**Drug Poisoning Death Rates**

The Centers for Disease Control and Prevention ([CDC](https://www.cdc.gov/)) is a United States federal agency founded to combat threats to health, safety, and security by researching and disseminating health information. The CDC also offers a wealth of vital public data such as population, death rates, and disease prevalence at multiple administrative levels from states to counties.

We scraped the CDC’s [WONDER](https://wonder.cdc.gov/) database and pulled county-level rates of death from drug poisoning overdose, expressed in number of deaths per 100,000 people aged between 15 and 64, for the years 2014 (when [county name/boundary changes](https://www.census.gov/geo/reference/county-changes.html) started to settle) through 2016 (the most recent year available).

We obtained and cleaned two subsets of data based on which kinds of drug deaths were included. Because some of the data was coded as “Unreliable” or “Suppressed” due to low population or death numbers, different death rates were used depending on the case. These are outlined in the dataset descriptions below.

Drug\_Poisoning\_Death\_Rates\_AllDrugs.csv

* Deaths were attributed to Drug Poisoning causes ([underlying causes dataset](https://wonder.cdc.gov/ucd-icd10.html))
* “Unreliable” county rates (fewer than 20 deaths, sensitive to yearly changes) filled using Crude Rate per 100,000 population
* “Suppressed” county rates filled using a modeled age-adjusted rate from the CDC’s branch [National Center for Health Statistics](https://www.cdc.gov/nchs/data-visualization/drug-poisoning-mortality/)

Drug\_Poisoning\_Death\_Rates\_Opioids.csv

* Deaths had underlying death code as drug poisoning, subcode opioids ([multiple causes dataset](https://wonder.cdc.gov/mcd-icd10.html))
* “Unreliable” county rates (fewer than 20 deaths, sensitive to yearly changes) filled using Crude Rate per 100,000 population
* “Suppressed” county rates indicated with an empty cell since a corresponding modeled rate was not obtained for opioid-only death rates

The CSV files contain the following fields (note the “DeathRateType” code differences between the “AllDrugs” and “Opioids” datasets):

|  |  |  |
| --- | --- | --- |
| **Variable Name** | **Type** | **Description** |
| FIPS | Integer | 4 or 5 digit [FIPS county code](https://en.wikipedia.org/wiki/FIPS_county_code) (leading zeros stripped). |
| county | String | County name. |
| state | String | 2 letter state abbreviation. |
| [year]\_DeathRateType | Integer | Rate type used for the county for [year].  1: WONDER Age-Adjusted Rate  2: WONDER Crude Rate  3: [AllDrugs dataset] NCHS Modeled Age-Adjusted Rate  4: [Opioids dataset] Data suppressed and not fillable |
| [year]\_Drug\_Poison\_Rate | Decimal | Rate of deaths from drug poisoning for [year]. |
| [year]\_Population | Integer | Number of people in county as of [year]. |