

Suicide Death among Veterans in California, 2019

In accordance with Assembly Bill 242 (Chapter 222, Statutes of 2017), the California Department of Public Health (CDPH) has created this annual injury data brief on California Veterans (those who have served in the United States Armed Forces) who died by suicide in 2019. It provides information on statewide counts by age, sex, race/ethnicity, county, and method of suicide. Data are compiled from limited information on death certificates in the California Comprehensive Death Files produced by CDPH's Center for Health Statistics and Informatics.¹

In 2019, there were 631 suicide deaths among California residents aged 18 years and older who had served in the United States Armed Forces (identified here as Veterans) (Table 1).

- Suicide deaths among Veterans made up 15% of all suicides in 2019.
- Among Veterans, suicides made up 1% of total deaths in 2019.
- The number of Veteran suicide deaths represented an 8% decrease from the 690 reported in 2018; it was similar to the 636 that occurred in 2017.

Table 1: Suicide deaths and total deaths in California residents aged 18 years and older by decedent's Veteran status, 2019.

Veteran Status	Suicides	Total Deaths
Veteran	631	49,093
Non-Veteran	3,621	213,660
Unknown	73	3,670
Total	4,325	266,423

The vast majority of Veteran suicide deaths were to males (96%). Thirty-nine percent of Veteran suicides were in the 65-84 year old age group and 23% occurred in the 45-64 year old age group. Fourteen percent of Veterans who died by suicide were in the oldest age group, 85 years and older. The majority of Veteran suicides were among Whites (81%) and Hispanics (11%) (Figure 1).

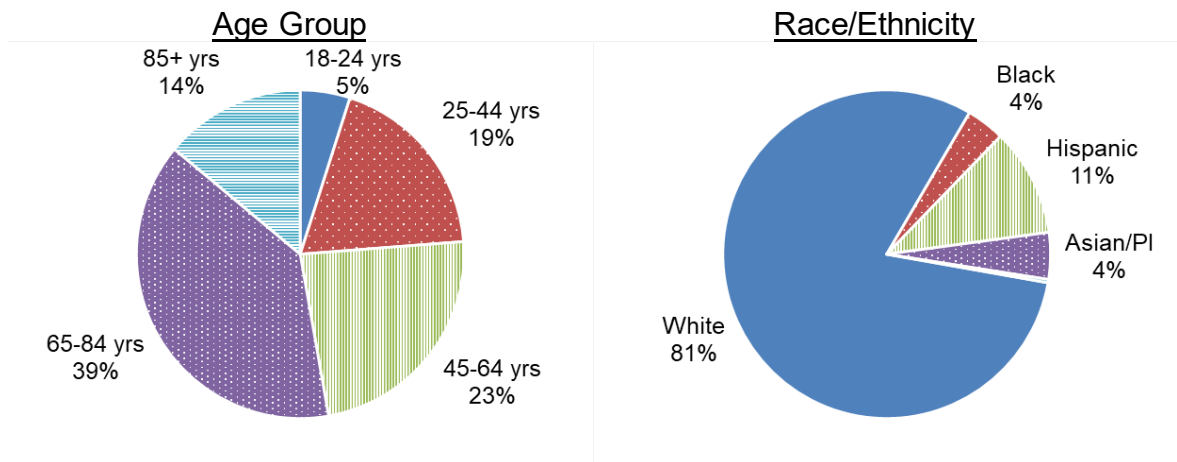


Figure 1: Age and Race/Ethnicity among Veteran suicide deaths, California residents aged 18 years and older, 2019.

Firearms were used in nearly two-thirds of suicides among California Veterans (62%), followed by hanging/suffocation (20%) (Figure 2).

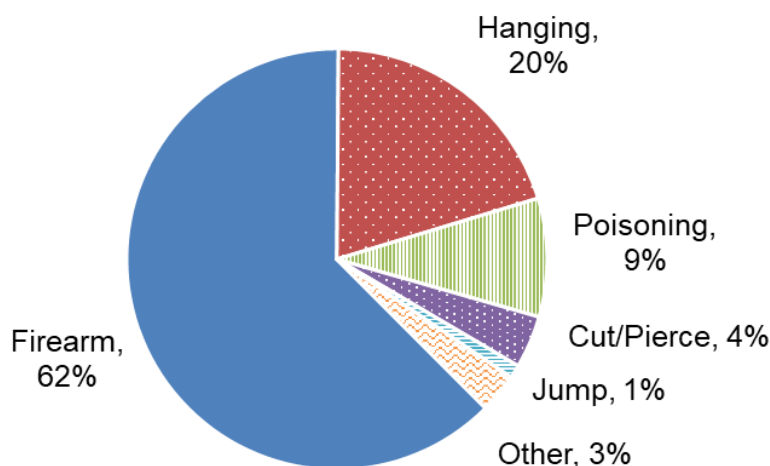


Figure 2: Method of suicide among Veteran suicide deaths, California residents aged 18 years and older, 2019.

Females make up only 4% of Veteran suicide deaths, and there may be some differences between male and female Veterans who die by suicide. More than half of male Veteran suicides were among those aged 65 or older, whereas this age group consisted of few female suicides (Table 2). Among both sexes, most suicides among Veterans were White (82% of males and 52% of females), although an additional 30% of female Veteran suicide decedents were Hispanic.

Table 2: Demographic characteristics among Veteran suicide deaths by sex, California residents aged 18 years and older, 2019.

	Male (N)	(%)	Female (N)	(%)
Age (years)				
18-44	140	23%	10	43%
45-64	136	22%	12	52%
65-84	244	40%	1	4%
85+	88	14%	0	
Race/Ethnicity				
White	497	82%	12	52%
Black	21	3%	*	
Hispanic	60	10%	7	30%
American Indian/Alaska Native	*		*	
Asian/Pacific Islander	28	5%	*	
Other/Unknown	*		*	
Total	608		23	

*Numbers are masked due to potential identification as required by the California Department of Health Care Services, Data De-Identification Guidelines (DDG), Version 2.0, November 22, 2016.

Firearms were used in the majority of suicides among male Veterans (63%), followed by hanging/suffocation in 20% (Table 3). Firearms, hanging/suffocation, and poisoning each contributed nearly equally to female Veteran suicides.

Table 3: Method of suicide among Veteran suicide deaths by sex, California residents aged 18 years and older, 2019.

Method of Suicide	Male (N)	(%)	Female (N)	(%)
Firearm	383	63%	8	35%
Hanging/Suffocation	122	20%	7	30%
Poisoning	53	9%	7	30%
Cut/Pierce	23	4%	0	
Jump	9	1%	0	
Other Methods	18	3%	1	4%
Total	608		23	

Los Angeles and San Diego, the two most populous counties in California, have the largest number of suicide deaths among Veterans in California, accounting for 29% in 2019 (Table 4).

Data Limitations

- In this report, Veteran status is identified based on the answer to a single item on the death certificate that asks whether the decedent was “ever in the United States Armed Forces.” This does not distinguish between current and former service members, nor does it identify those seeing active duty. This definition of Veteran may not align with other definitions that include only those who have been activated for federal military service and are not serving at the time of their death.
- Rates were not calculated because CDPH does not have estimates on the underlying population of Californians who have served in the U.S. Armed Forces.
- The Veteran status information on death certificates may be inaccurate if those completing the form (e.g., Coroners, Funeral Homes) did not have sufficient information on the decedent’s history.

Technical Notes

¹Copies of the California Certificate of Death and the CDPH, Vital Records, Death/Fetal Death Registration Handbook are available upon request from CDPH, Center for Health Statistics and Informatics (CHSI).

Suicides are identified on the death certificate as an underlying cause of death with ICD-10 codes X60-X84, U03.0 or U03.9. Method of suicide is categorized by the following ICD-10 code groupings: Cut/Pierce: X78; Firearm: X72-X74; Hanging/suffocation: X70; Jump: X80-X81; Poisoning: X60-X69; and Other: U03.0, U03.9, X71, X75-X77, X79, X82-X84.

As required by the California Department of Health Care Services, Data De-Identification Guidelines (DDG), Version 2.0, (November 22, 2016), small numbers may be masked in tables to prevent potential identification. In the case of county breakdowns, cells are masked when the number of deaths and the resident population are small.

Table 4: Veteran suicide deaths by county, California residents aged 18 years and older, 2017-2019.

County of Residence	2017	2018	2019	County of Residence	2017	2018	2019
Alameda	16	17	11	Orange	30	42	45
Alpine	0	0	0	Placer	7	9	13
Amador	*	*	*	Plumas	0	*	*
Butte	9	17	9	Riverside	43	52	44
Calaveras	*	*	*	Sacramento	31	32	30
Colusa	0	0	0	San Benito	0	1	1
Contra Costa	16	19	6	San Bernardino	31	37	33
Del Norte	0	*	0	San Diego	110	98	95
El Dorado	7	7	4	San Francisco	9	9	13
Fresno	20	14	15	San Joaquin	14	9	11
Glenn	*	*	*	San Luis Obispo	17	12	9
Humboldt	3	6	4	San Mateo	8	7	8
Imperial	1	1	2	Santa Barbara	13	5	17
Inyo	*	*	*	Santa Clara	22	14	21
Kern	15	16	16	Santa Cruz	6	2	2
Kings	5	3	5	Shasta	14	10	7
Lake	4	2	3	Sierra	0	0	0
Lassen	*	*	0	Siskiyou	*	0	*
Los Angeles	93	108	87	Solano	10	22	11
Madera	2	5	1	Sonoma	7	13	15
Marin	6	4	7	Stanislaus	9	11	12
Mariposa	*	*	0	Sutter	0	2	2
Mendocino	6	2	4	Tehama	2	5	2
Merced	1	3	1	Trinity	0	0	*
Modoc	0	0	0	Tulare	5	5	5
Mono	0	0	0	Tuolumne	3	5	1
Monterey	4	6	9	Ventura	13	25	23
Napa	2	3	4	Yolo	1	4	2
Nevada	4	0	7	Yuba	5	4	2
				Total	636	690	631

*Numbers are masked due to potential identification as required by the California Department of Health Care Services, Data De-Identification Guidelines (DDG), Version 2.0, November 22, 2016. In the case of county breakdowns, cells are masked when the number of deaths and the resident population are small.

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Injury and Violence Prevention Branch, Center for Healthy Communities
California Department of Public Health



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Data source: CDPH, California Comprehensive Master Death File (CCMDF), 2019.

Supplemental Table

The following table contains the numbers of suicide deaths to both Veteran and Non-Veterans by demographic characteristics and method of suicide for the three reporting years, 2017 through 2019. For Veteran suicide deaths, these numbers are reflected in Figures 1 and 2 and Tables 2 and 3.

Table 5: Demographic characteristics and method of suicide among Veteran and Non-Veteran suicide deaths, California residents aged 18 years and older, 2017-2019.

	2017:		2018:		2019:	
	Veteran	Non-Vet	Veteran	Non-Vet	Veteran	Non-Vet
Sex						
Male	615	2,583	669	2,670	608	2,737
Female	21	878	21	941	23	884
Age (years)						
18-24	21	412	28	393	31	381
25-44	120	1,188	111	1,263	119	1,303
45-64	153	1,308	176	1,384	148	1,363
65-84	254	487	282	506	245	505
85+	88	66	93	65	88	69
Race/Ethnicity						
White	504	2,137	560	2,160	509	2,208
Black	32	139	29	161	24	184
Hispanic	66	781	77	857	67	828
American Indian/Alaska Native	6	26	2	26	*	22
Asian/Pacific Islander	26	369	21	392	29	367
Other/Unknown	2	9	1	15	*	12
Method of Suicide						
Firearm	419	1,134	448	1,126	391	1,147
Hanging/Suffocation	109	1,236	139	1,412	129	1,344
Poisoning	61	572	57	578	60	562
Cut/Pierce	17	97	19	93	23	116
Jump	10	156	11	162	9	180
Other Methods	20	266	16	240	19	272
Total	636	3,461	690	3,611	631	3,621

*Numbers are masked due to potential identification as required by the California Department of Health Care Services, Data De-Identification Guidelines (DDG), Version 2.0, November 22, 2016.