# Data Sources for Opioid Abuse, Overdose, and Suicide

Opioid overdose (OD) and suicide are among the leading causes of preventable death in the United States. Gathering data on these problems and assessing how they intersect are key steps in identifying opportunities to prevent them. This tool presents 13 key data sources that provide indicators for opioid use and suicide. For each data source, we present the following information:

- A brief description
- Opioid use and suicide-related indicators provided
- Available demographic variables
- Possible limitations of the dataset

| Name | Description | Indicators/Variables | Possible Limitations |
|---|---|---|---|
| **Agency for Healthcare Research and Quality's (AHRQ) Healthcare Cost and Utilization Project (HCUP):** https://www.ahrq.gov/research/data/hcup/index.html | • Estimates for inpatient and emergency room visits<br>• Geographic level: national, state, and urbanization code<br>• Available for 33 states and Washington, D.C. | ☒ Opioid use, abuse, overdose<br>☒ Suicide deaths<br>☒ Suicide attempts<br>☒ Suicidal ideation<br>☒ Suicide by opioids<br>☒ Race/ethnicity<br>☐ LGBTQ status | • Not available for all states<br>• No county-level data<br>• Admissions do not represent individuals<br>• Online tool does not separate heroin vs. prescription opioid admissions |

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|---|---|---|---|
| | | | • Suicide attempts cannot be disaggregated from non-suicidal self-harm |
| **Alcohol and Drug Survey for Higher Education:** http://core.siu.edu/index.php | • Survey of college students' use, attitudes, perceptions, and opinions about alcohol and drugs<br>• Geographic level: participating colleges and universities | ☒ Opioid use, abuse, overdose<br>☐ Suicide deaths<br>☒ Suicide attempts<br>☒ Suicidal ideation<br>☐ Suicide by opioids<br>☒ Race/ethnicity<br>☐ LBGTQ status | • No national or state-level data<br>• Data available only for select colleges |
| **American College Health Association National College Health Assessment:** http://www.acha-ncha.org/overview.html | • Administered each spring and fall<br>• Schools survey all their students using a random sampling technique<br>• May include data on a wide range of health topics including suicide<br>• Geographic level: participating colleges and universities | ☒ Opioid use, abuse, overdose<br>☒ Suicide deaths<br>☒ Suicide attempts<br>☒ Suicidal ideation<br>☐ Suicide by opioids<br>☒ Race/ethnicity<br>☐ LGBTQ status | • Not available for every campus |

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| **BioSense Platform (ESSENCE application):** **https://www.cdc.gov/nssp/biosense/index.html** | • ESSENSE is a cloud-based platform that captures emergency room data<br>• Data is able to be shared across city, county, and state jurisdictions<br>• Houses several types of tools on the platforms for different data queries<br>• Geographic level: national, state, county, and hospital | ☒ Opioid use, abuse, OD<br>☒ Suicide deaths<br>☒ Suicide attempts<br>☐ Suicidal ideation<br>☒ Suicide by opioids<br>☒ Race/ethnicity<br>☐ LGBTQ status | • Based on chief complaints that patients seek medical treatment for at emergency rooms<br>• Only captures emergency department data<br>• Not all emergency rooms enter data into BioSense Platform<br>• Race/ethnicity may not be available (this indicator is dependent on reporting practices)<br>• Not publicly available (only available to National Syndromic Surveillance Program representatives) |
| Centers for Disease Control and Prevention Multiple Cause of Death (CDC WONDER): **https://wonder.cdc.gov/mcd.html** | • Mortality data from death certificates<br>• Geographic level: national, state, and county<br>• Available for all 50 states and Washington, D.C.<br>• One of the few sources of comparable suicide data over an extended time period at the county level<br>• Supplies more detail on suicide method (e.g., broad type of poison/medication involved) | ☒ Opioid use, abuse, overdose<br>☒ Suicide deaths<br>☐ Suicide attempts<br>☐ Suicidal ideation<br>☒ Suicide by opioids<br>☒ Race/ethnicity<br>☐ LGBTQ status | • County data may be suppressed due to low case count<br>• Quality of data may be inconsistent due to reporting practices<br>• Not all deaths are recorded as suicides<br>• Race and ethnicity information on death certificates may be reported inconsistently<br>Low prevalence may lead to unreliable data, especially at the county level |

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| **National Health and Nutrition Examination Survey (NHANES):** http://www.cdc.gov/nchs/nhanes.htm | • Nationally representative sample of approximately 5,000 individuals<br>• Includes information on illicit opioids (heroin)<br>• Includes information on military status<br>• Geographic level: national | ☒ Opioid use, abuse, overdose<br>☐ Suicide deaths<br>☐ Suicide attempts<br>☒ Suicidal ideation<br>☐ Suicide by opioids<br>☒ Race/ethnicity<br>☒ LGBTQ status | • Data not available by state<br>• Does not include information on the non-medical use of prescription opioids |
| **National Survey of Drug Use and Health (NSDUH):** https://www.samhsa.gov/data/population-data-nsduh | • Household-based survey for assessing prevalence, patterns, and consequences of alcohol, tobacco, and illegal drug use and abuse and mental health disorders in the U.S. civilian, non-institutionalized population, age 12 and older<br>• Geographic level: national, state, and sub-state regions<br>• Available for all 50 states and Washington, D.C. | ☒ Opioid use, abuse, overdose<br>☐ Suicide deaths<br>☒ Suicide attempts<br>☒ Suicidal ideation<br>☒ Suicide by opioids<br>☒ Race/ethnicity<br>☒ LGBTQ status | • Low sample size for sub-state estimates<br>• No county-level data |
| **National Violent Death Reporting System (NVDRS):** https://www.cdc.gov/violenceprevention/nvdrs/index.html | • State-based surveillance system that collects data from different sources about the same event<br>• Data sources include state and local medical examiner/coroner offices, law enforcement departments, toxicology research, and vital statistics | ☒ Opioid use, abuse, overdose<br>☒ Suicide deaths<br>☐ Suicide attempts<br>☐ Suicidal ideation<br>☒ Suicide by opioids<br>☒ Race/ethnicity<br>☒ LGBTQ status | • Not available for all states<br>• Reporting may vary by state<br>• Death may be misclassified<br>Circumstantial information may be incomplete |

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| | • May include data on mental health problems, physical problems, and information on circumstances of death<br>• Geographic level: national and state<br>• Available for 40 states, Washington, D.C., and Puerto Rico | | |
| **Treatment Episode Dataset (TEDS):**<br>**https://www.samhsa.gov/data/client-level-data-teds** | • Admissions to state substance abuse treatment systems<br>• Geographic level: national and state<br>• Available for all 50 states and Washington, D.C. | ☒ Opioid use, abuse, overdose<br>☐ Suicide deaths<br>☒ Suicide attempts<br>☒ Suicidal ideation<br>☒ Suicide x opioids<br>☒ Race/ethnicity<br>☐ LGBTQ status | • No county-level data<br>• Admissions do not represent individuals<br>• May not reflect prevalence of opioid abuse in general beyond those in treatment<br>• Suicide attempts and ideation are grouped together under depressive disorders |
| **Web-based Injury Reporting System (WISQARS) Non-fatal Injury:**<br>**https://www.cdc.gov/injury/wisqars/nonfatal.html** | • Suicide data is reported under 'self-harm'. Nonfatal injury reports provide estimates of injuries treated in hospital emergency departments.<br>• Data compared across demographic groups and by cause<br>• Geographic level: national | ☐ Opioid use, abuse, overdose<br>☐ Suicide deaths<br>☒ Suicide attempts<br>☐ Suicidal ideation<br>☐ Suicide by opioids<br>☒ Race/ethnicity<br>☐ LGBTQ status | • Suicide attempts cannot be differentiated from non-suicidal self-harm<br>• Self-harm data only available at a national level<br>• Does not break down drug poisoning into types of drugs |
| **Web-based Injury Statistics Query and** | • Data on medical, pharmacy, and dental claims from private and public payers | ☐ Opioid use, abuse, overdose | • Does not break down drug poisoning into types of drugs |

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| **Reporting System (WISQARS) Fatal Injury Data:** **https://www.cdc.gov/injury/wisqars/fatal.html** | • Geographic level: national, census region, and state | ☒ Suicide deaths<br>☐ Suicide attempts<br>☐ Suicidal ideation<br>☐ Suicide by opioids<br>☒ Race/ethnicity<br>☐ LGBTQ status | • Quality of data may be inconsistent due to reporting practices<br>• Not all suicides are recorded as suicides<br>• Race and ethnicity information on death certificates may be reported inconsistently<br>• Long delays in reporting |
| **Youth Risk Behavior Surveillance System (YRBSS):** **https://www.cdc.gov/healthyYouth/data/yrbs/index.htm** | • School-based survey for monitoring health-risk behaviors (including substance misuse) of students in grades 9–12<br>• Geographic level: national, state, and select cities<br>• Available for 47 states, Washington, D.C., and 4 Pacific jurisdictions | ☒ Opioid use, abuse, overdose<br>☐ Suicide deaths<br>☒ Suicide attempts<br>☒ Suicidal ideation<br>☒ Suicide by opioids<br>☒ Race/ethnicity<br>☒ LGBTQ status | • Not all states participate in every survey<br>• Only available for youth who are in school<br>• Low sample size for subgroup estimates<br>• No county-level data<br>• Indicator for the non-medical use of prescription drugs is not opioid-specific and includes several different types of prescription drugs |

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