

Humboldt County coronary heart disease mortality data report, 2005-2018 Version 10/22/2019

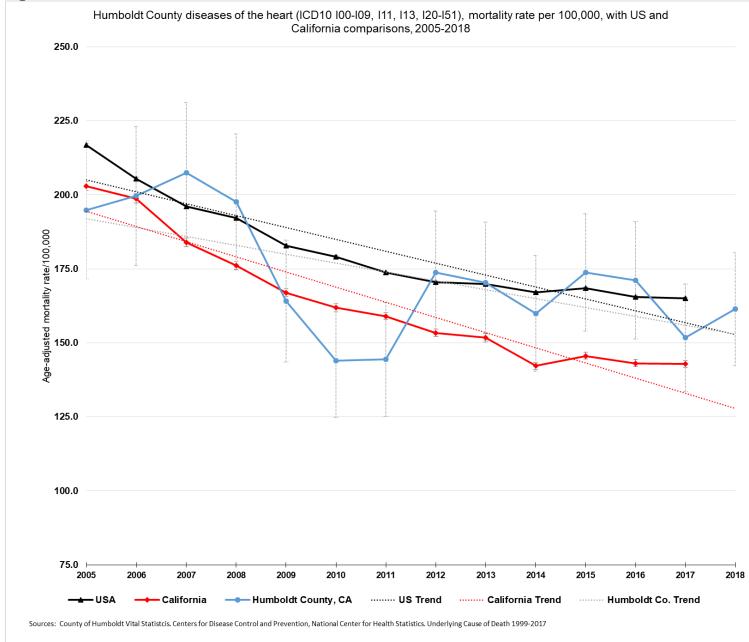
PURPOSE:

The purpose of this report is to supplement the section "Diabetes, Heart Health and Stroke (Pg. 51-52)—Health Outcomes and Risk Behaviors" of the 2018 Humboldt County Community health assessment (CHA). The CHA can be found online at <u>https://humboldtgov.org/DocumentCenter/View/71701/2018-Community-Health-Assessment-PDF</u>

SUMMARY

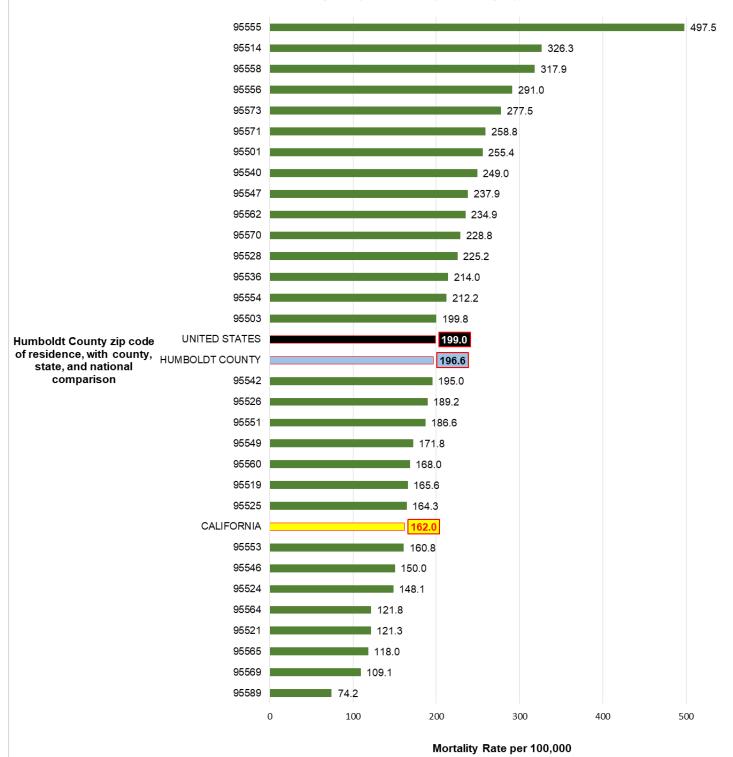
- 1. Deaths from heart disease (ICD10 codes I00-I09, I11, I13, I20-I51) has steadily decreased over the last decade nationally, statewide, and Humboldt County (figure 1), but still remains the leading cause of death overall.
- The heart disease mortality rate in over 40% of Humboldt County zip codes (based on zip code of residence at death) exceeds the national, state and overall county mortality rates (figure 2). This includes the most populous and some of the most rural, low population density zip codes in Humboldt County.
- 3. Heart disease is a major contributor of "premature death" (<age 75, see notes, page 7) in Humboldt County. Over 40% of county zip codes had an average age of death under 75 years from heart disease. Nearly 40% of heart disease deaths in Humboldt County from 2005-2018 were prior to age 75.
- 4. Heart disease mortality rates tend to be slightly higher in American Indian/Alaska Native and White non-Hispanic persons in Humboldt County, but is not statistically significant (figure 4).
- 5. In Humboldt County from 2005-2018, there has been a significant increase in County heart disease deaths in persons who have methamphetamine use listed on their death certificate as a contributing cause of illness and death (figure 5). This is an important and serious additional health burden for Humboldt County from substance use disorder (SUD) and will be tracked to determine prevention and intervention strategies.

Figure 1:

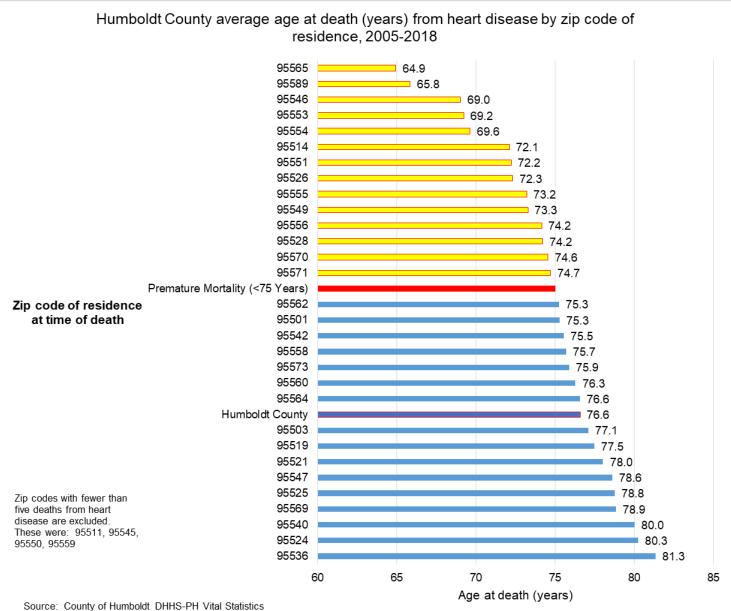


^{95%} confidence estimates were calculated for each annual rate estimate (see notes, page 7 for additional information.)

2005-2018 Heart disease mortality rate per 100,000 persons by zip code of residence



Sources: Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2017; County of Humboldt DHHS-PH Vital Statistics





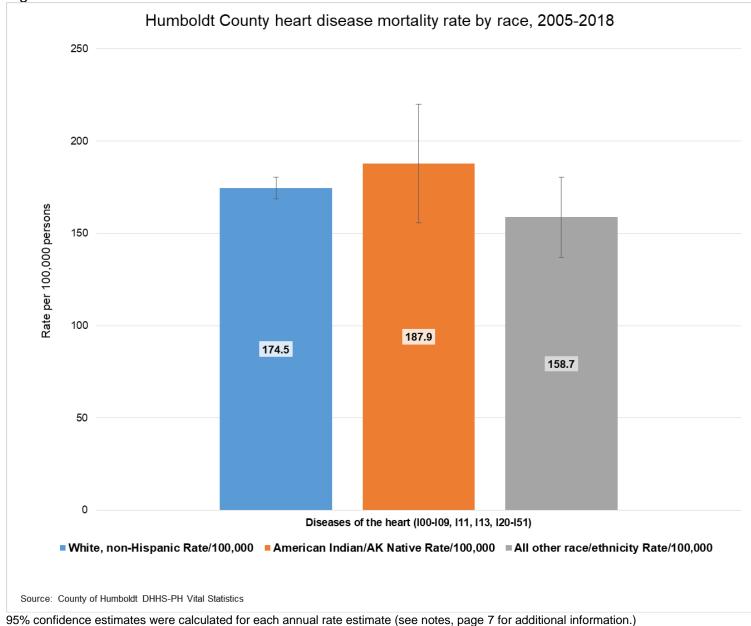
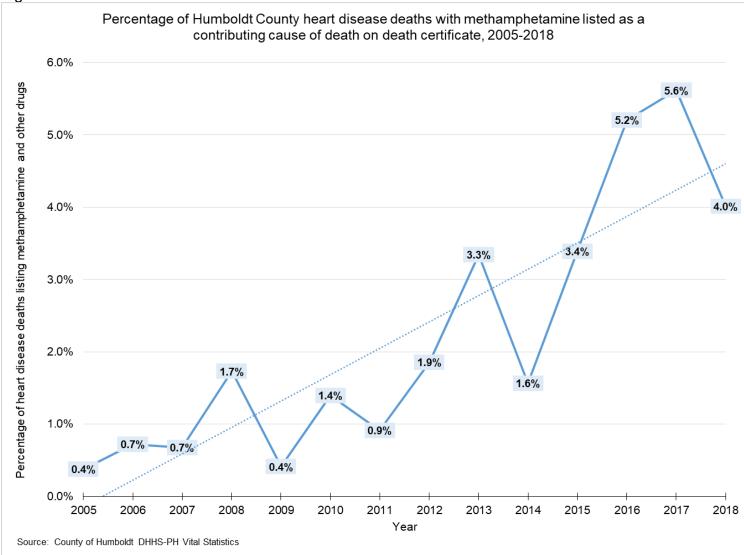


Figure 5:



Methamphetamine may be listed singly or in combination with other drugs/alcohol.

For questions regarding this report, contact Ron Largusa MSPH, Epidemiologist, Humboldt County DHHS-Public Health. (707)-268-2187. <u>rlargusa@co.humboldt.ca.us</u>

Sources:

Humboldt County DHHS-Public Health Vital Statistics, 2005-2018

Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2017 on CDC WONDER Online Database, released December, 2018. Data are from the Multiple Cause of Death Files, 1999-2017, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. <u>http://wonder.cdc.gov/ucd-icd10.html</u>

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:

Heart disease deaths are classified using the International Classification of Diseases, Tenth Revision (ICD-10) for codes I00-I09, I11, I13, and I20-I51.

Additionally, Humboldt County DHHS-Public Health-Epidemiology analyzes the electronic death registry system for California (CA-EDRS) using VRBIS (Vital Records Business System). The following text fields, or "Literals", are qualitatively reviewed and each death is grouped into categories:

- a. Causes of death due to or as a consequence of a particular health event
- b. Significant conditions contributing to death, including substance use.
- c. Description of injury or illness
- d. 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: <u>https://www.cdc.gov/nchs/data/nvsr/nvsr63/nvsr63_09.pdf</u>

Annual rates for the US, California, and Humboldt County (figures 1 and 3) are age-adjusted to the 2000 US Census population distribution. Crude rates are used in figure 2 to better estimate the heart disease mortality burden in Humboldt County zip codes. Confidence intervals for mortality rates from 100+ deaths are calculated using standard normal distribution. Confidence intervals for rates calculated using gamma probability distribution.

The cutoff age for determining "years potential life lost" (YPLL) can vary from <65 years to <85 years, depending on the causes of death under study. Typically, the CDC and NCHS use <75 years as the most common cutoff age. This report uses average age at death listed on the death certificate compared with <75 years cutoff as an approximation of YPLL. For an example of YPLL calculation, visit: http://www.cdc.gov/nchs/hus/contents2013.htm#021