# Telling the Story of Suicide in Your Community: State and County Level Mortality and Morbidity Data Sources

Presented at Alliance Data and Evaluation Committee Meeting

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**Understanding Suicide Data: Why is Data Important to Suicide Prevention?** 

Describe patterns

> Track trends

Project future resource needs

Detect suicide clusters or contagion Evaluate programs and policies



### **Note on Data Systems**

- Data systems, like our institutions, have been developed within systems of oppression and racism.
- House Bill 3159, known as the Data Justice Act, passed in 2021.
  - Requires healthcare providers to collect and report to the Oregon Health Authority (OHA) data on their patients' sexual orientation and gender identity, race, ethnicity, preferred language, and disabilities.
  - Directs OHA to develop a database for storing and analyzing patient demographic data



# **A Note on Small Numbers**

• Counties with low counts may need to look to state, regional and national data as opposed to individual county level data

### Suicide deaths and Rates by County Designation, Oregon, 2016-2020

|                   | Rate per 100,000 |                  |                  |
|-------------------|------------------|------------------|------------------|
|                   | population       | Deaths           | Population       |
| County            | (age-adjusted)   | (average annual) | (average annual) |
| Frontier counties | 23.7             | 23               | 92,591           |
| Rural counties    | 25.0             | 218              | 826,905          |
| Urban counties    | 17.3             | 596              | 3,256,849        |
| Oregon State      | 18.9             | 837              | 4,162,345        |



# Data Systems Administered by OHA Injury and Violence Prevention Program

- Oregon Violent Death Reporting System (ORVDRS)
- Oregon Electronic Surveillance System for the Early Notification of Community Based Epidemics (ESSENCE)
- Oregon Association of Hospital and Health System (OAHHS) Data Set



# Oregon Violent Death Reporting System (ORVDRS)

- Collects information on violent deaths (homicide, suicide and firearm deaths) from death certificates, medical examiner reports, and law enforcement reports
- Information available through OHA Violent Death Dashboards
- Entities that meet the OHA Public Health Division data use requirements (Ex: Local Public Health Authorities, suicide/violence grant recipients and contract agencies) can request access to county level data. Request OVDRS Data Use Agreement from Meghan or Taylor.

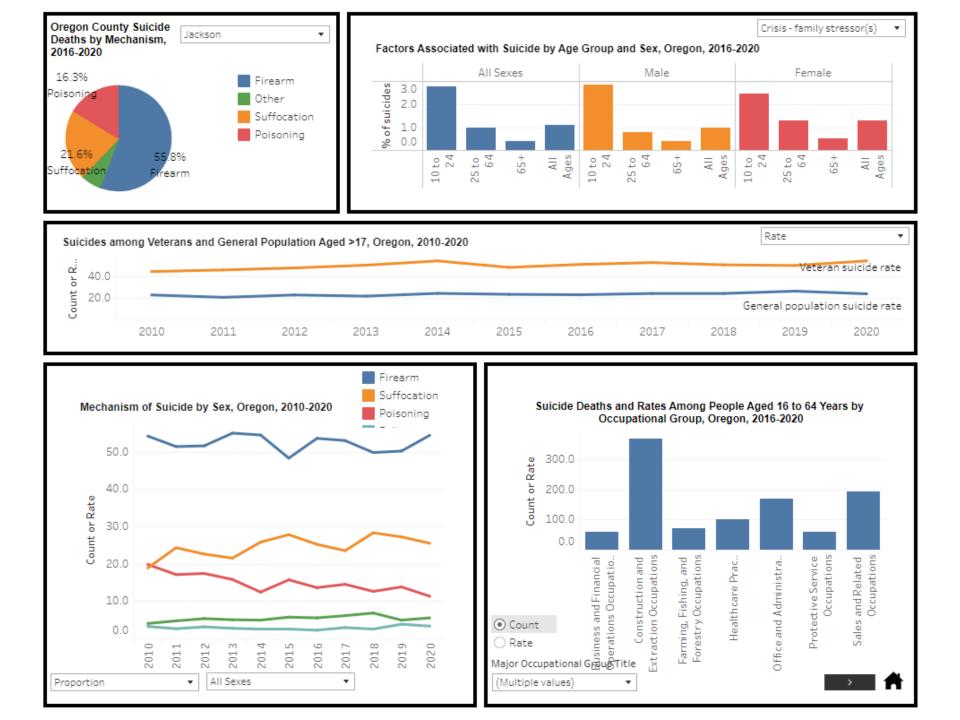


# Oregon Violent Death Reporting System (ORVDRS)

Data Elements Include:

- Decedents' demographics (age, sex, race/ethnicity)
- Injury and death (time, location)
- Circumstances surrounding incident (Mental and behavioral health status, financial crisis...
- Toxicology test results
- Substance use (history and treatment)
- Occupational group data





# **Note about Center for Health Statistics Data**

- OHA's Vital Statistics, Center for Health Statistics provides death data including violent deaths through review of death certificates.
- Information is available by state, county, age, race, ethnicity and sex.
- Preliminary death data, including suicide deaths, are updated monthly through the <u>OHA Vital Statistics Death Data Dashboards</u>. Data is finalized 10 to 11 months after the calendar year. For example, data from 2021 will be finalized by November 2022. There is also an <u>Injury Death Dashboard</u> with state and county level data available using finalized data.
- CHS data can be requested if the requestor has a valid need for the information, the requestor is authorized to receive the information; and the integrity of the vital record or report ca be assured. Learn more and request data via the <u>OHA Vital Statistics Data Use Request webpage</u>.



# **OHA Preliminary Mortality Death Dashboard**

#### Deaths by manner

Oregon residents, preliminary data

#### **Center for Health Statistics**

Health

Choose a focus year:

#### Choose residence county

Click, ctrl-click, or click-and-drag; or choose from list below



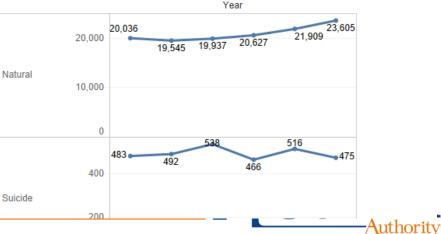
#### Deaths by manner, Oregon residents 2021 2022 year-to-date (January-July) 25.000 Choose a measure: Number of deaths 20,000 Crude death rate 15,000 Month dashboard 10,000 Age dashboard Medical examiner dashboard 5.000 475 Instructions / notes 0 Natural Suicide Other/ Homicide Unintend. Undeterm. Legal Download table injury intent interven. Unknown

#### Deaths by manner of death and residence county, 2022 year-to-date (January-July)

#### Deaths by manner, Oregon residents Annual trends for January-July period



#### Always note that this is preliminary data.



# What's the Difference between CHS and ORVDRS?

- The number and rates of deaths will be different form one another because data are collected and defined differently.
- Which data are used needs to be based on what questions are to be answered:
  - For example, if **descriptions** about deaths are needed, ORVDRS data should be used
  - If data are needed as soon as possible, then preliminary CHS data may be more helpful
- Do not compare across sources
- Instead, compare each source to itself over time, How many suicides occurred in 2017 compared to 2018 based on CHS data?
- You can use multiple sources of information to describe general trends, Both CHS data and ORVDRS data show an increase in the number of suicides between 2017 and 2018.



# Oregon Violent Death Reporting System (ORVDRS)

#### ORVDRS data can provide help answer questions like:

• What occupation group accounted for the greatest number of suicide deaths?

|  | Total<br>(N = 902) |      |
|--|--------------------|------|
|  | Count              | %    |
| Occupation                                     |                    |      |
| Construction and Extraction                    | 84                 | 9.3  |
| Unemployed                                     | 57                 | 6.3  |
| Disabled                                       | 51                 | 5.7  |
| Healthcare Practitioners and Technical Support | 47                 | 5.2  |
| Production/Fabrication                         | 46                 | 5.0  |
| Food Preparation and Service Industry          | 44                 | 4.9  |
| Homemaker                                      | 42                 | 4.7  |
| Retired  | 40                 | 4.4  |
| Installation, Maintenance and Repair           | 37                 | 4.1  |
| Sales and Related                              | 32                 | 3.6  |
| Arts, Design, Entertainment, Sport and Media   | 27                 | 3.0  |
| Other  | 611                | 67.7 |
| Unknown  | 57                 | 6.3  |

Leading Normal Occupations among Suicide Decedents, Lane County, OR 2003 - 2015\*

Table 9. Data Source: Oregon Violent Death Reporting System





# Oregon Violent Death Reporting System (ORVDRS)

ORVDRS data can provide help answer questions like:

 How many people who died by suicide had a diagnosed mental illness?

Depression/Dysthymia 81.6 Mental Health Diagnosis Bipolar Disorder 17.1 Anxiety Disorder 13.2 Schizophrenia 9.2 PTSD 4.8 Attention Deficit Disorder 2.2 0 10 20 30 40 50 60 70 80 90 100

Graph 8: Mental Health Diagnosis among Suicide Decedents <u>with a</u> <u>Known Mental Health Problem</u>, Deschutes County, OR, 2003-2017

Proportion of Suicide Decedents (%)

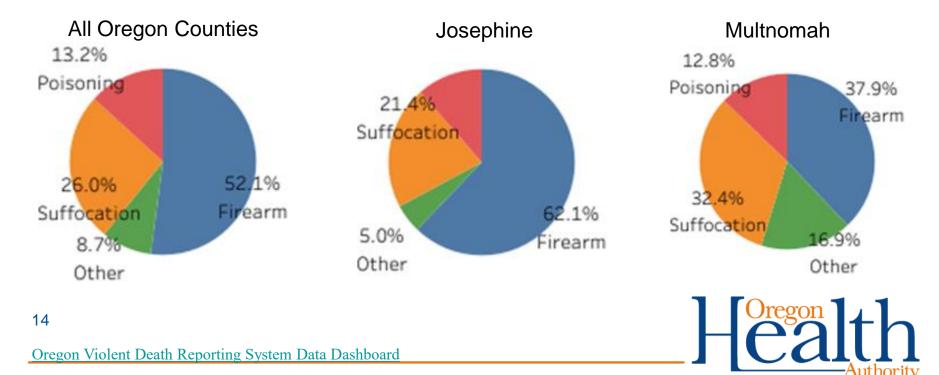


Suicide in Deschutes County 2000-2017: Trends, Risk Factors, and Recommendations

# Oregon Violent Death Reporting System (ORVDRS)

ORVDRS data can provide help answer questions like:

• What mechanisms are used in deaths by suicide in my county?



Oregon County Suicide Deaths by Mechanism, 2016-2020

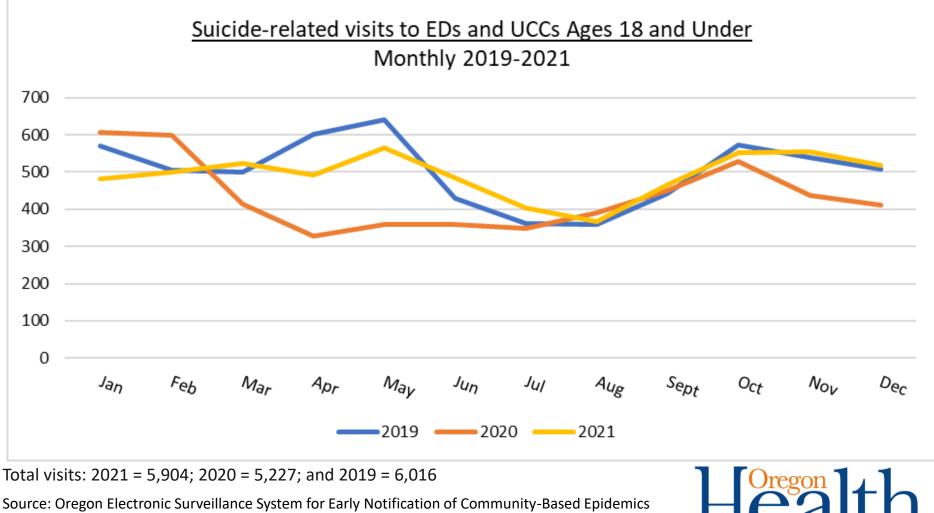
# Electronic Surveillance System for the Early Notification of Community-Based Epidemics



- Emergency departments (ED) and participating urgent care centers (UCCs) share de-identified data with OHA
- Data is shared with OHA daily.
- Used to monitor activity such as suicide attempts
- OHA publishes monthly surveillance reports on suicide and overdose activity.
- Local public health and hospital ESSENCE users can get data for their county or service area data. Visit the <u>OHA Accessing Oregon ESSENCE</u> <u>webpage</u> for more information and to apply for access.

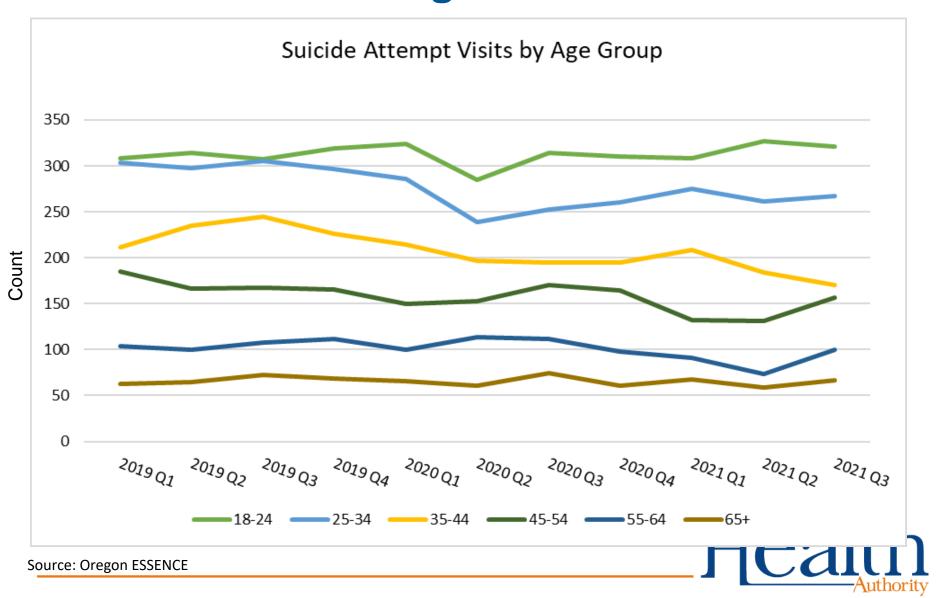


### How many suicide-related visits have there been to Emergency Departments and Urgent Care Centers for ages 18 and under?



(ESSENCE). Available through the OHA Monthly Suicide-Related Data Report

# What do suicide attempt visits in Oregon look like based on age?



# Hospital Discharge Data from Oregon Association of Hospital and Health Systems

- Discharge data include hospital and emergency department (ED) information.
- Hospitals and EDs report data to the Oregon Association of Hospital and Health Systems (OAHHS) on visits and stays when there is a charge for services.
- This information includes diagnosis, medical care received, and demographic information (e.g., age, sex, race, and ethnicity).
- Hospital and ED discharge data do not overlap.
- If a patient goes to an ED first and then is admitted to the hospital, their information will appear in the hospital discharge data only.



# **Emergency Dept. and Hospital Discharged Data Elements include:**

- Demographics (age, sex, race/ethnicity, county of residence)
- Admission source and type
- Mechanism or type of suicide attempt/self-harm (fall, firearm, etc.)
- Diagnosis and procedure information (underlying conditions as well)
- Chief and additional admitting diagnoses
- The condition of the patient at discharge and categories to where a patient discharged (disposition)
- Costs (across categories of care) and payers (up to three)
- Work related injury or illness



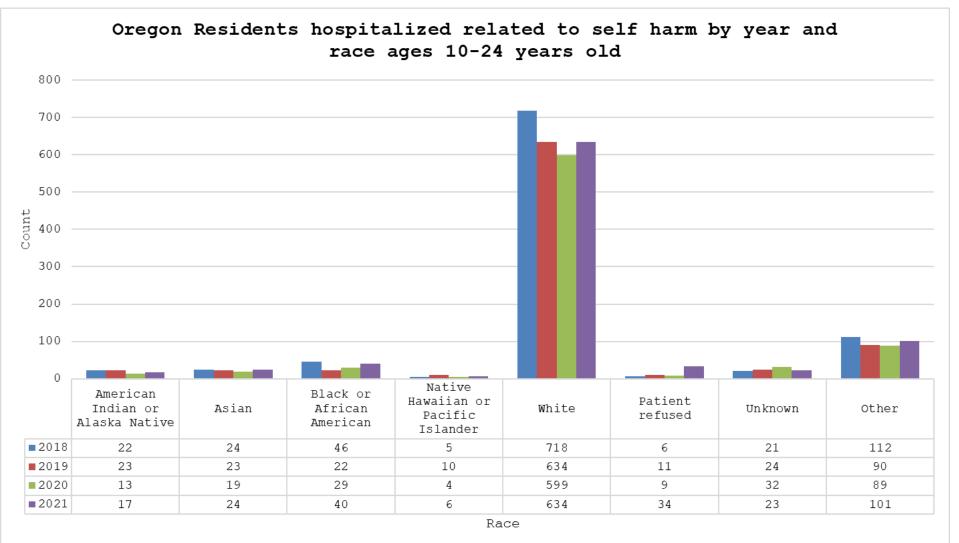
# Hospital Discharge Data from Oregon Association of Hospital and Health Systems

#### **Hospital In-Patient Discharge Data**

- Hospital discharge data include information for hospital visits that were at least 24 hours long.
- Data is available quarterly on a 6-month lag



# Which communities are hospitalized for suicide/self-harm?



Source: Oregon Association of Hospital and Health Systems (OAHHS)



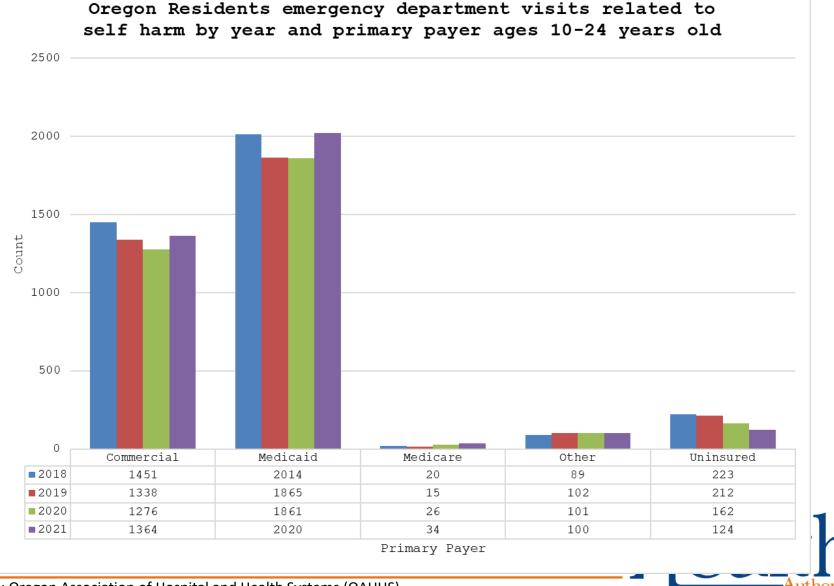
# Hospital Discharge Data from Oregon Association of Hospital and Health Systems

#### **Emergency Department (ED) Discharge Data**

- Include information for ED admissions. This information has been available since 2018.
- Data is available quarterly on a 6-month lag



# Who is the primary payer for ED visits related to suicide/self-harm for 10-24 years olds?



Source: Oregon Association of Hospital and Health Systems (OAHHS)

# What is the Difference Between ESSENCE and the OAHHS Data Sets?

- ESSENCE data describe ED and urgent care visits but do not include information on hospital stays.
- Discharge data describe ED visits and hospital stays (only when there is a charge for services) but do not include information on urgent care center visits.
- Both ESSENCE and discharge data have ED visit information, but the number of visits reported in ESSENCE will not match the number of visits reported in discharge data since each of these sources collect and report data differently. Data sets cannot be used for comparison purposes.
- Instead compare each source to itself over time:
   *"What was the number of ED visits for suicide attempts from discharge data in 2020 compared to number from discharge data in 2021?*
- Both sources can be used to describe general trends:
   "Both ESSENCE and discharge data show an increase in the number of ED visits for traumatic brain injuries over the last six months."

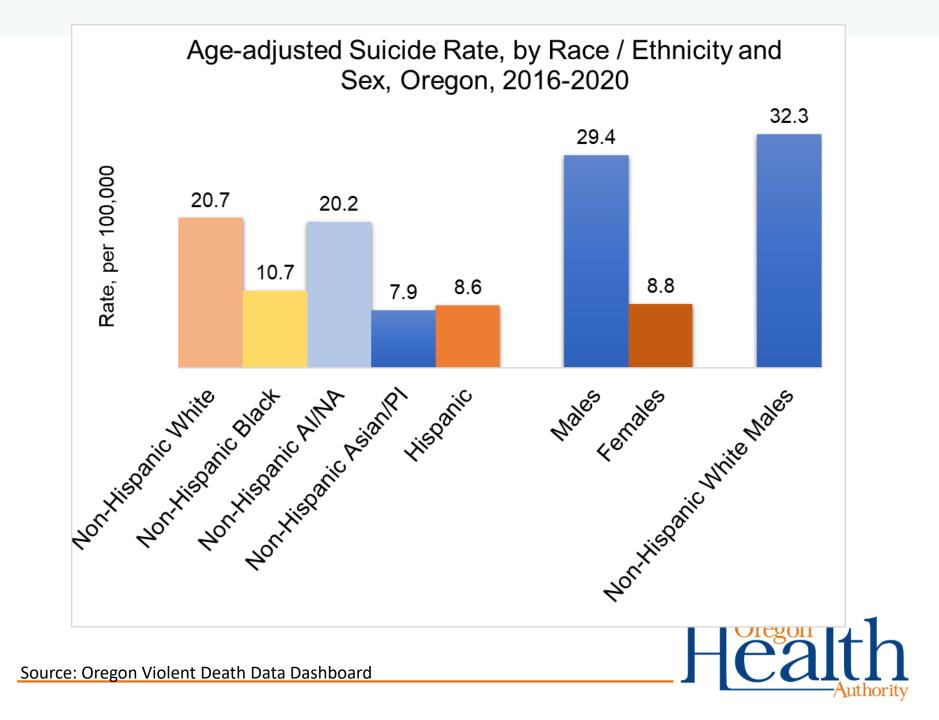


# **Visualizations of Race and Ethnicity Data**

 The following graph on race and ethnicity highlights the unequal impact of suicide by race and ethnicity. Health inequities exist due to historic and systemic policies, rooted in white supremacy, that continue to have harmful effects today.

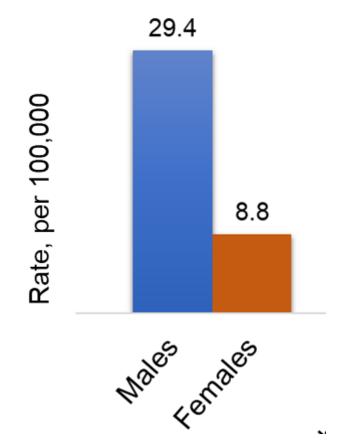
 The graphs presented use race and ethnicity as imperfect measures to guide our understanding of how the impact of oppression and discrimination based on race and ethnicity is related in higher rates of suicide by different groups.





### Age-Adjusted Suicide Rates by Sex, Oregon, 2016-2020

- What is called "sex" in Oregon Violent Death Reporting System refers to the person's gender identify at the time of their death.
- There is a separate variable for noting if a decedent was transgender, and a person can be identified as "male" or female" and also "transgender".
- This dataset does not allow for the identification of non-binary, gender nonconforming or other identities.
- OHA is not able to evaluate transgender suicide rates through this data set. Other state and national evidence tells us that transgender, non-binary and gender nonconforming people are more likely than cisgender people to attempt and to die by suicide.



Source: Oregon Violent Death Data Dashboards



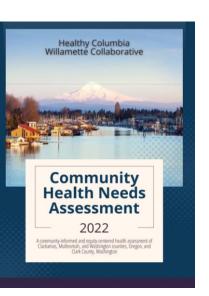
# **Note on Sexual Orientation Data**

- Sexual orientation data is collected within the Oregon Violent Death Reporting System (ORVDRS). Response options include straight/heterosexual, gay, lesbian, bisexual, unspecified sexual minority, and unknow.
- ORVDRS does not allow for the identification of other sexual orientation identities.
- OHA is not able to evaluate suicide rates for this population through this data set. Other state and national evidence tells us that people identifying as not straight (including lesbian, gay, bisexual, asexual, queer, fluid, pansexual, questioning) are more likely to attempt and die by suicide than straight people.
- This is not due to how they identify, rather due to issues including homophobia/biphobia/discrimination, acceptance from their family, trauma of experiencing rejection and not having access to healthcare that supports their ability to live their authentic lives.



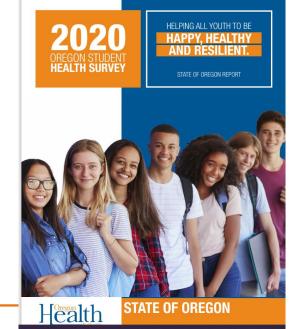
### Broadening how we tell the story of suicide...

| The table below shows the most recent data for | <b>Oregon Scorecard</b>  |        | Authority |
|--|--|--------|-----------|
| county, race/ethnicity, sex, age and othe      |  | , ,    |           |
| ACCESS TO EQUITABLE PREVENTIVE                 | HEALTHCARE   |        |           |
| Childhood Immunizations                        | Percentage of two-year-olds up-to-date on immunizations  | 71%    |           |
| Colorectal Cancer Screening                    | Percentage of 50 to 75 year olds who have received the<br>recommended colorectal cancer screening  | 74.4%  |           |
| Dental Visits                                  | Percentage of adults with a dental visit in the previous year                                      | 68.4%  |           |
| ADVERSITY, TRAUMA, AND TOXIC STR               | ESS  | Oregon |           |
| Adverse Childhood Experiences (ACEs)           | Percentage of children with high ACEs score  | 18.1%  |           |
| Chronic School Absenteeism                     | Percentage of students missing 10% or more of school<br>days in a year                             | 28.1%  |           |
| High Concentrated Disadvantage                 | Percentage of population living in census tracts with a high<br>level of concentrated disadvantage | 27.0%  |           |

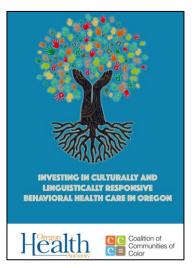


# Behavioral Health **Barometer** Oregon, Volume 6 sured through the 2019 National Survey on Drug Use and Health and the National Survey of Substance Abuse Treatment Services SAMHSA

| System: OHP CW IDD JJ   |                        | Age range:                       | 0       | 17      | Date rar  | nge: 7/1/201   | 19 6/30/2022                      |
|---|------------------------|----------------------------------|---------|---------|-----------|----------------|-----------------------------------|
| CCO: All ~  | l Youth                | Oregon Health                    | Child   | Welfare | Developme | ntal Juv       | venile Justice                    |
| County: In Development  | Served                 | Plan - BH                        |         |         | Disabilit | y              | -                                 |
| ? Help (i) Info   | 8,342                  | 91,212                           | 22,     | 696     | 13,43     | 4              | 12,873                            |
| Youth in All Systems     Sum of groups will be greater than       Youth in Selected System     Hover for group breakout | <sup>total</sup> Youth | by age group*                    |         |         |           | by 3 or more a | agencies<br>with system selection |
| Youth receiving services  |                        |                                  | 66,470  |         | OHP CV    | N IDD          | 70                                |
| 40K · · · · · · · · · · · · · · · · · · ·   |                        | 44,169                           |         |         | OHP CV    | N IDD          | JJ 39<br>JJ 12                    |
|   |                        | 21,094                           |         |         | C         |                | JJ 12                             |
| $\wedge$  |                        |                                  |         |         | OHP CV    | N IDD          | <b>JJ</b> 3                       |
| 11 . N  | Veritte                | 0-5+ 6-11+                       | 12 - 1  |         | Total     |                | 1,21                              |
|   | (i)                    | by physical location gro         | All     | OHP     | CW        | IDD            | 'n                                |
|   |                        | In Home/Community +              | 112,896 | 86,352  | 16,480    | 12,796         | 12,242                            |
|   |                        | Out of home +                    | 13,746  | 7,053   | 13,206    | 1,135          | 716                               |
| $\mathcal{I}$   |                        | Intensive out of home services + | 3,545   | 2,555   | 891       | 240            | 1,366                             |
| 30K 2020 20212022   | Out of                 | home - BRS and specialty care +  | 2,956   | 1,696   | 1,910     | 445            | 1,115                             |



# Broadening how we tell the story of suicide...





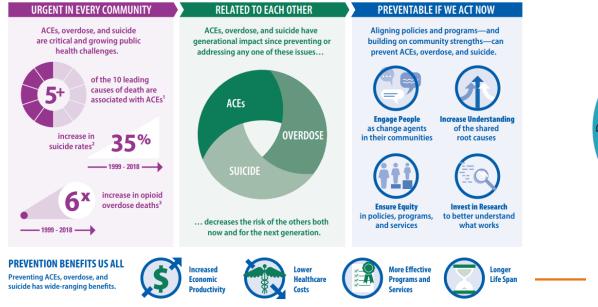
**OREGON VETERANS'** 

Behavioral Health Services Improvement Study: Needs Assessment & Recommendations Report



#### **ADDRESS IT TODAY. PREVENT IT TOMORROW.**

We can reduce the generational impact of adverse childhood experiences (ACEs), overdose, and suicide.





### Broadening how we tell the story of suicide...

# PROJECT





I will gladly bare my soul and secrets, if it changes one heart to have hope."



#### Suicide impacts all communities.

Roughly every three days, someone dies by suicide in Lane County, Oregon. For every death by suicide, about 25 more people attempt suicide. Up to another 20,000 Lane County residents seriously consider suicide each year.



# **Additional Learning and Resources**



Health OHA Injury and Violence Prevention Program Data Glossary: Overview of data sources and links to reports and additional information.



# **Suicide Prevention Resource Center**

Locating and Understanding Data for Suicide Prevention Training

# **Community-Led** Suicide Prevention

NEW: This web toolkit provide step-by-step information and how-to-tools for comprehensive suicide prevention. Includes Data Element: How to Use Data To Guide Action and Improve Efforts including:

- Accessing systems data for planning
- Gathering information on community context •
- Using data to access progress and make changes



YouthLine 1-877-968-8491 (text teen2teen at 839863)





Text OREGON to 741741

#### Resources

- Sign up for the OHA Suicide Prevention Network: <u>http://listsmart.osl.state.or.us/mailman/listinfo/yspnet</u> <u>work</u>
- Oregon Violent Death Data Dashboards
- OHA <u>Student Health Survey</u> \*\*\*New <u>SHS Dashboard</u>\*\*\*
- OHA Monthly Suicide-Related Data Report
- Oregon ESSENCE (syndromic surveillance)
- <u>2021-2025 Youth Suicide Intervention and Prevention Plan</u> and <u>Youth Suicide Intervention and Prevention Plan 2021 Annual</u> <u>Report (includes youth suicide data)</u>
- Oregon Veterans Behavioral Health Services Improvement Study
- OHA Injury and Violence Prevention Data Glossary
- <u>Communities of Color Investing In Culturally and Linguistically</u> <u>Responsive Behavioral Health In Oregon Report</u>
- Oregon LGBTQ+ Older Adult Survey



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Hope is that thing inside us that insists, despite all the evidence to the contrary, that something better awaits us if we have the courage to reach for it, and to work for it, and to fight for it. Barack Obama



#### Injury and Violence Prevention Program (IVPP) Data Glossary

This is an overview of data that the Injury & Violence Prevention Program uses. Please contact us at <u>IVPP.General@odhsoha.oregon.gov</u>. We will connect you with the person who can best answer your specific questions.



#### **Medication Prescribing**

#### Prescription Drug Monitoring Program (PDMP)

Pharmacies report prescriptions filled for drugs (Schedule II-IV and other controlled substances) such as pain or anxiety medications to an electronic database known as the PDMP. Providers can access their patients' prescription history (regardless of which health system is involved) so they can collaborate with other prescribers to reduce the risk of dangerous drug combinations. Information available through the PDMP includes prescriber and pharmacy identifiers, drug information, patient identifiers, and some patient demographics (i.e., age and sex).



#### Emergency Medical Services (EMS) Oregon EMS Information System (OR-EMSIS)

Licensed transporting EMS and EMS/Fire agencies are required to report pre-hospital care information for patients. For example, on a call to a transportation-related accident, information such as location, time of day, seat belt use and helmet use can be collected. This information is available by state and county. It has been available since 2016 and takes three months to become available.



#### Urgent Care Centers, Emergency Department and Hospital Stays

Health care information is available from two sources:

- ESSENCE data (emergency department and urgent care centers visits)
- Administrative discharge data (emergency department visits and hospital stays)

#### ESSENCE: Electronic Surveillance System for the Early Notification of Community-Based Epidemics

Emergency departments and participating urgent care centers in Oregon share de-identified information on visits to monitor health-related activity, such as suicide attempts and non-fatal overdose. This information is shared with OHA several times a day so that public health officials can alert staff if a higher-than-expected number of visits occur. Statewide information has been available since 2018. A <u>suicide-related events report</u> and <u>overdose report</u> are published monthly. Approved local public health ESSENCE users can get data daily for their counties.

#### Administrative Discharge Data: Oregon Association of Hospitals and Health Systems

Discharge data include hospital and emergency department (ED) information. Hospitals and EDs report data to OAHHS on visits and stays **when** there is a charge for services. This information includes diagnosis(es), medical care received, primary payors for the charges, disposition at discharge and demographic information (e.g., age, sex, race, and ethnicity). Data quality is good for reliable and consistent injury reporting by use of external cause of injury codes (provided by medical coders) hence why there is a lag in receiving administrative discharge data. Hospital and ED discharge data **do not** overlap. If a patient goes to an ED first and then is admitted to the hospital, their information will appear in the hospital discharge data only.

Injury and Violence Prevention Program Data Glossary. Revised 1/5/2023.

**Hospital discharge data** include information for hospital visits that were at least 24 hours long. This information **does not** include outpatient and ED visits. This information has been available since 2000. The diagnoses classifications changed in October 2015, so information after this cannot be compared directly to data from earlier years. It takes four to six months for data to become available after the last day of the quarter. For example, information about discharges in June 2022 would be available between October 2022 and December 2022.

**Emergency Department discharge data** include information for ED admissions. This information has been available since 2018. As with the hospital discharge data it takes four to six months for data to become available. For example, information about discharges in June 2022 would be available between October 2022 and December 2022.

#### What's the difference between ESSENCE and administrative discharge data?

ESSENCE data describe ED and urgent care visits (with or without charges for service) but **do not** include information on hospital stays. Discharge data describe ED visits and hospital stays (only when there is a charge for services) but **do not** include information on urgent care center visits.

Both ESSENCE and discharge data have ED visit information, but the number of visits reported in ESSENCE will not match the number of visits reported in discharge data since each of these sources collect and report data differently. This means that the number of ED visits from discharge data cannot be compared to ESSENCE data.

Instead compare each source to itself over time, "What was the number of ED visits for traumatic brain injuries from discharge data in 2017 compared to number from discharge data in 2018?" Both sources can be used to describe general trends, "Both ESSENCE and discharge data show an increase in the number of ED visits for traumatic brain injuries over the last six months."



#### Death/Mortality

Death data are available from three sources:

- Center for Health Statistics
- Oregon Violent Death Reporting System
- State Unintentional Drug Overdose Reporting System

#### **Center for Health Statistics** (CHS)

Death certificates are registered with CHS. Death certificates are completed and signed by a physician, physician assistant, nurse practitioner, or medical examiner. The data are reported in two ways: "resident deaths," which include the deaths of all Oregon residents, even if the death happened out of state; and "occurrence deaths," which include all deaths that happened in the state, including those who died here but were not Oregon residents. Information is available by state, county, age, race, ethnicity, and sex. Oregon began statewide registration of deaths in 1903. This preliminary information is <u>updated</u> monthly. This information is finalized 10 to 11 months after the calendar year. For example, data from 2021 will be finalized by November 2022.

#### Oregon Violent Death Reporting System (ORVDRS)

ORVDRS staff gather, review, and link data from death certificates, medical examiner reports, law enforcement reports, and lab (toxicology) reports. Complex, national guidelines are used to translate this data into information that provides a more complete picture of violent deaths. Violent deaths include suicides, homicides, deaths of undetermined intent, legal interventions, and unintentional firearm injury deaths. As a result, questions like the following can be answered: "*Was this random violence? Was the victim a bystander? Did the victim use a weapon? Was this a hate crime? Was there drug involvement?* Because information comes from several sources, it takes longer than other death data to become available. Demographic information such as age, sex, race, and ethnicity is available. This information has been available since 2003 and is <u>updated</u> yearly. The data take about 16 months to become available. For example, data from 2021 will be available after April 2023.

#### The State Unintentional Drug Overdose Reporting System (SUDORS)

SUDORS staff gather, review, and link data from death certificates, medical examiner reports, and lab (toxicology) reports. Complex rules are used to translate this data into information that provides a more complete picture of each overdose death. As a result, questions like the following can be answered: *"How many overdose deaths involved more than one substance, happened in front of a bystander, or involved people with a history of substance misuse/treatment?"* Because information is taken from several sources, it takes longer than other overdose death data to become available. Demographic information such as age, sex, race, and ethnicity is available. This information has been available since July 2019 and has been <u>updated</u> yearly. The data take eight months to become available. For example, information on overdose deaths from July to December 2022 will be available after August 2023.

#### What's the difference between CHS, ORDVRS, and SUDORS data?

The number and rates of deaths from these three sources will be different from one another because data are collected and defined differently. Each of these sources have strengths and one is not "better" than the others. Which data are used needs to be based on what questions are to be answered. For example, if **descriptions** about deaths are needed, ORVDRS and SUDORS data should be used. If the data are needed **as soon as possible**, then preliminary CHS data may be more helpful.

The most important thing is to **not** compare data from one source to another. Instead, compare each source to itself over time, *"How many suicides occurred in 2017 compared to 2018 based on CHS data?"* You **can** use multiple sources of information to describe **general** trends, *"Both CHS data and ORVDRS data show an increase in the number of suicides between 2017 and 2018."* 

Questions? Please contact us at <u>IVPP.General@odhsoha.oregon.gov</u>. We will connect you with the person who can best answer your specific questions.



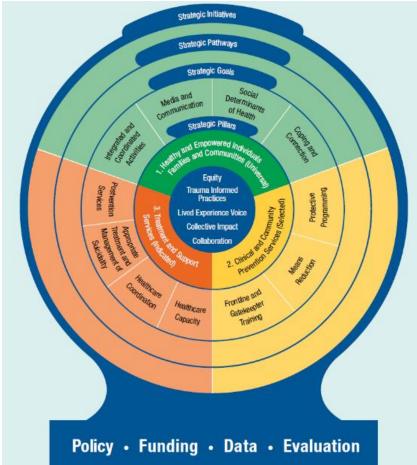
#### Public health data available through the Oregon Health Authority's Injury and Violence Prevention Program (and notes on other important sources)– October 2022

#### Objectives:

- Shared understanding of some of the available public health data around suicide (Medicaid/other utilization data not included)
- Knowledge on where to find these data and who to reach out to with technical questions
- Examples of how these data have or could inform <u>Oregon Suicide Prevention Framework</u> initiatives

Available data is presented in tables to illustrate how they could align with the Oregon Suicide Prevention Framework Pillars as well as Data and Evaluation Foundation Lenses:

- 1. Healthy and empowered individuals, families and communities
- 2. Clinical and community preventative services
- 3. Treatment and support services
- 4. Data and Evaluation Foundation Lenses



|                      | Data that has or could inform Pillar 1:   |  |   |  |   |  |  |  |  |
|----------------------|---|--|---|--|---|--|--|--|--|
|                      | Healthy   | and empowered individu   | als, families and   | d commun   | ities                                   |  |  |  |  |
|                      | Measure   | Stratifications  | Time Period   | Link &<br>Source   | IVPP Contact                            |  |  |  |  |
|                      | Previous Survey   |  |   |  |   |  |  |  |  |
| 1.<br>2.<br>3.<br>4. | Percentage of students who <b>seriously considered</b><br>suicide<br>Percentage of students who <b>attempted suicide</b><br>one or more times in the previous 12 months<br>(included in <u>YSIPP Annual Report</u> )<br>Percentage of <b>lesbian and gay</b> students who<br>contemplated suicide in the past 12 months<br>(included in YSIPP Annual Report)<br>Percentage of <b>transgender or gender diverse</b><br>students who contemplated suicide in the past 12<br>months (included in YSIPP Annual Report)<br>Percentage of students who said they <b>could get</b> | By state; county <sup>1</sup> ; <b>grade: 8th &amp;</b><br><b>11th;</b> age; race/ethnicity; tribal<br>affiliation; primary language;<br>youth with disabilities; sexual<br>orientation; gender identify, sex<br>at birth <sup>2</sup> | 2001- 2019<br>(administered in<br>odd years only) <sup>3</sup>  | Oregon<br>Healthy<br>Teens<br>(OHT)<br>Survey <sup>4</sup>       | studenthealth.survey@dhsoha.state.or.us |  |  |  |  |
|                      | access to and be ready to fire a loaded gun in less than 24 hours   | New Survey   |   |  |   |  |  |  |  |
| 6.                   | Percentage of students who said they <b>seriously</b><br><b>considered</b> suicide; Percentage of students who<br>said they <b>attempted suicide</b> one or more times in<br>the previous 12 months   | By state; county; grade: <b>6th</b> , <b>8th</b><br><b>&amp;11th</b> ; age; race/ethnicity; tribal<br>affiliation; primary language;<br>youth with disabilities; sexual<br>orientation; gender identity; sex<br>at birth               |   |  |   |  |  |  |  |
| 7.                   | Other SHS Measures that have shared risk and<br>protective factors with suicide risk including<br>connectedness and belonging, housing stability,<br>anxiety, substance use, etc.   | By state; county; grade (refer to<br>indiv. measure); and additional<br>stratifications listed above.  | 2020 (survey first<br>administered in<br>Fall 2020 – Spring<br>2021. Survey<br>repeated in even<br>years <sup>5</sup> . | <u>Student</u><br><u>Health</u><br><u>Survey</u><br><u>(SHS)</u> | studenthealth.survey@dhsoha.state.or.us |  |  |  |  |
| 8.                   | Percentage of students who said they <b>could get</b><br><b>access</b> to and be ready to fire a loaded gun in<br>less than 24 yours  | By state; county; grade: 8th &<br>11th; age; and additional<br>stratifications listed above.   |   |  |   |  |  |  |  |
| 9.                   | Percentage of students who said they <b>seriously</b><br><b>considered</b> attempting suicide due to<br>experiences due to the coronavirus or coronavirus<br>symptoms   | By state; county; grade: <b>11th</b> ;<br>age; race/ethnicity; tribal<br>affiliation; primary language;<br>youth with disabilities; sexual<br>orientation; gender identity; sex<br>at birth  |   |  |   |  |  |  |  |

<sup>&</sup>lt;sup>1</sup> Note: County level data should be considered in relation to the number of districts that participated by county. A list of district participation by county can be found here.

<sup>&</sup>lt;sup>2</sup> Note: Some OHT Survey results for suicide related questions may not be able to be stratified by demographics based on small counts.

<sup>&</sup>lt;sup>3</sup> Note: Suicide related questions have been revised or added over the years and may not be comparable over entire time period or between OHT and SHS results.

<sup>&</sup>lt;sup>4</sup> Starting in 2020, the OHT Survey and OHA Student Wellness Survey have been combined into the Student Health Survey. These surveys are NOT managed by Injury Violence and Prevention but are included because they are a crucial source of data to support Oregon Suicide Prevention Framework activities.

<sup>&</sup>lt;sup>5</sup> Results for the 2020 SHS survey are available by county as PDF files. Districts and schools from every county, except Gilliam and Wallowa, participated in this year's survey. Dur to relatively small sample sizes, the following counties were combined for more robust results: Sherman/Wasco into North Central Health District and Grant/Harney/Lake.

| Data that has or could  | d inform Pillar 2: Clinical ar<br>Pillar 3: Treatment and s  |  |   | e services and   |
|---|--|--|---|--|
| Measure   | Stratifications  | Time Period                              | Link &<br>Source  | IVPP Contact/How to Access<br>Data   |
| <ol> <li>Number of calls to the 988 Suicide &amp; Crisis Lifeline<br/>(previously the National Suicide Prevention<br/>Lifeline)<sup>6</sup></li> <li>Number of total calls to the Oregon Poison Center</li> <li>Number of suicide-related calls to the Oregon<br/>Poison Center (for intentional and suspected<br/>suicides)</li> <li>Percentage of total calls to the Oregon Poison<br/>Center that were suicide-related (for intentional<br/>and suspected suicides)</li> <li>Number of total visits to Emergency Departments<br/>(EDs) and Urgent Care Centers (UCCs)<sup>8</sup></li> <li>Number of suicide-related visits to EDs and UCCs<sup>8</sup></li> <li>Percentage of total visits to EDs and UCCs that<br/>were suicide-related<sup>8</sup></li> <li>Number of suicide-related visits to EDs and UCCs<br/>for youth ages 18 and younger</li> </ol> | By state   | 2019-2022 YTD<br>1-month lag             | Monthly<br>Suicide-<br>related<br>Public Health<br>Surveillance<br>Update<br>Sources:<br>Oregon<br>ESSENCE <sup>7</sup> ,<br>Lines for Life,<br>and the<br>Oregon<br>Poison<br>Center | IVPP.General@dhsoha.state.or.us<br>Local Public Health Authorities,<br>hospitals and other approved<br>entities can request access to<br>county/service area data. Learn<br>more on the OHA Accessing<br>Oregon ESSENCE webpage. |
|   | Hospital Discharge   | Data                                     |   |  |
| <ol> <li>Count and percentage of total suicide-related<br/>hospitalization that were at least 24 hours long</li> </ol>  | By state; county; age;<br>mechanism; diagnosis and<br>procedure information;<br>condition at discharge; costs;<br>payers (up to 3) | Available since<br>2000. 6 month<br>lag. | <u>Hospital</u><br><u>Discharge</u><br><u>Data</u>  | Dagan.A.Wright@dhsoha.state.or.us  |
| 19. Count and percentage of total suicide-related<br>Emergency Department visits  | By state; county; age;<br>mechanism; diagnosis and<br>procedure information;<br>condition at discharge; costs;<br>payers (up to 3) | Available since<br>2018. 6 month<br>lag. | <u>Hospital</u><br><u>Discharge</u><br><u>Data</u>  | Dagan.A.Wright@dhsoha.state.or.us  |

<sup>&</sup>lt;sup>6</sup> Call originating from a phone number with an Oregon area code

<sup>&</sup>lt;sup>7</sup> Syndromic surveillance in Oregon (a project called <u>Oregon ESSENCE</u> - Electronic Surveillance System for the Early Notification of Community-Based Epidemics) provides real-time data for public health and hospitals to monitor what is happening in emergency departments across the state before, during and after a public health emergency

<sup>&</sup>lt;sup>8</sup> OHA Injury and Violence Prevention Program is finalizing a public facing dashboard that will provide this data by county and at state level will include age group, sex (M/F), race/ethnicity data.

| Measure   | Stratifications   | Time Period | Link &<br>Source              | IVPP Contact                |
|---|---|-------------|-------------------------------|-----------------------------|
|   | Suicide Data  |             |                               |                             |
| 20. Number <sup>9</sup> and rate of <b>suicide</b> by year and sex                                    | By state; sex: male/female  | 2000-2020   |                               |                             |
| 21. Number and rate of suicide mapped by <b>county</b>  | By county   | 2010-2020   |                               |                             |
| 22. Number and rate of suicide by <b>age group and sex</b>  | By state; sex: male/female; age:<br>10-24, 25-44, 45-64, 65+  | 2010-2020   | -                             |                             |
| 23. Number and rate of suicide by <b>county and age</b> group   | By state; county; age: 10-24, 25-<br>44, 45-64, 65+   | 2003-2020   |                               |                             |
| <ol> <li>Number (and Percentage<sup>11</sup> of total) for mechanism of suicide.</li> </ol>           | By state; sex: male/female;<br>mechanism: firearm,<br>suffocations, poisoning, other  | 2010-2020   |                               |                             |
| 25. <b>Percentage</b> of total suicide by mechanism and by county                                     | By state; county; mechanism:<br>firearm, suffocations, poisoning,<br>other  | 2016-2020   | Oregon                        |                             |
| <ol> <li>Factors associated with suicide by age group and<br/>sex (percentage of total)</li> </ol>    | By state; sex: male/female; age:<br>10-24, 25-44, 45-64, 65+  | 2016-2020   | Violent<br>Death<br>Reporting | Xun.SHEN@dhsoha.state.or.us |
| 27. Number and rate of suicide for <b>Veterans</b> compared to general population                     | By state  | 2010-2020   | <u>System</u> <sup>10</sup>   |                             |
| 28. Percentage of suicide by age group  | By state; age: 10-24, 25-44, 45-<br>64, 65+   | 2016-2020   |                               |                             |
| 29. Rate of suicide by race/ethnicity and sex   | By state; sex: male/female;<br>race/ethnicity   | 2016-2020   |                               |                             |
| 30. Rate of suicide by <b>specific ages (5-year groups)</b>   | By state; age: 10-14, 15-19, 20-<br>24, 25-29, 30-34, 35-39, 40-44, 45-<br>49, 50-54, 55-59, 60-64, 65-69, 70-<br>74, 75-79, 80-84, 85+ | 2016-2020   |                               |                             |
| <ol> <li>Suicide Deaths and Rates Among People Aged 16<br/>to 64 Years by Occupation Group</li> </ol> | By state; occupation group  | 2016-2020   | 1                             |                             |

<sup>&</sup>lt;sup>9</sup> Can also be referred to as "count."

<sup>&</sup>lt;sup>10</sup> The <u>NVDRS in Oregon</u> collects data from several data sources: Oregon Medical Examiners' reports, Oregon Crime Lab reports, Oregon Law Enforcement Data System Uniform Crime reports, the Homicide Incident Tracking System, local law enforcement reports, Death Certificates, and Child Fatality Review reports. This program collects information from many data sources and compiles incident-based cases for all violent deaths in Oregon in order to generate public health information on violent deaths and to develop violence prevention strategies.

<sup>&</sup>lt;sup>11</sup> Can also be referred to as "proportion."

| Duid  | that has or could inform Y<br>Surveillance, research                                       |             |   |                             |
|---|--|-------------|---|-----------------------------|
| Measure   | Stratifications  | Time Period | Link &<br>Source                                | IVPP Contact                |
|   | Firearm Data   |             |   | •                           |
| 32. Rate of firearm deaths by <b>intent</b>   | By U.S; state; intent: suicide,<br>homicide, all   | 2000-2020   |   |                             |
| <ol> <li>Number and rate of firearm deaths by intent and sex of decedent</li> </ol>           | By state; sex: male/female;<br>intent: suicide, homicide, all                              | 2011-2020   |   |                             |
| <ol> <li>Number and rate of firearm deaths by intent<br/>mapped by county</li> </ol>          | By county; intent: suicide,<br>homicide, all   | 2011-2020   |   |                             |
| 35. <b>Percentage</b> of firearm deaths by intent and year                                    | By state; intent: suicide,<br>homicide, legal intervention,<br>undetermined, unintentional | 2011-2020   |   |                             |
| <ol> <li>Factors associated with firearm suicides by sex<br/>(percentage of total)</li> </ol> | By state; sex: male/female   | 2011-2020   | <u>Oregon</u><br><u>Violent</u><br><u>Death</u> |                             |
| 37. Number of <b>fatality incidents</b> by year   | By state   | 2011-2020   | Reporting<br>System <sup>12</sup>               | Xun.SHEN@dhsoha.state.or.us |
| <ol> <li>Type of firearm used by intent (percentage of total)</li> </ol>                      | By state; intent: suicide,<br>homicide, all  | 2011-2020   |   |                             |
| 39. Percent of deaths by intent attributable to firearms                                      | By state, intent: gang related<br>homicide, homicide, homicide-<br>suicide, suicide        | 2011-2020   |   |                             |
| 40. Rate of firearm deaths by <b>age and intent</b>   | By state; age: 0-9,10-17, 18-<br>24,25-44, 65+; intent: suicide,<br>homicide               | 2011-2020   |   |                             |
| 41. Rate of firearm death by race/ethnicity and sex   | By state; sex: male/female;<br>race/ethnicity  | 2011-2020   |   |                             |

<sup>&</sup>lt;sup>12</sup> The <u>NVDRS in Oregon</u> collects data from several data sources: Oregon Medical Examiners' reports, Oregon Crime Lab reports, Oregon Law Enforcement Data System Uniform Crime reports, the Homicide Incident Tracking System, local law enforcement reports, Death Certificates, and Child Fatality Review reports. This program collects information from many data sources and compiles incident-based cases for all violent deaths in Oregon in order to generate public health information on violent deaths and to develop violence prevention strategies.

| Data  | that has or could inform YS<br>Surveillance, research   |  |   |  |
|---|---|--|---|--|
| Measure   | Stratifications   | Time Period  | Link &<br>Source  | IVPP Contact                           |
|   | Vital Statistics (death ce  | rtificate) <sup>13</sup>   |   | •                                      |
| 42. Leading causes of death for Oregon residents                                      | By state; sex: M/F; age group;<br>rank order; race/ethnicity; place<br>of death   | 2017-2020 via<br>Leading Causes<br>of Death<br>Dashboard   |   |  |
| 43. Number or crude rate of deaths by <b>manner and</b><br><b>county</b> of residence | By state; manner (natural,<br>suicide, homicide, unintended<br>injury, undetermined intent,<br>legal intervention, other); age<br>group, type of injury (ex:<br>poisoning/overdose, firearm,<br>suffocation); sex: M/F;<br>race/ethnicity<br>By county; manner; type of<br>injury | 2017-2020 via<br>Injury Deaths<br>Dashboard  | <u>OHA Vital</u><br><u>Statistics:</u><br><u>Center for</u><br><u>Health</u><br><u>Statistics</u> | <u>IVPP.General@dhsoha.state.or.us</u> |
| 44. <b>Preliminary cause of death by manner and county</b> of resident                | By state and county; manner   | 2021 and 2022 (2<br>month lag) via<br><u>Preliminary Death</u><br><u>Dashboard</u> (refer<br>to manner<br>dashboard) |   |  |

<sup>&</sup>lt;sup>13</sup> These data are NOT managed by Injury Violence and Prevention but are included because they are a crucial source of data for suicide prevention planning.