Describing the Problem of Suicide – A Guide to Accessing Suicide Data

As noted by the Mental Health Services Oversight and Accountability Commission (MHSOAC), suicide is "a complex public health challenge involving many biological, psychological, social, and cultural determinants." This guide was developed to assist county behavioral health agencies (and their partners) in understanding the data sources available to inform and develop a strategic plan for suicide prevention in alignment with *Striving for Zero: California's Strategic Plan for Suicide 2020-2025*. This document provides a description of available suicide data sources, their limitations and caveats, along with links to useful resources, websites, and reports. This guide is not an exhaustive list of all available data sources but offers a starting point for collecting and analyzing suicide data.

I. Suicide Data Terms

Suicide is a complex issue that is driven by a range of factors. The following types of data are commonly used to understand the impact of suicide:

- Mortality (suicide deaths)
- Morbidity (suicide attempts, self-injury)
- Suicidal ideation (self-reported thoughts of suicide)
- Comorbidities (risk factors)
- Protective factors (supports that help buffer suicide risk)

Mortality refers to deaths that were confirmed to be suicide. Occasionally, deaths that may have been suicide are not reported as such because the coroner or medical examiner is not able to establish suicidal intent. In many jurisdictions, the threshold, or criteria to meet classification for a suicide is very high. The National Violent Death Reporting System (NVDRS) suggests some steps to address this in its comprehensive surveillance system on violent deaths. More about NVDRS appears later in this guide.

Morbidity refers to nonfatal, *intentional* self-injuries. It is important to note that there are many hurdles to overcome for intentional injuries and suicide attempts to be recorded correctly such as (1) disclosure by patient, (2) recording by medical team, and (3) accurate or appropriate injury classification code assigned in a data system by staff.

Suicidal ideation refers to thinking about or wanting to take one's own life. Some health care providers, clinics and agencies administer suicide risk assessments such as the Columbia Suicide Severity Rating Scale (CSSRS) or the Patient Health Questionnaire-9 (PHQ-9), which assess degree of depression severity. Another source of data on suicidal ideation is the California Health Interview Survey (CHIS), a national telephone survey that asks adults about several health topics including suicidal ideation. Some schools or districts also participate in the California Healthy Kids Survey (CHKS) that asks 7th, 9th, and 11th graders several questions relating to suicidal ideation. Tables 1-3 present more information about suicidal ideation

datasets and information. These data sources are valuable for understanding the prevalence of suicidal ideation in a local community and/or over time.

Comorbidity refers to the simultaneous presence of two or more diseases or medical conditions in an individual. For suicide prevention, this term typically refers to the presence of co-occurring substance use or mental health conditions such as depression, anxiety, post-traumatic stress disorder (PTSD) and physical ailments such as terminal illnesses and chronic diseases. The Suicide Prevention Resource Center defines protective and risk factors as follows:

Risk factors are any attribute, characteristic, or environmental exposure of an individual that increases the likelihood of developing a disease or injury (e.g., attempting or dying by suicide). Risk factors do not cause a disease or injury but can contribute to negative health outcomes in combination with other risk factors. For example, depression, access to firearms, and substance use disorders (individually and in combination) increase the likelihood of attempting or dying by suicide, although most people with these risk factors do not attempt suicide. Risk factors should not be confused with warning signs, which are observable behaviors that may indicate an individual is thinking about suicide.

Protective factors are any attribute, characteristic, or environmental exposure that decreases the likelihood of a person developing a disease or injury (e.g., attempting or dying by suicide) given a specific level of risk. For example, depression elevates a person's risk of suicide, but a depressed person with good social connections and coping skills is less likely to attempt or die by suicide than a person with the same level of depression who lacks social connections and coping skills. Social connections and coping skills are protective factors, buffering the suicide risk associated with depression and thus helping to protect against suicide.

II. Overview of Data Sources

The following section provides an overview of existing suicide related data sources. Section A outlines local, state, and national data at a glance displayed in table format. Section B provides more information about the resources listed in the tables, organized by data at the local, county/state, and national levels.

A. Suicide Data Sources at a Glance

The following summary tables list sources of suicide data at the local, state, and national levels. The three tables include the name of the agency or database; type of data (e.g., suicide death, attempt, ideation, or risk and protective factors); and a brief description of the data including its limitations. More detailed descriptions of the data sources follow. Note that these are not comprehensive or exhaustive lists but are intended as a starting point.

Table 1. Local Suicide Data Sources at a Glance

Data Source	Suicide Death	Suicide Attempts	Suicide Ideation	Risk Factors	Protective Factors	Description and Caveats
Office of the Corner or Medical Examiner	✓	Varies	Varies	✓	Varies	• Provides the most current information on all deaths in the county irrespective of county residence status. • Can provide more details about the circumstances around the suicide and means used depending on risk and protective factors collected (varies by jurisdiction) • Storage of data and database complexity varies by office. • May require a memorandum of understanding (MOU) to access data. • Processing delays may occur due to staff capacity, jurisdiction volume and toxicology reporting lag time.
County Epidemiologist	✓	✓				• Epidemiologists (often within the local public health department) have or can request access to all suicide and attempt data available to the county (coroner or Medical Examiner, emergency department and hospitalization) • Formal data requests are often needed to access data.
Emergency Departments/ Hospitals		✓				• Data related to intentional self-harm are collected along with demographic information as part of the intake system. • Data request is needed to access data. • Datasets are managed by the California Department of Health Care Access and Information (HCAI) (formerly the Office of Statewide Health Planning and Development/OSHPD)
Local Death Review Teams	✓			✓	✓	• Multidisciplinary teams that review deaths with a focus on examining risk and protective factors and to inform practices and policies to prevent future deaths. • May or may not exist in your county; contact your coroner or medical examiner, health department, Department of Children and Family Services or probation department. • Child death review teams were mandated in the past; some continue to exist and include review of suicide deaths.

Crisis Lines			✓			• The 988 Suicide & Crisis Lifeline collects call volume data from local crisis centers. • Basic call volume data includes number of calls, chats, and texts to the general line, Veterans Crisis Line, and the Spanish language subnetwork. • Contact your local crisis center to request this data; centers may also be able to share reports that include demographic information, reason for call and level of response provided (e.g., referral to resources, stabilization, or active rescue). •

Table 2. At a Glance Summary of Statewide Surveys, Dashboards and Data Sets that Provide County Level Information Related to Suicide

Data Source	Suicide Death	Suicide Attempts	Suicide Ideation	Risk Factors	Protective Factors	Description and Caveats
California Department of Public Health, EpiCenter – California Injury Data Online Data through 2020 - https://epicenter.cdph.ca.gov Data 2021 and after - https://skylab4.cdph.ca.gov/epicenter	✓	✓				• Death data available from 1991-2021 • Nonfatal hospital and emergency department self-inflicted data is available from 1991-2021. • Crude suicide/self-inflicted injury rates are also available. • Data can be analyzed by gender, age, ethnicity, veteran status and means, among other variables. • Data can be viewed using excel, pdf or html. • Coding change of nonfatal hospital and emergency department data occurred in late 2015; data from that year and earlier cannot be compared with data from 2016 and onward.
California Violent Death Reporting System (CalVDRS) Data Dashboard https://skylab4.cdph.ca.gov/calvdrs/	✓			✓	✓	• Data available from 2018-2020 • Each of the data dashboards has nested tabs to summarize data. The Deaths by Suicide dashboard summarizes Circumstances, Current Mental Health Diagnoses, Fatal Injury Location, and Toxicology • Data can be filtered under the categories of Year of Death, County of Death, Age Range, Method used to inflict the fatal injury, biological sex, Race and ethnicity, Education, Marital Status, and Veteran Status. • Multiple years can be selected for a single county to aggregate data. • Multiple counties can be selected for a single year to view data regionally. •
The Mental Health Services Oversight and Accountability Commission (MHSOAC) Suicide Incidence and Rate Dashboard	✓			✓	✓	• State and county death data rates from 2010-2019. • Data can be analyzed by age, cause of injury, race/ethnicity, and gender; results are displayed visually with a state map highlighting county rates or graphically. • Data can be further analyzed under the “detailed view” tab.

Kidsdata.org		✓	✓	✓	✓	• State and county-level data on the health and well-being of children from more than 35 resources. • Suicide ideation is based on California Healthy Kids survey data (2011-2021) • Suicide attempt data is based on EpiCenter data and death data is based on WONDER. • Data can be queried by gender, grade level, parent education, race/ethnicity, and sexual orientation. • Data can be viewed and downloaded in charts, graphs, and tables
California Department of Education, the California Healthy Kids Survey (CHKS)			✓	✓	✓	• Data on suicidal ideation, school climate, social-emotional and physical health, substance abuse, other risk behaviors and demographic information such as gender, race/ethnicity, sexual identity, free or reduced-lunch status, afterschool participation and military status is available for 7th, 9th, and 11th graders. • Data is available from 2014-2023 and can be downloaded as an image, pdf or ppt
UCLA's California Health Interview Survey (CHIS)			✓	✓	✓	• Data on health status, health conditions, health-related behaviors, health care access, health insurance coverage information, suicide attempts and ideation, and detailed demographic information is available. • Data is available from 2001-2022 and downloadable files available for analysis

Table 3. National Suicide Data Sources at a Glance

Data Source	Verified Suicide Death	Verified Suicide Attempts	Suicide Ideation	Risk Factors	Protective Factors	Description and Caveats
Web-Based Injury Statistics Query and Reporting System (WISQARS), CDC	✓					• Provides fatal injury information at the national, regional, and state levels from 1981-2020 including suicide deaths or injury. • Crude or age-adjusted rates and population estimates are available. • Data is downloaded as text or cvs file
Wide-Ranging Online Data for Epidemiologic Research (WONDER), CDC	✓			✓		• Provides information about births, deaths, cancer diagnoses, tuberculosis cases, vaccinations, environmental exposures, and population estimates, among many other topics. • Data available from 1999-2021 • Query system is available to create maps and tables and compare specific populations, locations and/or groups of people with custom measures, such as age-adjusted rates calculated with various standard populations to conduct trends, crosstabs, and regressions
Behavioral Risk Factor Surveillance System (BRFSS), CDC				✓	✓	• Survey asks about 14 health topics and includes an additional 31 optional topics. • National- and state-level data from 2008-2022 and seven metropolitan statistical areas in California is available. • Surveys are administered in Spanish. • Online query system available for creation of trend tables, cross tabs, and logistic regression
National Survey on Drug Use and Health (NSDUH)		✓	✓	✓		• Provides self-reported information on illicit and/or drug misuse, substance use disorders and substance use treatment, depression and psychological distress, mental illness and mental health care including suicidal ideation, plans, and self-reported suicide attempts. • Data available from 2002-2021 • State-specific tables and estimates as well as *p*-value tables available for download; additional data can be requested for research purposes

B. Local Suicide Data

The most timely and relevant suicide death, attempt and ideation data comes from local sources. State and national data often have a lag in time as data is received and cleaned from localities. The following are local resources you can reach out to as you begin your suicide prevention strategic planning efforts:

1. County coroner or medical examiner
2. County epidemiologist/public health department
3. Emergency departments
4. Hospitals
5. Lifeline or crisis line (help seeking/call volume data)
6. Death review teams

1. **County coroner or medical examiner's** office provides the most recent and up-to-date information on suicide deaths, as they are charged with administering death certificates for any death (resident or not) in the county. All death certificates are provided to the state. If the county participates in the California Violent Death Reporting System (CalVDRS), these offices will also complete or upload data to fulfill reporting requirements. Read more about CalVDRS in Section D: National Suicide Data and Resources.

   Data collected by the coroner or medical examiner's office include gender, ethnicity/race, age, means, drug or alcohol presence, place and date of injury and death, and other significant conditions. Additional data collected during detailed investigations varies by county and may include interviews with family and friends. However, storage of investigation findings is left to individual counties, which may or may not choose to record the information in a readily accessible database. Reach out to your county coroner or medical examiner to start a conversation about accessing data.

2. **County epidemiologists** typically plan, design, conduct and/or manage epidemiologic studies, field investigations and complex surveillance systems and have access to county data regarding a variety of public health concerns. Reach out to your county epidemiologist/public health department, if your county has one, and work collaboratively with them to identify, assess, and analyze suicide data available in your county.

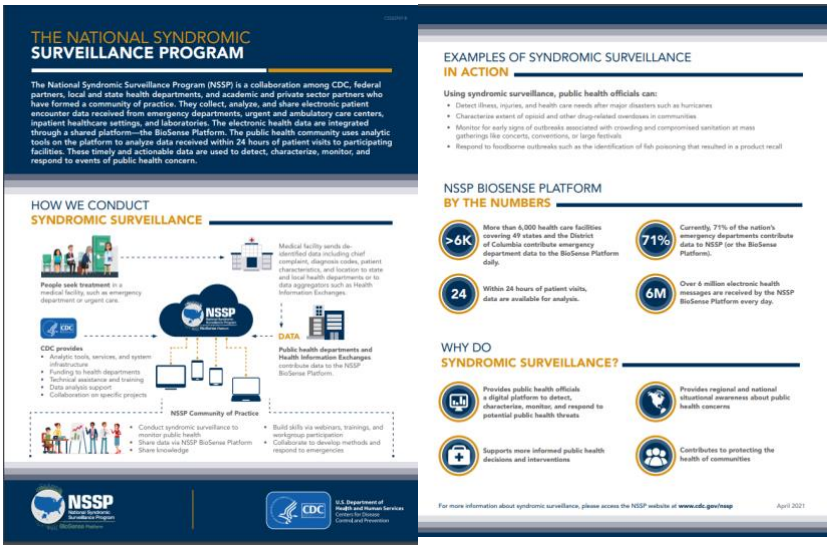
3. **Emergency departments** collect suicide attempt data from patients as part of their intake process. These data are reported to the state. Reach out to your local emergency department(s) to establish access to current suicide attempt data.

4. **Hospitals** collect data from patients who are treated in the hospital for a suicide attempt. Reach out to your local hospital or public health department to establish access to current suicide attempt data. Visit the CDPH EpiCenter (https://epicenter.cdph.ca.gov/ReportMenus/InjuryDataByTopic.aspx for data up to 2020; https://skylab4.cdph.ca.gov/epicenter/ for data 2021 and later) to access local hospital data online. Some hospitals are using syndromic surveillance systems such as ESSENCE to report real-time data related to suicide attempts.

Spotlight on the National Syndromic Surveillance Program and ESSENCE

The CDC developed the National Syndromic Surveillance Program (NSSP) to provide public health officials with a timely system for detecting, understanding, and monitoring health events to serve as an early warning system for public health concerns including opioid overdoses, lung injury associated with vaping product use, and natural disasters. NSSP collaborates with federal, local and state health departments as well as academic and private sector partners to form a community of practice. The **BioSense Platform** is an integrated electronic health information system that allows users to collect, evaluate, share, and store surveillance data. The public health community uses analytic tools on the platform to analyze data received as early as 24 hours after a patient's visit to a participating facility. Public health officials use these timely and actionable data to detect, characterize, monitor, and respond to events of public health concern.

- More than 6,400 health care facilities covering 50 states, the District of Columbia, and Guam contribute to the platform daily.
- Data are available for analysis within 24 hours of a patient's visit.
- 76% of U.S. emergency departments contribute data to the platform, often within 24 hours.
- More than 7 million electronic health messages are received by the platform daily.



After the Boston bombings, the Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE) was adapted to look for noninfectious health events including the following: anxiety, depression, suicidal tendencies, and hearing loss. ESSENCE is the software used by NSSP and hosted by the BioSense Platform. It has query capabilities that include time series information such as stacked graphs, detector comparison, configuration options, stratification queries and overlay. It also has GIS map views and more.

To view the two-page overview of NSSP, click here. Visit NSSP to learn more about ESSENCE and its online training for those interested in using the software.

5. **Suicide Crisis Hotline (Help Seeking) Data Sources.** A crisis center operates crisis lines that serve as resources for individuals going through mental health crises. These centers also assist individuals seeking to help someone in crisis or who may be thinking of suicide. Crisis centers across California collect call volume data. These data can be useful in suicide prevention strategic planning efforts as they can provide demographic information from callers including gender, race, ethnicity, age, and veteran status. Many local crisis centers can also provide valuable information about the nature of the call and the intervention applied (e.g., listening, referral to resources, stabilization, or active rescue). Crisis line data are a useful tool that can indicate how many people are reaching out for help, identify trends over time, and measure the impact of outreach activities in a county that has promoted the Lifeline. The best way to obtain this data is to contact your local crisis center or find out if your county behavioral health or public health department has a contract with a crisis center and already receives data reports. Figure X represents an example of data counties can receive from call centers that are part of the 988 Suicide and Crisis Lifeline network.

Spotlight on the 988 Suicide and Crisis Lifeline

The 988 Suicide and Crisis Line network consists of more than 200 member crisis centers nationwide. People can call or text 988 or chat 988lifeline.org for themselves or if they are worried about someone else. 988 serves as a universal entry point that is available 24/7, so that no matter when or where someone is calling from, they can reach a trained counselor who can help. Access is available through every landline, cell phone, and voice-over internet device in the U.S. Call services are available in Spanish, along with interpretation services in over 150 languages. Contacting 988 can also directly connect people to the 988 Spanish language sub network or the Veterans Crisis Line by choosing prompts. This infographic describes how calls, texts, and chats are routed through the network to reach a local crisis center.

The Lifeline network was launched in 2005 and over time has expanded to include ways to connect people to more specialized supports and, in all modalities, including calls, chats, and texts. Prompts are offered to connect directly to the Veterans Crisis Line (press 1), the Spanish language subnetwork (press 2 or text "AYUDA" to 988), and specialized services for LGBTQI+ youth and young adults ([press 3). In 2022 the Lifeline network launched a new 3-digit number, 988, to access the network. The previous 1-800-273-8255 number will continue to function for the foreseeable future.

It is important to know that Lifeline crisis centers are locally funded, independent organizations. Lifeline member crisis centers must be accredited and adhere to high standards of practice and service delivery. A list of crisis centers in California is included in table 4. Visit the AAS dashboard of accredited crisis centers and the 988 Crisis Center locator for full listings. Note that Lifeline crisis centers have negotiated coverage areas for 988 contacts, so while a center may be located in one city, its coverage area could include a broader area.

Table 4. California AAS-Accredited Crisis Centers

Name and Location of Center	Phone	Website
Kern Behavioral Health & Recovery Services Hotline, Bakersfield (988 Lifeline member)	(800) 273.8255	www.kernbhrs.org
Casa Pacifica Centers for Children & Families, Camarillo	(805) 366-4302	www.casapacifica.org
Suicide Prevention Center, Didi Hirsch Menta Health Services (Los Angeles, Ventura, and Orange counties) (988 Lifeline member)	(424) 362-2911 (L.A. or Ventura counties), (714) 989-8306 (Orange County	https://didihirsch.org/services/suicide-prevention/
Suicide Prevention and Crisis Services of Yolo County (Davis) (~~Lifeline member~~)	(888) 233-0228	www.suicidepreventionyolocounty.org
Central Valley Suicide Prevention Hotline - Kingsview, Fresno (Lifeline member)	(559) 256-0100 x5002	www.cvsph.org
Teen Line, Los Angeles	(310) 423-3401	www.teenlineonline.org
Buckelew Suicide Prevention Program, Novato (988 Lifeline member)	(415) 499-1100 or 1 (855) 587-6373	https://buckelew.org/services/suicide-prevention/
Crisis Support Services of Alameda County, Oakland (988 Lifeline member)	(510) 420-2460	www.crisissupport.org
WellSpace Health, Sacramento (988 Lifeline member)	(916) 469-4690	www.suicideprevention.wellspacehealth.org
StarVista. San Carlos (988 Lifeline member)	(650) 579-0359	www.star-vista.org
Optum, San Diego (988 Lifeline member)	(888) 724-7240	https://www.optumsandiego.com/content/SanDiego/sandiego/en/access---crisis-line.html
Felton Institute, San Francisco Suicide Prevention (988 Lifeline member)	(415) 984-1900	https://felton.org/social-services/adult/san-francisco-suicide-prevention-sfsp/

Institute on Aging Friendship Line, San Francisco		
Santa Clara County Suicide & Crisis Services, San Jose (988 Lifeline member)	(800) 704-0900	https://bhsd.sccgov.org/home
Transitions-Mental Health Association, San Luis Obispo	(805) 540-6500	www.t-mha.org
Suicide Prevention Service of the Central Coast, Santa Cruz (988 Lifeline member)	(831)-459-9373	https://www.suicidepreventionservicecc.org
Contra Costa Crisis Center, Walnut Creek (988 Lifeline member)	(925) 939-1916	www.crisis-center.org

6. **Child Death Review Teams (CDRT)** are county interagency teams that review child deaths for the purposes of improving prevention and support. CDRTs are able to investigate, usually through the coroner's office, the circumstance surrounding a child death (less than 18 years old). CDRTs vary in whether they investigate all child deaths or are limited to those that may be sudden, traumatic, and/or unexpected. In California, there may be up to 37 local CDRTs. The National Center for Fatality Review and Prevention's website, as described below, provides the history and responsibility of CDRT teams in California. Recent CDRT reports can be viewed in the "Key Studies and Reports" section.

Spotlight on Fatality Review Teams

The NCFRP's website contains information about the function and duties of local Child Death Review Teams (CDRT). The purpose of these teams is to help identify and investigate possible child maltreatment cases, protect siblings and other children from maltreatment, improve systems and agency, and to study the circumstances surrounding child death in order to prevent and create effective action against such deaths. The website also discusses the management of data, child death prevention initiatives that have been put in place, protocols for CDRT function and confidentiality, and team training funded by state departments. NCFRP does not track all CDRTs and CRTs. For the most accurate information, reach out to your health department, children and family services department or probation and ask if a CDRT or CRT is active.

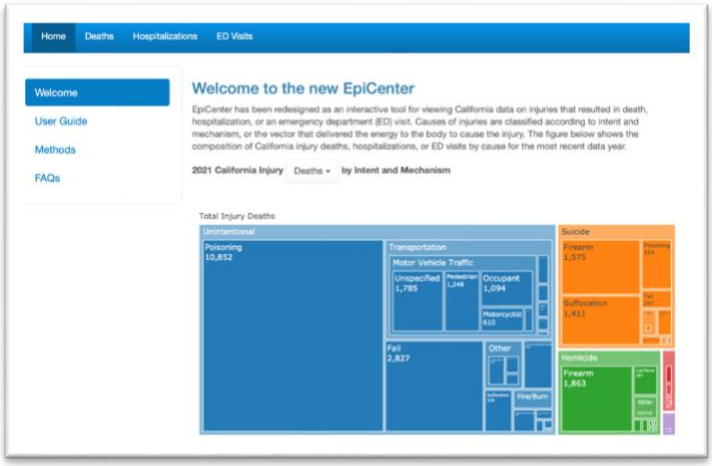
Dr. Kimberly Repp, chief epidemiologist of Washington County Public Health Department, has developed and implemented an innovative suicide surveillance system that involves a unique collaboration between the county's medicolegal death investigators (also known as deputy medical examiners) and epidemiologists. Dr. Repp created a checklist that includes basic questions about age, gender and cause of death and expands to an extensive list of questions about evidence of addiction, financial or job problems, relationship stress and others. The checklist tracks near real-time trends to determine who in the community is most at risk of suicide and what system changes can be made to prevent future suicides. The system has been

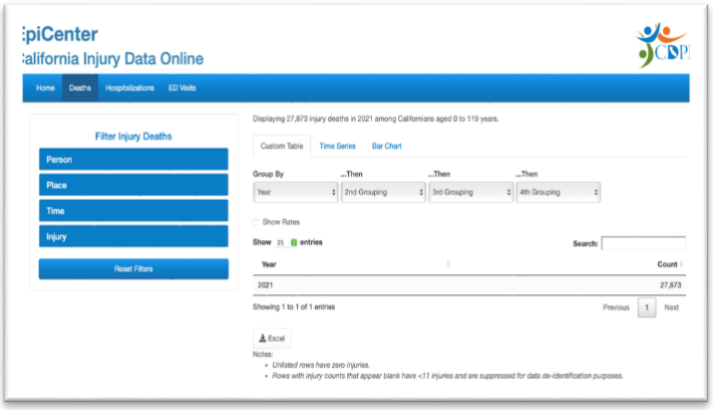
proven to save lives and is influencing national practice. A recorded webinar by Dr. Repp that provides an overview of the process can be viewed here.
In early 2019, this model began to be implemented in a few counties within California. For example, the Humboldt County Suicide Fatality Review Annual Report 2022 summarizes key findings from their work.

C. California Suicide Data Sources

Current state-level sources of suicide data include: 1) The California Department of Public Health (CDPH), 2) MHSOAC dashboard, 3) the California Health Kids Survey, 4) KidsData and 5) UCLA's California Health Interview Survey (CHIS).

1. **The California Department of Public Health (CDPH)** collects and analyzes suicide deaths from California counties through death certificates registered in California each year. Suicide attempt data or nonfatal injury is submitted to the state through the California Office of Statewide Health and Planning Development Patient Discharge Data (PDD) and Emergency Department Data.





   EpiCenter, California's Injury Data Online's website, developed by the Department of Public Health, is designed to query death and attempt data along with other fatal and nonfatal injuries. Suicide death data (fatal injuries) is available from 1991 to 2021. Data on nonfatal self-inflicted injuries (attempts) is available from 1991 to 2021.

   The query system allows users to review data filtered by one more variable. The variables appear in drop down menus from up to 4 grouping options, and can include age, sex, race/ethnicity, and cause of injury (means).

   For example, to locate suicide death data for one county, select Deaths from the menu bar at the top of the page. Then select custom table, time series, or bar chart for how you want the data to appear. From the grouping drop down menus select Injury Intent, then County of Residence, and any other variables you would like to include. Finally, enter the name of the county in the Search field below the groupings. If you are familiar

with the ICD9 or 10 codes for injuries or means of suicide, you can select a specific injury by entering its corresponding ICD code. Data can be exported and viewed in html, Excel, or pdf format. To learn more about the data visit EpiCenter's website.

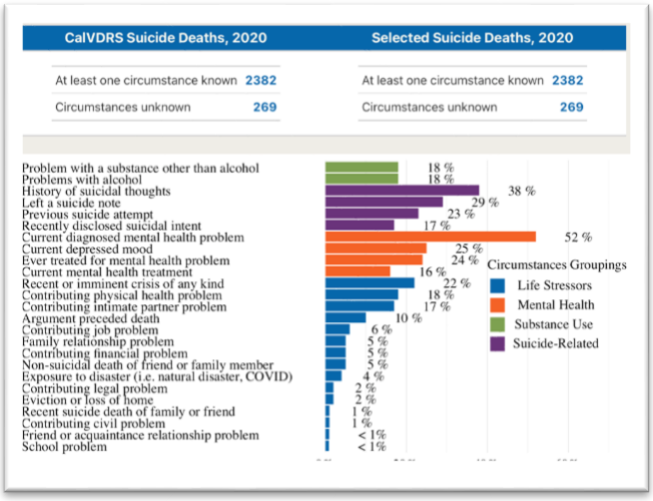
Notes on the new EpiCenter web site:

- In 2023 the EpiCenter was redesigned and moved to a new location: https://skylab4.cdph.ca.gov/epicenter/.
- The previous or legacy site can still be found at https://epicenter.cdph.ca.gov/Default.aspx. The legacy site will no longer be updated beyond data for 2020.
- The new EpiCenter includes death data for 2021 and onward. To review death data from 1991 to 2020, visit the legacy site. Data cannot be queried across the two web sites however, so to view death data trends that span a time frame before and after 2021, query each site and download the results into Excel or another format.
- For nonfatal injury data (Hospitalizations, ER Visits) use the new EpiCenter, which incorporates changes in coding that are not reflected on the legacy site.

ED/Hospitalization Notes:

- **Coding changes:** As noted, on the website, due to coding changes, nonfatal injury data from 2015 (including suicide attempts or self-inflicted injuries) forward is not comparable to earlier years. The new EpiCenter web site incorporates these coding changes from 2016 and beyond. Nonfatal injury data from the legacy EpiCenter site cannot be compared to the data on the new site.
- **Potential overlap in counts:** Note that there may be some overlap in the counts for suicide attempts between emergency departments (ED) and hospitals as some patients who are treated at an ED may then transfer and be admitted to a different hospital and will appear in both datasets.

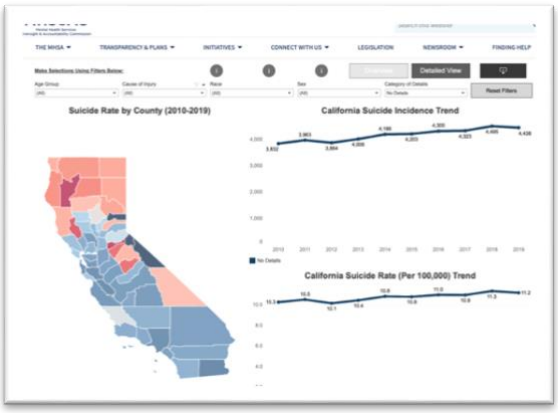
The California Violent Death Reporting System (CalVDRS) Data Dashboard allows users to search for data around suicide deaths and risk and protective factors. CalVDRS integrates data from various providers (i.e., vital records, law enforcement, and coroners/medical examiners) in one secure and confidential database to piece together a more complete picture of the circumstances and underlying causes of violent deaths, to track trends in communities across California, and to translate these findings into actionable information for local and state action.



As of February 2024, 34 California counties actively participate in the California Violent Death Reporting System:

Amador	Los Angeles	San Mateo
Butte	Marin	Santa Cruz
Colusa	Mendocino	Shasta
Contra Costa	Merced	Siskiyou
Fresno	Modoc	Sonoma
Glenn	Mono	Stanislaus
Humboldt	Orange	Tehama
Imperial	Placer	Trinity
Kern	Sacramento	Ventura
Kings	San Benito	Yolo
Lake	San Diego	
Lassen	San Francisco	

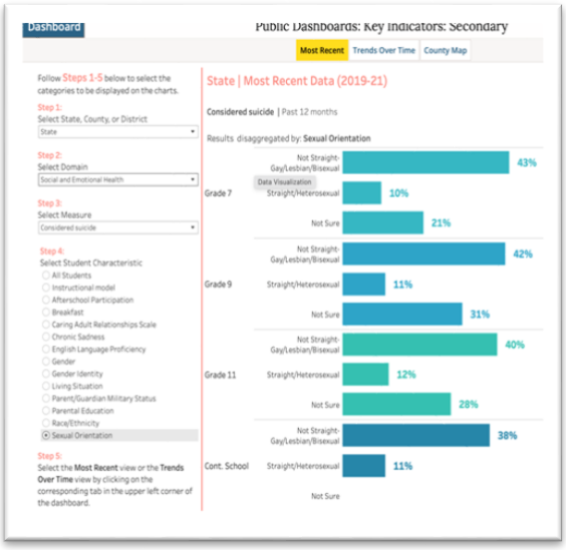
2. **The Mental Health Services Oversight and Accountability Commission (MHSOAC)** Suicide Incidence and Rate Dashboard data dashboard highlights trends in demographic and other factors to support the planning and development of state and local suicide prevention strategies. Suicide deaths can be viewed by demographic characteristics, cause of injury, race, and gender. Results are displayed through a state map highlighting county rates, or through graphs. Data is available from 2010 to 2019 and can be download in pdf format. The dashboard also has query or metric options where data can be downloaded as an image, data, cross tab, pdf, or PowerPoint. Data can be further analyzed under a "detailed view" option.



In addition to suicide incidence, the dashboard includes data on the following, which can inform risk and protective factors:

- Full-service partnership discontinuation
- Full-service partnership partner engagement reporting
- Client services information system monthly clients served.
- Statewide incompetent to stand trial dispositions.

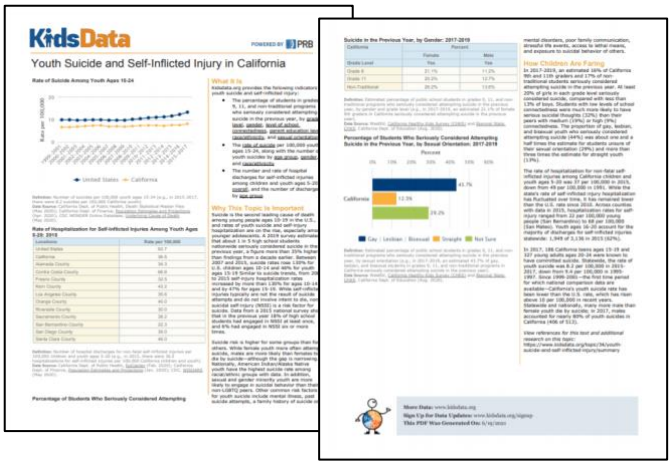
3. **The California Healthy Kids Survey (CHKS)** is the largest statewide survey of resiliency, protective factors, risk behaviors and school climate in the nation. It is given to grades 7, 9 and 11 at participating schools throughout the state. A dashboard displays data on contextual factors and risk factors such as experiencing teen dating violence, gang involvement, bullying/harassment, fighting at school and perceived safety. All data can be accessed online, including the following suicide attempt and ideation questions asked of students in the core module:



   - During the past 12 months, did you ever feel so sad or hopeless almost every day for **two weeks or more** that you stopped doing some usual activities?
   - During the past 12 months, did you ever seriously consider attempting suicide?

   For every question, a wide range of demographic variables are available including gender identity, ethnicity, participation in after school programs, participation in free or reduced lunch program, military status of parents and more. In addition to these questions, supplementary modules with additional suicide-related questions, mental health, and social emotional learning (SEL) questions might be available if the school/district participated. Visit CHKS to view the public dashboard, reports, and resources.

4. **Lucile Packard Foundation for Children's Health, Kidsdata** is an online data tool that has county-level data on the health and well-being of children in California, such as violence and safety (including adverse childhood experiences), socioeconomic factors, education, environmental health, and suicide attempt and ideation from more than 35 resources. Suicide data available is based on CHKS survey data. The online tools display data in charts, graphs, and tables. It also generates reports (see example). Visit kidsdata.org to learn more.



5. **UCLA's California Health Interview Survey (CHIS)** is the largest state health survey in the nation. It is a web and telephone survey that asks questions on a wide range of health topics including suicidal ideation among adults and teens. The survey also collects demographic information such as age, gender, race/ethnicity, language spoken at home and marital status.

CHIS is conducted on a continuous basis allowing the survey to generate timely one-year estimates. CHIS gathers representative data on all 58 counties in California and provides a detailed picture of the health and health care needs of California's large and diverse population. Suicide ideation and attempt questions are included in both adult and teen questionnaires. Visit the CHIS web site.

For surveys administered by phone, respondents who answer affirmatively to suicide ideation and attempt questions are provided with the Suicide & Crisis Line contact information and asked if they would like to be connected or continue with the survey.

Public files can be downloaded after creating a log in through the online portal here. Data is available from 2001-2022.

6. **Additional California data sources**. The resources below can offer information about risk and protective factors related to suicide and other health and wellness outcomes:

- Maternal and Infant Health (MIHA) – MIHA is an annual, statewide-representative survey of women with a recent live birth in California. MIHA collects self-reported information about maternal and infant experiences and about maternal attitudes and behaviors before, during and shortly after pregnancy.
- California Health and Human Services Open Data Portal – The California Health and Human Services Agency (CHHS) Open Data Portal increases public access to one of the state's most valuable assets: nonconfidential health and human services data. The portal offers access to standardized data that can be easily retrieved, combined, downloaded, sorted, searched, analyzed, redistributed, and reused by individuals, business, researchers, journalists, developers, and government to process, trend, and innovate.
- California Healthy Places Index (HPI) – The HPI website includes an interactive map where data down to the census tract level is available on communities in California. These data provide diverse economic, social, political, and environmental factors that influence physical and cognitive function, behavior, and disease. These factors are often called social determinants of health and form the root causes of disadvantage, which can affect violence in communities.
- Let's Get Healthy California – Let's Get Healthy California is a shared vision for the future health of Californians. It is a commitment to becoming a healthier state

through joint efforts in six project goals, including Creating Healthy Communities, which includes an indicator on neighborhood safety.

- Data Dashboard for Aging - includes indicators to measure progress toward the five goals outlined in the California Master Plan for Aging, such as housing, transportation, and health care, as well as demographic profiles.

D. National Suicide Data and Resources

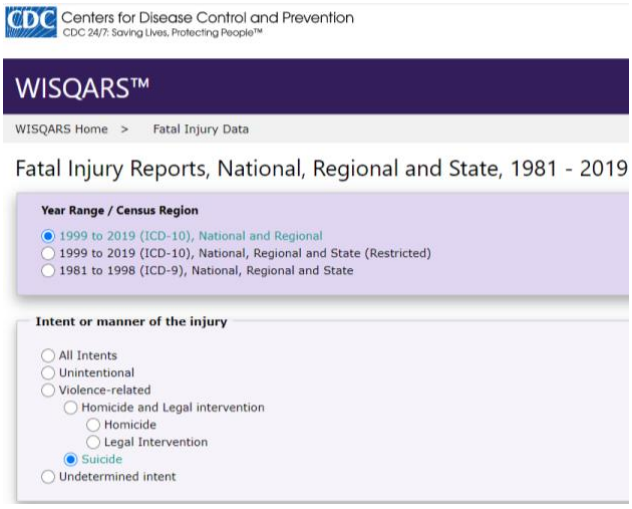
The Centers for Disease Control and Prevention (CDC) and the Substance Abuse and Mental Health Services Administration (SAMHSA) provide suicide data at the national level. The following is a brief summary of the resources available.

Centers for Disease Control and Prevention (CDC) has several data sources for suicide prevention that provide a variety of information including 1) National Violent Death Reporting System (NVDRS), 2) Web-Based Injury Statistics Query and Reporting System (WISQARS), 3) Youth Risk Behavior Surveillance Systems (YRBSS), 4) CDC Wide-ranging Online Data for Epidemiologic Research (CDC WONDER) and 5) the Behavioral Risk Factor Surveillance System (BRFSS). Each of the following five data sources provides unique information.

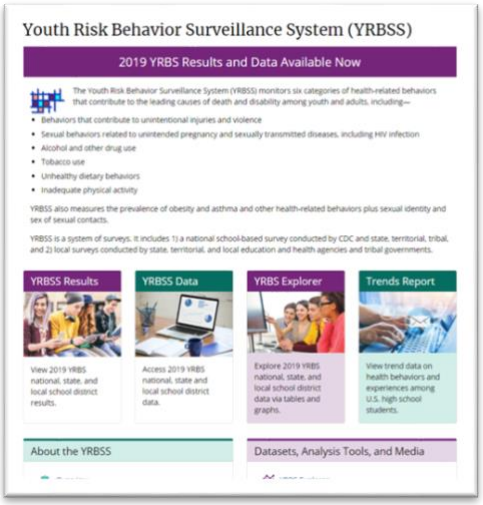
1. **National Violent Death Reporting System (NVDRS)** tracks and reports violent deaths, including suicide, from multiple sources such as law enforcement, medical examiners, toxicology reports and death certificates. Combining multiple data sources helps provide information on precipitating circumstances such as health conditions, relationships, mental health history, finances and other factors related to the decedent and death itself.

An overview video and fact sheet about the National Violent Death Reporting System can be found here.

2. **Web-Based Injury Statistics Query and Reporting System (WISQARS***)* is the online database for NVDRS that provides fatal injury information at the national, regional, and state levels from 1981 to 2020, including suicide deaths or injury. Data can be searched by state and by specific variables such as race/ethnicity, age, gender, and Hispanic origin. Number of deaths or fatal injuries by suicide are provided along with population estimates and crude- and age-adjusted rates. Users must agree to the terms of use for state level data from 1999-2021 to prevent inadvertent disclosure of a decedent's identity. Data is in text or table format only. Visit WISQARS for more information.



3. **Youth Risk Behavior Surveillance Systems (YRBSS)** was developed by the CDC to monitor six categories of health-related behaviors and experiences among students that contribute to leading causes of death and disability among youth and adults across the country. The surveillance system is a network of surveys that includes 1) national school-based survey conducted by the CDC and state, territorial, and tribal localities 2) local surveys conducted by state, territorial and local education and health agencies and tribal governments from 1991 to 2021.

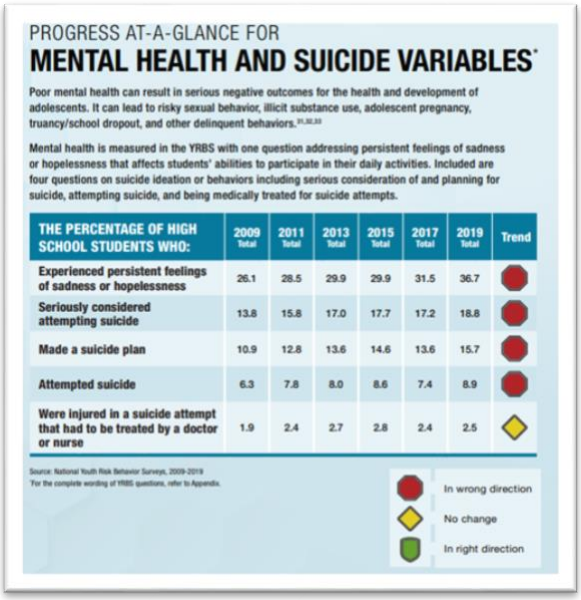


View the most recent YRBSS results, access data, explore data tables and view trend reports here. The most recent YRBSS report summarizes 10 years of data providing trends analysis on sexual behavior, high-risk substance use, experience with violence and mental health and suicide. The report also places a special focus on sexual minority youth or lesbian, gay or bisexual youth.

Regarding suicide, the survey asks if youth during the past 12 months had:

- Experienced persistent feelings of sadness or hopelessness
- Seriously considered attempting suicide
- Made a suicide plan.
- Attempted suicide
- Were injured in a suicide attempt that had to be treated by a doctor or nurse.

The table to the right provides progress at a glance regarding these five questions and shows that progress in the wrong direction (as noted by red dots) has been made in the past 10 years for most of these questions. Download the Youth Risk Behavior Survey Data Summary & Trend Report 2009-2019 for more information.


PROGRESS AT-A-GLANCE FOR

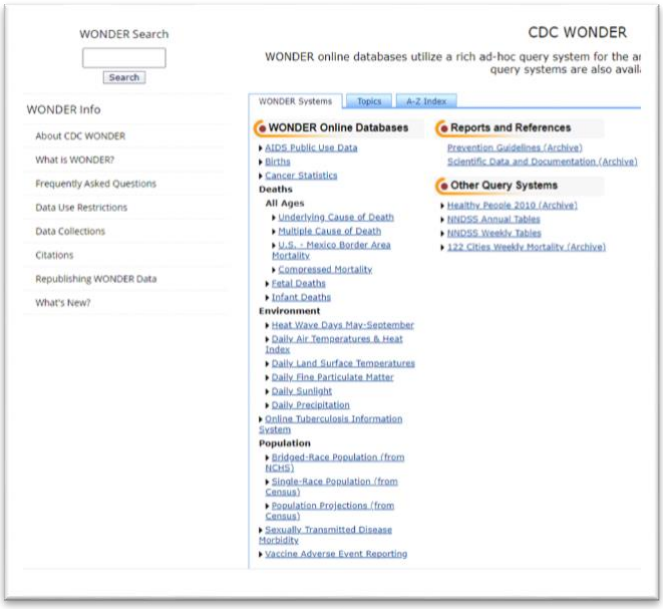
MENTAL HEALTH AND SUICIDE VARIABLES

Poor mental health can result in serious negative outcomes for the health and development of adolescents. It can lead to risky sexual behavior, illicit substance use, adolescent pregnancy, truancy/school dropout, and other delinquent behaviors.

Mental health is measured in the YRBS with one question addressing persistent feelings of sadness or hopelessness that affects students' abilities to participate in their daily activities. Included are four questions on suicide ideation or behaviors including serious consideration of and planning for suicide, attempting suicide, and being medically treated for suicide attempts.

THE PERCENTAGE OF HIGH SCHOOL STUDENTS WHO:	2009 Total	2011 Total	2013 Total	2015 Total	2017 Total	2019 Total	Trend
Experienced persistent feelings of sadness or hopelessness	26.1	28.5	29.9	29.9	31.5	36.7	
Seriously considered attempting suicide	13.8	15.8	17.0	17.7	17.2	18.8	
Made a suicide plan	10.9	12.8	13.6	14.6	13.6	15.7	
Attempted suicide	6.3	7.8	8.0	8.6	7.4	8.9	
Were injured in a suicide attempt that had to be treated by a doctor or nurse	1.9	2.4	2.7	2.8	2.4	2.5	

4. **CDC Wide-ranging Online Data for Epidemiologic Research (CDC WONDER)** is a public resource that makes many health-related data sets available to CDC staff, public health departments, researchers, and others.



The online data manages nearly 20 collections of public-use data including U.S. births, deaths, cancer diagnoses, tuberculosis cases, vaccinations, environmental exposures, and population estimates, among many others.
To assist with public health research, decision making and program evaluation, the public has access to ad-hoc queries, summary statistics, maps, charts, and data extracts from WONDER.

Most of the data are updated annually; some collections are updated monthly or weekly. The online systems allow users to:

- Create tables, maps, charts, and data exports with the ability to index data from any field or limit data by any field.
- Produce ad-hoc summary statistics, such as frequency counts, rates, confidence intervals, standard errors and percentages.
- Organize data results into categories.
- Compare specific populations, locations and/or groups of people with custom measures, such as age-adjusted rates calculated with various standard populations.

Visit WONDER to learn more. The CDC also has several other data sources including the following. For more information about these data sources visit CDC.

- National Electronic Injury Surveillance System-All Injury Program
- National Hospital Ambulatory Medical Care Survey
- The National Vital Statistics System

5. The Behavioral Risk Factor Surveillance System (BRFSS) is a national health-related telephone survey that collect state data about U.S. residents regarding their health-related risk behaviors, chronic health conditions and use of preventive services conducted by the CDC. BRFSS completes more than 400,000 interviews with adults each year asking about 14 health topics and an additional 31 optional topics. Surveys are also conducted in Spanish. National- and state-level data is available from 2008 to 2022.

The BRFSS website provides a variety of tools to access data.

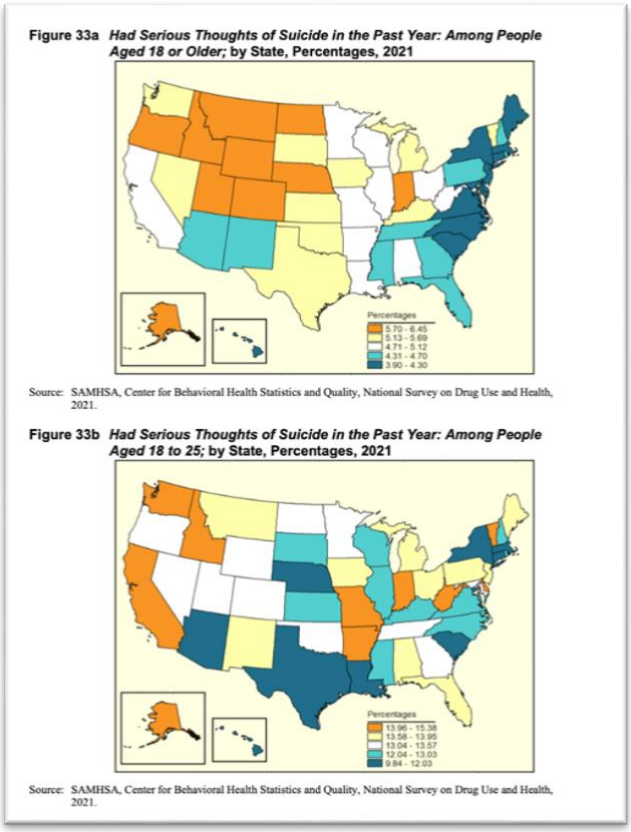
- The Prevalence and Trends Data tool allows queries of the data by geographic location (states and metropolitan areas including seven California areas).
- The Web Enabled Analysis Tool (WEAT) permits users to create trend tables, cross tabs, and logistic regression.
- Published Morbidity and Mortality Weekly Reports for multiple indicators by state and some substate areas are available for download.
- Selected Metropolitan/Micropolitan Area Risk Trends (SMART) tool produces some local estimates as well.

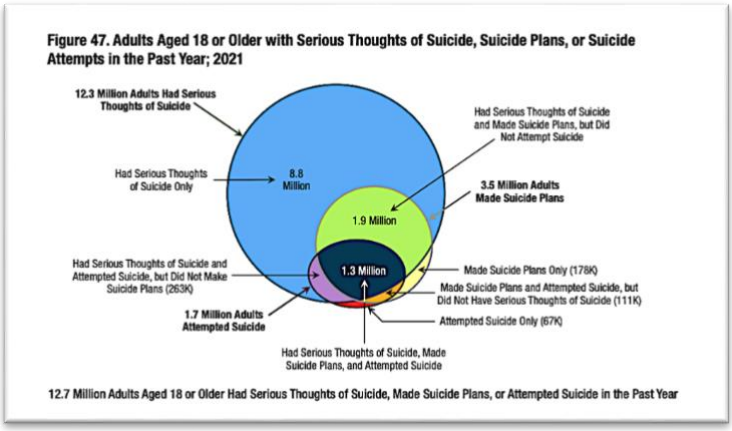
The Substance Abuse and Mental Health Services Administration (SAMHSA) administers the National Survey on Drug Use and Health (NSDUH) to a sample of Americans representing thousands of people every year to provide a snapshot of mental health and substance abuse. The survey includes questions regarding mental health and substance use and treatment as well as questions suicide ideation and attempts for adults and adolescents. Demographic data include gender, race/ethnicity, age, educational level, employment status, income level, veteran status, household composition and population density.

[The 2021 National Survey on Drug Use and Health National Maps of Prevalence Estimates, by State Report], provides data for each question overall and by age category. Figure 31a from the report highlights states according to the percent of the state's total population indicating they had serious thoughts of suicide in the past year.

[The Key Substance Use and Mental Health Indicators in the Unites States: Results from the 2021 Survey on Drug Use and Health] report provides data for each question overall. Figure 61 indicates the number of adults who had serious thoughts of suicide, suicide plans or suicide attempts in the past year.

These reports and an array of additional special reports that explore these topics in more detail, including by population, visit the [NSDUH web page].

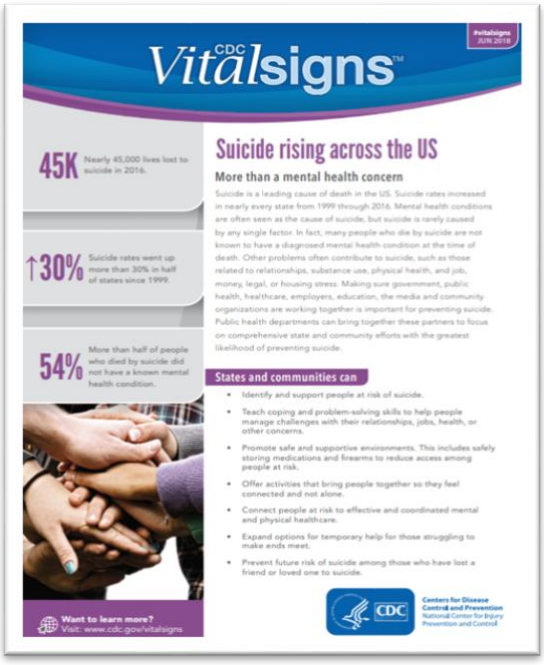




III. Key Recent Studies and Reports

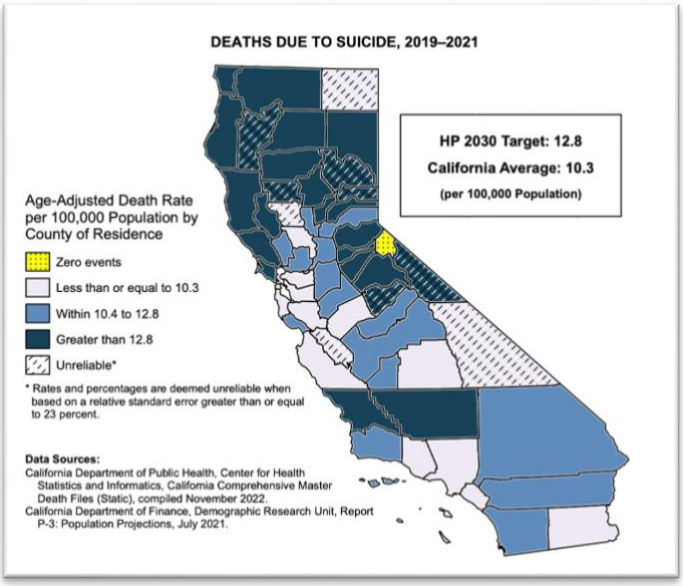
The Centers for Disease Control and Prevention (CDC), the California Department of Public Health (CDPH) and Mental Health America produce several reports that highlight suicide deaths and attempts across the nation and in California counties. Below are examples of two recent reports that highlight the rise in suicide rates across the U.S. and how rural communities are among the hardest hit.

Suicide rising across the US is a four-page report that reviews suicide data from 1999 to 2017. This report gives an overview of the factors of suicide and its increased rates in the U.S. since 1999. It also provides a list of preventative actions that can be taken by the federal government, states, health care systems, employers, and general communities. To view an overview video of the report and to learn more, visit the CDC's vital signs website.



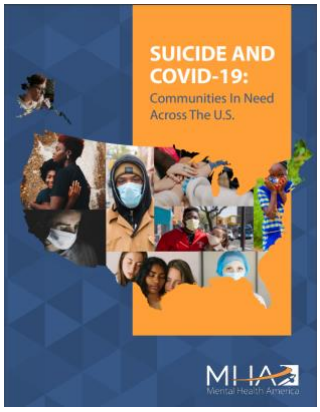
The CDC's webpage titled **Suicide in Rural America** provides information on the increase of suicide rates in rural America between 2000 - 2020 and the growing gap between the suicide rates between rural and urban areas. Data reveals higher rates of suicide among white non-Hispanics in urban areas while higher rates exist among non-Hispanic Native Americans and Alaskan Natives in rural areas. The webpage links to various reports and resources for rural suicide prevention planning.

CDPH County Health Status Profiles provide California and county age-adjusted rates, crude rates or percentages for mortality, infant mortality, morbidity conditions and other public-health-related categories, including suicide. These three-year average rates and percentages are ranked and compared to the target rates established in the Healthy People 2030 Initiative. The report also provides a comparison of current period to previous period rates and percentages for California and its counties. The profiles publication typically occurs in conjunction with National Public Health Week.
Regarding suicide data, the report highlights the number of counties with age-adjusted death rates per 100,000 populations that are less than or equal to 10.2, within 10.3 to 10.7, or greater than 10.7, which is the state's three-year average suicide death rate. The map illustrates that the majority of counties are above the state's suicide death rate.



In 2019, **Mental Health America** collected data from 2.6 million users visiting the MHA screening. In addition, in 2021, MHA analyzed MHA screenings from more than 725,000 individuals who took a depression screen (PHQ-9). Suicide ideation questions analyzed include:

- Frequency of thoughts that you would be better off dead, or of hurting yourself (thinking about the previous two weeks thoughts have been: not at all, several days, more than half the days, nearly every day)
- Among those with frequent suicidal ideation (thinking about suicide more than half or nearly every day) they were asked:
    - Are you currently, or have you ever been, diagnosed with a mental health condition by a professional?
    - Have you ever received treatment/support for a mental health problem?



The analysis of these data resulted in the *Suicide and Covid-19: Communities in Need Across the U.S.* report. The report found that across the country about one third-of respondents were experiencing frequent suicide ideation and women more so than men. The report also examined these questions by race/ethnicity and age. The report then ranked states and counties with the highest proportion of individuals reporting suicidal ideation. California, Texas, and Florida were the top three states with suicidal ideation.

IV. Death Review Team Reports

Both the Inter-Agency Council on Child Abuse and Neglect ICAN (Los Angeles County's Child Death Review Team) annual report and Montana Suicide Mortality Review Team's report demonstrate the benefits of these review teams as they 1) provide additional risk and protective factors not available elsewhere, 2) review coroner data and 3) have a team of stakeholders dedicating time to review and make recommendations. The reports are summarized as follows and include links to the full reports.

ICAN 2021 Child Death Review report describes overall child deaths (children and adolescents aged 17 years or younger) and details these deaths by homicides by parents, family members or caregivers; suicide; accidental deaths; and undetermined causes of death. The report details how cases were selected for team review and offer five years of data by demographic and regional characteristics. The report also provides sample case summaries of deaths by category and lists associated risk factors for each category of death reviewed.

Montana Suicide Mortality Review Team report contains data, graphs and surveys that discuss U.S. suicide rates in 2014 and Montana suicide rates by gender, race, and veteran status as well as age, region, and education level. The report describes suicide deaths by type of means used and mental health issues or disorders among other variables. The report takes a deeper look at youth (11-17 years old), Native American and veteran suicide deaths. The report incorporates information from the Mountains' Youth Risk Behavior survey. Recommendations listed include depression screening and safety planning interventions, utilizing the Columbia Suicide Severity Rating Scale, and convening a suicide prevention conference. A series of state and federal interventions are also described.

V. Additional Suicide Data Webinars and Tools

It may be helpful to view prior webinars and other training guides that review suicide data sources and explain why becoming familiar with all the factors that impact suicide can better inform county strategic planning efforts. Two resources are provided below, along with links to register or review the training.

The **Striving for Zero Suicide Prevention Strategic Planning Learning Collaborative** was formed to advance local strategic planning and implementation in alignment with strategic aims, goals and objectives set forth in Striving for Zero, California's Strategic Plan for Suicide Prevention 2022-2025. The Learning Collaborative web site includes links to webinar and module recordings, slide sets, and other strategic planning resources developed for the Collaborative. Below is a selection of data-related Collaborative modules and resources:

Describing the Problem of Suicide Prevention Part 1- Suicide Deaths and Suicide Attempt Data**:** This module reviewed databases and tools to describe the problem of suicide related to suicide deaths and attempts. Throughout the module tips were provided for data storytelling, as well as how to apply safe and effective messaging principles when communicating about suicide.

- View a recording of the meeting here
- View slides from the meeting here
- Requesting Suicide Data from a County Epidemiologist Handout

Describing the Problem of Suicide Prevention Part 2- Suicide Ideation, Help-Seeking, Protective and Risk Factors**:** This module reviewed databases and tools available to describe the problem of suicide related to suicide ideation, help-seeking, and risk and protective factors. Presenters provided an overview of suicide fatality review teams and shared tips and tools to facilitate data integration across multiple systems and partners. A step-by-step process to facilitate a suicide prevention strategic planning resource mapping process was reviewed.

- View a recording of the meeting here
- View slides from the meeting here

Evaluation and Measuring Outcomes: Two modules reviewed practical strategies to measure outcomes outlined in a strategic plan for suicide prevention. Topics covered key steps to creating a program evaluation plan, logic models, writing objectives, cost benefit studies, and considerations for culture and inclusivity.

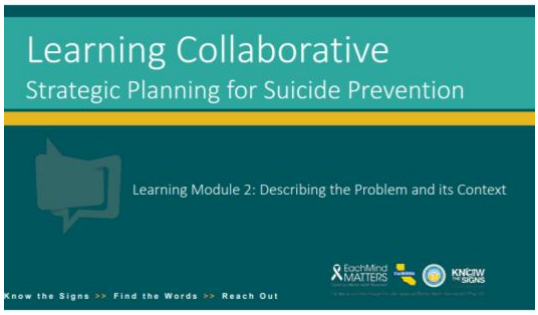
Evaluation and Measuring Outcomes A:

- View a recording of the meeting here
- View slides from the meeting here

Evaluation and Measuring Outcomes B:

- View a recording of the meeting here
- View slides from the meeting here

In 2018, the **Learning Collaborative for Strategic Planning for Suicide Prevention**, funded by the California Mental Health Services Authority, presented five webinar modules to assist counties in their strategic planing effforts. The second module titled “Describing the Problem and Its Context” outlined the value of a data-driven planning process and explored different sources of data that could be used to describe the problem of suicide in a community. A common understanding of the problem of suicide was presented as the foundation for developing long-term goals for the strategic plan. To view the recording, click here. To view all modules produced by the Learning collaborative, visit the EMM Resource Center.



The Suicide Prevention Resource Center (SPRC) has several webinars on understanding and using data. For example, Dr. Crosby, in a 4-minute video titled Using Data to Prevent Suicide, reviews the importance of understanding data and talks about the National Violent Death Reporting System and how states are using this data to determine how to improve suicide prevention interventions and programs.

The SPRC also has online courses that include a certificate of completion. SPRC partnered with Health Knowledge to provide the following two self-paced, free, approximately 2-hour courses: 1) Locating and Understanding Data for Suicide Prevention and 2) A Strategic Planning Approach to Suicide Prevention. Click here to register for the courses.

In addition to these self-paced, free certification classes, SPRC also offers a variety of other resources including virtual learning labs, micro-learning, and SPARK talks. Visit SPRC.org/training for more information.