



COUNTY OF HUMBOLDT
DEPARTMENT OF HEALTH AND HUMAN
SERVICES
PUBLIC HEALTH BRANCH
529 I Street, Eureka, CA 95501
Phone: (707) 445-6200; Toll Free: (866) 597-1574
Fax: (707) 445-6097
www.co.humboldt.ca.us

Humboldt County substance abuse mortality data report: Drug poisoning and substance use disorder (SUD) Deaths, 2005-2021, version 5/27/2022

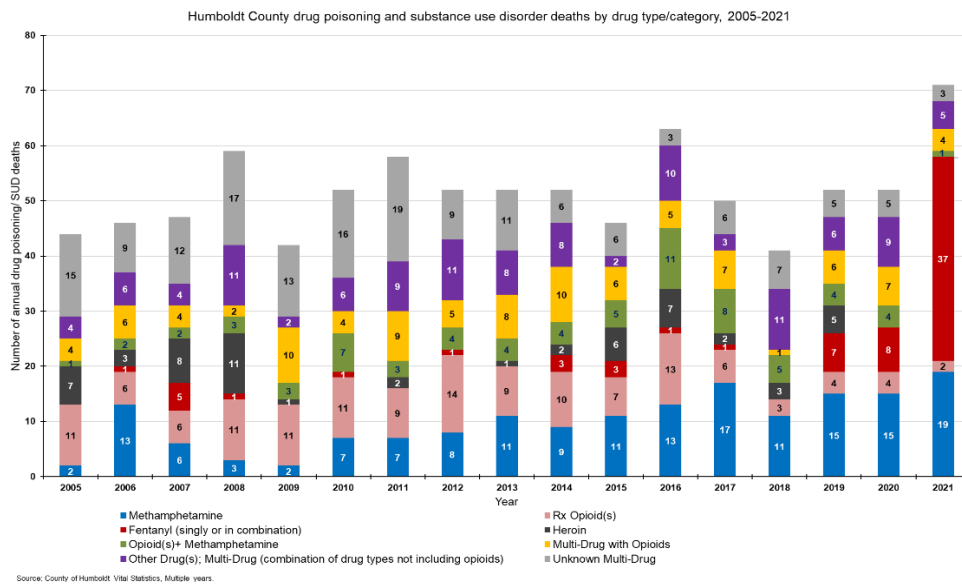
PURPOSE:

This report is a supplement to the “Behavioral Health: Alcohol and Other Drug Use” section (Pg.61) 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. Drug poisoning (“Overdose” or OD) and substance use disorder (SUD) deaths resulting from short or long-term substance abuse has been and remains a significant public health concern for Humboldt County. The recent rise in Fentanyl abuse and deaths from Fentanyl poisoning represent a major new challenge to address the ongoing impact of SUD in Humboldt County.
2. Fentanyl-related drug poisoning deaths increased 363% in 2021 from 2020, accounting for 64% of all drug-poisoning deaths. This resulted in the highest mortality rate recorded during the reporting period.
3. Drug poisoning/SUD deaths from non-opioids, either singly or in combination, are also a significant public health concern in Humboldt County, with a continued of increasing OD/SUD deaths involving methamphetamine.
4. When compared to California and the US, the mortality rate by age range from drug poisoning in Humboldt County is significantly higher across most age ranges (Figure 3).
6. The Humboldt County American Indian/Alaska Native 2005-2021 average drug poisoning mortality rate is approximately twice the rate of White, non-Hispanics (Figure 4).

FIG 1. Humboldt County Drug Poisoning and Substance Use Disorder Deaths by Drug Type/Category, 2005-2021



This graphic is a bar chart that reflects the span of deaths by drug type for each year, beginning in 2005 and continuing through 2021. The list of drugs includes the following categories: Methamphetamine; Fentanyl (singly or in combination); Opioid(s) plus Methamphetamine; Other Drug(s) or Multi-Drug—a combination of drug types NOT including opioids; Prescription Opioid(s); Heroin; Multi-Drug with Opioids; and Unknown Multi-Drug.

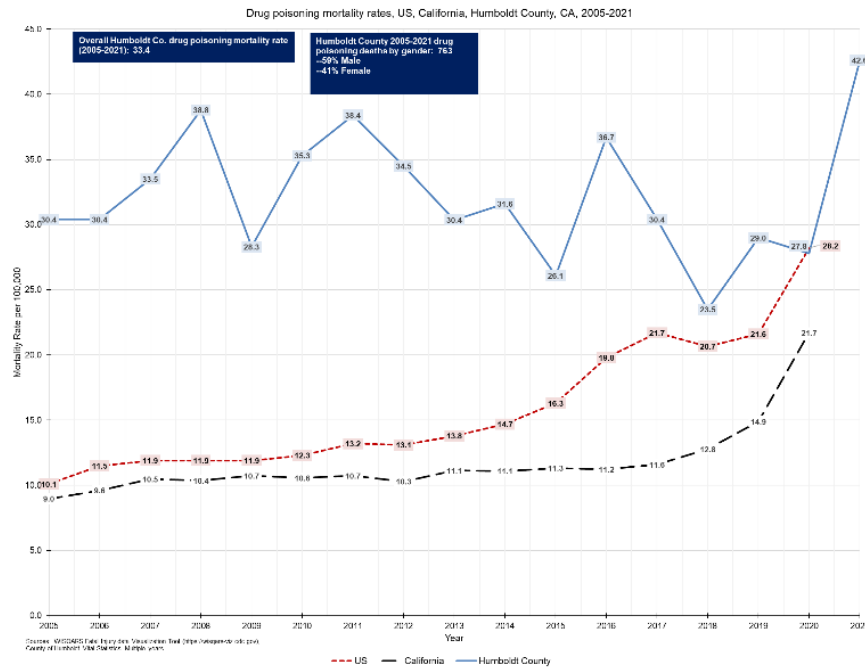
- Fentanyl-related drug poisoning deaths increased 363% in 2021 from 2020, accounting for 64% of all drug-poisoning deaths. This resulted in the highest mortality rate recorded during the reporting period.
- Drug poisoning/SUD deaths from non-opioids, either singly or in combination, are also a significant public health concern in Humboldt County, with a continued of increasing OD/SUD deaths involving methamphetamine.

The following data table containing the same information as above is presented as an alternative format that can more easily be read by a screen-reader.

FIG 1a. Humboldt County Drug Poisoning/SUD Deaths by Type

| Year | Meth-amphetamine | Rx Opioid(s) | Fentanyl (singly or in combination) | Heroin | Opioid(s)+ Methamphetamine | Multi-Drug with Opioids | Other Drug(s); Multi-Drug (combination of drug types not including opioids) | Unknown Multi-Drug | # of Deaths |
|--------------|------------------|--------------|-------------------------------------|-----------|----------------------------|-------------------------|---|--------------------|-------------|
| 2005 | 2 | 11 | 0 | 7 | 1 | 4 | 4 | 15 | 44 |
| 2006 | 13 | 6 | 1 | 3 | 2 | 6 | 6 | 9 | 46 |
| 2007 | 6 | 6 | 5 | 8 | 2 | 4 | 4 | 12 | 47 |
| 2008 | 3 | 11 | 1 | 11 | 3 | 2 | 11 | 17 | 59 |
| 2009 | 2 | 11 | 0 | 1 | 3 | 10 | 2 | 13 | 42 |
| 2010 | 7 | 11 | 1 | 0 | 7 | 4 | 6 | 16 | 52 |
| 2011 | 7 | 9 | 0 | 2 | 3 | 9 | 9 | 19 | 58 |
| 2012 | 8 | 14 | 1 | 0 | 4 | 5 | 11 | 9 | 52 |
| 2013 | 11 | 9 | 0 | 1 | 4 | 8 | 8 | 11 | 52 |
| 2014 | 9 | 10 | 3 | 2 | 4 | 10 | 8 | 6 | 52 |
| 2015 | 11 | 7 | 3 | 6 | 5 | 6 | 2 | 6 | 46 |
| 2016 | 13 | 13 | 1 | 7 | 11 | 5 | 10 | 3 | 63 |
| 2017 | 17 | 6 | 1 | 2 | 8 | 7 | 3 | 6 | 50 |
| 2018 | 11 | 3 | 0 | 3 | 5 | 1 | 11 | 7 | 41 |
| 2019 | 15 | 4 | 7 | 5 | 4 | 6 | 6 | 5 | 52 |
| 2020 | 15 | 4 | 8 | 0 | 4 | 7 | 9 | 5 | 52 |
| 2021 | 19 | 2 | 37 | 0 | 1 | 4 | 5 | 3 | 71 |
| Total | 169 | 137 | 69 | 58 | 71 | 98 | 115 | 162 | 879 |

Fig. 2. Drug Poisoning Mortality Rates, US, California, Humboldt County, CA, 2005-2021



This chart shows the number of deaths per 100,000 people for the United States, California, and for Humboldt County, with datapoints shown for each year from 2005 through 2021. Horizontal lines connect the discrete annual rates to depict the trajectory of mortality across time for each of the three regions.

The overall rate for Humboldt County drug poisoning deaths from 2005-2021 is 33.4%. Humboldt County is significantly higher, overall, than California and the US. We are missing 2021 data for California and the US, so this chart does not display the aftermath of the pandemic year for the state or for the country as a whole.

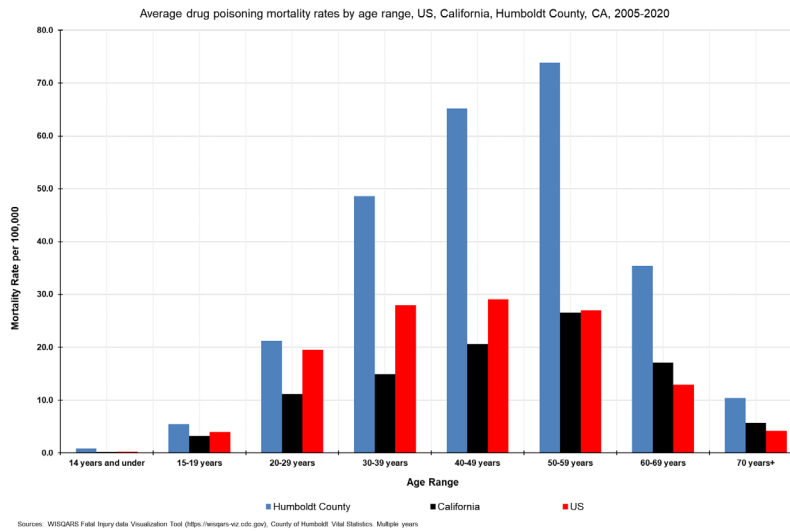
US numbers remained fairly even in the years between 2005 (10.1) and 2012 (13.1), but then began to rise steadily each year until reaching 21.7 in 2017. The annual number dipped slightly in 2018 (20.7) and rose only slightly in 2019 (21.6) before shooting up to 28.2 in 2020, which slightly exceeds Humboldt County's record for that year (27.8).

California's rates remained fairly steady at a lower rate than the national numbers, though they began to rise in 2018 (12.8) and climbed precipitously in 2020 (21.7).

The most notable feature of Humboldt County's 17-year record of drug-poisoning deaths is its degree of fluctuation, peaking and plunging often in two-year cycles, sometimes recovering slightly before rising again (from 28.3 in 2009 to 35.3 in 2010 and 38.4 in 2011, then dropping to 30.4 in 2013, for example; or from 26.1 in 2015 to 36.7 in 2016). But the greatest and most concerning change is the increase in deaths from 2020 (27.8) to 42.6 in 2021. Deaths related to fentanyl increased 363% from 2020 to 2021, resulting in the highest mortality rate recorded during the reporting period.

Of the 763 drug-poisoning deaths from 2005-2021, 59% were male and 41% were female.

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



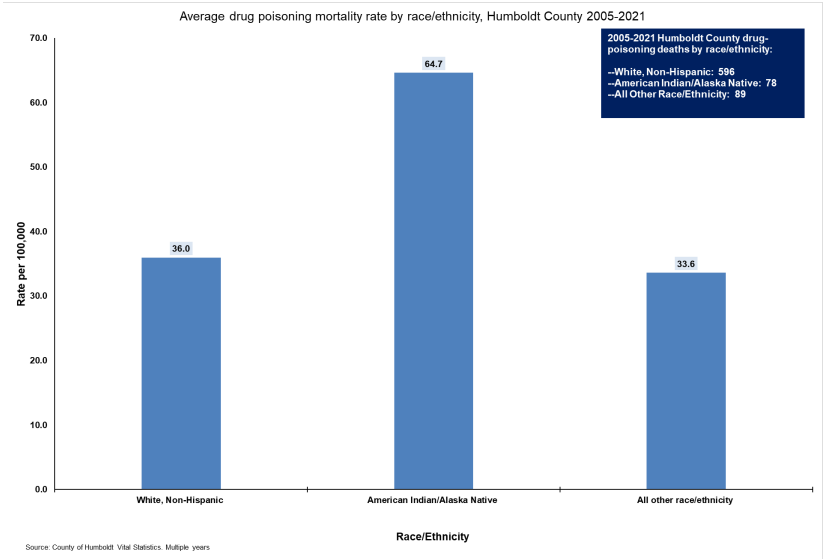
This graphic is a bar chart depicting mortality rate per 100,000 people, for the three regions. It shows specific age clusters spanning the years 2005 through 2020.

In every age group, Humboldt County’s totals exceed both California and US numbers. California’s and Humboldt’s mortality rates accelerate across the age groupings from 30-39, 40-49, and 50-59, hitting their highest in the 50-59 group, but California numbers are still about half of Humboldt County’s in those age ranges. US figures remain somewhat even across the three age groupings, with a slight uptick in the middle (40-49-year) group, and are higher across the three groups than California’s numbers. However, Humboldt County’s rates are more than double those of the US.

The rate of drug-related mortality for the 60-69-year age group diminishes substantially for all three regions. Again, Humboldt remains the highest, followed by California, and the US being a bit lower than California.

In the eldest group, 70 years and over, we see numbers that return to just a bit above the adolescent group for California and the US, but Humboldt is still the highest of the three categories.

Fig. 4. Average Drug-Poisoning Mortality Rate by Race/Ethnicity, Humboldt County, 2005-2021



This bar chart represents three categories of race/ethnicity, White (non-Hispanic), American Indian/Alaska Native, and All Other Race/Ethnicity, using rates per 100,000 calculated across the years 2005-2021. The rate of drug-poisoning deaths for American Indian/Alaska Native people is 64.7, which is approximately twice the rate of White (non-Hispanic) people. The rate for “All Other Race/Ethnicity” is lower than for Whites, at 33.6. Actual numbers for these groups during this time period are 596 White people, 78 American Indian/Alaska Native, and 89 “All Other Race Ethnicity” categories.

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

Sources:

WISQARS Fatal Injury data Visualization Tool <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>

Notes:

Deaths are classified using the International Classification of Diseases, Tenth Revision (ICD–10). Drug-poisoning deaths are defined as having ICD–10 underlying cause-of-death codes X40–X44 (unintentional), X60–X64 (suicide), X85 (homicide), or Y10–Y14 (undetermined intent). ICD-10 codes F10-F19 (mental and behavioral disorders due to psychoactive substance use) are also included in Humboldt County rates and counts. 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. Manner of death, as determined by the Humboldt County Coroner or designee (example: Unintentional, Suicide, Natural, etc.)

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

Rates are age-adjusted to the 2000 US Census population distribution.

For more information on California’s opioid epidemic, please visit the California Opioid Overdose Surveillance Dashboard: <https://discovery.cdph.ca.gov/CDIC/ODdash/>