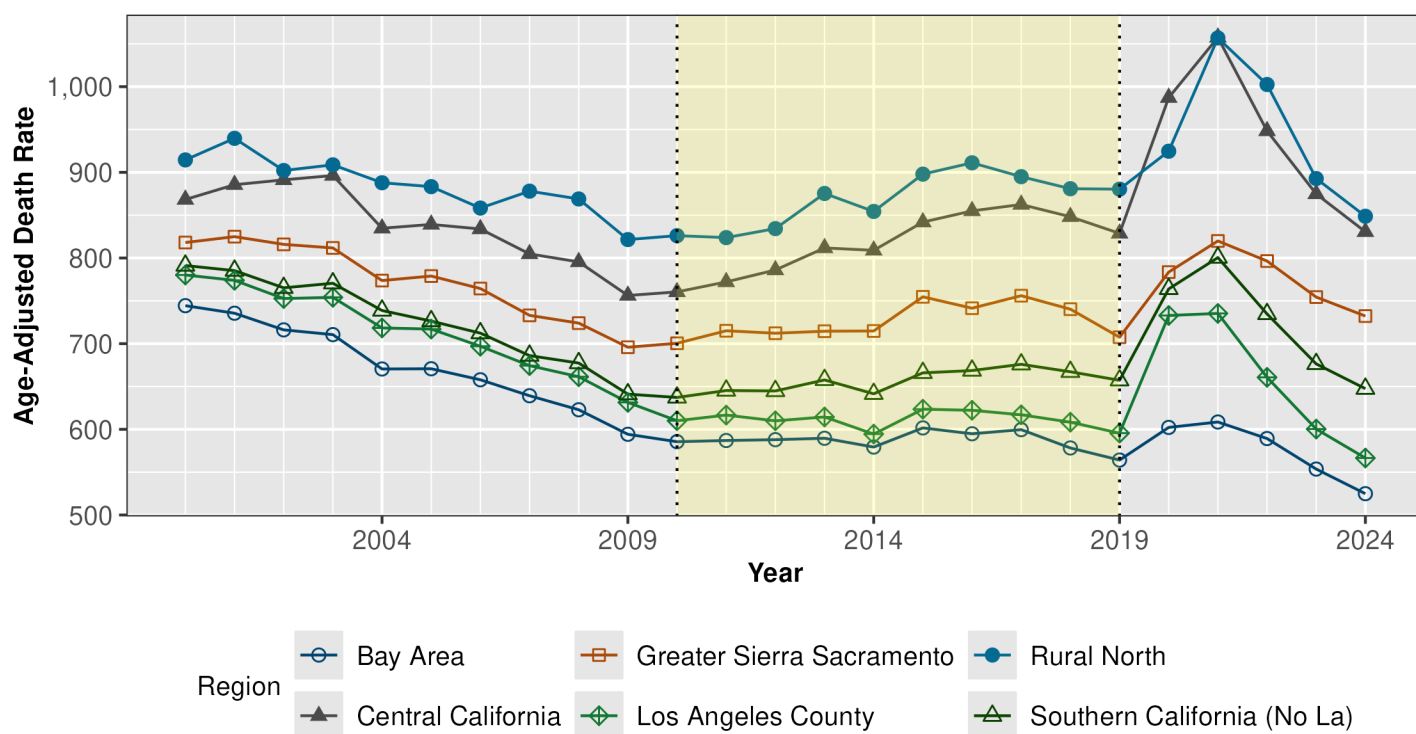
Region

Mortality rates overall have decreased over the long term. However, the rates and the trends over time differ by California regions (Figure 8).

- In 2024, all-cause death rates were highest in the Rural North and Central California, where rates were around 1.5 times higher than in the Bay Area and Los Angeles County, the regions with the lowest rates.
- Death rates decreased in all regions from 2000 to 2009. However, from 2010 to 2019 (the period highlighted in the figure below), the patterns of change were remarkably different. Rates increased over this period in the Rural North (7% increase) and Central California (9% increase), while in the other regions the rates fluctuated but were overall stable or somewhat downward (with a 4% decrease in the Bay Area and 2% decrease in Los Angeles County).

Figure 8

Trends in All-Cause Death Rates by California Regions, 2000-2024



Rural Health

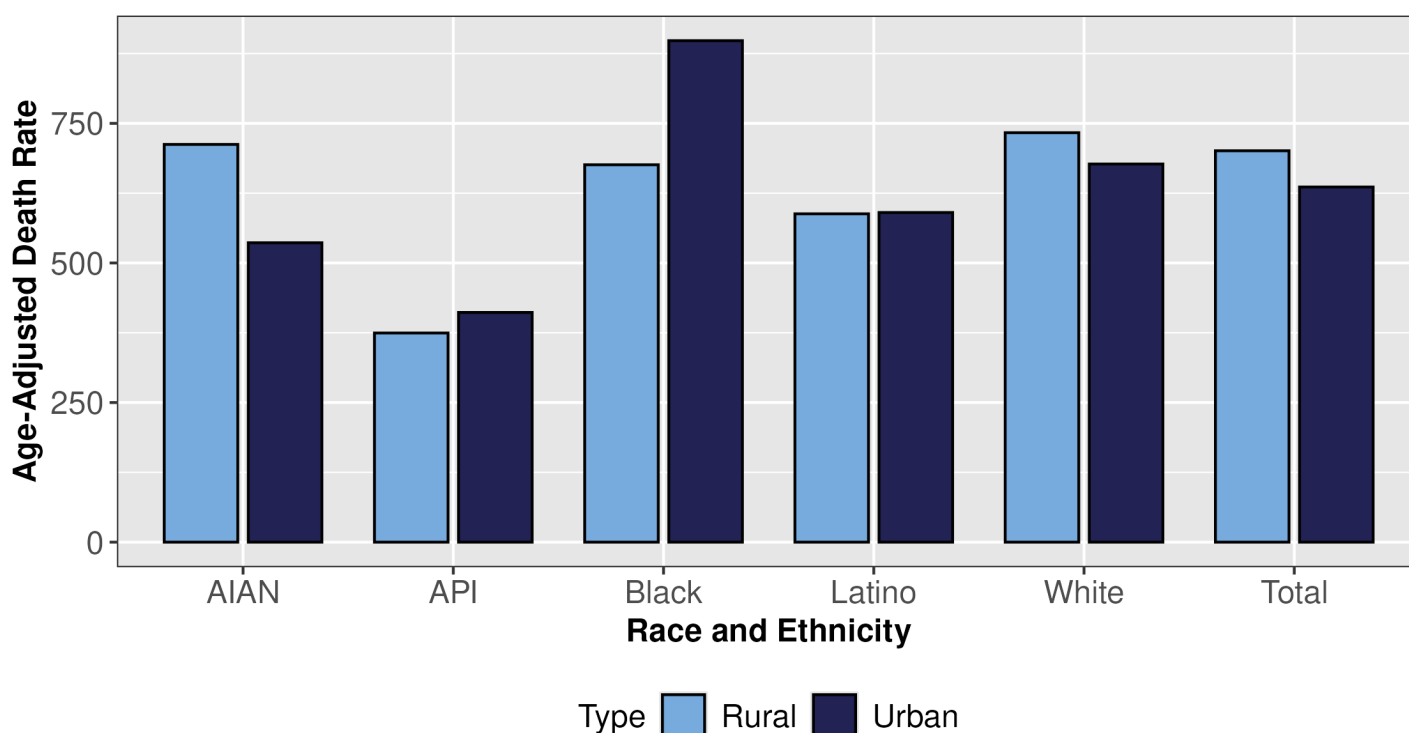
Economic decline and disinvestment in rural communities contribute to higher rates of poverty among rural residents and increased barriers to protective factors that benefit health. Rural Californians also experience limited access to healthcare, particularly specialty providers, and fewer upward mobility opportunities. Socioeconomic disadvantage may contribute to increased stress

and trauma, as well as rates of health risk behaviors such as smoking.[20] These can be compounded by other challenges often present in rural areas, such as social and geographic isolation and limited public transportation options (see [Rural Health Disparities Overview - Rural Health Information Hub](#)). Due to these factors, rural populations often experience worse health outcomes compared to urban populations (Figure 9⁸).

- All-cause mortality rates were around 17% higher in rural areas compared to urban areas in California.
- Patterns differed across racial and ethnic groups. For example, rates were higher among Black or African American individuals living in urban areas, while rates were higher among American Indian or Alaska Native and White individuals living in rural areas.

Figure 9

All-Cause Mortality Rate by Race and Ethnicity and Rural/Urban Areas, California, 2022-2024



⁸ Rural/urban categories are defined using the [Rural-Urban Commuting Area \(RUCA\) codes](#) from the Federal Health Resources and Services Administration (HRSA); API = Asian and Pacific Islander.

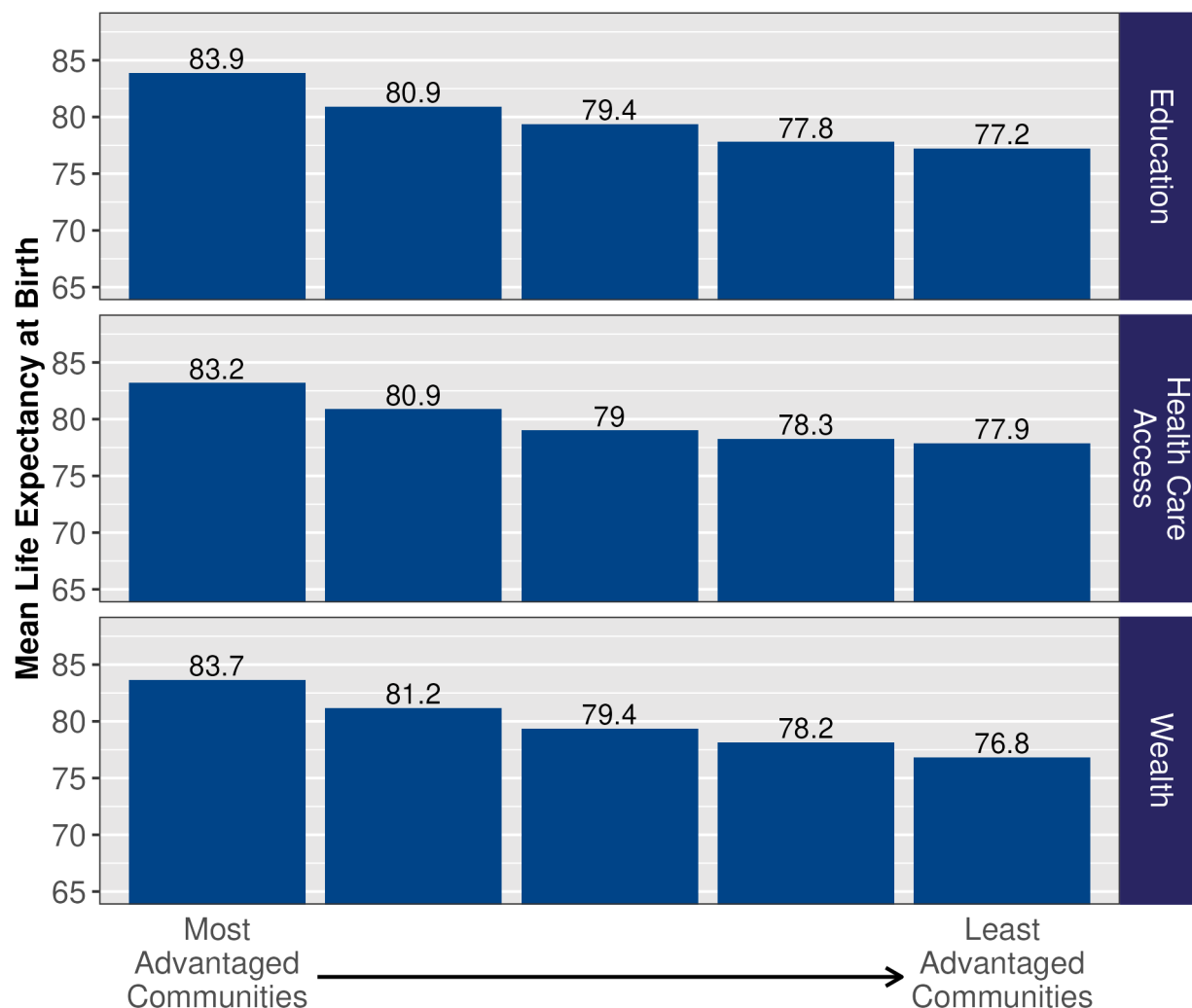
Social Drivers of Health

Social drivers of health indicators, such as measures of wealth, education, and healthcare access are associated with community-level health outcomes, including life expectancy. Poverty is closely associated with many other social drivers of health including lack of access to healthcare and education, economic and housing instability, poor nutrition, low-quality built environments and lack of neighborhood safety, and racism and discrimination. Systemic factors like structural racism and disadvantage drive health inequities and compound with other social drivers of health to exacerbate health disparities and contribute to higher rates of illness and mortality. Cumulative experiences of racism and discrimination contribute to psychological and physiological stress with poor physical and mental health impacts across the life course.[21]

Life expectancy in 2020-2024 was higher (83-84 years) in communities with the highest educational attainment, healthcare access, and wealth compared to 77-78 years in those with the lowest. Similar life expectancy disparities were observed for other community-level health and social indicators (Figure 10). Higher levels of educational attainment typically lead to better employment, higher income, increased access to healthcare, and other protective factors and positively influence health literacy.

Figure 10

Mean Life Expectancy by Quintiles of Social Drivers of Health, 2020-2024



Leading Causes of Morbidity and Mortality

Multiple Lenses

There are many ways to view the health status of Californians. Public health looks across multiple mortality and morbidity measures to assess different levels of burden and identify public health challenges from different perspectives. Public health also conducts analyses to understand the shared risk and protective factors that are the underlying causes of multiple health conditions.

Figure 11 shows the top five leading conditions from different perspectives. The first six charts use measures relating to deaths, and the next six examine additional lenses of public health burden. These perspectives have unique uses and can lead to different conclusions. For example, looking at the leading

causes of numbers of death has clear utility for insights into the big picture of what most Californian's die from. In contrast, "Years of Life Lost" (or premature mortality) is also a ranking of leading causes of death, but it emphasizes conditions that cause death in younger persons. Deaths among younger people have unique economic impact from losing people early in their economically productive years, and often more emotional and societal impact from losing people long before enjoying the fullness of their lives. Years of life lost is based on summing up the number of years before age 75 that people die from a particular condition.

Many conditions, including heart-related conditions and behavioral health conditions, appear on more than one of these ranking measures. Heart-related conditions caused high rates of mortality and morbidity. Ischemic heart disease, stroke, and hypertensive heart disease were among the leading causes of death. Ischemic heart disease also caused high rates of years of life lost. Heart failure was the second most common cause of hospitalizations. Behavioral health conditions such as drug overdose and mental health conditions caused high rates of premature death, hospitalization, and years lived with disability.

The most common cancers based on incidence and deaths were lung, colon and rectum, and breast cancers. While lung cancer remains a leading cause of cancer death, its death rate has declined by 38.7% in the last 10 years.

Musculoskeletal pain was the leading cause of years lived with disability and 3rd leading cause of emergency department (ED) visits.

Hepatitis deaths decreased sharply over the past decade, reflecting new highly effective medication to treat hepatitis C, changes in drug use, updated screening and treatment guidelines, expansion of harm reduction, changes in healthcare seeking behaviors, and investments in public health services. The most common reportable diseases are sexually transmitted diseases (STDs).

Figure 11

Multiple Lenses - Top 5 Conditions Based on Multiple Measures, California

Deaths, 2024

	Number
1 Ischemic heart disease	34,461
2 Alzheimer's/Dementias	29,810
3 Stroke	17,665
4 Hypertensive heart disease	15,727
5 COPD	10,963

Years of Life Lost, 2024

	Rate ¹
1 Drug overdose	682.2
2 Ischemic heart disease	423.4
3 Road injury	400.4
4 Alcohol-related*	324.5
5 Suicide	298.3

Race Disparity in Deaths, 2022-2024²

	Rate Ratio
1 Obesity (NHPI:Asian)	27.5
2 HIV/STDs (Black:Asian)	20.1
3 Homicide (Black:Asian)	18.3
4 Drug overdose (AIAN:Asian)	14.2
5 Alcohol-related* (AIAN:Asian)	14.1

Decrease in Death Rates, 2014 to 2024³

Percent	
-77.4	1 Hepatitis
-38.7	2 Lung cancer
-32.1	3 Valve disorders
-31.7	4 Cardiomyopathy, myo., endo.
-30.1	5 COPD

Increase in Death Rates, 2014 to 2024³

Percent	
120.6	1 Drug overdose
41.7	2 Obesity
35.7	3 Endocrine, blood, immune dis.
34.1	4 Hyperlipidemia
32.3	5 Hypertensive heart disease

Cancer Deaths, 2024

	Number
1 Lung and Bronchus	9,660
2 Colon and Rectum	5,841
3 Pancreas	5,350
4 Breast (Female)	4,713
5 Liver	3,826

Number of Hospitalizations, 2024

	Number
1 Septicemia	347,707
2 Heart failure	110,274
3 Schizophrenia	91,684
4 Diabetes mellitus	75,799
5 Complications during childbirth	72,615

Number of ED Visits, 2024

	Number
1 Abdominal pain	797,762
2 Chest pain	566,832
3 Musculo. pain (not low back)	500,683
4 Other upper resp. inf.	491,058
5 Contusion	469,288

Cancer Incidence, 2023

	Rate ⁴
1 Breast (Female)	132.3
2 Prostate (Male)	107.1
3 Colon and Rectum	36.4
4 Lung and Bronchus	34.7
5 Skin Melanoma	24.3

Neurodeg. Prevalence⁵

	Number
1 Alzheimer's/Dementias	710,305
2 Parkinson's Disease	133,517
3 Multiple Sclerosis (MS)	83,773
4 Huntington's Disease	4,800
5 ALS	4,080

Reportable Disease Cases, 2024

	Number
1 Chlamydia	171,281
2 Gonorrhea	67,869
3 Total Syphilis	26,732
4 Hepatitis C, chronic	12,843
5 Coccidioidomycosis	12,446

Years Lived with Disability, 2023

	Rate ¹
1 Musculoskeletal disorders	3,259.3
2 Mental disorders	2,722.9
3 Unintentional injuries	1,687.2
4 Neurological disorders	1,261.0
5 Substance use disorders	1,018.7

Figure Notes:

1 - Years of life lost and years lived with disability values are crude rates per 100,000.

2 - Racial and ethnic disparities are indicated by ratios between the age-adjusted death rates in the group with the highest rate and the group with the lowest rate.

3 - Increase and decrease in death rates are based on percent increases or decreases in age-adjusted death rates. COVID-19 is excluded as a cause in comparisons that involve pre-pandemic years. Furthermore, conditions with fewer than 100 deaths in either period are excluded.

4 - Cancer incidence rates are age-adjusted rates per 100,000.

5 - Neurodegenerative prevalence data are estimates extrapolated from national rate sources. Refer to the [Neurodegenerative Diseases](#) section for more information.

*Alcohol-related conditions do not include partially or indirectly attributed conditions.

Abbreviations: Myo., endo. = Myocarditis, endocarditis; Resp. inf. = Respiratory infections;

Musculo. = Musculoskeletal; ALS = Amyotrophic Lateral Sclerosis

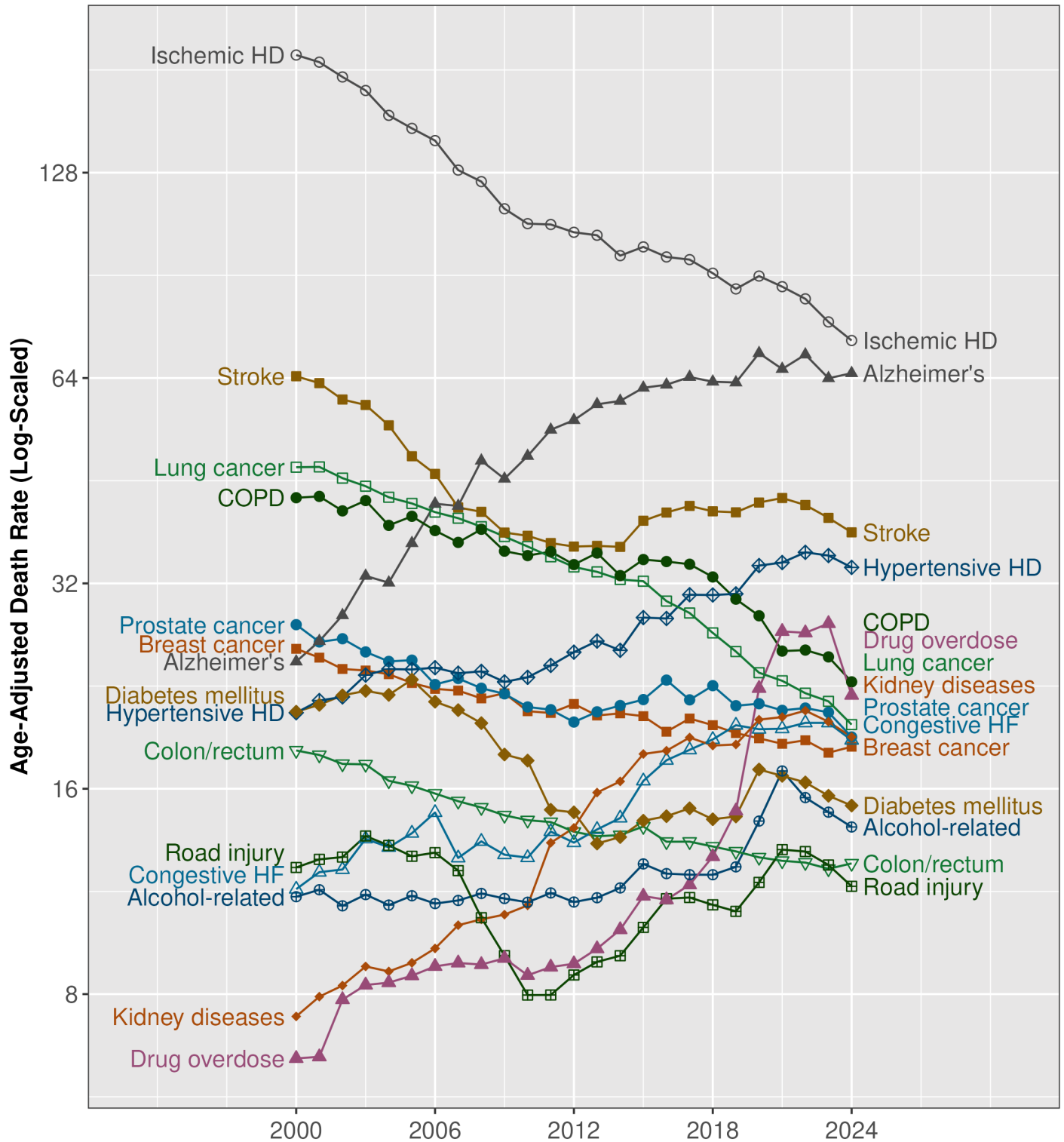
Mortality Over Time

There have been encouraging decreases in death rates over the past 20 years for several chronic conditions, including ischemic heart disease, stroke, lung cancer, COPD, prostate cancer, and breast cancer (Figure 12).

In contrast, there were significant long-term increases in deaths due to Alzheimer's disease and other dementias, hypertensive heart disease, and drug overdose (Figure 12). Alzheimer's disease and other dementias have more than doubled since 2000 and had the second-highest rate from 2008 onward, with a temporary exception during the height of the pandemic. Death rates for drug overdose and kidney diseases have increased dramatically since 2000, although rates have encouragingly decreased in recent year(s).

Figure 12

Trends in Leading Causes of Death, 2000-2024, California



Notes: Alzheimer's = Alzheimer's disease and other dementias; Colon/rectum = Colon and rectum cancers; HD = Heart Disease; HF = Heart Failure

Race and Ethnicity

Leading Causes of Deaths by Race and Ethnicity

Leading causes of burden in California vary across racial and ethnic groups, reflecting both shared and distinct health burdens.

- Ischemic heart disease was the 1st or 2nd leading cause of death for all groups.
- Alzheimer's disease and other dementias were a leading cause for most groups and ranked 1st among Chinese, Cuban, Japanese, Puerto Rican, and Korean individuals.
- Stroke was a leading cause of death in most groups. It ranked in the top 3 in all Asian subpopulations, and 1st among Hmong individuals.
- Kidney diseases ranked 2nd among Tongan and Samoan populations.
- Drug overdose was the 2nd leading cause of death for American Indian and Alaska Native individuals and in the top 5 among Black, Other Hispanic, and Puerto Rican populations.
- Lung cancer appeared in the top 5 in many Asian subpopulations, specifically among Chinese, Japanese, Korean, Laotian, Taiwanese, Thai, and Vietnamese individuals.

Some causes of death only appeared among the top 5 in a few groups. For example, alcohol-related conditions is one of the five leading causes of death only among the American Indian and Alaska Native population, pancreas cancer in the Taiwanese population, and COPD in the White population.

Figure 13

Leading Causes of Death by Race and Ethnicity, California, 2024

	#1 Ranked Cause	#2 Ranked Cause	#3 Ranked Cause	#4 Ranked Cause	#5 Ranked Cause	
AIAN	Ischemic HD	Drug overdose	Alzheimer's	Stroke	Alcohol-related	AIAN
Asian Indian	Ischemic HD	Alzheimer's	Stroke	Hypertensive HD	Diabetes mellitus	Asian
Cambodian	Ischemic HD	Stroke	Kidney diseases	Alzheimer's	Hypertensive HD	
Chinese	Alzheimer's	Ischemic HD	Stroke	Lung cancer	Hypertensive HD	
Filipino	Ischemic HD	Alzheimer's	Stroke	Kidney diseases	Hypertensive HD	
Hmong	Stroke	Ischemic HD	Hypertensive HD	Kidney diseases	Diabetes mellitus	
Indonesian	Ischemic HD	Alzheimer's	Stroke	*	*	
Japanese	Alzheimer's	Ischemic HD	Stroke	Hypertensive HD	Lung cancer	
Korean	Alzheimer's	Ischemic HD	Stroke	Hypertensive HD	Lung cancer	
Laotian	Ischemic HD	Stroke	Kidney diseases	Lung cancer	Hypertensive HD	
Pakistani	Ischemic HD	Stroke	Diabetes mellitus	Alzheimer's	Kidney diseases	
Taiwanese	Ischemic HD	Alzheimer's	Stroke	Lung cancer	Pancreas cancer	
Thai	Ischemic HD	Alzheimer's	Stroke	Lung cancer	Hypertensive HD	
Vietnamese	Ischemic HD	Alzheimer's	Stroke	Lung cancer	Hypertensive HD	
Black	Ischemic HD	Hypertensive HD	Alzheimer's	Stroke	Drug overdose	Black
Cuban	Alzheimer's	Ischemic HD	Hypertensive HD	Stroke	Lung cancer	Latino
Mexican	Ischemic HD	Alzheimer's	Stroke	Hypertensive HD	Kidney diseases	
Other Hispanic	Ischemic HD	Alzheimer's	Stroke	Hypertensive HD	Drug overdose	
Puerto Rican	Alzheimer's	Ischemic HD	Stroke	Drug overdose	Hypertensive HD	
Fijian	Ischemic HD	*	*	*	*	NHPI
Guamanian	Ischemic HD	*	*	*	*	
Hawaiian	Ischemic HD	*	*	*	*	
Samoan	Ischemic HD	Kidney diseases	Hypertensive HD	Stroke	Alzheimer's	
Tongan	Ischemic HD	Kidney diseases	Hypertensive HD	*	*	
White	Ischemic HD	Alzheimer's	Stroke	Hypertensive HD	COPD	White

Figure Note: * = Data are suppressed per the CalHHS data de-identification guidelines.

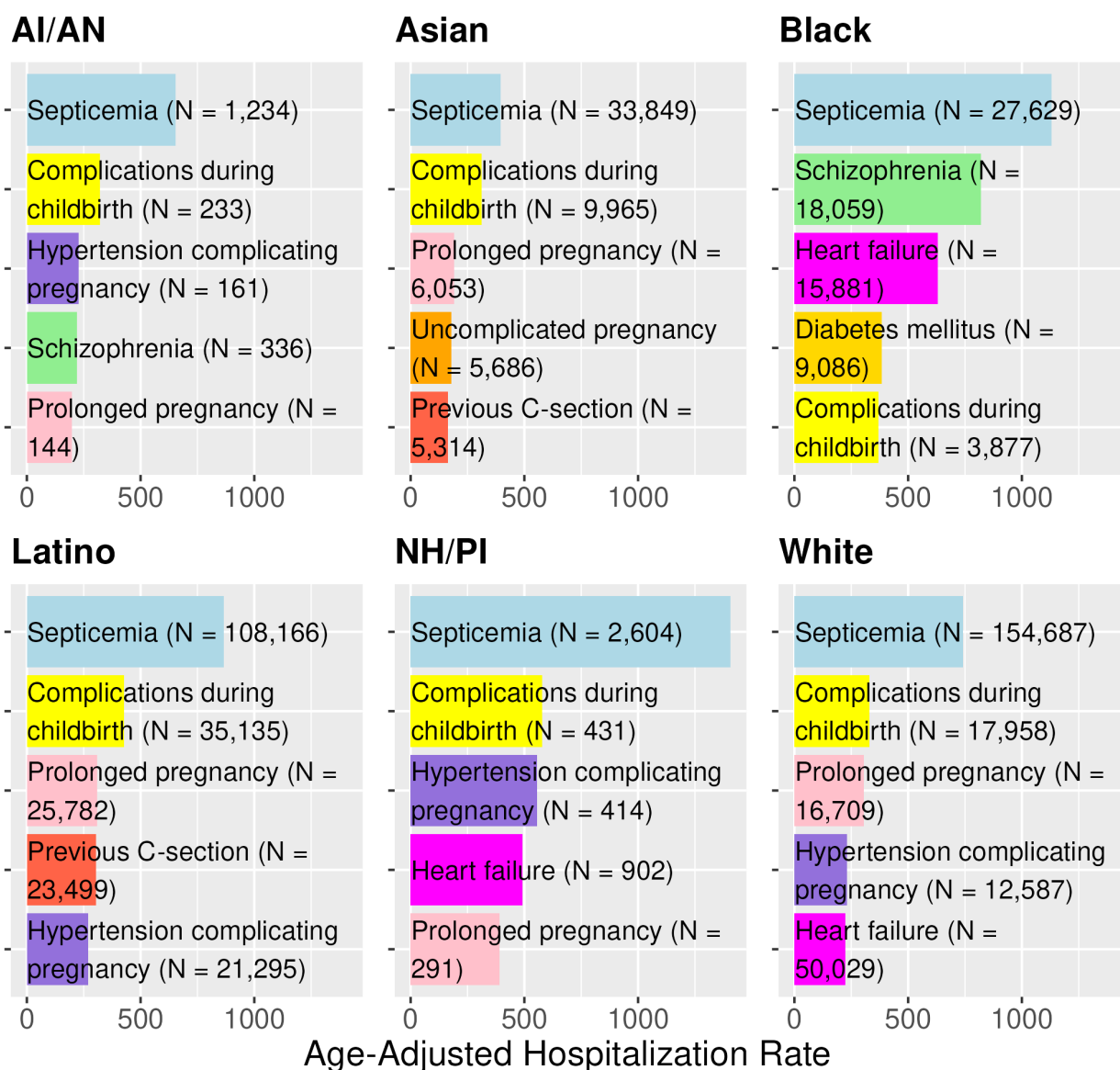
Leading Causes of Hospitalizations by Race and Ethnicity

Figure 14 shows the five leading causes of hospitalization (based on age-adjusted hospitalization rates) for each broad racial and ethnic group in 2024.

- Septicemia was the leading cause of hospitalization in all groups. Complications during childbirth also were a leading cause in all groups.
- Some causes of hospitalization only appear among the top five in a few groups. For example, schizophrenia among Black and American Indian or Alaska Native populations and heart failure among Black, Native Hawaiian or Pacific Islander, and White populations.

Figure 14

Leading Causes of Hospitalizations by Race and Ethnicity, California, 2024



Place

Rural Health

Mortality rates are higher in rural areas (Figure 9 in the [Rural Health](#) section). This pattern is also seen with many specific causes of death as shown in Figure 15. The figure displays the ratio of age-adjusted death rates in rural versus urban areas for each cause of death. Causes that appear at the top have substantially higher rates in rural areas (rate ratios greater than 1.0), while those towards the bottom have higher rates in urban areas (rate ratios lower than 1.0).

Rates of most injury-related causes of death were higher in rural areas. Rates of deaths from road injuries, drug overdose, suicide, and alcohol-related conditions were 1.4 to 1.8 times higher in rural populations. In contrast, death rates from chronic conditions like kidney diseases, diabetes mellitus, Alzheimer's disease and other dementias, and Parkinson's disease were higher in urban areas.

Figure 15

Cause-Specific Mortality Rate Ratios by Rural and Urban, California, 2024

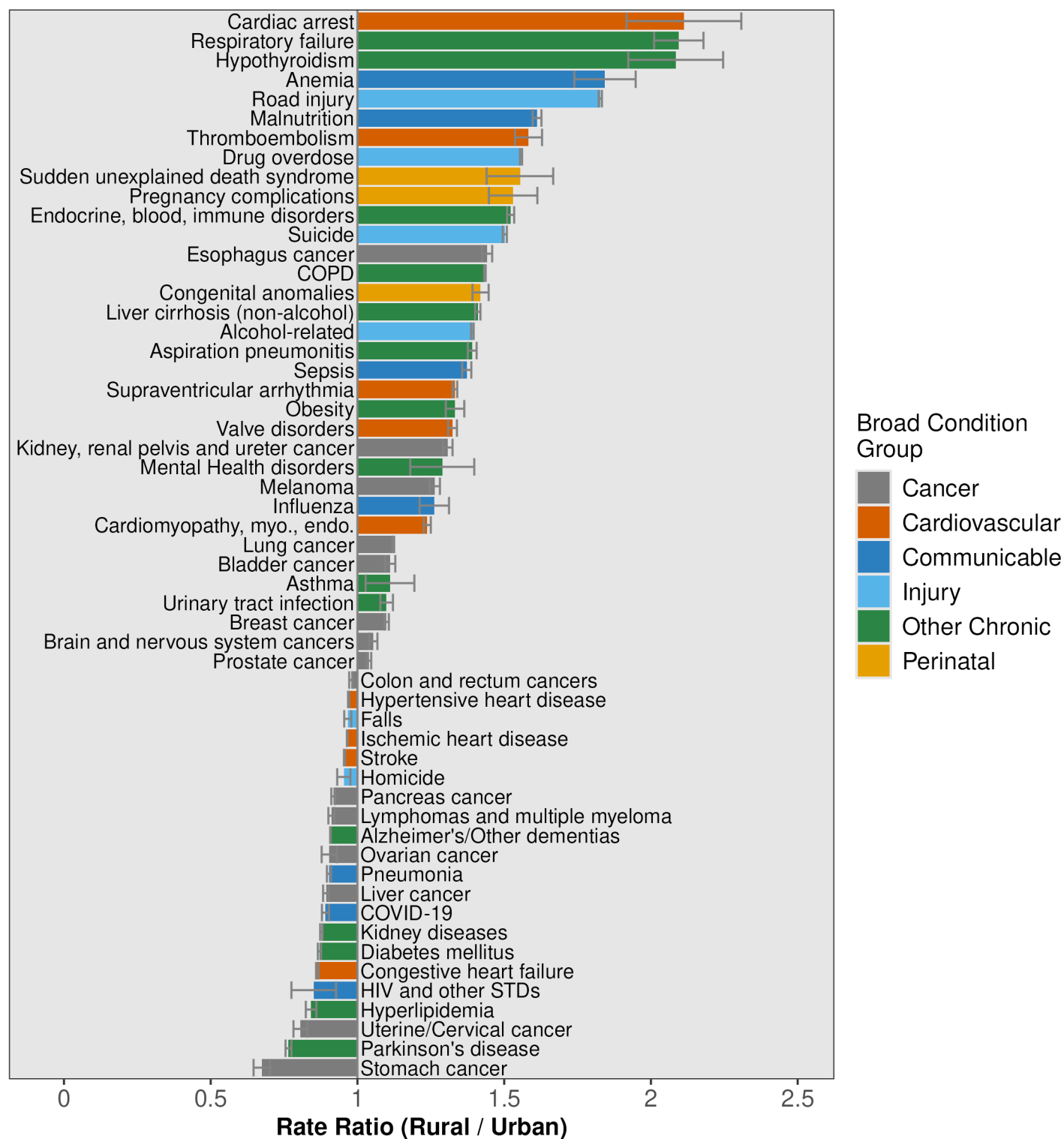


Figure Note: Causes with fewer than 11 deaths in rural or urban areas, and those without statistically significant rural-urban rate ratios, are excluded.

Leading Causes Across the Life Course

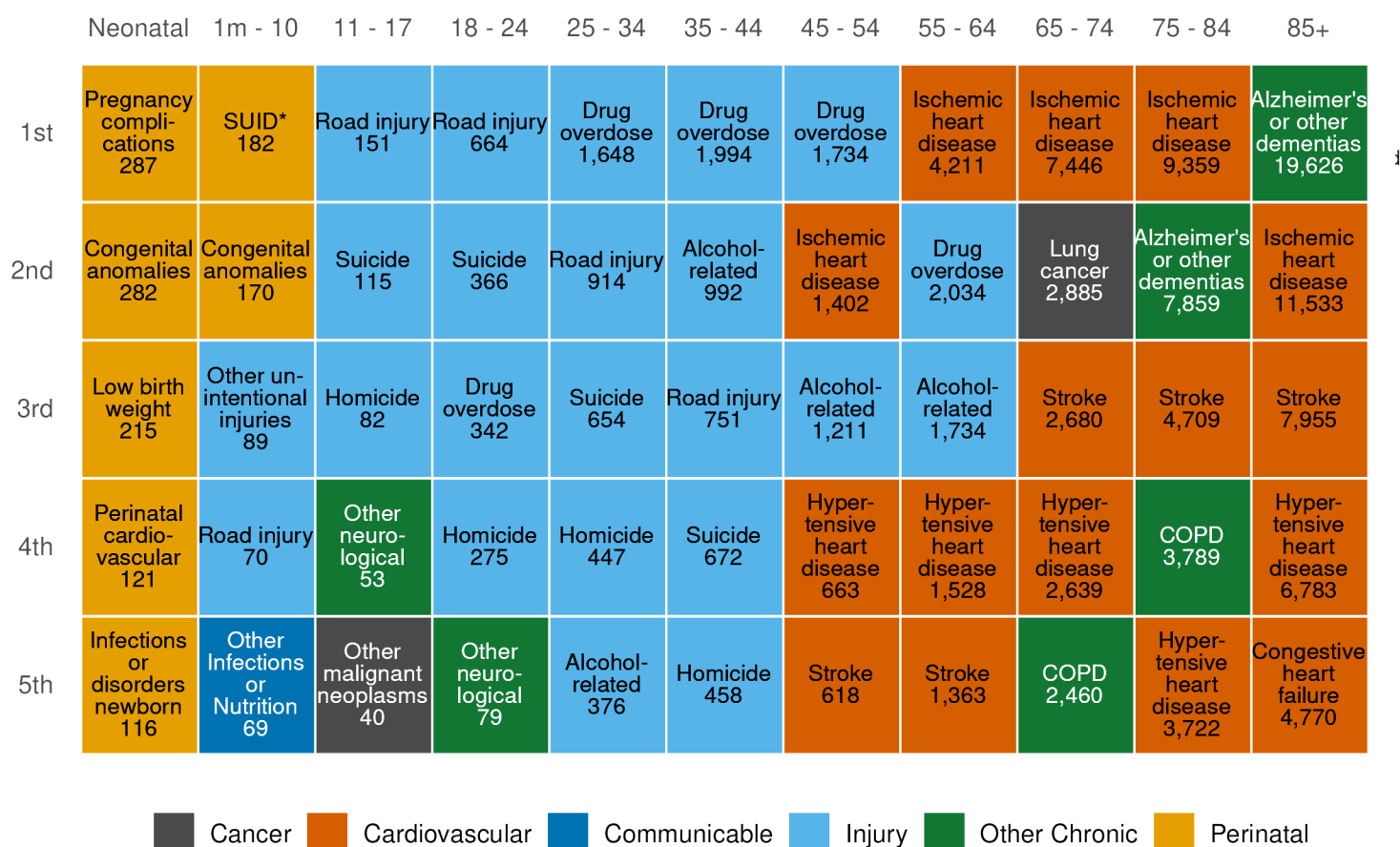
Leading Causes of Mortality Across the Life Course

The conditions that affect health vary across stages of life as shown in Figure 16.

- Perinatal conditions were the leading causes of death among neonates (infants less than four weeks old).
- Injury-related causes such as drug overdose, road injury, and suicide were leading causes of death from childhood through adulthood.
- Among older adults, chronic conditions such as cardiovascular disease, cancer, and Alzheimer's disease were the leading causes of death.

Figure 16

Leading Causes of Death Across the Life Course, California, 2024



Leading Causes of Hospitalization Across the Life Course

Figure 17 shows the top five conditions for hospitalization across the life course.

- Perinatal conditions were the leading causes of hospitalizations among neonates.
- Pregnancy complications and mental health-related conditions (depressive disorders, schizophrenia, other mood disorders, bipolar disorders, and alcohol-related disorders) were leading causes of hospitalization among younger and middle-aged adults.
- Septicemia was the top cause of hospitalization among those aged 45 and older. Heart failure was a leading cause of hospitalization among older adults.

Figure 17

Leading Causes of Hospitalization Across the Life Course, California, 2024

	Neonatal	1m - 10	11 - 17	18 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	75 - 84	85+
1st	Hemolytic or perinatal jaundice 5,662	Respiratory failure 8,034	Depressive disorders 19,108	Pregnancy complications 65,451	Pregnancy complications 239,019	Pregnancy complications 117,457	Septicemia 34,282	Septicemia 55,295	Septicemia 74,928	Septicemia 72,811	Septicemia 49,549
2nd	Other perinatal conditions 2,310	Asthma 6,258	Appendicitis 3,450	Depressive disorders 9,625	Schizophrenia 24,831	Septicemia 25,806	Schizophrenia 13,495	Heart failure 19,630	Heart failure 23,222	Heart failure 25,442	Heart failure 23,485
3rd	Respiratory perinatal condition 1,466	Acute bronchitis 5,834	Pregnancy complications 3,260	Schizophrenia 9,516	Septicemia 16,922	Schizophrenia 20,970	Diabetes mellitus 11,801	Diabetes mellitus 16,692	Heart attack 15,094	Cardiac dys-rhythmias 16,579	Hip fracture 11,281
4th	Perinatal infections 1,417	Pneumonia 5,340	Other mood disorders 2,958	Septicemia 6,620	Depressive disorders 9,501	Alcohol-related disorders 11,402	Heart failure 10,140	Heart attack 13,114	Spondylopathies, spondyloarthropathy 15,044	Cerebral infarction 13,716	Urinary tract infections 11,262
5th	Short gestation; low birth weight 1,295	Epilepsy; convulsions 5,010	Encounter for anti-neoplastic therapies 2,274	Bipolar and related disorders 4,796	Alcohol-related disorders 8,367	Diabetes mellitus 8,523	Alcohol-related disorders 8,520	Spondylopathies, spondyloarthropathy 11,334	Diabetes mellitus 14,457	Pneumonia 12,814	Pneumonia 10,395

 Circulatory

 Injuries

 Other systems

 Pregnancy

 Infectious

 Mental

 Perinatal

 Respiratory

Years Lived with Disability (IHME) Across the Life Course

The years lived with disability measure accounts for the number of years lived with an illness or health condition and the severity of the condition throughout life. It is a unique and important measure of conditions that impact quality of life and have the potential to cause years lived with disability.

- Mental disorders (which include schizophrenia and depressive, anxiety, bipolar, autism spectrum, conduct, attention-deficit hyperactivity, eating, and other disorders) were the leading causes of years lived with disability among ages 0-44, and the second leading causes among ages 45-64.
- Musculoskeletal disorders, including low back pain, neck pain, and other musculoskeletal problems, were among the top two causes of years lived with disability across nearly the entire life course for men and women.
- Substance use disorders ranked among the top five causes of years lived with disability among individuals aged 20-54.

Figure 18

Leading Causes of Years Lived with Disability Across the Life Course, California, 2023

	0 - 9	10 - 19	20 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	75 - 84	85+
1st	Mental disorders	Mental disorders	Mental disorders	Mental disorders	Mental disorders	Musculo-skeletal disorders	Musculo-skeletal disorders	Musculo-skeletal disorders	Musculo-skeletal disorders	Neurological disorders
2nd	Chronic respiratory diseases	Musculo-skeletal disorders	Musculo-skeletal disorders	Musculo-skeletal disorders	Musculo-skeletal disorders	Mental disorders	Non-intentional injuries	Non-intentional injuries	Non-intentional injuries	Non-intentional injuries
3rd	Skin and sub-cutaneous diseases	Neurological disorders	Substance use disorders	Substance use disorders	Substance use disorders	Non-intentional injuries	Mental disorders	Diabetes and kidney diseases	Sense organ diseases	Cardio-vascular diseases
4th	Respiratory infections	Chronic respiratory diseases	Neurological disorders	Neurological disorders	Neurological disorders	Neurological disorders	Diabetes and kidney diseases	Sense organ diseases	Cardio-vascular diseases	Musculo-skeletal disorders
5th	Maternal and neonatal disorders	Skin and sub-cutaneous diseases	Other non-communicable diseases	Other non-communicable diseases	Other non-communicable diseases	Substance use disorders	Sense organ diseases	Mental disorders	Diabetes and kidney diseases	Sense organ diseases

Musculoskeletal disorders have been the leading cause of years lived with disability in each of the past four decades and have increased each year, causing over 2,601,571 years lived with disability in 2021.⁹

Back and neck pain are public health concerns because they are leading causes of disability, lost productivity, and healthcare costs. These conditions result from workplace strain, injury, sedentary lifestyles, poor posture, or underlying medical conditions. Chronic pain can lead to reduced quality of life, opioid and other drug use, and mental health challenges. Musculoskeletal disorders are a leading cause of economic burden on both individuals and healthcare systems. These disorders are a leading driver of healthcare spending in the U.S. with estimated direct costs of \$380.9 billion in 2016, exceeding costs for diabetes, cardiovascular diseases, mental disorders, and cancer.[22]

In 2023, the World Health Organization provided detailed [evidence-based recommendations](#) on nonsurgical interventions for low back pain in adults that can be delivered in primary and community care settings.[23]

Public health strategies for musculoskeletal disorders include promoting ergonomic workplaces, encouraging physical activity and posture awareness, improving access to pain management, and investing in research.[24, 25] Community education campaigns, workplace wellness programs, and innovative policy can play a crucial role in reducing the burden of back and neck pain.

⁹ Musculoskeletal disorders Years Lived with Disability data can be found on the [California Community Burden of Disease Engine](#).



Early Life Stages: Supporting Health and Well-being for a Strong Start

	Neonatal	1m - 10	11 - 17
1st	Pregnancy complications	Congenital anomalies	Road injury
2nd	Congenital anomalies	Sudden unexplained death syndrome	Suicide
3rd	Low birth weight	Other unintentional injuries	Homicide
4th	Perinatal cardiovascular	Road injury	Other neurological
5th	Infections or disorders newborn	Other Infections or Nutrition	Other malignant neoplasms

Leading causes of death (rank)

Cancer
 Injury
 Perinatal

Communicable
 Other Chronic

Many of the health conditions and outcomes described throughout this and the following sections affect individuals of all ages, but specific age groups are impacted to a greater degree. This report organizes population health trends by life stage to highlight burden for specific groups and how public health is working to improve health.

Pregnancy, infancy, early childhood, and adolescence are critical developmental periods during which biological systems and developing brains are highly sensitive to community and environmental conditions. Public health places significant importance on early life because experiences during this period are the foundations for health and well-being throughout the life

course and can impact multiple generations.

A substantial and multi-disciplinary U.S.-based body of work indicates that investments in early childhood are more cost-effective than interventions delivered later in adulthood. Early-life programs reduce the incidence and severity of downstream health conditions, lowering the need for more intensive and costly medical and social services over time. Long-term evaluations of early education, nutrition, and early access to healthcare demonstrate sustained improvements in adult health, reductions in healthcare utilization, and gains in educational and economic outcomes, particularly for children in disadvantaged settings.[26-28] Early life conditions such as sufficient nutrition,

safe housing, and safe, stable, and nurturing relationships with caring adults increase the likelihood of positive health outcomes later in life. Factors such as access to quality education, culturally responsive healthcare, and safe neighborhoods and environments, can either contribute to equity of opportunity or reinforce systemic disparities. Public health collaborates across sectors so that all children have a healthy start to life and continue to thrive.

Pregnancy and Maternal Health

Pregnancy-related outcomes serve as sensitive barometers of social, economic, structural, and environmental conditions. Risk-appropriate, trauma-informed care and safe, supportive community environments can prevent health challenges before they manifest.

The pregnancy-related mortality ratio is defined as deaths while pregnant or within one year of the end of pregnancy from causes related to or exacerbated by the pregnancy or its management per 100,000 live births. Pregnancy-associated deaths are defined as deaths during pregnancy or within one year of the end of pregnancy from any cause. Maternal deaths are tragic and have significant negative impacts on families and communities. Severe maternal morbidities are unexpected, life-threatening complications during pregnancy, childbirth, or postpartum, such as hemorrhage, infection, and cardiac events that result in significant short- or long-term health consequences.

Maternal mental health refers to the emotional, social, and mental well-being of individuals during pregnancy and up to two years postpartum, including conditions such as depression and anxiety. Prenatal depression increases the risk of preterm birth, low birthweight, and preeclampsia and can negatively impact breastfeeding and the birthing person's ability to bond with their baby. Perinatal depression increases birthing people's risk of chronic depression and suicide, as well as children's risk of developmental problems.

Key Data and Trends

Pregnancy-related mortality among birthing people in California was 15.0 deaths per 100,000 live births in 2022, a decrease from a high of 21.6 deaths per 100,000 live births in 2021 during the early COVID-19 pandemic period. The current rate remains higher than that of 2012, when it reached a low of 9.5 deaths per 100,000 live births.

Close to half (49%) of all pregnancy-associated deaths were caused by medical or obstetric complications in 2019-2021. Behavioral health-related causes such as unintentional drug overdose (20%), other unintentional injuries (17%), homicide (7%), and suicide (6%) were also important drivers.

- Both the pregnancy-associated suicide ratio and the unintentional drug overdose ratio (Figure 19) have increased since 2009-2011.

- The increase in the pregnancy-associated drug overdose ratio reflects the growth of substance use among the overall population as well as the specific challenges for pregnant people to access unbiased and stigma-free treatment.[29]

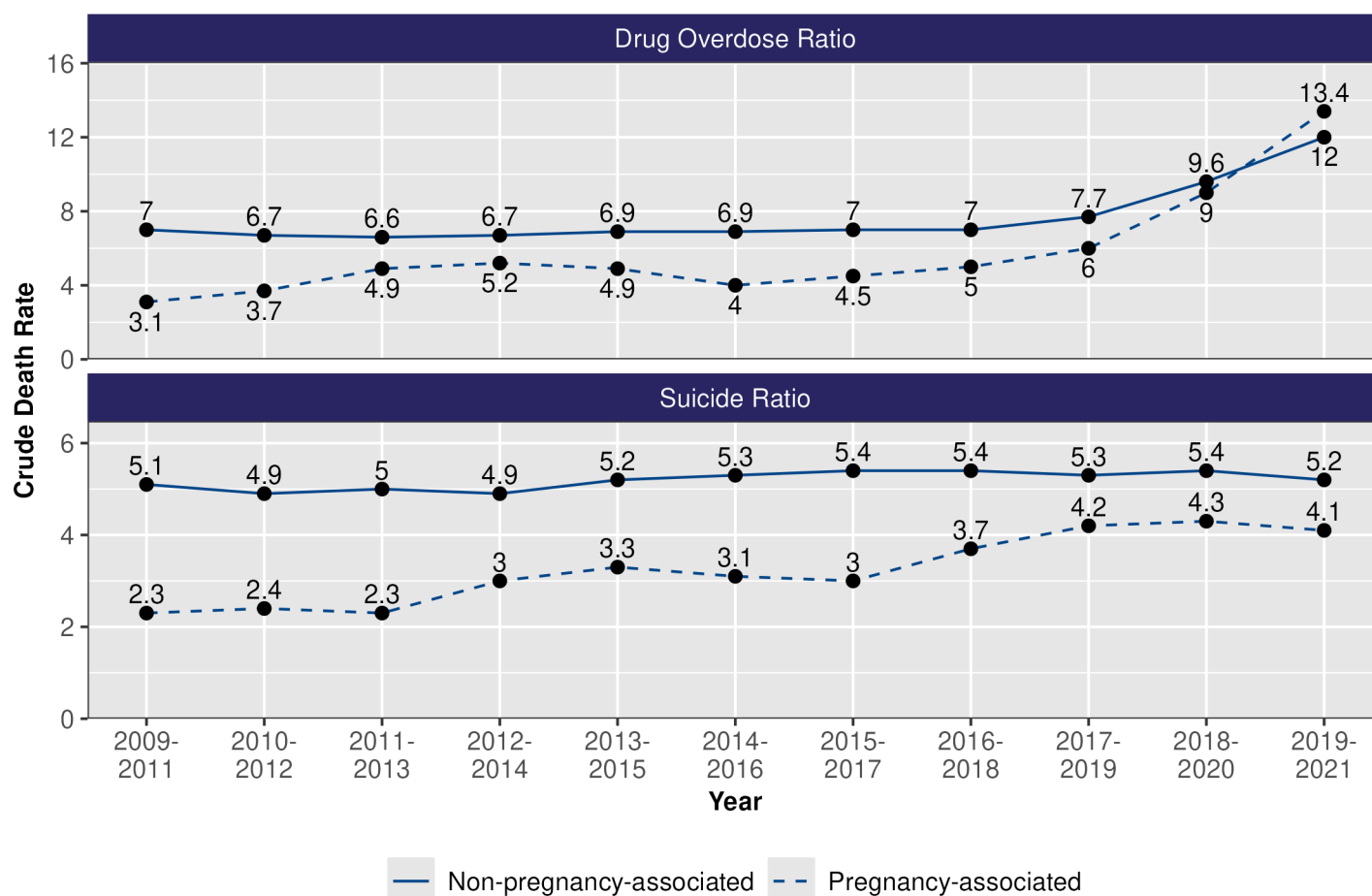
Severe maternal morbidity rates in California have risen sharply, from 74.8 per 10,000 deliveries in 2016 to 111.6 in 2023.

Depression and anxiety are common mental health conditions experienced during pregnancy or postpartum. Prevalence of **postpartum** depression symptoms was 14.1% in 2020-2022. Furthermore, 14.8% of birthing people reported experiencing depression symptoms in the **prenatal** period in 2020-2022.[30] More than one third of birthing people experience depression or anxiety symptoms across the perinatal period.

CDPH's [MCAH data dashboards on pregnancy and maternal health](#) provide additional detail and analysis.

Figure 19

Trends in Death Rates from Pregnancy-Associated and Non-Pregnancy-Associated Drug Overdoses and Suicide, 2009-2021, California



Notes: Pregnancy-associated drug overdose [suicide] ratio = Number of deaths by unintentional drug overdose [suicide] per 100,000 live births, up to 365 days after the end of pregnancy. Non-pregnancy-associated drug overdose ratio = Number of deaths by unintentional drug overdose [suicide] per 100,000 population of reproductive-aged women (15-49 years) who were not pregnant within one year of death. Population data are published by CDPH and found on the California EpiCenter Database.

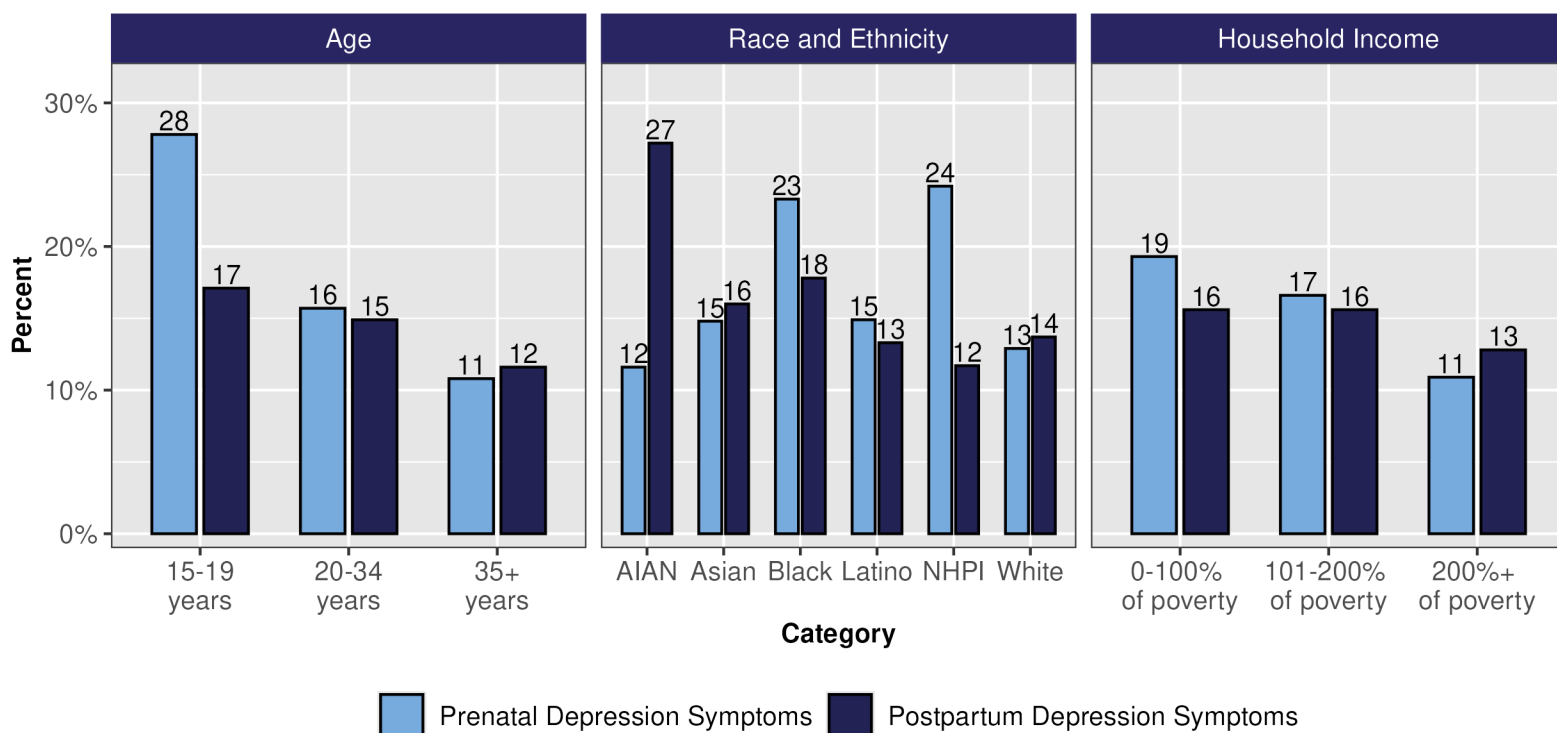
Disparities

Pregnancy-related mortality is strongly associated with race, ethnicity, and maternal age. In 2020-2022, significant disparities were observed among Black or African American individuals (rate = 56.5 deaths per 100,000 live births), compared to Asian individuals (14.2 deaths per 100,000 live births), the group with the lowest rate. Rates ranged from 9.6 among birthing individuals aged 20-24 to 49.6 among those 40 and older. Rates were elevated among those who did not have a high school diploma or equivalent (45.9), and individuals with severe obesity (87.7).

Black and Pacific Islander birthing people, those with household incomes at or below 200% of the federal poverty level (FPL), and those aged 15-19 years experienced prenatal depression symptoms at relatively high rates (Figure 20). Those who identified as American Indian or Alaska Native experienced the highest prevalence of postpartum depression symptoms. Birthing people with lower household income had a higher prevalence of prenatal depression symptoms.

Figure 20

Prenatal and Postpartum Depression Symptoms by Age, Race and Ethnicity, and Household Income, California, 2020-2022



Coordinated, culturally congruent and trauma-informed clinical care during pregnancy for individuals experiencing mental health and substance use disorders are important prevention approaches. About two thirds of birthing people are screened for mental health conditions prenatally or postpartum, and only about half receive mental health care when it is needed.

Public Health Prevention Strategies

CDPH's [Centering Black Mothers Report](#) highlights the importance of addressing racism and implicit bias among healthcare and public health professionals. Operationalizing respectful, equitable, and supportive care is a key priority

informing the roll out of numerous statewide maternal health projects. Programs providing home visiting and case management can screen and refer mothers for mental health conditions and facilitate timely care.

The state's [Title V Maternal and Child Health Block Grant](#) prioritizes mental health across the perinatal period through primary prevention, early intervention, and social supports. CDPH-led data monitoring and analyses initiatives such as the Maternal Infant Health Assessment and California Pregnancy-Associated Review Committee collect and review data to inform interventions. In October 2025, the California Pregnancy-Associated Review Committee released [recommendations for preventing pregnancy-associated suicides](#) to raise awareness about this significant, ongoing public health issue.

Programs such as the [CalAIM Behavioral Health Initiative](#) and [DHCS Enhanced Care Management \(ECM\)](#) are designed to create a comprehensive healthcare experience for pregnant people, addressing both their physical and mental health needs. Midwifery, doula services, and care coordination help to reduce disparities and improve outcomes, particularly for Black, Indigenous, and other marginalized people.

Infant Health

Infancy, or the first year of life, is a critical development period characterized by rapid growth.[31] Public health supports infants and families to ensure healthy development and set the building blocks for lifelong health, educational achievement, economic productivity, strong communities, and successful parenting of the next generation. This includes targeted efforts to support birthing people and families to address key social drivers influencing health during this period, including nutrition, economic and housing stability, access to timely and respectful care, and safe neighborhood conditions. Breastfeeding helps to protect infants from infections and promotes brain development and digestive health, fosters a strong parent-infant bond, and is associated with lower risks of negative health outcomes later in life.

Infant Mortality

Infant mortality refers to the death of an infant before their first birthday and is a key indicator of overall community health associated with many factors, including access to quality healthcare, health status of the pregnant person, and living conditions. Most infant deaths occur within the first month of life.

Key Data and Trends

- The rate increased to 4.13 in 2021 and then decreased slightly in 2022 to 4.09 infant deaths per 1,000 live births.

- In 2022, more than 1,700 infant deaths were reported in California.¹⁰ The leading causes were birth defects, sudden unexplained infant death (SUID), and complications due to preterm birth and low birth weight.
- From 2014 to 2023, rates of low birthweight births and preterm births increased by 12.4% and 10.4%, respectively.
- The rate of SUID deaths, the second leading cause of infant deaths, is on the rise. During 2019-2021, the SUID rate was 50.7 deaths per 100,000 live births, an almost 7% increase from the 2015-2017 period (47.3).

Additional analysis and indicators can be found on the [Perinatal/Infant Data Dashboard](#).

Disparities

- In 2022, infant mortality rates were highest among babies born to pregnant people under age 20.
- By race and ethnicity, American Indian and Alaska Native infants had the highest mortality rate, followed by Black and Native Hawaiian or Pacific Islander infants (Figure 21).¹¹
- Although the infant mortality rate was higher in other racial and ethnic groups, the largest number of deaths (831 deaths in 2022) occurred among Hispanic infants due to the birthing population size.

Vaccines and Infant Mortality

Many factors have contributed to the enormous and sustained reductions in infant mortality rates, including sanitation and clean water; improved nutrition and maternal health; better living standards and education; and modern clinical medicine, including antibiotics and newborn screening. Another key factor is **vaccinations**, starting in the 19th century with the smallpox vaccine; followed in the early 20th century with widespread vaccination for diphtheria, tetanus, and pertussis; polio vaccines in the mid-1950s; measles, mumps, and rubella in the 1960s; and several others since then.

Vaccinations have reduced infant mortality rates by drastically reducing, and even eliminating in the case of smallpox, the occurrence of these diseases in the population, thereby preventing transmission to infants, who are especially vulnerable to severe consequences from these infections. Some vaccines administered during infancy (e.g., hepatitis B, polio, diphtheria, tetanus, and pertussis) directly protect infants from these diseases.

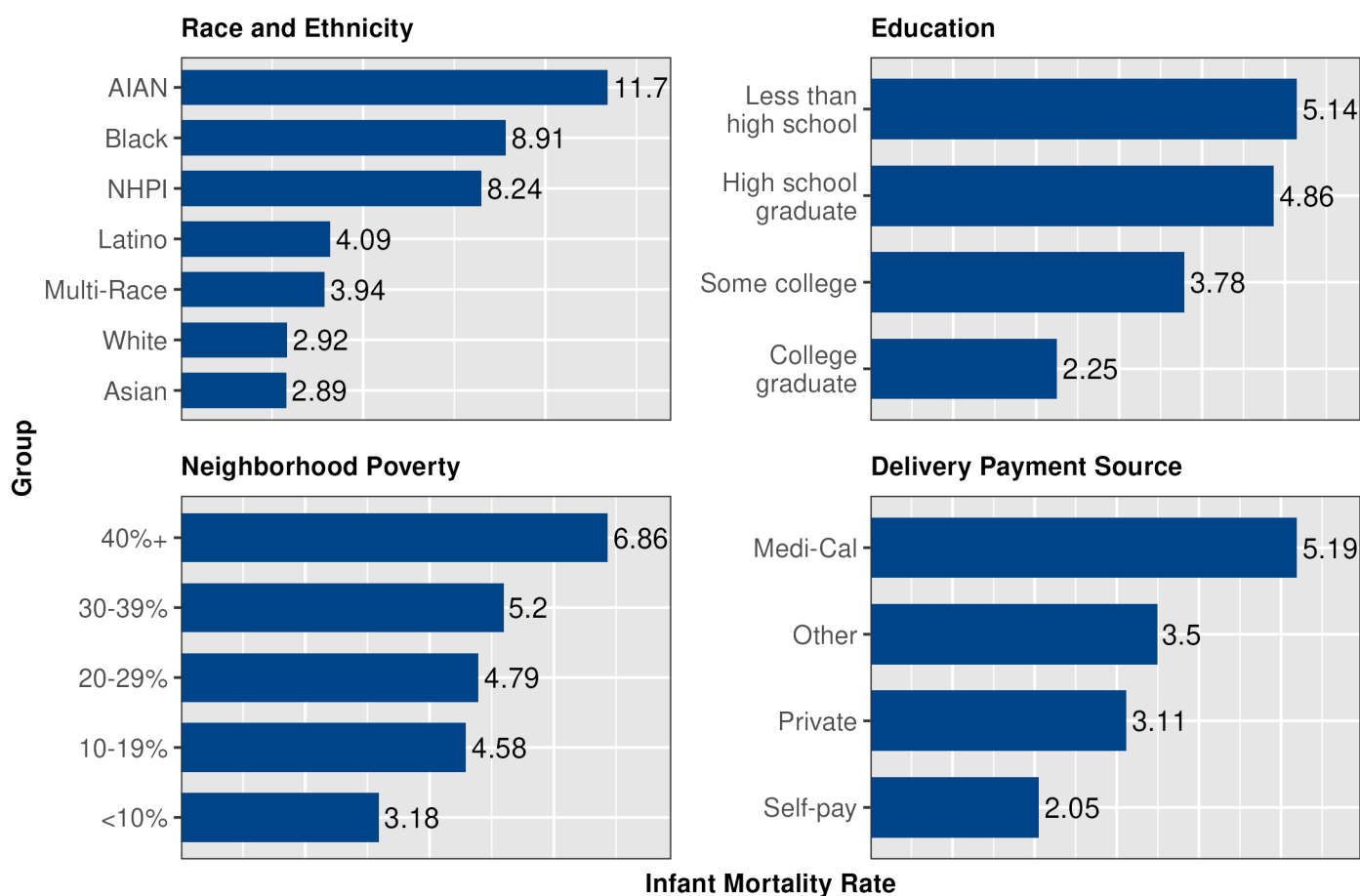
¹⁰ Studies of infant mortality based on death certificates alone have been found to underestimate infant death rates. Infant mortality rates in this report are based on linked birth and infant death records in the California Birth Cohort Files, which generate more accurate estimates but cannot be as timely as the California Birth and Death Master Files.

¹¹ Note that for the AIAN population, single-year rates are unstable due to the small number of AIAN infant deaths. Rates were not calculated for 2020 and 2021 for this reason. In 2019, the mortality rate for AIAN infants was 7.48.

Structural racism is a key driver of infant mortality and rates vary widely by race and ethnicity. Neighborhood poverty and low educational attainment are associated with higher infant mortality rates and infants born to pregnant individuals who did not receive prenatal care are at higher risk of death.

Figure 21

Infant Mortality Rate per 1,000 Live Births by Race and Ethnicity, Education, Neighborhood Poverty, and Delivery Payment Source, 2022



Public Health Prevention Strategies

CDPH raises awareness about key state initiatives that play a role in strengthening economic stability to improve health and educational outcomes for children and families. CDPH [promotes participation in the California Earned Income Tax Credit](#) (CalEITC), which can be used to meet essential needs like food, housing, and healthcare.

CDPH and its partners implement programs such as [home visiting](#), [WIC's nutrition programs for families](#), training community health workers to serve as liaisons between health providers, [improving access to early prenatal and postpartum care](#), [newborn screening for genetic or congenital conditions](#), and [support for breastfeeding and early bonding](#). CDPH's [Black Infant Health](#) and [Perinatal Equity](#) programs seek to address health disparities and improve health outcomes for Black mothers, birthing people, and infants.

The [Sudden Infant Death Syndrome/Sudden Unexpected Infant Death \(SIDS/SUID\) program](#) provides grief and bereavement support through home visits and/or mail resource packets to families suffering an infant loss. The Program also provides training and education on SIDS/SUID prevention to public health, healthcare professionals, coroners, first responders, social workers, and families.

The Department of Health Care Services' [Birthing Care Pathway \(BCP\) Initiative](#) focuses on improving outcomes for Black or African American, Native American, and Pacific Islander individuals through enhanced care coordination, expanding provider networks, and a focus on whole person care. The expansion of Medi-Cal services and healthcare access for pregnant and postpartum individuals, as well as supporting family leave policies, reduces the risk of infant deaths and pregnancy-related mortality.

CDPH's Maternal, Child and Adolescent Health (MCAH) Division's Breastfeeding Initiative aims to support breastfeeding during infancy by working closely with WIC on nutritional guidance for infants, breastfeeding resources and training, and coordinating services for families. MCAH publishes the [9-steps to Breastfeeding Friendly Clinics](#) toolkit to provide breastfeeding guidance and resources to healthcare clinics. MCAH and the Center for Healthy Communities collaborate with the California Breastfeeding Coalition to develop [Model Hospital Policies](#) training modules.

Federal Impacts

The Advisory Committee on Heritable Disorders in Newborns and Children, which was responsible for reviewing and recommending disorders for the national Recommended Uniform Screening Panel (RUSP), was terminated in April 2025.

California's Newborn Screening Program relies upon the work of the RUSP for prioritizing conditions to be added to routine postnatal testing of all newborns in a timely manner for conditions in which health and life preserving treatment are available.

Some infants may be deprived of vital lifesaving or health preserving care due to lack of early detection. For example, the Committee was scheduled to review adding screening to the RUSP for two forms of muscular dystrophy.

Congenital Syphilis

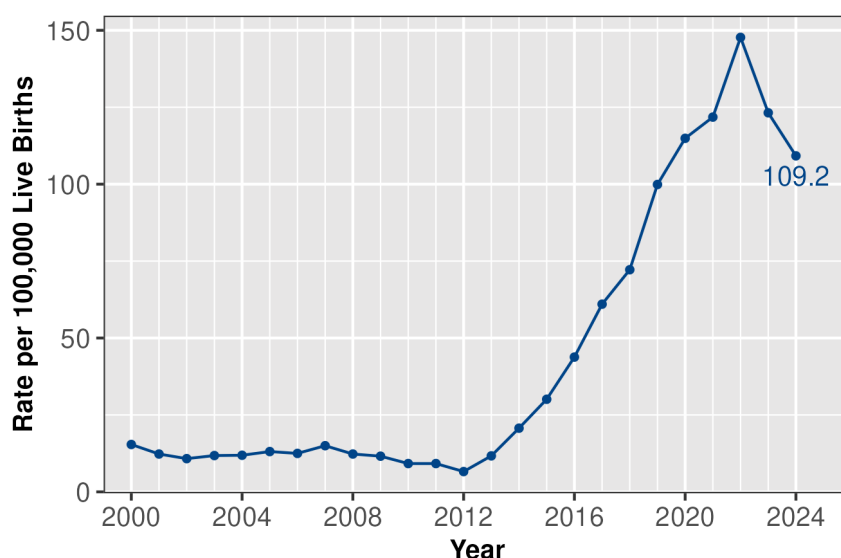
During pregnancy, syphilis can be transmitted across the placenta to the fetus and cause congenital syphilis. Congenital syphilis can cause miscarriage, stillbirth, or infant death shortly after delivery.[32] In other cases, infants may experience severe health outcomes like premature birth, low birth weight, neurological problems, and deformities. These health impacts can cause lifelong disability. Congenital syphilis is preventable with timely diagnosis and adequate treatment of syphilis in pregnant people.

Key Data and Trends

After concerning and dramatic increases since 2012, the rate of congenital syphilis among infants born in California turned the curve by decreasing 16% from 2023 to 2024. However, the 2024 rate was still three times higher compared to 10 years ago. In 2024, 438 cases of congenital syphilis were reported, including 30 congenital syphilis-related stillbirths and six neonatal/infant deaths. The decrease, and prior increase, in congenital syphilis cases was driven by demographic changes in those infected with syphilis (i.e., women and their male sexual partners) (see [STIs/STDs in the Adulthood section](#)).

Figure 22

Incidence of Congenital Syphilis, California, 2000-2024 (Annual), California Reportable Disease Information Exchange



There are likely multiple contributors to achieving these recent decreases, including strengthened local health department programming with disease intervention staff that meet patients where they are in their communities to effectively test, treat, and prevent syphilis. In April 2023, California was the first state to release [post exposure prophylactic doxycycline recommendations](#), an approach that can decrease the risk of acquiring syphilis by more than 70% in men who have sex with men and transgender women. Other measures include:

- A 2022 CDPH [Dear Colleague Letter](#) supporting routine syphilis screening and empiric syphilis treatment in emergency departments.
- State Legislature investments in 2023 to establish or scale opt-out testing programs in 28 emergency departments.
- [CDPH updated Syphilis Screening Recommendations](#) in 2024 to broaden recommendations to all pregnant people.

Disparities

Risk factors for congenital syphilis include no or delayed prenatal care, methamphetamine use, homelessness, incarceration, and injection drug use. Substance use is associated with less safe sexual practices including decreased condom use.[33]

Public Health Prevention Strategies

CDPH administers state funding to local health jurisdictions with high rates of early syphilis or congenital syphilis for congenital syphilis prevention. More detail on California's efforts to prevent syphilis and congenital syphilis is described under the STI/STD topic in the [Adulthood section](#) of this report.

Child Health

Childhood, in particular early childhood (through age 8), is a pivotal period of development characterized by rapid brain and body development.[34] Many health outcomes and disparities in adulthood are rooted in childhood conditions such as family and community health, neighborhood safety, policies, and systems. Public health creates safe, stable, nurturing relationships and supportive environments that protect against childhood stressors. Promoting early prevention to support lifelong health and foster intergenerational well-being is a key priority within [CDPH's Strategic Plan](#).

Adverse Childhood Experiences, Positive Childhood Experiences, and Flourishing

Adverse Childhood Experiences (ACEs) are traumatic events in

Climate Change and Children's Health

Climate change driven by the burning of fossil fuels threatens health and children are at particularly high risk. California's current and future children will face unprecedented exposure to these effects as they impact the environments in which children live, play, and learn.[1] Extreme weather events harm both physical and mental health, with disproportionate impacts on children of color and in low-income communities. Children are uniquely at risk from climate impacts due to their developing physiology and dependence on adults. For example, children are particularly sensitive to extreme heat and rely on adults for help staying hydrated and cool. Climate change-related disasters like the 2025 Los Angeles wildfires expose children to toxic chemicals in the air and water. Air pollution and wildfire smoke are a danger to children's developing lungs. Disasters can disrupt children's education, social support, and housing as well as lead to food insecurity, trauma, and caregiver stress. Even children who have not experienced a disaster may suffer from climate anxiety, and this fear for their future can sometimes lead to mental health challenges.[2]

childhood that have long-lasting individual and intergenerational impacts on health and well-being, such as exposure to abuse, alcoholism or substance misuse, parental separation or divorce, mental illness, and incarceration in the household. ACEs disrupt healthy brain development, alter the immune and endocrine systems, and change how the body responds to stress.[35] ACEs can negatively impact education, employment, earnings, mental health, and health outcomes and people who experience ACEs are at higher risk of experiencing violent victimization and intimate partner violence. The risk of developing long-term health problems and adopting risky coping mechanisms increases with the number of ACEs exposures.[36]

Positive Childhood Experiences (PCEs) are beneficial experiences in childhood that are associated with improved mental health and wellbeing in adulthood. PCEs include supportive relationships, a nurturing environment, community engagement, and opportunities for emotional growth. These positive experiences have been shown to counter some of the harmful effects of ACEs and toxic stress.[37]

Flourishing is a state of optimal well-being, growth, and positive development in children. It is a parent-reported holistic measure reflecting a child's emotional, social, mental, and physical well-being. Children with access to family-centered resources, high family connectedness, and fewer ACEs are more likely to flourish.[38] Social connectedness, which includes feeling supported, valued, and part of a community, is associated with improved mental health, stronger coping skills, and lower rates of anxiety, depression, and suicide.[39, 40] Flourishing in childhood is linked to better health outcomes later in life.[41]

CDPH's Strategic Plan prioritizes reducing ACEs and promoting PCEs to identify and address risk conditions and environmental exposures to enable children and families to grow and flourish.

Key Data and Trends

In 2024, most California adults reported experiencing ACEs during childhood.

- About 2 in 3 experienced one or more ACEs during childhood, and nearly 1 in 5 experienced four or more.
- The most commonly reported ACEs are emotional abuse, challenges with getting the basics covered (such as food or housing) due to family's income, household alcoholism or substance misuse, parental separation or divorce, and physical abuse (Figure 23).

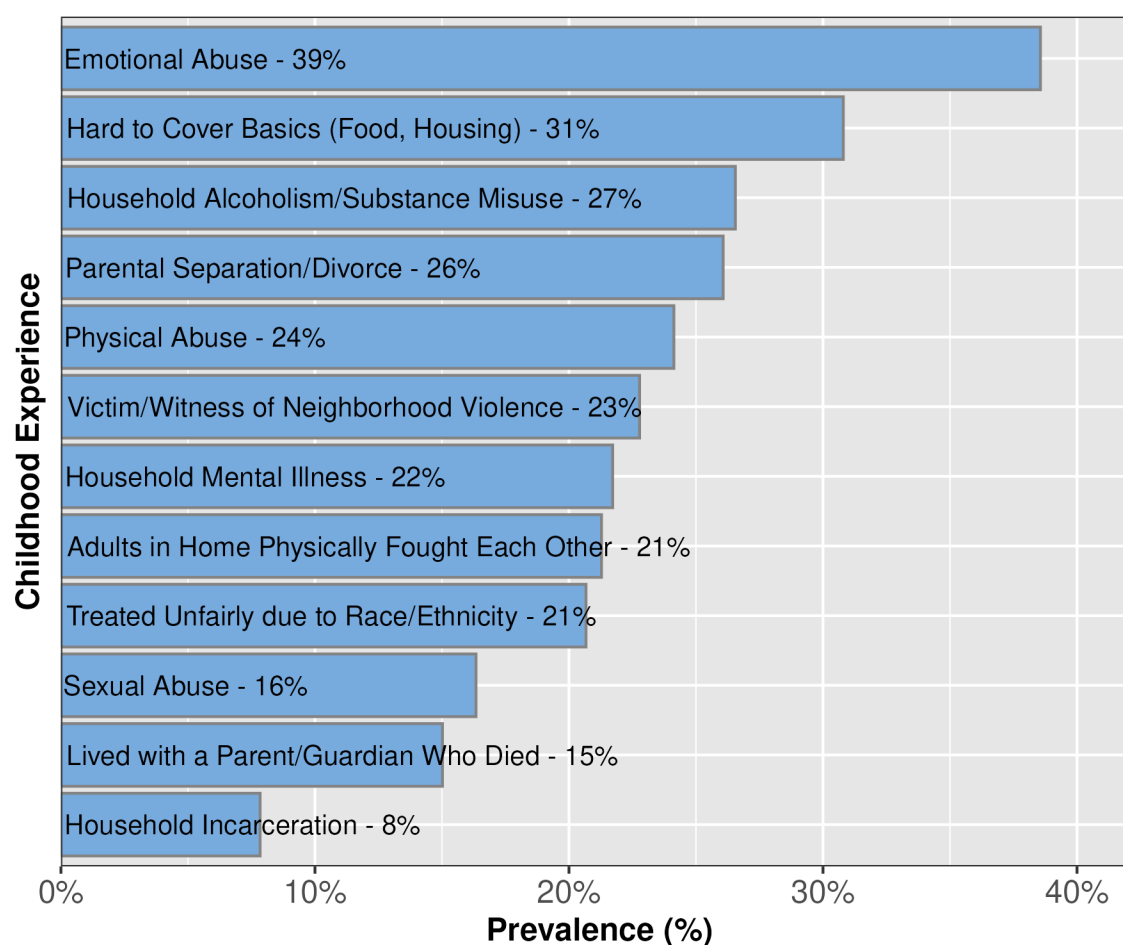
The [MCAH ACEs data dashboard](#) offers more details by different subcategories with data through 2021.

Most California adults also reported experiencing PCEs¹² during childhood, with approximately 89% reporting that there was an adult in the household who tried hard to make sure basic needs were met, and around 81% reporting that they felt safe and protected at home.

Trends in flourishing have remained stable over time. From 2022-2023, nearly 4 in 5 California children aged 6 months-5 years and only three-fifths of those aged 6-17 years met the definition for flourishing.[42]

Figure 23

Prevalence of Adults Who Retrospectively Report Experiencing ACEs during Childhood, California, 2024, California Health Interview Survey



¹² California Interview Health Survey 2024 included only two PCE items. Earlier surveys (e.g., 2021) included a broader set of PCEs. Analyses of these additional PCEs can be found in the [Positive and Adverse Childhood Experiences \(PACES\) Data Report: California Health Interview Survey \(CHIS\), 2021](#).

Disparities

In 2024, several groups reported higher prevalence of experiencing four or more ACEs during childhood.

- Multi-Race (36%), American Indian or Alaska Native (34%), and Black or African American (29%) individuals had the highest prevalence of experiencing 4 or more ACEs.
- 40% of respondents who identified as transgender or gender non-conforming reported experiencing four or more ACEs compared to 19% of respondents who identified as cisgender.
- Bisexual (40%) and lesbian or gay (30%) respondents had the highest prevalence compared to straight respondents (19%).

There are differences in flourishing across age groups.¹³ Older children face complex developmental challenges, hormonal changes, stress from school and peer dynamics, future uncertainty, and navigating individual identity. Older children spend more time on screens, which can displace activities like play and social interaction that support flourishing.[43] Despite differences in flourishing, most California children aged 6-17 (80.7% of children aged 6-11 and 75.4% of children aged 12-17 years) can successfully form and maintain peer relationships, showing strong social skills.

In addition to age differences, flourishing data from the 2022-2023 National Survey of Children's Health show disparities in flourishing by household income and race and ethnicity in California.

- Children in households with higher income (making 400% of the FPL) were most likely to flourish.
- Flourishing prevalence was highest for multiracial children aged 6 months to 5 years and lowest for Black or African American children.
- In the 6-17 age group, flourishing prevalence was highest for Asian children and lowest for White children.

Social drivers that promote PCEs and flourishing include early education, mentorship, reliable health insurance coverage, caregiver support, and housing stability.[44] Participation in extracurricular activities is linked to better academic performance, social skills, and emotional resilience.[45] Neighborhood safety plays a critical role in supporting outdoor play, social connectedness, and a sense of security.[46] Community-based solutions, supportive investments, and collaboration across sectors can help to ensure that all communities have equitable access to conditions that promote PCEs and flourishing.

¹³ From 6 months to 5 years old, flourishing children show affection, resilience, curiosity, and tend to smile and laugh. At 6-17 years old, flourishing children show interest in learning, complete tasks, and stay calm under pressure.

Public Health Prevention Strategies

Childhood adversity is a preventable public health issue. CDPH implements coordinated and data-driven approaches supporting equitable, community-led policies to prevent adversity and help children, adolescents, and families thrive. State programs that address childhood adversity include the [All Children Thrive, California](#), the [California Essentials for Childhood \(EfC\) Initiative](#), and CDPH's MCAH. All Children Thrive, California is an equity-focused initiative that engages high-need communities to prevent childhood adversity and support community resilience. The EfC Initiative addresses ACEs as a public health issue using a data-informed approach. The EfC Initiative priorities include development and use of ACEs data to help protect children and youth in California communities. The EfC Initiative data include near real-time syndromic surveillance of California ED and urgent care data to identify where and when ACEs occur. CDPH's MCAH is home to the [FLOURISH Initiative](#) which promotes prevention strategies for individuals and families to access resources, services, and support to improve mental wellness.

The [California Office of the Surgeon General's Live Beyond](#) campaign (2023-2025) raised awareness about ACEs and toxic stress and was a key initiative funded by the [Children and Youth Behavioral Health Initiative \(CYBHI\)](#), part of the [Governor's Master Plan for Kids' Mental Health](#). The campaign was successful in reaching audiences affected by ACEs, including immigrant youth and youth in foster care, and parents and caregivers with lower incomes and less education. A RAND study found it increased awareness of ACEs and engagement in self-care and stress reduction activities.[47]

CDPH proposes to utilize a portion of Behavioral Health Services Act (BHSA) population-based prevention funding to leverage existing campaign assets from Live Beyond. BHSA requires at least 51% of CDPH funding to serve young people 25 and younger, with a special focus on children aged 0-5. CDPH [proposes to work](#) with local partners on upstream strategies using a life course approach to promote PCEs and the development of safe, stable, and nurturing relationships and environments for the maternal, child, and adolescent health populations. An ongoing cross-sector approach is needed to increase the proportion of children who thrive and flourish.

Asthma

Asthma is a serious, chronic lung disease that makes it hard to breathe. Asthma is the number one chronic childhood disease in California, with substantial impacts on adults as well.[48] Asthma is a priority condition from a quality-of-life perspective, as individuals with asthma consistently report among the lowest health-related quality of life and health status.[49]

Key Data and Trends

Approximately 6 million Californians (15.5%) have been diagnosed with asthma during their lives (lifetime asthma¹⁴), including more than 500,000 children and 3.4 million Californians (8.9%) who currently have asthma.¹⁵

- The percentage of Californians with lifetime asthma increased over the past two decades, from 12.0% in 2001 to 15.5% in 2024.
- Current asthma prevalence remained steady over the past two decades.
- In 2024, asthma resulted in approximately 145,000 ED visits, 15,000 hospitalizations, and 364 deaths.
- Children are more likely than adults to experience severe asthma episodes requiring emergency medical care. Children aged 0–17 years were twice as likely to visit the ED and nearly 4 times more likely to be hospitalized for asthma compared to adults.
- The asthma death rate has historically been declining except for 2020 when there was a spike in asthma deaths.

Disparities

- Compared to White populations, Black or African American individuals were 5 times more likely to visit the ED, 4 times more likely to be hospitalized, and more than 3 times more likely to die because of asthma.
- Black or African American and American Indian and Alaska Native children aged 0–14 had the highest ED visit rates for asthma (Figure 24).
- American Indian and Alaska Native populations were 50 percent more likely to have asthma compared to White populations.
- Latino individuals generally had lower asthma prevalence than White individuals but had nearly double the asthma ED visit and hospitalization rates, suggesting that Latino individuals with asthma were more likely than White individuals to experience uncontrolled asthma.

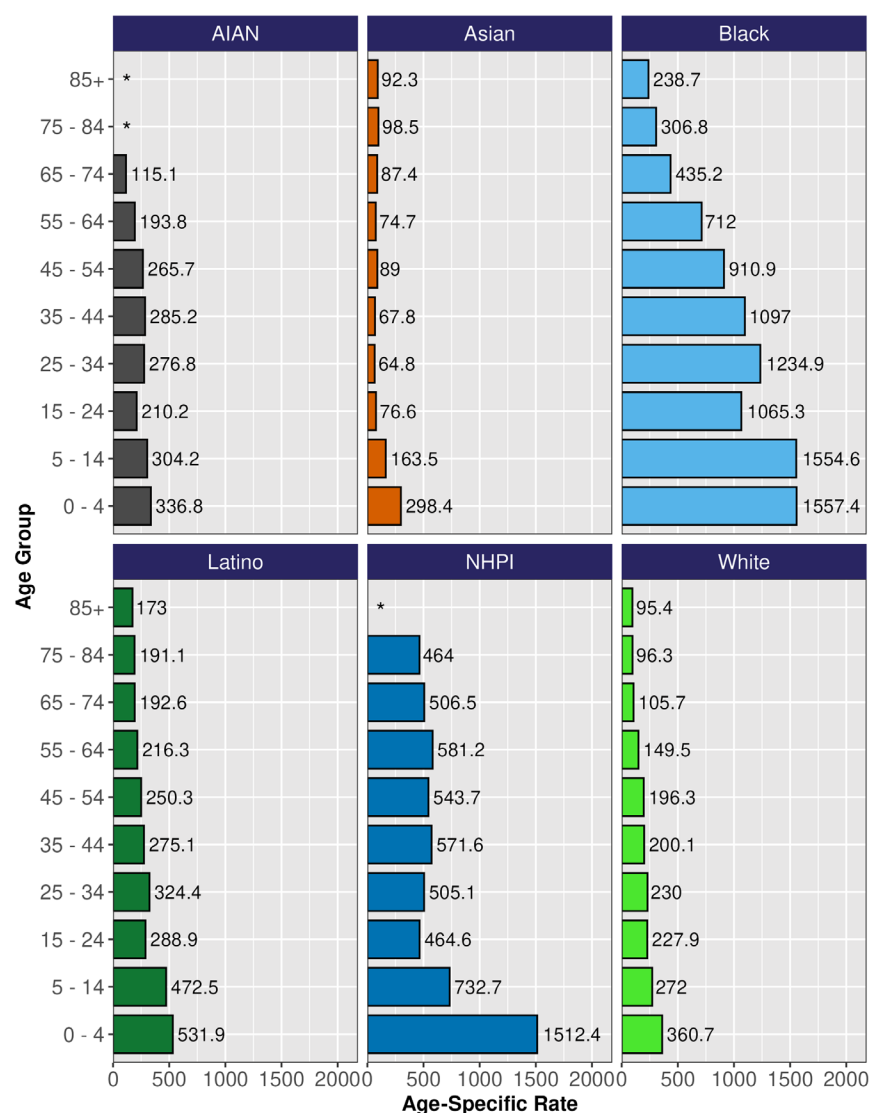
For more asthma trend and disparities data visit [Tracking California's Data Explorer dashboard](#), which hosts CDPH's asthma surveillance data.

¹⁴ Lifetime asthma prevalence describes the percentage of people who have ever been diagnosed with asthma by a healthcare provider.

¹⁵ Current asthma prevalence describes the percentage of people who have ever been diagnosed with asthma by a healthcare provider and report that they still have asthma and/or had an asthma episode or attack within the past 12 months.

Figure 24

Age-Specific ED Visit Rate for Asthma by Race and Ethnicity and Age Group, 2020-2024, California



Note: * = Data are suppressed per the CalHHS data de-identification guidelines

Social Drivers of Asthma

Poor asthma outcomes are associated with interrelated factors such as poverty, air pollution exposure, substandard and unstable housing, racial discrimination, and inequitable healthcare access.[50] Low-income Californians are more likely to suffer from uncontrolled asthma and to visit the ED or be hospitalized for asthma.[51] Housing insecurity and substandard living conditions contribute to chronic stress and exposure to pests and mold, which can trigger asthma.[52]

Public Health Prevention Strategy: Healthy Homes for Low-Income and Farmworker Families

CDPH's Climate Change and Health Equity Branch, in partnership with Kaweah Health, the Association for Energy Affordability, the University of California, Davis, and Proteus, Inc., launched the CHWs, Healthy Homes and Healthy Families pilot program. The program connects low-income families and farmworker communities in Tulare County with energy-efficiency and weatherization services as protective health interventions to provide thermal comfort in homes, reduce health risks and improve resilience to air pollution, heat, and wildfire smoke.

Community Health Workers (CHWs) perform in-home visits with Medi-Cal patients who have asthma, COPD, or other potential health conditions. CHWs assess health conditions linked to poor housing conditions using a housing and health intake survey and, when appropriate and authorized by the patient, make a referral to the local weatherization provider, Proteus, Inc. The pilot program continues to move forward in weatherizing homes in 2026.

Air pollution can worsen asthma, especially if particles are small enough to enter the lungs and bloodstream.[53] Recent evidence links air pollution from oil and gas to 216,000 annual childhood-onset asthma cases nationally, or 90% of all new childhood asthma cases.[54] Despite Clean Air Act improvements, pollution is a persistent health hazard in California. Several cities in the Central Valley, Bay Area, Los Angeles, and Imperial counties, home to a large percentage of the state's communities of color, have some of the nation's highest levels of air pollution.[55] Children exposed to high levels of traffic density and closer to freeways had higher risk of asthma.[56] These elevated risks are attributable to discriminatory policies such as redlining and high rates of oil and gas permitting near communities of color.

A 2024 peer-reviewed study of California's San Joaquin Valley estimated that the total burden of air pollution-related asthma and upper respiratory outcomes in the region including healthcare costs, productivity losses, school absences, and opportunity costs, exceeds \$1 billion annually for the region alone. Modeled reductions in O₃, NO₂, and PM_{2.5} concentrations demonstrated that nationally achievable improvements in air quality could prevent approximately 41,000 ED visits and hospitalizations annually, yielding an estimated \$137 million in avoided healthcare and societal costs.[57, 58]

Public Health Prevention Strategies

[California Breathing](#) (CB), the state asthma program housed within CDPH, has worked to address the burden of asthma since 1998. CB provides and disseminates asthma surveillance data, forms

partnerships with and participates in statewide networks and coalitions focused on mitigating environmental asthma triggers and promoting asthma-related best practices and develops programs to improve asthma self-management. CB prioritizes working with communities with the greatest asthma burden and partners with Federally Qualified Health Centers and other organizations providing services to Black, Latino, and American Indian and Alaska Native communities and programs serving children.

The [Asthma Management Academy \(AsMA\)](#) is CB's cornerstone evidence-based training program for non-licensed asthma care team members, such as CHWs and health educators. The AsMA teaches participants how to deliver asthma self-management education to patients and families with uncontrolled asthma in the most burdened communities. Since 2018, the AsMA has trained 774 educators from 104 organizations. The goals of the AsMA are to 1) reduce the burden of asthma through improved asthma outcomes (e.g., better asthma control, reduced ED visits, fewer missed school days, reduced asthma triggers); 2) provide high quality, culturally and linguistically appropriate training for educators; and 3) improve drivers of health inequities.

Adolescence: A Time of Growth and Opportunity

Adolescence is a period of rapid physical, neurological, and mental growth.[59] Hormone changes during early adolescence (ages 10-13) transform childhood bodies into reproductively capable adult bodies by late adolescence (ages 17-19).[60] The rapid growth of brain gray matter during early adolescence drives teens' sensation-seeking and identity and relationship exploration.[61]

Teens' environments greatly impact their opportunities to safely explore their identity, emotion regulation, and sensation seeking. Youth in environments with economic instability, neighborhood violence, limited access to healthy food and stable housing, limited positive adult support, and experiences of societal discrimination, including racism, are more likely to resort to substance use, less safe sexual behaviors, and school disconnection.[62] The compounding stressors during this critical period have immediate and long-term impacts on adolescent health.[63] While fortunately there are relatively few deaths among this age group, injury-related causes such as road injury, suicide, homicide, and drug overdose make up the leading causes of death in adolescence.

Providing adolescents with prosocial options like sports and leadership can help them meet their developmental needs and improve health and wellness.[64] Education and opportunity to practice allow youth to solidify their values and choices early and often. Positive relationships with caring adults are a major protective factor during this period.[65] Public health supports adolescence by promoting the importance of fostering strong connections to a trusted adult, and opportunities for safe exploration and risk taking to promote a healthy transition to adulthood.

Tobacco Use

Commercial tobacco¹⁶ product use is the leading cause of preventable disease, death, and disability in California and the nation.[66] Commercial tobacco products include cigarettes, vapes, cigars, heated tobacco products, nicotine pouches, little cigars or cigarillos, and smokeless tobacco products. Tobacco and nicotine use impacts every major system in the body, significantly contributing to the chronic disease burden in California. Over 1 in 5 cancer deaths and billions in annual healthcare spending are attributable to smoking.[67] Nicotine addiction is a pediatric disease that can lead to other addictions and amplify symptoms of mental health conditions such as anxiety and depression, especially among young people.[68]

Key Data and Trends

Although use of commercial tobacco products in California has decreased over time, the decline has stalled in recent years.

- While cigarette use has continued to decrease, vaping use has increased from 3.4% in 2019-2020 to 5.2% in 2023-2024 among California adults.[69]
- Californians use cigarettes (5.3%) and vapes (5.2%) with similar prevalence. However, vaping prevalence is more than twice as high among young adults (18-25) compared to the general adult population.[70]
- High schoolers in California use vapes more than other tobacco products.

Youth and young adult nicotine use behavior is changing in part because of high-nicotine content in vapes and nicotine pouches.

- Between February 2020 and June 2024, nicotine content in milligrams more than doubled in vapes sold.[68]
- About half of California high schoolers in 2024 reported recently seeing ads for tobacco products.
- Almost 1 in 5 licensed tobacco retailers in California inspected in 2024 illegally sold tobacco products to an underage customer.
- In 2024, almost 40% of high school student current vape users reported vaping daily or nearly every day.
- Among high school students in California, current nicotine pouch use significantly increased by over 130%, and current heated tobacco use increased by 67%, between 2022 and 2024.

Visit the [California Tobacco-Related Data Dashboard](#) for additional data.

¹⁶ Throughout this section, “tobacco” is used to describe tobacco products sold by the tobacco industry and does not refer to traditional tobacco use or access to sacred tobacco.

Disparities

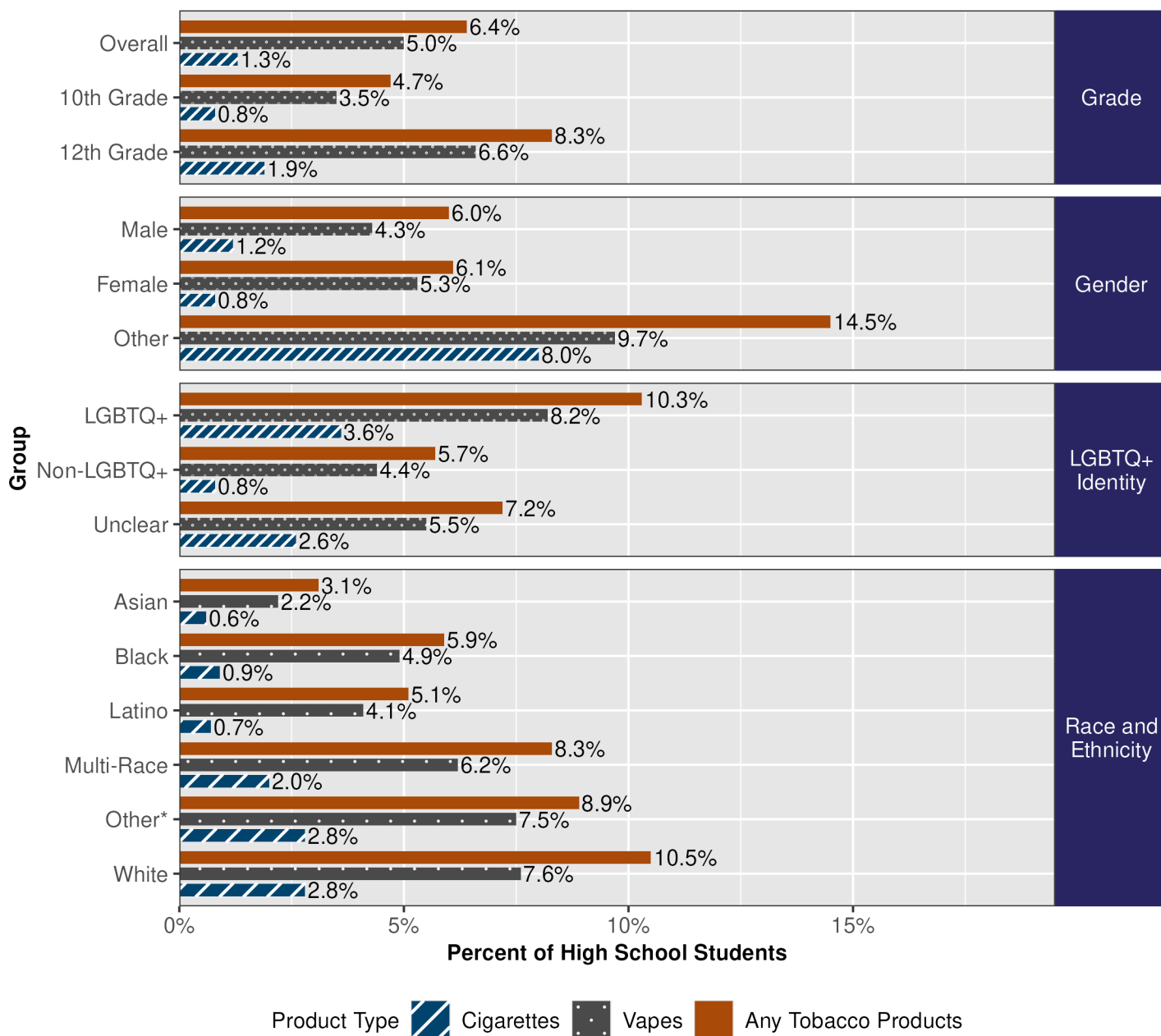
While overall tobacco use in California is decreasing, disparities in tobacco and nicotine use exist among populations (Figure 25).

- In California, most adult tobacco users are 26-44 years old.[71]
- Current tobacco use was nearly twice as high for students in 12th grade compared to 10th graders.
- Both adults and high schoolers who identify as LGBTQIA+ were more likely to currently use tobacco than their peers.
- Adults and high schoolers who live or attend school in rural areas had higher prevalences of current tobacco use. Furthermore, prevalences were higher among adults living below 200% of the FPL.
- Current tobacco use was more prevalent for both adults and high schoolers experiencing psychological distress or poor mental health.
- Adult males had higher tobacco use prevalence than adult females, whereas for high schoolers prevalence was highest among those identifying outside of the gender binary.
- Current tobacco use was higher among Black adults than other single-race groups, and among White high schoolers relative to other groups.

Low income, housing instability, structural racism, tobacco retailer density, and targeted tobacco marketing are fundamental factors that influence tobacco use.[72] Tobacco retailer density is higher in communities with more people of color and low-income residents.

Figure 25

Current Tobacco Product Use among High School Students, by Product Type, Grade, Gender, LGBTQ+ Identity, and Race and Ethnicity¹⁷, 2024, California, California Youth Tobacco Survey[73]



¹⁷ American Indian or Alaska Natives and Native Hawaiian or Pacific Islanders were combined with "Other" race due to small sample sizes.

Public Health Prevention Strategies

The [California Tobacco Prevention Program](#) uses a comprehensive approach to reduce tobacco use through policy, community engagement, media, and cessation services. California leads the nation in strong tobacco prevention policies and services at the state and local levels.[74] Local tobacco policies include comprehensive sales bans of nicotine products, stronger enforcement of age and sales restrictions on flavored products, and providing culturally appropriate cessation resources to communities. These activities reduce the disease burden caused by tobacco products and provide significant cost savings. Since 1988, lung cancer rates have decreased by 52%.[75] and from 1989 to 2019, these efforts netted cumulative per capita healthcare savings of \$544 billion.[76]

Cannabis Use

The human brain continues to develop and mature into the mid-twenties. Developing brains are especially vulnerable to the harmful effects of cannabis. Using cannabis often, particularly at younger ages, has been shown to change important parts of the brain that are responsible for attention, decision-making, learning, memory, and motivation. More research is needed to understand the long-term effects of cannabis on the brain; however, some studies suggest that these negative effects may last a long time.

Cannabis use disorder is when a person is unable to stop using cannabis, even though it is causing health and social problems in their lives. The risk of developing cannabis use disorder is higher in people who start using cannabis as youth and in people who use cannabis more often. Research suggests that about 22 percent of people who use cannabis have cannabis use disorder. Frequent use of high-potency THC cannabis in youth is linked to higher risk for developing psychosis or psychotic disorders later in life. This is especially true for those with higher genetic risk for psychotic disorders, who start using cannabis earlier, and who use it more often.[77, 78]

Key Data and Trends

In 2024, there were around 72,000 non-fatal ED visits related to cannabis¹⁸, with more than 50% of the ED visits among 15- to 35-year-olds. See the CDPH Substance and Addiction Prevention Branch's data dashboards on cannabis-related non-fatal [hospitalizations](#) and [ED visits](#) for more analysis.

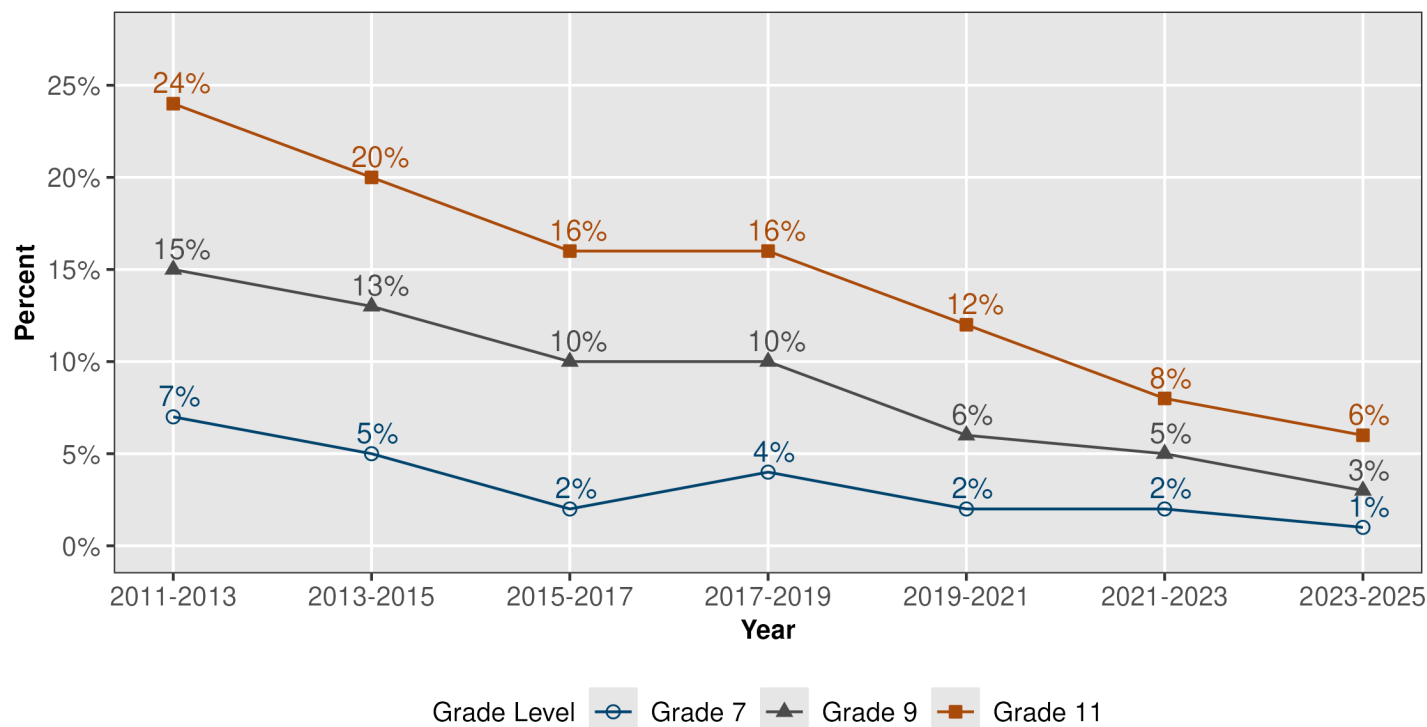
Survey data indicate that the prevalence of past 30-day cannabis use among 7th, 9th, and 11th graders in California from 2011–2013 to 2023–2025 declined

¹⁸ These visits are referred to as Cannabis Burden. Cannabis Burden is the most inclusive definition that incorporates nearly all cannabis-related ICD-10-CM codes in both the principal and other diagnoses: Cannabis abuse, dependence, and use (F12), Poisoning by, adverse effects of, and underdosing of cannabis (T40.7), and Newborn affected by maternal use of cannabis (P40.81).

for all groups (Figure 26).

Figure 26

Youth Cannabis Use (Past 30-Day) by Grade and Survey Year (2011-2025), California, Biennial State California Healthy Kids Survey¹⁹



Disparities

Overall, adult males had considerably higher rates and numbers of cannabis-related ED visits compared to adult females from 2016 to 2024. Among individuals aged 20 years or younger, the cannabis-related ED visits rates were lower than adults, and among this age group the rates for females surpassed that of males in 2022 and 2023. In 2024, the rates for both females and males of this age group were nearly the same.

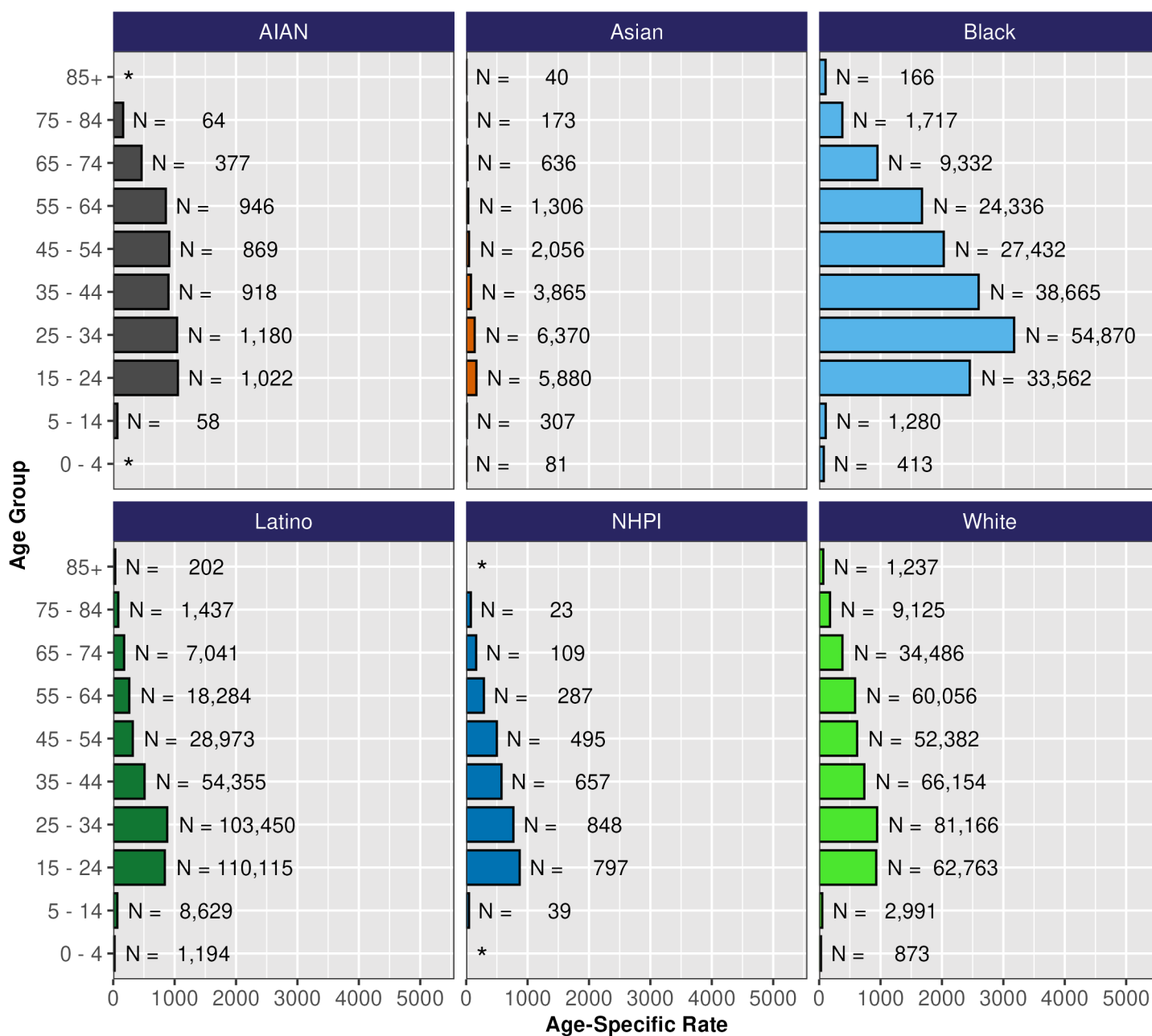
The rate of cannabis-related ED visits was highest, in almost all age groups, for Black or African American individuals compared to individuals from other racial and ethnic groups from 2020 to 2024. Among the Black or African American population, individuals aged 25 to 34 had the highest ED visit rate related to cannabis. However, there was a large overall decrease in the rate of cannabis poisoning-related ED visits among Black or African American adults 21 years and older from 2020 to 2024. While these ED data are valuable for

¹⁹ In 2018, the marijuana use questions were modified to include eating, drinking, or vaping in addition to smoking. The 2018 and later marijuana use results are therefore not comparable to results in earlier years.

understanding disparities in morbidity burden, it is important to consider how they may be influenced by disparities in access to care, insurance, exposure to prevention, provider biases, and other social drivers of health.

Figure 27

Age-Specific ED Visit Rate for Cannabis Burden by Race and Ethnicity and Age Group, 2020-2024, California



*: Data suppressed per the California Health and Human Services Agency Data De-Identification Guidelines

Public Health Prevention Strategies

The CDPH Youth Cannabis Prevention Initiative (YCPI) is a comprehensive effort that includes the [California Cannabis Surveillance System](#) (CCSS) and the [Cannabis Education and Youth Prevention Program](#) (CEYPP). CCSS monitors cannabis use trends, health outcomes, and the broader social, legal, and environmental impacts of cannabis across populations. CEYPP supports culturally responsive health education, [public awareness campaigns](#), and local prevention strategies and grants. YCPI partners with the California Friday Night Live Partnership (FNL) to engage youth in assessing attitudes and norms through surveys and focus groups to develop culturally appropriate educational materials and training for youth by youth. The [California Youth Advocacy Network](#) (CYAN) provides training and technical assistance to promote youth engagement, advocacy, and equitable alternatives to punitive measures for cannabis use violations in schools. Additionally, YCPI partners with UC San Diego's [Youth Vaping Alternative Program Education](#) (YVAPE), which offers free counseling and education for middle and high school students as an alternative to suspension program for on-campus cannabis use.

Food Security

Food security refers to the availability, access, and utilization of sufficient, safe, and nutritious food to meet the dietary needs for an active and healthy life.[79] It encompasses various dimensions, including food availability, economic and physical access to food, food utilization, and stability over time. In 2025, the US Agriculture Department canceled its annual household food insecurity report and will no longer field surveys.[80]

Food insecurity in children and adolescents is associated with a range of behavioral risk factors and negative health indicators that influence outcomes later in life. These include a greater likelihood of being overweight, greater consumption of sugar from sweetened beverages, and eating breakfast and dinner with family less frequently.[81] Lower food security is associated with a higher probability of several chronic diseases, such as stroke and COPD.[82]

Key Data and Trends

More than five million Californians were food insecure in 2023, with people living below 200% of the FPL experiencing the highest prevalence rates.[83]

- Food insecurity affects families and individuals across the life course, but youth experienced the highest rates of household food insecurity.[83]
- The prevalence of household food insecurity in California between 2022 and 2024 was below the national average (12.5% vs. 13.3%), but rates were significantly higher than they were in 2018-2020.[84] After a decline in 2020, likely influenced by pandemic-era food assistance and tax credit policies, food insecurity among adults living below 200% of the FPL increased from 35.8% in 2020 to 44.5% in 2024.[85, 86]

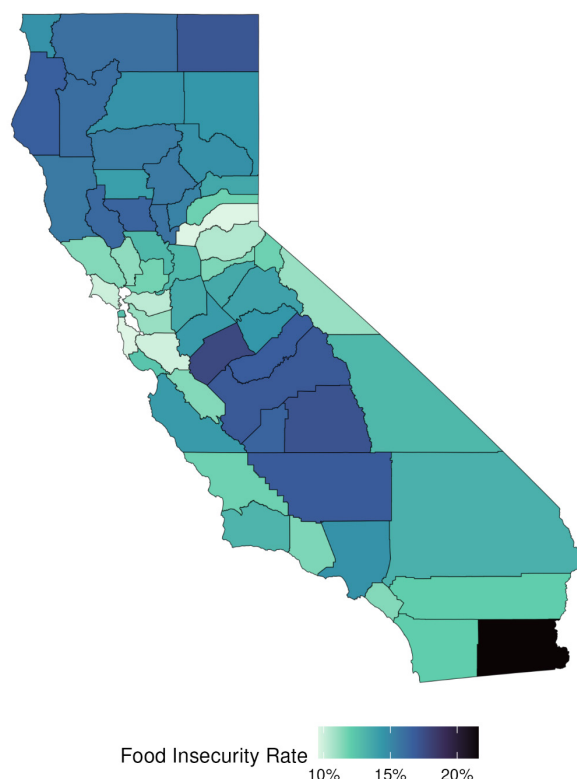
Disparities

Among people living below 200% FPL, females reported higher food insecurity than males. Among adults with low incomes, those identifying as two or more races and American Indian or Alaska Native had the highest prevalence of food insecurity.[86] The highest rates were in Imperial County (21.6%), whereas the lowest were in San Mateo and Placer Counties (9.6%) (Figure 28).[83]

Food insecurity is shaped by multiple factors including economic stability, education, and community context. Households with lower incomes and educational attainment face higher barriers to accessing affordable and nutritious food, often living in areas with few options for affordable and healthy foods or relying on low-quality, processed food options.[87]

Figure 28

Food Insecurity by County, 2023, Feeding America



Federal Funding Cuts

Federal legislation (H.R. 1) in 2025 enacted historic cuts to CalFresh, which provides food assistance to over 5 million low-income Californians. The law reduces or eliminates monthly benefits through new eligibility restrictions and limits on state financing. H.R. 1 ended \$132 million in funding for SNAP-Ed state- and community-based programs with impacts on state and local staff.

Public Health Prevention Strategies

[California WIC](#) provides nutrition education, breastfeeding support, healthy food benefits, and referrals to health care and community services. California WIC serves approximately 1 million participants statewide each month.

SNAP-Ed has been a national model for engaging communities to improve nutrition, physical activity, built environments, and downstream health outcomes. Despite elimination of SNAP-Ed funding, CDPH will continue to promote healthy eating, physical activity, and nutrition security with an emphasis in communities with the greatest health disparities through statewide, regional, and local partnerships. California continues to lead on nutrition security policy through [executive action](#) and [first-in-the-nation legislation](#) to define and limit the harms associated with “ultra-processed foods” and other harmful ingredients.[88]



Young Adulthood: Building Skills and Positive Relationships to Thrive

As young adults transition from adolescence to early adulthood, the prefrontal cortex or the brain's center for rationale decision making continues to develop and mature throughout the early to mid-20s. During this developmental period, young adults explore their identity and sense of self as they also assume greater responsibilities and adult roles through work, learning a trade, and/or pursuing higher education. Young adults' relationships with others transform as their relationships with parents and peers change, they develop greater empathy and intimacy skills and shift their focus from self to others.

	18 - 24	25 - 34
1st	Road injury	Drug overdose
2nd	Suicide	Road injury
3rd	Drug overdose	Suicide
4th	Homicide	Homicide
5th	Other neurological	Alcohol-related
Leading causes of death		

■ Injury ■ Other Chronic

This critical development phase has unique challenges and opportunities that profoundly impact mental health and well-being. This age group has the highest rates of mental health-related ED visits and hospitalizations, and the leading causes of death for this age group are mostly injury-related causes.

Access to employment and education opportunities, social connection, and community supports that provide purpose and meaning are

critical during this period for younger adults to thrive.

Motor Vehicle Traffic Injury

Unintentional Motor Vehicle Traffic (MVT) injuries are injuries and deaths resulting from unintentional motor vehicle collisions on public roads. All road users can be affected by unintentional MVT injuries, including drivers and passengers, cyclists, motorcyclists, and pedestrians. These injuries can be severe, causing long-term

disability or death, and place significant strain on the healthcare system.[89] Unintentional MVT injury is a leading cause of injury and death in California.

Key Data and Trends

In 2024, unintentional MVT injuries resulted in 4,374 deaths, 29,944 non-fatal hospitalizations, and 308,236 non-fatal ED visits among Californians.[90] That is an average of 12 deaths, 82 hospitalizations, and 842 ED visits per day for Californians driving, walking, or biking on public roads.

- Pedestrians accounted for nearly 1 in 4 and motorcyclists accounted for nearly 1 in 5 unintentional MVT injuries.
- From 2003 to 2010, unintentional MVT death rates decreased by around 40%, resulting from various factors including improved vehicle safety standards and road design, as well as behavior change.
- However, much of this progress was erased with rates increasing by around 70% from 2010 to 2021. Research suggests engaging in risk behaviors such as speeding, failure to wear seat belts, and driving under the influence of alcohol or other substances contributed to the increase. Encouragingly, since 2021, rates have decreased every year (Figure 29).[91]

Additional data trends and disparities related to MVT injury can be found on [EpiCenter](#) and [legacy EpiCenter](#), CDPH's interactive data tools on injuries that resulted in death, hospitalization, or ED visits.

Disparities

In 2024, unintentional MVT death rates were highest for American Indian or Alaska Native and Black or African American populations.

Unintentional MVT death rates were highest for adults aged 20-24 and 25-34 (Figure 30). Rates were over twice as high for males compared to females of legal driving age.

Figure 29

Trend in Death Rate of Unintentional MVT Injuries, 2000-2024, California

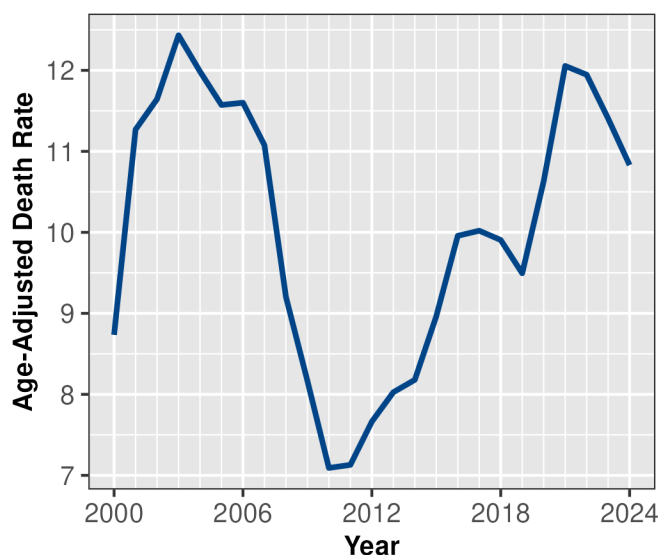
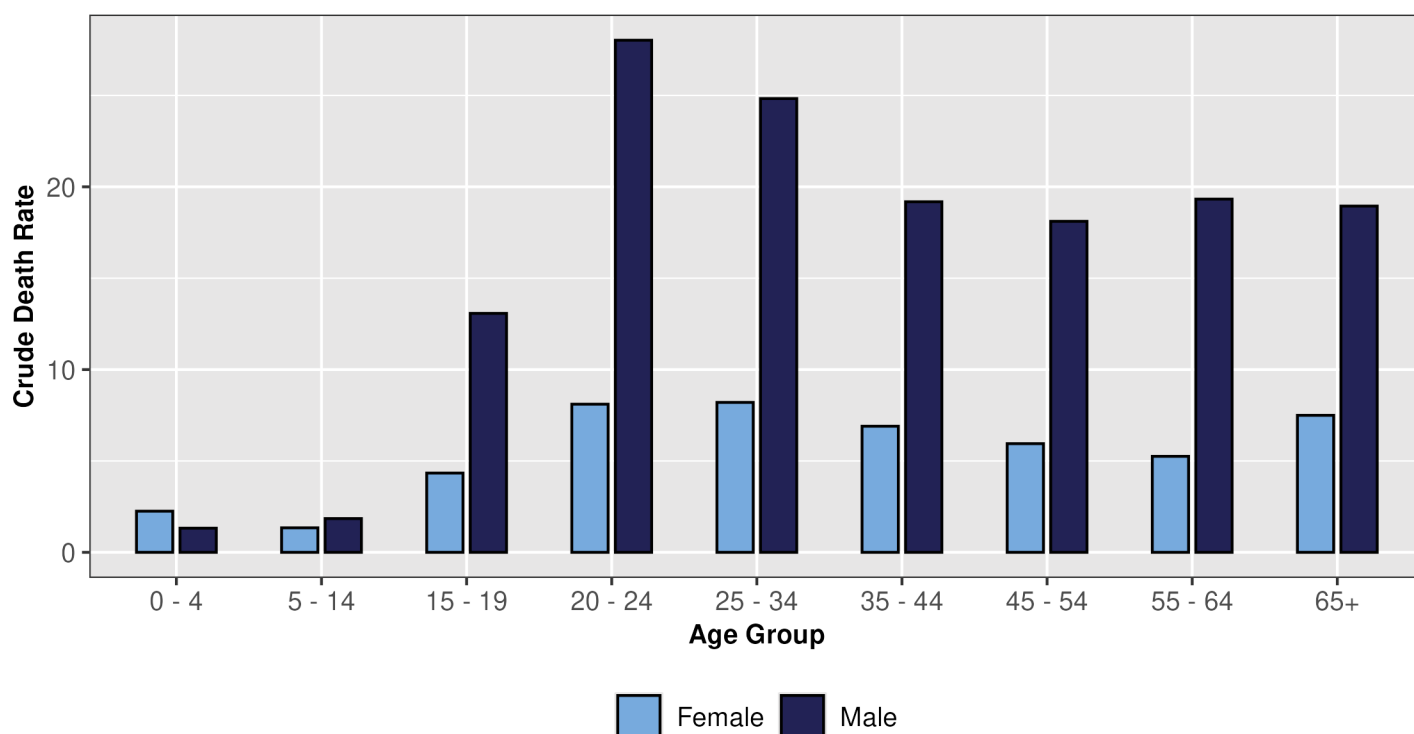


Figure 30

Age-Specific Death Rate of Unintentional MVT Injuries by Age and Sex, California, 2024



Roads designed to carry high volumes of vehicles at high speeds increase the risk of a severe MVT injury. High-risk streets are often concentrated in low-income neighborhoods where a greater share of residents are Black and other people of color. In these neighborhoods there is insufficient traffic safety infrastructure to prevent unintentional MVT injury, such as medians, sidewalks, or crosswalks. Adopting a Complete Streets design approach can slow traffic speeds and reduce collisions between motorized and non-motorized road users.[92, 93] Rural residents may be more affected by MVTs due to longer emergency service response times, and distance from trauma centers.

Public Health Prevention Strategies

The California Strategic Highway Safety Plan (SHSP) includes evidence-based strategies to reduce MVT injuries in California. The SHSP strategies are identified and implemented by an extensive network of traffic safety stakeholders, including CDPH. In October 2025, California released a new [statewide policy on road safety](#) which incorporates public health and injury prevention principles in transportation decisions, investments, and operations.

The CDPH [Active Transportation Safety Program](#) advances safe, complete streets to reduce risk of traffic injury and promote walking, biking, and other modes of active travel that contribute to physical activity. Active travel models support reduced risk of cardiovascular disease and contribute to cleaner air and reduced greenhouse gas emissions. CDPH also works with the Office of Traffic Safety to promote child passenger safety best practices through statewide instructor trainings and sharing occupant protection resources [Child Passenger Safety \(CPS\) In California](#).

Homicide

Homicide and non-fatal assaults are preventable public health concerns with immediate and long-term impacts on individuals, families, and communities.

Key Data and Trends

Homicide rates decreased beginning in 2022 following a sharp increase between 2019 and 2021 (Figure 31), with the 2024 rate nearly returning to pre-pandemic levels.

- Increases during 2020 and 2021 were driven primarily by firearm-related homicide and coincide with historic increases in gun purchases during this period.[94]
- Firearms have consistently accounted for around 70% of homicides each year from 2000 to 2024.
- Over 80% of the homicides among the 11-17 and 18-24-year-old groups were due to firearms in 2024.

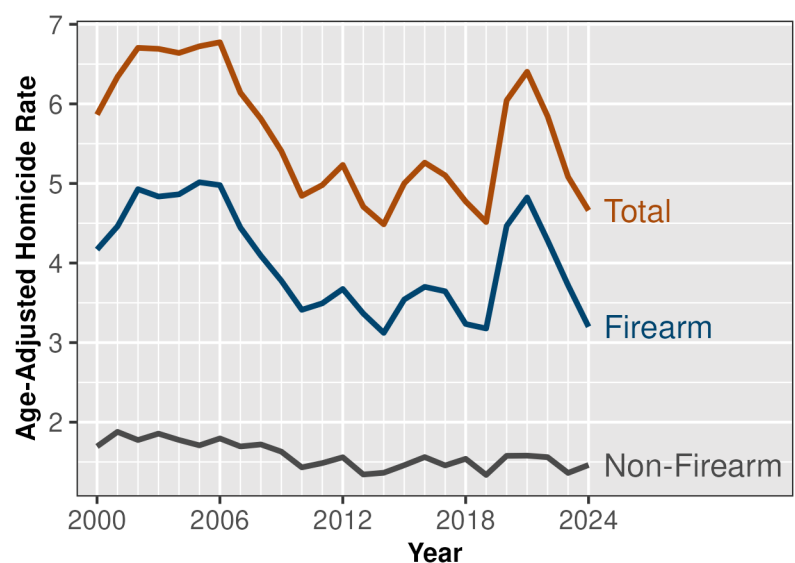
Additional data related to homicide can be found on [EpiCenter](#) and [legacy EpiCenter](#).

Disparities

More than 4 out of 5 homicide victims in 2024 were male. Homicide rates were highest between ages of 15-44 (Figure 32). Intimate partner violence was a contributing factor in nearly half of female-victim homicides and in the majority the suspect was someone known to the woman.[95]

Figure 31

Age-Adjusted Homicide Rates Due to All Causes, Firearms, and Non-Firearms, 2000-2024, California

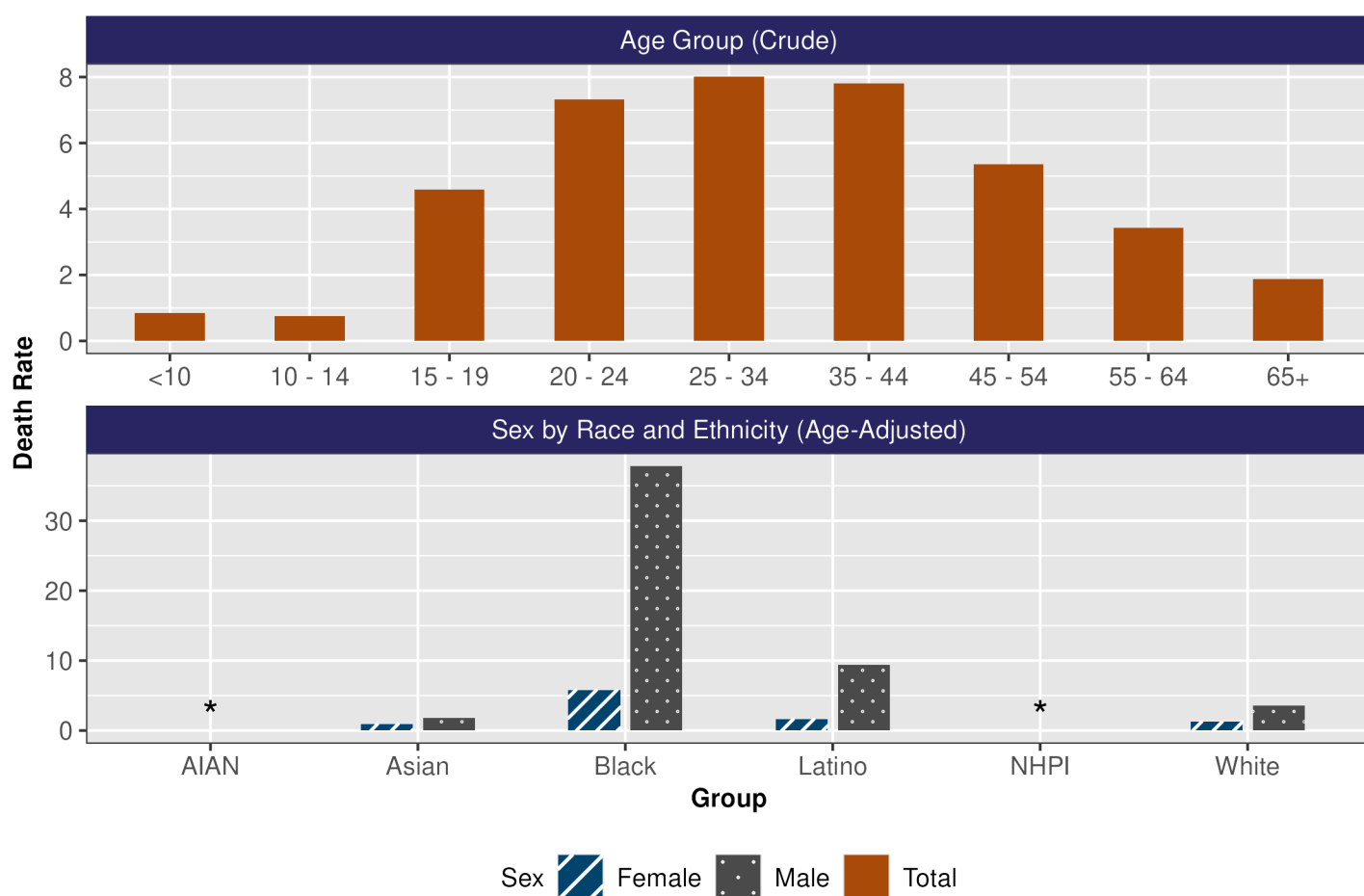


Racial and ethnic disparities in homicide rates rank among California's largest health disparities. In 2024, the homicide death rate was highest in the Black or African American population (Figure 32) and was especially high for young Black or African American male adults. Nearly half of homicide victims were Latino.

People living in environments with limited social, educational, and economic opportunities are at greater risk of exposure to multiple forms of violence. Norms that promote aggression and frequent experiences of racism, discrimination, and instability, contribute to disparities in violence. Exposure to violence causes psychological, economic, and intergenerational harm. Exposure to one form of violence increases the likelihood of experiencing other forms.[96]

Figure 32

Homicide Rate by Age Group, Sex, and Race and Ethnicity, 2024, California



Note: * = Data are suppressed per the CalHHS data de-identification guidelines.

Public Health Prevention Strategies

CDPH has multiple programs that contribute to preventing violence, including the [California Home Visiting Program](#) (CHVP), the [California Reducing Disparities Project](#) (CRDP), and the [Domestic Violence Training and Education Program](#). CHVP provides in-home visits from trained professionals to expecting and new parents. Home visitors screen for domestic violence and provide families with community resources, services, and support to reduce child maltreatment and injury. The CRDP funds culturally and linguistically responsive programs to reduce mental health disparities. One example, the Mixteco Indigena Community Organizing Project's Living with Love program, addresses issues of depression, domestic violence, and socio-cultural and linguistic isolation for Mexican Indigenous migrant populations through workshops, stigma reduction, and linkage to services. The Domestic Violence Training and Education Program funds community-led strategies aimed at increasing public awareness of gender-based violence and improving the scope and quality of services provided to victims of gender-based violence, including strengthening economic security and mobility as a protective factor that contributes to prevention of domestic violence.

CDPH's [Violence Prevention Initiative](#), in partnership with the Institute for Social Research at California State University, Sacramento, released the [California Public Health Roadmap for Firearm Violence Prevention: Local Strategies to Reduce and Prevent Firearm Violence](#) to provide a toolbox of upstream firearm violence prevention strategies.

Depression

Depression is a common and generally treatable mental health condition which can have serious health consequences if left untreated. Depression is a specific mental health condition that is more than just a feeling of being "down in the dumps" or "blue" for a few days. There are different types of depression, including major depressive disorder (also known as clinical depression) and postpartum depression.[97]

Addressing issues of mental health, like depression, is essential to achieving better health outcomes from early childhood through adulthood. Good health includes not just physical health, but also mental health. Mental health includes emotional, psychological, and social well-being.

Key Data and Trends

The prevalence of adults with any history of depression diagnosis has increased slightly, from 14.1% in 2020 to 17.4% in 2023.[98]

- Depressive disorders were leading causes of hospitalization for Californians aged 11-34 and accounted for far more hospitalizations (N=19,108) than

any other cause among adolescents aged 11 to 17 (Figure 17).

Schizophrenia was also a leading cause of hospitalization from age 18-54.

- Adolescents and young adults aged 18-24 had higher prevalence of depressive feelings than other age groups (Figure 33).

Disparities

Transgender or gender non-conforming individuals experienced the highest level of psychological distress. Bisexual individuals and adults using different terms to express their sexual orientation were 4 times more likely to experience psychological distress compared to straight individuals (Figure 33).[99]

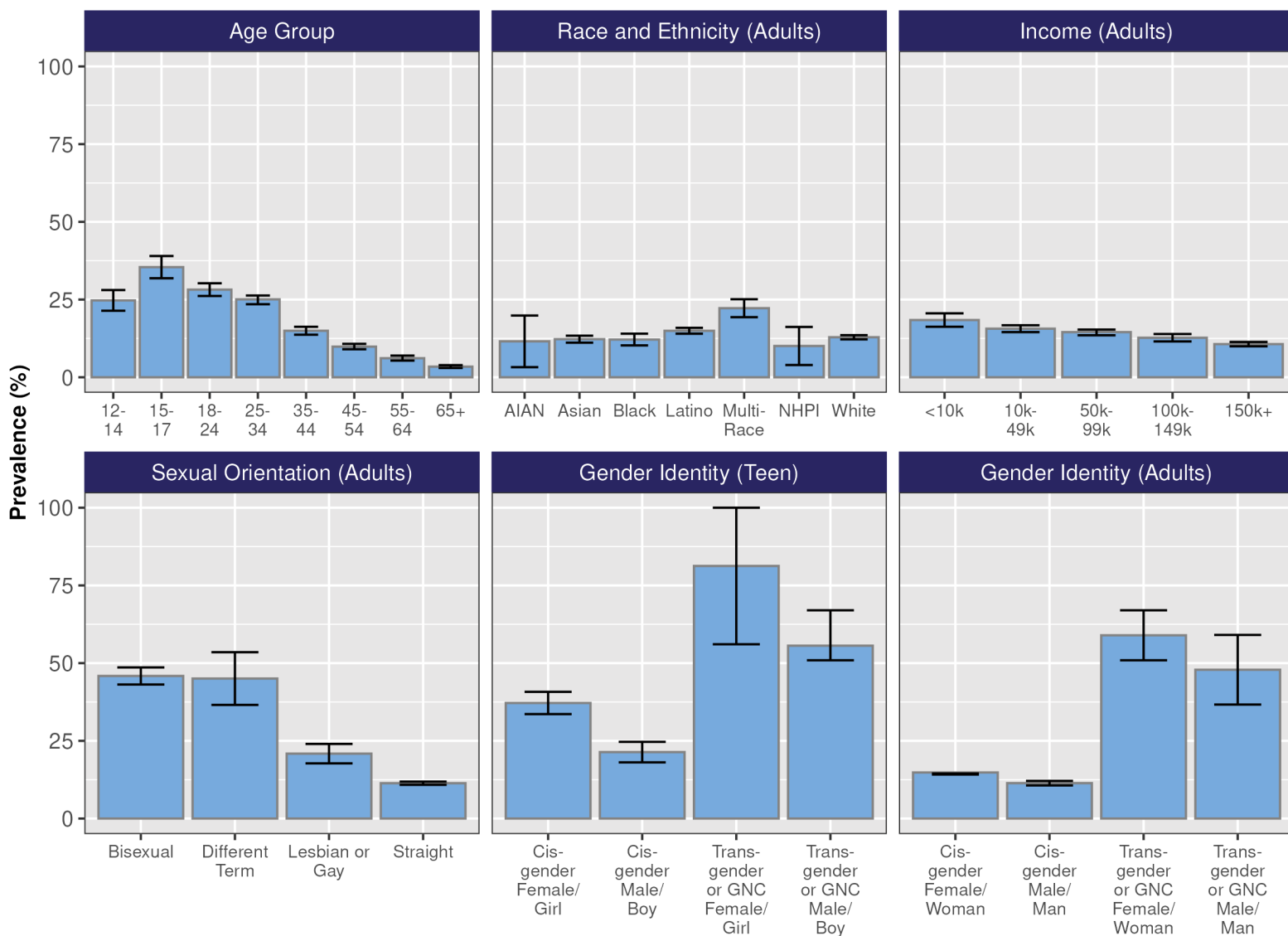
Transgender individuals often face discrimination, stigma, and violence, all of which contribute to mental health challenges. Culturally responsive and gender-affirming healthcare is an important determinant of health and mental health. Limited access to care for LGBTQIA+ individuals can lead to untreated or poorly managed mental health conditions. Bisexual individuals and those using different terms to describe their sexual orientation may face unique societal stigma and lack of acceptance—both inside and outside the LGBTQIA+ community—contributing to higher levels of depression and hopelessness.

Women were more likely than men to report feeling hopeless or depressed or experiencing moderate to serious psychological distress.

Individuals with lower incomes tend to report more bad mental health days, hopelessness, and depressive feelings. These disparities are influenced by limited access to mental health services and experiences of discrimination and systemic racism, which can contribute to chronic stress. Individuals experiencing economic hardship may also lack access to protective factors that buffer against related stressors, such as safe green spaces and nutritious foods.

Figure 33

Prevalence of Psychological Distress within the Last 12 Months, California Health Interview Survey 2023/2024



Public Health Prevention Strategies

The Governor's Master Plan for Kids' Mental Health and the [CYBHI](#) are cornerstones of California's efforts to improve the mental health of young people. CDPH supports these efforts with youth centered and culturally responsive education and change campaigns, like [Take Space to Pause](#), focused on reducing self-stigma surrounding youth mental health and promoting positive ways to seek help. The campaign educates teens on how to recognize early signs of stress, teaching them new coping skills, and promoting positive ways for them to seek help before they reach a breaking point.

Under the BHSA, CDPH will implement population-based prevention strategies. BHSA presents an opportunity to address significant population health burdens and disparities related to behavioral health through a coordinated, statewide approach. The BHSA is foundational to California's commitment to improve our behavioral health systems and achieve positive behavioral health and well-being for all.

Suicide and Self-Harm

Suicide and self-harm are major preventable public health concerns that have immediate and long-term impacts on individuals, families, and communities. Multiple factors are associated with increased risk of suicide or self-harm. Individual-level risk factors can include a history of mental health concerns, ACEs, hopelessness, or substance use, while interpersonal issues like social isolation and loss of relationships may exacerbate risk. Community-level circumstances like lack of access to healthcare, community violence, and stress of acculturation may also increase risk for suicide and self-harm. Societal factors such as stigma associated with mental illness and seeking help and access to lethal means such as firearms can further increase risk. Protective factors include support provided by healthy relationships and feeling connected to the community, as well as maintaining healthy and effective coping strategies.[100]

Key Data and Trends

There were 4,042 suicides in 2024. Overall suicide rates in California increased somewhat from 2000 through 2019 with a slight drop observed during the first year of the pandemic (2020), followed by fairly stable rates since then. The number of suicide deaths in 2024 represent a decrease from the number of suicide deaths (4,191) in 2023. The use of firearms was the most common mechanism for suicide overall, comprising 37.9% of suicide deaths. The most common mechanism for Californians aged 25 and younger was suffocation, comprising 38.9% of these suicide deaths.

There were 30,535 non-fatal self-harm-related ED visits in 2024, with the majority (54.4%) among individuals 24 or younger.

Additional data related to suicide and self-harm can be found on [EpiCenter](#) and [legacy EpiCenter](#).

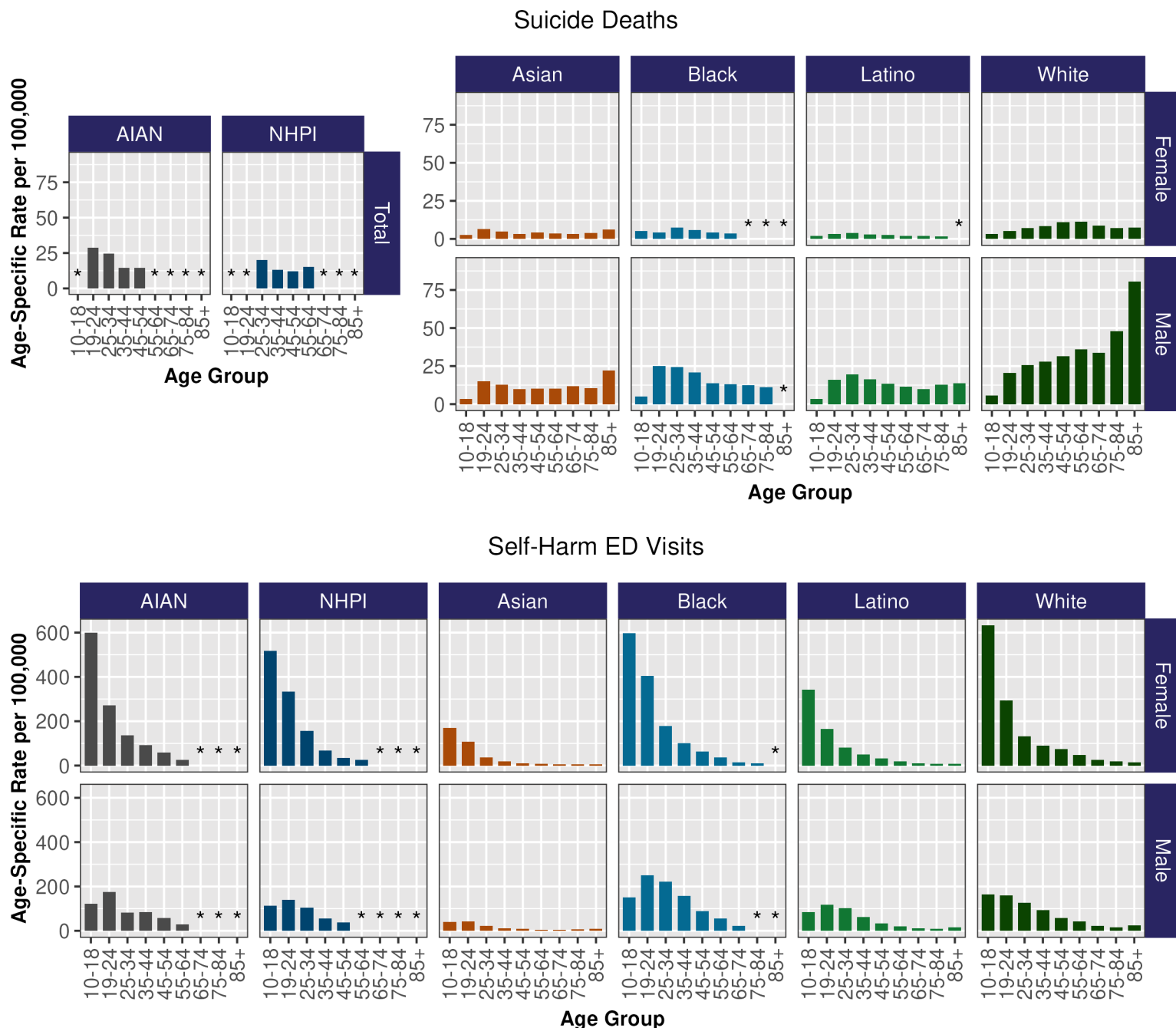
Disparities

- Males had much higher suicide rates than females in all age groups within all race and ethnicity groups.
- Females had higher non-fatal self-harm ED visit rates than males in most age groups within all race and ethnicity groups. In adolescence, females have much higher self-harm rates than males.

- In general, among American Indian or Alaska Native, Native Hawaiian and Pacific Islander, Black, and Latino populations, suicide rates were highest among young adults and then decreased with age. In stark contrast, suicide rates among White males generally increased strongly and steadily along the life course, with rates among White males being much higher than males (and females) in almost all corresponding age groups, with extraordinarily high rates in the oldest age groups. Among Asian males, suicide rates were also highest in the oldest age group.
- In general, among females and males, within most race and ethnic groups, self-harm ED visit rates were highest among adolescents. Among most race and ethnic groups, self-harm ED rates generally decreased with age following adolescence.
- Other groups with elevated suicide rates include rural county residents, LGBTQIA+ individuals, veterans, older adults (see [Older Adulthood](#)), and those with firearms in the household.[101-103]

Figure 34

Suicide and Self-Harm Crude Rates (per 100,000) by Age, Race and Ethnicity, and by Sex, 2020-2024



Notes: Figure 33 displays one set of charts for suicide and one set for self-harm ED visits, broken down by age group, race and ethnicity, and sex. All charts within the suicide set have the same y-axis scale, as do all the charts within the ED set, but the scale for the suicide set is much lower than for the ED set, reflecting the much lower rates of suicide than non-fatal self-harm. The '*' symbol in the figure means that the data are suppressed per the CalHHS data de-identification guidelines. Due to small numbers, suicide rates are not stratified by sex for the AIAN and NHPI populations.

Public Health Prevention Strategies

The Office of Suicide Prevention (OSP) is responsible for coordinating and aligning statewide suicide prevention efforts and resources through planning and collaboration across diverse partners and systems. The OSP partners with the CDC-funded [California Violent Death Reporting System \(CalVDRS\)](#), which collects and disseminates data on the circumstances surrounding suicide and other violent deaths. It also works with the CDC-funded [Comprehensive Suicide Prevention \(CSP\) Program](#) to build local capacity in counties with high rates of suicide and self-harm to implementing lethal means safety approaches (such as safe and secure storage of firearms and medications), facilitate gatekeeper trainings for healthcare providers, and encourage use of tele-mental health to address provider shortages. The CSP Program also promotes use of syndromic surveillance so that communities can implement data-driven strategies.

In July 2025, Governor Newsom issued [Executive Order N-31-25](#) to address the elevated rates of suicide and disconnection among men and boys. CDPH is participating in the coordinated statewide response to improve mental health, reduce stigma, and expand access to meaningful education, work, and mentorship opportunities.

The OSP also led two [CYBHI](#) workstreams, including the [Youth Suicide Reporting and Crisis Response Pilot Program](#), which aimed to strengthen local systems for rapid report and response to youth suicides and suicide attempts in 10 counties, and the [Never a Bother](#) youth suicide prevention campaign. The *Never a Bother* campaign, co-created with over 420 youth from across California, is part of the state's ongoing effort to increase awareness of suicide warning signs, share suicide prevention and mental health resources, build life-saving intervention skills, and promote help-seeking behavior for youth and young adults - before, during, and after a crisis. In its first year, the campaign generated more than 1.12 billion impressions, while community-based grantees offered over 4,600 engagement activities that supported 106,000+ direct interactions with youth and caregivers.

Federal Impacts

In July 2025, the federal government eliminated suicide prevention support for LGBTQ+ youth through the 988 Suicide and Crisis Lifeline. In response, California's Governor and Health and Human Services Agency established a partnership with The Trevor Project to enhance training for the state's 988 crisis counselors. Across California, 988 call centers are staffed around the clock, ready to support the unique needs of LGBTQ+ youth, their families and allies. Specialized suicide prevention services for LGBTQ+ youth are also available 24/7 via The Trevor Project hotline, which continues as a state-endorsed access point to better respond to the needs of LGBTQ youth.



Adulthood: Managing Health and Chronic Disease Prevention

	35 - 44	45 - 54	55 - 64
1st	Drug overdose	Drug overdose	Ischemic heart disease
2nd	Alcohol-related	Ischemic heart disease	Drug overdose
3rd	Road injury	Alcohol-related	Alcohol-related
4th	Suicide	Hypertensive heart disease	Hypertensive heart disease
5th	Homicide	Stroke	Stroke

Leading causes of death

■ Cardiovascular ■ Injury

Some of the conditions highlighted during earlier life stages (i.e., road injury, suicide, and homicide) are also leading causes of death well into adulthood. Injury-related causes are among the top five leading causes of death for adults aged 35 to 64. As individuals age into adulthood, they also experience new vulnerabilities like heightened risk for chronic diseases. Cardiovascular diseases emerge as leading causes of death during adulthood. Other chronic diseases like diabetes and cancer are major drivers of morbidity and mortality during this life stage. Factors related to the built environment—like safe and walkable communities with clean air and green space—are protective against chronic disease and injury-related outcomes in adulthood. Access to affordable, quality healthcare and financial security through higher-paying and stable employment are other important protective factors.

This section also explores the population wide health impacts of STDs, substance use, and occupational health exposures.

Cardiovascular Diseases

Cardiovascular disease is a group of conditions that affect the heart or blood vessels, including ischemic heart disease, hypertensive heart disease, stroke, cardiomyopathy, congestive heart failure, and arrhythmias. These conditions cause the greatest number of deaths in California. Stroke can cause disabilities

that impair communication, emotional regulation, and movement. Health conditions that increase the risk of cardiovascular disease are high blood pressure, high cholesterol, diabetes, and obesity. A history of severe COVID-19 emerged in recent years as a possible new risk factor for heart attack (myocardial infarction) and stroke.[104] Behaviors such as smoking, exposure to second-hand smoke, unhealthy diet, and low physical activity levels can increase the risk of cardiovascular disease.

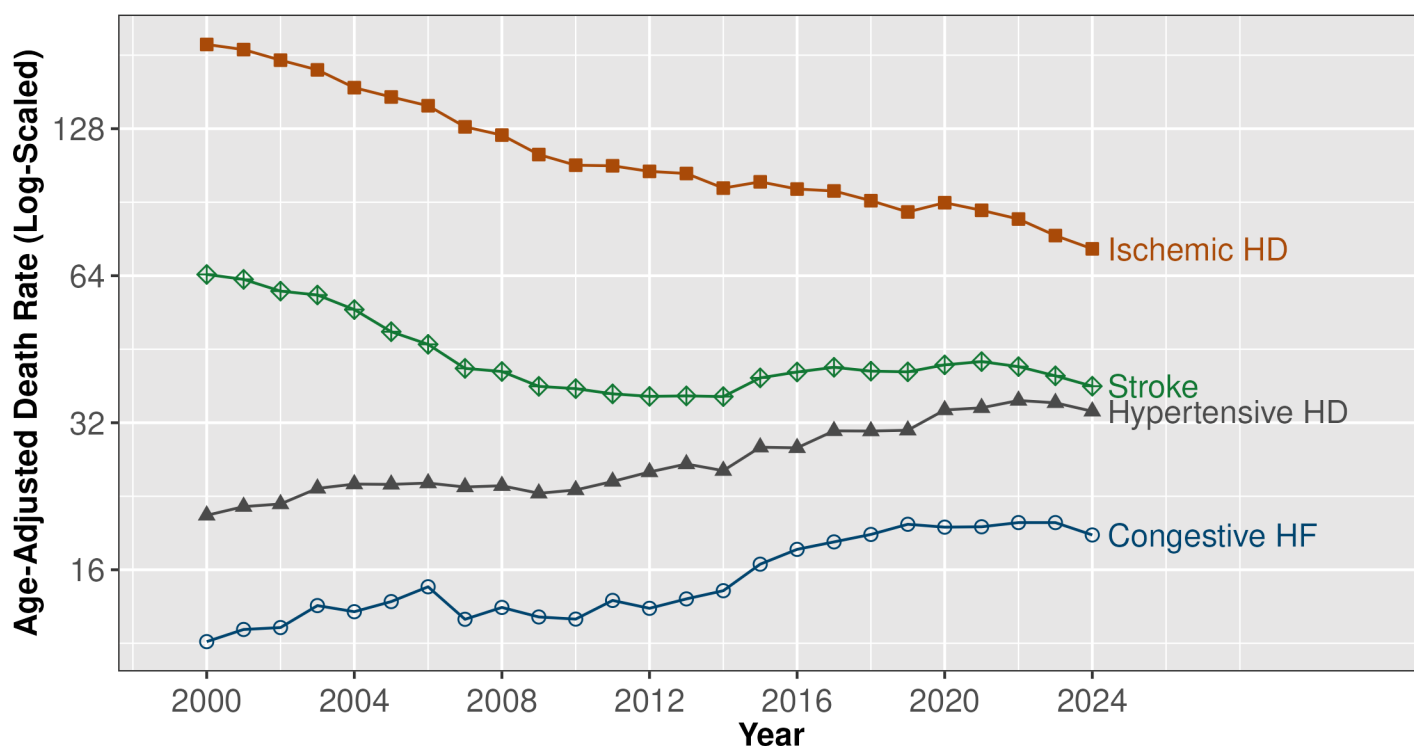
Key Data and Trends

Cardiovascular disease mortality has declined in recent decades, driven largely by a long-term decline in ischemic heart disease (Figure 35).

- Since 2000, ischemic heart disease death rates have decreased by 62%, likely due to advances in prevention and treatment such as the use of statins and increased awareness of ischemic heart disease.
- However, deaths from other major cardiovascular-related conditions have increased. Since 2000, hypertensive heart disease and congestive heart failure death rates have increased by around 63% and 65% respectively.
- Stroke death rates declined in the early 2000s but have leveled off since.

Figure 35

Trends in Age-Adjusted Death Rates of Leading Cardiovascular Conditions, 2000-2024, California



Note: Abbreviations: HD = Heart Disease; HF = Heart Failure

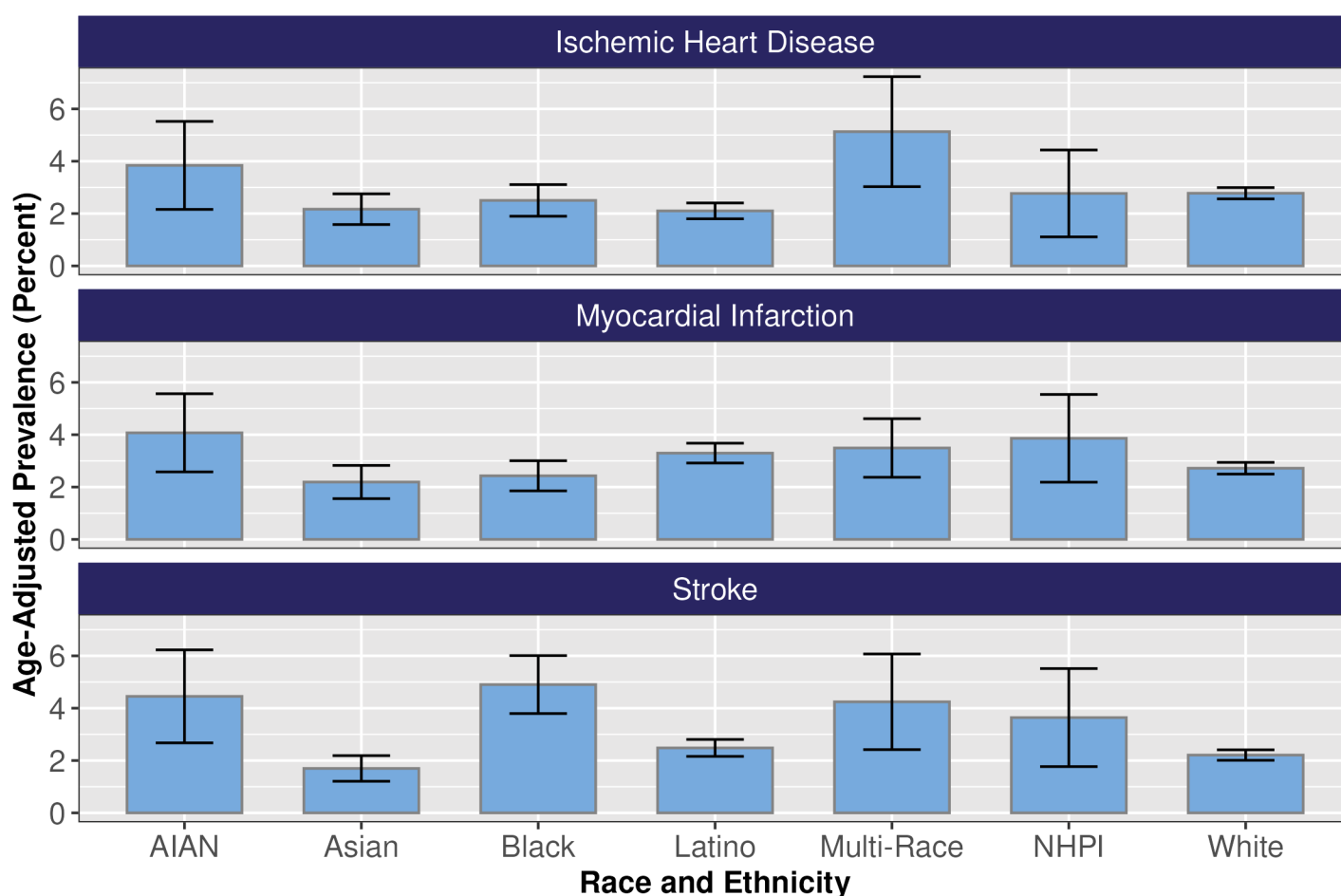
Disparities

In 2024, the age-adjusted death rate from all cardiovascular diseases was around 1.6 times higher among males compared to females. Males experienced 1.7 times the prevalence of ischemic heart disease and 1.5 times the prevalence of myocardial infarction compared to females.

In 2024, Black or African American Californians had the highest death rates from cardiovascular disease with rates roughly 1.6 times higher than the statewide average and nearly 2.7 times higher compared to Asian Californians, who had the lowest rates. The Black or African American population also had the highest prevalence of stroke (Figure 36).

Figure 36

Age-Adjusted Prevalence of Cardiovascular Disease by Race or Ethnicity, 2018-2024 (Aggregate), California, Behavioral Risk Factor Surveillance System (BRFSS) Survey



The cardiovascular disease death rate is higher in California for individuals with less than a college education than for those with a college degree. Education improves health outcomes by contributing to protective factors, without which low-income communities have higher cardiovascular disease risk.[105]

Public Health Prevention Strategies

The [Cardiovascular Health Innovation](#) program promotes evidence-based strategies to increase protective factors and healthy behaviors to prevent, diagnose, and manage chronic disease. The [HeartBeatCA](#) program enhances state and local capacity for preventing, identifying, and managing high blood pressure and cholesterol, and reducing disparities. One local partner, Monterey County Clinic Services, has made significant progress in cardiovascular disease prevention and management through comprehensive screening and referrals that connect patients to lifestyle change programs and social support services. Monterey County CHWs strengthen local engagement by delivering culturally tailored education and training in self-measured blood pressure monitoring.

CDCB's 5-year Cardiovascular Health state plan aims to improve cardiovascular health through addressing social drivers and climate change, and by forming and maintaining partnerships with community partners, local health jurisdictions, universities, healthcare systems, and other state programs to achieve equitable outcomes.

Diabetes

Diabetes is a chronic condition where blood glucose levels are persistently high due to poor insulin production, insulin resistance, or both.[106, 107] Without proper management, diabetes can lead to many serious health problems and early death.[107, 108] Prediabetes, a condition where blood glucose levels are above normal but not high enough to be classified as diabetes, raises the risk for type 2 diabetes and heart disease.[109, 110]

Behavioral risk factors, such as physical inactivity and poor diet and cardiometabolic disorders like obesity, increase the risk for diabetes.

Key Data and Trends

The prevalence of diabetes and prediabetes in California has steadily increased over the past decade.

- The prevalence of diabetes in adults 18 and older rose from 8.4% in 2011 to 12.4% in 2024 and the prevalence of prediabetes more than doubled, increasing from 8.9% in 2011 to 21.4% in 2022.[111]
- Diabetes prevalence increases with age, with the highest prevalence rates (23.0%) among adults aged 65 and older in 2024 (compared to 4.4% among adults 18-64).

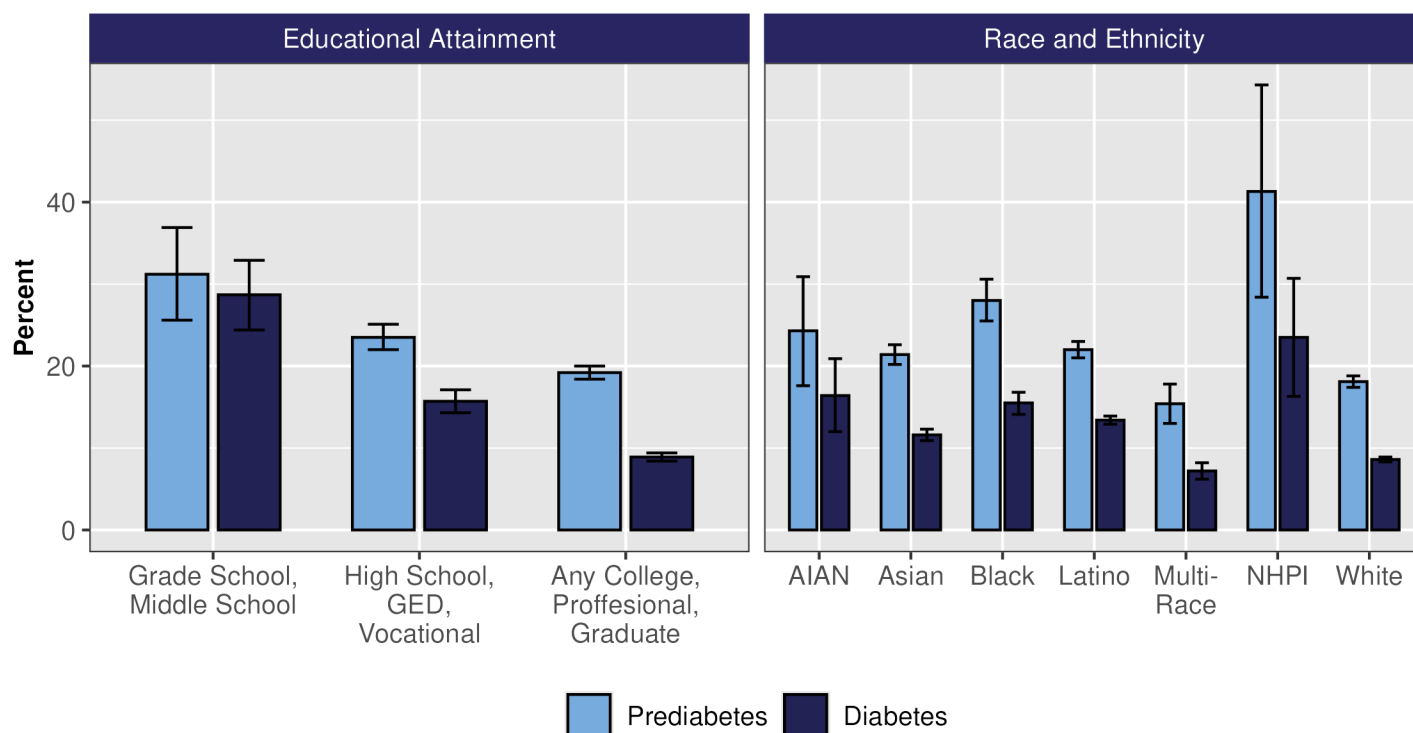
Disparities

Native Hawaiian or Pacific Islander, American Indian or Alaska Native, and Black or African American individuals had higher diabetes and prediabetes prevalence rates than other racial and ethnic groups (Figure 37).[111]

In California, adults with less than a high school education had the highest prevalence of diabetes (28.7%) and prediabetes (31.2%), in comparison to adults with any college education (8.9% and 19.2%, respectively) (Figure 37).[111]

Figure 37

Prevalence of Prediabetes and Diabetes Among Adults, by Race and Ethnicity and Educational Attainment, California²⁰



Elevated Risk for Kidney Disease

Diabetes is one of the leading causes of chronic kidney disease, a condition that often develops slowly and may not cause symptoms until it is advanced. Without early detection and treatment, individuals may progress to end-stage

²⁰ Data are from the California Health Interview Survey, accessed through the AskCHIS dashboard, and represent crude prevalence estimates; Diabetes data are from 2024 for education attainment and from 2020-2024 for race and ethnicity; Prediabetes data are from 2022 for educational attainment and 2021-2022 for race and ethnicity.

kidney disease, also known as kidney failure, requiring dialysis or a kidney transplant to survive.

- Nearly 44% of kidney failure cases were caused by diabetes.[112]
- The number of Californians living with kidney failure increased by 39% since 2011.[113]
- In California, kidney disease was the 8th leading cause of death in 2024 with death rates increasing by roughly 43% since 2011. However, since 2022, kidney disease death rates have encouragingly decreased by 8.5%.
- Chronic kidney disease due to diabetes accounted for about 44% of all kidney disease deaths in 2024.

Effectively managing diabetes and high blood pressure can help prevent or delay the onset of end-stage kidney disease. Monitoring trends over time is essential for evaluating the impact of health programs. For example, targeted diabetes programs for American Indian communities have reportedly saved over \$500 million in avoided cases of end-stage kidney disease and could help explain why American Indian and Alaska Native people had the smallest increase in end-stage kidney disease cases nationally in the U.S.[112]

Public Health Prevention Strategies

Lifestyle modifications or medications can reduce the risk of progression from prediabetes to type 2 diabetes by 40–60%.[110, 114] Early identification of prediabetes and implementation of population-level healthy lifestyle strategies form a core component of the [CDPH Type 2 Diabetes Program](#) (T2DP), a statewide initiative aimed at reducing the burden of diabetes and prediabetes. The program prioritizes outreach to disproportionately affected populations, including Black or African American, Latino, Asian American, and Native American communities. T2DP takes a coordinated, multi-level approach by engaging public and private partnerships to implement evidence-based strategies that address both clinical care and social drivers of health.

Cancer

Cancer is a disease caused by uncontrollable cell growth in the body and can spread to other parts of the body. Cancer remains one of the most serious health challenges facing adults in California.

Certain behaviors and risk factors are associated with higher incidence of cancer, including smoking, poor diet, lack of exercise, and alcohol use. These risk factors are more common in communities with fewer resources, increasing community members' risk of developing certain cancers. An estimated 40% of all cancers in U.S. adults aged 30 years and older (excluding melanoma of the skin) were attributable to potentially modifiable risk factors.[115] Community conditions such as unsafe housing, food insecurity, and exposure to pollution or toxic work environments can exacerbate cancer risk and health outcomes.

Key Data and Trends

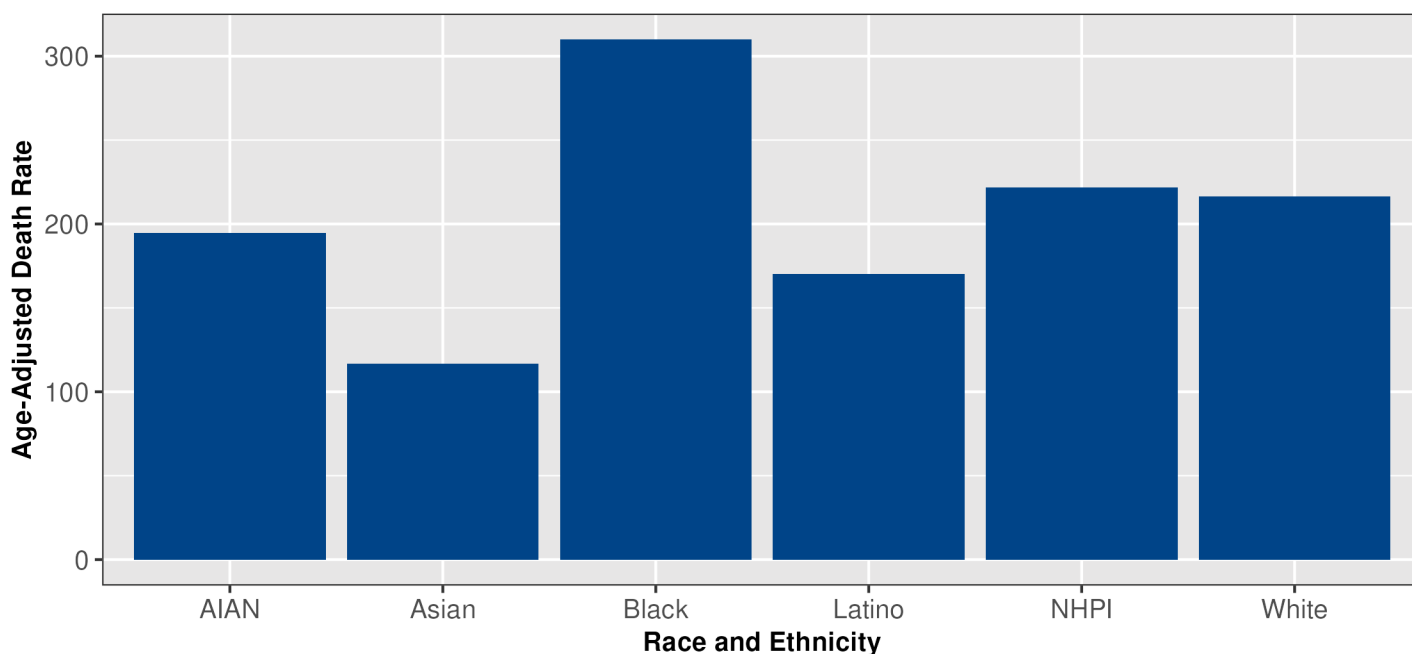
Although cancer incidence and mortality rates have declined since 1988, approximately 180,000 cancer cases were diagnosed and about 59,000 cancer deaths occur annually in the last decade in California.[75] Despite the steady decline, nearly half of all Californians born today are expected to develop cancer during their lifetime. The most common cancers diagnosed were breast, prostate, colorectal, lung, and skin cancer while the most common types of cancer death were lung, colorectal, pancreas, breast, and prostate cancer.

Disparities

- Overall, adults aged 40 and older accounted for most new cancer cases and deaths, although almost 1,800 children under the age of 20 were diagnosed with cancer each year over the past decade.
- Men had higher rates of cancer diagnoses and death compared to women.
- Black individuals had the highest mortality rate for all cancers combined (Figure 38).

Figure 38

Mortality Rates for All Cancers Combined by Race and Ethnicity, 2024, California



Disparities in cancer differ by type and stage.

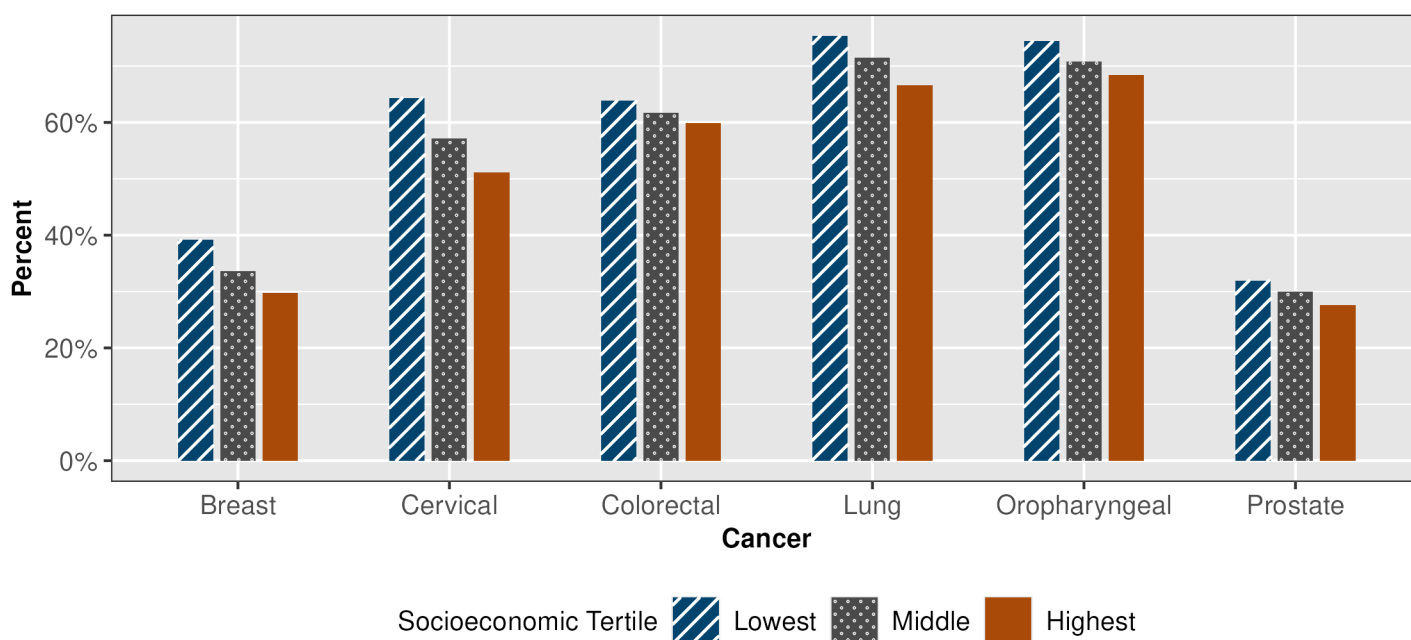
Certain cancers, like lung, prostate, oropharyngeal, breast, and cervical cancer, can often be found early through screening, yet disadvantaged

populations, including people with lower incomes are more likely to be diagnosed with cancer at a late stage and tend to have worse outcomes (Figure 39).

Social and structural community conditions can create serious barriers to timely diagnosis and treatment of cancer. Individuals with no or limited healthcare coverage may delay care due to high costs and getting to a specialist or treatment center can be especially difficult for those in rural areas. Cultural and systemic barriers such as language challenges, lack of trust in the healthcare system, or experiences of discrimination, can also be a barrier to accessing health services.[116]

Figure 39

Percent of Screen Detectable Cancers Diagnosed at Late Stage by Socioeconomic Status (Tertiles), 2019-2023, California



Public Health Prevention Strategies

The California Cancer Registry in the Chronic Disease Surveillance and Research Branch provides leadership and coordination for California's statewide comprehensive cancer control efforts, which include activities managed by California's Comprehensive Cancer Control Program (CCCCP). CCCC oversees the California Dialogue on Cancer (CDOC) coalition which serves as the vehicle for comprehensive cancer control in California. CDOC was created to develop and implement [California's Comprehensive Cancer Control Plan](#), a strategic plan to reduce the cancer burden in California. Strategies from the plan include continued investment in research and quality surveillance and data collection, increased access to quality care to reduce disparities, and culturally responsive

interventions that meet the diverse needs of Californians. Currently, CDOC is developing and implementing the 'State Cancer Plan 2026-2035.'

Substance Use

Substance use and substance use disorder have a significant impact on the health and well-being of adults across California. Data from 2024 show decreasing death rates due to overdose from many substances; however, substance use, substance use disorder, and overdose remain significant public health concerns and drug overdose is the leading cause of years of life lost.

Drug Overdose

Key Data and Trends

In 2024, there were over 9,000 drug-related overdose deaths among California residents.

- Around 60% of these deaths involved an opioid (including 53% that involved fentanyl), 57% involved psychostimulants with abuse potential (e.g., methamphetamine, MDMA, Ritalin), 14% involved cocaine, 9% involved a prescription opioid (excluding synthetics), and 3% involved heroin. Indicators are not mutually exclusive: deaths with multiple substances listed as the cause of death are counted in multiple indicators.

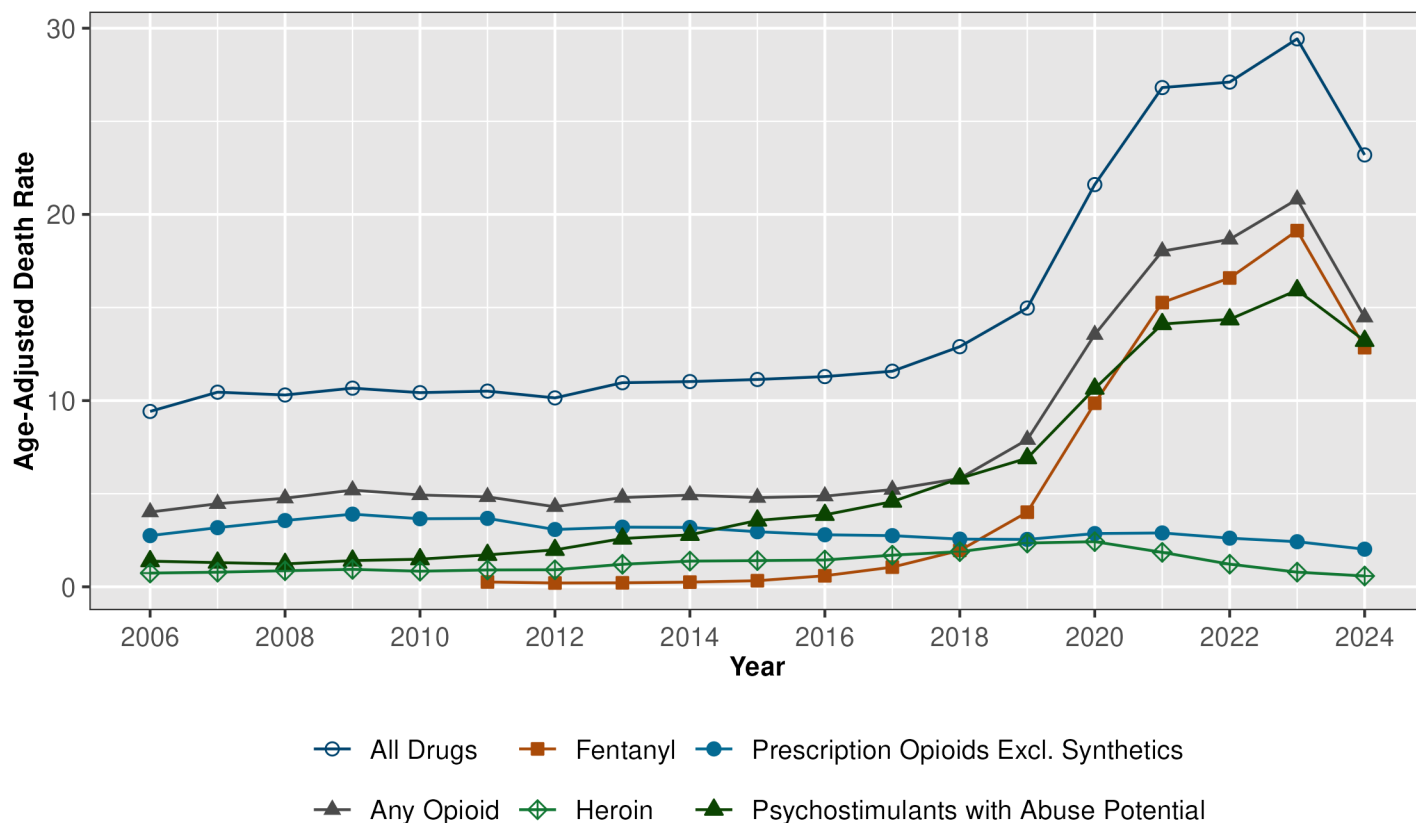
Overdose ranks high on multiple metrics. It was the leading cause of death for adults aged 25 to 54, the leading cause of years of life lost, the eighth leading cause of death overall, and one of the leading causes in overall increases in mortality rates over the past decade as well as in recent years.

From 2019 to 2023, the drug-related overdose death rate nearly doubled. Starting in 2022 the *rate of increase* of drug overdose deaths slowed, but the number of deaths continued to increase and reached an all-time high in 2023. Encouragingly, in 2024 drug overdose death rates decreased by 21% from 29.4 (in 2023) to 23.2 (in 2024) per 100,000 people, although the decline was slower or nonexistent for older adults over 65. Opioid- and psychostimulant-related overdose deaths followed a similar pattern of decline (Figure 40). Overdose deaths related to opioids and psychostimulants decreased between 2023 and 2024, a promising change in the trend since the increase in deaths during the COVID-19 pandemic period.

Visit the [California Overdose Surveillance Dashboard](#) for additional, up-to-date data for state and local level drug-related overdose outcomes.

Figure 40

Opioid and Stimulant-Related Fatal Overdose, 2006-2024, California



Disparities

Men are disproportionately impacted by drug overdoses. The overdose death rate for men in 2024 was more than three times the rate for women.

In 2024, drug overdoses were the leading cause of death among individuals aged 25-54, and among the top three leading causes among individuals aged 15-24 and 55-64. Individuals in the age groups 25-34 and 35-44 had the most drug-related overdose deaths where opioids and stimulants were both detected.

American Indian or Alaska Native and Black or African American individuals experienced the highest rates of drug overdose deaths in 2024, with rates over 15 and 12 times higher respectively than the rate among Asian individuals, the group with the lowest rate.

Circumstances Surrounding Overdose Deaths

The [California State Unintentional Drug Overdose Reporting System \(CA SUDORS\)](#) is a public health surveillance system of drug-related overdose deaths to better understand the circumstances surrounding these overdose deaths in participating counties. Based on 2024 data from a total of 4,559 drug-related

overdose death cases (49.8% of all unintentional and undetermined drug-related overdose deaths) in 24 California counties²¹:

- Over two-thirds of the deaths involving an opioid also involved one or more stimulants. More than 70% of the deaths involving fentanyl also involved at least one stimulant.
- Most individuals (84.3%) who died of drug-related overdoses had a documented history of substance use or misuse and 21.9% had a history of unhealthy alcohol use. Further, 25% of individuals who died from a drug-related overdose had at least one current mental health diagnosis reported through medical records or witness reports. The most common diagnoses were depression, anxiety, schizophrenia, and bipolar disorder.
- Approximately 10% of individuals who died from a drug-related overdose had ever been treated for a substance use disorder (including 2.9% who were in current treatment).
- 68.8% of drug-related overdose deaths had at least one potential intervention opportunity before or during the fatal overdose, highlighting the opportunity for increased coordination and collaboration across the prevention and treatment continuum.
- Homelessness and unstable housing contribute to a higher risk of overdose. In 2024, about 1 in 4 people who died from an overdose were unhoused.²² In contrast, unhoused people represent about 1 in 200 of California's total population.
- About 6% of Californians who died from overdose had been released from an institution—such as a jail, prison, hospital, or treatment center—within the 30 days before their death. Incarceration and institutionalization can contribute to increased overdose risk for reasons including limited access to medication assisted treatment and naloxone, periods of abstinence contributing to tolerance loss, and disruptions to healthcare and social supports.

Public Health Prevention Strategies

The Overdose Prevention Initiative (OPI) collaborates across sectors to collect data, offer treatment, and support harm reduction services, particularly for people at higher risk of overdose such as those experiencing homelessness and systems-impacted individuals, as well as programs that help people in rural or underserved areas stay safe and connected to care.

OPI partners with [CA Bridge](#) to support clinicians and substance use navigators in emergency departments, expanding access to treatment and recovery

²¹ Alameda, Colusa, Fresno, Humboldt, Imperial, Lake, Lassen, Los Angeles, Orange, Placer, Riverside, Sacramento, San Benito, San Francisco, San Luis Obispo, Santa Clara, Shasta, Solano, Sonoma, Stanislaus, Tehama, San Mateo, Ventura, Yolo

²² This may be an underestimate since housing status was unknown for 8.05% of those who died from a drug-related overdose.

services for adults and youth. Through training, technical assistance, and resource development, CA Bridge helps integrate substance use disorder care into acute care settings across California.

In collaboration with the California Department of Justice, OPI supports the enhancement and interstate exchange of data within the [Controlled Substance Utilization Review and Evaluation System \(CURES\)](#), a prescription drug monitoring program that informs clinical decision-making and helps prevent substance misuse and diversion.

Through the Overdose Response Strategy (ORS), OPI works with Public Health Analysts to strengthen coordination between public health and public safety. This partnership enables real-time data sharing and supports implementation of evidence-based, cross-sector strategies to reduce overdose deaths.

OPI partners with [NEXT Distro](#), a mail-based harm reduction program designed to reach individuals with limited access to syringe services and naloxone, especially in rural or underserved areas. The program reduces overdose risk and disease transmission while fostering nonjudgmental linkages to care, treatment, and community-based support through harm reduction navigators.

Alcohol Use and Related Harms

Alcohol misuse is associated with many harmful health outcomes and risks, including high blood pressure, cancers, learning and memory problems, depression, anxiety, high risk sexual behaviors, injuries, and violence. Experience of ACEs has been shown to be associated with early initiation of alcohol use and with problem drinking behavior into adulthood.[117]

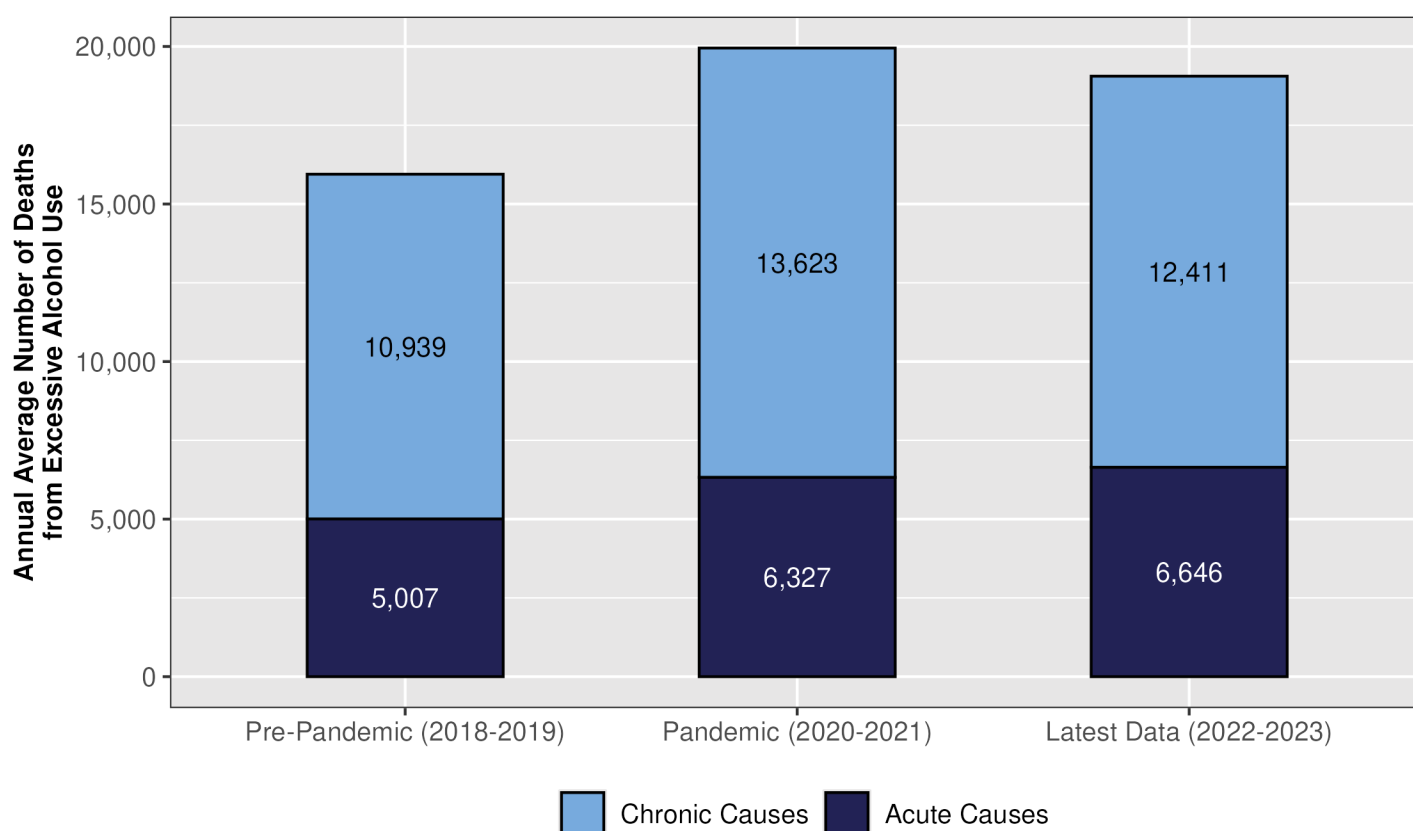
Key Data and Trend

In 2022-2023, over 19,000 people died per year on average from causes linked to excessive alcohol use, a 4% annual average decrease since 2020-2021 (Figure 41). This decrease was driven by a decline in alcohol attributable chronic death causes²³. Alcohol attributable acute death causes, such as violence and motor vehicle crashes, increased an average of 5% annually since 2020-2021, and accounted for 35% of alcohol attributable deaths.

²³ Alcohol attributable deaths are deaths from dependent and nondependent use of alcohol, including those fully attributable to alcohol use (e.g., alcoholic liver disease, alcohol dependence syndrome) and partially attributable to alcohol use (e.g., motor vehicle crashes, hypertension, breast cancer). Chronic causes of death are causes with a long latency period from the time of onset to the time of death, whereas acute causes of death have a very short latency period and are from the short-term effects of binge drinking or drinking to the point of intoxication. Alcohol attributable deaths reported in this section are based on methods from the Center for Disease Control and Prevention's [Alcohol-Related Disease Impact Application](#).

Figure 41

Deaths from Excessive Alcohol Use due to Acute and Chronic Causes in California, 2018-2023



Disparities

Men accounted for more than two-thirds (69%) of alcohol attributable deaths in 2022-2023. In 2022-2023, 8% of all male deaths in California were attributed to excessive alcohol use each year. In 2022-2023, the highest number of alcohol attributable deaths occurred among men aged 50+ years old, and most of those deaths were due to chronic causes of death. Alcohol attributable deaths in youth and adults 34 years and under are mostly due to acute causes.

There are linkages between alcohol and substance use with gambling. Californian adults who gamble were more likely to report binge drinking, smoking, using e-cigarettes, or using substances like methamphetamine, heroin, or prescription drugs without a prescription.[118]

Public Health Prevention Strategies

The [Alcohol Harms Prevention Initiative](#) (AHPI) works to reduce the adverse effects of alcohol use on individuals, families, and communities in California through research and evidence-based prevention strategies. The AHPI conducts research on excessive alcohol use and related harms, including alcohol

attributable deaths. Through a lens of health equity, AHPI develops culturally relevant alcohol harm reduction and prevention messaging. Priority messages for educational materials include shifting social norms on alcohol use and related harms, focusing on long term harms of alcohol including cancer, and best practice strategies to reduce use. To support local communities and initiatives, AHPI provides local technical assistance and actively disseminates data briefs and materials through presentations, a stakeholder newsletter, social media, and a website.

Sexually Transmitted Diseases

Bacterial Sexually Transmitted Infections

A sexually transmitted infection (STI), also known as an STD, is a virus, bacteria, fungus, or parasite people can get through sexual contact.

In 2024, California reported:

- 171,281 chlamydia cases (an 11% decrease from 2023),
- 67,869 gonorrhea cases (9% decrease),
- 26,732 acquired all stage of syphilis cases (17% decrease), including 9,549 early syphilis (31% decrease) and 438 congenital syphilis cases (15% decrease).[119]

Decreases in California STI cases contributed substantially to the nationwide slowing of the STI epidemic. STIs can cause serious health problems such as meningitis, blindness, hearing loss and infertility without prompt diagnosis and treatment. Untreated syphilis in pregnant people can be transmitted to the fetus and up to 40% of the time may result in miscarriage, stillbirth, or infant death shortly after delivery; inadequate treatment may result in premature birth, low birth weight, and meningitis; and congenital syphilis leads to lifelong disabilities.

Without frequent screening, people may not realize that they have an STI and can inadvertently transmit the infection to their sexual partner(s). Social drivers of health affecting access to care contribute to higher rates of STIs. Additionally, people with STIs are at an increased risk for acquiring and transmitting Human Immunodeficiency Virus (HIV). Identifying, treating and preventing STIs has a clear link to preventing HIV infection.

Syphilis

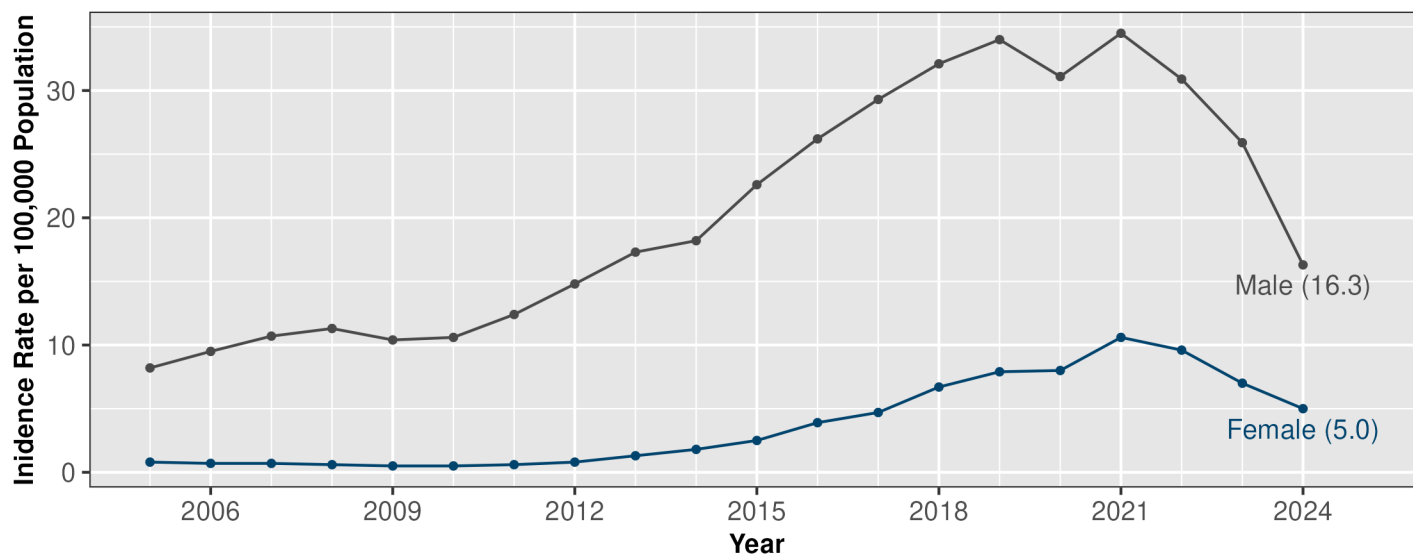
Syphilis is a STI that is usually transmitted during vaginal, anal, or oral sex. During pregnancy, the bacterium that causes syphilis can be transmitted across the placenta to the fetus and cause congenital syphilis.

Key Data and Trends

After concerning increases over the prior decade, there have been dramatic declines in primary and secondary syphilis rates since 2021. From 2021 to 2024, there was a 53% decrease in primary and secondary syphilis rates, with similar decreases among males and females.

Figure 42

Incidence of Primary and Secondary Syphilis by Gender, 2005-2024, California



In 2022, for the first time in 20 years, men who have sex with women accounted for most syphilis infections. Previously, men who have sex with men and men who have sex with men and women accounted for most cases. This shift in cases toward majority men who have sex with women continued into 2024. The increasing proportion of cases among men who have sex with women was a key driver of increases in congenital syphilis cases from 2015-2024.

Disparities

Syphilis rates were highest for Black or African American individuals and other people of color. Rates were highest for gay or bisexual men and other people who have male to male sexual contact. Structural racism and other social drivers create the inequitable access to resources that leads to disparities in syphilis. Substance use, incarceration, poverty, unsafe sex work, homelessness, and inadequate access to care contribute to disparities in STI incidence.

Public Health Prevention Strategies

CDPH funds STI prevention and treatment through local health jurisdictions and community-based organizations (CBOs). CDPH also funds opt-out testing and

linkage to care for syphilis, HIV, and hepatitis C virus in 28 emergency departments.

The CDPH Office of STIs and Hepatitis C (formerly known as the [STD Control Branch](#)) collaborates with the Office of AIDS to prevent HIV, Hepatitis C, and STIs. These diseases cause a syndemic, which happens when two or more epidemics affect the same population. The [Integrated Statewide Strategic Plan](#) aims to increase access to prevention and treatment and address upstream factors that cause disparities in infections with HIV, STIs and Hepatitis C.

HIV/AIDS

HIV is a virus that attacks and weakens the immune system. Without medical treatment, HIV infection can progress to stage 3, commonly known as Acquired Immunodeficiency Syndrome (AIDS). AIDS is a chronic condition in which the immune system becomes further compromised, symptoms worsen, and the risk of premature death increases. Although there is currently no cure, HIV can be managed and controlled with proper medical care. California has made progress in addressing the HIV epidemic; however, cases are increasing, and significant disparities in outcomes remain.

Key Data Trends and Disparities

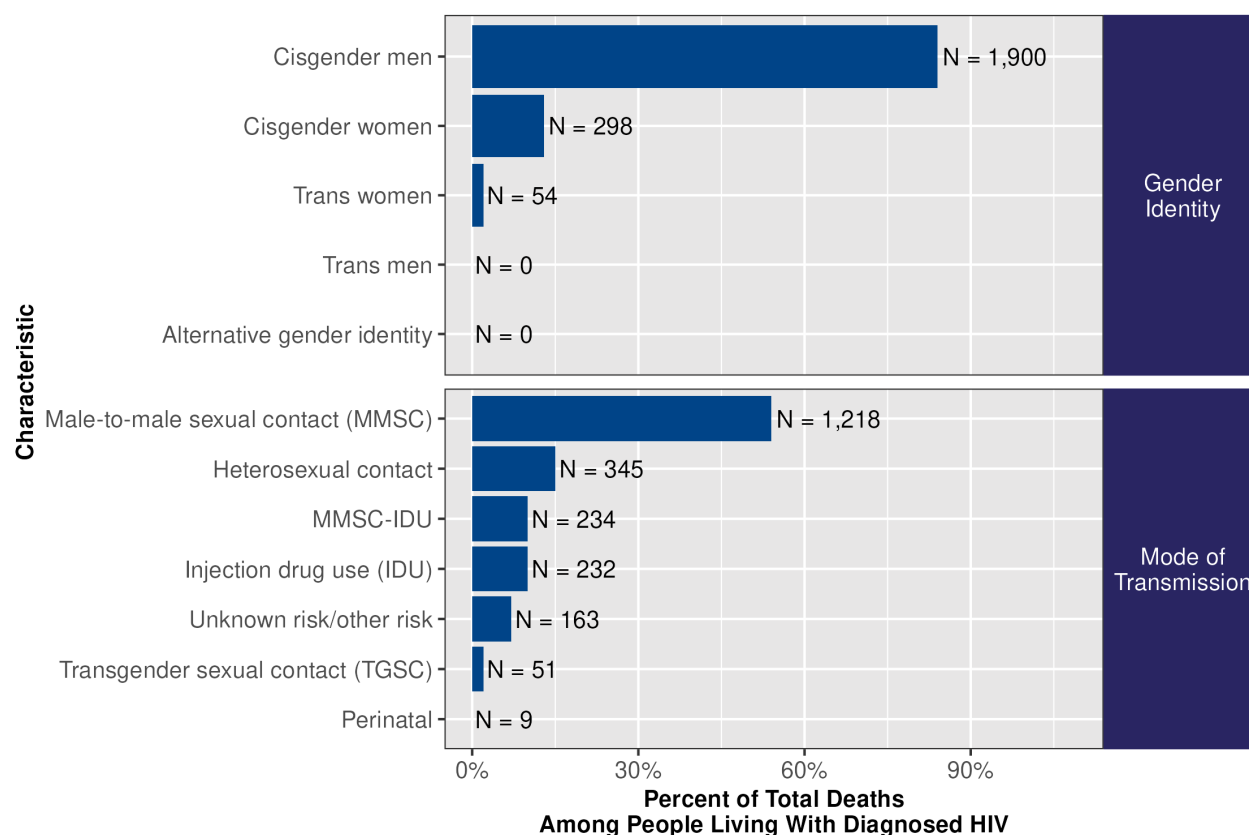
From 2019 to 2023, HIV incidence, prevalence, and deaths among people diagnosed with HIV increased in California. In 2023, individuals who engage in male-to-male sexual contact (MMSC), including those who also inject drugs, accounted for most new and existing cases as well as most deaths among people diagnosed with HIV in California. People diagnosed with HIV aged 50 or older accounted for over half of living cases. Cisgender men have the highest disease burden and number of deaths among people diagnosed with HIV. Within this group, there are disparities by race and ethnicity. In 2023, HIV incidence was over 4 times higher for Black or African American men than for White men. Latino people newly diagnosed with HIV had the highest number of late diagnoses, defined as having AIDS at the time of initial HIV diagnosis or that progressed to AIDS within one year of the diagnosis date.

Federal Impacts

In April 2025, the CDC's STD prevention laboratory was closed, halting critical national testing that does not exist anywhere else within the federal HHS agency. Federal funding for STD surveillance is under threat, which may impact CDPH's ability to support the prevention and control of STDs.

Figure 43

Deaths among People Diagnosed with HIV by Selected Demographic Characteristics, 2023, California



Access to treatment is key to stopping HIV progression, preventing its spread, and ending the epidemic. Treatment helps reduce symptoms and prevents passing the virus to others. People diagnosed and treated for HIV are considered virally suppressed when they have ≤ 200 copies of the virus per ml of blood. Most people diagnosed with HIV who use injection drugs were linked to care, but less than half reached viral suppression within six months. Black people diagnosed with HIV were the least likely to be linked to care within one month of diagnosis. American Indian and Alaska Native individuals were least likely to achieve viral suppression within six months.

In 2023, HIV incidence was higher in communities that were low-income or had fewer residents who completed high school or had health insurance. People newly diagnosed with HIV in low-income communities were least likely to be linked to care or achieve viral suppression.

Public Health Prevention Strategies

Access to preventative medication, testing, treatment, and harm reduction resources can reduce the number of new HIV/AIDS cases and improve health

for people diagnosed with HIV. Testing can identify individuals who are unaware of their HIV status for linkage to appropriate resources. CDPH provides mail-in HIV and STI self-tests in select counties through the [TakeMeHome](#) program, and funds both routine opt-out (ROOT) HIV testing and anonymous testing of high-risk individuals. Eligible individuals can receive preventative medication through the Pre-Exposure Prophylaxis Assistance Program (PrEP-AP), and medication treatment through the [AIDS Drug Assistance Program](#) (ADAP). Additionally, CDPH provides partner notification services through local health departments to help HIV+ people notify others of possible HIV exposure. Harm reduction programs provide sterile injection and non-injection materials, overdose reversal medications, and condoms to prevent exposure. These programs also refer people to HIV and hepatitis C testing, drug treatment, and housing services, among others.

Mpox

Mpox (formerly known as monkeypox) is a viral infection that causes a painful, contagious rash and spreads person-to-person through close, physical contact, including sexual or intimate contact. A vaccine (JYNNEOS) is available and helps reduce the risk of infection, hospitalization, and severe disease.

California rapidly identified and contained the first travel associated clade I mpox infection introduction in the United States in November 2024.

Key Data and Trends

After emerging in the U.S. for the first time in 2022, the number of mpox cases has remained relatively low, at approximately 34 cases per month in 2023 and 45 cases per month in 2024, with notable increases in October 2023 and June through September 2024. The decline in cases is attributed in part to expanded JYNNEOS vaccine availability and distribution.

CDPH's Division of Communicable Disease Control maintains a [mpox data dashboard](#) with information on cases, vaccination, and disparities.

Disparities

From 2022–2024, 94% of cases of mpox in California occurred in men and around 70% of cases occurred in those aged 25–44.

- Among those with sexual orientation data available, the majority identified as gay, same gender loving, or bisexual.
- People with diagnosed HIV, who are at higher risk for severe illness and death from mpox infection, made up 40% of reported cases.

Latino and Black or African American individuals were disproportionately impacted, mainly due to disparate vaccination coverage compared to White populations.[120]

Public Health Prevention Strategies

CDPH partners with local health departments and CBOs to expand vaccine, testing, and treatment access for high-risk populations. In 2024, a capacity-building vaccination grant was distributed to CBOs to reduce racial and ethnic disparities in vaccine uptake. CDPH and local health jurisdictions collect demographic data including sexual orientation and gender identity (SOGI) to identify disparities and guide interventions. Efforts to strengthen SOGI data included a CDPH workgroup, which developed standards for intersex data collection and reporting.

The CDPH Viral and Rickettsial Disease Laboratory developed novel testing that can confirm clade I mpox. In November 2024, CDPH used this protocol to promptly identify and respond to the [first case of clade I mpox in the US](#). There were no secondary cases in the robust, collaborative public health investigation.

Occupational Health Exposures

Work influences health in many ways, including through workplace hazards, healthcare access, and income. Adults spend a significant amount of time working or seeking out work, and a thorough assessment of health in adulthood should consider the role of work.

Approximately 18 million people are employed in California. Occupational health refers to workplace injury, disease, or other exposures linked to health outcomes. In many cases, the negative health impacts of occupational exposures are preventable. Workplace fatality rates have increased slightly since 2016. In 2023, the workplace fatality rate was 2.5 per 100,000 full-time equivalent for workers aged 16 years and older, up from 2.2 in 2016.[121]

Latino workers represent the largest segment of California's workforce and are overrepresented in high-risk industries, such as farming, fishing, forestry, construction, and extraction.[122] Workers in the highest risk, lowest wage jobs tend to be younger workers of color. These jobs often do not provide job security or employer-sponsored health insurance, reducing access to healthcare for employees. Workers may not speak up about workplace hazards or unsafe working conditions for fear of workplace retaliation, including job loss.

The health impacts of workplace exposure to silica dust, lead, and extreme heat are examples of occupational health issues of particular concern. Workers are uniquely vulnerable to the effects of extreme heat. Many occupations require heavy physical activity in hot conditions, increasing the risk of preventable heat-related illness and making extreme heat an occupational health exposure of growing public health concern. More detailed analysis on Extreme Heat is found under the [Climate-Driven Extreme Weather Events](#) topic.

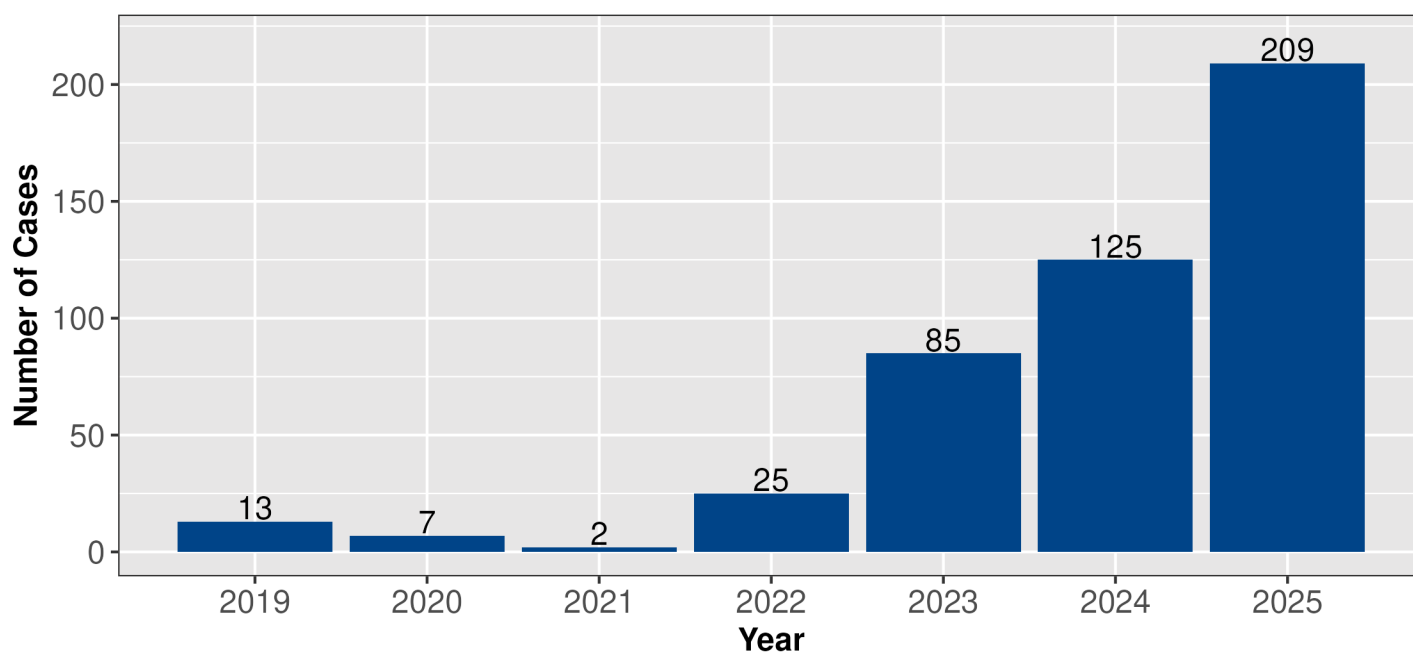
Silica Dust

Exposure to silica dust in the workplace can cause silicosis, an incurable lung disease that causes premature disability and death. Silicosis recently emerged as an occupational health concern for workers who cut and finish engineered stone (“quartz”) countertops. Demand for engineered stone has increased over the past decade, and it is now the most popular countertop material in the U.S.[123] Appropriate protections such as wet cutting methods, adequate ventilation, and respiratory protection must be used when working with this material but controlling exposures to levels low enough to prevent disease is technically challenging and costly, thus rarely feasible.[124]

In California, confirmed silicosis cases from working with engineered stone increased from 13 in 2019 to over 200 in 2025 (Figure 44). Nearly all (98%) engineered stone silicosis cases have been documented in Latino males, who are highly represented among the industry’s workforce.[125] Many people affected by silicosis have had nine to 15 years of occupational exposure to silica dust; higher dust level exposure can accelerate the disease and its impacts.[126]

Figure 44

Confirmed Engineered Stone Silicosis Cases Identified by CDPH, California



CDPH's Occupational Health Branch maintains the [California Engineered Stone Silicosis Dashboard](#) with surveillance data updated weekly.

Public Health Prevention Strategies

The CDPH [Occupational Health Branch \(OHB\)](#) works with regulatory, worker advocacy, local public health, and industry partners to prevent work-related injury and illness, including making silicosis a reportable disease in California in 2025.[127] OHB works with California Division of Occupational Safety and Health (Cal/OSHA) to design and update standards that protect workers. In December 2024, Cal/OSHA adopted permanent updates to their standard to protect workers from exposure to respirable crystalline silica, using OHB data and expertise to support the updates. OHB also develops training and informational materials for workers, employers, healthcare providers, and local health departments, including [silica safety guidance for countertop workers](#).

Lead

During adulthood, most lead exposure occurs in the workplace, making adult lead exposure a significant and long-standing occupational health concern. Even low levels of lead in the body can cause damage, leading to serious and permanent health problems. The incidence of elevated blood lead levels among workers decreased from 4.8 per 100,000 workers in 2017 to 3.7 per 100,000 workers in 2024. Sixty-two percent of workers with elevated blood lead levels were Latino, with most working in high-risk industries like battery manufacturing and construction.[128]

Public Health Prevention Strategies

OHB partnered with Cal/OSHA in the rulemaking process to revise its lead standards, which passed in February 2024. California became the first state in the United States to revise its lead standards. Effective in January 2025, the new regulations aim to significantly lower exposure limits for workers and reduce the risk of lead poisoning.



Older Adulthood: Supporting Healthy Aging

	65 - 74	75 - 84	85+
1st	Ischemic heart disease	Ischemic heart disease	Alzheimer's or other dementias
2nd	Lung cancer	Alzheimer's or other dementias	Ischemic heart disease
3rd	Stroke	Stroke	Stroke
4th	Hypertensive heart disease	COPD	Hypertensive heart disease
5th	COPD	Hypertensive heart disease	Congestive heart failure

Leading causes of death

Cancer
 Other Chronic
 Cardiovascular

California is experiencing a major demographic shift as the overall population grows older. By 2040, 22% of Californians will be 65 or older, up from 14% in 2020. The older population will grow by 59%, while the working-age population will stay about the same, and the child population will decrease by 24%. [11]

The older adult population is becoming more diverse in race and ethnicity, requiring culturally appropriate services and a diverse healthcare workforce. Family and community connections are vital, along with support to avoid financial burdens from low income, housing costs, and healthcare needs.

California's [Master Plan for Aging](#) includes significant initiatives focused on aging populations, recognizing the need for a person-centered, home and community-based care workforce.

Neurodegenerative Diseases

Alzheimer's Disease and Related Dementias

Alzheimer's disease and related dementias are conditions that primarily affect memory, thinking, and behavior. Dementia is a general term for the loss of memory and other cognitive abilities serious enough to interfere with daily living. Common types of dementia include Alzheimer's disease, vascular dementia, and frontotemporal dementia. Alzheimer's disease, the most common type of dementia, is a progressive disease, meaning that symptoms worsen over time.

Eventually, symptoms grow severe enough to interfere with daily tasks and the ability to live independently.

Key Data and Trends

Death rates from Alzheimer's disease²⁴ almost tripled from 2000 to 2020. Rates decreased from 2020 to 2024 but were at much higher levels than prior decades. In 2024, Alzheimer's disease was the leading cause of death in adults 85 years and older and the second leading cause of deaths overall.

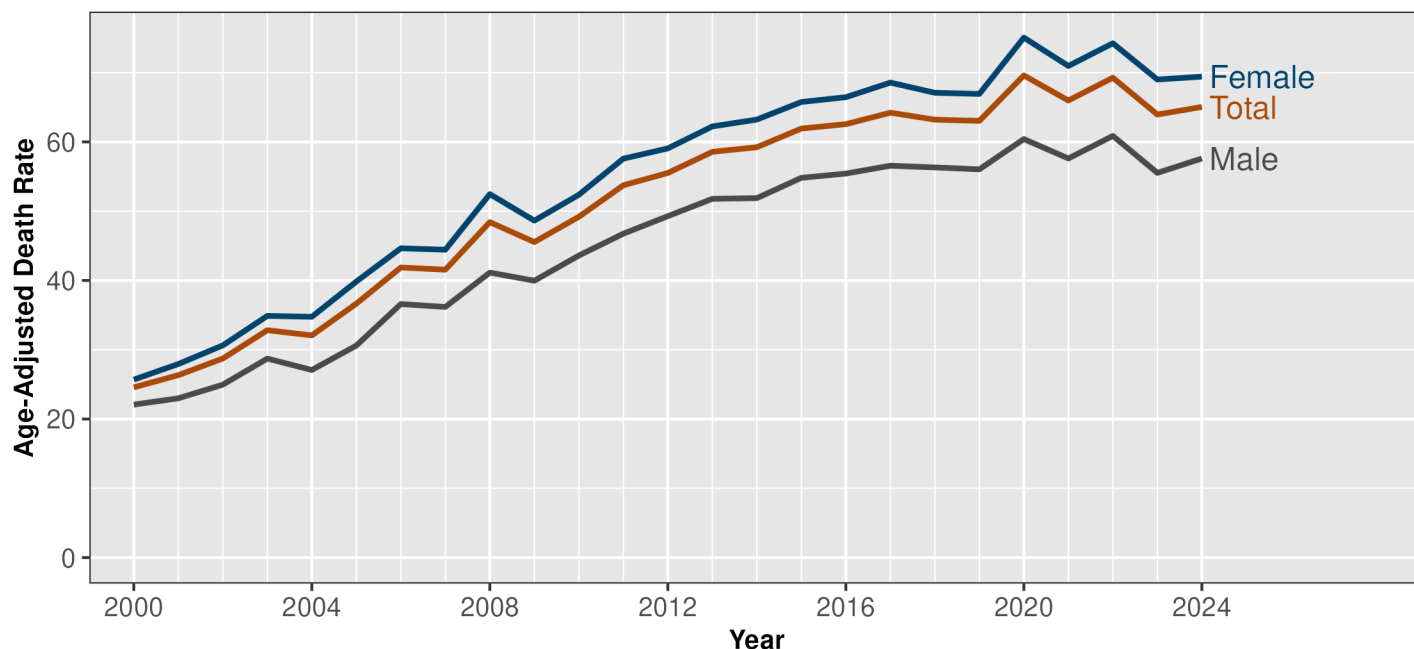
Alzheimer's disease has historically been underdiagnosed and there is a lack of public awareness of the disease, leading to underutilization of care, underreporting, and delayed diagnoses or late-stage disease diagnoses, especially in communities of color who are underrepresented in data and research. As California's population ages, Alzheimer's disease is expected to affect more people.

Disparities

In 2024, females had higher age-adjusted rates (69.4 per 100,000) of death due to Alzheimer's disease compared to males (57.6 per 100,000) (Figure 45).

Figure 45

Trends in Age-Adjusted Death Rates of Alzheimer's Disease, 2000-2024, California

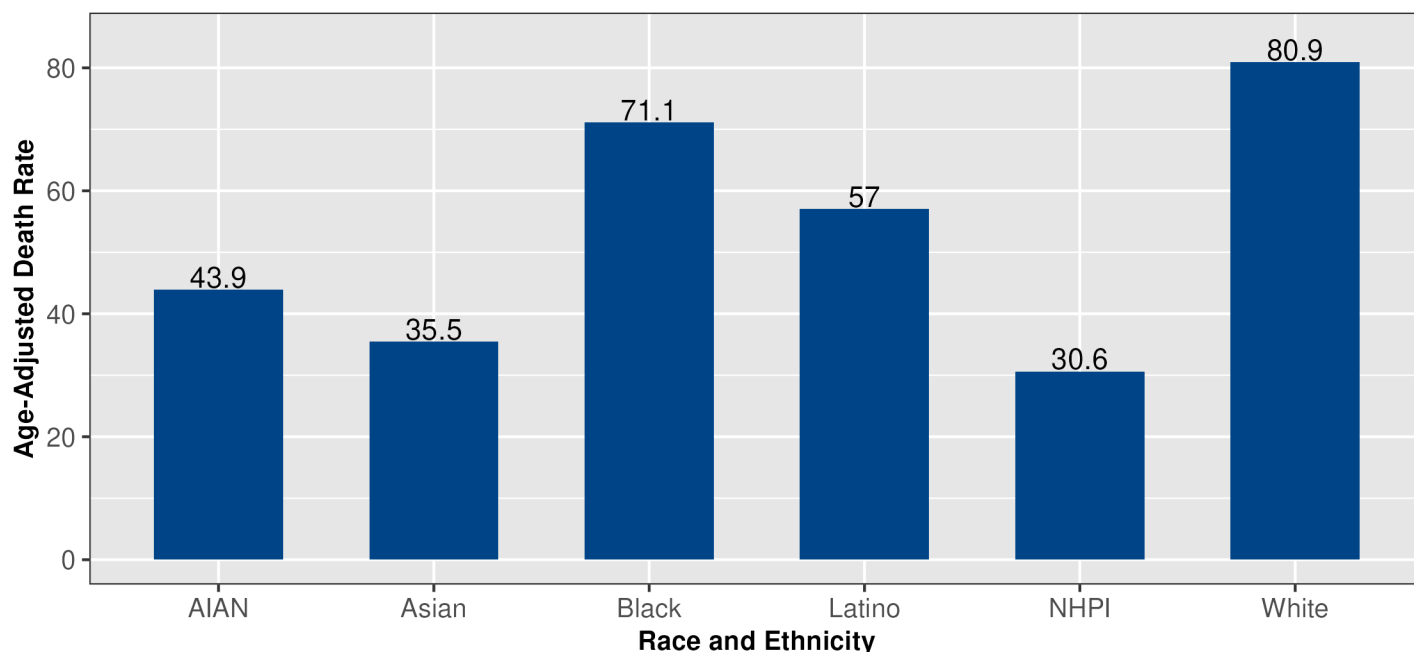


²⁴ "Alzheimer's disease" in this section refers to Alzheimer's disease and related dementias.

White (80.9 per 100,000) and Black or African American (71.1 per 100,000) individuals had the highest age-adjusted death rates due to Alzheimer's disease (Figure 46).

Figure 46

Age-Adjusted Death Rates of Alzheimer's Disease by Race and Ethnicity, 2024, California



Lower income and limited healthcare access increases risk and poor management of the disease, as does living in areas with environmental hazards.[129]

Caregiver Well-being

There are currently more than 4 million Californians providing unpaid care for family, friends, and neighbors with chronic illness or disability.[130] Most caregivers are women, and many have paid work outside the home in addition to providing caregiving support. Caregiving is essential for individuals with Alzheimer's disease and related dementias, who often rely on family or friends. In 2024, the provision of care significantly impacted the physical, mental, and overall health of caregivers, with a notable disparity between men and women. Physical, mental, and overall health problems were reported more frequently by female than male caregivers. Most Californians were unaware of the option of paid family leave, with few caregivers utilizing family leave for more than two weeks (average overall usage of 10.5%).[131]

Public Health Prevention Strategies

The cause of Alzheimer's disease and its progression is not fully understood. There are potential genetic, environmental, and behavioral risk factors for Alzheimer's disease. Protective measures such as a healthy diet, reduced alcohol consumption, abstaining from smoking, building cognitive resilience, staying physically active, getting screened for and treating hearing loss, maintaining good sleep and stress management, social connection, educating oneself about the disease, and coordinated caregiver training can help reduce the risk, slow disease progression, and enhance the quality of life for affected individuals and their caregivers.[132] These and other lifestyle interventions can help reduce negative health outcomes, improve quality of life, and may delay or prevent up to 45% of dementias.[133]

In support of the [Governor's Master Plan for Aging](#), the [California Department of Aging](#) and CDPH have launched a number of initiatives (e.g., [Cal-COMPASS](#) and the [Healthy Aging Initiative](#)). [CDPH's Alzheimer's Disease Program \(ADP\)](#) supports evidence-based community interventions guided by the Healthy Brain Initiative to address social drivers and reduce disparities. For example, ADP partners in Monterey County developed informational materials and data dashboards to raise awareness and promote healthy aging and effective caregiving, conducting workshops in English and Spanish to educate the community on brain health and dementia prevention. ADP also provides [research grants](#) to improve understanding of the higher prevalence of Alzheimer's disease among women and communities of color. These grants will enhance early detection, diagnosis, treatment, and caregiver support.

California is also focused on supporting the [caregiver workforce through grants and training programs](#). As the population ages, the need for caregiver support grows, making it more important than ever to increase the resources and support available to caregivers and caregiver awareness of them.

Other Neurodegenerative Conditions Beyond Alzheimer's

While Alzheimer's disease and related dementias are the most common neurodegenerative conditions affecting older Californians, other disorders also contribute significantly to disability, long-term care needs, reduced quality of life and in some cases premature mortality. These include Parkinson's disease, multiple sclerosis (MS), amyotrophic lateral sclerosis (ALS), and Huntington's disease. Their cumulative impacts on mobility, independence, and caregiving are substantial.

Table 1*Neurodegenerative Diseases Prevalence in California*

Disease	Prevalence Estimate (number of cases)	Incidence Estimate (number of cases)	Deaths (2024) (number)
Parkinson's Disease	133,517 [134]	10,800 [134]	4,158
Multiple Sclerosis (MS)	83,773 [135]	8,528 [136]	328
Amyotrophic Lateral Sclerosis (ALS)	4,080 [137]	725 [137]	737 ²⁵
Huntington's Disease	4,800 [138]	696 [139]	117

Note: Original California-specific prevalence and incidence estimates are not currently available; the data shown are estimates extrapolated from national rate sources as footnoted.

Parkinson's Disease

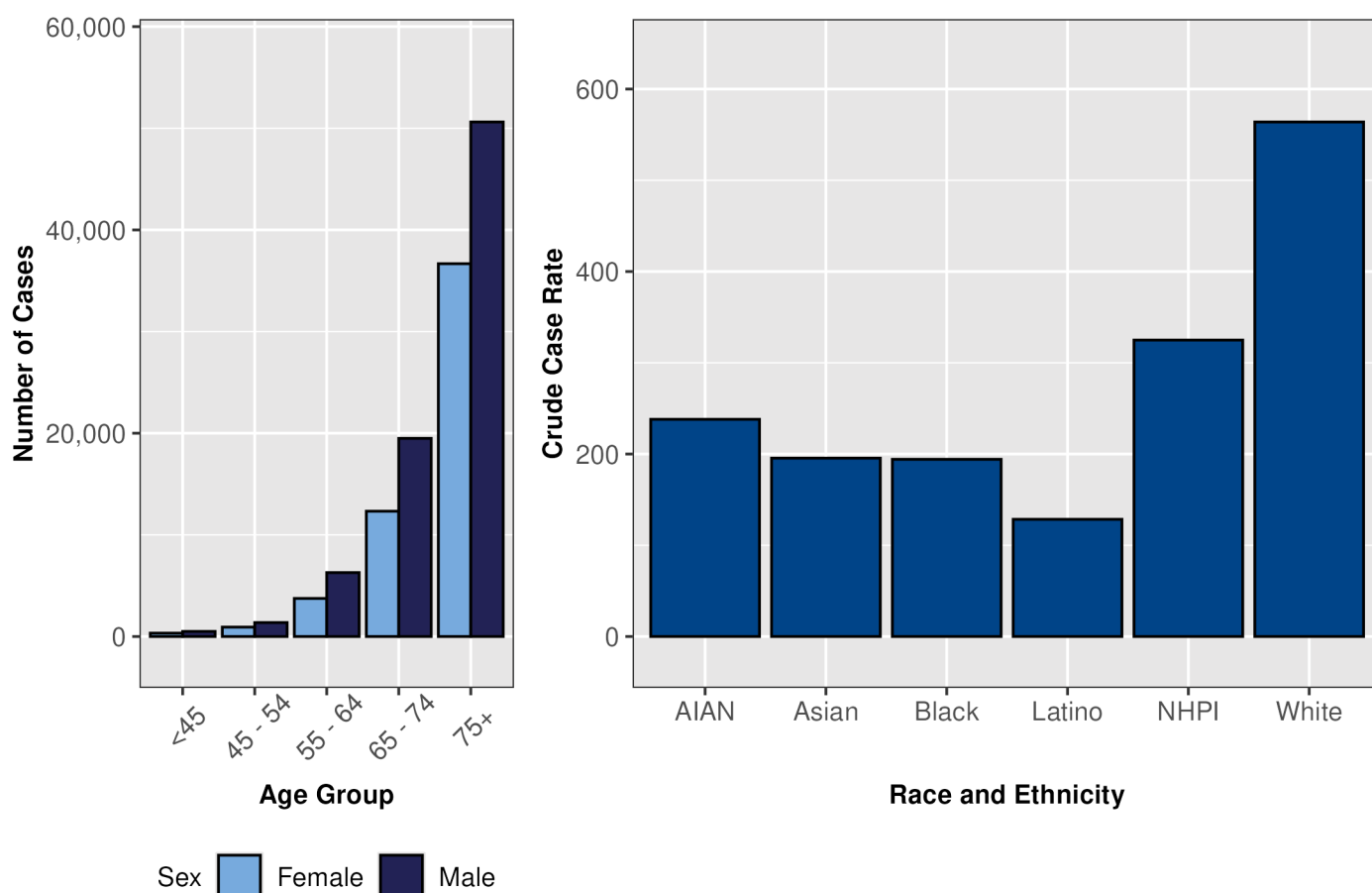
In California, over 125,000 people were estimated to be living with Parkinson's disease in 2024. Males are at higher risk of Parkinson's disease than females, and risk increases with advancing age (Figure 47, Left). Differences are also observed across race and ethnic groups (Figure 47, Right).

The burden of Parkinson's disease reflects not only the number of individuals affected, but also its profound functional consequences, including tremor, impaired balance, falls, and in later stages, cognitive decline and death.

²⁵ Number of deaths based on ICD-10 code "G122" which represents all motor neuron diseases. ICD-10 code "G122.1" for ALS is unavailable.

Figure 47

Parkinson's Disease Cases by Sex and Age (left), and Crude Case Rate by Race and Ethnicity (right), 2024, California



Notes: Data are from the California Parkinson's Disease Registry, CDPH. *Case rates are approximations for the American Indian or Alaska Native and Native Hawaiian or Pacific Islander populations to comply with the California Health and Human Services Data De-Identification Guidelines.

Other Neurodegenerative Conditions

MS, ALS (also known as Lou Gehrig's disease), and Huntington's disease also contribute significantly to long-term disability (MS and Huntington's disease) and premature mortality (ALS). Table 2 summarizes the key characteristics of these conditions, including typical age of onset, major symptoms, sex differences, and overall disease burden. Each condition contributes in different ways, and their challenges extend beyond mortality, encompassing disability and shortened survival.

Table 2*Key Characteristics of Other Neurodegenerative Diseases*

Disease	Onset age (years)	Key Symptoms	Sex Difference	Burden Characteristic
Multiple Sclerosis (MS) [140-143]	20-40	Variable and unpredictable, they include Vision problems, fatigue, motor weakness, cognitive changes	Women with higher risk	Long survival, high disability burden
Amyotrophic Lateral Sclerosis (ALS) [137, 144, 145]	55-75	Muscle weakness, speech / swallowing difficulty, respiratory decline	Men with higher risk	Short survival, high mortality burden
Huntington's Disease [146, 147]	30-50	Motor dysfunction, psychiatric symptoms, cognitive decline	Equal in both sexes, with equal inheritance risk	Prolonged disability

Public Health Prevention Strategies

In 2018 and 2021, California enacted Health and Safety Codes (HSC), [section 103870 Chapter 1.6](#) and [section 103871 Chapter 1.7](#), respectively, to require the collection and reporting of data on Parkinson's disease and other neurodegenerative conditions, such as ALS, MS, Alzheimer's disease, and Huntington's disease. The California Parkinson's Disease Registry (CPDR) and California Neurodegenerative Disease Registry (CNDR) serve as California's statewide population-based neurodegenerative disease surveillance systems to track these neurodegenerative conditions across age, sex, geography, and time. They produce publicly accessible deidentified summary reports, such as fact sheets, to inform the public, advocates, and policy makers about disease trends, disparities, and needs. They also support research recruitment and stakeholder engagement to help translate surveillance into actionable insights for possible treatments, care planning, and advocacy.

Social Isolation and Suicide

Behavioral health challenges among older adults due to social isolation are of growing concern. A lack of social connection has profound social, health, and economic costs to individuals, communities, and society. In 2023, the former U.S.

Surgeon General declared an epidemic of loneliness and isolation, highlighting how a lack of social connection is an independent risk factor for deaths from all causes, including a 29% increase in the risk of heart disease and a 32% increase in the risk of stroke.[14] While many factors contribute to suicide risk, the Surgeon General's Advisory highlights links between a lack of social connection and death by suicide.

Key Data and Trends

In 2023, the California Department of Aging's [Community Assessment Survey of Older Adults](#) found that of 17,700 older Californians surveyed, 40% reported that feeling lonely or isolated was a problem, 43% reported feeling depressed and nearly half were dealing with recent grief or loss. Social isolation and loneliness contribute to an increased risk of suicide among older adults in California. In 2024, there were 4,042 confirmed suicide deaths in California and 930 (23.0%) of them were among Californians aged 65 and older.[103, 148]

Disparities

As shown in [Figure 34](#) above, men die by suicide at much higher rates than women throughout the life course including into older adulthood. One contributing factor to this disparity is suicide mechanism. Firearms are uniquely fatal and the most commonly used mechanism for suicides. Firearms were used in 64.1% of male and 23.7% of female older adult suicides.

While among males and females of most racial and ethnic groups, rates of suicide generally decrease with age after early-adulthood, this is not the case among Asian males, or particularly strikingly, among White males. Of all Californians, suicide death rates were higher among White males than any other race and ethnic group for all age groups 45-54 and above, with the highest rates among White males in the oldest age groups. The rates among 75-84-year-old and 85 and older White males were over 4 and 7 times higher, respectively, than the overall suicide rate in California in 2020-2024, and over 6 and 10 times higher respectively than the rate among White females in those same age groups.

Of all older adult suicide deaths, approximately 25.7% (239) were known veterans.[148]

Older adults who are also immigrants, LGBTQIA+, people of color, and victims of elder abuse are at higher risk of social isolation and its harms. Immigrants often experience stressors that can increase their social isolation, such as language barriers, differences in community, family dynamics, and new relationships that lack depth or history.[149] California's first statewide study of LGBTQIA+ older adults, "[From Challenges to Resilience](#)," found that of the 4,700 older adults surveyed, nearly half had experienced a traumatic event in their lifetime, nearly

a quarter had symptoms consistent with Post Traumatic Stress Disorder, and 1 in 10 reported serious thoughts of suicide in the past year.[150]

Public Health Prevention Strategies

A comprehensive public health approach to encourage social connection and prevent suicide among older adults is essential. CDPH's Office of Suicide Prevention (OSP) promotes the creation of safe and protective environments, including lethal means safety, as a priority strategy for older adult suicide prevention. The OSP purchased approximately 4,450 firearm lockboxes between July 2024 and June 2025 and distributed them to 40 Tribal entities across the state. Flyers in [English](#) and [Spanish](#) accompanied the lockboxes, providing information about safe firearm and medication storage and the 988 Suicide and Crisis Lifeline. [OSP Social Media Shareables](#) also help to promote the [Friendship Line California](#), a free source of connection and emotional support for people aged 60 years and older, caregivers, and adults living with disabilities.

A 2025 report released by [Insure the Uninsured Project](#), in partnership with the California Department of Aging, found that social isolation, cognitive decline, and caregiver stress were the most pressing behavioral health challenges facing older adults.[151] Respondents emphasized the need for integrated aging and behavioral health services, expanded community-based care, culturally competent outreach, and improved workforce training. California's [network of local agencies on aging](#) offer opportunities for social connection and nutrition and health services.

CDPH is working with partners across health and human services, including the California Department of Aging, to advance a suite of programs and investments to foster inclusion, engagement, and connection for older adults, including strategies outlined in the Governor's Master Plan for Aging as well as plans for population-based prevention under BHSA.



Public Health Preparedness and Response

Preparing and responding to emergencies is a key responsibility of public health. There are human health impacts resulting from most emergencies and disasters that require public health leadership, with local public health often the first to respond. Each emergency offers opportunities to learn and improve preparedness planning and response.

The COVID-19 pandemic exposed a historically underfunded and understaffed public health sector that was challenged with responding to an emergency at an unprecedented scale while attempting to maintain core public health responsibilities. State leaders responded with the Future of Public Health, a \$300 million ongoing annual investment to fill critical gaps in public health capacity and infrastructure, advance health equity, and catalyze innovation and new tools for promoting and protecting health.²⁶

Addressing public health emergencies and other emerging issues is a [strategic priority for CDPH](#). Due to climate change, natural disasters are increasing in intensity and frequency. The number of annual

Federal Impacts

Proposed federal HHS reorganization would shift some Administration for Strategic Preparedness and Response (ASPR) staff and functions to the CDC. CDC and ASPR staff are essential partners during public health emergencies, and any disruption or reallocation of funding could significantly impact California's ability to prepare for and respond to emergencies. These two agencies are the sole sources of federal public health preparedness funding through the Public Health Emergency Preparedness and Hospital Preparedness Program. CDPH is monitoring these developments to assess their potential impact, ensuring that California remains informed and prepared to advocate for sustained and effective federal support.

²⁶ The 2024 Budget Act authorized a 7.95% reduction to the Future of Public Health beginning in Fiscal Year 2024-2025 and ongoing.

emergency activations has increased exponentially. The duration and concurrence of activations due to wildfires and other complex and critical health events such as COVID-19, H5N1, Mpox, and an infant botulism outbreak have added new and ongoing workload. For example, in August 2024 - April 2025, the CDPH Center for Preparedness and Response's (CPR) Medical Health Coordination Center (MHCC) was activated for the H5N1 outbreak and in January 2025 – June 2025 for the catastrophic LA Fires response. Over the past five years, the MHCC has been activated for more than 2,270+ cumulative days for over 32 different and overlapping emergencies.

CDPH is dedicated to improving its all-hazards readiness to face any health threat, to save lives and livelihoods, and to strengthen community and responder resiliency.

One Health

California's urgent and emerging public health threats include extreme weather events and other climate change-driven challenges such as emerging infectious diseases, food security and water quality, antimicrobial resistance, and harmful algae. In these instances, understanding the interactions of people, animals, and plants with our shared environment is essential. [One Health](#) is a globally recognized approach that incorporates the interdependency of people, animals, plants, and our shared environment into strategies that achieve optimal health outcomes and well-being for all.

Indigenous communities have long recognized and understood the linkage between the health of animals, people, and the environment for decades. Only recently have these principles been re-introduced in One Health and transformed Western science, medicine, and international policy. The One Health approach provides a roadmap to prepare for the next public health challenge. A One Health approach to emergency response requires consideration for preservation of human life, pets, livestock, structures, and natural spaces.

Many known human diseases and emerging infections are zoonotic diseases of animal origin. Zoonotic disease events such as COVID-19, Mpox, and H5N1 highlight the impacts of increasing human-animal interactions. Environmental dynamics of viruses like dengue, chikungunya, and Zika are important given the introduction of invasive vectors like *Aedes* mosquitoes to California.

Backyard poultry ownership increased during the COVID-19 pandemic, and poultry handling is known to transmit zoonotic and foodborne pathogens. Outbreaks and cases of enteric illness related to animal contact are increasing, and many cases of *Salmonella* in California involved handling poultry.[152]

The CDPH One Health Program, established in 2022, addresses complex challenges at the interface of animal, human, and environmental health. The program conducts outreach, education, research, technical assistance, and

advocacy, and collaborates with local, state, and national partners. One Health activities include monitoring pathogens and toxins in humans, animals, and the environment to rapidly respond to public health emergencies and protect people and pets from extreme heat, injury, zoonotic and foodborne illness. CDPH uses a One Health approach in surveillance, investigation, biomonitoring, and programmatic activities, including the H5N1 response.

H5N1

Avian influenza A (H5N1) is a virus that impacts the health of humans, animals, and the environment.

In July 2022, highly pathogenic avian influenza A (H5N1) clade 2.3.4.4.b was detected for the first time in California, in wild birds.

- By the end of August 2024, H5N1 was confirmed in nearly 600 wild birds in California, over 7.1 million domestic birds were killed by the virus or euthanized, and H5N1 was detected in three Central Valley dairy herds.
- The first two confirmed human cases in California were reported in dairy workers in October 2024.
- California declared a State of Emergency for H5N1 in December 2024.
- By the end of 2024, there were 39 human cases of H5N1 in California. Thirty-seven cases were dairy workers. All dairy worker case-patients were

Public Health Prevention Strategy: Wastewater Surveillance

CDPH is using wastewater surveillance to improve situational awareness of infectious diseases in communities around California. Wastewater surveillance involves sampling wastewater or “sewage” with its abundance of human waste material, and testing it for many diseases and pathogens, including influenza, respiratory syncytial virus (RSV), mpox, SARS-CoV-2, and norovirus. These data allow state and local public health to monitor trends and raise early alerts of unusual or unexpected detections. This information has been increasingly used by healthcare systems and providers for clinical decision making and system preparedness.

The CDPH-led California Surveillance of Wastewaters (Cal-SuWers) network is recognized as a national Center of Excellence and can rapidly adapt and respond to newly emerging diseases of public health concern. In Spring 2024, within weeks of the first detection of H5N1 in dairy cattle in Texas, CDPH worked with academic partners to rapidly begin monitoring of influenza A (H5) in California wastewater. These data helped public health monitor statewide H5 distribution, informing response activities. Testing is now performed at 85 sites—more than any other state.

In 2024, CDPH leveraged wastewater surveillance to support the clade I mpox response and currently monitors for measles.

among men between 19 and 62 years old. Ninety percent of the dairy workers were milkers who were likely exposed through direct contact with raw milk, possibly in their eyes. All case-patients experienced mild illness, and none were hospitalized.

- Despite 105 commercial poultry flocks and 39 backyard poultry flocks being infected, no cases occurred among Californians due to poultry exposure, likely because poultry workers routinely use proper personal protective equipment promoted by public health, industry partners, local businesses, and workers.

Public Health Prevention Strategies

Enhanced data systems, surveillance, laboratory and coordination capabilities gained during the pandemic allowed CDPH and local health departments to respond swiftly to H5N1. California adopted a One Health perspective in its preparation for H5N1 before the first cases in dairy cows or humans occurred in the state and continues to coordinate efforts in a united response.

CDPH is collaborating across sectors with State agencies, farm workers, and farm owner associations to prevent exposures from infected animals or food products and to detect, treat, and contain human cases of bird flu with a focus on protecting farm workers at highest risk.

CDPH provided approximately 5.2 million pieces of personal protective equipment to workers across 18 counties and set up 182 temporary mobile clinic events to provide free testing and vaccines. Additionally, California's state public health laboratory is one of three national influenza reference centers.

CDPH collaborated with trusted community partners including six library systems, four affordable housing communities, and a popular flea market in the Central Valley to distribute educational information about bird flu and to increase access to free testing and vaccination clinics. CDPH worked closely with local health departments, CBOs, and Tribal Nations in counties with dairy and poultry facilities and farms to promote safety with outreach materials in nine languages.

Other Emerging and Climate-Sensitive Infectious Diseases

Changes in environmental conditions, seasonal patterns, extreme weather events, and long-term climate cycles contribute to changes in infectious disease.

Valley Fever

Increases in heat waves and swings between extreme drought and heavy rainfall have been associated with surges in the number of cases of [Valley fever](#), also known as coccidioidomycosis, since 2000. Valley fever is caused by a

fungus that grows in the soil and dirt in some areas of California and is named after the San Joaquin Valley where it is most common. Valley fever can cause serious lung infections like pneumonia, meningitis, and bone infections. Although most people with Valley fever get better on their own and do not need treatment, for some people it can become severe, chronic, or even fatal without care. In California, on average over 1,000 people have been hospitalized with Valley fever each year, of which about 1 in 10 have died.[153]

- In 2024, California [reported nearly 12,500 cases](#), the highest year on record and a significant jump from the 7,000-9,000 cases reported annually from 2017-2023.
- Rates of Valley fever continue to be highest in the southern San Joaquin Valley region, but cases have been increasing in other areas such as the northern Central Valley and the Central Coast.
- Construction workers, wildland firefighters, and others who work outdoors are at higher risk for Valley fever, especially when digging or disturbing soil, operating heavy machinery, or working under windy conditions.[154]

The CDPH Division of Communicable Disease Control has Valley fever data dashboards with [year-end data](#) and [provisional case data updated monthly](#).

Public Health Prevention Strategy: Syndromic Surveillance

The [California Syndromic Surveillance \(CalSyS\) Program](#) is a statewide initiative to improve public health by expanding syndromic surveillance (SyS) use. SyS provides near real-time monitoring of health-related data to serve as an early warning system for emerging public health threats.

The CalSyS Program has onboarded 50% of healthcare facilities with EDs to the state's SyS system and provides technical assistance to support use of SyS data by local health departments and across CDPH Programs.

The CalSyS Program is focused on the following "use cases" to address potential threats:

1. Respiratory viruses, including COVID-19, flu, and respiratory syncytial virus (RSV).
2. Climate-related health outcomes, including wildfire smoke exposure and heat-related illnesses.
3. Behavioral health, including drug overdose outcomes, suicide-related behavior, and ACEs (e.g., child abuse and neglect).
4. Public health at mass gatherings, including the Superbowl, FIFA World Cup, and the Olympics.

SyS is an important public health tool to help keep Californians safe and healthy by tracking illness, disease, and injury in near real-time so that intervention and prevention efforts can be initiated when needed.

Public Health Prevention Strategies

For those living in areas affected by Valley fever, individuals can reduce the likelihood of getting Valley fever by staying indoors during dust storms, wearing a properly fitted N-95 respirator (mask) in dusty conditions, and wetting soil before digging. The CDPH Occupational Health Branch has investigated Valley fever outbreaks in workers and [developed recommendations](#) for preventing work-related Valley fever.

Other Emerging Infectious Diseases

In 2024, global emerging diseases included Ebola and Marburg, New World Screwworm, and Oropouche. During outbreaks in other parts of the world, CDPH prevents the introduction of these viruses into California by coordinating public health traveler monitoring and helping ensure symptomatic persons receive appropriate public health or medical evaluation while minimizing spread.

CDPH has also begun to use syndromic surveillance (SyS)—near real-time data on symptoms experienced by patients in emergency departments and urgent care settings—to track and monitor a variety of infectious diseases.

Climate-Driven Extreme Weather Events

Climate change, driven by rising greenhouse gas levels from fossil fuel combustion, is driving hotter temperatures, drought, sea level rise, extreme rainfall, and floods.

Deaths due to hazardous weather increased from 2014-2024 in California, despite injuries remaining steady.[155] Climate change and health inequities are driven by inequitable access to social, political, and economic power. Structural racism and disinvestment leave marginalized communities with fewer resources to adapt, driving health disparities and greenhouse gas emissions. Fair and healthy climate action requires addressing these structural inequities that create and intensify community vulnerabilities.

Extreme Heat

Extreme heat events are consecutive days and nights of temperatures well above normal conditions in an area. Prolonged exposure to heat causes progressively worse health outcomes from heat stress, including heat syncope, stroke, and death.[156] Extreme heat may impact health indirectly by worsening pre-existing health conditions. Extreme heat intersects with other major climate hazards and extreme weather events, including air pollution and wildfires.

Key Data and Trends

In California, the overall trend in heat-related ED visits, hospitalizations, and deaths has been increasing over time. Worker's compensation claims for heat-

related illness have more than doubled since 2000, with young workers aged 16-24 and male workers filing claims at higher rates.[157] Annual ED visits for occupational heat-related illness peaked in 2017 and have since decreased.

Disparities

Poverty, occupation and workplace conditions, recreational activities, linguistic isolation, and housing insecurity are social drivers of heat-related illness.[158] In addition to these risks, there are important disparities in heat-related illness by race and age.

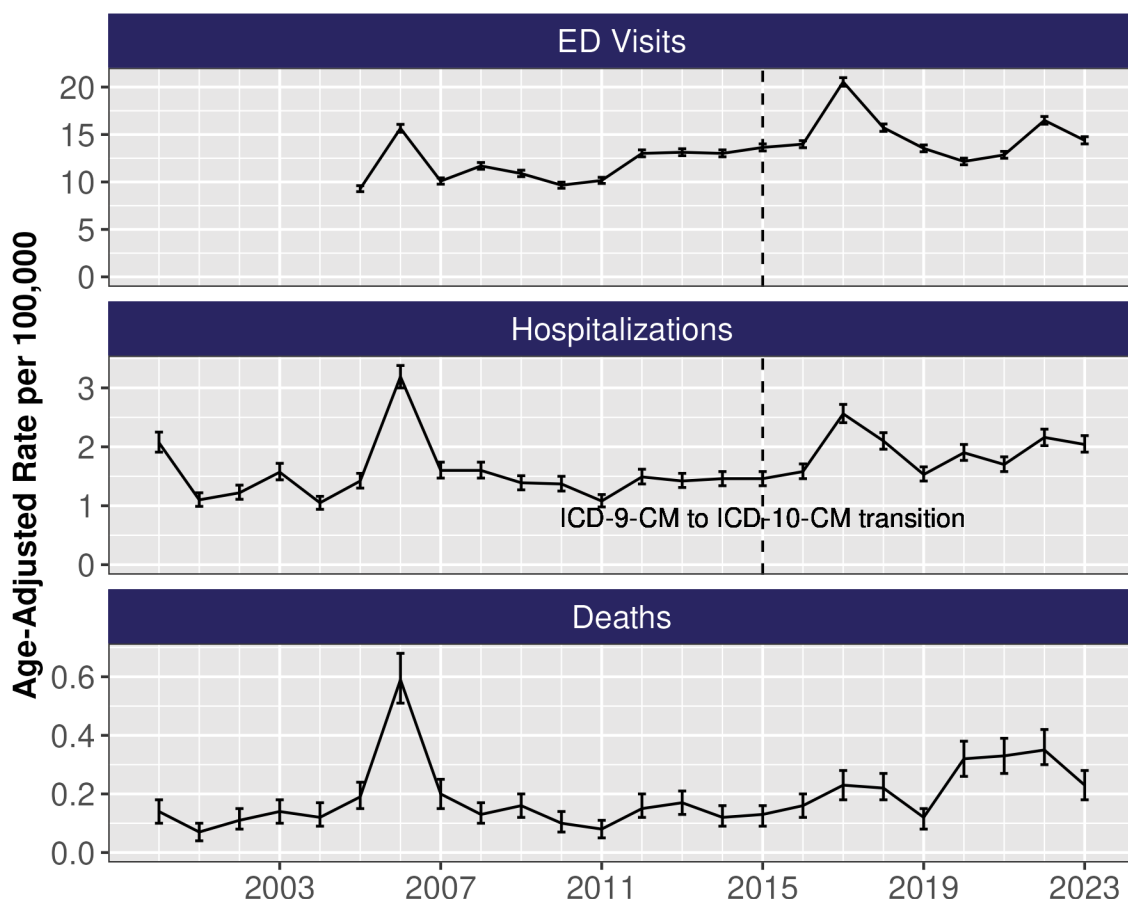
Older adults were hospitalized for heat-related illness at higher rates in 2020-2024 than any other age group. Older adults' internal heat-regulation mechanisms are

impacted by age, medications, and other factors that make adverse outcomes from extreme heat more likely.[159]

From 2020-2024, people experiencing homelessness went to the hospital or an ED for heat-related illness at much higher rates than the general population—over 20 times higher ED visit rate and over 40 times higher hospitalization rate. Many Californians have limited access to spaces to cool down with potable water, air conditioning, or shade. Structural factors, including housing exclusion and criminalization, as well as policies that limit access and use of public spaces can increase the risk of heat-related illness for people who lack secure housing or shelter.[160] Heat-related illness and deaths are often underreported or

Figure 48

Age-Adjusted Rate of Heat-Related Illness ED Visits, Hospitalizations, and Deaths per 100,000 Population, California, 2000-2023 (Annual), Tracking California

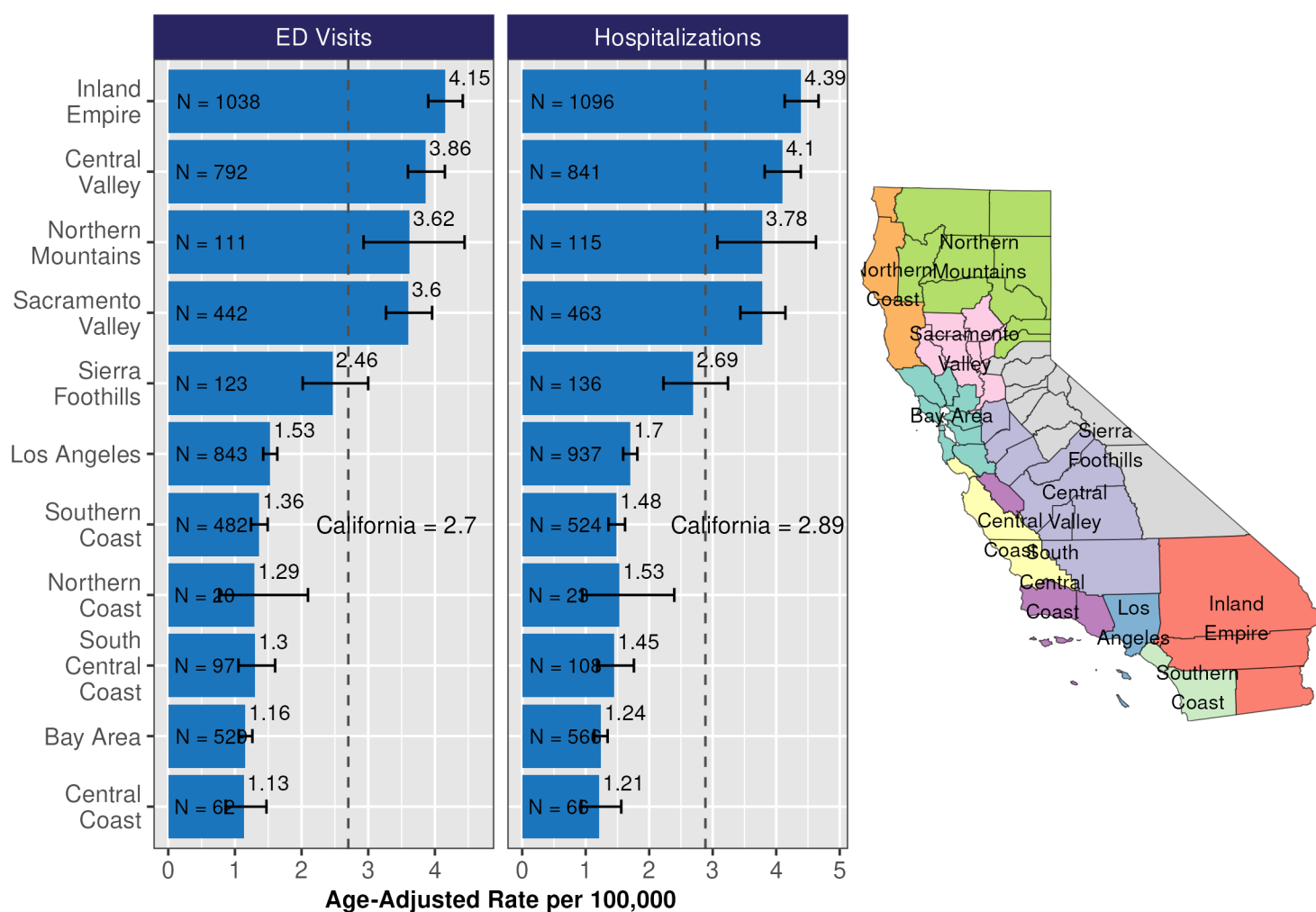


misclassified, especially those that involve individuals using drugs and/or experiencing housing insecurity and homelessness.[160]

Regional variations in climate and resources to address the impacts of climate and climate change lead to striking differences in heat-related hospitalizations and ED visits. The Northern Mountains, Inland Empire, and Central Valley regions all had high rates of heat-related hospitalizations and ED visits. The coastal regions from the Bay Area to the Southern Coast all had lower rates (Figure 49).

Figure 49

Age-Adjusted Hospitalizations and ED Visit Rate for Heat-Related Illness by Region, 2020-2024*



*NOTE: Regions for this data are defined based on shared climate characteristics as well as geographic proximity for better interpretability.

Social Drivers of Climate-Related Health Effects: Evidence from the California Health Interview Survey

In 2023, about 3 of every 5 California households (61%) experienced at least one extreme weather event, mainly heat waves (51%) and wildfire smoke (41%) in the past two years. Over a third (35%) of households experiencing two or more extreme weather events in the past two years, of which 36% reported a related physical or mental health harm. Findings included:

- **Housing instability:** Californians with "very unstable" housing are 37% more likely than those with "very stable" housing to report physical or mental health harms from an extreme weather event.
- **Poverty:** CalFresh (food stamp) beneficiaries are 26% more likely than non-beneficiaries to report physical or mental health harms related to extreme weather event impacts.
- **Rural residence:** Californians who live in rural ZIP Codes are 23% more likely than those who live in urban areas to report physical or mental health harms related to an extreme weather event.
- **Gender identity:** Transgender and gender expansive (such as non-binary) Californians are nearly twice as likely (94% more) than cisgender Californians to report physical or mental health harms related to an extreme weather event. These populations are more likely to report gender-based discrimination and housing instability which may contribute to exposure risks.

Public Health Prevention Strategies

CDPH helped develop [statewide policy recommendations](#) for a general maximum safe indoor air temperature (82° Fahrenheit) for residential dwelling units.

CDPH participates in developing and implementing California's Extreme Heat Action Plan, which outlines state efforts related to public awareness and notification, community services and response (e.g., community cooling centers), increasing built environment resilience, and utilizing nature-based solutions. CDPH collaborates with CalEPA Office of Environmental Health Hazard Assessment (OEHHA) on the state's heatwave warning system, [CalHeatScore](#).

CDPH is also implementing a home weatherization pilot program in Tulare County in collaboration with CHWs from Kaweah Health. The program connects farmworkers and low-income residents with energy-efficiency and weatherization services to reduce health risks and improve resilience to extreme weather events (see the [Asthma](#) section for a detailed description).

Cal/OSHA requires employers to prevent heat-related illness in indoor and outdoor workplaces. CDPH has worked to inform Cal/OSHA standards designed to protect workers.

Wildfire and Wildfire Smoke

California's climate makes it naturally prone to wildfires, but climate change is increasing their

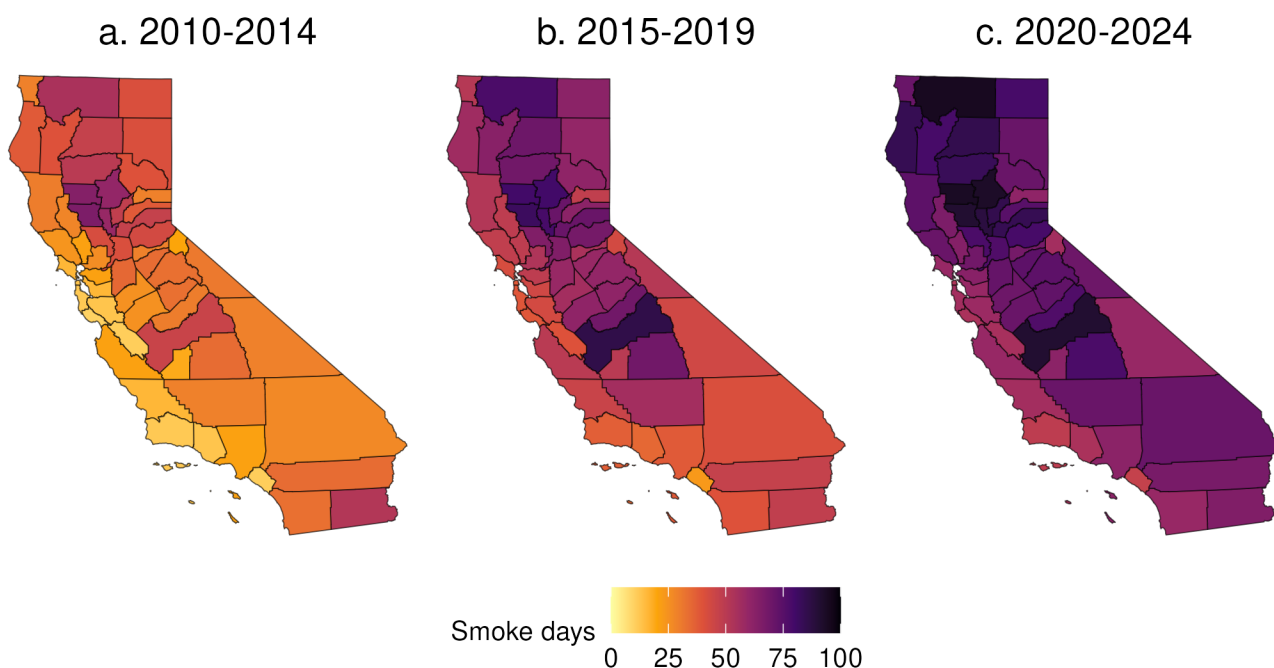
frequency and severity. Several of the state's largest and most destructive wildfires have occurred in recent years, creating public health, environmental, and economic challenges.[161] Smoke, debris, and ash can contain hazardous substances and contaminate water, creating environmental health risks. Wildfires also disrupt access to healthcare, education and employment; increase housing insecurity; and strain support systems. These impacts are often more severe and longer-lasting for lower income communities.[162]

Wildfire smoke contains fine particulate matter less than 2.5 micrometers in diameter (PM_{2.5}) that can enter the lungs and bloodstream. Even short-term exposures to PM_{2.5} have been associated with increased risk of asthma exacerbations, respiratory illness, allergic reactions, stroke, and heart attacks, contributing to higher use of emergency care and hospitalizations.

In California, more counties have been impacted by wildfire smoke over time, with the average annual number of days with smoke per county more than doubling between 2010-2014 and 2020-2024 (Figure 50).

Figure 50

Average Annual Number of Smoke Days by County in California, Comparing Three 5-year Periods: 2010-2014 (a), 2015-2019 (b), and 2020-2024 (c).²⁷



²⁷ Data Source: NOAA Hazard Mapping System (HMS) Smoke Product (daily smoke plumes, aggregated by county)

Public Health Prevention and Response

In response to the devastating 2025 Los Angeles urban wildfires, CDPH coordinated with partners to provide critical support including multi-lingual communications, reduced fees and paperwork, expanded bed capacity, recovery of vital records, protective gear and medical equipment, and activation of the Emergency Prescription Assistance Program. Additional actions focused on environmental clean-up and mental health for survivors and first responders through Psychological First Aid training, Safe Spaces training, and Recognize, Respond, Connect training for school populations, and trauma-responsive training for responders.

CDPH is proactively working to better understand and respond to the health impacts of wildfire smoke by studying how it affects respiratory and cardiovascular ED visits and evaluating how increased prescribed fires, which help prevent larger, more catastrophic fires, could affect air quality and health[163]. CDPH also develops [materials in multiple languages on coping with stress from natural disasters](#), as well as ways for [individuals to protect themselves and their families from smoke exposure](#). CDPH labs are evaluating clean air options for wildfire smoke and assisting with guidance on smoke and ash chemical exposures. The department is also developing a statewide [Wildfire Health Plan](#) with AQI-based safety guidance for residents and county planning.

Community Input to CDPH Climate Action for Health

CDPH convenes a [Climate and Health Equity Advisory Group \(CHEAG\)](#) to support community-informed public health climate action. CHEAG members are a diverse group of Californians with lived experience and expertise on climate change impacts on health equity.

Addressing climate change represents an opportunity to improve living conditions through low or no-emission transportation, energy efficiency and weatherization for housing, healthy local food systems, collaborative planning and recovery that addresses underlying risks, and increasing community decision-making power. CDPH continues to collaborate with partners across State government to leverage California investments and ingenuity to prevent the cause of climate change by reducing fossil fuel burning, while also preparing for climate impacts, and improving health and equity outcomes.

Conclusion

Over the past few decades, the health and well-being of Californians and communities have improved, as reflected in longer life expectancies and reductions in deaths from ischemic heart disease; stroke; COPD; lung, breast, prostate, and colon cancers; HIV/AIDS; and other causes. Death rates declined for all age groups, except among younger adults aged 25–44, primarily due to overdose deaths, and significant health disparities for other population groups persist. Reducing and eliminating these disparities and addressing preventable years of life lost is a key priority to ensure all Californians benefit from public health interventions and innovations and experience good health.

Certain conditions represent growing burdens and threats to population health of all Californians. Assessing, addressing, and monitoring these conditions will be critically important to prioritize going forward:

- Increased rates of behavioral health-related issues linked to lack of social connection, early life adversity, and harmful industries and products are impacting quality of life and driving up premature death rates among young people. Rates of death due to drug overdose, alcohol misuse, and suicide remain high. Evidence of disparities by race and ethnicity, geography, gender, and sexual orientation underscores the importance of implementing multifaceted prevention and treatment approaches.
- Cardiovascular disease, diabetes, cancer, and other chronic diseases remain significant drivers of morbidity and mortality among California's adult population. Socioeconomic advantages like financial stability, access to quality healthcare, and walkable communities with clean air and green space are key protective factors.
- California's population is aging, and Alzheimer's disease prevalence will continue to increase in parallel. Because racial and ethnic diversity among older adults is also increasing, a diverse, population-representative healthcare workforce will be needed to ensure availability of culturally appropriate services.

Many of the public health prevention strategies described throughout this report were supported by the Future of Public Health investment, which has enabled both state and local public health to expand emergency preparedness and response capabilities. Today, California is significantly better prepared to respond to emerging public health threats like H5N1 and extreme weather events than it was before the COVID-19 pandemic.

The Future of Public Health has made possible more rapid disease detection and investigation functions, outreach and education to at-risk communities, healthcare provider guidance and education, and collaboration with other response agencies such as fire and public safety. The Future of Public Health is also an investment in equity, increasing California's capacity to address the root causes of health disparities.

Public health is facing unprecedented challenges in the form of federal funding cuts and actions that undermine science-based research and practice. As California takes action to protect communities and sustain population health gains, public health services must be reimagined and activities with the greatest impact on health and health equity prioritized. This report provides data, analysis, and strategies to both illustrate the current state of public health in California and guide future work. Grounded in science, community perspectives, and multisectoral partnerships, California will continue to lead in public health to protect and improve the health of all Californians.

Appendix

Definitions of Measures

Age-adjusted Death Rate: Takes into account or “controls” for the age distribution of the population where the rate is being assessed. It is the rate that would have existed if the population had the same age distribution as a reference population. This allows for comparisons between populations with differences in age distributions, accounting for the fact that age itself is generally correlated with higher mortality.

Crude Death Rate: Takes the size of the population into account by dividing the number of deaths by the number of people in the population (multiplied by 100,000 for interpretability, i.e. number of deaths per 100,000 people).

Incidence: The number or rate of new cases or injury in a population over a specified period of time, often one year.

Life Expectancy at Birth: A widely used measure that summarizes overall population health and disparities across groups. Its calculation is complex but is generally interpreted as the number of years people born in a particular year are expected to live.

Morbidity: The term morbidity means having a specific illness or health condition. At the population level, morbidity measures incidence, or how much of a disease or condition there is in a population during a year (or other time period); or prevalence, how much of the disease or condition there is in the population at one point in time.

Prevalence: Measures the total number of individuals in a population, both new and existing cases, who have a disease at a specific point in time. Often expressed as a rate.

Rate Ratio: A measure that compares the rate of an event or occurrence in one group to the rate of the same event or occurrence in another group. A large ratio between the two rates indicates a large disparity.

Years Lived with Disability: Measures the non-fatal burden of disease, quantifying the number of years people live with conditions that reduce their quality of life. This measure is based on calculations and modeling done by the [Institute for Health Metrics and Evaluation](#). These models utilize assumptions and multiple data sources to produce reliable California-specific estimates of years lived with disability.

Years of Life Lost: A measure that emphasizes conditions that cause death in younger persons. It is based on summing the number years before age 75 that people die from a particular condition.

Data Dashboards

The following is a list of CDPH data dashboards referenced throughout the report, categorized by section and public health condition or outcome.

Population Health Trends and Leading Causes

- [California Community Burden of Disease Engine \(CCB\)](#)

Early Life Stages

CDPH Maternal, Child and Adolescent Health Division:

- [Pregnancy and Maternal Health Data Dashboards](#)
- [Perinatal/Infant Data Dashboard](#)
- [Breastfeeding Initiation](#)
- [Breastfeeding Intention and Duration](#)
- [ACEs data dashboard](#)

Asthma:

- [Tracking California's Data Explorer Dashboard](#)

CDPH California Tobacco Control Branch:

- [California Tobacco-Related Data Dashboard](#)

CDPH Substance and Addiction Prevention Branch:

- [California Cannabis Surveillance System](#) data dashboards and briefs, including cannabis-related non-fatal [hospitalizations](#) and [ED visits](#) data dashboards

Food Insecurity:

- [Feeding America: Map the Meal Gap](#)

Young Adulthood

- Motor Vehicle Traffic Injury, Homicide, Suicide and Self-Harm data can be found on [EpiCenter](#) and [legacy EpiCenter](#).

Adulthood

CDPH Chronic Disease Surveillance and Research Branch:

- [California Cancer Registry data tools](#)

CDPH Division of Communicable Disease Control:

- [Mpox data dashboard](#)

CDPH Substance and Addiction Prevention Branch:

- [California Overdose Surveillance Dashboard](#)

CDPH Occupational Health Branch:

- [California Engineered Stone Silicosis Dashboard](#)

Public Health Preparedness and the Environment

Division of Communicable Disease Control:

- [Valley fever provisional data dashboard](#)
- [Valley fever year-end data dashboard](#)
- [Respiratory Virus Dashboard](#)

References

1. Grant, Luke, et al. (2025). [*Global emergence of unprecedented lifetime exposure to climate extremes*](#). *Nature*, 641(8062). 374-379. [dx.doi.org/10.1038/s41586-025-08907-1](https://doi.org/10.1038/s41586-025-08907-1).
2. [*Connecting Early Childhood Development to Climate Change: Insights for Communicators*](#). (2025). Frameworks Institute. www.frameworksinstitute.org/app/uploads/2025/09/Harvard-Kids-and-Climate-Long-Report_V6.pdf.
3. Frieden, T. R. (2010). [*A framework for public health action: the health impact pyramid*](#). *Am J Public Health*, 100(4). 590-5. www.ncbi.nlm.nih.gov/pubmed/20167880.
4. Krieger, Nancy. (2012). [*Methods for the Scientific Study of Discrimination and Health: An Ecosocial Approach*](#). *American Journal of Public Health*, 102(5). 936-945. ajph.aphapublications.org/doi/10.2105/AJPH.2011.300544.
5. [*A Conceptual Framework for Action on the Social Determinants of Health*](#). (2010). World Health Organization. iris.who.int/server/api/core/bitstreams/ca294183-3263-470f-a5fe-8e124ec48c72/content.
6. Future of Public Health Work Group. (2021). [*Investments and Capabilities Needed for the Future Public Health System*](#). California Department of Public Health. www.cdph.ca.gov/Programs/DO/CDPH%20Document%20Library/Future-of-Public-Health-Memo.pdf.
7. [*The 2024-25 Budget: Future of Public Health Budget Solution*](#). (2024). lao.ca.gov/Publications/Report/4904.
8. [*The Impact of Chronic Underfunding on America's Public Health System: Trends, Risks, and Recommendations*](#). (2024). Trust for America's Health. www.tfah.org/wp-content/uploads/2024/08/2024-PublicHealthFunding-FINAL.pdf.
9. [*Public Health Infrastructure in Crisis*](#). (2025). Trust for America's Health. www.tfah.org/report-details/funding-report-2025/.
10. [*Climate change widespread, rapid, and intensifying*](#). (2021). The Intergovernmental Panel on Climate Change. Available from: www.ipcc.ch/2021/08/09/ar6-wg1-20210809-pr/.
11. Johnson, Hans, et al. [*California's Aging Population*](#). (2025). www.ppac.org/publication/californias-aging-population/.
12. Kelleher, Chelsea , Rozier, Kelly, and Group, Aurrera Health. [*Substance Use Almanac- 2025 Edition*](#). (2025). California Health Care Foundation. www.chcf.org/resource/substance-use-in-california-almanac/.
13. [*Protecting Youth Mental Health: The U.S. Surgeon General's Advisory*](#). (2021). Office of the Surgeon General. www.ncbi.nlm.nih.gov/books/NBK575984/.

14. [Our Epidemic of Loneliness and Isolation The U.S. Surgeon General's Advisory on the Healing Effects of Social Connection and Community.](#) (2023). Office of the Surgeon General. www.ncbi.nlm.nih.gov/books/NBK595227/pdf/Bookshelf_NBK595227.pdf.
15. Dawson, Lindsey and Kates, Jennifer. [Overview of President Trump's Executive Actions Impacting LGBTQ+ Health.](#) (2025). Kaiser Family Foundation. Available from: www.kff.org/other-health/overview-of-president-trumps-executive-actions-impacting-lgbtq-health/.
16. Kim, Juliana. [How Trump's tax cut and policy bill aims to 'supercharge' immigration enforcement.](#) NPR, (2025). www.npr.org/2025/07/03/g-s1-75609/big-beautiful-bill-ice-funding-immigration.
17. Wallace, Helen M, et al. (1975). [Patterns of infant and early childhood mortality in the California Project of a collaborative Inter-American Study.](#) iris.paho.org/handle/10665.2/27701.
18. Ely, Danielle M. and Driscoll, Anne K. [Infant Mortality in the United States, 2022: Data From the Period Linked Birth/Infant Death File.](#) (2024). Centers for Disease Control and Prevention. www.cdc.gov/nchs/data/nvsr/nvsr73/nvsr73-05.pdf.
19. [U.S. Life Expectancy by State and Sex for 2021.](#) (2021). Centers for Disease Control and Prevention. Available from: www.cdc.gov/nchs/data-visualization/state-life-expectancy/index_2021.htm.
20. Kirkbride, James B., et al. (2024). [The social determinants of mental health and disorder: evidence, prevention and recommendations.](#) World Psychiatry, 23(1). 58-90. doi.org/10.1002/wps.21160.
21. American Public Health Association. [Structural Racism is a Public Health Crisis: Impact on the Black Community.](#) (2020). [cited 2026 January 13]; Available from: www.apha.org/policy-and-advocacy/public-health-policy-briefs/policy-database/2021/01/13/structural-racism-is-a-public-health-crisis.
22. Dieleman, J. L., et al. (2020). [US Health Care Spending by Payer and Health Condition, 1996-2016.](#) JAMA, 323(9). 863-884. www.ncbi.nlm.nih.gov/pubmed/32125402.
23. [WHO guideline for non-surgical management of chronic primary low back pain in adults in primary and community care settings.](#) (2023). www.who.int/publications/i/item/9789240081789.
24. [16 Ways to Avoid Back Pain.](#) (2025). WebMD. [cited 2025; Available from: www.webmd.com/back-pain/tips-for-pain-relief.
25. [Healthy Living Prevent Back Pain.](#) (2025). Office of Disease Prevention and Health Promotion. [cited 2025; Available from: odphp.health.gov/myhealthfinder/healthy-living/safety/prevent-back-pain.
26. Boudreaux, M. H. , Golberstein, E., and McAlpine, D. D. (2016). [The long-term impacts of Medicaid exposure in early childhood: Evidence from the](#)

- [program's origin](#). Journal of Health Economics, 45. 161-175.
pubmed.ncbi.nlm.nih.gov/26763123/.
27. Heckman, J. J. (2011). [The economics of inequality: The value of early childhood education](#). American Educator, 31-47.
files.eric.ed.gov/fulltext/EJ920516.pdf.
 28. Karoly, L. A., Kilburn, M. R., and Cannon, J. S., *Early Childhood Interventions: Proven Results, Future Promise*. (2005).
 29. [Improving Access to Care for Pregnant and Postpartum People With Opioid Use Disorder: Recommendations for Policymakers](#). (2024). American Medical Association. www.end-overdose-epidemic.org/sites/end_overdose/files/2025-11/AMA-Manatt-2024-Improving-Access-to-Care-Pregnant-Parenting-People-with-SUD_July-2024.pdf.
 30. Center for Family Health. [Maternal Mental Health Dashboard](#). (2025). California Department of Public Health. Available from: www.cdph.ca.gov/Programs/CFH/DMCAH/surveillance/Pages/Maternal-Mental-Health.aspx.
 31. [Early Childhood Health and Development](#). (2022). American Academy of Pediatrics. [cited 2025 December 16]; Available from: www.aap.org/en/patient-care/early-childhood/early-childhood-health-and-development/.
 32. [About Congenital Syphilis](#). (2025). Centers for Disease Control and Prevention. Available from: www.cdc.gov/syphilis/about/about-congenital-syphilis.html.
 33. [Sexually Transmitted Infections Treatment Guidelines](#). (2021). Centers for Disease Control and Prevention. Available from: www.cdc.gov/std/treatment-guidelines/syphilis-pregnancy.htm.
 34. [Social Drivers of Health](#). (2023). American Academy of Pediatrics. [cited 2025 December 23]; Available from: www.aap.org/en/patient-care/early-childhood/early-childhood-health-and-development/social-drivers-of-health/.
 35. [About Adverse Childhood Experiences](#). (2023). Centers for Disease Control and Prevention. [cited 2025 December 23]; Available from: www.cdc.gov/aces/about/.
 36. Bhushan, Devika, et al. (2020). Roadmap for Resilience: The California Surgeon General's Report on Adverse Childhood Experiences, Toxic Stress, and Health.
 37. Bethell, C., et al. (2019). [Positive childhood experiences and adult mental and relational health in a statewide sample: associations across adverse childhood experiences levels](#). Jama Pediatrics, 173(11). 1110.
jamanetwork.com/journals/jamapediatrics/fullarticle/2749336.
 38. Kim, T., Jang, C. Y., and Kim, M. (2020). [Socioecological Predictors on Psychological Flourishing in the US Adolescence](#). International Journal of Environmental Research and Public Health, 17(21).
www.mdpi.com/1660-4601/17/21/7917.

39. Miller, A. B., Esposito-Smythers, C., and Leichtweis, R. N. (2015). [*Role of Social Support in Adolescent Suicidal Ideation and Suicide Attempts*](#). Journal of Adolescent Health, 56(3). 286-292.
www.sciencedirect.com/science/article/abs/pii/S1054139X14006946?via%3Dihub.
40. [*Building Resilience in Children*](#). (2014). American Academy of Pediatrics. [cited 2025 December 23]; Available from:
www.healthychildren.org/English/healthy-living/emotional-wellness/Building-Resilience/Pages/Building-Resilience-in-Children.aspx.
41. Schotanus-Dijkstra, M., et al. (2017). [*The longitudinal relationship between flourishing mental health and incident mood, anxiety and substance use disorders*](#). European Journal of Public Health, 27(3). 563-568.
academic.oup.com/eurpub/article/27/3/563/2452354.
42. *The National Survey of Children's Health (NSCH)*. (2022-2023). Child and Adolescent Health Measurement Initiative. Health Resources U.S. Department of Health and Human Services.
43. Rubin, K. H., Coplan, R. J., and Bowker, J. C. (2009). [*Social Withdrawal in Childhood*](#). Annual Review of Psychology, 60. 141-171.
www.annualreviews.org/content/journals/10.1146/annurev.psych.60.110707.163642.
44. Injury and Violence Prevention Branch. [*Positive and Adverse Childhood Experiences \(PACES\)*](#). California Department of Public Health. [cited 2025 December 23]; Available from:
www.cdph.ca.gov/Programs/CCDPPH/DCDIC/SACB/Pages/PACES-resources.aspx.
45. Verner-Filion, Jérémie, et al. (2025). [*Extracurricular Activities—Extra Beneficial: The Role of Motivation for Extracurricular Activities on Outcomes in High-School Students*](#). Journal of Adolescence, 97(7). 1869-1881.
dx.doi.org/10.1002/jad.70008.
46. Barnhart, S., et al. (2022). [*Supportive Neighborhoods, Family Resilience and Flourishing in Childhood and Adolescence*](#). Children-Basel, 9(4).
www.mdpi.com/2227-9067/9/4/495.
47. DiGuseppi, Graham, et al. [*Early Success for California's "Live Beyond" Adverse Childhood Experiences Public Awareness Campaign*](#). (2025). RAND. [cited 2025 December 23]; Available from:
www.rand.org/pubs/research_briefs/RBA3039-1.html.
48. Lizzo, Jenna M., Goldin, Jennifer, and Cortes, Sara. [*Pediatric Asthma*](#). (2024). National Library of Medicine.
www.ncbi.nlm.nih.gov/books/NBK551631/.
49. Juniper, E. F., et al. (2004). [*Relationship between quality of life and clinical status in asthma: a factor analysis*](#). European Respiratory Journal, 23(2). 287-291. dx.doi.org/10.1183/09031936.04.00064204.
50. Sullivan, K. and Thakur, N. (2020). [*Structural and Social Determinants of Health in Asthma in Developed Economies: a Scoping Review of Literature*](#)

- Published Between 2014 and 2019*. Current Allergy and Asthma Reports, 20(2). link.springer.com/article/10.1007/s11882-020-0899-6.
51. Millett, C., et al. (2013). [*Hospital Admissions for Childhood Asthma After Smoke-Free Legislation in England*](#). Pediatrics, 131(2). E495-E501. publications.aap.org/pediatrics/article-abstract/131/2/e495/31862/Hospital-Admissions-for-Childhood-Asthma-After?redirectedFrom=fulltext.
 52. Beck, A. F., et al. (2014). [*Role of Financial and Social Hardships in Asthma Racial Disparities*](#). Pediatrics, 133(3). 431-439. pmc.ncbi.nlm.nih.gov/articles/PMC3934338/.
 53. Faust, J., August, L., Bangia, K., Galaviz, V., Leichty, J., Prasad, S., Schmitz, R., Slocombe, A., Welling, R., Wieland, W., and Zeise, L. . [*Update to the California Communities Environmental Health Screening Tool, CalEnviroScreen 3.0*](#). (2017). oehha.ca.gov/sites/default/files/media/downloads/calenviroscreen/report/ces3report.pdf.
 54. Vohra, K., et al. (2025). [*The health burden and racial-ethnic disparities of air pollution from the major oil and gas lifecycle stages in the United States*](#). Science Advances, 11(34). doi.org/10.1126/sciadv.adu2241.
 55. [*State of the Air*](#). (2020). American Lung Association. Available from: www.stateoftheair.org/assets/SOTA-2020.pdf.
 56. [*Asthma and Air Pollution*](#). California Air Resources Board. [cited 2025 December 23]; Available from: ww2.arb.ca.gov/resources/asthma-and-air-pollution.
 57. Zarate-Gonzalez, Gilda, Brown, Paul, and Cisneros, Ricardo. (2024). [*Costs of Air Pollution in California's San Joaquin Valley: A Societal Perspective of the Burden of Asthma on Emergency Departments and Inpatient Care*](#). Journal of Asthma and Allergy, Volume 17. 369-382. dx.doi.org/10.2147/jaa.s455745.
 58. Zarate-Gonzalez, Gilda, Brown, Paul, and Cisneros, Ricardo. (2025). [*Assessing public support for air pollution mitigation and control policies: health, socioeconomic, and ideological predictors in an overburdened and vulnerable region of the U.S.*](#) BMC Public Health, 25(1). dx.doi.org/10.1186/s12889-025-21366-7.
 59. Lerner, Richard M. and Steinberg, Laurence D., *Handbook of adolescent psychology*. 3rd ed. (2009), Hoboken, NJ: John Wiley & Sons.
 60. Berenbaum, S. A., Beltz, A. M., and Corley, R. (2015). [*The Importance of Puberty for Adolescent Development: Conceptualization and Measurement*](#). Advances in Child Development and Behavior, 48. 53-92. www.sciencedirect.com/science/article/pii/S0065240714000305.
 61. Andersen, S. L. (2016). [*Commentary on the special issue on the adolescent brain: Adolescence, trajectories, and the importance of prevention*](#). Neuroscience and Biobehavioral Reviews, 70. 329-333. doi.org/10.1016/j.neubiorev.2016.07.012.

62. Monroe, P., et al. (2023). [*Racial/ethnic differences in social determinants of health and health outcomes among adolescents and youth ages 10-24 years old: a scoping review*](#). *Bmc Public Health*, 23(1). doi.org/10.1186/s12889-023-15274-x.
63. Eiland, L. and Romeo, R. D. (2013). [*Stress and the Developing Adolescent Brain*](#). *Neuroscience*, 249. 162-171. doi.org/10.1016/j.neuroscience.2012.10.048.
64. Armstrong-Carter, E. and Telzer, E. H. (2025). [*The development of prosocial risk-taking behavior: Mechanisms and opportunities*](#). *Child Development Perspectives*, 19(2). 63-71. srcd.onlinelibrary.wiley.com/doi/epdf/10.1111/cdep.12525.
65. Sieving, R. E., et al. (2017). [*Youth-Adult Connectedness: A Key Protective Factor for Adolescent Health*](#). *American Journal of Preventive Medicine*, 52(3). S275-S278. www.sciencedirect.com/science/article/pii/S0749379716303233?via%3Dihub.
66. [*The Health Consequences of Smoking—50 Years of Progress A Report of the Surgeon General*](#). (2014). Office on Smoking and Health National Center for Chronic Disease Prevention and Health Promotion. Centers for Disease Control and Prevention. U.S. Department of Health and Human Services. stacks.cdc.gov/view/cdc/21569.
67. [*The Toll of Tobacco in California*](#). (2025). Campaign for Tobacco Free Kids. June 18, 2025]; Available from: www.tobaccofreekids.org/problem/toll-us/california.
68. [*Nicotine and The Young Brain*](#). (2022). Truth Initiative. truthinitiative.org/sites/default/files/media/files/2022/06/Nicotine_Factsheet_FINAL_061722.pdf.
69. California Health Interview Survey. CHIS 2019, CHIS 2020, CHIS 2023, and CHIS 2024 Adult Files. (2025). UCLA Center for Health Policy Research. Los Angeles, CA.
70. California Health Interview Survey. CHIS 2023 and CHIS 2024 Adult Files. (2025). UCLA Center for Health Policy Research. Los Angeles, CA.
71. California Health Interview Survey. CHIS 2022 and CHIS 2023 Adult Files. (2025). UCLA Center for Health Policy Research. Los Angeles, CA.
72. Mills, S. D., et al. (2023). [*Using systems science to advance health equity in tobacco control: a causal loop diagram of smoking*](#). *Tobacco Control*, 32(3). 287-295. tobaccocontrol.bmj.com/content/32/3/287.
73. Clodfelter, R; Dutra, L.M.; Bradfield, B.; Levine, B., Baum, L.; Russell, S.; Sumith, M. (2025). Annual Results Report for the California Youth Tobacco Survey 2024. RTI International.
74. [*30 Years of Success and Innovation: Celebrating the Past, Present, and Future of Tobacco Control in California*](#). (2020). California Tobacco Control Program (CTCP). California Department of Public Health. www.cdph.ca.gov/Programs/CCDPHP/DCDIC/CTCB/CDPH%20Document

- %20Library/ResearchandEvaluation/FactsandFigures/30YearsOfSuccessAndInnovation.pdf.
75. California Cancer Registry. [SEER*Stat Database: Incidence - California](#). (2025). California Department of Public Health. Available from: www.ccrca.org/.
 76. Lightwood, J. and Glantz, S. A. (2016). [Smoking Behavior and Healthcare Expenditure in the United States, 1992-2009: Panel Data Estimates](#). Plos Medicine, 13(5). doi.org/10.1371/journal.pmed.1002020.
 77. Substance and Addiction Prevention Branch. [Health Considerations for Youth and Young Adults](#). (2024). California Department of Public Health. [cited 2026 January 2]; Available from: www.cdph.ca.gov/Programs/CCDPHP/sapb/cannabis/Pages/You th-and-Young-Adults.aspx.
 78. Substance and Addiction Prevention Branch. [Cannabis \(Marijuana\) Use Disorder](#). (2023). California Department of Public Health. [cited 2026 January 2]; Available from: www.cdph.ca.gov/Programs/CCDPHP/sapb/cannabis/Pages/Ca nnabis-Use-Disorder.aspx.
 79. [Food Security in the U.S. - Measurement](#). (2025). U.S. Department of Agriculture. Available from: www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/measurement#security.
 80. DeParle, J. (2025). [Trump administration to stop measuring food insecurity](#). www.nytimes.com/2025/09/20/us/politics/trump-hunger-report-data.html.
 81. Au, L. E., et al. (2019). [Household Food Insecurity Is Associated with Higher Adiposity among US Schoolchildren Ages 10-15 Years: The Healthy Communities Study](#). Journal of Nutrition, 149(9). 1642-1650. doi.org/10.1093/jn/nxz108.
 82. Gregory, C. A. & Coleman-Jensen, A. [Food insecurity, chronic disease, and health among working-age adults](#). (2017). ers.usda.gov/sites/default/files/_laserfiche/publications/84467/ERR-235pdf?v=48084.
 83. Feeding America. [Food Insecurity among the Overall Population in California](#). (2024). Available from: map.feedingamerica.org/county/2023/overall/california.
 84. Rabbitt, Matthew P. , et al. [Household food security in the United States in 2024](#). (2025). ers.usda.gov/sites/default/files/_laserfiche/publications/113623/ERR-358.pdf?v=19404.
 85. Khairunnisa, N. (2024). [A Shift in Hunger: U.S. Food Policy and What We Learned from the Pandemic](#). www.prb.org/articles/a-shift-in-hunger-u-s-food-policy-and-what-we-learned-from-the-pandemic/.
 86. [Food security of adults whose income is less than 200% of the Federal Poverty Level \(California\), 2011-2023](#). (2024). UCLA Center for Health Policy Research. Los Angeles, CA. ask.chis.ucla.edu.

87. Healthy People 2030. [Food Insecurity](#). Office of Disease Prevention and Health Promotion, Office of the Assistant Secretary for Health, Office of the Secretary, U.S. Department of Health and Human Services. [cited 2026 January 9]; Available from: odphp.health.gov/healthypeople/priority-areas/social-determinants-health/literature-summaries/food-insecurity.
88. [Governor Newsom issues executive order to crack down on ultra-processed foods and further investigate food dyes](#). (2025). State of California. www.gov.ca.gov/2025/01/03/governor-newsom-issues-executive-order-to-crack-down-on-ultra-processed-foods-and-further-investigate-food-dyes/.
89. Zhao, L., Lucado, J., and Stocks, C., *Emergency Department Visits Associated with Motor Vehicle Accidents, 2006*, in *Healthcare Cost and Utilization Project (HCUP) Statistical Briefs*. 2011: Rockville (MD).
90. CDPH Vital Statistics Death Data and HCAI Hospital Discharge and Emergency Department Visit Data. (2024).
91. Pappas, Stephanie. (2022). [With traffic deaths on the rise, psychologists are being called on to make driving safer](#). Monitor on Psychology, 53(4). www.apa.org/monitor/2022/06/feature-traffic-safety.
92. [Complete Streets Transformations Six Scenarios to Transform Arterials using a Complete Streets Implementation Strategy](#). (2022). Department of Transportation. highways.dot.gov/sites/fhwa.dot.gov/files/2022-02/2022_CS_Transformations_Doc_508.pdf.
93. Smart Growth America. [What are Complete Streets?](#) (2025). National Complete Streets Coalition. Available from: www.smartgrowthamerica.org/programs-and-coalitions/national-complete-streets-coalition/about/.
94. Hall, C. (2025). [COVID-19's Impact on Gun Violence in America](#). www.americanprogress.org/article/covid-19s-impact-on-gun-violence-in-america/.
95. Injury and Violence Prevention Branch. (2025). CaIVDRS. California Department of Public Health.
96. Wilkins, Natalie, *Connecting the dots: an overview of the links among multiple forms of violence*. (2014): Centers for Disease Control and Prevention, Prevention Institute.
97. [Types of Depression](#). (2023). Substance Abuse and Mental Health Services Administration. [cited 2025 December 22]; Available from: www.samhsa.gov/mental-health/what-is-mental-health/conditions/depression.
98. National Center for Chronic Disease Prevention and Health Promotion Division of Population Health. [BRFSS Prevalence & Trends Data](#). (2025). Centers for Disease Control and Prevention. Available from: www.cdc.gov/brfss/brfssprevalence/.

99. [CHIS 2020-2023 Teen & Adult Datasets](#). UCLA Center for Health Policy Research. Los Angeles, CA. healthpolicy.ucla.edu/our-work/california-health-interview-survey-chis.
100. [Risk and Protective Factors for Suicide](#). (2024). Centers for Disease Control and Prevention. [cited 2025 December 19]; Available from: www.cdc.gov/suicide/risk-factors/index.html.
101. [Health Disparities in Suicide](#). (2024). Centers for Disease Control and Prevention. [cited 2025 June 24, 2025]; Available from: www.cdc.gov/suicide/disparities/index.html.
102. [Suicide Data and Statistics](#). (2025). Centers for Disease Control and Prevention. Available from: www.cdc.gov/suicide/facts/data.html.
103. Center for Healthy Communities Injury and Violence Prevention Branch. [EpiCenter: California Injury Data Online](#). (2025). California Department of Public Health. Available from: skylab4.cdph.ca.gov/epicenter/_w_16e1ed0c/?Home-welcome.
104. Hilser, J. R., et al. (2024). [COVID-19 Is a Coronary Artery Disease Risk Equivalent and Exhibits a Genetic Interaction With ABO Blood Type](#). *Arteriosclerosis Thrombosis and Vascular Biology*, 44(11). 2321-2333. doi.org/10.1161/atvbaha.124.321001.
105. Division for Heart Disease and Stroke Prevention. [Million Hearts® Learn & Prevent](#). (2019). Centers for Disease Control and Prevention. Available from: millionhearts.hhs.gov/learn-prevent/.
106. [Diabetes Overview: What is Diabetes?](#) (2023). National Institute of Diabetes and Digestive and Kidney Disease. [cited 2025 June 16]; Available from: www.niddk.nih.gov/health-information/diabetes/overview/what-is-diabetes.
107. [Diabetes](#). (2025). World Health Organization. Available from: www.who.int/health-topics/diabetes.
108. [Diabetes Basics](#). (2024). Centers for Disease Control and Prevention. Available from: www.cdc.gov/diabetes/about/index.html.
109. [Prediabetes – Your Chance to Prevent Type 2 Diabetes](#). (2024). Centers for Disease Control and Prevention. [cited 2025 June 16]; Available from: www.cdc.gov/diabetes/prevention-type-2/prediabetes-prevent-type-2.html.
110. [Insulin Resistance & Prediabetes](#). (2025). National Institute of Diabetes and Digestive and Kidney Diseases. Available from: www.niddk.nih.gov/health-information/diabetes/overview/what-is-diabetes/prediabetes-insulin-resistance.
111. [California Health Interview Survey \(CHIS\): AskCHIS Ever diagnosed with Diabetes \(California\). 2012-2023](#). (2025). UCLA Center for Health Policy Research. Los Angeles, CA. healthpolicy.ucla.edu/askchis/.
112. [Kidney Failure and Diabetes](#). (2024). Centers for Disease Control and Prevention. Available from: www.cdc.gov/diabetes/data-research/research/kidney-failure-diabetes.html.

113. [Kidney failure in California: 2023](https://www.kidneyfund.org/sites/default/files/media/documents/California%202023.pdf). (2023). American Kidney Fund. Available from: www.kidneyfund.org/sites/default/files/media/documents/California%202023.pdf.
114. Echouffo-Tcheugui, J. B. and Selvin, E. (2021). [Prediabetes and What It Means: The Epidemiological Evidence](https://doi.org/10.1146/annurev-publhealth-090419-102644/). Annual Review of Public Health, 42. 59-77. [www.doi.org/10.1146/annurev-publhealth-090419-102644/](https://doi.org/10.1146/annurev-publhealth-090419-102644/).
115. [Cancer Facts & Figures 2025](https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/annual-cancer-facts-and-figures/2025/2025-cancer-facts-and-figures-acf.pdf). (2025). American Cancer Society. www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/annual-cancer-facts-and-figures/2025/2025-cancer-facts-and-figures-acf.pdf.
116. Allen, Elizabeth M, et al. (2017). [Barriers to Care and Healthcare Utilization among the Publicly Insured](https://pubmed.ncbi.nlm.nih.gov/articles/PMC5309146/). Medical Care, 55(3). [pmc.ncbi.nlm.nih.gov/articles/PMC5309146/](https://pubmed.ncbi.nlm.nih.gov/articles/PMC5309146/).
117. [Alcohol Harms Prevention Initiative Program](https://www.cdph.ca.gov/Programs/CCDCPHP/sapb/CDPH%20Document%20Library/AHPI-Fact-Sheet_ADA.pdf). (2022). Substance and Addiction Prevention Branch. California Department of Public Health. www.cdph.ca.gov/Programs/CCDCPHP/sapb/CDPH%20Document%20Library/AHPI-Fact-Sheet_ADA.pdf.
118. Tan, Sean and Ponce, A. Ninez. [Gambling and Associated Health Risks in California](https://healthpolicy.ucla.edu/sites/default/files/2024-09/gambling-and-associated-health-risks-california-fact-sheet-2024.pdf). (2024). healthpolicy.ucla.edu/sites/default/files/2024-09/gambling-and-associated-health-risks-california-fact-sheet-2024.pdf.
119. Division of Communicable Disease Control STD Control Branch, Center for Infectious Diseases. [Sexually Transmitted Infection Data](https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/STD-Data.aspx). (2024). California Department of Public Health. [cited 2026 January 6]; Available from: www.cdph.ca.gov/Programs/CID/DCDC/Pages/STD-Data.aspx.
120. Center for Infectious Diseases Division of Communicable Disease Control. [Mpox Data in California](https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/Mpox-Data.aspx). (2026). California Department of Public Health. [cited 2026 January 15]; Available from: www.cdph.ca.gov/Programs/CID/DCDC/Pages/Mpox-Data.aspx.
121. [Fatal Occupational Injuries in California 2013-2023](https://www.dir.ca.gov/dosh/CFOI/California-Occupational-Fatalities.pdf). (2025). California Department of Industrial Relations. www.dir.ca.gov/dosh/CFOI/California-Occupational-Fatalities.pdf.
122. National Institute for Occupational Safety and Health (NIOSH) Division of Safety Research. [NIOSH Employed Labor Force \(ELF\) Query System](https://wwwwn.cdc.gov/wisards/cps/cps_estimates.aspx). (2024). Centers for Disease Control and Prevention. [cited 2025 June 20]; Available from: wwwwn.cdc.gov/wisards/cps/cps_estimates.aspx.
123. Fazio, J. C., et al. (2023). [Silicosis Among Immigrant Engineered Stone \(Quartz\) Countertop Fabrication Workers in California](https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2807615). Jama Internal Medicine, 183(9). 991-998. jamanetwork.com/journals/jamainternalmedicine/fullarticle/2807615.
124. Occupational Health Branch. [Silicosis](https://www.cdph.ca.gov/Programs/CCDCPHP/DEODC/OHB/Pages/silicosis.aspx). (2025). California Department of Public Health. [cited 2025 December 22]; Available from: www.cdph.ca.gov/Programs/CCDCPHP/DEODC/OHB/Pages/silicosis.aspx.

125. Occupational Health Branch. [*Engineered Stone \(ES\) Silicosis Surveillance Dashboard*](#). (2025). California Department of Public Health. [cited 2025; Available from: www.cdph.ca.gov/Programs/CCDCPHP/DEODC/OHB/Pages/essda_dashboard.aspx].
126. Occupational Health Branch. [*Hazard Alert for Workers: Silica dust from countertop work can harm you!*](#) (2025). California Department of Public Health. [cited 2025 December 23]; Available from: www.cdph.ca.gov/Programs/CCDCPHP/DEODC/OHB/CDPH%20Document%20Library/Silica%20Hazard%20Alert_Workers_2025.pdf].
127. Occupational Health Branch. [*Silicosis for Health Care Providers*](#). (2025). California Department of Public Health. [cited 2025 December 22]; Available from: www.cdph.ca.gov/Programs/CCDCPHP/DEODC/OHB/Pages/silicosisproviders.aspx].
128. Occupational Health Branch. (2025). (Unpublished data) California Occupational Lead Poisoning Surveillance Dashboard. California Department of Public Health.
129. [*Social determinants of health and dementia risk: A summary of the science and public health impact*](#). (2024). BOLD Public Health Center of Excellence on Dementia Risk Reduction. Alzheimer's Association. www.alz.org/getmedia/bbdf2c43-90c7-4f81-8d50-b49567553592/sdoh-dementia-risk-compiled-report.pdf.
130. [*California Department of Aging Highlights Essential, Free Resources to Support Caregivers for Older Adults and Adults with Disabilities During National Family Caregivers Month*](#). (2024). California Department of Aging. Available from: aging.ca.gov/Newsroom/Press_Release/National_Family_Caregivers_Month/.
131. [*California Health Interview Survey \(CHIS\)*](#). (2025). UCLA Center for Health Policy Research. Available from: healthpolicy.ucla.edu/our-work/california-health-interview-survey-chis.
132. Reynolds, Sharon. [*Hearing aids slow cognitive decline in people at high risk*](#). (2023). U.S. Department of Health and Human Services National Institutes of Health. Available from: www.nih.gov/news-events/nih-research-matters/hearing-aids-slow-cognitive-decline-people-high-risk.
133. Livingston, G., et al. (2024). [*Dementia prevention, intervention, and care: 2024 report of the Lancet standing Commission*](#). *Lancet*, 404(10452). 572-628. [https://doi.org/10.1016/s0140-6736\(24\)01296-0](https://doi.org/10.1016/s0140-6736(24)01296-0).
134. Parkinson's Foundation. [*Understanding Parkinson's Statistics*](#). (2025). [cited 2025; Available from: www.parkinson.org/understanding-parkinsons/statistics].
135. Wallin, Mitchell T., et al. (2019-March-05). [*The prevalence of MS in the United States*](#). *Neurology*, 92(10). www.neurology.org/doi/full/10.1212/WNL.0000000000007035.

136. Kwon, Sue Hyun, et al. (2024-4-14). [*Annual incidence of Multiple Sclerosis in a large Health Care System in the US from 2014 to 2020*](#) (P11-6.003). *Neurology*, 102(7_supplement_1).
www.neurology.org/doi/10.1212/WNL.0000000000204732.
137. [*National ALS Registry Dashboard*](#). (2023). Agency for Toxic Substances and Disease Registry. Available from:
www.cdc.gov/als/dashboard/index.html.
138. Yohrling, George, et al. (2020). [*Prevalence of Huntington's Disease in the US*](#). *Neurology*, 94(15).
www.neurology.org/doi/10.1212/WNL.94.15_supplement.954.
139. Medina, Alex , et al. (2022). [*Prevalence and Incidence of Huntington's Disease: An Updated Systematic Review and Meta-Analysis*](#). *Mov Disord.*
movementdisorders.onlinelibrary.wiley.com/doi/10.1002/mds.29228.
140. [*Prevalence of Multiple Sclerosis*](#). (2025). The National Multiple Sclerosis Society. Available from: www.nationalmssociety.org/about-the-society/who-we-are/research-we-fund/ms-prevalence.
141. [*Multiple Sclerosis Symptoms*](#). (2025). The National Multiple Sclerosis Society. Cited 2025; Available from: www.nationalmssociety.org/understanding-ms/what-is-ms/ms-symptoms.
142. Romero-Pinel, Lucía, et al. (2022). *The age at onset of relapsing-remitting multiple sclerosis has increased over the last five decades*. *Multiple Sclerosis and Related Disorders*, 68. 104103.
143. Wallin, Mitchell T, et al. (2019). *Global, regional, and national burden of multiple sclerosis 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016*. *The Lancet Neurology*, 18(3). 269-285.
144. Brown, Robert H. and Al-Chalabi, Ammar. (2017). *Amyotrophic Lateral Sclerosis*. *New England Journal of Medicine*, 377(2). 162-172.
145. [*Amyotrophic Lateral Sclerosis \(ALS\)*](#). (2025). National Institute of Neurological Disorders and Stroke. Available from:
www.ninds.nih.gov/health-information/disorders/amyotrophic-lateral-sclerosis-als.
146. Foroud, T., et al. (1999). [*Differences in duration of Huntington's disease based on age at onset*](#). *J Neurol Neurosurg Psychiatry*, 66(1). 52-6.
www.ncbi.nlm.nih.gov/pubmed/9886451.
147. Risby-Jones, Grace, et al. (2024). *Sex differences in Huntington's disease from a neuroinflammation perspective*. *Frontiers in Neurology*, 15.
148. Center for Healthy Communities Injury and Violence Prevention Branch. [*Deaths*](#). (2025). EpiCenter: California Injury Data Online. California Department of Public Health. Available from:
skylab4.cdph.ca.gov/epicenter/_w_34c43232/?Deaths.
149. [*California's Behavioral Health Continuum Across the Lifespan: Addressing the Compounding Threats to Older Adult Mental Health*](#). (2024). California Health and Human Services. Available from:

- www.chhs.ca.gov/wp-content/uploads/2024/12/Older-Adult-Behavioral-Health-in-California_Overview_110824.pdf.
150. [Older Adult Behavioral Health Resources for Stakeholders](#). (2025). California Department of Aging. Available from: aging.ca.gov/Older-Adult-Behavioral-Health-Resources-for-Stakeholders/.
 151. [California's Behavioral Health Older Adults Survey Report](#). (2025). Insure the Uninsured Project. West Health California Department of Aging. aging.ca.gov/download.ashx?IE0rcNUV0zYheTXkDXbPAw%3D%3D.
 152. National Outbreak Reporting System. [About the National Outbreak Reporting System \(NORS\)](#). (2025). Centers for Disease Control and Prevention. [cited 2025; Available from: www.cdc.gov/nors/about/index.html.
 153. Center for Infectious Diseases. [Valley Fever Basics](#). (2025). California Department of Public Health. [cited 2025; Available from: www.cdph.ca.gov/Programs/CID/DCDC/Pages/ValleyFeverBasics.aspx.
 154. [Outdoor workers need more protections from Valley fever](#). (2025). UC Berkeley Public Health. Available from: publichealth.berkeley.edu/articles/spotlight/research/outdoor-workers-need-more-protections-from-valley-fever.
 155. [Weather Related Fatality and Injury Statistics](#). (2025). National Weather Service. Available from: www.weather.gov/hazstat.
 156. [Heat and Health](#). (2024). World Health Organization. [cited 2025; Available from: www.who.int/news-room/fact-sheets/detail/climate-change-heat-and-health.
 157. Smith, Allison , et al. [Occupational Heat-Related Illness Claims Among California Workers, 2000–2022](#). (2024). www.cdph.ca.gov/Programs/CCDCPHP/DEODC/OHB/CDPH%20Document%20Library/OccupationalHeatRelatedIllnessClaimsAmongCaliforniaWorkers.pdf.
 158. [Protecting Californians From Extreme Heat: A State Action Plan to Build Community Resilience](#). (2022). California Natural Resources Agency. resources.ca.gov/-/media/CNRA-Website/Files/Initiatives/Climate-Resilience/2022-Final-Extreme-Heat-Action-Plan.pdf.
 159. [Seniors and Heat-Related Illness](#). (2024). California Department of Public Health. [cited 2025; Available from: www.cdph.ca.gov/Programs/EPO/Pages/Extreme%20Heat%20Pages/BI_Natural-Disasters_Extreme-Heat_Seniors-and-Heat-Illness.aspx.
 160. Lin, Zihan, et al. (2024). [Daily heat and mortality among people experiencing homelessness in 2 urban US counties, 2015-2022](#). American Journal of Epidemiology, 193(11). 1576-1582. [dx.doi.org/10.1093/aje/kwae084](https://doi.org/10.1093/aje/kwae084).
 161. [Impacts of Wildfires on Public Health and the Health Care System](#). (2025). California Assembly Committee on Health.

- ahea.assembly.ca.gov/system/files/2025-03/background-paper-final.pdf.
162. Benmarhnia, Tarik, Errett, Nicole A, and Casey, Joan A. (2025 Apr 28). [Beneath the smoke: Understanding the public health impacts of the Los Angeles urban wildfires.](#) *Environmental Epidemiology*, 9(3).
pmc.ncbi.nlm.nih.gov/articles/PMC12040033/pdf/ee9-9-e388.pdf.
 163. Environmental Health Investigations Branch. [Public Health Impacts of Prescribed Fire \(PHIRE\) Study. \(2025\).](#) California Department of Public Health. [cited 2025 December 30]; Available from:
www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHIB/Pages/EIS/PHIRE_Study.aspx.