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Humboldt County suicide mortality data report, 2005-2021, version 6/3/2022

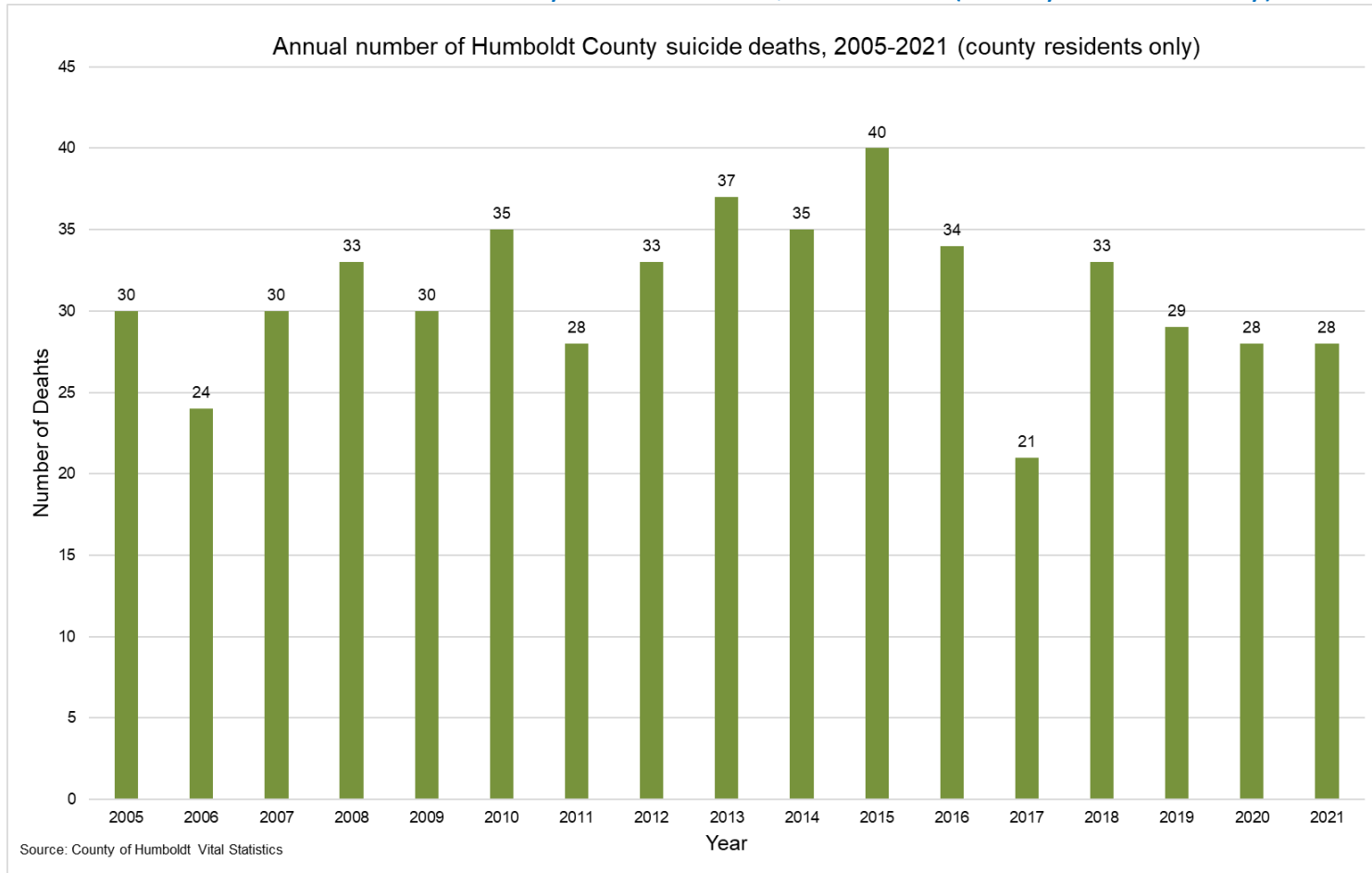
PURPOSE

This report is a supplement to the “Behavioral Health: Suicide” (Pg. 64) section of the 2018 Humboldt County Community Health Assessment (CHA). The CHA can be found at: <https://humboldt.gov/DocumentCenter/View/71701/2018-Community-Health-Assessment-PDF>

SUMMARY

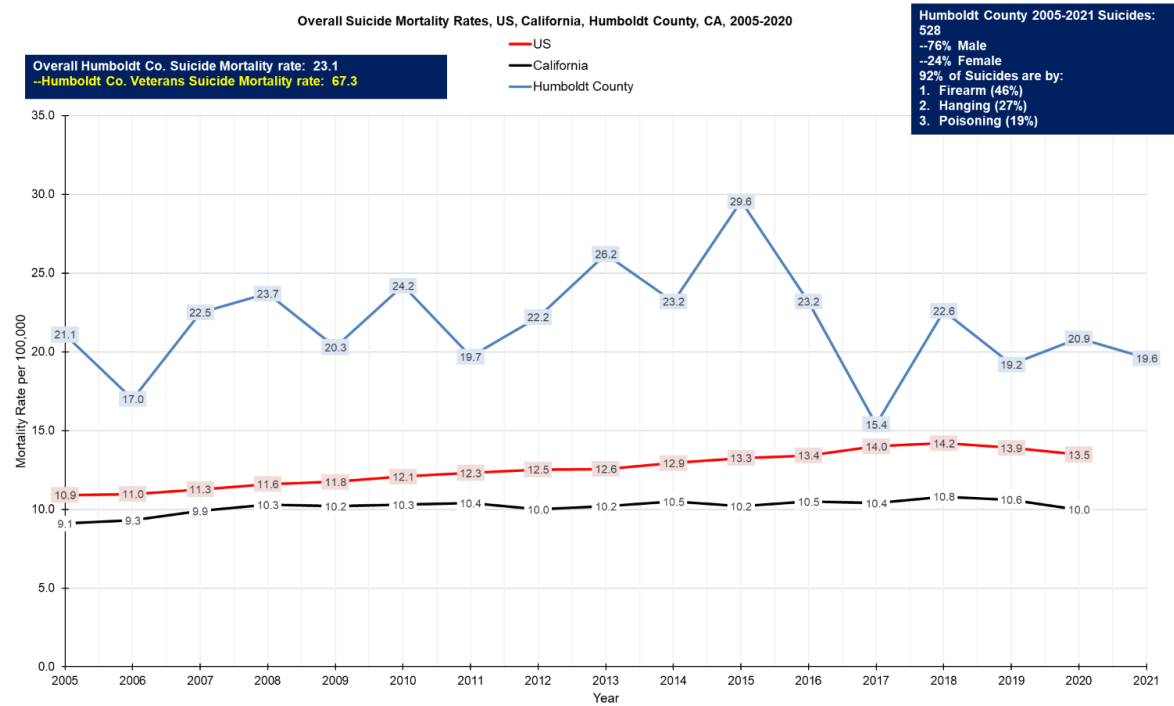
1. Death by suicide has been and remains a significant public health concern for Humboldt County residents.
2. Over 90% of Humboldt County Suicide deaths from 2005-2021 resulted from three methods: self-inflicted gunshot wounds, poisoning, and hanging/suffocation. Overall, approximately half of the 528 suicide deaths occurring during this time period resulted from self-inflicted gunshot wounds.
3. The Humboldt County suicide mortality count and rate per 100,000 for 2019-2021 were largely unchanged over the time period. Males represented 76% of suicide deaths; overall suicide attempts by men and women are approximately equivalent. Males use more lethal means (firearms, hanging) at a greater frequency than women, resulting in a higher rate of death. Humboldt County residents who are veterans of the US Armed Services die by suicide more than six times the rate of California.
4. Age-specific mortality rates from suicide in Humboldt County is significantly higher than state and national benchmarks across all age ranges. The average at death for Humboldt suicides is 51 years.
5. Humboldt County Public Health, in cooperation with the Humboldt Coroner’s Office, reviewed nearly 200 suicide coroner reports from 2013-2018, using the Suicide Consolidated Risk Assessment Profile form (a data collection tool to determine risk factors for suicide). The most prevalent risk factors are listed from highest to lowest frequency in Table 1 (page 6). Significant risk factor differences between demographic groups are displayed in Table 2 (page7).

Fig. 1. Annual Number of Humboldt County Suicide Deaths, 2005-2021 (county residents only)



The above bar chart shows the annual number of suicide deaths of Humboldt County residents from 2005 through 2021. The highest amount of suicide deaths was 40 in 2015, and the lowest was 21 in 2017. The source of this data is County of Humboldt Vital Statistics.

Fig. 2. Overall Suicide Mortality Rates, US, California, Humboldt County, CA, 2005-2020



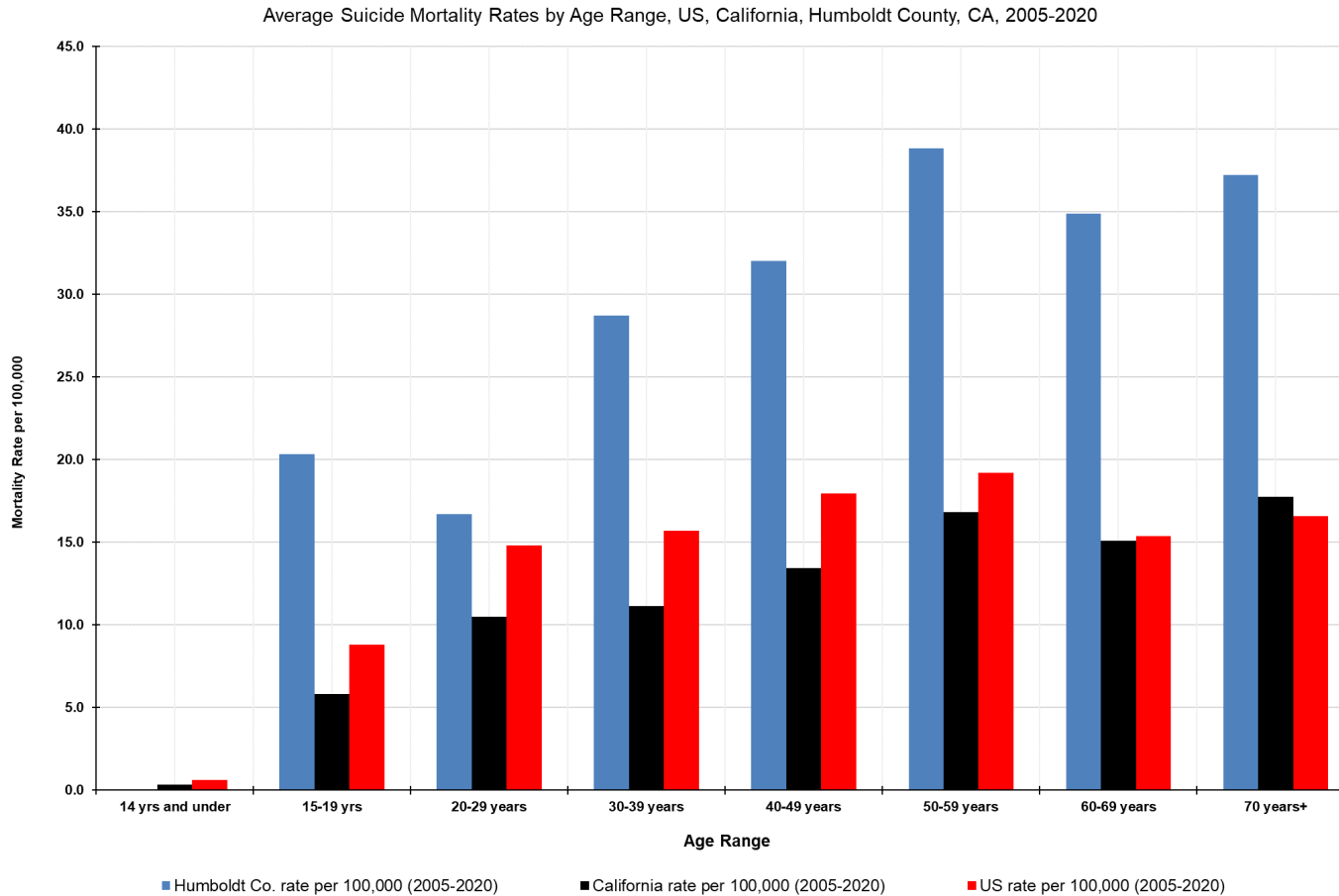
Sources: WISQARS Fatal Injury data Visualization Tool (<https://wisqars-viz.cdc.gov/>), US Census American FactFinder, County of Humboldt Vital Statistics

This line chart shows the overall suicide mortality rate per 100,000 residents for Humboldt County, the state of California and the United States. It spans the years of 2005 through 2020 for the California and the United States, while spanning 2005 through 2021 for Humboldt County. The chart shows that Humboldt County has a higher average rate through this entire time span of 2005 through 2020. The chart is accompanied by additional statistics including the overall Humboldt County suicide mortality rate of 23.1, and the much higher Humboldt County veterans suicide mortality rate of 67.3.

An additional text box contains this data in Humboldt County for the years of 2005 through 2021: Total suicides were 528, with approximately half resulting from self-inflicted gunshot wounds. Suicides by gender were 76% male and 24% female. Over 90% of the total suicide deaths came by way of firearms at 46%, hanging at 27%, and poisoning being the cause of 19% of suicide deaths.

Note: Data for California and US rates were not yet available at the time of this report.

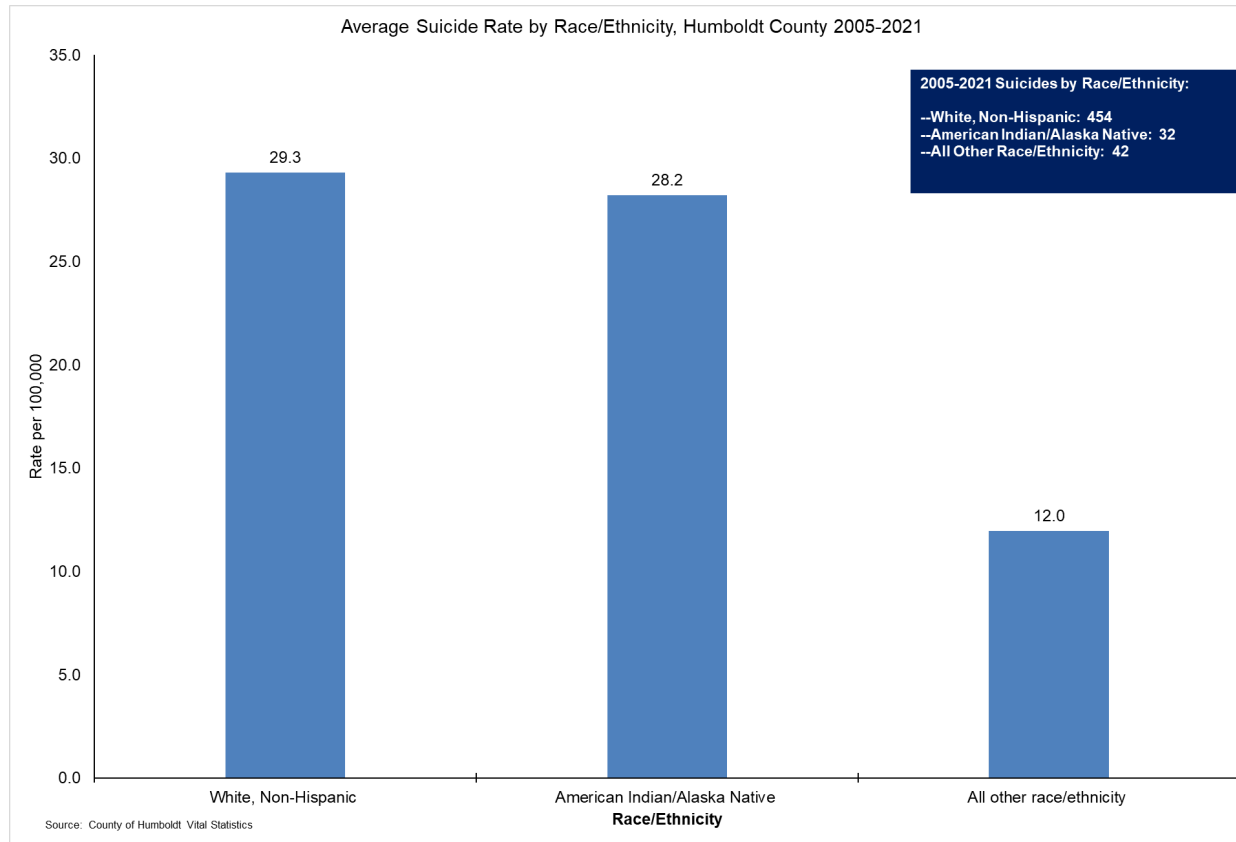
Fig. 3. Average Suicide Mortality Rates by Age Range, US, California, Humboldt County, CA, 2005-2020



Sources: WISQARS Fatal Injury data Visualization Tool (<https://wisqars-viz.cdc.gov>), County of Humboldt Vital Statistics

This bar chart depicts the average suicide mortality rate by age range over the time span of 2005 through 2020 for Humboldt County, for California, and for the United States. The different age ranges are 14 years and under, 15 to 19 years, 20 to 29 years, 30 to 39 years, 40 to 49 years, 50 to 59 years, 60 to 69 years, and 70 years and older. The chart shows that Humboldt County has a higher average suicide mortality rate than California or the US for every age range except for the 14-years-and-under group. Sources: WISQARS Fatal Injury Data Visualization, multiple years <https://wisqars-viz.cdc.gov>, Humboldt County DHHS-Public Health Vital Statistics, multiple years.

Fig. 4. Average Suicide Rate by Race/Ethnicity, Humboldt County 2005-2021



This bar chart represents the average suicide rate per 100,000 residents by race and ethnicity for Humboldt County from 2005 through 2021. The average rate for White/non-Hispanic was 29.3. American Indian/Alaska Native had an average of 28.2, and all other race/ethnicity had an average of 12. The total suicides by race/ethnicity were 454 for White/non-Hispanic, 32 for American Indian/Alaska Native, and 42 for all other race/ethnicity. Source: County of Humboldt Vital Statistics.

Table 1. Frequency of Results—Humboldt County Suicide Consolidated Risk Assessment Profile, 2013-2018

Experienced at time of incident	% YES
Current mental health problem	56.0
Depressed mood	51.8
Physical health problem	38.7
Family relationship stress	35.1
Disclosed intent to commit suicide	32.5
Other substance abuse problem	30.4
Current mental health treatment	26.7
Alcohol problem	26.7
Intimate partner problem	23.0
Social isolation	19.4
Financial problem	14.7
Criminal legal problem	11.5
Other relationship problem	10.5
Job problem	9.4
Eviction/loss of home	9.4
Other addiction	7.3
Anniversary of traumatic event	4.2
Non-criminal legal problem	2.6
School problem	2.1

Experienced in the last 30 days	% YES
Perpetrator of interpersonal violence	6.8
Victim of interpersonal violence	2.6

Experienced in the last 5 years	% YES
Death of friend/family member	10.5
Suicide of friend/family member	2.6

Experienced at any time	% YES
Suicidal thoughts or plans	44
Mental health diagnosis	34.6
Suicide attempt	23.6
Suicide of friend/family member	4.7
Nonfatal self-directed violence	4.2
Abused as a child	3.1

Decedent left a note	37.2%
Percent of 2013-2018 suicides reviewed	86.4% n=191

Experienced crisis	% YES
In past 2 weeks	77.5

If yes, type of crisis experienced	% YES
CRISIS: Mental health	46.1
CRISIS: Physical health	25.1
CRISIS: Family relationship stress	20.9
CRISIS: Intimate partner problem	19.4
CRISIS: Alcohol problem	19.0
CRISIS: Substance abuse	17.8
CRISIS: Other relationship problem	8.9
CRISIS: Financial problem	8.4
CRISIS: Job problem	5.8
CRISIS: Eviction/loss of home	5.8
CRISIS: Criminal legal problem	5.2
CRISIS: Death of friend/family member	4.2
CRISIS: Other addiction	3.7
CRISIS: School problem	1.6
CRISIS: Noncriminal legal problem	1.6
CRISIS: Suicide of friend/family member	1.1

Table 2. Risk Factor Analysis of Humboldt County Suicides, 2013-2018

RISK FACTOR ANALYSIS OF HUMBOLDT COUNTY SUICIDES, 2013-2018

% Yes by Age Grouping

Risk Factor	%Age 49 and Less	%Age 50+	Risk Difference	p-value
Physical health problem at time of incident	22.2%	53.5%	31.2%	p<0.001
Other substance abuse problem at time of incident	38.9%	22.8%	16.1%	p<0.01
Intimate partner problem at time of incident	28.9%	17.8%	11.1%	p<0.04
Financial problem at time of incident	10.0%	18.8%	8.8%	p<0.05

%Yes by Race/Ethnicity

Risk Factor	%White, Non-Hispanic	% All other Race/Ethnicity	Risk Difference	p-value
Family relationship stress at time of incident	29.8%	60.6%	30.9%	p<0.001
Physical health problem at time of incident	42.4%	21.2%	21.2%	p<0.02
Eviction/loss of home/homeless at time of incident	7.0%	21.2%	14.2%	p<0.02
Social isolation at time of incident	24.7%	13.3%	11.4%	p<0.03
Suicidal thoughts or plans at any time	46.8%	30.3%	16.5%	p<0.05

% Yes by Gender

Risk Factor	% Females	% Males	Risk Difference	p-value
Current mental health treatment at time of incident	49.0%	19.0%	30.0%	p<0.001
Current mental health problem at time of incident	75.5%	49.3%	26.2%	p<0.001
Disclosed intent to commit suicide at time of incident	46.9%	27.5%	19.5%	p<0.01
Suicide attempt at any time	36.7%	19.0%	17.7%	p<0.01
Depressed mood at time of incident	65.3%	47.2%	18.1%	p<0.02
Other relationship problem at time of incident	18.4%	7.8%	10.6%	p<0.03
Suicidal thoughts or plans at any time	55.1%	40.1%	15.0%	p<0.04
Other substance abuse problem at time of incident	40.8%	26.8%	14.0%	p<0.04
Mental health diagnosis at any time	44.9%	31.0%	13.9%	p<0.05

For questions regarding this report, contact the DHHS-Public Health epidemiology program at epidemiologyprogram@co.humboldt.ca.us.

Sources:

WISQARS Fatal Injury Data Visualization, multiple years <https://wisqars-viz.cdc.gov>

Humboldt County DHHS-Public Health Vital Statistics, multiple years.

State of California Department of Finance—Demographics <http://www.dof.ca.gov/Forecasting/Demographics/>

Census.gov American FactFinder <https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>

Suicide Consolidated Risk Assessment Profile (SCRAP) form. Dr. Kimberly K. Repp, PhD MPH, Washington County Research, Analytics, Informatics and Data (RAID), Aloha, OR 97007.

Notes:

Deaths are classified using the International Classification of Diseases, Tenth Revision (ICD–10). Suicide deaths are defined as having ICD–10 underlying cause-of-death codes X60–X84 (intentional self-harm). Additionally, Humboldt County DHHS-Public Health-Epidemiology analyzes the electronic death registry system for California (CA-EDRS). The following text fields, or “Literals”, are qualitatively reviewed and each death is grouped into categories:

1. Causes of death due to **or** as a consequence of a particular health event
2. Significant conditions contributing to death
3. Description of injury
4. “Suicide” Manner of death, as determined by the Humboldt County Coroner or designee

Death rates are considered “Unreliable” and must be viewed with caution when the rate estimate is calculated with a numerator of 20 or less and/or a relative standard error over 23%. For further information visit: https://www.cdc.gov/nchs/data/nvsr/nvsr63/nvsr63_09.pdf

P-values listed in Table 2, Page 7 are mid-p values, with significance at 0.05.