UNDERSTANDING SUICIDE DATA IN UTAH:
INFORMATION YOU NEED TO SAVE LIVES

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ALLISON FOUST, MHA, MCHES
SUICIDE PREVENTION PROGRAM ADMINISTRATOR
WHAT YOU WILL LEARN TODAY

- Basic suicide trends in Utah
- How to obtain suicide data and other public wellness measures through behavioral health indicator systems
- How to interpret small numbers and big tragedies
- Prevention planning: using data to inform community efforts
- Suicide surveillance in Utah: What information and resources exist?
CORE STRATEGIES OF THE UTAH SUICIDE PREVENTION PLAN

● Increase Availability and Access to Quality Physical and Behavioral Health Care
● Increase Social Norms Supportive of Help-seeking and Recovery
● Reduce Access to Lethal Means
● Increase Connectedness to Individuals, Family, Community and Social Institutions by Creating Safe and Supportive School and Community Environments
● Increase Coping and Problem Solving Skills
● Increase support to Survivors of Suicide Loss
● Strengthen Economic Supports

Other priorities include: 1) Increasing Comprehensive Data Collection for Suicide to Guide Prevention Efforts 2) Engaging and Supporting High Risk or Underserved Groups.
LEGISLATION THAT SUPPORTS SUICIDE DATA COLLECTION TO INFORM PREVENTION EFFORTS

- Utah Suicide Prevention Coalition
- Utah Suicide Prevention State Plan
- Suicide Prevention Coordinator and Suicide Research Coordinator positions
THE IMPORTANCE OF COLLECTING SUICIDE-RELATED DATA

- Provide guidance to the Utah Suicide Prevention Coalition (USPC) and workgroups;
- Provide guidance to community partners and local communities for developing their own strategic plans for suicide prevention;
- Outline priorities for state agencies and legislators for legislation and policy-making;
- Report on current trends in suicide data in Utah.
WHEN ACADEMICS TALK ABOUT SUICIDE …
Suicide Ideation

Non-Fatal Suicide Attempt

Suicide Death
PAST YEAR SUICIDAL THOUGHTS AND BEHAVIORS AMONG U.S. ADULTS, 2019

12.0 million adults had serious thoughts of suicide

3.5 million adults made suicide plans

1.4 million adults attempted suicide

1.2 million adults made plans and attempted suicide

217,000 adults made no plans and attempted suicide

45,861 adults died by suicide

Source: NIMH, SAMHSA
WHAT PROPORTION OF ALL SUICIDE DEATHS EACH YEAR IN UTAH ARE 10 TO 17 YEAR-OLDS?
6%
SUICIDE RATES IN THE U.S. AND UTAH, AGES 0 TO 17, 1999 TO 2020

[Graph showing suicide rates in the U.S. and Utah from 1999 to 2020.]
SUICIDE DEATH IN UTAH BY METHOD, 2015 TO 2019

- Firearm: 50.31%
- Asphyxiation: 25.71%
- Poisoning: 18.85%
- Other: 5.13%
PUBLIC HEALTH INDICATOR BASED INFORMATION SYSTEM (IBIS)

HOW MANY PEOPLE DIED BY SUICIDE IN UTAH IN THE PAST FIVE YEARS?
WHERE DOES THE DATA COME FROM?

- Utah Office of the Medical Examiner (OME)
  - Centralized Death Investigation System in Utah – there are no coroners in Utah
  - Determine cause and manner; certifies death certificates
  - Deaths investigated are based on place: where the decedent died

- Office of Vital Records and Statistics (OVRS)
  - Source of official vital statistics, including suicides in Utah
  - Reports deaths based on place of residence, not place of death or injury

- Centers for Disease Control and Prevention (CDC) and National Vital Statistics System (NVSS)
  - Reconciles deaths to report accurate death data by residence (e.g., Wyoming resident who died in Utah would be “returned” to Wyoming)

- Funeral homes also play a role in gathering some important demographic information, such as race, education, etc.
Welcome to the State of Utah, Department of Health, Indicator-Based Information System for Public Health (IBIS-PH). This site provides health data with context on the health of Utahns and status of the Utah health care system.

This Site Provides:

- **Utah Health Topics** - Focus on specific health topics, compiles indicator data, query datasets, important facts, and publications relevant to specific health topics.
- **Health Indicator Reports** - Health indicator reports provide an overview of specific public health issues in Utah as well as its public health context, recent status, and what is being done to improve it.
- **Customizable Public Health Query Modules** - Data access and analysis tools to numerical datasets. Custom queries include charts, maps, Utah Health Improvement Index, and metadata.
- **Community Snapshot Reports** - Community measures of health indicators within Local Health Districts and Utah Small Areas in the state.
- **Publications for Health Data by Topic** - Publications address studies of current health issues and answer frequently asked questions concerning current health statuses in Utah. Search over hundreds of Utah Department of Health publications and access to over 7,000 publications in the online Utah Public Health Library.
- **Information About IBIS-PH** - Information about the IBIS-PH website, Utah Public Health data, and other general support.

**IBIS Training**

We provide quarterly IBIS training. For the next session, please register here.

**Questions, Concerns, and Feedback**

https://ibis.health.utah.gov/
Injury Mortality Query Module Configuration Selection

Overview
Click on either the Quick Selection or Advanced Selection bar to see a list of measures available. Use the hierarchical folder tree to navigate to the query module that will meet your needs. To see folder contents, click on the folder icon. Clicking on the folder again will hide the menu folder contents. When you click on the text link, it will take you to the query module. For further explanation on the modules, click on the "Help" button to the right.

ICD-9 Injury Data
This IBIS-PH module queries injury data only. Data in this module are consistent with the injury case definitions found in the Consensus Recommendations for Using Hospital Discharge Data for Injury Surveillance (2003) developed by the State and Territorial Injury Program Directors Association (STIPDA) Injury Surveillance Workgroup, available at http://ibis.health.utah.gov/pdf/resource/query/STIPDA.pdf (see pages 7-11).

ICD-10 Injury Data
This IBIS-PH module queries injury data only. Data in this module are consistent with the External Cause of Injury Mortality Matrix for ICD-10 found on the NCHS website at http://www.cdc.gov/nchs/data/ezicd10_transcode.pdf. Step 2 (Injury Indicators) are consistent with the Council for State and Territorial Epidemiologists toolkit, available at https://resources.cste.org/Injury-Surveillance-Methods-Toolkit/Home/GeneralInjuryIndicators.

**POPULATION DATA ALERT!!**
On October 12, 2021, estimates for 2010 and later have been updated to the IBIS Version 2020 population estimates. For more information, go to http://ibis.health.utah.gov/query/PopEst.html

Quick Selection (Click here for ICD-10 coding measures)
- Injury Count
- Injury Crude Rate
  - Injury 11 Age Groups Age-adjusted Rates
  - Average Age at Time of Death

Advanced Selection (Click here for ICD-9 coding, Utah Small Area, Race/Ethnicity)
- County and Local Health District, Years 1998 and before (ICD-9 coding system)
- Year 2000 and later by race/ethnicity (ICD-10 coding system)
- Utah Small Areas, Years 1998 and before (ICD-9 coding system)
- Utah Small Areas, Years 1999 and later (ICD-10 coding system)

Trend Analysis
- Injury
Department of Health IBIS Query System, Data Use Agreement

The data and information provided through the IBIS-PH Query System are intended to support any individuals or entities engaged in activities designed solely to enhance the well-being of a specific community, which may include the State. Activities include informing evidence-based decision making in the State to plan and improve health service delivery, evaluate health care interventions and systems, and inform health policy decisions. Other uses are not permissible.

As an IBIS-PH Query System user, I AGREE TO:
1. Use the data for statistical reporting and analysis only.
2. Avoid any attempt to identify or contact individual(s) represented in the IBIS-PH query system data.
3. Avoid disclosure or use of the identity of any individual(s) discovered inadvertently.
4. Avoid linkage of IBIS-PH query system data with other data that, after linkage, might allow identification of an individual represented in the IBIS-PH query system data.
5. Use appropriate safeguards to prevent the inappropriate use or disclosure of individual(s) represented in the data, including when disclosing IBIS-PH Query System data to others.
6. Report IMMEDIATELY any inadvertent or intentional identity disclosures or violations of this agreement of which I become aware to the Director of the Center for Public Health Data, Department of Health.

I understand that failure to adhere to the above stated agreement items will result in loss of access to DOH Internet databases, and I may be subject to legal penalties. Any use, release, or publication of health data contrary to the provisions stated is a class B misdemeanor, with subsequent violations being class A misdemeanors punishable by a fine of up to $5,000 per offense (Chapter 23, Title 26, Code Annotated). If I am a state government employee, this may be grounds for immediate dismissal.

I Agree
Overview

The mortality data in this IBIS-Q query module have been derived from death certificates in participation with the National Vital Statistics System, and are maintained and provided by the Utah Department of Health, Office of Vital Records. They include virtually all deaths of Utah residents, regardless of where the death occurred. The causes of death were coded using International Classification of Diseases (ICD) codes. The population estimates for years 1980-1999 were produced by the Utah Governor’s Office of Planning and Budget (OPB). For years 2000 and later the population estimates are provided by the National Center for Health Statistics (NCHS) through a collaborative agreement with the U.S. Census Bureau.

ICD-10 Injury Data

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Getting Started

Follow the steps to narrow your query and display your results. When you are done forming your query, click “Submit” bottom of the screen (last step) to get your query result.

**POPULATION DATA ALERT**

On October 12, 2021, estimates for 2010 and later have been updated to the IBIS Version 2020 population estimates. For more information, go to http://ibis.health.utah.gov/query/PopEst.html

---

Step 1: Select year
(2020)

Step 2: Select month

Step 3: Select injury cause of death

Step 4: Select injury intention

Step 5: Select age of decedent

Step 6: Select sex

Step 7: Select geographic area

Step 8: How to display the data
(Graphe By: Year, Chart: None, Map: Default 2015)

Submit  Reset

Office of Vital Records and Statistics, Center for Health Data and Informatics, Utah Department of Health, Salt Lake City, UT 84114-1012, Telephone: 801-538-6843, Website: http://health.utah.gov/vitalrecords/, Email: vrequest@utah.gov
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Getting Started
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Step 1: Select year

What year grouping do you want to select? Default is single years, most recent year.

- Single years
  - 2016
  - 2017
  - 2018
  - 2019
  - 2020

- Enter custom year group(s)

Step 2: Select month

Step 3: Select injury cause of death

Step 4: Select injury intention

Step 5: Select age of decedent

Step 6: Select sex

Step 7: Select geographic area

Step 8: How to display the data

(Selected by default: Death Rate, Age-Adjusted)
First choose a coding scheme to use for injury causes of death. (Default is all causes.)

- UDOH Injury causes
  - All causes of death
  - Cut/Pierce
  - Drowning/Submersion
  - Fall
  - Fire/Flame/Smoke
  - Hot Object/Substance, Caustic Substance

- TBI (Available from 2016)
- Drug overdose (Available from 2016)

Step 4: Select injury intention
(Suicide)

Select from list of intentions

- All Injury Intentions
- Accidental
- Suicide
- Assault
- Undetermined
- Other

Step 5: Select age of decedent

Step 6: Select sex

Step 7: Select geographic area

Step 8: How to display the data
(Grouped By: Year, Chart: None, Map: Default 2015)

Submit  Reset
These age groups work well for inquiries that include all suicide deaths in a given year.

For smaller breakdowns of data, use larger age groups:
- 0-17
- 18-44
- 45-64
- 65+
Step 6: Select sex

Would you like to include only males or only females in the results? Default includes both sexes.

- Both Male and Female
- Male
- Female

Step 7: Select geographic area

Step 8: How to display the data

Submit  Reset

Office of Vital Records and Statistics, Center for Health Data and Informatics, Utah Department of Health, Salt Lake City, UT 84114-1012, Telephone: 801-538-6043, Website: http://health.utah.gov/vitalrecords/, Email: vrequest@utah.gov
Step 6: Select sex

Would you like to include only males or only females in the results? Default includes both sexes.
- Both Male and Female
- Male
- Female

Step 7: Select geographic area

First choose a geography type. Default is all Utah residents, regardless of place of death.
- Local health district
  - All local health districts
  - Bear River LHD
  - Central Utah LHD
  - Davis County LHD
  - Salt Lake County LHD
  - San Juan LHD
- County
- Urban/Rural residence

Step 8: How to display the data
(Grouped By: Year, Chart: None, Map: Default 2015)

Submit  Reset
### Options:
- Year
- Month
- Causes of Death
- Injury Indicator
- Injury Intention
- Age Group
- Sex
- Geographic Area

### Step 7: Select geographic area

First choose a geography type. Default is all Utah residents, regardless of place of death.

- Local health district
  - All local health districts
  - Bear River LHD
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- County
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### Step 8: How to display the data

To display a map, you must select Geographic Area in Display By (category) and None in Group By (series).

<table>
<thead>
<tr>
<th>Display By (category)</th>
<th>Geographic Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group By (series)</td>
<td>None</td>
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<tr>
<td>Chart</td>
<td>None</td>
</tr>
<tr>
<td>Map</td>
<td>Default 2015</td>
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<tr>
<td>Primary Measure</td>
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Submit | Reset

Office of Vital Records and Statistics, Center for Health Data and Informatics, Utah Department of Health, Salt Lake City, UT 84114-2822
http://health.utah.gov/vitalrecords/, Email: vrequest@utah.gov
### Query Results for Injury Mortality ICD-10 Query Module for Utah Counties and Local Health Districts - Crude Rates, Deaths Per 100,000 Population

#### Query Criteria
- **Single Years Filter:** 2016, 2017, 2018, 2019, 2020
- **Injury Intention Filter:** Suicide
- **Custom Age Group Filter:** 0-17, 18-24, 25-34, 35-44, 45-54, 55-64, 65-74, 75+
- **Data Grouped By:** Single Years

#### Data Table

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### Query Results for Injury Mortality ICD-10 Query Module for Utah Counties and Local Health Districts - Crude Rates, Deaths Per 100,000 Population

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#### Data Notes
### Query Results for Injury Mortality ICD-10 Query Module for Utah Counties and Local Health Districts - Crude Rates, Deaths Per 100,000 Population

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NUMBER OF SUICIDE DEATHS AND SUICIDE DEATH RATE PER 100,000, UTAH, 2016-2020
WHAT IS A RATE?

Number of Cases (Suicide Deaths) / Total Population = Crude Rate per 100,000
NUMBER OF SUICIDE DEATHS AND SUICIDE DEATH RATE PER 100,000, UTAH, 2016-2020, WITH TRENDLINES
EXAMINING TRENDS
EXAMINING TRENDS

COUNTS

RATES

TIME
EXAMINING TRENDS
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<td>3,206,088</td>
<td>3.91</td>
</tr>
<tr>
<td>2020</td>
<td>20.02</td>
<td>18.51</td>
<td>21.61</td>
<td>651</td>
<td>3,252,408</td>
<td>3.92</td>
</tr>
<tr>
<td>Overall</td>
<td>20.58</td>
<td>19.88</td>
<td>21.3</td>
<td>3,245</td>
<td>15,768,648</td>
<td>1.76</td>
</tr>
</tbody>
</table>
HOW MANY PEOPLE DIED BY SUICIDE IN UTAH IN THE PAST FIVE YEARS?
### Data Table

<table>
<thead>
<tr>
<th>Single Years</th>
<th>Crude Rates, Injury Deaths Per 100,000 Population</th>
<th>95% CI LL</th>
<th>95% CI UL</th>
<th>Number of Injury Deaths</th>
<th>Number in the Population</th>
<th>Relative Standard Error %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>12.36*</td>
<td>5.34*</td>
<td>24.36*</td>
<td>8*</td>
<td>64716*</td>
<td>35.353*</td>
</tr>
<tr>
<td>2017</td>
<td>28.11</td>
<td>16.93</td>
<td>43.0</td>
<td>19</td>
<td>67,584</td>
<td>22.94</td>
</tr>
<tr>
<td>2018</td>
<td>24.25</td>
<td>14.13</td>
<td>38.83</td>
<td>17</td>
<td>70,092</td>
<td>24.25</td>
</tr>
<tr>
<td>2019</td>
<td>17.99</td>
<td>9.58</td>
<td>30.77</td>
<td>13</td>
<td>72,252</td>
<td>27.74</td>
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<tr>
<td>2020</td>
<td>20.08</td>
<td>11.24</td>
<td>33.12</td>
<td>15</td>
<td>74,688</td>
<td>25.82</td>
</tr>
<tr>
<td>Overall</td>
<td>20.61</td>
<td>16.13</td>
<td>25.96</td>
<td>72</td>
<td>349,332</td>
<td>11.79</td>
</tr>
</tbody>
</table>

*Use caution in interpreting; the estimate has a coefficient of variation > 30% and is therefore deemed unreliable by Utah Department of Health standards. Consider aggregating years to decrease the relative standard error and improve the reliability of the estimate.

### Data Table

<table>
<thead>
<tr>
<th>Single Years</th>
<th>Crude Rates, Injury Deaths Per 100,000 Population</th>
<th>95% CI LL</th>
<th>95% CI UL</th>
<th>Number of Injury Deaths</th>
<th>Number in the Population</th>
<th>Relative Standard Error %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>22.95*</td>
<td>9.23*</td>
<td>47.28*</td>
<td>7*</td>
<td>30504*</td>
<td>37.7964*</td>
</tr>
<tr>
<td>2017</td>
<td>12.43*</td>
<td>3.39*</td>
<td>31.82*</td>
<td>4*</td>
<td>32184*</td>
<td>50.0000*</td>
</tr>
<tr>
<td>2018</td>
<td>20.95*</td>
<td>8.42*</td>
<td>43.17*</td>
<td>7*</td>
<td>33408*</td>
<td>37.7964*</td>
</tr>
<tr>
<td>2019</td>
<td>==</td>
<td>==</td>
<td>==</td>
<td>==</td>
<td>==</td>
<td>==</td>
</tr>
<tr>
<td>2020</td>
<td>11.31*</td>
<td>3.08*</td>
<td>28.97*</td>
<td>4*</td>
<td>35352*</td>
<td>50.0000*</td>
</tr>
<tr>
<td>Overall</td>
<td>==</td>
<td>==</td>
<td>21.54</td>
<td>==</td>
<td>165,780</td>
<td>20.41</td>
</tr>
</tbody>
</table>

*Use caution in interpreting; the estimate has a coefficient of variation > 30% and is therefore deemed unreliable by Utah Department of Health standards. Consider aggregating years to decrease the relative standard error and improve the reliability of the estimate. **The estimate has been suppressed because 1) The relative standard error is greater than 50% or when the relative standard error can’t be determined. Consider aggregating years to decrease the relative standard error and improve the reliability of the estimate. 2) The observed number of events is very small and not appropriate for publication, or 3) it could be used to calculate the number in a cell that has been suppressed.
### Step 1: Select year

What year grouping do you want to select? Default is single years, most recent year.
- Single years
- Enter custom year group(s)

<table>
<thead>
<tr>
<th>Year Group</th>
<th>Crude Rates, Injury Deaths Per 100,000 Population</th>
<th>95% CI LL</th>
<th>95% CI UL</th>
<th>Number of Injury Deaths</th>
<th>Number in the Population</th>
<th>Relative Standard Error (Coefficient of Variation %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015-2016</td>
<td>23.44</td>
<td>12.82</td>
<td>39.33</td>
<td>14</td>
<td>59,724</td>
<td>26.73</td>
</tr>
<tr>
<td>2017-2018</td>
<td>16.77*</td>
<td>8.37*</td>
<td>30.01*</td>
<td>11*</td>
<td>65592*</td>
<td>30.1511*</td>
</tr>
<tr>
<td>2019-2020</td>
<td>8.61*</td>
<td>3.16*</td>
<td>18.74*</td>
<td>6*</td>
<td>69684*</td>
<td>40.8248*</td>
</tr>
<tr>
<td>Overall</td>
<td>15.9</td>
<td>10.8</td>
<td>22.57</td>
<td>31</td>
<td>195,000</td>
<td>17.96</td>
</tr>
</tbody>
</table>

*Use caution in interpreting; the estimate has a coefficient of variation > 30% and is therefore deemed unreliable by Utah Department of Health standards. Consider aggregating years to decrease the relative standard error and improve the reliability of the estimate.
OTHER SUICIDE RELATED QUERIES AVAILABLE ON IBIS

- Queries by race and ethnicity
- Utah Violent Death Reporting System (UTVDRS or NVDRS): Find out circumstances of suicide death by year, age, sex, race/ethnicity, and geography.
- Fatal and non-fatal suicide attempts reported to emergency departments by year, age, sex, primary payer, discharge status, and geography
A WHOA! MOMENT

76 deaths
THAT WASN’T SO WHOA
The Smith County Suicide Prevention Coalition learns from the local sheriff of three suicide deaths that occurred in their county over the past two weeks and is rightfully concerned about an increase in suicide death in their county.

CONSIDERATIONS:

- How many suicide deaths are typical in a 12 month period in Smith County?
- Are the three people who died in Smith County socially connected to one another? For example, part of the same school, faith community or congregation, work in the same industry or for the same employer, or were friends?
- Were there any commonalities among the three deaths? For example, did they use the same method to kill themselves, injure themselves at the same location, or all a racial/ethnic minority?
- Did all three individuals who died by suicide reside in Smith County?
POINT CLUSTERS: Three or more deaths that occur within a short period of time (typically a 12 month period) in which all of the decedents were socially connected.

- For example, all attended the same school, worked at the same company, or were incarcerated at the same facility.
- Another example: three suicides in a Tlingit village in Southeast Alaska.
- Sometimes referred to as suicide contagion

MASS CLUSTERS: An aberration typical frequency that exceeds normal variation for a period of time within a specified period of time (typically a 12 month period) in which there are commonalities, but the individuals were not socially connected.

- For example, following Robin Williams’ death by suicide in 2014, there was an increase in suicide by ligature hanging nationally.
- Another example: there has been considerable research in the aftermath of Netflix’s 13 Reasons Why, which showed increases in suicidal behavior among teens.
- Sometimes referred to as suicide diffusion

Clusters require specific responses that typically extend beyond a community suicide prevention plan.
CDC WONDER

WONDER online databases utilize a rich ad-hoc query system for the analysis of public health data. Reports and other query systems are also available.
National Center for Health Statistics
Mortality Data on CDC WONDER

All Ages Deaths by Underlying Cause

- **Underlying Cause of Death**
- **1999-2020: Underlying Cause of Death by Bridged-Race Categories**
- **2018-2020: Underlying Cause of Death by Single-Race Categories**
- **1988-2016: Compressed Mortality**

The mortality data available on CDC WONDER are national mortality and population data produced by National Center for Health Statistics (NCHS) at the Centers for Disease Control and Prevention (CDC). Mortality information is collected by state registries and provided to the National Vital Statistics System. Data are based on death certificates for U.S. residents. Each death certificate contains a single underlying cause of death, and demographic data. The number of deaths and death rates can be obtained by place of residence (United States national, state, and county when available), age group, race, Hispanic ethnicity, gender, and cause of death (4-digit ICD-10 codes, 113 selected causes of death, 130 selected causes of death for infants, and categories for injury intent and mechanism, or drug / alcohol induced causes of death, when available). For more information, refer to National Vital Statistics System - Mortality Data.
About Underlying Cause of Death, 1999-2020

Note: Any use of these data implies consent to abide by the terms of the data use restrictions.

The Underlying Cause of Death database contains mortality and population counts for all U.S. counties. Data are based on death certificates for U.S. residents. Each death certificate identifies a single underlying cause of death and demographic data. The number of deaths, crude death rates or age-adjusted death rates, and 95% confidence intervals and standard errors for death rates can be obtained by place of residence (total U.S., region, state and county), age group (single-year-of-age, 5-year age groups, 10-year age groups and infant age groups), race, Hispanic ethnicity, gender, year, cause-of-death (4-digit ICD-10 code or group of codes), injury intent and injury mechanism, drug/alcohol induced causes and urbanization categories. Data are also available for place of death, month and week day of death, and whether an autopsy was performed.

Data Use Restrictions:
The Public Health Service Act (42 U.S.C. 242m(d)) provides that the data collected by the National Center for Health Statistics (NCHS) may be used only for the purpose for which they were obtained; any effort to determine the identity of any reported cases, or to use the information for any purpose other than for health statistical reporting and analysis, is against the law. Therefore users will:

- Use these data for health statistical reporting and analysis only.
- For sub-national geography, do not present or publish death counts of 9 or fewer or death rates based on counts of nine or fewer (in figures, graphs, maps, tables, etc.).
- Make no attempt to learn the identity of any person or establishment included in these data.
- Make no disclosure or other use of the identity of any person or establishment discovered inadvertently and advise the NCHS Confidentiality Officer of any such discovery.

Confidentiality Officer
National Center for Health Statistics
3311 Toledo Road
Hyattsville, MD 20782
Telephone 888-642-4159
Email: nchsconfidentiality@cdc.gov

Sanctions for Violating Rules:
Researchers who violate the terms of the data use restrictions will lose access to WONDER and their sponsors and institutions will be notified. Researchers who are suspected of violating the rules may be prevented from using WONDER until an investigation can be completed. Deliberately making a false statement in any matter within the jurisdiction of any department or agency of the Federal government violates 18 USC 1001 and is punishable by a fine of up to $10,000 or up to 5 years in prison, or both.

By clicking the "I Agree" button I signify that I will abide by the terms of data use stated above and understand the sanctions and legal penalties for violation of these terms of use.

Click Dataset Documentation for complete information about this dataset.

Content source: CDC WONDER
Underlying Cause of Death, 1999-2020 Request
Deaths occurring through 2020

1. Organize table layout:

Make all desired selections and then click any Send button one time to send your request.

Group Results By: Year
And By: State
And By: None
And By: None
And By: None
And By: None

Notes:
- Group Results By "15 Leading Causes" to see the top 15 rankable causes selected from the corresponding 113 or 130 Cause List. More information.

Measures (Default measures always checked and included. Check box to include any others.)
- Death Count
- Population
- Crude Rate
- Age Adjusted Rate
- 95% Confidence Interval
- Standard Error
- Percent of Total Deaths

Additional Rate Options
- Click '+' for non-standard age adjusted rates and other options.

2. Select location:

Click a button to choose locations by State, Census Region or HHS Region.
- States
- Census Regions
- HHS Regions

Browse or search to find items in the States Finder Tool, then highlight the items to use for this request. (The currently selected box displays all current request items.)

Finder Tool Help - Advanced Finder Options
6. Select cause of death:

Click a button to select ICD codes by Chapters or by Groups.

- [ ] ICD-10 Codes
- [ ] ICD-10 130 Cause List (Infants)
- [x] Drug/Alcohol Induced Causes
- [ ] ICD-10 113 Cause List
- [ ] Injury Intent and Mechanism

Browse or search to find items in the ICD-10 Codes Finder Tool, then highlight the items to use for this request.

Currently selected: X60-X84 (Intentional self-harm)

7. Other options:

- Export Results
- Show Totals
- Show Zero Values
- Show Suppressed Values
- Precision
- Data Access Timeout

Send Reset

Content source: CDC WONDER
Hold down ctrl, then select Y87.0
<table>
<thead>
<tr>
<th>ICD-10 Codes</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y87.2</td>
<td>Sequence of events of undetermined intent</td>
</tr>
<tr>
<td>Y88.0</td>
<td>Sequence with surgical and medical care as external cause</td>
</tr>
<tr>
<td>Y88.1</td>
<td>Sequence of adverse effects caused by drugs, medications and biologicals</td>
</tr>
<tr>
<td>Y88.2</td>
<td>Sequence of adverse incidents associated with medical devices in diagnostic procedures</td>
</tr>
<tr>
<td>Y88.3</td>
<td>Sequence of surgical and medical procedures as the cause of abnormal reaction</td>
</tr>
<tr>
<td>Y89.0</td>
<td>Sequence of other external causes</td>
</tr>
<tr>
<td>Y89.1</td>
<td>Sequence of legal intervention</td>
</tr>
<tr>
<td>Y89.2</td>
<td>Sequence of war operations</td>
</tr>
<tr>
<td>Y89.9</td>
<td>Sequence of unspecified external cause</td>
</tr>
</tbody>
</table>

**Browse** the list by opening and closing items.

**Use Ctrl+Click** to multiple select, **Shift+Click** for a range.

**7. Other options:**

- **Export Results**
- **Show Totals**
- **Show Zero Values**
- **Show Suppressed Values**
- **Precision**
- **Data Access Timeout**

**Send** | **Reset**

Content source: CDC WONDER
<table>
<thead>
<tr>
<th>Year</th>
<th>State</th>
<th>Deaths</th>
<th>Population</th>
<th>Crude Rate Per 100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>Wyoming (56)</td>
<td>182</td>
<td>582,328</td>
<td>31.3</td>
</tr>
<tr>
<td>2020</td>
<td>Alaska (02)</td>
<td>204</td>
<td>731,188</td>
<td>27.9</td>
</tr>
<tr>
<td>2020</td>
<td>Montana (30)</td>
<td>300</td>
<td>1,080,577</td>
<td>27.8</td>
</tr>
<tr>
<td>2020</td>
<td>New Mexico (35)</td>
<td>516</td>
<td>2,106,319</td>
<td>24.5</td>
</tr>
<tr>
<td>2020</td>
<td>Idaho (16)</td>
<td>419</td>
<td>1,826,913</td>
<td>22.9</td>
</tr>
<tr>
<td>2020</td>
<td>Colorado (08)</td>
<td>1,302</td>
<td>5,807,719</td>
<td>22.4</td>
</tr>
<tr>
<td>2020</td>
<td>Oklahoma (40)</td>
<td>869</td>
<td>3,980,703</td>
<td>21.8</td>
</tr>
<tr>
<td>2020</td>
<td>South Dakota (46)</td>
<td>186</td>
<td>892,717</td>
<td>20.8</td>
</tr>
<tr>
<td>2020</td>
<td>Utah (49)</td>
<td>651</td>
<td>3,249,879</td>
<td>20.0</td>
</tr>
<tr>
<td>2020</td>
<td>West Virginia (54)</td>
<td>354</td>
<td>1,784,787</td>
<td>19.8</td>
</tr>
<tr>
<td>2020</td>
<td>Oregon (41)</td>
<td>833</td>
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<td>19.6</td>
</tr>
<tr>
<td>2020</td>
<td>Arkansas (05)</td>
<td>383</td>
<td>3,030,522</td>
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<tr>
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<td>Nevada (32)</td>
<td>603</td>
<td>3,138,259</td>
<td>19.2</td>
</tr>
<tr>
<td>2020</td>
<td>Vermont (50)</td>
<td>117</td>
<td>623,347</td>
<td>18.8</td>
</tr>
<tr>
<td>2020</td>
<td>Arizona (04)</td>
<td>1,363</td>
<td>7,421,401</td>
<td>18.4</td>
</tr>
<tr>
<td>2020</td>
<td>Missouri (20)</td>
<td>1,125</td>
<td>6,151,548</td>
<td>18.3</td>
</tr>
<tr>
<td>2020</td>
<td>Kansas (20)</td>
<td>531</td>
<td>2,913,805</td>
<td>18.2</td>
</tr>
<tr>
<td>2020</td>
<td>Kentucky (21)</td>
<td>801</td>
<td>4,477,251</td>
<td>17.9</td>
</tr>
<tr>
<td>2020</td>
<td>Tennessee (47)</td>
<td>1,220</td>
<td>6,886,834</td>
<td>17.7</td>
</tr>
<tr>
<td>2020</td>
<td>North Dakota (38)</td>
<td>135</td>
<td>765,369</td>
<td>17.6</td>
</tr>
<tr>
<td>2020</td>
<td>Iowa (18)</td>
<td>552</td>
<td>3,163,561</td>
<td>17.4</td>
</tr>
<tr>
<td>2020</td>
<td>Maine (23)</td>
<td>234</td>
<td>1,350,141</td>
<td>17.3</td>
</tr>
<tr>
<td>2020</td>
<td>New Hampshire (33)</td>
<td>234</td>
<td>1,366,275</td>
<td>17.1</td>
</tr>
<tr>
<td>2020</td>
<td>South Carolina (45)</td>
<td>868</td>
<td>5,218,040</td>
<td>16.6</td>
</tr>
<tr>
<td>2020</td>
<td>Alabama (01)</td>
<td>793</td>
<td>4,921,532</td>
<td>16.1</td>
</tr>
<tr>
<td>2020</td>
<td>Washington (53)</td>
<td>1,212</td>
<td>7,693,612</td>
<td>15.8</td>
</tr>
</tbody>
</table>
BEHIND THE SCENES SURVEILLANCE

- Full time epidemiologists at the OME: Suicide, drug overdose
- Real time aberration detection and notification of stakeholders (LHDs, LMHAs, LEAs)
- Monthly (or more often) meeting to review recent surveillance of suicide and drug overdose
- Epidemiologic investigations in suicide deaths
- Equivocal cases (suicide vs. accident vs. other) for deaths in which intention is difficult to ascertain
- Research: Utah Youth Suicide Research Project, Utah Veterans and Service Members Suicide Research Project
- Research liaison: Utah Suicide Genetics Research Study at the University of Utah
- National leaders in epidemiological surveillance and reporting (both at OME and UDOH)
HOW WILL THIS DATA INFORM OR CHANGE MY SUICIDE PREVENTION STRATEGY? + PARTING THOUGHTS

- Most epidemiological changes in suicide death data occur over years worth of time. I.e., What happened in your community last month or next month does not typically change your strategy.

- Why do I need this data?
  - Grants, funding, and community engagement
  - Situational awareness

- Suicide deaths do not need to be increasing to illustrate a need for prevention, intervention and postvention resources.
  - Suicide rates are relatively high in every place in Utah right now

- The episodic is not epidemic.
  - And informing a community in this manner can be dangerous
WHAT ARE THE APPLICATIONS?

- Suicide-related data should be used to inform prevention strategies, policies, and priorities.
- Suicide can be a problem, regardless if rates are increasing.
- MOST of the time, a suicide death in a community will not necessarily change the way you are doing prevention. Things to watch for that MAY mean adjusting strategies would be:
  - A suicide cluster
  - A statistically significant increase in a specific method of suicide

**The OME or DSAMH would likely contact the local area’s prevention coordinators and schedule a meeting if there was ever a concern about what is happening in your area.**
WHEN YOU NEED HELP …

MSTALEY@UTAH.GOV OR VIPP@UTAH.GOV