Suicide in California, 2018

Vital statistics data are collected from death certificates for all violent deaths that occur in California. Enhanced surveillance through CalVDRS is completed for a subset of participating counties by linking vital statics data to supplemental data abstracted from coroner and medical examiner reports, toxicology reports, and law enforcement reports. This additional data can address the who, where, when and how of the deaths to help us try to understand why they occurred. Circumstances that contributed to the death that were documented in these reports were abstracted from this supplemental data and included in the surveillance system.

This document summarizes demographic data from vital statistics for suicide deaths that occurred to all California residents in 2018 aged 10 years and older. Additionally, circumstance data are summarized for suicide deaths that occurred in the subset of 21 participating CalVDRS counties using CalVDRS supplemental data from multiple sources.

STATEWIDE SUICIDE DATA

- There were 6,775 violent deaths to CA residents in 2018.
- Two thirds of these (4,497) were deaths due to suicide.
- The rate of death by suicide was 11.3 suicides per 100,000 population.
- There were twice as many deaths due to suicide than homicide.

Violent death among CA residents, 2018

- **Suicide, 4497, 66%**
- **Homicide, 1901, 28%**
- **Unintentional firearm, 34, 1%**
- **Legal intervention, 89, 1%**
- **Undetermined, 254, 4%**

ABOUT CalVDRS

The California Violent Death Reporting System (CalVDRS) is housed in the Injury and Violence Prevention Branch in the California Department of Public Health. CalVDRS is funded by the Centers for Disease Control and Prevention to conduct statewide surveillance on violent deaths that occur in California. Violent deaths include homicide (including legal intervention deaths that result from law enforcement acting in the line of duty), suicide, unintentional firearm deaths, and deaths of undetermined intent that meet the CalVDRS definition. CalVDRS collects data from multiple sources (i.e., death certificates, medical examiner/coroner reports, and law enforcement reports) in order to gain a more comprehensive understanding of the circumstances surrounding these deaths. The goal of this system is to promote development of data-driven public health prevention strategies that aim to reduce the number of violent deaths that occur each year.
Sex
- More than three-quarters of those who died by suicide (78%) were male.
- Among those aged 65 years and older, 83% of those who died by suicide were male.
- The rate of suicide death among males (17.6 per 100,000) was more than 3 times the rate among females (5.1 per 100,000).

Age
- Among males, rates of death by suicide increased with age with the highest rates in males aged 85 years and older (44.1 per 100,000).
- Among females who died by suicide, the rate peaked at age 45-64 (8.1 per 100,000) and then decreased with age.
- In older age groups, the rates of suicide among males were 5 to 10 times higher than females.

Race/Ethnicity
- Most of those who died by suicide were people who are White (62%) or Hispanic (22%).
- The highest rates of death by suicide were among people who were White or Native American (18.6 and 17.4 per 100,000, respectively).
Mechanism of Suicide

- Firearms were used in more than one in every three suicide deaths (36%).
- Firearms were the most commonly used weapon among males who died by suicide, used in 42% of deaths.
- Among females, the most commonly used mechanisms were hanging/suffocation (38%) and poisoning (31%). Firearms were used by 17% of females who died by suicide.
- Among younger people who died by suicide, hanging/suffocation was the most common method used; hanging/suffocation was used in 58% of those younger than 18 who died by suicide and in 43% of those aged 18-24.
- The use of firearms as a method of suicide increased with age; firearms were used among 27% of those younger than 25 years old, 31% of those aged 25-64, and in 58% of those older than 65 years.

**Mechanism of suicide among CA residents by sex, 2018**

- **MALE (N=3490)**
  - Firearm: 36%
  - Hanging/suffocation: 17%
  - Poisoning: 9%
  - Other: 3%

- **FEMALE (N=1007)**
  - Firearm: 31%
  - Hanging/suffocation: 38%
  - Poisoning: 13%
  - Other: 1%

**SUICIDE CIRCUMSTANCES (in CalVDRS counties)**

- There were 2,335 suicides in the CalVDRS counties with supplemental data reports. 90% had at least one circumstance documented (n=2,103).
- 47% of those who died by suicide had a current diagnosed mental health problem. Conversely, more than half (53%) had no identified mental health problem.
- 66% of suicides occurred at home. This was more likely among the youngest and the oldest: 91% of those younger than 18 and 81% of those 65 or older were injured at home.
- The presence of circumstances contributing to the suicide varied across age groups.
Mental Health and Suicide-Specific Circumstances by Age

<table>
<thead>
<tr>
<th></th>
<th>10-17 yrs (n=53)</th>
<th>18-24 yrs (n=198)</th>
<th>25-64 yrs (n=1426)</th>
<th>65+ yrs (n=426)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current mental health problem</td>
<td>45%</td>
<td>48%</td>
<td>49%</td>
<td>37%</td>
</tr>
<tr>
<td>Current or history of mental health/substance abuse treatment</td>
<td>38%</td>
<td>28%</td>
<td>26%</td>
<td>18%</td>
</tr>
<tr>
<td>Current perceived depressed mood</td>
<td>19%</td>
<td>26%</td>
<td>25%</td>
<td>30%</td>
</tr>
<tr>
<td>History of suicidal thoughts or plans</td>
<td>41%</td>
<td>42%</td>
<td>38%</td>
<td>34%</td>
</tr>
<tr>
<td>History of previous suicide attempt</td>
<td>28%</td>
<td>22%</td>
<td>24%</td>
<td>14%</td>
</tr>
<tr>
<td>Recently disclosed intent to commit suicide</td>
<td>11%</td>
<td>23%</td>
<td>20%</td>
<td>21%</td>
</tr>
<tr>
<td>Left a suicide note</td>
<td>26%</td>
<td>28%</td>
<td>29%</td>
<td>34%</td>
</tr>
</tbody>
</table>

Other Notable Circumstances Across the Lifespan

**Youth aged 10-17 years**
- 17% intimate partner problem
- 17% school problem
- 17% recent or imminent crisis of any kind
- 15% other relationship problem (family or friend, but not an intimate partner)
- 11% argument or conflict
- 10% alcohol and/or substance abuse problem

**Young adults aged 18-24 years**
- 22% alcohol and/or substance abuse problem
- 19% intimate partner problem
- 15% recent or imminent crisis
- 8% financial and/or job problem

**Adults aged 25-64 years**
- 32% alcohol and/or substance abuse problem
- 21% intimate partner problem
- 16% recent or imminent crisis of any kind
- 14% financial and/or job problem
- 11% physical health problem

**Older adults aged 65 years and older**
- 48% physical health problem
- 12% alcohol and/or substance abuse problem
- 11% recent or imminent crisis of any kind
- 10% death of family member or friend (suicide or other)
- 5% eviction or loss of home
Know the Signs

Every day in California friends, family and co-workers struggle with emotional pain. And, for some, it’s too difficult to talk about the pain, thoughts of suicide, and the need for help. Everyone can play a role in suicide prevention by learning the warning signs of suicide, finding the words to reach out to a loved one, and knowing where to turn for help. Visit www.suicideispreventable.org to learn more about suicide prevention.

The Centers for Disease Control and Prevention (CDC), Preventing Suicide: A Technical Package of Policy, Programs, and Practices.

National Suicide Prevention Hotline 1-800-273-TALK (8255)
Chat also available at suicidepreventionlifeline.org or text 741741.

Notes about CalVDRS data

- In 2018, 21 counties participated in CalVDRS enhanced data collection, including: Amador, Butte, Fresno, Humboldt, Imperial, Kern, Kings, Lake, Los Angeles, Marin, Mono, Placer, Sacramento, San Benito, San Diego, San Francisco, San Mateo, Shasta, Siskiyou, Ventura, and Yolo Counties. Together, the CalVDRS counties represent 54% of the suicide deaths that occurred in 2018 in California and cover a mix of both urban and rural counties across the state.

- Circumstance data are reported as a percentage of deaths with at least one known circumstance; circumstances were known for 90% of abstracted suicide deaths in the 21 CalVDRS counties. Analyses were performed using SAS 9.4 (SAS Institute Inc., Cary, NC)

- Circumstances contributing to the suicide are not mutually exclusive, and more than one can be indicated for a single suicide death.

Data Sources

California Violent Death Reporting System (CalVDRS), Injury and Violence Prevention Branch, Center for Healthy Communities, California Department of Public Health (CDPH).


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For more information on CalVDRS please contact IVPB@cdph.ca.gov.