April 2024

POSITIVE AND ADVERSE CHILDHOOD EXPERIENCES (PACEs) DATA REPORT: CALIFORNIA HEALTH INTERVIEW SURVEY (CHIS), 2021

California Department Public Health, Injury and Violence Prevention Branch; California Department of Social Services, Office of Child Abuse Prevention; California Essentials for Childhood Initiative; All Children Thrive, California. (2024, April). Positive and Adverse Childhood Experiences (PACEs) Data Report: California Health Interview Survey, 2021

California Department of PublicHealth

CDSS CALIFORNIA DEPARTMENT OF SOCIAL SERVICES

All Children Thrive California

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Acknowledgments

The *Positive and Adverse Childhood Experiences (PACEs) Data Report: California Health Interview Survey (CHIS), 2021* was collaboratively developed by the California Essentials for Childhood Initiative (EfC) and All Children Thrive, California (ACT).

The EfC Initiative is a project funded by the Centers for Disease Control and Prevention (CDC) and is led in partnership by the California Department of Public Health's Injury and Violence Prevention Branch (CDPH/IVPB) and the California Department of Social Services, Office of Child Abuse Prevention (CDSS/OCAP). The EfC Initiative seeks to address child maltreatment and Adverse Childhood Experiences (ACEs) as public health issues; aims to raise awareness and commitment to promote safe, stable, nurturing relationships, and environments (SSNR&E); creates the context for healthy children and families through social norms change, programs, and policies; and utilizes data to inform actions.

The mission of All Children Thrive - California (ACT) is to prevent childhood trauma and shift power in local government by empowering youth and adult residents to create sustainable policy change that center children and their families. With funding from the California Department of Public Health (CDPH) and technical support from Public Health Advocates and the University of California, Los Angeles (UCLA) Center for Healthier Children, Families, and Communities, ACT builds capacity through training and coaching that democratizes data, raises awareness around ACEs prevention and social determinants of health, develops resources, and connects individuals within and across the state.

The *PACEs in California Data Report: CHIS, 2021* benefited from the generosity and support of the following partners who contributed to the development of this resource:

- California (EfC) Initiative Data Subcommittee Members
- California Office of the Surgeon General
- CDPH Violence Prevention Initiative
- CDPH Office of Health Equity
- CDPH Maternal, Child and Adolescent Health Division
- CDPH Office of Planning and Policy
- University of California, Los Angeles, (UCLA)-University of California, San Francisco (UCSF) ACEs Aware Family Resilience Network (UCAAN)
- California Department of Health Care Services (DHCS)
- UCLA, Center for Health Policy Research

Purpose, Use, Development

The *PACEs in California Data Report: CHIS, 2021* resource was developed to provide an overview of the 2021 PACEs data from the CHIS. It is intended to be used by PACEs stakeholders, including community coalitions and community-based organizations, decision-makers, and state and local government representatives, to educate about the prevalence of PACEs in California and guide efforts to reduce ACEs and promote PCEs. A key function for governmental public health and social services agencies in addressing ACEs and promoting PCEs is to collect and analyze data to better understand these phenomena, identify risk and protective factors, and support the development of data-informed interventions that reduce risk factors and support protective factors, including policy and systems changes. Access to relevant and up-to-date data is essential in the development of targeted, effective, and sustainable child adversity prevention strategies.

The ACE questions asked on the CHIS were adapted from the original CDC-Kaiser ACE Study (See below at, "Overview of ACEs" for more information) and collects information about abuse and household challenges experienced during the respondent's first 17 years of life.[1]

ACEs data are also available from other sources, such as the National Survey of Children's Health (NSCH), in which parents answer survey question on behalf of their children, and the Behavioral Risk Factor Surveillance System (BRFSS), in which adults answer ACE and PCE survey questions retrospectively. These additional sources provide different perspectives on childhood adversity (i.e., data reported by parents/caregivers on their children's current experiences, and data reported by adults on their own past childhood experiences). The 2021 administration of the CHIS also includes youth self-reports of their current experiences, in addition to adult retrospective reports on their past childhood experiences. The current report is focused on 2021 adult retrospective data, self-reported youth PACEs will be released in a subsequent report. These sources collectively provide complementary data to inform and facilitate interventions to prevent and reduce child adversity. (See KidsData – Childhood Adversity and Resilience topic for more information).

Introduction

Methods

The CHIS is the largest state health survey in the country. It is a web and telephone survey that is conducted on a continuous basis. The total number of respondents included in this report was 24,453 adults, age 18 years or over, from across all 58 California counties. Participants in the CHIS survey are selected at random and the sample is extensive enough to be statistically representative of California's diverse population.[2] CHIS is conducted by the UCLA Center for Health Policy Research in collaboration with CDPH and DHCS. Analysis has been weighted to account and adjust for the sample selection probabilities and other potential sources of bias to ensure the sample represents the population of California. The analysis was tested for stability and all reported results are stable. In the data presented, prevalence was rounded to the nearest tenth and may not add up to 100 percent. Finally, no hypothesis testing was undertaken within the analysis of these data and what is described in the current report is descriptive in nature.

Scaling

Analysis was conducted using a total ACE score ranging from 0 to 8 that denotes the number of ACE categories to which an individual was exposed. To create the 8-point ACE scale two questions about parental alcohol and drug misuse were combined into one measure, and three questions on childhood sexual abuse were combined into one measure. Exposure was determined if an individual answered, "yes" or at least "once," to the ACE questions. Experiencing a PCE was determined if an individual responded "all of the time" or "most of the time" to any of the seven PCE questions.

Limitations

This report does not include trends over time, as 2021 is the first year that PACEs questions were included on the CHIS. The ACE questions summarized in this report are self-reported and retrospective in nature, and thus subject to response and recall bias. While PACEs questions are retrospective, in which adults look back on their childhood to answer, the indicators to which they are being compared are current, unless otherwise specified; the analysis focuses on how ACEs that

occurred in the past relate to current experiences and factors. ACE questions do not include other important measures that children may experience that contribute to poor long-term health. Lastly, while it is understood that the terms “mentally ill” and “alcoholic” perpetuate harmful labels, the terms are used in this report when referencing prior research and the initial methods used to define ACEs, as well as to describe the CHIS survey methods and results, which include reference to having a “parent/guardian who was mentally ill or an alcoholic”.

Background

Overview of ACEs

ACEs are traumatic events that occur before age 18 and can disrupt healthy brain development, alter the immune and endocrine systems, and change how the body responds to stress.[3] ACEs can also negatively impact education, employment, earnings, and health outcomes over the life course and across generations.[4] Experiencing four or more ACEs has a strong relationship with elevated risk for several leading causes of death in adulthood, including heart disease, cancer, chronic obstructive pulmonary disease (COPD), Alzheimer's, and suicide. [1,4]

The Adverse Childhood Experiences Study (ACE Study) was a groundbreaking research study conducted from 1995 to 1997 by Kaiser Permanente and the Centers for Disease Control and Prevention (CDC).[1] It was the first large scale study to look at the relationship between adversity in childhood and health outcomes in adulthood. The original study included 9,508 Kaiser Health Plan members from Southern California and measured nine specific childhood exposures, including three categories of abuse (physical, emotional, and sexual), four categories of household challenges (untreated mental illness, substance use, domestic violence, and incarceration of a loved one), and two measures of neglect (physical and emotional).[1] Studies associating divorce or family separation with emotional, developmental, and behavioral problems in response to stress related to family conflict or instability contributed to the addition of divorce or family separation as a tenth ACE.[5,6] Note that the original sample was largely homogenous (e.g., 79.4% of the study participants were White).[1] Key findings from the Kaiser study were published in the American Journal of Preventive Medicine in 1998 and highlighted the following:

- ACEs were very common; two-thirds of Kaiser’s study participants had experienced at least one ACE category, and one in eight individuals had experienced four or more ACEs. [1]
- Higher ACE scores were linked to higher risk of developing long-term health problems such as heart disease, cancer, chronic lung disease, skeletal fractures, liver disease and poor self-rated health. [1]
- The link between ACEs, health risk behaviors, and adult disease centers on conscious or unconscious coping mechanisms such as smoking, alcohol or drug abuse, overeating, or sexual behaviors. High levels of exposure to ACEs would expectedly produce anxiety, depression, and anger in children, to the degree that these coping mechanisms would tend to be used chronically.[1]

Since the original ACE study was published, other studies have identified additional childhood adversities, including systemic factors and community-level indicators, often referred to as social determinants of health, that may also influence long-term health.[7-12] These additional childhood adversities include witnessing violence, experiencing discrimination, feeling unsafe outside the home, being bullied, experiencing poverty, and involvement in the foster care system.[8-13] These forms of adversity and others are included in commonly used screening tools like the Traumatic Events Screening

Inventory (TESI)[13] and Culturally Informed Adverse Childhood Experiences Framework (C-ACE),[14] but are not included in the CHIS ACEs 8-point scale.

In this analysis, exposure was determined if an individual answered "yes" or at least "once" during childhood to one or more of the following questions:

- Lived with anyone who was depressed, mentally ill, or suicidal.
- Lived with anyone who was a problem drinker or alcoholic, or anyone who used illegal street drugs or abused prescription drugs.
- Lived with anyone who served time or who was sentenced to serve time in a prison, jail, or other correctional facility.
- Witnessed parents or adults in the home slap, hit, kick, punch, or beat each other up.
- Parents were separated or divorced.
- Parent or adult in the home hit, beat, kick, or physically hurt you in any way (not including spanking).
- Parent or adult swore at, insulted, or put you down.
- If anyone at least 5 years older or an adult ever touched you sexually, tried to make you touch them sexually, or forced you to have sex.

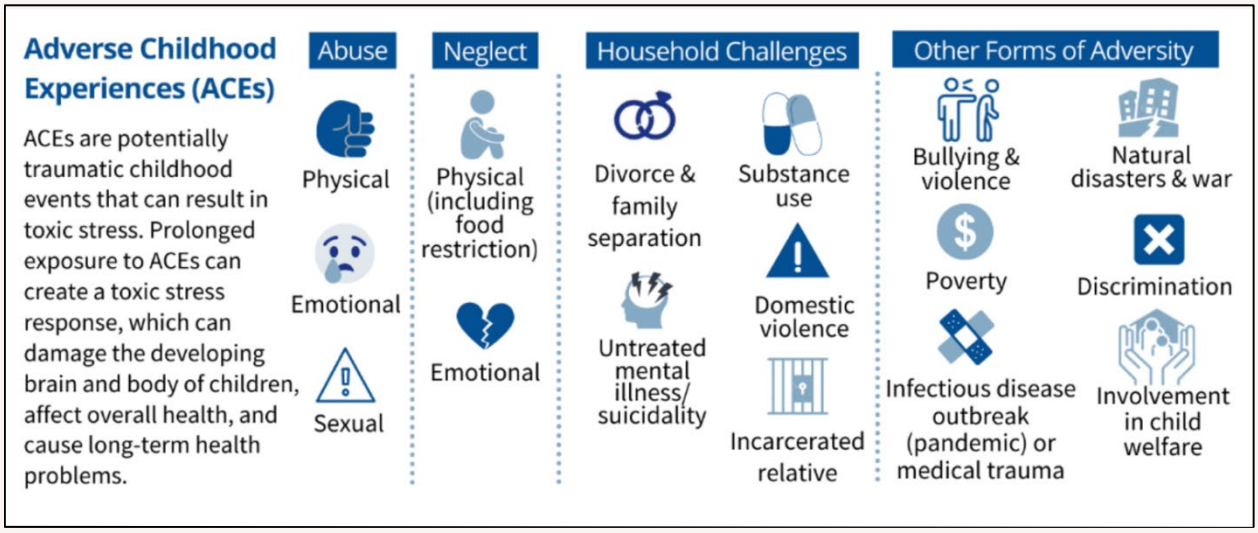

Figure 1: Types of ACEs and ACE Categories. *Image adapted from the Robert Wood Johnson Foundation.*[1,3-13]

Overview of Positive Childhood Experiences (PCEs)

PCEs have been associated with improved mental health, social and emotional wellbeing in adulthood, and have been shown to counter some of the harmful effects of ACEs and toxic stress.[15] As such, PCEs were compared only to mental health variables within this report and will otherwise not be featured as prominently as ACEs. Since this analysis, evidence was published suggesting PCEs may lower risk of

poor physical health outcomes as well; therefore, future analyses could examine those additional relationships.[16] Due to PCEs potential to promote resilience, there is a lot of interest in PCE data, and the interaction of ACEs and PCEs will continue to be analyzed in the future.

Safe, stable, nurturing relationships and environments promote resilience among youth and pave the way to healthy development.[17] Local Health Departments and child and family service providers can contribute to creating positive experiences and improve child wellbeing in their communities by educating partners and organizations about policies that improve child wellbeing and resiliency. The PCEs scale includes seven items which ask respondents to report how often, before the age of 18, they:

- Felt their family stood by them during difficult times.
- Had at least two non-parent adults who took a genuine interest in them.
- Felt safe and protected in their home.
- Felt a sense of belonging in high school.
- Felt supported by friends.
- Felt able to talk to their family about feelings.
- Enjoyed participating in community traditions.

ACEs in California

Distribution of ACE Scores and Prevalence of ACEs

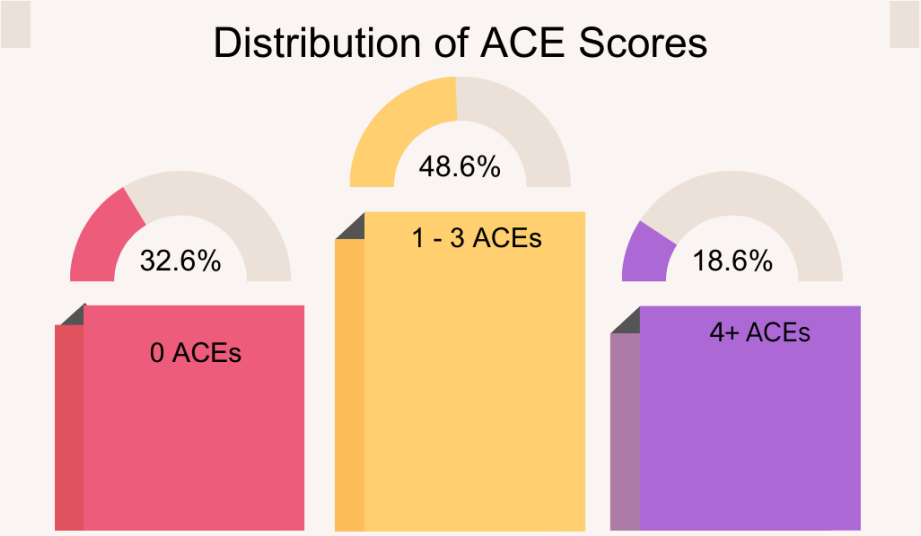

Figure 2: Distribution of Adverse Childhood Experiences (ACE) scores among CHIS respondents, 2021 (n=24,453).

In 2021, 67.3 percent of Californians reported having experienced at least one ACE, while 18.6 percent reported having experienced four or more ACEs before age 18. Respondents reported zero ACEs at 32.6 percent. These responses indicate that experiencing at least one ACE before age 18 is relatively common among adult residents in California **(Figure 2)**.

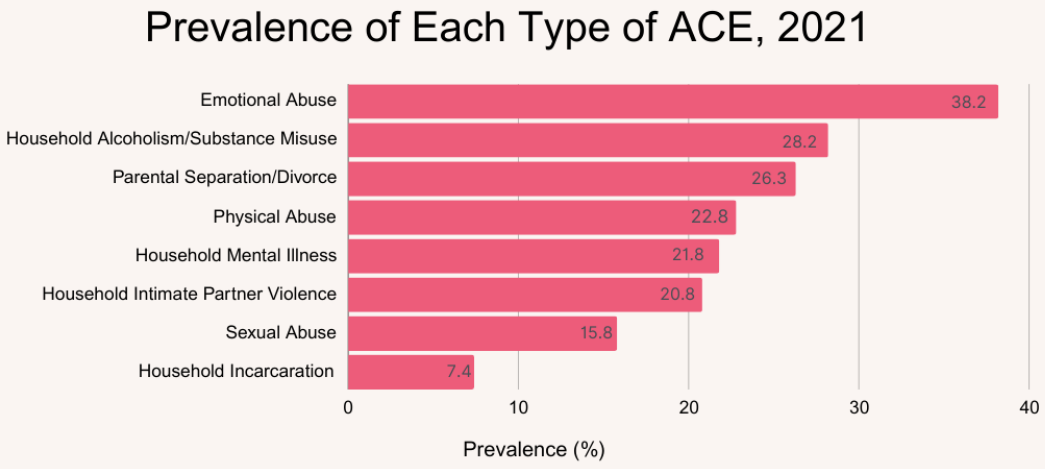

Figure 3: Prevalence of individual ACEs experienced among CHIS responses, 2021 (n=24,453).

The prevalence of eight ACEs was measured among 24,453 California residents. The most frequently reported ACE was emotional abuse at 38.2 percent, followed by living with someone who misused substances, including alcohol, illegal drugs, and prescription medications at 28.2 percent, and experiencing parental separation/divorce at 26.3 percent. The type of ACE that was least commonly reported was living with someone who was sentenced to serve time in prison, jail, or a correctional facility at 7.4 percent **(Figure 3)**.

Demographics

Race/Ethnicity

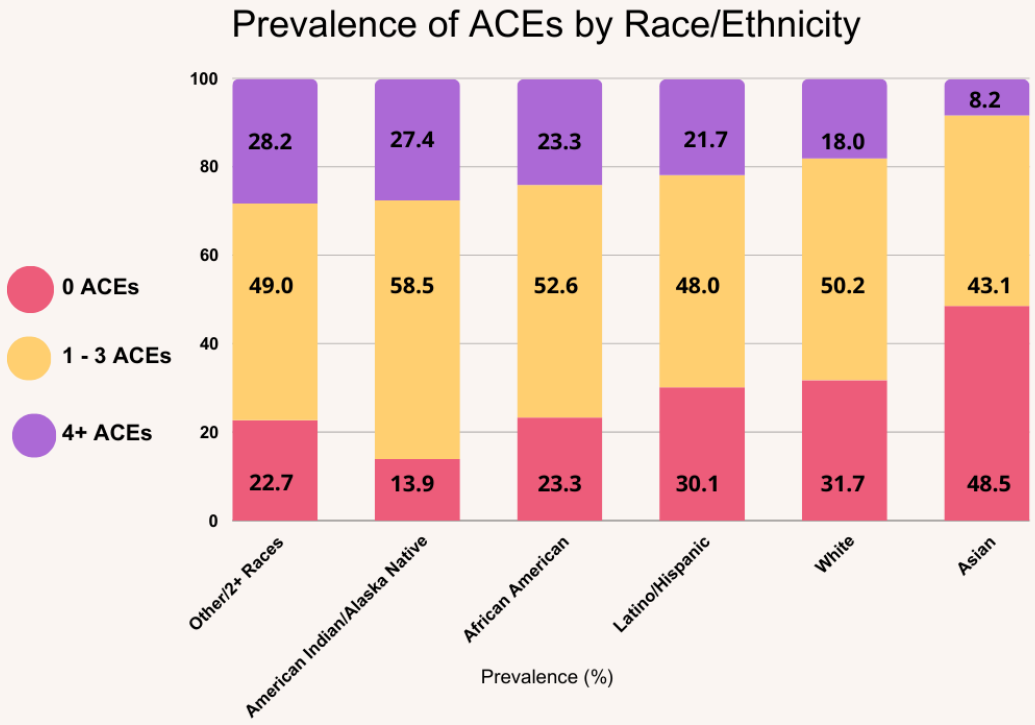

Figure 4: Prevalence of number of ACEs experienced, by race/ethnicity, among CHIS respondents, 2021 (n=24,453).

Respondents who identify as "Other," or two or more races most commonly report four or more ACEs (28.2%), followed by people who identify as American Indian/Alaska Natives (27.4%). Respondents who identified as Asian least commonly report four or more ACEs (8.2%), followed by respondents who identified as White (18.0%). Respondents who identified as African American or Latino/Hispanic report four or more ACEs at 23.3 and 21.7 percent, respectively **(Figure 4)**.

Sexual Orientation

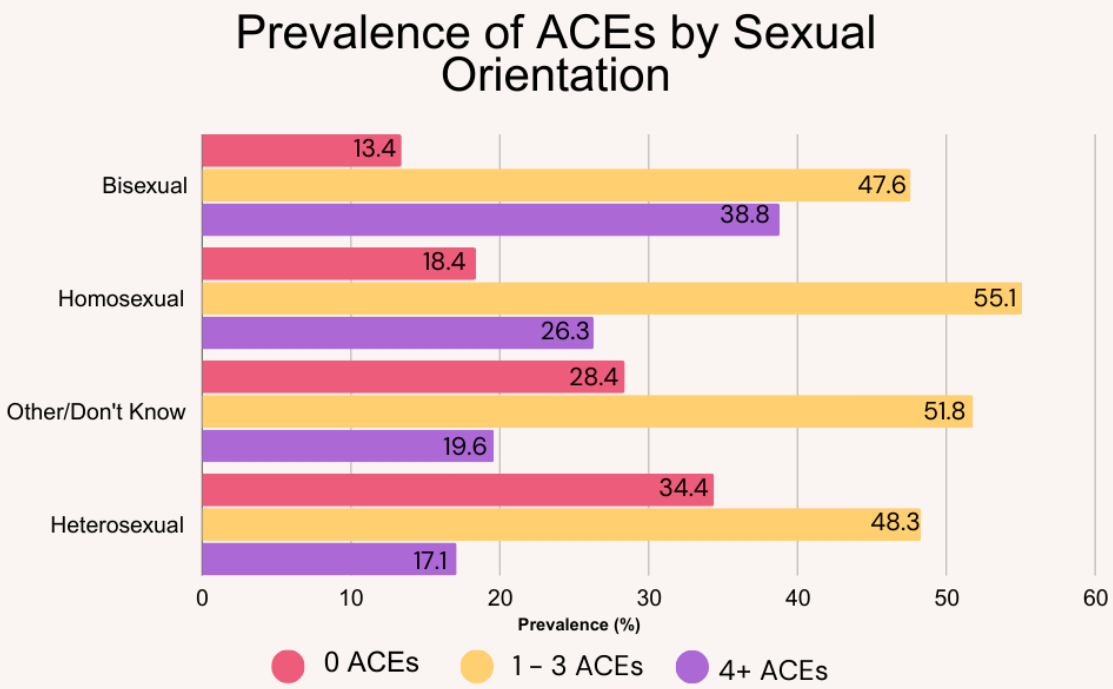

Figure 5: Prevalence of number of ACEs experienced by sexual orientation during adulthood, among CHIS respondents, 2021 (n=24,453).

Major differences in ACEs were prevalent by sexual orientation. Respondents who identify as bisexual reported experiencing four or more ACEs at 38.8 percent, respondents who identified as homosexual at 26.3 percent, and those who indicated other/don't know at 19.6 percent. Meanwhile, respondents who identify as heterosexual reported four or more ACEs at 15.0 percent. This indicates that among those who identified their sexual orientation as bisexual, there was a prevalence of four or more ACEs that was more than twice that of respondents who identified as heterosexual; further, among those who identify their sexual orientation as homosexual, there was a prevalence of four or more ACEs at about 9 percent more than those who identify as heterosexual **(Figure 5)**.

Income

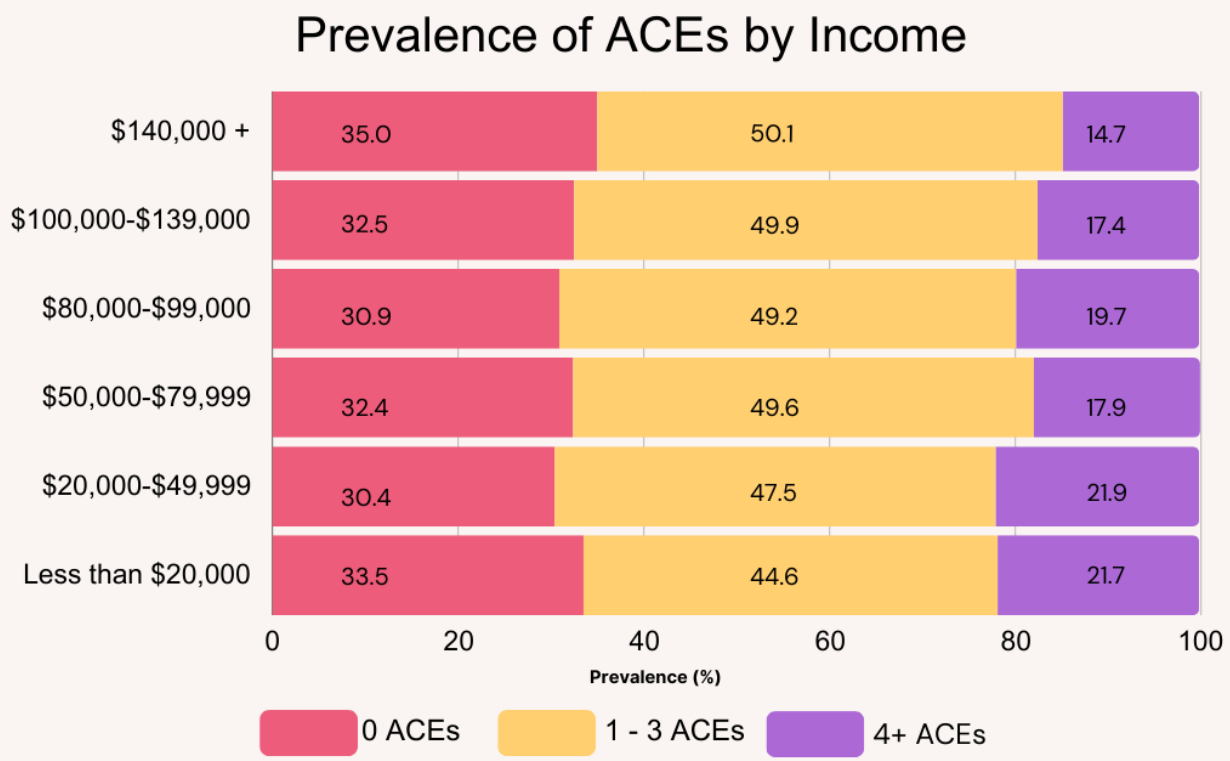

Figure 6: Prevalence of number of ACEs experienced by household income during adulthood, among CHIS respondents, 2021 (n=24,453).

Respondents reporting a household income of $20,000-$49,000 reported the highest prevalence of four or more ACEs (21.9%) and the lowest prevalence of zero ACEs (30.4%), while respondents reporting their household income as more than $140,000 reported the lowest prevalence of four or more ACEs (14.7%), and the highest prevalence of zero ACEs (35.0%). Respondents with an ACE score of 1-3 report minimal variation across income brackets, ranging from 47 percent to 50 percent; albeit respondents reporting a household income of less than $20,000 report an ACE score of 1-3 at 44.6 percent, slightly lower than the other household income brackets. **(Figure 6)**.

Education

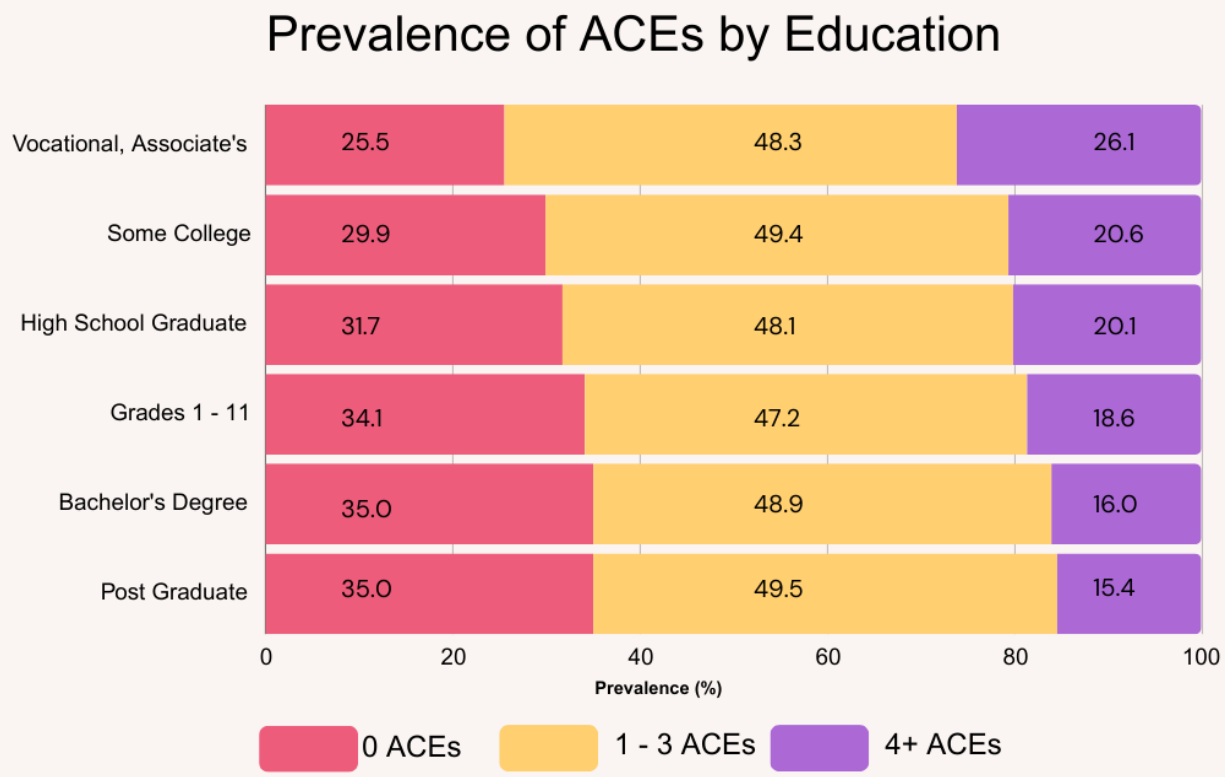

Figure 7: Prevalence of number of ACEs experienced by level of education attained, among CHIS respondents, 2021 (n=24,453).

Respondents who completed a vocational program or an associate degree (AA) reported an ACE score of four or more at the highest prevalence (26.1%), and an ACE score of zero at the lowest prevalence (25.5%), indicating respondents who have achieved an associate degree or vocational program as adults, experienced a higher number of ACEs compared to those who attained a higher education level. Meanwhile, respondents who completed a graduate or professional degree reported an ACE score of four or more at the lowest prevalence (15.4%), and reported an ACE score of zero at the highest prevalence (35.0%). Across educational levels, respondents reporting an ACE score of 1-3 was fairly consistent, from 47.2 percent to 49.5 percent **(Figure 7)**.

Insurance

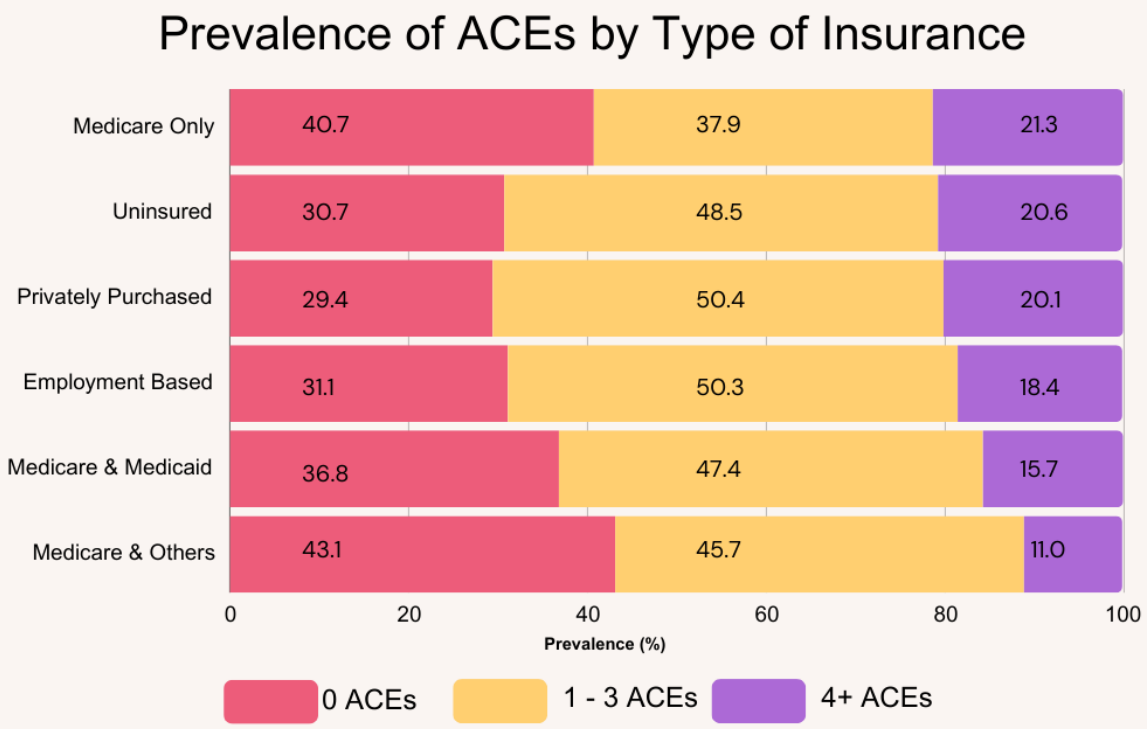

Figure 8: Prevalence of number of ACEs experienced by type of insurance during adulthood, among CHIS respondents, 2021 (n=24,453).

Respondents who reported different types of health insurance coverage also reported different levels of ACEs. Respondents with “Medicare Only” reported an ACE score of four or more at the highest prevalence (21.3%); while respondents with “Medicare & Others” reported an ACE score of four or more at the lowest prevalence (11.0%). The uninsured (20.6%), those with privately purchased (20.1%), and employment based (18.4%) insurance reported an ACE score of four or more at about the same prevalence. Respondents with “Medicare & Others” also reported a zero ACE score at the highest prevalence, 43.1 percent; followed by “Medicare Only,” at 40.7 percent, and “Medicare & Medicaid” together at 36.8 percent. Again, the uninsured (30.7%), those with privately purchased (29.4%), and employment based (31.1%) insurance, were similar in in prevalence of ACE scores of zero. **(Figure 8)**.

Health Conditions, Behaviors, and Violence

Self-Reported Health Status

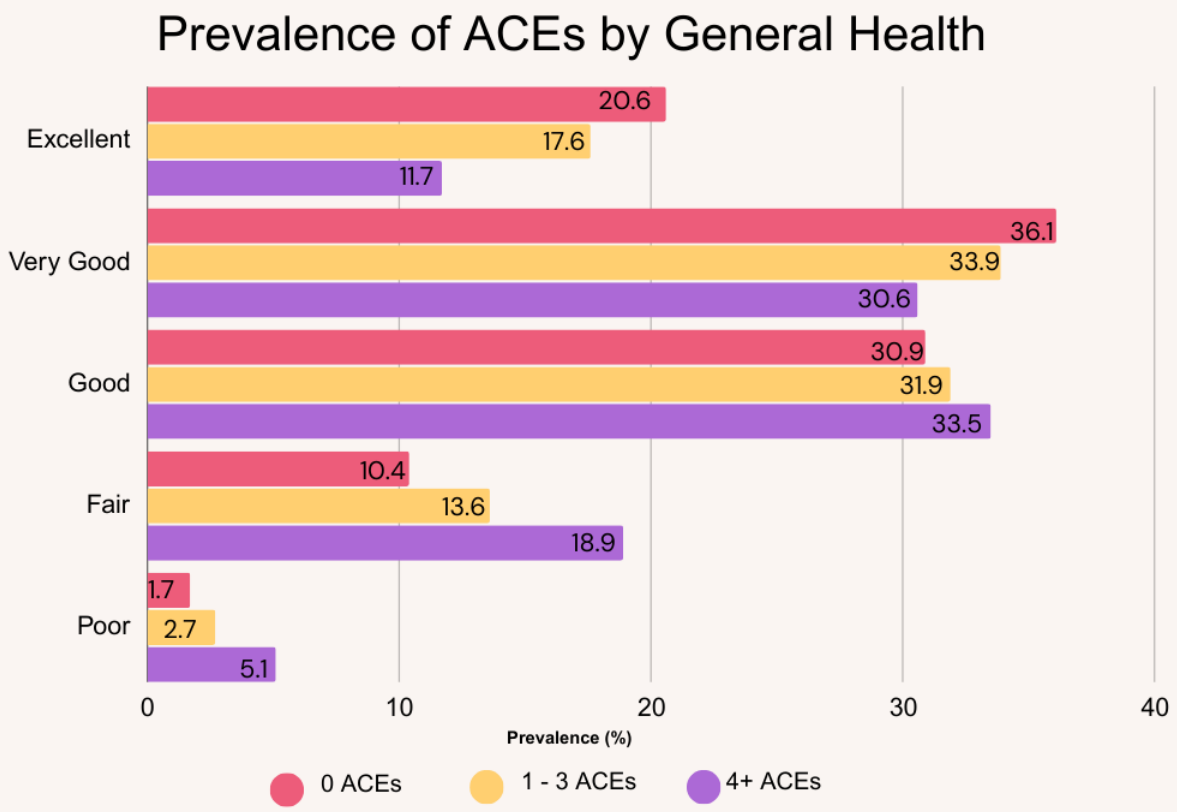

Figure 9: Prevalence of number of ACEs experienced by self-reported general health status, among CHIS respondents, 2021 (n=24,453).

Respondents were asked to self-report their current general health on a 5-point scale from "Excellent" to "Poor". Most respondents indicated that they had "Very Good" health (0 ACEs, 36.1%; 1-3 ACEs, 33.9%; 4+ ACEs, 30.6%). However, respondents with an ACE score of four or more also reported "Fair" health at a similar prevalence as respondents with an ACE score of zero reported "Excellent" health (18.9% and 20.6%, respectively). In this figure, respondents reporting zero ACEs self-report their general health to be "Excellent," "Very Good," and "Good," at a higher prevalence than respondents with any ACEs; while prevalence of reporting positive general health decreases as ACEs increase **(Figure 9)**.

Chronic Disease

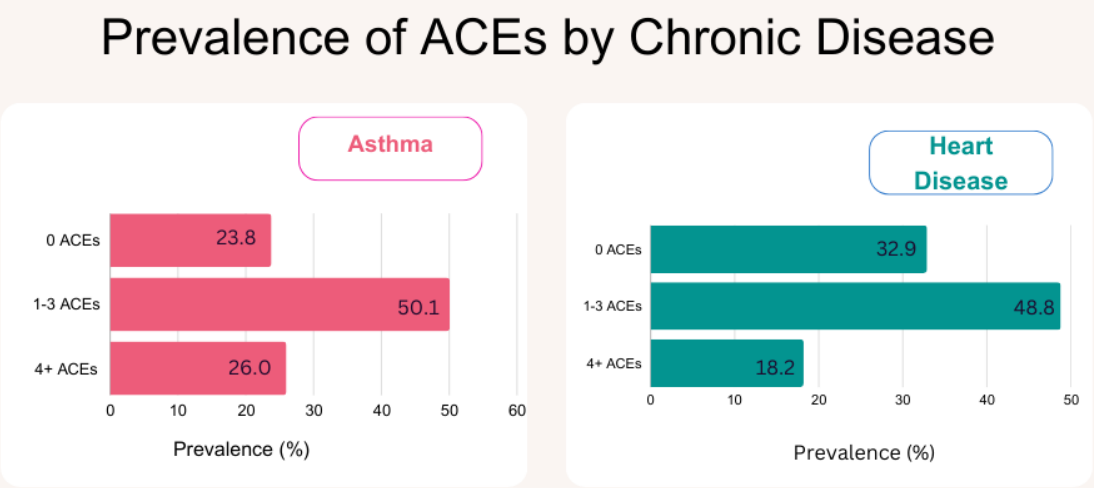

Figure 10: Prevalence of number of ACEs experienced by diagnosis of asthma (n=4,260) and heart disease (n=2,219), among CHIS respondents, 2021.

Asthma

When asked if a doctor has ever told the respondent that they have asthma, those with any reported number of ACEs answered "Yes" at 76.1 percent. Respondents reporting 1-3 ACEs answered "Yes" at 50.1 percent and respondents reporting four or more ACEs answered "Yes" at 26.0 percent. Finally, 23.8 percent of respondents who reported zero ACEs had also received an asthma diagnosis **(Figure 10)**.

Heart Disease

Respondents were asked if they had ever received a diagnosis for any kind of heart disease. Respondents who reported having experienced any ACEs also reported heart disease at 67.0 percent; 1-3 ACEs at 48.8 percent and four or more ACEs at 18.2 percent. Respondents reporting zero ACEs confirmed a heart disease diagnosis at 32.9 percent **(Figure 10)**.

Health Behaviors

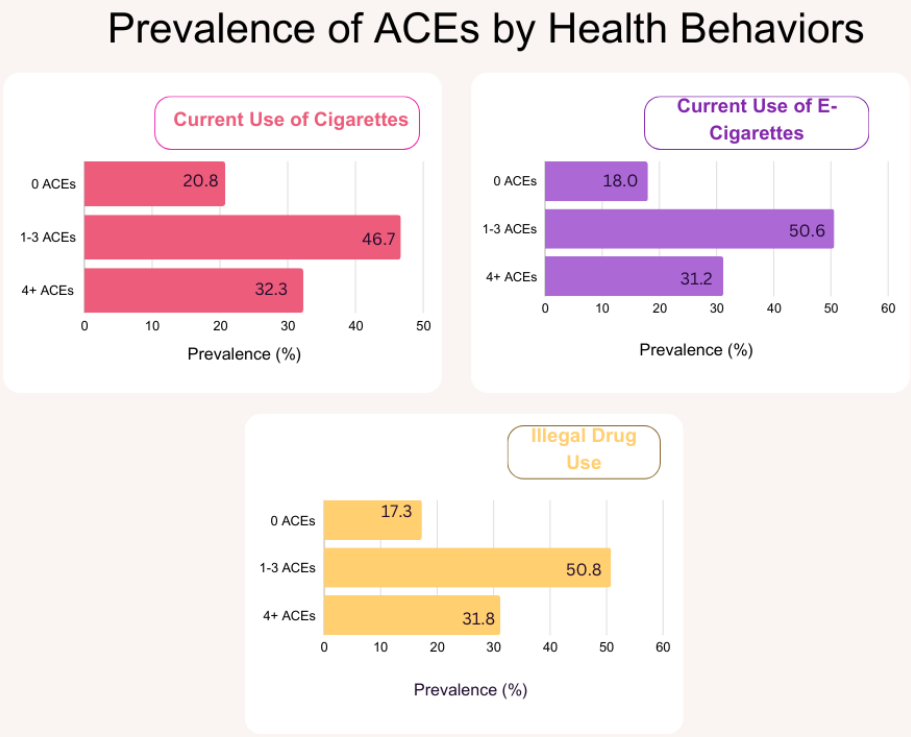

Figure 11: Prevalence of number of ACEs experienced by health behaviors; use of cigarettes (n=1,619); use of e-cigarettes (n=680); and use of illegal drugs (n=787), among CHIS respondents, 2021.

Current Cigarette and E-Cigarette Use

Current cigarette use was determined if respondents indicated both that they had smoked 100 or more cigarettes in their life and have smoked cigarettes within the last 30 days; 1,619 respondents were determined to currently use cigarettes (7.3 percent). Respondents with any ACEs reported current cigarette use at 79.1 percent; respondents reporting four or more ACEs at 32.3 percent, while respondents reporting 1-3 ACEs at 46.7 percent. Respondents reporting zero ACEs currently used cigarettes at 20.8 percent. Current e-cigarette use was determined if respondents indicated they had ever used an e-cigarette or other electronic vaping product, and then disclosed how often they had used in the past 30 days; 680 respondents were determined to currently use e-cigarettes (4.2 percent). Respondents with any ACEs reported e-cigarette use at 81.8 percent; respondents reporting four or more ACEs at 31.2 percent, while respondents reporting 1-3 ACEs at 50.6 percent. Respondents reporting zero ACEs currently use e-cigarettes at 18 percent. **(Figure 11).**

Illegal Drug Use

Respondents were asked about use of illicit or non-prescribed drugs, including use of heroin methamphetamines, and prescription painkillers in the past 12 months, (e.g., Vicodin, OxyContin, Norco, Hydrocodone, Percocet, and Methadone) or prescription stimulants (e.g.,

Adderall, Dexedrine) not as directed by their doctor in their past 12 months. Respondents with any ACEs report illicit drug use or misuse of prescription drugs at 82.6 percent. Respondents reporting four or more ACEs indicated illegal drug use at 31.8 percent, and 1-3 ACEs at 50.8 percent, while respondents reporting zero ACEs indicated illicit drug use at 17.3 percent **(Figure 11).**

Alcohol Use

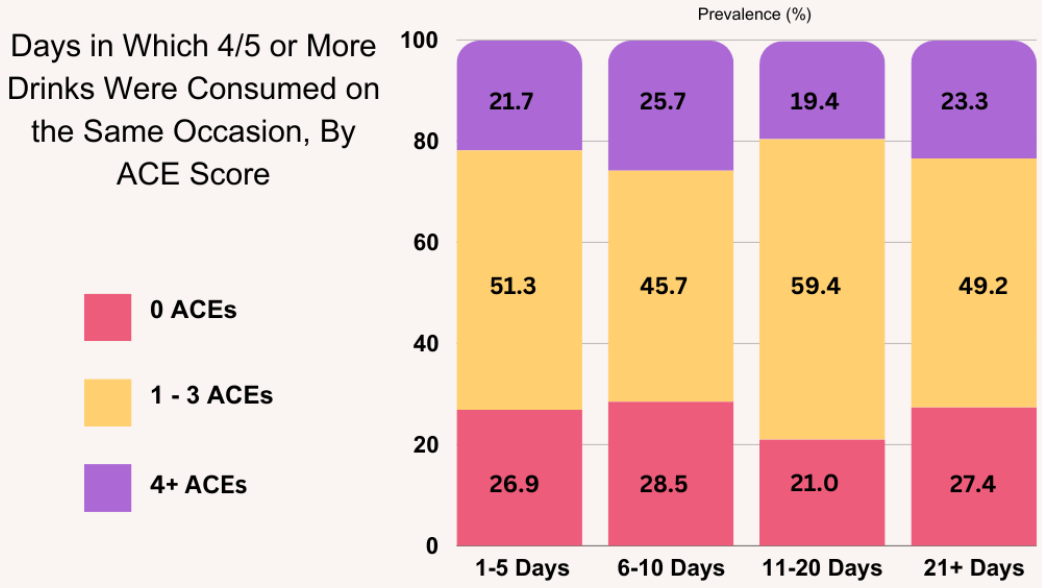

Figure 12: Prevalence of number of ACEs experienced, by number of times had five or more drinks (male) or four or more drinks (female) in past 30 days, among CHIS respondents, 2021 (n=4,108).

The CDC defines "binge drinking" as having five or more drinks (for people who identify as male) or four or more drinks (for people who identify as female) on any given day.[18] The CHIS survey asks respondents that drank any alcoholic beverages in the past 30 days how many days they had 4/5 or more drinks on the same occasion. Responses to this question would be indicative not only of how many drinks the respondent is consuming, but how many days they were drinking heavily to illuminate differences between low-risk and high-risk alcohol consumption. Notably, most respondents (83.2%) did not indicate that they consume alcohol in this pattern. Of those that do, respondents reporting any ACEs indicated binge drinking more often than respondents reporting zero ACEs **(Figure 12).**

Intimate Partner Violence

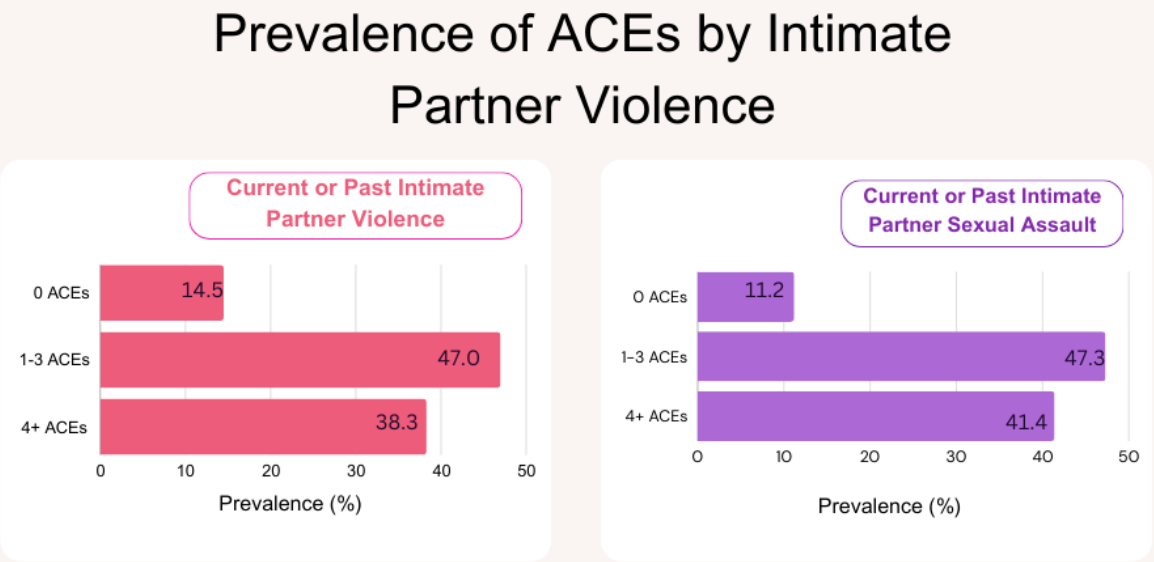

Figure 13: Prevalence of ACEs by physical Intimate Partner Violence (IPV) (pink chart; n=4,046) and sexual intimate partner violence (purple chart; n=1,851) among CHIS respondents, 2021.

Questions pertaining to intimate partner violence defined an intimate partner as a "husband, wife, boyfriend, girlfriend, or someone that the respondent lived with or dated." Respondents were asked about instances of physical abuse: After you turned 18, has a current or past intimate partner ever hit, slapped, pushed, kicked, or physically hurt you in any way?

Respondents with any ACEs indicated current or past intimate partner violence at 85.3 percent; respondents reporting 1-3 ACEs indicated intimate partner violence at 47.0 percent, and respondents reporting four or more ACEs indicated intimate partner violence at 38.3 percent. Respondents reporting zero ACEs indicated intimate partner violence at 14.5 percent.

When asked about unwanted sex within an intimate partner relationship, the question defines "unwanted" as sex that the respondent did not consent or agree to, and defines sexual contact as intercourse, as well as oral sex, anal sex, or sex with an object. Respondents were asked: After you turned 18, has a current or past intimate partner ever forced you into unwanted sexual intercourse, oral or anal sex, or sex with an object by using force or threatening to harm you?

Respondents reporting any ACEs indicated unwanted sexual contact from an intimate partner at 88.7 percent; respondents reporting 1-3 ACEs indicated unwanted sexual contact from an intimate partner at 47.3 percent, and four or more ACEs at 41.4 percent. Respondents reporting zero ACEs indicated unwanted sexual contact from an intimate partner at 11.2 percent. **(Figure 13)**.

Mental Health

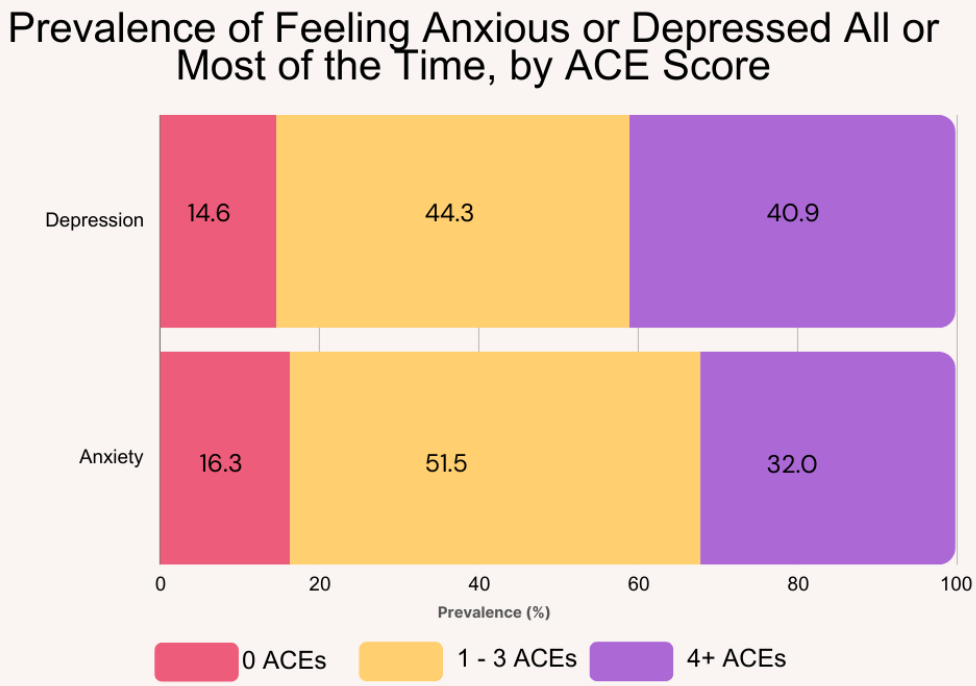

Figure 14: Prevalence of number of ACEs experienced by depression (n=896) and anxiety (n=2,186) among CHIS respondents, 2021.

Depression

When asked how often in the past 30 days they felt depressed, respondents with any ACEs indicated that they felt depressed either, “all of the time” or “most of the time” at 85.2 percent; those reporting 1-3 ACEs at 44.3 percent, and those reporting four or more ACEs at 40.9 percent. Respondents reporting zero ACEs felt depressed at 14.6 percent. **(Figure 14)**.

Anxiety

When asked how often in the past 30 days they felt nervous, respondents with any ACEs indicated that they felt nervous either, “all of the time” or “most of the time” at 83.5 percent; those reporting 1-3 ACEs at 51.5 percent, and those reporting four or more ACEs at 32.0 percent. Respondents reporting zero ACEs felt nervous at 16.3 percent. **(Figure 14)**.

Suicide

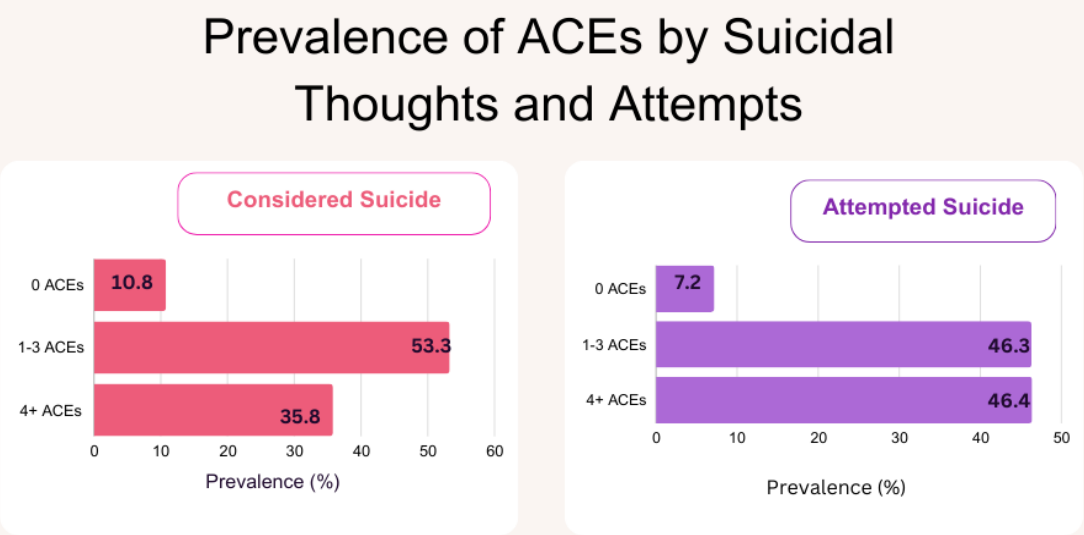

Figure 15: Prevalence of number of ACEs experienced by thoughts to commit suicide (n=4,275) and attempts to commit suicide (n=1,321), among CHIS respondents, 2021.

When respondents were asked if they had ever had thoughts of ending their life by suicide, respondents reporting zero ACEs indicated that they had thoughts of suicide at 10.8 percent; while respondents reporting any ACEs indicated that they had thoughts of suicide at 89.1 percent (1-3 ACEs: 53.3%; 4+ ACEs: 35.8%). When asked about suicide attempts, respondents reporting zero ACEs indicated that they had attempted to die by suicide at 7.2 percent, while respondents reporting any ACEs attempted suicide at 92.7 percent (1-3 ACEs: 46.3%; 4+ ACEs: 46.4%) **(Figure 15)**.

Economic Hardship

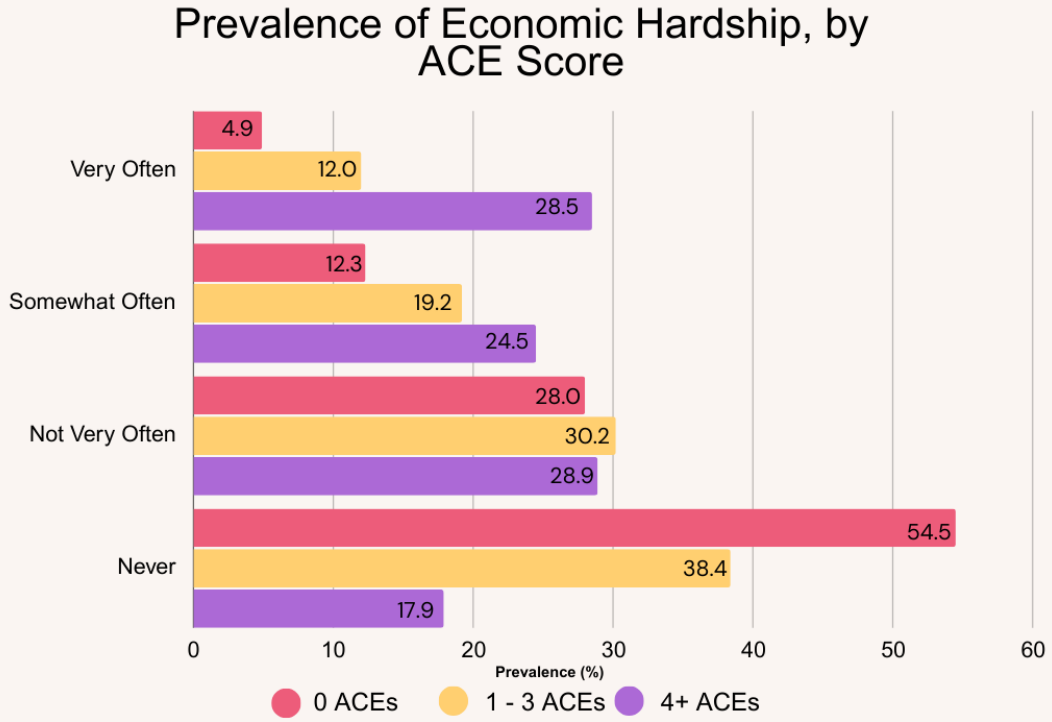

Figure 16: Prevalence of ACEs experienced by economic hardship during childhood among CHIS respondents, 2021 (n=24,453).

Respondents were asked to reflect on how difficult it was to get by on their family's income before they were 18, including access to basics such as food or housing. Respondents reporting zero ACEs indicated that it was hard to get by on their family's income "very often" 4.9 percent, while respondents reporting four or more ACEs indicated "very often" at 28.5 percent. Further, respondents reporting zero ACEs indicated that it was "never" hard to get by on family income at 54.5 percent, while respondents reporting four or more ACEs indicated that it was never difficult at 17.9 percent **(Figure 16)**.

Positive Childhood Experiences (PCEs) in California

Distribution and Prevalence of PCEs

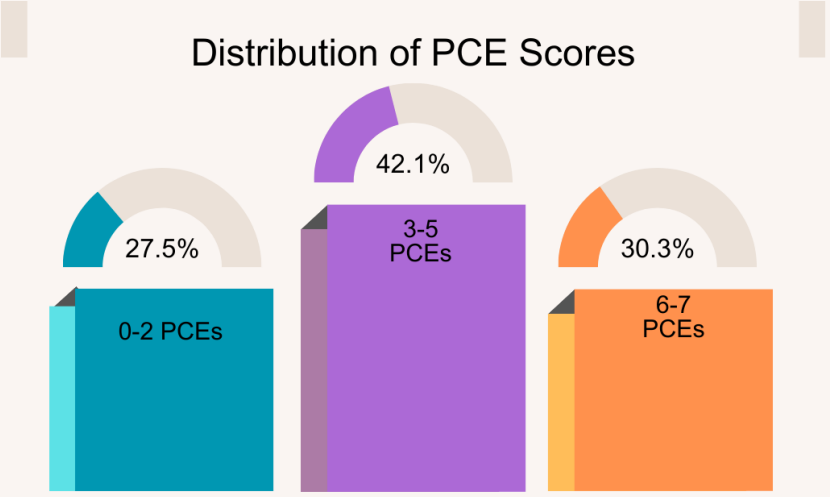

Figure 17: Prevalence of score of PCEs experienced, among CHIS respondents, 2021 (n=24,453).

PCE scores were determined by the distribution of the number of PCEs experienced by adults in California. Exposure was determined if the respondent answered they had experienced a PCE "all of the time" or "most of the time." Most respondents indicated that they had experienced 3-5 PCEs (42.1%), while 30.3 percent experienced 6-7 PCEs, and 27.5 percent experienced 0-2 PCEs **(Figure 17).**

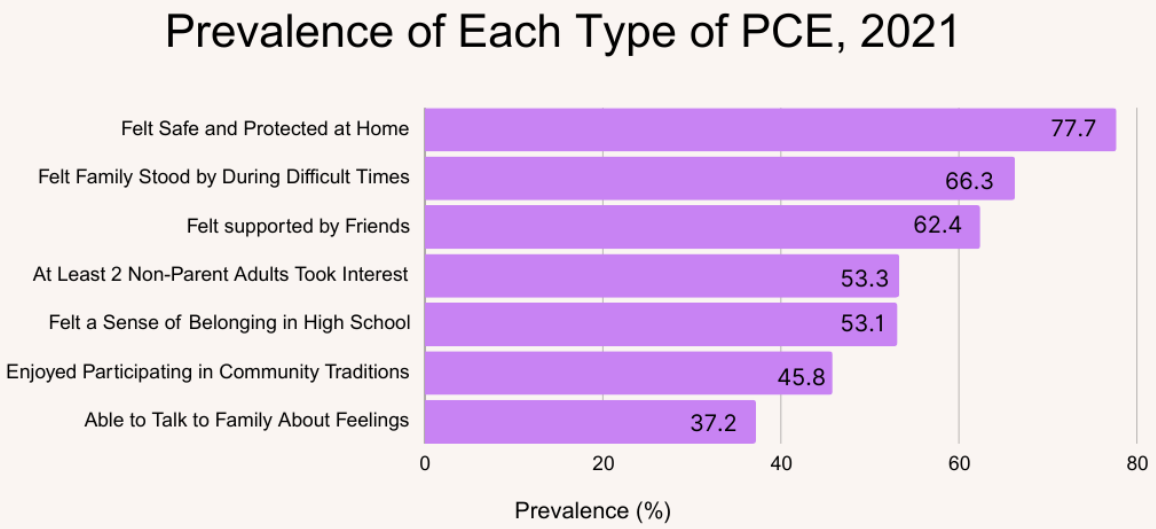

Figure 18: Prevalence of number of PCEs experienced, among CHIS respondents, 2021 (n=24,453).

Adult Californians indicated that, in childhood, they felt safe and protected at home "All of the time," or "most of the time," at the highest prevalence (77.7%) while the lowest PCE prevalence reported was "able to talk to family about feelings," at 37.2 percent. Prevalence was between 45.8 and 66.3 percent for the PCEs, "enjoyed participating in community traditions" (45.8%), "felt a sense of belonging in high school" (53.1%), "At least 2 non-parents took an interest" (53.3%), "felt supported by friends" (62.4%), and "felt family stood by during difficult times" (66.3%) (**Figure 18**).

PCE Scores and ACE Scores

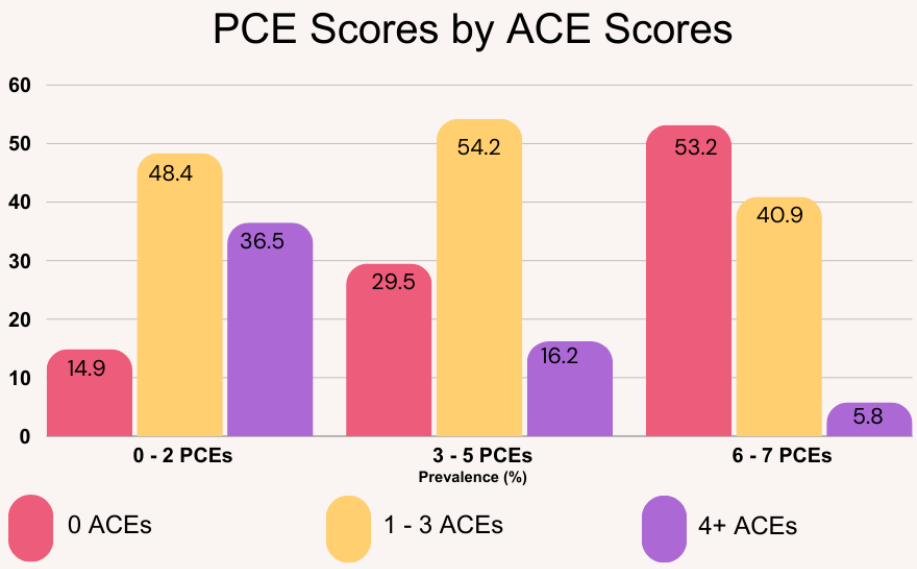

Figure 19: Prevalence of PCE Scores compared to ACE scores experienced by CHIS respondents, 2021 (n=24,453).

In the 2021 CHIS data, 53.2 percent of respondents who reported 6-7 PCEs also reported zero ACEs, while 36.5 percent of respondents who reported four or more ACEs, also reported 0-2 PCEs. This indicates that respondents reporting higher PCEs reported lower ACEs, while respondents reporting high ACEs, reported low PCEs (**Figure 19).**

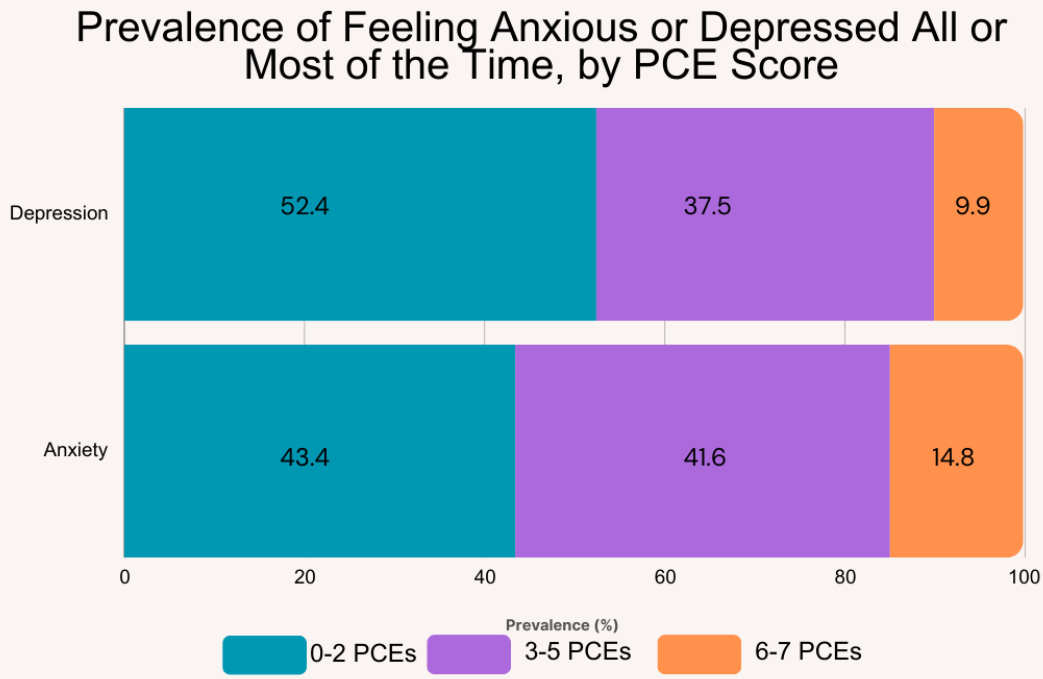

Figure 20: Prevalence of PCE scores compared to current experiences of depression (n=896) and anxiety (n=2,186) among CHIS respondents, 2021.

Depression

When asked how often in the past 30 days they felt depressed, respondents with higher (6-7 PCEs) indicated they felt depressed "all of the time" or "most of the time" at 9.9 percent, while respondents with a lower number of PCEs (0-2 PCEs) answered that they felt depressed at 52.4 percent **(Figure 20)**.

Anxiety

When asked how often in the past 30 days they felt nervous, respondents with higher (6-7 PCEs) indicated that they felt nervous "all of the time" or "most of the time" at 14.8 percent, while respondents with a lower number of PCEs (0-2 PCEs) answered that they felt nervous at 43.4 percent (**Figure 20).**

Conclusions and Next Steps

Research suggests that adults who experienced four or more ACEs have increased likelihood of poor mental health, risky behaviors such as acute drinking and smoking, and chronic disease, including heart disease, diabetes, stroke, COPD, obesity, and asthma. Preventing ACEs may in turn reduce the likelihood of experiencing many of these conditions later in the life course.[1] While no hypothesis testing was done, indicator prevalence in this report is consistent with prior research and suggests that Californians who experienced four or more ACEs during childhood are at an increased risk for health behaviors, mental health challenges, and violence victimization. The CHIS ACEs data presented in this report gives insight into the prevalence of ACEs in California and can be used to encourage risk reduction and resiliency promotion as prevention efforts to support and protect the health and wellbeing of children in California, as well as support treatment and healing for adults.

Report highlights:

- In 2021, 67.3 percent of Californians who responded to the CHIS survey reported having experienced one or more ACEs and 18.6 percent reported having experienced four or more ACEs, before age 18. These responses indicate that experiencing at least one ACE before age 18 is relatively common among adult residents in California.
- The most commonly occurring ACEs in this sample were emotional abuse, living with a household member who misused illegal drugs or alcohol, and parental separation or divorce.
- Populations that were disproportionately impacted by ACEs include those identifying as multiracial (2+ Races), American Indian/Alaska Native, and "Other," people who identify as bisexual or homosexual, those with a vocational or associate degree, and those reporting a household income of less than $49,000.
- People who experience ACEs were more likely to experience violent victimization and behaviors as an adult that can negatively affect their health, such as smoking tobacco, drinking alcohol, and being victimized by an intimate partner.
- ACEs experienced as children placed people at risk for anxiety, depression, and suicidal thoughts and attempts in adulthood.
- Respondents with fewer PCEs also reported experiencing higher ACEs in childhood. In contrast, only about six percent of those who reported 6-7 PCEs reported experiencing 4+ ACEs.
- Respondents with more PCEs reported feeling anxious or depressed at lower prevalence than respondents with fewer PCEs.

Primary prevention efforts should work towards promoting PCEs and reducing occurrences of ACEs to improve life-long health and success. Interventions should include creating social norms change by supporting connection to community, family, pro-social peers, and school, as well as access to mental health and substance abuse services while promoting policies that strengthen economic support for families.[19] In California, the California Earned Income Tax Credit (CalEITC) and Paid Family Leave (PFL) programs are two examples of actions taken at the state-level to improve family access to enhanced economic stability ("Strategies and Resources" below for more information).[20,21] Again, due to PCEs' potential to promote resilience, there is a lot of interest in PCE data, and the interaction of ACEs and PCEs will continue to be analyzed in the future.

As of 2018, California was home to 9,092,863 children, 43 percent of whom were living in families with low-incomes, and 20% were living in poverty. These populations are disproportionately impacted by ACEs due to stressful environments, socioeconomic inequalities, and in some cases, lack of systemic support and resources.[22] This report further demonstrates these disparities, identifying racial, socioeconomic, and social differences in the number of ACEs adult California residents reported experiencing in their childhoods. Primary prevention efforts to reduce the occurrence of ACEs should take these disparities into account and target communities most at risk.

Comparative Reports

Adverse and Positive Childhood Experiences Data Report: Behavioral Risk Factor Surveillance System (BRFSS), 2015-2021 An Overview of Adverse and Positive Childhood Experiences in California

CHIS findings described here are similar to findings on ACEs and PCEs obtained from the ACEs module of the Behavioral Risk Factor Surveillance System (BRFSS) using aggregated data from 2015, 2017, 2019, and 2021 for California. The BRFSS is an annual, state-level, survey of U.S. adults aged 18 and over regarding health conditions and behaviors. Both reports found that roughly 7 in 10 Californians had experienced at least one ACE, and roughly 2 in 10 Californians experienced four or more ACEs, before the age of 18. Additional highlights of both reports include:

- Emotional abuse was the highest reported ACE, while parental incarceration was the lowest reported ACE.
- Disparities were found in among the prevalence of four or more ACEs and sexual orientation, income, education level, asthma diagnosis, and self-reported general health stratifications, as well as reports of depression and anxiety.
- With respect to PCEs, both reports found that roughly six percent of respondents who reported four or more ACEs also reported 6-7 PCEs, indicating that among both samples, high ACEs most often meant low PCEs.
- The most common PCE in both reports was, “felt safe and protected at home,” although the BRFSS report found the least common PCE to be “enjoyed participating in community traditions,” while the least common PCE on in this report was “able to talk to family about feelings.”
- The current report highlights additional health behaviors and risks, and their relationship to ACEs, including thoughts and attempts of suicide, intimate partner violence, sexual assault by an intimate partner, e-cigarette use, illegal drug use, and economic hardship.[23]

Prevention Data Brief: Adverse Childhood Experiences and Substance Use Among Teens in California, 2021

IVPB’s recent data brief focused on ACEs and substance use among teens in California and analyzed data from the Teen CHIS, which includes 1,169 California teens aged 12 to 17 years old. Prevalence of ACEs among California teens was common; in 2021, 44 percent of California teens reported having experienced at least one ACE, which is similar to the national percentage of 45 percent of teens who have experienced at least one ACE in their lifetime. Teens who experienced ACEs reported trying alcohol, cannabis, and tobacco (cigarettes, e-cigarettes, other electronic vaping products) at higher rates than those who reported no ACEs. As the number of ACEs increased, the percentage of teens who had tried substances increased.[24]

Strategies and Resources

The following prevention strategies and resources could support child and family service providers, community coalitions, and others in their efforts to prevent and reduce ACEs and promote PCEs to improve the wellbeing of California's children.

Strategies	Resources
Support implementation of existing state laws including the California Earned Income Tax Credit (CalEITC) and Young Child Tax Credit (YCTC) by educating Californians about the benefits of tax filing to collect tax credits.	Connecting Families to Tax Credits to Improve Child Wellbeing in California: A Brief for Local Health Department and Child and Family Services Providers
Educate about where opportunities exist to create policy change that strengthens economic supports and social norm change.	Reimagining Child Wellbeing: Local Policy Strategies to Prevent and Reduce Adverse Childhood Experiences (ACEs) in California's Communities
Engage with local coalitions who are working to create policy change that improves the lives of children.	Essentials for Childhood Initiative: California Child Wellbeing Coalition e-Guide
Share and utilize data about the health and wellbeing of children in California.	KidsData.org Website, Maternal Child and Adolescent Health (MCAH) Dashboard, National Survey for Children's Health (NSCH) Interactive Query
Educate about the warning signs of physical abuse, neglect, and sexual abuse in children.	For information about reporting child abuse and neglect and the legal obligations of mandated reporters, review the Child Abuse Identification and Reporting Guidelines from the California Department of Education (CDE) and the California Department of Social Services (CDSS)
Information about strategies that create change and improve the lives of children, CDC Technical Package.	Preventing Child Abuse and Neglect: A Technical Package for Policy, Norm, and Programmatic Activities.
Information on the underlying science of how ACEs can lead to toxic stress and the associated health and social outcomes, as well as a blueprint for how a coordinated cross-sector response across sectors can function to achieve primary, secondary, and tertiary prevention and treatment strategies. It also summarizes existing efforts underway within California to address ACEs and	Roadmap for Resilience: California Surgeon General's Report on Adverse Childhood Experiences, Toxic Stress, and Health

toxic stress and a shared vision for how to extend these efforts.	

Additional Resources, Tools, and Data Sources

The resources below include additional information that may be useful for PACEs stakeholders who are seeing linkage to data and prevention strategies to inform their work in preventing ACEs, promoting PCEs, and identifying risk and protective factors to create change and improve the lives of children.

1) Free Digital Behavioral Health Platforms for Children and Families
2) Adverse and Positive Childhood Experiences Data Report: Behavioral Risk Factor Surveillance System (BRFSS), 2015-2021 An Overview of Adverse and Positive Childhood Experiences in California.
3) Prevention Data Brief: Adverse Childhood Experiences and Substance Use Among Teens in California, 2021
4) PACEs Connection
    - Map the Movement includes information on US states that have done ACE surveys
5) CDC website on ACEs
6) CDC technical packages
    - CDC Technical Package on Preventing ACEs
7) EfC Initiative Resource List
8) American Academy of Pediatrics
9) ACEs Aware

Data Sources

1. The Behavioral Risk Factor Surveillance System (BRFSS)
2. The National Survey of Children's Health (NSCH)
3. The California Health Interview Survey (CHIS)
4. The Youth Risk Behavior Surveillance System (YRBSS)

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