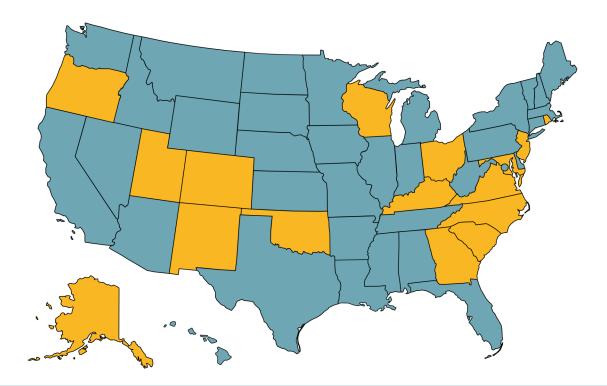
## DEATHS FROM SUICIDE among U.S. Veterans & Armed Forces in 16 States

A Special Report with Data from the National Violent Death Reporting System, 2010-2014



Alaska Colorado Georgia Kentucky Maryland New Jersey New Mexico North Carolina Ohio Oklahoma Oregon Rhode Island South Carolina Utah Virginia Wisconsin



March 2018

## About the Safe States Alliance

Established in 1993, the Safe States Alliance is a national non-profit organization and professional association whose mission is to strengthen the practice of injury and violence prevention. Safe States is the only national non-profit organization and professional association that represents the diverse and ever-expanding group of professionals who comprise the field of injury and violence prevention. Safe States Alliance engages in a variety of activities to advance the organization's mission, including:

- Increasing awareness of injury and violence throughout the lifespan as a public health problem;
- Enhancing the capacity of public health agencies and their partners to ensure effective injury and violence prevention programs by disseminating best practices, setting standards for surveillance, conducting program assessments, and facilitating peer-to-peer technical assistance;
- Providing educational opportunities, training, and professional development for those within the injury and violence prevention field;
- Collaborating with other national organizations and federal agencies to achieve shared goals;
- Advocating for public health policies designed to advance injury and violence prevention;
- Convening leaders and serving as the voice of injury and violence prevention programs within state health departments; and
- Representing the diverse professionals making up the injury and violence prevention field.

#### For more information about the Safe States Alliance, contact the national office:

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## INTRODUCTION

#### Suicide is a significant public health problem in the United States.

In 2015, there were more than 44,000 deaths from suicide, accounting for two-thirds of the more than 62,000 people who died from acts of violence.<sup>1</sup> In addition:

- The age-adjusted suicide death rate in the U.S. rose from 10.5 per 100,000 population in 1999 to 13.0 in 2014 – *a 24% increase*.<sup>2</sup>
- The average annual percent increase was greater from 2006-2014 (about 2% per year) than from 1999-2006 (about 1% per year).<sup>2</sup>
- While overall mortality is generally declining, suicide rates are increasing among both males and females and in nearly all age groups.<sup>2</sup>

### An average of 20 veterans died by suicide each day in 2014, with veterans accounting for about one-fifth (18%) of all suicide deaths.

U.S. Department of Veterans Affairs

#### Each year, thousands of veterans and active duty U.S. military personnel die by

**suicide.** Historically, suicide rates in the U.S. military have been lower than in the U.S. population. **However, since 2001, suicide rates have steadily increased for both active duty military personnel and veterans** (persons who served in the armed forces but are no longer serving).<sup>3,7</sup>

- From 2001-2011, since the beginning of combat operations in Iraq and Afghanistan, *suicide rates among active duty U.S. Army personnel doubled, and in 2008, surpassed the suicide rate for the U.S. population*. These higher rates of suicide continue to persist.<sup>4,5,6</sup>
- Suicide among veterans has also increased, particularly among younger veterans. In 2014, the U.S. Department of Veterans Affairs estimated *an average of 20 veterans died by suicide each day*, with veterans *accounting for 18% of all suicide deaths*.<sup>7</sup>
- Male and female veterans have a higher suicide risk than their U.S. civilian counterparts.<sup>7</sup>

Many of these deaths can be prevented. The development of effective prevention strategies relies on complete, accurate and timely information about populations at risk and the circumstances and factors that contribute to deaths from violence. The National Violent Death Reporting System (NVDRS) provides this essential information. The NVDRS is the only national state-based surveillance reporting system that compiles data from multiple sources on all deaths from violence, including veteran/military status data from death certificates (see pages 6-7 for more information on the NVDRS).

### This report provides a detailed snapshot of veteran and active duty armed forces suicide deaths in 16 states that reported 2010-2014 data to the NVDRS. The

report examines circumstances surrounding veteran and armed forces suicide deaths among various demographic groups, and draws comparisons between veteran/armed forces and non-veteran civilian suicide deaths. The NVDRS Restricted Access Database (RAD) was used to conduct analysis for 16 NVDRS states that completed data collection during 2010 through 2014. These states are Alaska, Colorado, Georgia, Kentucky, Maryland, New Jersey, New Mexico, North Carolina, Ohio, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

National Violent Death Reporting System (NVDRS) data provide a more comprehensive understanding of suicide deaths among veterans and armed forces, and can help guide prevention efforts.

#### The report is a companion piece to Deaths from Suicide: A Look at 18 States,

published in 2016.<sup>8</sup> Both reports build upon previous NVDRS-based reports with a similar approach and format. A 2008 report addressed the overall picture of violence using 2004-2005 data collected from NVDRS-reporting states, and a 2014 report using 2009-2010 data from NVDRS-reporting states included a special focus on intimate partner violence.<sup>9,10</sup>

#### This examination of veteran and armed forces suicide deaths includes:

- An overview of the NVDRS, its data sources, and key variables, including how veteran and armed forces status is captured in the system.
- Key findings, including demographics and circumstances of veteran and armed forces suicide deaths.
- An infographic depicting the overall picture of veteran and armed forces suicide deaths in the 16 states combined.
- An overview (Table 1) of suicide rates among veterans and armed forces, and non-veteran civilians, in the 13 NVDRS states with complete (<10% missing/unknown) veteran status data collected for all five years (2010-2014).\* Occurrent suicide rates for veterans and armed forces, and non-veteran civilians, are provided by sex and age group (for males) for each state.
- Toxicology testing and results that reflect the involvement of alcohol and drugs in suicide deaths among veterans and armed forces (Table 2).
- State profiles for the 16 states.
- A brief description of factors to consider when analyzing NVDRS data particularly when analyzing veteran and armed forces status data to orient readers to some subtleties and complexities of working with NVDRS data and the veteran/military status variable collected in the NVDRS. The results presented on veteran and armed forces suicide deaths in this report may differ from those derived from other sources or analysis methodologies.
  - \* Three states with a high degree of missing or unknown veteran status data for certain years were not included in rate calculations.

#### SUICIDE CRISIS & PREVENTION RESOURCES

*Suicide is not inevitable for anyone.* The National Suicide Prevention Lifeline states that we can help prevent suicides and save lives by starting the conversation, providing support, and directing help to those who need it.

À



For both the National Suicide Prevention Lifeline and the Veterans Crisis Line Call 1-800-273-8255 and Press 1, <u>chat online</u>, or send a text message to 838255 to receive free and confidential support 24 hours a day, 7 days a week, 365 days a year. Support for <u>deaf and hard of hearing</u> individuals is available.

**The National Suicide Prevention Lifeline** provides free and confidential emotional support to people in suicidal crisis or emotional distress through a national network of over 160 local crisis centers, combining custom local care and resources with national standards and best practices. **The Veterans Crisis Line** connects veterans in crisis and their families and friends with qualified, caring Department of Veterans Affairs responders through a confidential toll-free hotline, online chat, or text (*see box above*).

# **2** NVDRS OVERVIEW

The National Violent Death Reporting System (NVDRS) is the only national state -based surveillance reporting system that compiles data from multiple sources on all deaths from violence – including homicides, suicides, and legal intervention deaths.<sup>11,12</sup> (See Appendix A for definitions of these terms.) The Centers for Disease Control and Prevention (CDC) established the NVDRS in 2002.<sup>11</sup> NVDRS data collection began in 2003 with just six states. Since then, additional appropriations have increased NVDRS participation to 40 states, the District of Columbia, and Puerto Rico.<sup>13</sup> The goal is to expand NVDRS participation to all 50 states and U.S. territories.

A violent death is a death that results from the intentional use of physical force or power, threatened or actual, against oneself, another person, or a group or community. *Centers for Disease Control and Prevention* 

#### 6 types of violent deaths

All NVDRS states use standard coding practices developed by the CDC to collect information about:

- Homicides
- Suicides
- Legal intervention deaths
- Unintentional firearm deaths
- Deaths of undetermined intent

#### Data sources

The primary NVDRS data sources are listed below, as well as additional sources that some states may incorporate.<sup>11,12</sup> All identifying information is removed, the names of individual victims and suspects are not released, and laws protecting other types of health department records, such as communicable disease records, also apply to the NVDRS.

#### **Primary sources**

- Death certificates
- Coroner/medical examiner reports
- Toxicology reports
- Law enforcement reports

#### Additional sources

- Child Fatality Reviews
- Domestic Violence Fatality Reviews

#### More than 600 variables in six categories

Six categories of information are collected for each type of violent death:

- Demographics
- Injury and death information
- Circumstances
- Weapon
- Suspects
- Toxicology

#### Types of circumstances collected

The types of circumstances collected are:

- Mental health (e.g., current diagnosed mental health problem, substance abuse, and other addictions)
- **Relationship and life stressors** (e.g., intimate partner problems)
- **Crime and criminal activity** (e.g., the death being precipitated by another crime)
- Homicide and legal intervention death specific circumstances (e.g., a hate crime)
- Suicide and undetermined specific circumstances (e.g., history of suicide attempts)
- Unintentional firearm specific circumstances (e.g., gun defect or malfunction)

#### The NVDRS creates a more complete picture of violent deaths by collecting data on the *entire* violent incident, and then linking all victims and alleged suspects associated with the incident in a *single record*.

#### NVDRS collects veteran and military status from death certificates

The NVDRS collects **veteran/military status data from death certificates**. The U.S. Standard Certificate of Death form used by most states includes a box **"Ever a member of U.S. Armed Forces?"** The box is completed as "Yes," "No," or "Unknown" based on information provided by the informant.

**Ever a member of U.S. Armed Forces includes both veterans and persons actively serving in the U.S. Armed Forces**. The U.S. Armed Forces comprises five armed service branches: Air Force, Army, Coast Guard, Marine Corps, and Navy. This data can be used to better understand risk factors related to veteran/armed forces suicide and help guide prevention efforts.

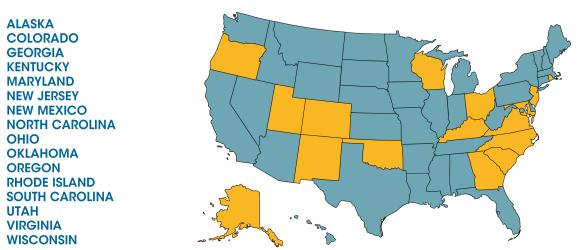
#### > The NVDRS links data to create a more complete picture of violent deaths

The NVDRS links data from multiple sources to provide a more complete picture of violent deaths in the U.S., states and local communities. Unlike other surveillance systems that collect data on individual deaths (e.g., vital statistics), the NVDRS is an *incident-based* system. **The NVDRS collects data on the** *entire* violent incident and links all victims and alleged suspects associated with the incident in one record.<sup>12</sup> For example, the NVDRS can identify and link all victims and suspects in multiple homicide cases, as well as in homicide-suicide cases.

#### Linking data in one database places a death into context and provides information not previously possible, such as:

- the relationship between the victim and suspect, including if they knew each other
- information about the suspect, including relevant criminal acts
- **circumstances** such as a history of depression or other mental health problems, chronic illness, alcohol or drug use
- recent problems with a job, finances or relationships
- circumstances unique to intimate partner violence, including prior incidents of abuse

Select NVDRS data are available on the CDC Web-based Injury Statistics Query and Reporting System (<u>WISQARS</u>). Additionally, the NVDRS Restricted Access Database (RAD) — a de-identified, multi-state, case-level micro dataset available from the CDC — is available for use by researchers and other investigators who meet certain criteria. (See Appendix A: Definition of Terms)



### **16 NVDRS STATES INCLUDED IN THIS REPORT**

## 3 KEY FINDINGS

The key findings illustrate the public health problem of suicide deaths among veterans and armed forces members in the 16 states<sup>+</sup> that reported 2010-2014 data to the National Violent Death Reporting System (NVDRS). Key findings include circumstances surrounding these suicide deaths, and draw comparisons between veteran and armed forces and non-veteran civilian suicide deaths. Also refer to the infographic and tables on pages 12-13.

#### VETERAN AND ARMED FORCES STATUS AMONG SUICIDE VICTIMS

In the 16 states, 10,039 (19%) of suicide victims were identified as veterans or currently serving in the armed forces.

- Among male suicide victims, 23% were identified as veterans or currently serving in the armed forces, 74% were non-veteran civilians, and 3% had an unknown or missing veteran/armed forces status.
- Among female suicide victims, 3% were identified as veterans or currently serving in the armed forces, 95% were non-veteran civilians, and 2% had an unknown or missing veteran/armed forces status.

### VIOLENT DEATH TYPES AMONG VETERANS AND ARMED FORCES MEMBERS

Suicides outnumbered homicides among veterans and armed forces members in all 16 NVDRS states included in this report.

- Among males, suicides accounted for 83% of all violent deaths, followed by homicides (10%), deaths of undetermined intent (6%), deaths due to legal intervention (1%), and unintentional firearm deaths (<1%).</li>
- Among females, suicides accounted for 70% of all violent deaths, followed by homicides (19%), deaths of undetermined intent (11%), deaths due to legal intervention (<1%), and unintentional firearm deaths (<1%).</li>

#### ANALYSIS CONSIDERATIONS

In reviewing all findings in this report, please refer to the *Analysis Considerations* section (pages 48-50) for details on how the data analyses were conducted and for insight into the subtleties and complexities of working with NVDRS data. It is important to understand key factors to consider when analyzing NVDRS data and reasons why the results presented in this report might differ from those derived from other data sources or analysis methodologies.

\*Occurrent Suicide Rate, for example, is used throughout this report. Occurrence statistics are based on all violent deaths that occur in the geographic area of interest, not just the deaths of residents. Occurrent deaths are those in which the decedent was fatally injured in the reporting state, whether or not the decedent was a resident of the reporting state. This report uses occurrent rates rather than mortality rates based on residency status because occurrent rates provide a more comprehensive description of a state's burden of deaths from violence (see pages 48-49 for further details). These rates are presented per 100,000 veteran and armed forces residents and per 100,000 nonveteran civilian residents.

+ Complete (<10% missing/unknown) veteran variable data was available for 13 of the 16 states included in this report. Only states with complete veteran variable data for all five years (2010-2014) were included in overall rate calculations. Therefore, analyses noted with "+" include 13 states only (AK, CO, KY, MD, NJ, NM, NC, OK, OR, RI, UT, VA, WI).

#### HOMICIDE-SUICIDE INCIDENTS

A total of 222 homicide-suicide incidents were identified involving male veterans and armed forces members, totaling 485 deaths.

- In these incidents, 197 male veterans and armed forces members committed homicide followed by suicide, and 34 were victims of homicide.
- The 485 total deaths consisted of 263 homicides and 222 suicides.
- 71% of the homicide victims were female.
- 67% of these homicide-suicide incidents were related to intimate partner problems.

#### SUICIDE

#### **Occurrent suicide rate**\*<sup>+</sup>

All rates are presented as either per "100,000 veteran and armed forces residents" or per "100,000 non-veteran civilian residents".

- The overall suicide rate among veterans and armed forces members in the 13 states (33.7 per 100,000 veteran and armed forces residents) was 2.2 times higher than the non-veteran civilian suicide rate (15.5 per 100,000 non-veteran civilian residents).
- In all of these 13 states, the veteran and armed forces suicide rate was higher than the non-veteran civilian suicide rate.
  - The difference ranged from 1.5 times higher in Alaska to 2.5 times higher in Oregon.
  - The lowest veteran and armed forces suicide rate was 22.6/100,000 in New Jersey, while the highest was 54.4/ 100,000 in Utah.
  - New Jersey also had the lowest non-veteran civilian suicide rate (9.3/100,000), while Alaska had the highest non-veteran civilian suicide rate (25.4/100,000).

#### Males and females<sup>+</sup>

- The overall male veteran and armed forces suicide rate in the 13 states (35.7/100,000) was 2.6 times higher than the female veteran and armed forces suicide rate (13.6/ 100,000).
  - The male veteran and armed forces suicide rate was higher than the female veteran and armed forces suicide rate in all 13 states, ranging from 1.6 times higher

in Kentucky and Rhode Island to 4.1 times higher in Maryland.

- Among males, the veteran and armed forces suicide rate in the 13 states was 38% higher than the rate among non-veteran civilians (35.7/100,000 and 25.9/100,000, respectively).
  - The male suicide rate was higher among veterans and armed forces members in all states except for Alaska, where the male non-veteran civilian suicide rate was slightly higher than the veteran and armed forces rate (42.6/100,000 and 41.7/100,000, respectively).
  - The largest difference was in Oregon, where the male veteran and armed forces suicide rate of 52.0 was 1.6 times higher than the non-veteran civilian suicide rate of 32.4/100,000.
  - The lowest male veteran and armed forces suicide rate was 23.4/100,000 in New Jersey, while the highest was 55.7/ 100,000 in Utah.
- In the 13 states, the female suicide rate was higher among veterans and armed forces members than among non-veteran civilians.
  - The largest difference was in Kentucky, where the female veteran and armed forces suicide rate was 3.4 times higher than the rate for non-veteran civilians.
  - The smallest difference was in Colorado, where the female veteran and armed forces suicide rate was 1.2 times higher than the rate for non-veteran civilians.
  - The lowest female veteran and armed forces suicide rate was 6.2/100,000 in Maryland, while the highest was 35.5/ 100,000 in Utah.
- Among male veterans and armed forces members, the highest suicide rate was among those ages 18-34 years at 43.6/ 100,000, followed by ages 35-54 (36.4/ 100,000), ages 65+ (34.6/100,000); the lowest was among ages 55-64 (32.4/ 100,000).
  - The states with the highest rates in each age group were Wisconsin for ages 18-34 (67.5/100,000), Oregon for ages 35-54 (63.9/100,000), Utah for ages 55-64 (60.5/100,000), and New Mexico for ages 65+ (56.2/100,000).

#### Suicide Methods

#### **Firearm Use**

 Firearms were used in the overwhelming majority (70%) of veteran and armed forces suicide deaths.

#### Frequency among males

- Among male veteran and armed forces suicide victims, firearms were the most frequent suicide method used in all states (71% overall).
  - Alaska had the highest percentage of suicide deaths among males due to firearms (82%), while New Jersey and Rhode Island had the lowest (49%).
- Firearms accounted for 54% of non-veteran civilian male suicide deaths.

#### Frequency among females

 Firearms were also the most frequent suicide method (43%) among female veteran and armed forces members, while they were the second most frequent suicide method (33%) of female non-veteran civilians. 100,000), while New Jersey had the lowest firearm suicide rate among this population (11.7/100,000).

#### Other suicide methods

#### Poisoning

- Among veterans and armed forces members, poisoning accounted for 33% of suicide deaths among females and 9% of suicide deaths among males.
- Among non-veteran civilians, poisoning accounted for 37% of suicide deaths among females and 11% of suicide deaths among males.

#### Hanging/suffocation

- Among veterans and armed forces members, hanging/suffocation accounted for 17% of suicide deaths among females and 15% of suicide deaths among males.
- Among non-veteran civilians, hanging/ suffocation accounted for 22% of suicide deaths among females and 28% of suicide deaths among males.

*Firearms were used in the overwhelming majority* (70%) of veteran and armed forces suicide deaths, and also among the majority of male (71%) and female (43%) veteran and armed forces suicide deaths.

#### Firearm suicide rate

- The overall firearm suicide rate among male veterans and armed forces members in the 13 states was higher than male nonveteran civilians (25.3 and 13.8/100,000, respectively).
- In each of the 13 states, the firearm suicide rate was higher among male veterans and armed forces members than among male non-veteran civilians.
  - The smallest difference was in Alaska, where the male veteran and armed forces firearm suicide rate was 1.2 times higher than male non-veteran civilians.
  - The largest difference was in Rhode Island, where the male veteran and armed forces firearm suicide rate was 3.0 times higher than male non-veteran civilians.
- Among the 13 states, Oregon and Utah had the highest firearm suicide rate among male veteran and armed forces members (39.6/

#### Toxicology

 Toxicology test results among veteran and armed forces suicide victims who were tested showed that 32% were positive for alcohol, 24% for antidepressants, and 21% for opiates. (See Table 2 on page 14)

#### Race/Ethnicity

- Among veteran and armed forces suicide victims, 89% were white (non-Hispanic), 6% were black (non-Hispanic), 3% were Hispanic, 1% were American Indian/Alaska Native (non-Hispanic), 1% were Asian/ Pacific Islander (non-Hispanic), 1% were two or more races (non-Hispanic), and <1% were other/unknown race.</li>
- Among non-veteran civilian suicide victims, 84% were white (non-Hispanic), 6% were black (non-Hispanic), 5% were Hispanic, 1% were American Indian/Alaska Native (non-Hispanic), 2% were Asian/Pacific Island -er (non-Hispanic), 2% were two or more races (non-Hispanic), and <1% had other or unknown race.

Among veteran and armed forces suicide victims with known circumstances, more than half (58%) of females and 39% of males were identified as *currently having a mental health problem*.

#### **Marital status** Males

- Among male veteran and armed forces suicide victims, 45% were married, 15% were never married, 24% were divorced, 12% were widowed, 2% were married but separated, 1% were single, not otherwise specified, and 1% had an unknown or missing marital status.
- Among male non-veteran civilian suicide victims, 33% were married, 38% were never married, 20% were divorced, 4% were widowed, 3% were married but separated, 2% were single, not otherwise specified, and 1% had an unknown or missing marital status.

#### Females

- Among female veteran and armed forces suicide victims, 39% were married, 21% were never married, 31% were divorced, 4% were widowed, 2% were married but separated, 1% were single, not otherwise specified, and 1% had an unknown or missing marital status.
- Among female non-veteran civilian suicide victims, 36% were married, 24% were never married, 29% were divorced, 8% were widowed, 2% were married but separated, 1% were single, not otherwise specified, and 1% had an unknown or missing marital status.

#### Education\*

- Among veteran and armed forces suicide victims, 8% had less than a high school degree, 42% were a high school or GED graduate, 44% had some college credit or a college degree, and 6% had an unknown education level.
- Among non-veteran civilian suicide victims, 14% had less than a high school degree, 39% were a high school or GED graduate, 40% had some college credit or a college degree, and 6% had an unknown education level.

#### Homelessness

• Of the 10,309 veteran and armed forces suicide victims in the analysis, 0.6% (61) were identified as homeless, which was less than the 0.9% of non-veteran civilian suicide victims identified as homeless.

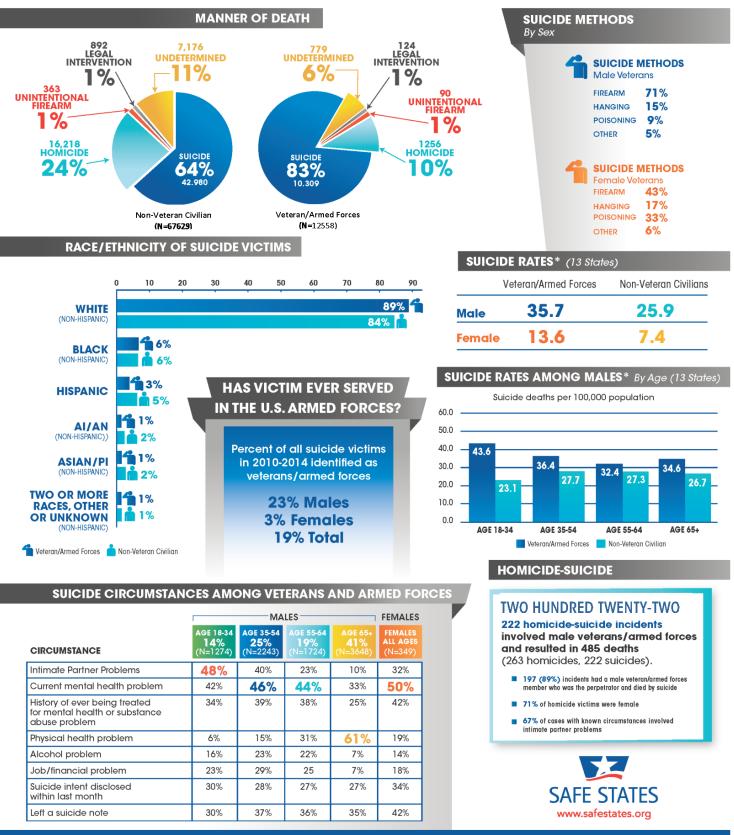
#### Mental Health Problems

- Among veteran and armed forces suicide victims with known circumstances, more than half (58%) of females and 39% of males were identified as currently having a mental health problem.
- Among veteran and armed forces suicide victims identified as currently having a mental health problem, 73% had a diagnosis of depression/dysthymia, 14% had posttraumatic stress disorder (PTSD), 13% had anxiety disorder, 10% had bipolar disorder, 3% had schizophrenia, and 16% had other or unknown diagnoses.
- Among non-veteran civilian suicide victims identified as currently having a mental health problem, 76% had a diagnosis of depression/dysthymia, 2% had PTSD, 15% had anxiety disorder, 16% had bipolar disorder, 6% had schizophrenia, and 17% had other or unknown diagnoses.

<sup>\*</sup> Data excludes Rhode Island, where 95% of suicide victims had an unknown or missing education level.

### SUICIDE AMONG VETERANS AND ARMED FORCES: A look at 16 NVDRS states, 2010-2014

Data from the National Violent Death Reporting System, 2010-2014



NOTE: This data represents the following 16 states: Alaska, Colorado, Georgia (2010-2011, 2013-2014 only), Kentucky, Maryland, New Jersey, New Mexico, North Carolina, Ohio (2012-2014 only), Oklahoma, Oregon, Rhode Island, South Carolina (2010-2012 only), Utah, Virginia, Wisconsin. \* Complete veteran variable data for all five years (2010-2014) was available for 13 of the 16 states included in this report (AK, CO, KY, MD, NJ, NM, NC, OK, OR, RI, UT, VA, WI). Only these states with complete data were included in overall rate calculations.

## TABLE 1. SUICIDE RATES AMONG VETERAN/ARMED FORCES AND NON-VETERAN CIVILIANSAGE 18 AND OLDER IN 13 NVDRS STATES, 2010-2014

Table 1 provides a quick look at the magnitude of suicide deaths among veterans and armed forces compared to non-veteran civilians in 13 states that collected 2010-2014 NVDRS data <u>and</u> had complete (<10% missing/unknown) veteran status data for all five years necessary for the calculations presented below.

Suicide death measures shown are: (1) the total number of suicide deaths that occurred in each state over the five-year period 2010-2014, (2) the annual occurrent suicide rate per 100,000 residents population, (3) the percent of occurrent suicide deaths among males and state residents, (4) the annual occurrent suicide rate among males by age group, and females (all ages). Age-specific rates were not possible for females due to small numbers in some states. **All rates are five-year average rates.** 

|                      |           |              |       |                                       |        |                | Males         |             |          | Females      |
|----------------------|-----------|--------------|-------|---------------------------------------|--------|----------------|---------------|-------------|----------|--------------|
|                      | # of      |              |       |                                       | Age    | e-specific occ | urrent suicio | de death ra | ates     | Occurrent    |
|                      | occurrent | Occurrent    | %     | %                                     |        |                |               |             |          | suicide rate |
| State                | suicides  | suicide rate | males | residents                             | 18-34  | 35-54          | 55-64         | 65+         | All ages | (All ages)   |
| Alaska               |           |              |       |                                       |        | -              | 1             | 1           | 1        |              |
| Veteran/AF           | 170       | 39.0         | 94%   | 96%                                   | 62.4   | 36.7           | 26.3          | 37.5        | 41.7     | 20.1**       |
| Non-Veteran Civilian | 576       | 25.4         | 77%   | 98%                                   | 58.6   | 35.1           | 24.6          | 30.9        | 42.6     | 10.9         |
| Colorado             |           | <b></b>      | 1     | · · · · · · · · · · · · · · · · · · · |        |                | 1             |             | 1        |              |
| Veteran/AF           | 910       | 42.6         | 97%   | 97%                                   | 47.2   | 49.2           | 43.8          | 44.3        | 45.9     | 13.3         |
| Non-Veteran Civilian | 3852      | 21.8         | 72%   | 97%                                   | 30.4   | 38.5           | 38.7          | 32.3        | 34.9     | 11.0         |
| Kentucky             |           | Γ            | 1     |                                       |        |                |               |             |          |              |
| Veteran/AF           | 552       | 34.6         | 96%   | 98%                                   | 46.7   | 36.3           | 27.6          | 36.5        | 35.6     | 22.1         |
| Non-Veteran Civilian | 2413      | 15.8         | 77%   | 97%                                   | 23.7   | 29.4           | 27.8          | 36.1        | 27.9     | 6.4          |
| Maryland             |           |              |       |                                       |        |                | 1             | 1           |          |              |
| Veteran/AF           | 513       | 23.2         | 97%   | 96%                                   | 30.6   | 23.3           | 21.1          | 27.7        | 25.5     | 6.2**        |
| Non-Veteran Civilian | 2143      | 10.5         | 75%   | 95%                                   | 15.0   | 19.4           | 21.3          | 20.7        | 18.2     | 4.5          |
| New Jersey           |           |              |       |                                       |        | _              |               |             | -        |              |
| Veteran/AF           | 478       | 22.6         | 98%   | 96%                                   | 35.2   | 29.6           | 24.3          | 20.1        | 23.4     | 8.5**        |
| Non-Veteran Civilian | 2995      | 9.3          | 74%   | 96%                                   | 12.3   | 16.7           | 17.7          | 17          | 15.4     | 4.4          |
| New Mexico           |           |              |       |                                       |        |                |               |             |          |              |
| Veteran/AF           | 446       | 49.9         | 95%   | 96%                                   | 59.2   | 51.6           | 41.4          | 56.2        | 52.1     | 27.8         |
| Non-Veteran Civilian | 1626      | 23.4         | 70%   | 96%                                   | 37.9   | 40.3           | 36.1          | 29.7        | 37.6     | 12.4         |
| North Carolina       |           |              | -     |                                       |        | _              | -             |             | -        |              |
| Veteran/AF           | 1109      | 27.9         | 96%   | 98%                                   | 39.9   | 29.2           | 23.3          | 29.1        | 29.6     | 10.8         |
| Non-Veteran Civilian | 5015      | 15.0         | 71%   | 98%                                   | 19.9   | 26.1           | 28.9          | 31.3        | 24.9     | 7.6          |
| Oklahoma             |           |              | -     |                                       |        | _              | -             |             | -        |              |
| Veteran/AF           | 703       | 43.6         | 97%   | 99%                                   | 58.6   | 49.7           | 42.5          | 41.6        | 45.8     | 17.4         |
| Non-Veteran Civilian | 2579      | 20.2         | 74%   | 98%                                   | 32.0   | 38.4           | 32.3          | 29.1        | 34.1     | 9.5          |
| Oregon               |           |              |       |                                       |        |                |               |             |          |              |
| Veteran/AF           | 790       | 50.0         | 96%   | 99%                                   | 60.9   | 63.9           | 46.3          | 48.6        | 52.0     | 24.2         |
| Non-Veteran Civilian | 2684      | 19.7         | 72%   | 95%                                   | 27.7   | 35.6           | 33.3          | 36.1        | 32.4     | 9.8          |
| Rhode Island         |           |              |       |                                       |        |                |               |             |          |              |
| Veteran/AF           | 88        | 24.5         | 97%   | 97%                                   | 26.0** | 36.2           | 26.4**        | 20.2        | 25.3     | _*           |
| Non-Veteran Civilian | 486       | 12.7         | 75%   | 94%                                   | 17.6   | 28.4           | 24.1          | 11.3        | 22.1     | 5.5          |
| Utah                 |           |              |       |                                       |        |                |               |             |          |              |
| Veteran/AF           | 395       | 54.4         | 96%   | 96%                                   | 67.4   | 62.0           | 60.5          | 47.7        | 55.7     | 35.5**       |
| Non-Veteran Civilian | 2037      | 22.3         | 74%   | 98%                                   | 33.5   | 38.6           | 38.6          | 32.5        | 35.9     | 10.7         |
| Virginia             |           |              |       |                                       |        |                |               |             |          |              |
| Veteran/AF           | 1150      | 27.8         | 96%   | 98%                                   | 31.7   | 25.2           | 27.3          | 36.6        | 30.5     | 9.4          |
| Non-Veteran Civilian | 3898      | 14.2         | 73%   | 98%                                   | 20.6   | 25.4           | 27.3          | 27.7        | 24.1     | 6.8          |
| Wisconsin            |           |              |       |                                       |        |                |               |             |          |              |
| Veteran/AF           | 697       | 35.0         | 97%   | 99%                                   | 67.5   | 41.6           | 36.8          | 29.4        | 36.2     | 18.2         |
| Non-Veteran Civilian | 3000      | 15.0         | 75%   | 98%                                   | 24.1   | 27.9           | 23.8          | 20.2        | 25.1     | 6.7          |

#### FOOTNOTES

Definitions of terms are found in Appendix A. Methodology is described in Appendix B. Occurrent deaths are those in which the fatal injury occurred in the specified state, regardless of the person's state of residence.

\*Rates are not calculated for cells containing fewer than five deaths.

\*\*Rates based on fewer than 20 deaths may be unstable and should be interpreted with caution.

## TABLE 2. TOXICOLOGY TESTING AND RESULTS AND VETERAN AND ARMED FORCES SUICIDE VICTIMS IN 16 NVDRS STATES, 2010-2014

Table 2 presents toxicology testing and results for veteran and armed forces suicide victims. Of those tested, toxicology test results show that 32% were positive for alcohol, 24% for antidepressants, and 21% for opiates.

| SUBSTANCE               | TOXICOLOGY TESTING & RESULTS<br>(Total number of veteran and armed forces suicide victims: N=10,309) |                                    |                                 |  |  |  |  |
|-------------------------|--|------------------------------------|---------------------------------|--|--|--|--|
| NAME                    | # Tested   | # of Tests with<br>Positive Result | % Positive<br>(of those tested) |  |  |  |  |
| Alcohol                 | 5904   | 1876                               | 32%                             |  |  |  |  |
| Amphetamines            | 3478   | 93                                 | 3%                              |  |  |  |  |
| Antidepressants         | 2856   | 687                                | 24%                             |  |  |  |  |
| Cocaine                 | 3562   | 117                                | 3%                              |  |  |  |  |
| Marijuana               | 2775   | 258                                | 9%                              |  |  |  |  |
| Opiates                 | 3721   | 769                                | 21%                             |  |  |  |  |
| TOTAL #<br>or AVERAGE % | 22296  | 3800                               | 17%                             |  |  |  |  |

# **4 STATE PROFILES**

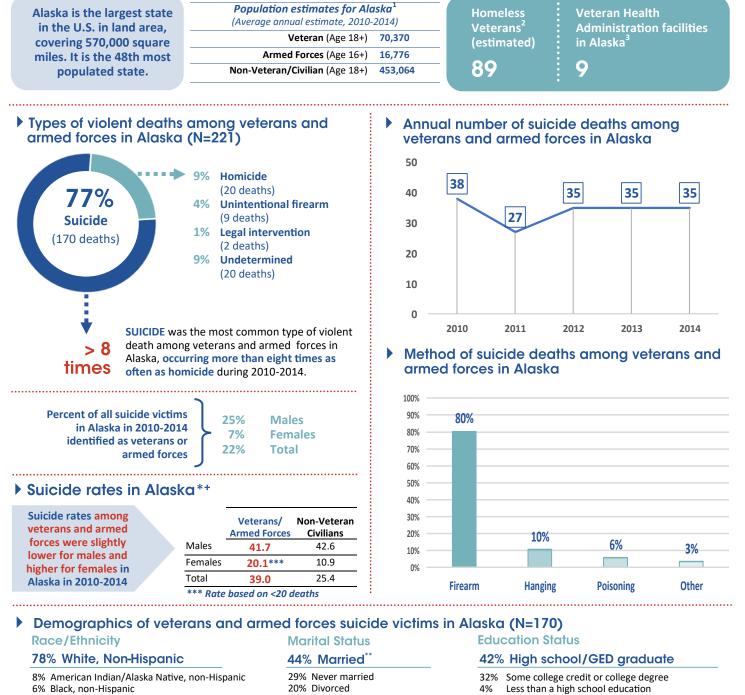
Profiles for each of the 16 states provide a brief overview for comparison purposes within this report, as well as a stand-alone document for each state. Because significant state-level heterogeneity is often masked when aggregate data are analyzed at the national level, the state profiles highlight state-level similarities and differences in the numbers, characteristics and circumstances of suicide. State-level data in each of the 16 profiles provide a more detailed picture that can better inform the choice of suicide prevention measures most likely to be effective at state and local levels.

## **Suicide among Veterans and Armed Forces** ALASKA, 2010 - 2014

Data from the National Violent Death Reporting System (NVDRS)

Alaska Violent Death Reporting System (AKVDRS) Joined the NVDRS: 2002

First year of data collection: 2003



- 5% Hispanic
- 2% Two or more races, other, or unknown race
- 0% Asian/Pacific Islander, non-Hispanic

- 6% Widowed
- 1% Other/unknown status
- \*\*includes civil unions and domestic partnerships
- 22% Unknown or missing education level

Percents may not equal 100% due to rounding. \*All rates are occurrent ratios based on the number of resident and non-resident deaths that occurred in the state per 100,000 resident population. \*Statistical testing was not conducted. Differences between veterans/armed forces and non-veteran civilians may not be statistically significant. Sources: <sup>1</sup>U.S. Census Bureau, American Community Survey, 2010-2014; <sup>2</sup>U.S. Department of Housing and Urban Development, 2014 Annual Homeless Assessment Report (AHAR) to Congress; <sup>3</sup>U.S. Department of Veteran Affairs

Firearm suicide rates among male veterans/armed forces and non-veteran civilians in Alaska\*+

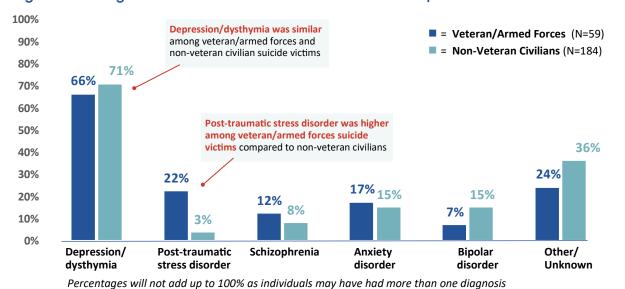
|  |                          | Firearm suicide rates*+ in Alaska, 2010-2014 |  |
|--|--------------------------|--|--|
| )  |                          | Males, All Ages                              |  |
| Male veterans/armed forces had:<br>firearm suicide rate 1.2 times higher | VETERAN/<br>ARMED FORCES | Firearm use<br>34.6                          |  |
| mpared to non-veteran civilians  | $\succ$                  | Non-firearm use<br>7.1 ●●●●                  |  |
|  | NON-VETERAN<br>CIVILIAN  | Firearm use<br>28.0                          |  |
| J  |                          | Non-firearm use<br>14.7 ●●●●●●●              |  |
|  |                          | • or • = 2 deaths per 100,000 residents      |  |

#### Suicide circumstances by life stage among male veterans and armed forces in Alaska

In 96% of Alaska's suicide deaths among male veterans and armed forces, circumstances were documented in the records (N=152). More than one circumstance may have been noted in the record. The five most frequent circumstances by age group, as well as information about suicide intent, and a suicide note, are shown below. Circumstances by age group were not calculated for females due to small numbers.

|     | AGE 18-34   |     | AGE 35-54   |     | AGE 55-64   |            | AGE 65+   |
|-----|---|-----|---|-----|---|------------|---|
|     | 39%   |     | 27%   |     | 13%   |            | 22%   |
|     | (N=59)  |     | (N=41)  |     | (N=19)  |            | (N=33)  |
| 59% | Intimate partner<br>problems                                    | 39% | Current mental health<br>problem                                | 42% | Physical health<br>problems                                     | <b>79%</b> | Physical health<br>problems                                     |
| 37% | Job/financial<br>problems                                       | 37% | Job/financial<br>problems                                       | 37% | Job/financial<br>problems                                       | 48%        | Recent/imminent crisis  |
| 34% | Current mental health<br>problem                                | 34% | Intimate partner<br>problems                                    | 37% | Current mental health problem                                   | 30%        | Ever treated for mental<br>health or substance<br>abuse problem |
| 34% | Ever treated for mental<br>health or substance<br>abuse problem | 34% | Ever treated for mental<br>health or substance<br>abuse problem | 26% | Ever treated for mental<br>health or substance<br>abuse problem | 27%        | Current mental health problem                                   |
| 32% | Recent/imminent crisis  | 24% | Physical health problems  | -   | Not calculated, n<5   | 21%        | Other death of friend<br>or family member                       |
| 56% | Suicide intent disclosed within last month                      | 39% | Suicide intent disclosed within last month                      | 37% | Suicide intent disclosed within last month                      | 30%        | Suicide intent disclosed within last month                      |
| 37% | Left a suicide note   | 34% | Left a suicide note   | 47% | Left a suicide note   | 52%        | Left a suicide note   |

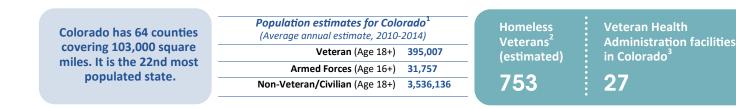
#### Diagnoses among suicide victims with a current mental health problem in Alaska\*

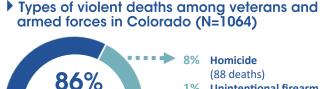


## **Suicide among Veterans and Armed Forces COLORADO, 2010 - 2014**

Data from the National Violent Death Reporting System (NVDRS)

Colorado Violent Death Reporting System (COVDRS) Joined the NVDRS: 2003 First year of data collection: 2004





.....

86% **Unintentional firearm** 1% Suicide (9 deaths) Legal intervention (910 deaths) (12 deaths) ۵% Undetermined (45 deaths) SUICIDE was the most common type of violent death among veterans and armed forces in 10

Colorado, occurring more than ten times as often as homicide during 2010-2014.

Percent of all suicide victims in Colorado in 2010-2014 identified as veterans or armed forces

times

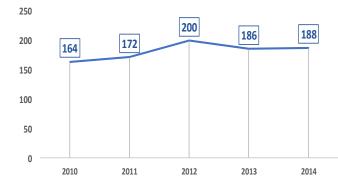
24% Males 3% **Females** 19% Total

#### Suicide rates in Colorado\*+

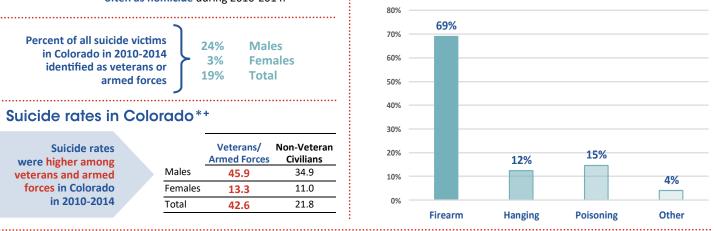
| Suicide rates<br>were higher among |         | Veterans/<br>Armed Forces | Non-Veteran<br>Civilians |
|------------------------------------|---------|---------------------------|--------------------------|
| veterans and armed                 | Males   | 45.9                      | 34.9                     |
| forces in Colorado                 | Females | 13.3                      | 11.0                     |
| in 2010-2014                       | Total   | 42.6                      | 21.8                     |

Annual number of suicide deaths among veterans and armed forces in Colorado

.....



Method of suicide deaths among veterans and armed forces in Colorado



#### Demographics of veterans and armed forces suicide victims in Colorado (N=910) Race/Ethnicity **Marital Status**

#### 90% White, Non-Hispanic

- 6% Hispanic
- Black, non-Hispanic 2%
- Two or more races, other, or unknown race 1%
- <1% American Indian/Alaska Native, non-Hispanic
- <1% Asian/Pacific Islander, non-Hispanic

### 47% Married\*

- 25% Divorced
- 16% Never married
- 10% Widowed
- 1% Other/unknown status
- \*\*includes civil unions and domestic partnerships

#### **Education Status**

#### 56% Some college credit or college degree

- 38% High school or GED graduate
- Less than a high school education 4%
- 1% Unknown or missing education level

Percents may not equal 100% due to rounding. \*All rates are occurrent ratios based on the number of resident and non-resident deaths that occurred in the state per 100,000 resident population. +Statistical testing was not conducted. Differences between veterans/armed forces and non-veteran civilians may not be statistically significant. Sources: <sup>1</sup>U.S. Census Bureau, American Community Survey, 2010-2014; <sup>2</sup>U.S. Department of Housing and Urban Development, 2014 Annual Homeless Assessment Report (AHAR) to Congress; <sup>3</sup>U.S. Department of Veteran Affairs

#### Firearm suicide rates among male veterans/armed forces and non-veteran civilians in Colorado\*+

|              |   |   |                          | Firearm suicide rates             | *+ in Colorado, 2010-2014            |
|--------------|---|---|--------------------------|-----------------------------------|--------------------------------------|
| Malayot      | erans/armed forces had:                                   |   |                          | Males age 18-54                   | Males age 55+                        |
| Age          | The highest firearm                                       |   | VETERAN/<br>ARMED FORCES | Firearm use<br>29.9               | Firearm use<br>33.4 •••••••••••••••• |
| 55+          | suicide rate  | \ |                          | Non-firearm use<br>18.6 ●●●●●●●●● | Non-firearm use<br>10.7 ●●●●●●       |
| Age<br>18-54 | A firearm suicide rate<br>1.8 times higher<br>compared to |   | NON-VETERAN<br>CIVILIAN  | Firearm use<br>16.6 ●●●●●●●●      | Firearm use<br>23.4 ••••••••••••     |
|              | non-veteran civilians                                     |   |                          | Non-firearm use<br>17.9 ●●●●●●●●● | Non-firearm use<br>13.1 ●●●●●●       |

or = 2 deaths per 100,000 residents

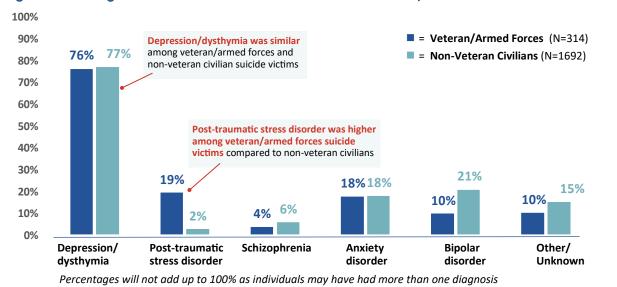
#### Suicide circumstances by life stage among male veterans and armed forces in Colorado

In 91% of Colorado's suicide deaths among male veterans and armed forces, circumstances were documented in the records (N=801). More than one circumstance may have been noted in the record. The five most frequent circumstances by age group, as well as information about suicide intent, and a suicide note, are shown below. Circumstances by age group were not calculated for females due to small numbers.

.....

|     | AGE 18-34   |            | AGE 35-54   |     | AGE 55-64   |            | AGE 65+   |
|-----|---|------------|---|-----|---|------------|---|
|     | 14%   |            | 28%   |     | 21%   |            | 37%   |
|     | (N=112)   |            | (N=222)   |     | (N=169)   |            | (N=298)   |
| 55% | Intimate partner<br>problems                              | <b>42%</b> | Current mental health problem                                   | 47% | Physical health<br>problems                               | <b>76%</b> | Physical health<br>problems                                     |
| 44% | Current mental health problem                             | 39%        | Ever treated for mental<br>health or substance<br>abuse problem | 41% | Current mental health<br>problem                          | 30%        | Current mental health problem                                   |
| 38% | Argument or conflict                                      | 36%        | Intimate partner<br>problems                                    | 39% | Job/financial<br>problems                                 | 25%        | Ever treated for mental<br>health or substance<br>abuse problem |
| 37% | Ever treated for mental health or substance abuse problem | 35%        | Job/financial<br>problems                                       | 34% | Ever treated for mental health or substance abuse problem | 22%        | Recent/imminent crisis  |
| 29% | History of attempting suicide                             | 32%        | Alcohol<br>problem  | 31% | Intimate partner<br>problems                              | <b>13%</b> | Intimate partner<br>problems                                    |
| 36% | Suicide intent disclosed within last month                | 34%        | Suicide intent disclosed within last month                      | 34% | Suicide intent disclosed within last month                | 28%        | Suicide intent disclosed within last month                      |
| 29% | Left a suicide note                                       | 39%        | Left a suicide note   | 33% | Left a suicide note                                       | 38%        | Left a suicide note   |

#### Diagnoses among suicide victims with a current mental health problem in Colorado\*



## Suicide among Veterans and Armed Forces GEORGIA, 2010-2011, 2013-2014

Data from the National Violent Death Reporting System (NVDRS)

#### Georgia Violent Death Reporting System (GVDRS) Joined the NVDRS: 2003

First year of data collection: 2004

|                              | Population estimates for Georgia                |  |  |  |  |  |  |
|------------------------------|---|--|--|--|--|--|--|
| 159 counties<br>7,000 square | (Average annual estimate, 2010-2011, 2013-2014) |  |  |  |  |  |  |
|                              | Veteran (Age 18+) 670,135                       |  |  |  |  |  |  |
| the 8th most                 | Armed Forces (Age 16+) 47,427                   |  |  |  |  |  |  |
| ed state.                    | Non-Veteran/Civilian (Age 18+) 6,695,741        |  |  |  |  |  |  |
|                              |   |  |  |  |  |  |  |

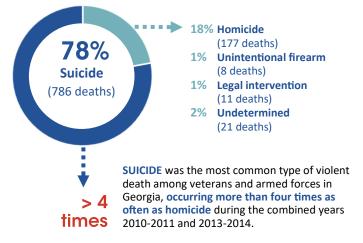
| timated) | in Georgia <sup>3</sup> |
|----------|-------------------------|
| 433      | 39                      |

Veteran Health

ministration facilities

#### Types of violent deaths among veterans and armed forces in Georgia (N=1003)

.....

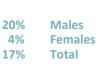


#### Percent of all suicide victims in Georgia in 2010-2014 identified as veterans or armed forces

**Georgia has** 

covering 57

miles. It is t populat



#### Suicide rates in Georgia\*\*

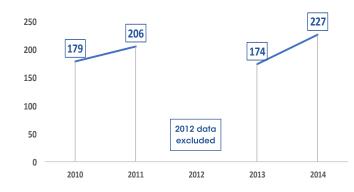
| Suicide rates<br>were higher among |         | Veterans/<br>Armed Forces | Non-Veteran<br>Civilians |
|------------------------------------|---------|---------------------------|--------------------------|
| veterans and armed                 | Males   | 28.9                      | 21.7                     |
| forces in Georgia                  | Females | 14.2                      | 5.8                      |
| in 2010-2011, 2013-2014            | Total   | 27.4                      | 12.7                     |

Annual number of suicide deaths among veterans and armed forces in Georgia

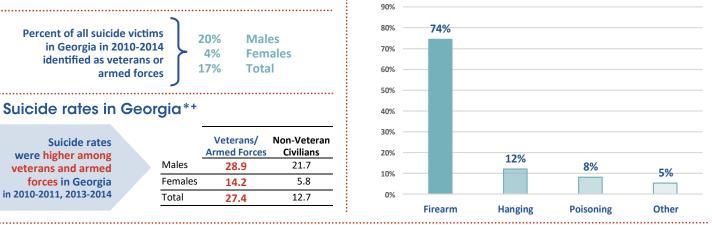
Homeless

Vet

(est



Method of suicide deaths among veterans and armed forces in Georgia



#### Demographics of veterans and armed forces suicide victims in Georgia (N=786) **Race/Ethnicity Marital Status**

#### 83% White, Non-Hispanic

- 12% Black, non-Hispanic
- Two or more races, other, or unknown race 3%
- 1% Hispanic
- 1% Asian/Pacific Islander, non-Hispanic

<1% American Indian/Alaska Native, non-Hispanic

- 47% Married\* 21% Divorced
- 15% Never married
- 11% Widowed
- 7% Other/unknown status
- \*\*includes civil unions and domestic partnerships

#### **Education Status**

#### 35% Some college credit or college degree

- 31% High school or GED graduate
- Less than a high school education 5%
- 28% Unknown or missing education level

Percents may not equal 100% due to rounding. \*All rates are occurrent ratios based on the number of resident and non-resident deaths that occurred in the state per 100,000 resident population. +Statistical testing was not conducted. Differences between veterans/armed forces and non-veteran civilians may not be statistically significant. Sources: <sup>1</sup>U.S. Census Bureau, American Community Survey, 2010-2014; <sup>2</sup>U.S. Department of Housing and Urban Development, 2014 Annual Homeless Assessment Report (AHAR) to Congress; <sup>3</sup>U.S. Department of Veteran Affairs

Firearm suicide rates among male veterans/armed forces and non-veteran civilians in Georgia\*\*

|              |   | _                        | Firearm suicide r              | ates*+ in Georgia, 2010-2014      |
|--------------|---|--------------------------|--------------------------------|-----------------------------------|
| Malayot      | erans/armed forces had:                                   |                          | Males age 18-54                | Males age 55+                     |
| Age          | The highest firearm                                       | VETERAN/<br>ARMED FORCES | Firearm use<br>19.7 ●●●●●●●●●● | Firearm use<br>23.2 ••••••••••••• |
| 55+          | suicide rate  |                          | Non-firearm use<br>10.6 ●●●●●● | Non-firearm use<br>4.8 ●●●        |
| Age<br>18-54 | A firearm suicide rate<br>1.6 times higher<br>compared to | NON-VETERAN<br>CIVILIAN  | Firearm use<br>12.1 ●●●●●●     | Firearm use<br>18.9 ●●●●●●●●●●    |
|              | non-veteran civilians                                     |                          | Non-firearm use<br>8.2         | Non-firearm use<br>7.6 ●●●●       |

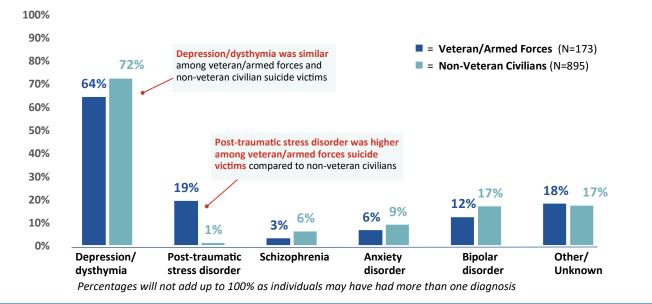
or = 2 deaths per 100,000 residents

#### Suicide circumstances by life stage among male veterans and armed forces in Georgia

In 79% of Georgia's suicide deaths among male veterans and armed forces, circumstances were documented in the records (N=586). More than one circumstance may have been noted in the record. The five most frequent circumstances by age group, as well as information about suicide intent, and a suicide note, are shown below. Circumstances by age group were not calculated for females due to small numbers.

|     | AGE 18-34   |     | AGE 35-54   |     | AGE 55-64   |            | AGE 65+   |
|-----|---|-----|---|-----|---|------------|---|
|     | 19%   |     | 26%   |     | 21%   |            | 35%   |
|     | (N=109)   |     | (N=152)   |     | (N=121)   |            | (N=204)   |
| 50% | Intimate partner<br>problems                              | 34% | Current mental health problem                                   | 38% | Physical health problems  | <b>67%</b> | Physical health<br>problems   |
| 31% | Current mental health problem                             | 30% | Intimate partner<br>problems                                    | 30% | Current mental health problem                                   | 24%        | Recent/imminent crisis  |
| 24% | Recent/imminent crisis                                    | 27% | Ever treated for mental<br>health or substance<br>abuse problem | 26% | Ever treated for mental<br>health or substance<br>abuse problem | 19%        | Current mental health<br>problem  |
| 21% | Ever treated for mental health or substance abuse problem | 19% | Recent/imminent crisis  | 21% | Intimate partner<br>problems                                    | 13%        | Ever treated for mental<br>health or substance<br>abuse problem           |
| 17% | Criminal legal<br>problem                                 | 18% | Job/financial<br>problems                                       | 17% | Recent/imminent crisis  | 10%<br>10% | Other death of friend or<br>family member<br>Intimate partner<br>problems |
| 24% | Suicide intent disclosed within last month                | 18% | Suicide intent disclosed within last month                      | 25% | Suicide intent disclosed within last month                      | 20%        | Suicide intent disclosed within last month                                |
| 20% | Left a suicide note                                       | 34% | Left a suicide note   | 26% | Left a suicide note   | 25%        | Left a suicide note   |

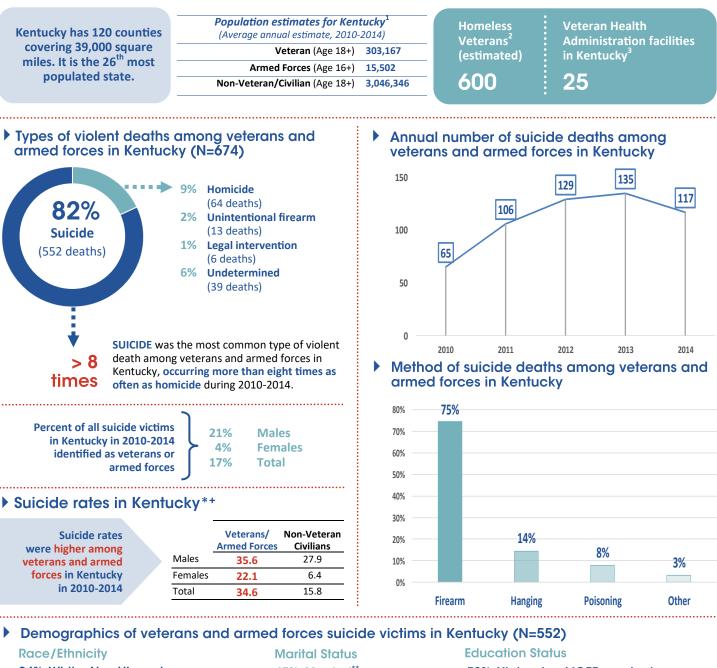
Diagnoses among suicide victims with a current mental health problem in Georgia\*



## **Suicide among Veterans and Armed Forces KENTUCKY, 2010 - 2014**

Data from the National Violent Death Reporting System (NVDRS)

Kentucky Violent Death Reporting System (KVDRS) Joined the NVDRS: 2004 First year of data collection: 2005



### 94% White, Non-Hispanic

- ۵% Black, non-Hispanic
- Hispanic 1%
- 1% Two or more races, other, or unknown race
- <1% Asian/Pacific Islander, non-Hispanic
- American Indian/Alaska Native, non-Hispanic 0%
- 45% Married<sup>\*</sup> 27% Divorced
- 13% Widowed
- 11% Never married
- 5% Other/unknown status
- \*\*includes civil unions and domestic partnerships

#### 50% High school/GED graduate

- 36% Some college credit or college degree
- 14% Less than a high school education
- 1% Unknown or missing education level

Percents may not equal 100% due to rounding. \*All rates are occurrent ratios based on the number of resident and non-resident deaths that occurred in the state per 100,000 resident population. +Statistical testing was not conducted. Differences between veterans/armed forces and non-veteran civilians may not be statistically significant. Sources: <sup>1</sup>U.S. Census Bureau, American Community Survey, 2010-2014; <sup>2</sup>U.S. Department of Housing and Urban Development, 2014 Annual Homeless Assessment Report (AHAR) to Congress; <sup>3</sup>U.S. Department of Veteran Affairs

Firearm suicide rates among male veterans/armed forces and non-veteran civilians in Kentucky\*\*

|             |   |                              | Firearm suicide rates*+ in Kentucky, 2010-2014 |                             |  |  |  |
|-------------|---|------------------------------|--|-----------------------------|--|--|--|
|             |   | <u> </u>                     | Males age 18-54                                | Males age 55+               |  |  |  |
| Age         | erans/armed forces had:<br>The highest firearm            | VETERAN/<br>ARMED FORCES     | Firearm use<br>24.3                            | Firearm use<br>27.5         |  |  |  |
| 5+          | suicide rate  | $\left\langle \right\rangle$ | Non-firearm use<br>15.1 ●●●●●●●                | Non-firearm use<br>5.9 ●●●  |  |  |  |
| Age<br>8-54 | A firearm suicide rate<br>1.5 times higher<br>compared to | NON-VETERAN<br>CIVILIAN      | Firearm use<br>15.4 ●●●●●●●                    | Firearm use<br>24.5         |  |  |  |
|             | non-veteran civilians                                     |                              | Non-firearm use<br>11.2 ●●●●●●                 | Non-firearm use<br>6.7 ●●●● |  |  |  |

### • or • = 2 deaths per 100,000 residents

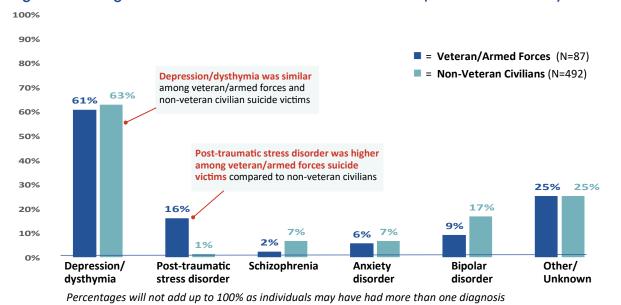
#### Suicide circumstances by life stage among male veterans and armed forces in Kentucky

In 68% of Kentucky's suicide deaths among male veterans and armed forces, circumstances were documented in the records (N=357). More than one circumstance may have been noted in the record. The five most frequent circumstances by age group, as well as information about suicide intent, and a suicide note, are shown below. Circumstances by age group were not calculated for females due to small numbers.

|     | AGE 18-34                                  |     | AGE 35-54                                  |     | AGE 55-64                                  |            | AGE 65+   |
|-----|--|-----|--|-----|--|------------|---|
|     | 15%  |     | 25%  |     | 17%  |            | 43%   |
|     | (N=53)                                     |     | (N=90)                                     |     | (N=62)                                     |            | (N=152)   |
| 32% | Intimate partner<br>problems               | 33% | Intimate partner<br>problems               | 40% | Physical health<br>problems                | <b>49%</b> | Physical health<br>problems                                     |
| 28% | Current mental health problem              | 19% | Job/financial<br>problems                  | 24% | Non-alcohol substance<br>abuse problem     | 23%        | Current mental health problem                                   |
| 21% | Recent/imminent crisis                     | 19% | Current mental health problem              | 21% | Intimate partner<br>problems               | 16%        | Recent/imminent crisis  |
| 21% | Non-alcohol substance<br>abuse problem     | 18% | Alcohol<br>problem                         | 21% | Current mental health problem              | 13%        | Ever treated for mental<br>health or substance<br>abuse problem |
| 17% | Job/financial<br>problems                  | 16% | Recent/imminent crisis                     | 19% | Job/financial<br>problems                  | 10%        | Other death of friend or family member                          |
| 17% | Suicide intent disclosed within last month | 17% | Suicide intent disclosed within last month | 18% | Suicide intent disclosed within last month | 17%        | Suicide intent disclosed within last month                      |
| 13% | Left a suicide note                        | 16% | Left a suicide note                        | 21% | Left a suicide note                        | 16%        | Left a suicide note   |

#### Diagnoses among suicide victims with a current mental health problem in Kentucky\*

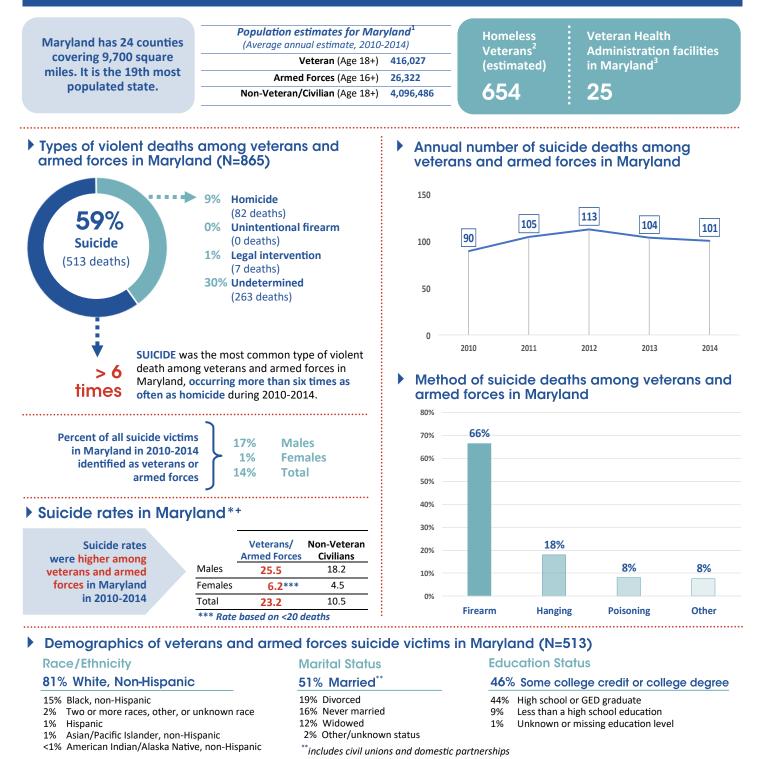
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## Suicide among Veterans and Armed Forces MARYLAND, 2010 - 2014

Data from the National Violent Death Reporting System (NVDRS)

Maryland Violent Death Reporting System (MVDRS) Joined the NVDRS: 2002 First year of data collection: 2003



Percents may not equal 100% due to rounding. \*All rates are occurrent ratios based on the number of resident and non-resident deaths that occurred in the state per 100,000 resident population. \*Statistical testing was not conducted. Differences between veterans/armed forces and non-veteran civilians may not be statistically

Assessment Report (AHAR) to Congress; <sup>3</sup>U.S. Department of Veteran Affairs

significant. Sources: <sup>1</sup>U.S. Census Bureau, American Community Survey, 2010-2014; <sup>2</sup>U.S. Department of Housing and Urban Development, 2014 Annual Homeless

#### National Violent Death Reporting System (NVDRS) Special Report on Veteran Suicide 24

#### Firearm suicide rates among male veterans/armed forces and non-veteran civilians in Maryland\*+

|              |   |                         | Firearm suicide rates*+ in Maryland, 2010-2014 |                               |  |  |
|--------------|---|-------------------------|--|-------------------------------|--|--|
| Anla wat     | erans/armed forces had:                                 |                         | Males age 18-54                                | Males age 55+                 |  |  |
| Age          | The highest firearm                                     | VETERAN/<br>ARMED FORC  | Firearm use<br>15.1 ●●●●●●●                    | Firearm use<br>19.0 ●●●●●●●●● |  |  |
| 55+          | suicide rate  | \                       | Non-firearm use<br>10.3 ●●●●●                  | Non-firearm use<br>6.5 ●●●●   |  |  |
| Age<br>18-54 | A firearm suicide rate<br>2 times higher<br>compared to | NON-VETERAI<br>CIVILIAN | N Firearm use<br>7.3 ●●●⊖                      | Firearm use<br>11.9 ●●●●●●    |  |  |
|              | non-veteran civilians                                   |                         | Non-firearm use<br>10.0 ●●●●●                  | Non-firearm use<br>9.2 ●●●●●  |  |  |

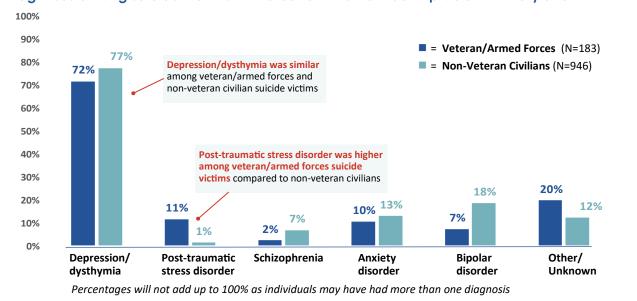
or = 2 deaths per 100,000 residents

#### Suicide circumstances by life stage among male veterans and armed forces in Maryland

In 91% of Maryland's suicide deaths among male veterans and armed forces, circumstances were documented in the records (N=452). More than one circumstance may have been noted in the record. The five most frequent circumstances by age group, as well as information about suicide intent, and a suicide note, are shown below. Circumstances by age group were not calculated for females due to small numbers.

|     | AGE 18-34   |     | AGE 35-54   |     | AGE 55-64   |            | AGE 65+   |
|-----|---|-----|---|-----|---|------------|---|
|     | 12%   |     | 26%   |     | 18%   |            | 44%   |
|     | (N=54)  |     | (N=118)   |     | (N=80)  |            | (N=200)   |
| 39% | Current mental health problem                             | 38% | Current mental health problem                             | 44% | Current mental health problem                                   | 50%        | Physical health<br>problems                                     |
| 37% | Intimate partner<br>problems                              | 34% | Intimate partner<br>problems                              | 34% | Job/financial<br>problems                                       | 35%        | Current mental health problem                                   |
| 30% | Ever treated for mental health or substance abuse problem | 30% | Ever treated for mental health or substance abuse problem | 30% | Physical health<br>problems                                     | 22%        | Ever treated for mental<br>health or substance<br>abuse problem |
| 20% | History of attempting suicide                             | 27% | Job/financial<br>problems                                 | 30% | Ever treated for mental<br>health or substance<br>abuse problem | 17%        | Recent/imminent crisis  |
| 17% | Job/financial<br>problems                                 | 19% | Alcohol<br>problem  | 20% | Intimate partner<br>problems                                    | <b>12%</b> | Intimate partner<br>problems                                    |
| 17% | Recent/imminent crisis                                    |     |   |     |   | <b>12%</b> | Other death of friend of family member                          |
| 26% | Suicide intent disclosed within last month                | 33% | Suicide intent disclosed within last month                | 33% | Suicide intent disclosed within last month                      | 31%        | Suicide intent disclosed within last month                      |
| 41% | Left a suicide note                                       | 38% | Left a suicide note                                       | 35% | Left a suicide note   | 36%        | Left a suicide note   |

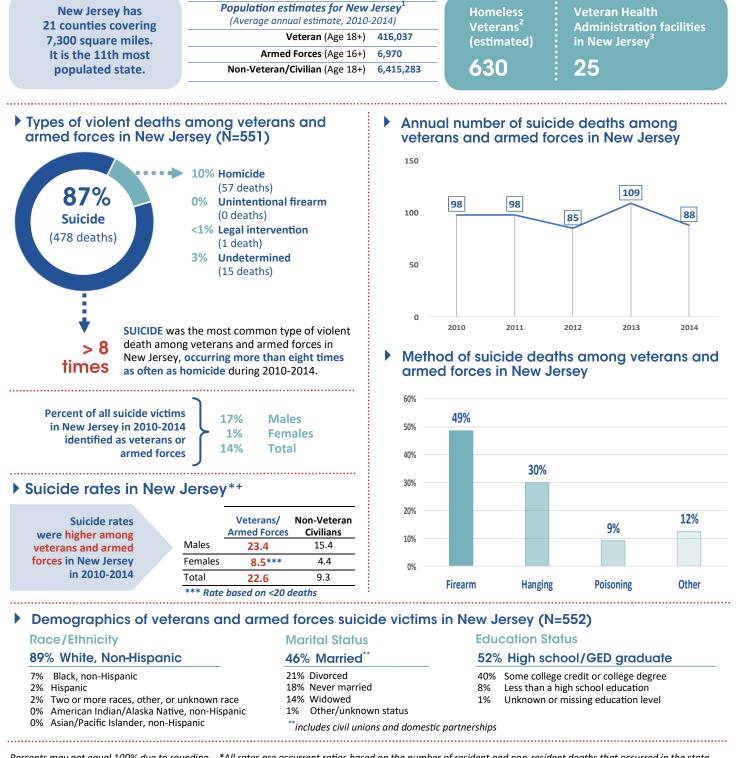
#### Diagnoses among suicide victims with a current mental health problem in Maryland+



# Suicide among Veterans and Armed Forces **NEW JERSEY, 2010 - 2014**

Data from the National Violent Death Reporting System (NVDRS)

New Jersey Violent Death Reporting System (NJVDRS) Joined the NVDRS: 2002 First year of data collection: 2003



Percents may not equal 100% due to rounding. \*All rates are occurrent ratios based on the number of resident and non-resident deaths that occurred in the state per 100,000 resident population. \*Statistical testing was not conducted. Differences between veterans/armed forces and non-veteran civilians may not be statistically significant. Sources: <sup>1</sup>U.S. Census Bureau, American Community Survey, 2010-2014; <sup>2</sup>U.S. Department of Housing and Urban Development, 2014 Annual Homeless Assessment Report (AHAR) to Congress; <sup>3</sup>U.S. Department of Veteran Affairs

Firearm suicide rates among male veterans/armed forces and non-veteran civilians in New Jersey\*+

|             |  | _                            | Firearm suicide rates*+ in New Jersey, 2010-2014 |                                |  |  |
|-------------|--|------------------------------|--|--------------------------------|--|--|
| ala vat     | erans/armed forces had:                                  |                              | Males age 18-54                                  | Males age 55+                  |  |  |
| ge          | The highest firearm                                      | VETERAN/<br>ARMED FORCES     | Firearm use<br>10.7 ●●●●●                        | Firearm use<br>12.0 ●●●●●●     |  |  |
| +           | suicide rate   | $\left\langle \right\rangle$ | Non-firearm use<br>20.3                          | Non-firearm use<br>9.2 ●●●●●   |  |  |
| Age<br>8-54 | A firearm suicide rate<br>>3 times higher<br>compared to | NON-VETERAN<br>CIVILIAN      | Firearm use<br>3.4 ●⊖                            | Firearm use<br>5.8 ●●●●●●      |  |  |
|             | non-veteran civilians                                    |                              | Non-firearm use<br>11.3 ●●●●●●                   | Non-firearm use<br>11.6 ●●●●●● |  |  |

#### or = 2 deaths per 100,000 residents

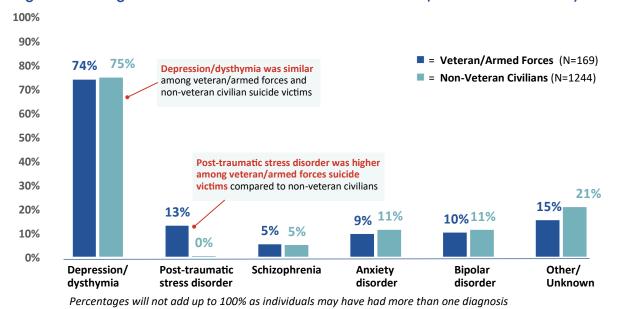
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#### Suicide circumstances by life stage among male veterans and armed forces in New Jersey

In 89% of New Jersey's suicide deaths among male veterans and armed forces, circumstances were documented in the records (N=417). More than one circumstance may have been noted in the record. The five most frequent circumstances by age group, as well as information about suicide intent, and a suicide note, are shown below. Circumstances by age group were not calculated for females due to small numbers.

|            | AGE 18-34   |     | AGE 35-54   |     | AGE 55-64   |            | AGE 65+   |
|------------|---|-----|---|-----|---|------------|---|
|            | 8%  |     | 23%   |     | 19%   |            | 50%   |
|            | (N=34)  |     | (N=94)  |     | (N=81)  |            | (N=208)   |
| 53%        | Current mental health problem                                   | 44% | Current mental health problem                                   | 37% | Current mental health problem                                   | <b>48%</b> | Physical health<br>problems                                     |
| <b>50%</b> | Ever treated for mental<br>health or substance<br>abuse problem | 44% | Ever treated for mental<br>health or substance<br>abuse problem | 35% | Ever treated for mental<br>health or substance<br>abuse problem | 37%        | Current mental health problem                                   |
| 38%        | Intimate partner<br>problems                                    | 30% | Intimate partner<br>problems                                    | 22% | Job/financial<br>problems                                       | 34%        | Ever treated for mental<br>health or substance<br>abuse problem |
| 32%        | Non-alcohol substance<br>abuse problem                          | 28% | Job/financial<br>problems                                       | 20% | Recent/imminent crisis  | 24%        | Recent/imminent crisis  |
| 29%        | Recent/imminent crisis  | 23% | Recent/imminent crisis  | 19% | History of attempting suicide                                   | 10%        | Other death of friend or family member                          |
| 15%        | Suicide intent disclosed within last month                      | 16% | Suicide intent disclosed within last month                      | 10% | Suicide intent disclosed within last month                      | 16%        | Suicide intent disclosed within last month                      |
| 32%        | Left a suicide note   | 32% | Left a suicide note   | 42% | Left a suicide note   | 35%        | Left a suicide note   |
|            |   |     |   |     |   |            |   |

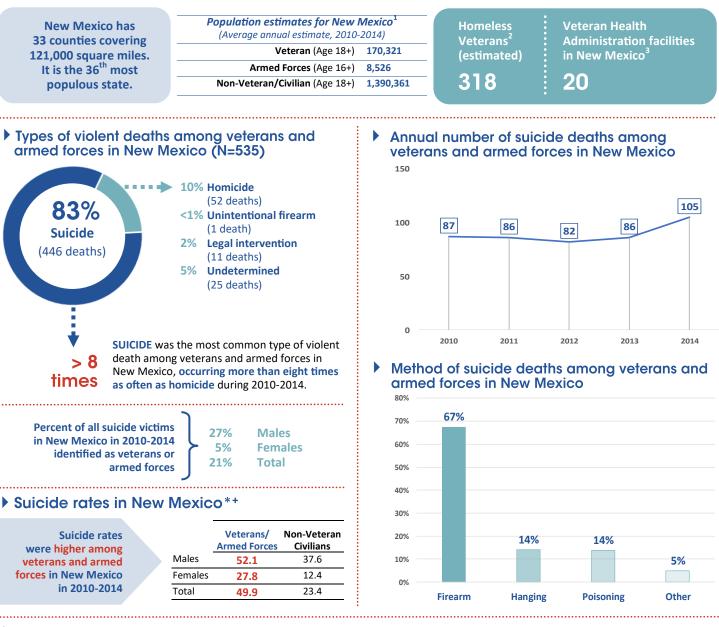
#### Diagnoses among suicide victims with a current mental health problem in New Jersey\*



## Suicide among Veterans and Armed Forces NEW MEXICO, 2010 - 2014

Data from the National Violent Death Reporting System (NVDRS)

New Mexico Violent Death Reporting System (NMVDRS) Joined the NVDRS: 2004 First year of data collection: 2005



#### Demographics of veterans and armed forces suicide victims in New Mexico (N=446)

#### Race/Ethnicity

#### 76% White, Non-Hispanic

- 19% Hispanic
- 2% American Indian/Alaska Native, non-Hispanic
- 2% Two or more races, other, or unknown race
- 1% Black, non-Hispanic
- <1% Asian/Pacific Islander, non-Hispanic

#### **Marital Status**

- 42% Married\*\*
- 28% Divorced
- 18% Never married
- 10% Widowed
- 2% Other/unknown status
  - \*\*includes civil unions and domestic partnerships
- menuues eivin unions una uomeste pur inc

#### **Education Status**

#### 61% Some college credit or college degree

- 31% High school or GED graduate
- 5% Less than a high school education
- 3% Unknown or missing education level

Percents may not equal 100% due to rounding. \*All rates are occurrent ratios based on the number of resident and non-resident deaths that occurred in the state per 100,000 resident population. \*Statistical testing was not conducted. Differences between veterans/armed forces and non-veteran civilians may not be statistically significant. Sources: <sup>1</sup>U.S. Census Bureau, American Community Survey, 2010-2014; <sup>2</sup>U.S. Department of Housing and Urban Development, 2014 Annual Homeless Assessment Report (AHAR) to Congress; <sup>3</sup>U.S. Department of Veteran Affairs

Þ Firearm suicide rates among male veterans/armed forces and non-veteran civilians in New Mexico\*+

|               |   |                          | Firearm suicide rates*+ in New Mexico, 2010-2014 |                                |  |  |
|---------------|---|--------------------------|--|--------------------------------|--|--|
| Anla wat      | owned for society of                                      |                          | Males age 18-54                                  | Males age 55+                  |  |  |
| Age           | erans/armed forces had:<br>The highest firearm            | VETERAN/<br>ARMED FORCES | Firearm use 31.7                                 | Firearm use<br>38.9            |  |  |
| 55+           | suicide rate  |                          | Non-firearm use<br>22.3                          | Non-firearm use<br>12.2 ●●●●●● |  |  |
| Age<br>  8-54 | A firearm suicide rate<br>1.6 times higher<br>compared to | NON-VETERAN<br>CIVILIAN  | Firearm use<br>20.0 ••••••••                     | Firearm use 22.1               |  |  |
|               | non-veteran civilians                                     |                          | Non-firearm use<br>19.1 ●●●●●●●●                 | Non-firearm use<br>11.4 ●●●●●● |  |  |

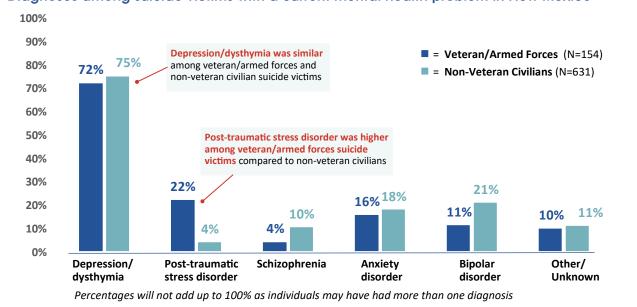
or = 2 deaths per 100,000 residents \_\_\_\_\_ 

#### Suicide circumstances by life stage among male veterans and armed forces in New Mexico

In 91% of New Mexico's suicide deaths among male veterans and armed forces, circumstances were documented in the records (N=385). More than one circumstance may have been noted in the record. The five most frequent circumstances by age group, as well as information about suicide intent, and a suicide note, are shown below. Circumstances by age group were not calculated for females due to small numbers.

|     | AGE 18-34   |     | AGE 35-54   |     | AGE 55-64   |                  | AGE 65+   |
|-----|---|-----|---|-----|---|------------------|---|
|     | 12%   |     | 24%   |     | 17%   |                  | 46%   |
|     | (N=48)  |     | (N=94)  |     | (N=67)  |                  | (N=176)   |
| 40% | Intimate partner<br>problems                                    | 53% | Current mental health problem                                   | 40% | Physical health<br>problems                                     | <mark>61%</mark> | Physical health<br>problems                                     |
| 40% | Recent/imminent crisis  | 51% | Ever treated for mental<br>health or substance<br>abuse problem | 39% | Current mental health problem                                   | 27%              | Recent/imminent crisis  |
| 38% | Current mental health problem                                   | 33% | Intimate partner<br>problems                                    | 39% | Ever treated for mental<br>health or substance<br>abuse problem | 27%              | Current mental health problem                                   |
| 33% | Ever treated for mental<br>health or substance<br>abuse problem | 33% | Job/financial<br>problems                                       | 34% | Intimate partner<br>problems                                    | 22%              | Ever treated for mental<br>health or substance<br>abuse problem |
| 29% | History of attempting suicide                                   | 31% | History of attempting suicide                                   | 30% | Alcohol<br>problem  | 14%              | Alcohol<br>problem  |
| 54% | Suicide intent disclosed within last month                      | 38% | Suicide intent disclosed within last month                      | 39% | Suicide intent disclosed within last month                      | 33%              | Suicide intent disclosed within last month                      |
| 25% | Left a suicide note   | 41% | Left a suicide note   | 37% | Left a suicide note   | 41%              | Left a suicide note   |

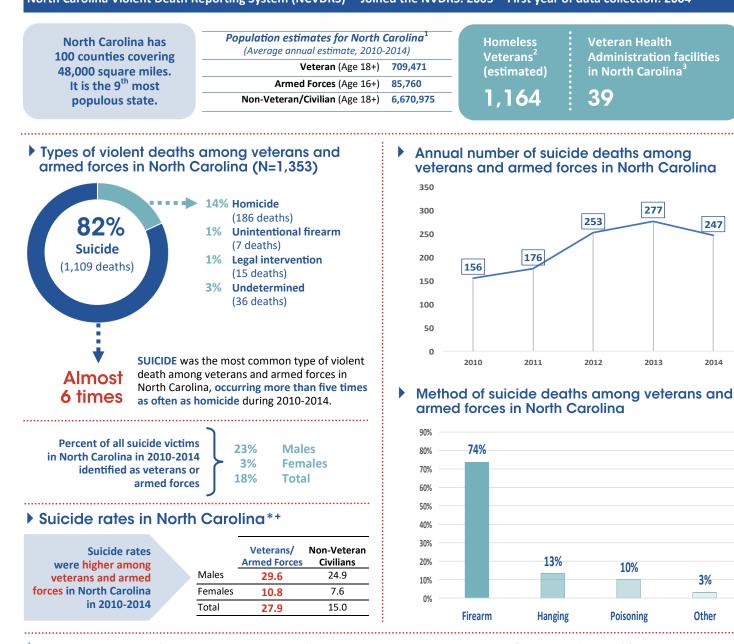
#### Diagnoses among suicide victims with a current mental health problem in New Mexico+



# Suicide among Veterans and Armed Forces NORTH CAROLINA, 2010-2014

Data from the National Violent Death Reporting System (NVDRS)

North Carolina Violent Death Reporting System (NCVDRS) Joined the NVDRS: 2003 First year of data collection: 2004



#### Demographics of veterans and armed forces suicide victims in North Carolina (N=1,109)

#### Race/Ethnicity

#### 89% White, Non-Hispanic

- 8% Black, non-Hispanic
- 1% Hispanic
- 1% Two or more races, other, or unknown race
- <1% American Indian/Alaska Native, non-Hispanic
- <1% Asian/Pacific Islander, non-Hispanic

#### **Marital Status**

- 50% Married\*\*
- 23% Divorced
- 15% Never married
- 10% Widowed
- 3% Other/unknown status
- \*\*includes civil unions and domestic partnerships
- 37% Some college credit or college degree

**Education Status** 

- 34% High school or GED graduate
- 6% Less than a high school education
- 23% Unknown or missing education level
- Percents may not equal 100% due to rounding. \*All rates are occurrent ratios based on the number of resident and non-resident deaths that occurred in the state per 100,000 resident population. \*Statistical testing was not conducted. Differences between veterans/armed forces and non-veteran civilians may not be statistically significant. Sources: <sup>1</sup>U.S. Census Bureau, American Community Survey, 2010-2014; <sup>2</sup>U.S. Department of Housing and Urban Development, 2014 Annual Homeless Assessment Report (AHAR) to Congress; <sup>3</sup>U.S. Department of Veteran Affairs

Firearm suicide rates among male veterans/armed forces and non-veteran civilians in North Carolina\*\*

|             |   |                          | Firearm suicide rates*+ in North Carolina, 2010-20 |                                |  |  |  |
|-------------|---|--------------------------|--|--------------------------------|--|--|--|
| alo vot     | erans/armed forces had:                                   |                          | Males age 18-54                                    | Males age 55+                  |  |  |  |
|             | A firearm suicide rate                                    | VETERAN/<br>ARMED FORCES | Firearm use<br>21.5                                | Firearm use<br>22.4 •••••••••• |  |  |  |
| Age<br>55+  | similar to non-veteran<br>civilians                       |                          | Non-firearm use<br>11.8 ●●●●●●                     | Non-firearm use<br>4.7 ●●●     |  |  |  |
| Age<br>8-54 | A firearm suicide rate<br>1.6 times higher<br>compared to | NON-VETERAN<br>CIVILIAN  | Firearm use<br>13.2 ●●●●●●                         | Firearm use<br>22.5            |  |  |  |
|             | non-veteran civilians                                     | J                        | Non-firearm use<br>10.0 ●●●●●                      | Non-firearm use<br>7.4 ●●●⊖    |  |  |  |

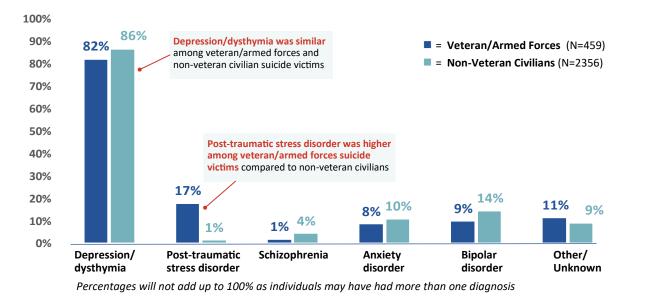
or = 2 deaths per 100,000 residents

#### Suicide circumstances by life stage among male veterans and armed forces in North Carolina

In 92% of North Carolina's suicide deaths among male veterans and armed forces, circumstances were documented in the records (N=981). More than one circumstance may have been noted in the record. The five most frequent circumstances by age group, as well as information about suicide intent, and a suicide note, are shown below. Circumstances by age group were not calculated for females due to small numbers.

|     | AGE 18-34   |            | AGE 35-54   |     | AGE 55-64   |     | AGE 65+   |
|-----|---|------------|---|-----|---|-----|---|
|     | 20%   |            | 25%   |     | 16%   |     | 39%   |
|     | (N=192)   |            | (N=247)   |     | (N=161)   |     | (N=381)   |
| 44% | Recent/imminent crisis  | <b>49%</b> | Current mental health problem                                   | 57% | Current mental health problem                                   | 57% | Physical health<br>problems                                     |
| 42% | Intimate partner<br>problems                                    | 48%        | Ever treated for mental<br>health or substance<br>abuse problem | 57% | Ever treated for mental<br>health or substance<br>abuse problem | 39% | Current mental health problem                                   |
| 39% | Current mental health problem                                   | 39%        | Recent/imminent crisis  | 29% | Physical health problems  | 38% | Ever treated for mental<br>health or substance<br>abuse problem |
| 38% | Ever treated for mental<br>health or substance<br>abuse problem | 38%        | Intimate partner<br>problems                                    | 29% | Recent/imminent crisis  | 26% | Recent/imminent crisis  |
| 20% | Job/financial<br>problems                                       | 19%        | Alcohol<br>problem  | 22% | Intimate partner<br>problems                                    | 11% | Intimate partner<br>problems                                    |
| 22% | Suicide intent disclosed within last month                      | 25%        | Suicide intent disclosed within last month                      | 33% | Suicide intent disclosed within last month                      | 32% | Suicide intent disclosed within last month                      |
| 28% | Left a suicide note   | 37%        | Left a suicide note   | 31% | Left a suicide note   | 30% | Left a suicide note   |

#### Diagnoses among suicide victims with a current mental health problem in North Carolina\*



# Suicide among Veterans and Armed Forces OHIO, 2011 - 2014

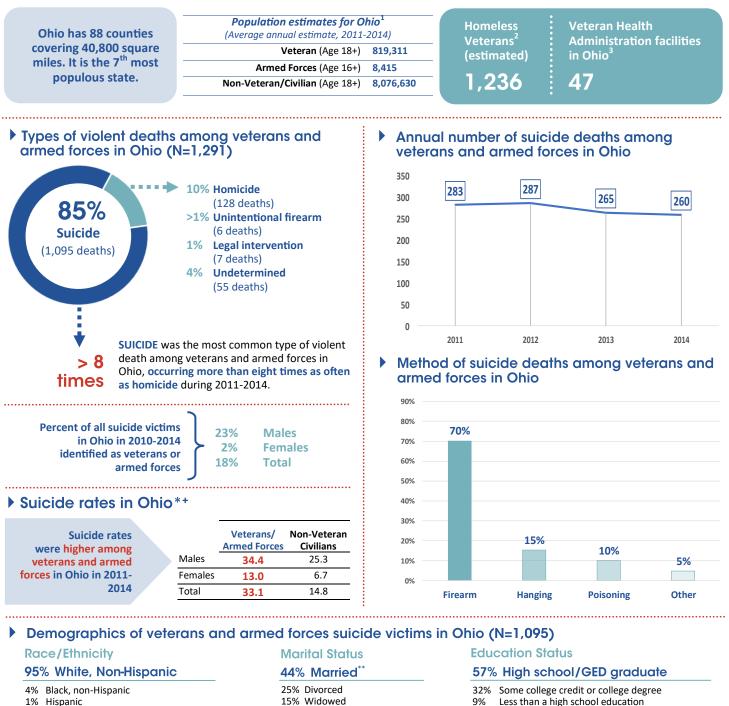
Data from the National Violent Death Reporting System (NVDRS)

1% Asian/Pacific Islander, non-Hispanic

<1% Two or more races, other, or unknown race

0% American Indian/Alaska Native, non-Hispanic

Ohio Violent Death Reporting System (OHVDRS) Joined the NVDRS: 2009 First year of data collection: 2010 (66% of deaths)



- 1% Unknown or missing education level
- 1% Unknown or missing education iev

Percents may not equal 100% due to rounding. \*All rates are occurrent ratios based on the number of resident and non-resident deaths that occurred in the state per 100,000 resident population. \*Statistical testing was not conducted. Differences between veterans/armed forces and non-veteran civilians may not be statistically significant. Sources: <sup>1</sup>U.S. Census Bureau, American Community Survey, 2010-2014; <sup>2</sup>U.S. Department of Housing and Urban Development, 2014 Annual Homeless Assessment Report (AHAR) to Congress; <sup>3</sup>U.S. Department of Veteran Affairs

3% Other/unknown status

\*\*includes civil unions and domestic partnerships

13% Never married

#### Firearm suicide rates among male veterans/armed forces and non-veteran civilians in Ohio\*\*

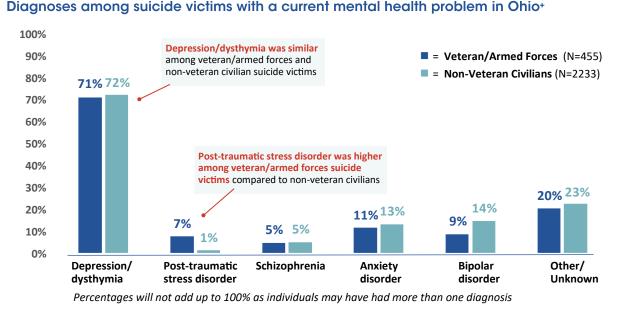
| a.1                |   |                          | Males age 18-54                   | Males age 55+               |
|--------------------|---|--------------------------|-----------------------------------|-----------------------------|
| Age                | erans/armed forces had:                                   | VETERAN/<br>ARMED FORCES | Firearm use<br>20.7 ●●●●●●●●●●    | Firearm use<br>25.9         |
| 55+                | suicide rate  |                          | Non-firearm use<br>17.7 ●●●●●●●●● | Non-firearm use<br>6.9 ●●●● |
| Age<br><b>8-54</b> | A firearm suicide rate<br>1.5 times higher<br>compared to | NON-VETERAN<br>CIVILIAN  | Firearm use<br>11.8 ●●●●●●        | Firearm use<br>16.5         |
|                    | non-veteran civilians                                     |                          | Non-firearm use<br>13.8 ●●●●●●●   | Non-firearm use<br>8.2 ●●●● |

or = 2 deaths per 100,000 residents

#### Suicide circumstances by life stage among male veterans and armed forces in Ohio

In 87% of Ohio's suicide deaths among male veterans and armed forces, circumstances were documented in the records (N=933). More than one circumstance may have been noted in the record. The five most frequent circumstances by age group, as well as information about suicide intent, and a suicide note, are shown below. Circumstances by age group were not calculated for females due to small numbers.

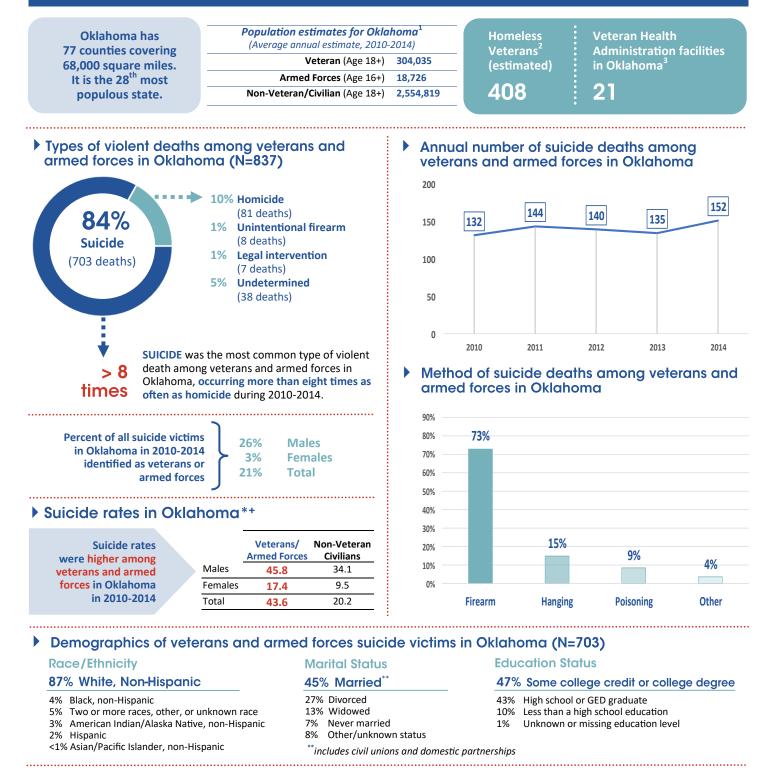
| AGE 18-34<br>10%<br>(N=93) |   | AGE 35-54<br>23%<br>(N=215) |   | AGE 55-64<br>21%<br>(N=193) |  | AGE 65+<br>46%<br>(N=432) |   |     |                               |     |                               |     |   |     |                               |
|----------------------------|---|-----------------------------|---|-----------------------------|--|---------------------------|---|-----|-------------------------------|-----|-------------------------------|-----|---|-----|-------------------------------|
|                            |   |                             |   |                             |  |                           |   | 57% | Current mental health problem | 46% | Current mental health problem | 55% | Current mental health problem                                   | 53% | Physical health<br>problems   |
|                            |   |                             |   |                             |  |                           |   | 48% | Intimate partner<br>problems  | 41% | Intimate partner<br>problems  | 44% | Ever treated for mental<br>health or substance<br>abuse problem | 42% | Current mental health problem |
| 40%                        | Ever treated for mental<br>health or substance<br>abuse problem | 36%                         | Ever treated for mental<br>health or substance<br>abuse problem | 33%                         | Recent/imminent crisis                     | 25%                       | Recent/imminent crisis  |     |                               |     |                               |     |   |     |                               |
| 39%                        | Recent/imminent crisis  | 35%                         | Recent/imminent crisis  | 24%                         | Physical health<br>problems                | 24%                       | Ever treated for mental<br>health or substance<br>abuse problem |     |                               |     |                               |     |   |     |                               |
| 26%                        | Argument or conflict  | 30%                         | Job/financial<br>problems                                       | 20%                         | Job/financial<br>problems                  | 13%                       | Other death of friend or<br>family member                       |     |                               |     |                               |     |   |     |                               |
| 27%                        | Suicide intent disclosed within last month                      | 26%                         | Suicide intent disclosed within last month                      | 20%                         | Suicide intent disclosed within last month | 24%                       | Suicide intent disclosed within last month                      |     |                               |     |                               |     |   |     |                               |
| 35%                        | Left a suicide note   | 40%                         | Left a suicide note   | 39%                         | Left a suicide note                        | 33%                       | Left a suicide note   |     |                               |     |                               |     |   |     |                               |



# Suicide among Veterans and Armed Forces OKLAHOMA, 2010 - 2014

Data from the National Violent Death Reporting System (NVDRS)

Oklahoma Violent Death Reporting System (OKVDRS) Joined the NVDRS: 2003 First year of data collection: 2004



Percents may not equal 100% due to rounding. \*All rates are occurrent ratios based on the number of resident and non-resident deaths that occurred in the state per 100,000 resident population. \*Statistical testing was not conducted. Differences between veterans/armed forces and non-veteran civilians may not be statistically significant. Sources: <sup>1</sup>U.S. Census Bureau, American Community Survey, 2010-2014; <sup>2</sup>U.S. Department of Housing and Urban Development, 2014 Annual Homeless Assessment Report (AHAR) to Congress; <sup>3</sup>U.S. Department of Veteran Affairs

#### Firearm suicide rates among male veterans/armed forces and non-veteran civilians in Oklahoma\*+

| Anda wat            | annual fanna de fan an a la ande                          |                          | Males age 18-54                    | Males age 55+                   |  |
|---------------------|---|--------------------------|------------------------------------|---------------------------------|--|
| Age                 | erans/armed forces had:                                   | VETERAN/<br>ARMED FORCES | Firearm use<br>31.5                | Firearm use 34.7 •••••••••••••• |  |
| 55+                 | suicide rate  |                          | Non-firearm use<br>21.2 •••••••••• | Non-firearm use<br>7.2 ●●●●     |  |
| Age<br><b>8-</b> 54 | A firearm suicide rate<br>1.5 times higher<br>compared to | NON-VETERAN<br>CIVILIAN  | Firearm use<br>20.9                | Firearm use<br>23.2             |  |
|                     | non-veteran civilians                                     |                          | Non-firearm use                    | Non-firearm use                 |  |

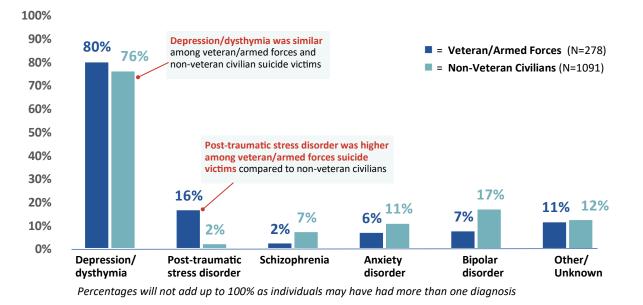
or • = 2 deaths per 100,000 residents

#### Suicide circumstances by life stage among male veterans and armed forces in Oklahoma

In 96% of Oklahoma's suicide deaths among male veterans and armed forces, circumstances were documented in the records (N=656). More than one circumstance may have been noted in the record. The five most frequent circumstances by age group, as well as information about suicide intent, and a suicide note, are shown below. Circumstances by age group were not calculated for females due to small numbers.

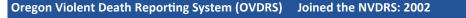
| AGE 18-34<br>15%<br>(N=100) |   | AGE 35-54<br>26%<br>(N=170) |   | AGE 55-64<br>20%<br>(N=134) |  | AGE 65+<br>38%<br>(N=252) |   |     |                               |     |                               |     |                               |     |                               |
|-----------------------------|---|-----------------------------|---|-----------------------------|--|---------------------------|---|-----|-------------------------------|-----|-------------------------------|-----|-------------------------------|-----|-------------------------------|
|                             |   |                             |   |                             |  |                           |   | 53% | Intimate partner<br>problems  | 51% | Current mental health problem | 37% | Current mental health problem | 70% | Physical health<br>problems   |
|                             |   |                             |   |                             |  |                           |   | 45% | Current mental health problem | 47% | Intimate partner<br>problems  | 35% | Physical health problems      | 34% | Current mental health problem |
| 41%                         | Recent/imminent crisis  | 33%                         | Ever treated for mental<br>health or substance<br>abuse problem | 27%                         | Intimate partner<br>problems               | 19%                       | Recent/imminent crisis  |     |                               |     |                               |     |                               |     |                               |
| 31%                         | Job/financial<br>problems                                       | 33%                         | Recent/imminent crisis  | 27%                         | Recent/imminent crisis                     | <b>12%</b>                | Other death of friend or<br>family member                       |     |                               |     |                               |     |                               |     |                               |
| 29%                         | Ever treated for mental<br>health or substance<br>abuse problem | 29%                         | Job/financial<br>problems                                       | 24%                         | Alcohol<br>problem                         | 12%                       | Ever treated for mental<br>health or substance<br>abuse problem |     |                               |     |                               |     |                               |     |                               |
| 21%                         | Suicide intent disclosed within last month                      | 35%                         | Suicide intent disclosed within last month                      | 24%                         | Suicide intent disclosed within last month | 28%                       | Suicide intent disclosed within last month                      |     |                               |     |                               |     |                               |     |                               |
| 37%                         | Left a suicide note   | 41%                         | Left a suicide note   | 31%                         | Left a suicide note                        | 35%                       | Left a suicide note   |     |                               |     |                               |     |                               |     |                               |

#### Diagnoses among suicide victims with a current mental health problem in Oklahoma\*

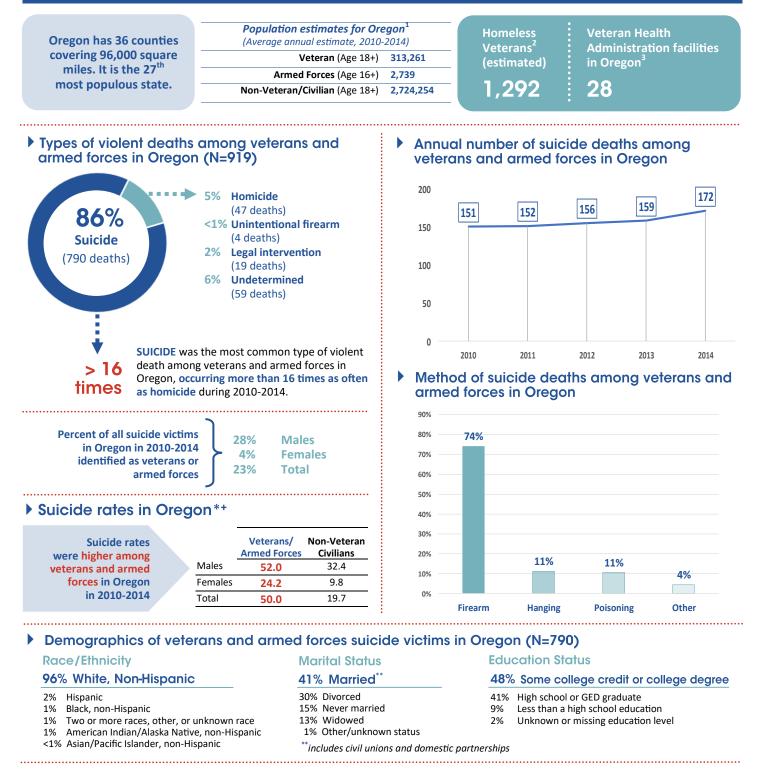


# Suicide among Veterans and Armed Forces OREGON, 2010 - 2014

Data from the National Violent Death Reporting System (NVDRS)



First year of data collection: 2003



Percents may not equal 100% due to rounding. \*All rates are occurrent ratios based on the number of resident and non-resident deaths that occurred in the state per 100,000 resident population. \*Statistical testing was not conducted. Differences between veterans/armed forces and non-veteran civilians may not be statistically significant. Sources: <sup>1</sup>U.S. Census Bureau, American Community Survey, 2010-2014; <sup>2</sup>U.S. Department of Housing and Urban Development, 2014 Annual Homeless Assessment Report (AHAR) to Congress; <sup>3</sup>U.S. Department of Veteran Affairs

Firearm suicide rates among male veterans/armed forces and non-veteran civilians in Oregon\*\*

|              |                                 |                          | Firearm suicide rates*+ in Oregon, 2010-2014 |                                      |  |  |  |
|--------------|---------------------------------|--------------------------|--|--------------------------------------|--|--|--|
| Male vet     | erans/armed forces had:         |                          | Males age 18-54                              | Males age 55+                        |  |  |  |
|              | The highest firearm             | VETERAN/<br>ARMED FORCES | Firearm use<br>41.6 ••••••                   | Firearm use<br>38.8 •••••••••••••••• |  |  |  |
| Age<br>18-54 | A firearm suicide rate          | >                        | Non-firearm use<br>21.6 ●●●●●●●              | Non-firearm use<br>9.0 ●●●●●         |  |  |  |
|              | 2.6 times higher<br>compared to | NON-VETERAN<br>CIVILIAN  | Firearm use<br>15.8                          | Firearm use<br>22.4 •••••••••        |  |  |  |
|              | non-veteran civilians           |                          | Non-firearm use<br>15.9 ●●●●●●●              | Non-firearm use<br>11.9 ●●●●●●       |  |  |  |

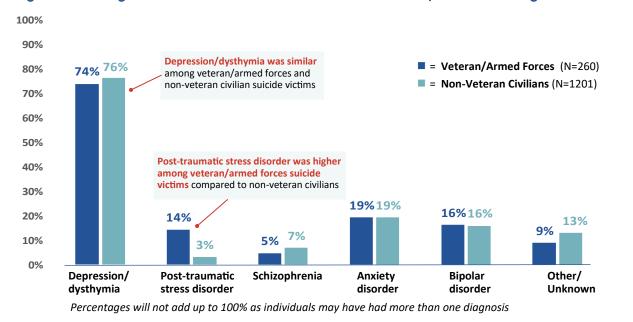
or = 2 deaths per 100,000 residents

## Suicide circumstances by life stage among male veterans and armed forces in Oregon

In 92% of Oregon's suicide deaths among male veterans and armed forces, circumstances were documented in the records (N=702). More than one circumstance may have been noted in the record. The five most frequent circumstances by age group, as well as information about suicide intent, and a suicide note, are shown below. Circumstances by age group were not calculated for females due to small numbers.

|     | AGE 18-34   |     | AGE 35-54   |     | AGE 55-64   |     | AGE 65+   |
|-----|---|-----|---|-----|---|-----|---|
|     | 8%  |     | 25%   |     | 21%   |     | 46%   |
|     | (N=58)  |     | (N=176)   |     | (N=145)   |     | (N=323)   |
| 43% | Intimate partner<br>problems                                    | 49% | Current mental health problem                                   | 41% | Current mental health problem                                   | 65% | Physical health<br>problems                                     |
| 43% | Current mental health problem                                   | 46% | Ever treated for mental<br>health or substance<br>abuse problem | 38% | Ever treated for mental<br>health or substance<br>abuse problem | 41% | Recent/imminent crisis  |
| 36% | Recent/imminent crisis  | 40% | Intimate partner<br>problems                                    | 34% | Recent/imminent crisis  | 22% | Current mental health problem                                   |
| 24% | Ever treated for mental<br>health or substance<br>abuse problem | 36% | Recent/imminent crisis  | 31% | Alcohol<br>problem  | 20% | Ever treated for mental<br>health or substance<br>abuse problem |
| 24% | Non-alcohol substance<br>abuse problem                          | 31% | Job/financial<br>problems                                       | 30% | Job/financial<br>problems                                       | 14% | Other death of friend or family member                          |
| 36% | Suicide intent disclosed within last month                      | 36% | Suicide intent disclosed within last month                      | 32% | Suicide intent disclosed within last month                      | 36% | Suicide intent disclosed within last month                      |
| 17% | Left a suicide note   | 35% | Left a suicide note   | 39% | Left a suicide note   | 42% | Left a suicide note   |

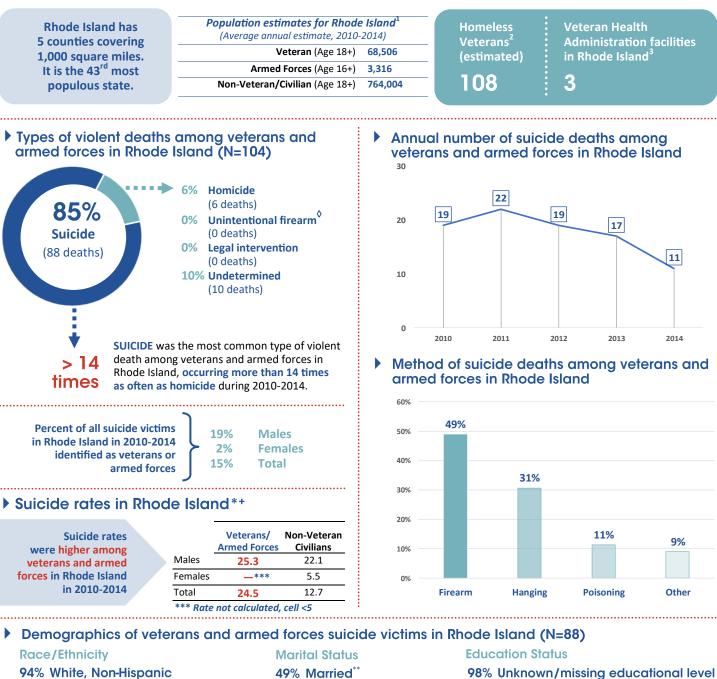
### Diagnoses among suicide victims with a current mental health problem in Oregon.



## **Suicide among Veterans and Armed Forces** RHODE ISLAND, 2010 - 2014

Data from the National Violent Death Reporting System (NVDRS)





- 3% Hispanic 1% Black, non-Hispanic
- 1% Two or more races, other, or unknown race
- 0% American Indian/Alaska Native, non-Hispanic
- 0% Asian/Pacific Islander, non-Hispanic
- 22% Divorced
- 17% Never married
- 10% Widowed
- 2% Other/unknown status
- \*\*includes civil unions and domestic partnerships

- Some college credit or college degree 1%
- Less than a high school education 1%
- 0% High school or GED graduate

Percents may not equal 100% due to rounding. It is data system. \*All rates are occurrent ratios based on the number of resident and non-resident deaths that occurred in the state per 100,000 resident population. \*Statistical testing was not conducted. Differences between veterans/armed forces and non-veteran civilians may not be statistically significant. Sources: <sup>1</sup>U.S. Census Bureau, American Community Survey, 2010-2014; <sup>2</sup>U.S. Department of Housing and Urban Development, 2014 Annual Homeless Assessment Report (AHAR) to Congress; <sup>3</sup>U.S. Department of Veteran Affairs

### Firearm suicide rates among male veterans/armed forces and non-veteran civilians in Rhode Island\*+

|                                     |                         | Firearm suicide rates*+ in Rhode Island, 2010-2014 |
|-------------------------------------|-------------------------|--|
| -                                   |                         | Males, All Ages                                    |
| Male veterans/armed forces had:     | VETERAN/                | Firearm use  |
| firearm suicide rate 3 times higher | ARMED FORCES            | 12.5   |
| ompared to non-veteran civilians    |                         | Non-firearm use                                    |
|                                     |                         |  |
|                                     | NON-VETERAN<br>CIVILIAN | Firearm use  |
|                                     |                         | Non-firearm use                                    |
|                                     | )                       | 17.9   |

or = 2 deaths per 100,000 residents

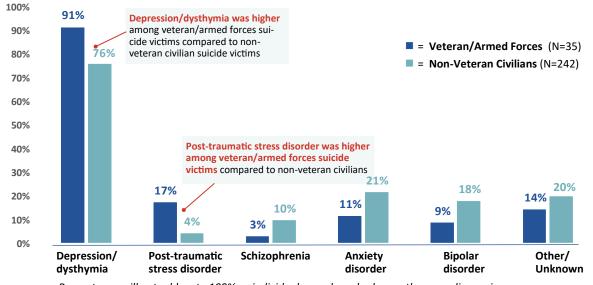
### Suicide circumstances by life stage among male veterans and armed forces in Rhode Island

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In 95% of Rhode Island's suicide deaths among male veterans and armed forces, circumstances were documented in the records (N=81). More than one circumstance may have been noted in the record. The five most frequent circumstances by age group, as well as information about suicide intent, and a suicide note, are shown below. Circumstances by age group were not calculated for females due to small numbers.

|          | AGE 18-34                                  |            | AGE 35-54   |         | AGE 55-64   |            | AGE 65+   |
|----------|--|------------|---|---------|---|------------|---|
|          | 9%   |            | 31%   |         | 21%   |            | 40%   |
|          | (N=7)                                      |            | (N=25)  |         | (N=17)  |            | (N=32)  |
| _        | Not calculated, n<5                        | <b>68%</b> | Current mental health problem                                   | 47%     | Intimate partner<br>problems                              | 47%        | Physical health<br>problems                                     |
| -        | Not calculated, n<5                        | 64%        | Ever treated for mental<br>health or substance<br>abuse problem | 29%     | Physical health<br>problems                               | 38%        | Ever treated for mental<br>health or substance<br>abuse problem |
| -        | Not calculated, n<5                        | 48%        | Job/financial<br>problems                                       | 29%     | Current mental health<br>problem                          | 31%        | Current mental health<br>problem                                |
| _        | Not calculated, n<5                        | 36%        | Alcohol<br>problem  | 29%     | Ever treated for mental health or substance abuse problem | 22%        | Recent/imminent crisis  |
| -        | Not calculated, n<5                        | 32%        | Recent/imminent crisis  | 29%     | Recent/imminent crisis                                    | 16%        | Intimate partner<br>problems                                    |
|          |  |            |   |         |   | <b>16%</b> | History of attempting suicide                                   |
| —<br>n<5 | Suicide intent disclosed within last month | 32%        | Suicide intent disclosed within last month                      | <br>n<5 | Suicide intent disclosed within last month                | <br>n<5    | Suicide intent disclosed within last month                      |
| 0%       | Left a suicide note                        | 32%        | Left a suicide note   | 47%     | Left a suicide note                                       | 31%        | Left a suicide note   |

### Diagnoses among suicide victims with a current mental health problem in Rhode Island+

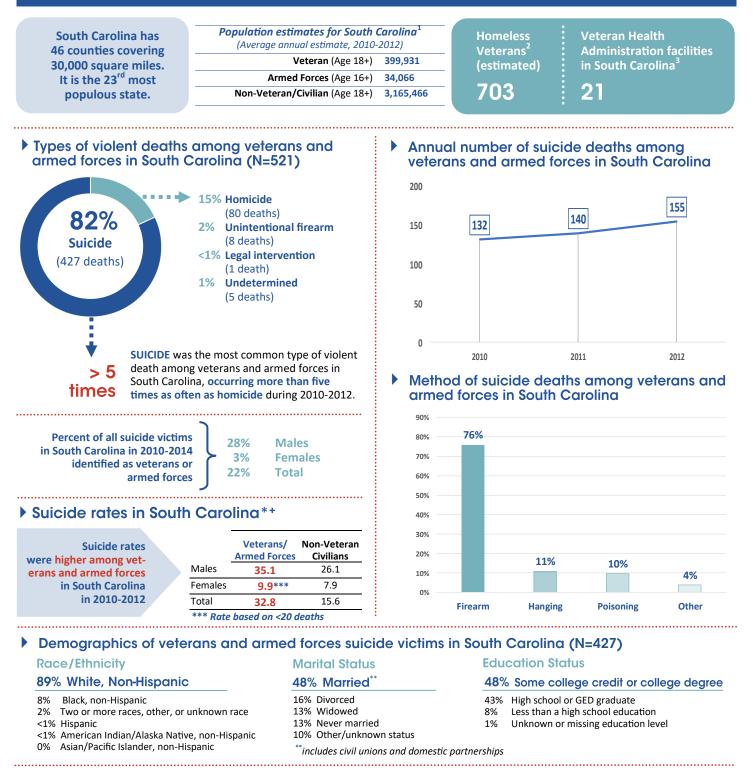


Percentages will not add up to 100% as individuals may have had more than one diagnosis

## Suicide among Veterans and Armed Forces SOUTH CAROLINA, 2010-2012

Data from the National Violent Death Reporting System (NVDRS)

South Carolina Violent Death Reporting System (SCVDRS) Joined the NVDRS: 2002 First year of data collection: 2003



Percents may not equal 100% due to rounding. \*All rates are occurrent ratios based on the number of resident and non-resident deaths that occurred in the state per 100,000 resident population. \*Statistical testing was not conducted. Differences between veterans/armed forces and non-veteran civilians may not be statistically significant. Sources: <sup>1</sup>U.S. Census Bureau, American Community Survey, 2010-2014; <sup>2</sup>U.S. Department of Housing and Urban Development, 2014 Annual Homeless Assessment Report (AHAR) to Congress; <sup>3</sup>U.S. Department of Veteran Affairs

Firearm suicide rates among male veterans/armed forces and non-veteran civilians in South Carolina\*\*

| a                   |   |                          | Males age 18-54                 | Males age 55+                   |
|---------------------|---|--------------------------|---------------------------------|---------------------------------|
| Age                 | erans/armed forces had:                                   | VETERAN/<br>ARMED FORCES | Firearm use<br>21.0 ●●●●●●●●●●  | Firearm use<br>29.2 ••••••••••• |
| 55+                 | suicide rate  |                          | Non-firearm use<br>14.0 ●●●●●●● | Non-firearm use<br>6.0 ●●●      |
| 4ge<br><b>8-5</b> 4 | A firearm suicide rate<br>1.3 times higher<br>compared to | NON-VETERAN<br>CIVILIAN  | Firearm use<br>15.8 ●●●●●●●●    | Firearm use<br>19.8             |
|                     | non-veteran civilians                                     |                          | Non-firearm use<br>10.2 ●●●●●   | Non-firearm use<br>6.5 ●●●●     |

or = 2 deaths per 100,000 residents

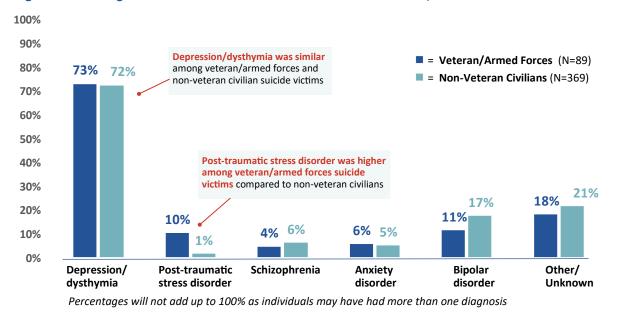
## Suicide circumstances by life stage among male veterans and armed forces in South Carolina

.....

In 79% of South Carolina's suicide deaths among male veterans and armed forces, circumstances were documented in the records (N=328). More than one circumstance may have been noted in the record. The five most frequent circumstances by age group, as well as information about suicide intent, and a suicide note, are shown below. Circumstances by age group were not calculated for females due to small numbers.

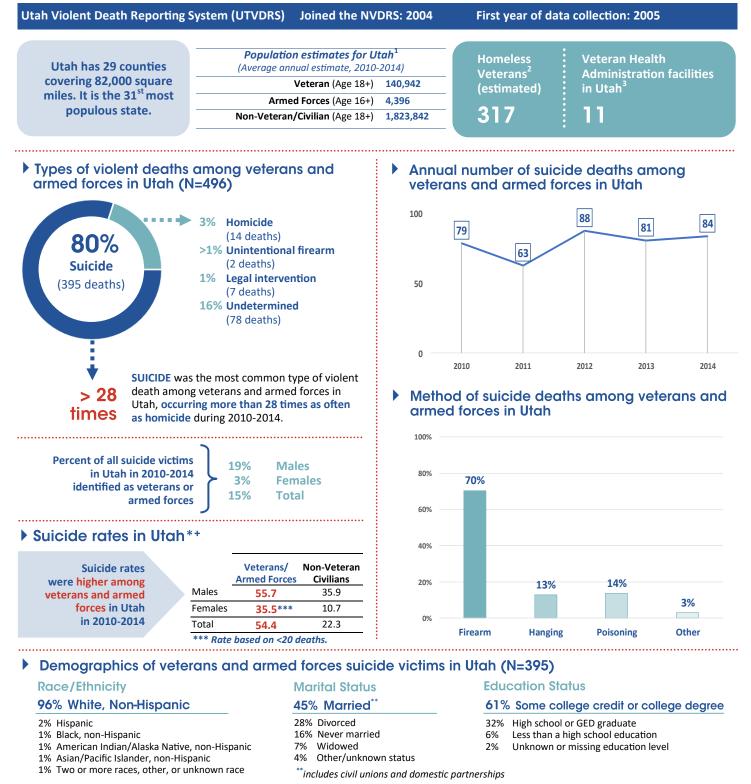
|     | AGE 18-34   |     | AGE 35-54   |     | AGE 55-64                                  |                  | AGE 65+   |
|-----|---|-----|---|-----|--|------------------|---|
|     | 13%   |     | 24%   |     | 21%  |                  | 43%   |
|     | (N=41)  |     | (N=78)  |     | (N=69)                                     |                  | (N=140)   |
| 37% | Intimate partner<br>problems                                    | 41% | Current mental health problem                                   | 30% | Physical health<br>problems                | <mark>61%</mark> | Physical health<br>problems                                     |
| 24% | Job/financial<br>problems                                       | 37% | Intimate partner<br>problems                                    | 26% | Current mental health problem              | <b>18%</b>       | Current mental health problem                                   |
| 22% | Current mental health problem                                   | 26% | Job/financial<br>problems                                       | 25% | Job/financial<br>problems                  | 11%              | Intimate partner<br>problems                                    |
| 12% | Ever treated for mental<br>health or substance<br>abuse problem | 21% | Ever treated for mental<br>health or substance<br>abuse problem | 16% | History of attempting suicide              | 11%              | Ever treated for mental<br>health or substance<br>abuse problem |
| 12% | History of attempting suicide                                   | 21% | History of attempting suicide                                   | 14% | Alcohol<br>problem                         | 8%               | Alcohol<br>problem  |
| 29% | Suicide intent disclosed within last month                      | 26% | Suicide intent disclosed within last month                      | 20% | Suicide intent disclosed within last month | 28%              | Suicide intent disclosed within last month                      |
| 27% | Left a suicide note   | 26% | Left a suicide note   | 30% | Left a suicide note                        | 30%              | Left a suicide note   |

## Diagnoses among suicide victims with a current mental health problem in South Carolina<sup>+</sup>



# Suicide among Veterans and Armed Forces UTAH, 2010 - 2014

Data from the National Violent Death Reporting System (NVDRS)



Percents may not equal 100% due to rounding. \*All rates are occurrent ratios based on the number of resident and non-resident deaths that occurred in the state per 100,000 resident population. \*Statistical testing was not conducted. Differences between veterans/armed forces and non-veteran civilians may not be statistically significant. Sources: <sup>1</sup>U.S. Census Bureau, American Community Survey, 2010-2014; <sup>2</sup>U.S. Department of Housing and Urban Development, 2014 Annual Homeless Assessment Report (AHAR) to Congress; <sup>3</sup>U.S. Department of Veteran Affairs

Firearm suicide rates among male veterans/armed forces and non-veteran civilians in Utah\*\*

|              |                              | _   | Firearm suicide rates*+ in Utah, 2010-2014 |                                  |                                 |  |  |
|--------------|------------------------------|-----|--|----------------------------------|---------------------------------|--|--|
| Male vet     | erans/armed forces had:      |     |  | Males age 18-54                  | Males age 55+                   |  |  |
|              | The highest firearm          |     | VETERAN/<br>ARMED FORCES                   | Firearm use<br>42.6              | Firearm use 38.2                |  |  |
| Age<br>18-54 | A firearm suicide rate       | • > |  | Non-firearm use<br>21.1          | Non-firearm use<br>13.6 ••••••  |  |  |
|              | 2.2 times higher compared to |     | NON-VETERAN<br>CIVILIAN                    | Firearm use<br>19.0 ●●●●●●●      | Firearm use<br>25.1 ●●●●●●●●●●● |  |  |
|              | non-veteran civilians        | J   |  | Non-firearm use<br>16.9 ●●●●●●●● | Non-firearm use<br>11.1 ●●●●●●  |  |  |
|              |                              |     |  |                                  |                                 |  |  |

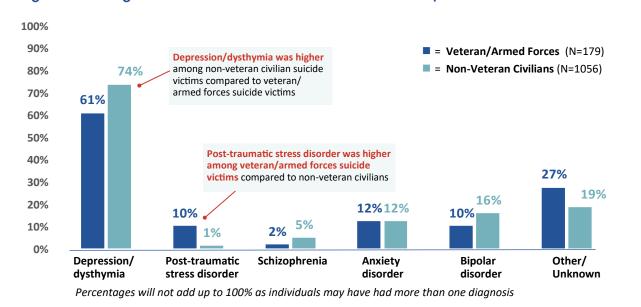
• or • = 2 deaths per 100,000 residents

## Suicide circumstances by life stage among male veterans and armed forces in Utah

In 98% of Utah's suicide deaths among male veterans and armed forces, circumstances were documented in the records (N=370). More than one circumstance may have been noted in the record. The five most frequent circumstances by age group, as well as information about suicide intent, and a suicide note, are shown below. Circumstances by age group were not calculated for females due to small numbers.

|     | AGE 18-34   |     | AGE 35-54   |     | AGE 55-64   |                  | AGE 65+   |
|-----|---|-----|---|-----|---|------------------|---|
|     | 13%   |     | <b>2</b> 5%   |     | 23%   |                  | 39%   |
|     | (N=47)  |     | (N=93)  |     | (N=84)  |                  | (N=146)   |
| 57% | Recent/imminent crisis                                    | 67% | Recent/imminent crisis  | 48% | Recent/imminent crisis  | <mark>68%</mark> | Physical health<br>problems                                     |
| 55% | Current mental health problem                             | 56% | Intimate partner<br>problems                                    | 46% | Current mental health problem                                   | <mark>66%</mark> | Recent/imminent crisis  |
| 51% | Ever treated for mental health or substance abuse problem | 48% | Current mental health<br>problem                                | 46% | Ever treated for mental<br>health or substance<br>abuse problem | 40%              | Current mental health problem                                   |
| 49% | Intimate partner<br>problems                              | 48% | Ever treated for mental<br>health or substance<br>abuse problem | 44% | Physical health<br>problems                                     | 39%              | Ever treated for mental<br>health or substance<br>abuse problem |
| 28% | Job/financial<br>problems                                 | 34% | Job/financial<br>problems                                       | 27% | Job/financial<br>problems                                       | 17%              | Intimate partner<br>problems                                    |
| 45% | Suicide intent disclosed within last month                | 39% | Suicide intent disclosed within last month                      | 29% | Suicide intent disclosed within last month                      | 38%              | Suicide intent disclosed within last month                      |
| 34% | Left a suicide note                                       | 45% | Left a suicide note   | 38% | Left a suicide note   | 39%              | Left a suicide note   |

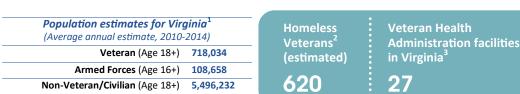
## Diagnoses among suicide victims with a current mental health problem in Utah+



## **Suicide among Veterans and Armed Forces VIRGINIA, 2010 - 2014**

Data from the National Violent Death Reporting System (NVDRS)





## Types of violent deaths among veterans and armed forces in Virginia (N=1,345)

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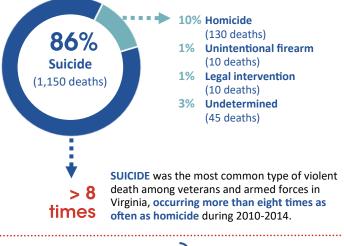
Virginia has 95 counties

and 38 independent cities

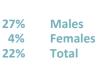
covering 39,000 square

miles. It is the 12<sup>th</sup>

most populous state.



Percent of all suicide victims in Virginia in 2010-2014 identified as veterans or armed forces

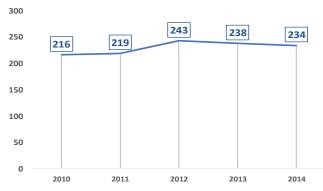


## Suicide rates in Virginia\*+

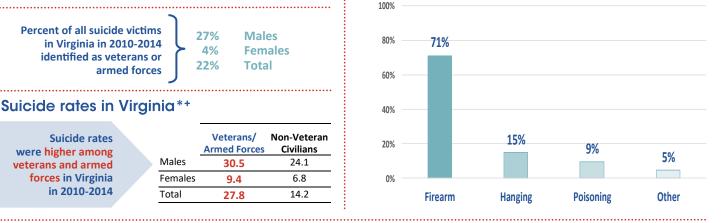
| Suicide rates<br>were higher among |         | Veterans/<br>Armed Forces | Non-Veteran<br>Civilians |
|------------------------------------|---------|---------------------------|--------------------------|
| veterans and armed                 | Males   | 30.5                      | 24.1                     |
| forces in Virginia                 | Females | 9.4                       | 6.8                      |
| in 2010-2014                       | Total   | 27.8                      | 14.2                     |

Annual number of suicide deaths among veterans and armed forces in Virginia

.....



Method of suicide deaths among veterans and armed forces in Virginia



## Demographics of veterans and armed forces suicide victims in Virginia (N=1,150)

## **Race/Ethnicity**

## 87% White, Non-Hispanic

- 9% Black, non-Hispanic
- Hispanic 2%
- 1% Asian/Pacific Islander, non-Hispanic
- <1% Two or more races, other, or unknown race
- American Indian/Alaska Native, non-Hispanic 0%

.....

## **Marital Status**

## 40% Married\*

- 20% Divorced
- 17% Never married
- 12% Widowed
- 11% Other/unknown status
- includes civil unions and domestic partnerships

## **Education Status**

## 47% Some college credit or college degree

- 41% High school or GED graduate
- 11% Less than a high school education
- Unknown or missing education level 1%

Percents may not equal 100% due to rounding. \*All rates are occurrent ratios based on the number of resident and non-resident deaths that occurred in the state per 100,000 resident population. +Statistical testing was not conducted. Differences between veterans/armed forces and non-veteran civilians may not be statistically significant. Sources: <sup>1</sup>U.S. Census Bureau, American Community Survey, 2010-2014; <sup>2</sup>U.S. Department of Housing and Urban Development, 2014 Annual Homeless Assessment Report (AHAR) to Congress; <sup>3</sup>U.S. Department of Veteran Affairs

## Firearm suicide rates among male veterans/armed forces and non-veteran civilians in Virginia\*+

|              |   | -                       | Firearm suicide rates*+ in Virginia, 2010-2014 |                                   |  |  |  |
|--------------|---|-------------------------|--|-----------------------------------|--|--|--|
| Malowot      | erans/armed forces had:                                   |                         | Males age 18-54                                | Males age 55+                     |  |  |  |
| Age          | The highest firearm                                       | VETERAN/<br>ARMED FORCE | Firearm use<br>17.8 ●●●●●●●●                   | Firearm use<br>26.7 ●●●●●●●●●●●●● |  |  |  |
| 55+          | suicide rate  |                         | Non-firearm use<br>9.7 ●●●●●                   | Non-firearm use<br>6.5 ●●●●       |  |  |  |
| Age<br>18-54 | A firearm suicide rate<br>1.4 times higher<br>compared to | NON-VETERAN<br>CIVILIAN | Firearm use<br>12.7 ●●●●●●●                    | Firearm use<br>18.7 ●●●●●●●●●     |  |  |  |
|              | non-veteran civilians                                     |                         | Non-firearm use<br>10.4 ●●●●●                  | Non-firearm use<br>8.7 ●●●●●      |  |  |  |

or = 2 deaths per 100,000 residents

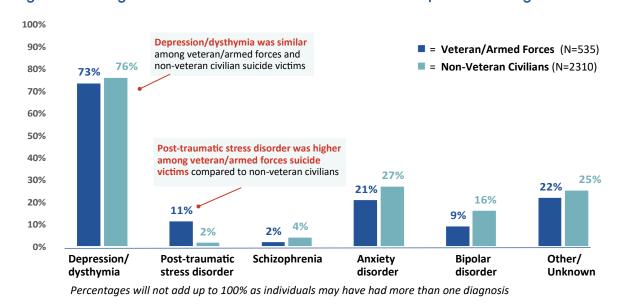
## Suicide circumstances by life stage among male veterans and armed forces in Virginia

In 96% of Virginia's suicide deaths among male veterans and armed forces, circumstances were documented in the records (N=1060). More than one circumstance may have been noted in the record. The five most frequent circumstances by age group, as well as information about suicide intent, and a suicide note, are shown below. Circumstances by age group were not calculated for females due to small numbers.

|            | AGE 18-34   |            | AGE 35-54   |     | AGE 55-64   |            | AGE 65+   |
|------------|---|------------|---|-----|---|------------|---|
|            | 18%   |            | 25%   |     | 17%   |            | 40%   |
|            | (N=189)   |            | (N=270)   |     | (N=181)   |            | (N=420)   |
| <b>49%</b> | Intimate partner<br>problems                              | <b>52%</b> | Current mental health problem                                   | 55% | Current mental health problem                                   | 57%        | Physical health<br>problems                                     |
| 47%        | Recent/imminent crisis                                    | 49%        | Recent/imminent crisis  | 46% | Ever treated for mental<br>health or substance<br>abuse problem | 41%        | Current mental health problem                                   |
| 47%        | Current mental health<br>problem                          | 48%        | Intimate partner<br>problems                                    | 36% | Job/financial<br>problems                                       | 30%        | Ever treated for mental<br>health or substance<br>abuse problem |
| 39%        | Ever treated for mental health or substance abuse problem | 42%        | Ever treated for mental<br>health or substance<br>abuse problem | 35% | Recent/imminent crisis  | 28%        | Recent/imminent crisis  |
| 27%        | Job/financial<br>problems                                 | 30%        | Job/financial<br>problems                                       | 26% | Alcohol<br>problem  | <b>10%</b> | Intimate partner<br>problems                                    |
| 31%        | Suicide intent disclosed within last month                | 22%        | Suicide intent disclosed within last month                      | 23% | Suicide intent disclosed within last month                      | 24%        | Suicide intent disclosed within last month                      |
| 39%        | Left a suicide note                                       | 43%        | Left a suicide note   | 45% | Left a suicide note   | 35%        | Left a suicide note   |

.....

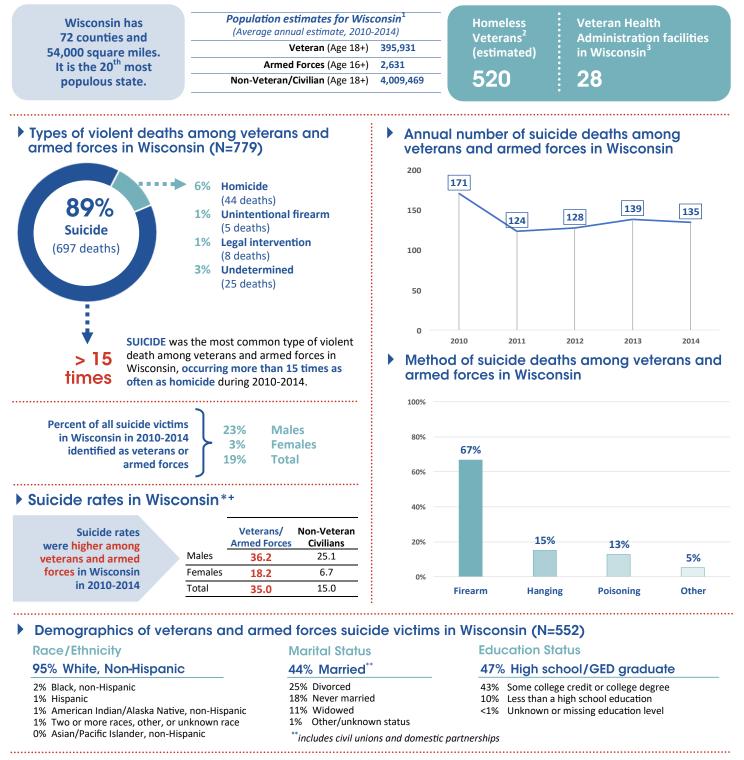
Diagnoses among suicide victims with a current mental health problem in Virginia\*



## Suicide among Veterans and Armed Forces WISCONSIN, 2010 - 2014

Data from the National Violent Death Reporting System (NVDRS)

Wisconsin Violent Death Reporting System (WIVDRS) Joined the NVDRS: 2003 First year of data collection: 2004



Percents may not equal 100% due to rounding. \*All rates are occurrent ratios based on the number of resident and non-resident deaths that occurred in the state per 100,000 resident population. \*Statistical testing was not conducted. Differences between veterans/armed forces and non-veteran civilians may not be statistically significant. Sources: <sup>1</sup>U.S. Census Bureau, American Community Survey, 2010-2014; <sup>2</sup>U.S. Department of Housing and Urban Development, 2014 Annual Homeless Assessment Report (AHAR) to Congress; <sup>3</sup>U.S. Department of Veteran Affairs

Firearm suicide rates among male veterans/armed forces and non-veteran civilians in Wisconsin\*\*

| <b>a</b> -1 |   |                          | Males age 18-54                    | Males age 55+               |
|-------------|---|--------------------------|------------------------------------|-----------------------------|
| vidle Vete  | erans/armed forces had:<br>The highest firearm            | VETERAN/<br>ARMED FORCES | Firearm use 28.0                   | Firearm use<br>23.5         |
| Age         | suicide rate  |                          | Non-firearm use<br>19.7 •••••••••• | Non-firearm use<br>8.2 ●●●● |
| 8-54        | A firearm suicide rate<br>1.5 times higher<br>compared to | NON-VETERAN<br>CIVILIAN  | Firearm use<br>12.4 •••••          | Firearm use<br>14.2 ••••••  |
|             | non-veteran civilians                                     |                          | Non-firearm use<br>13.7 ●●●●●●●    | Non-firearm use<br>8.2 ●●●● |

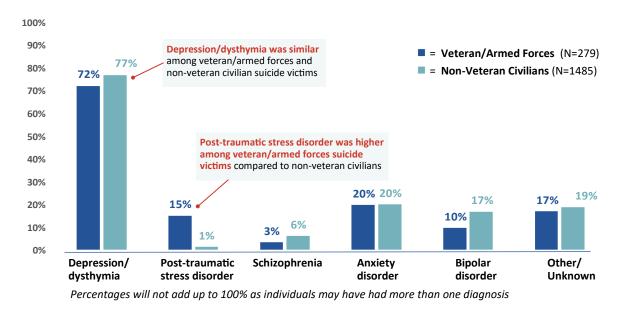
• or • = 2 deaths per 100,000 residents

## Suicide circumstances by life stage among male veterans and armed forces in Wisconsin

In 93% of Wisconsin's suicide deaths among male veterans and armed forces, circumstances were documented in the records (N=628). More than one circumstance may have been noted in the record. The five most frequent circumstances by age group, as well as information about suicide intent, and a suicide note, are shown below. Circumstances by age group were not calculated for females due to small numbers.

| AGE 18-34<br>15%<br>(N=78) |   | AGE 35-54<br><b>25%</b><br>(N=158) |  | AGE 55-64<br>17%<br>(N=141) |  | AGE 65+<br>43%<br>(N=251) |   |             |                              |            |   |     |   |     |                             |
|----------------------------|---|------------------------------------|--|-----------------------------|--|---------------------------|---|-------------|------------------------------|------------|---|-----|---|-----|-----------------------------|
|                            |   |                                    |  |                             |  |                           |   | <b>67</b> % | Recent/imminent crisis       | 54%        | Ever treated for mental<br>health or substance<br>abuse problem | 52% | Ever treated for mental<br>health or substance<br>abuse problem | 71% | Physical health<br>problems |
|                            |   |                                    |  |                             |  |                           |   | 63%         | Intimate partner<br>problems | <b>52%</b> | Current mental health problem                                   | 48% | Current mental health problem                                   | 35% | Recent/imminent crisis      |
| 42%                        | Current mental health problem                                   | 45%                                | Recent/imminent crisis                     | 40%                         | Recent/imminent crisis                     | 32%                       | Current mental health problem                                   |             |                              |            |   |     |   |     |                             |
| 40%                        | Ever treated for mental<br>health or substance<br>abuse problem | 44%                                | Job/financial<br>problems                  | 35%                         | Physical health<br>problems                | 30%                       | Ever treated for mental<br>health or substance<br>abuse problem |             |                              |            |   |     |   |     |                             |
| 29%                        | Job/financial<br>problems                                       | 43%                                | Intimate partner<br>problems               | 33%                         | Alcohol<br>problem                         | 14%                       | Other death of friend or family member                          |             |                              |            |   |     |   |     |                             |
| 38%                        | Suicide intent disclosed within last month                      | 31%                                | Suicide intent disclosed within last month | 29%                         | Suicide intent disclosed within last month | 26%                       | Suicide intent disclosed within last month                      |             |                              |            |   |     |   |     |                             |
| 33%                        | Left a suicide note   | 41%                                | Left a suicide note                        | 43%                         | Left a suicide note                        | 41%                       | Left a suicide note   |             |                              |            |   |     |   |     |                             |

## Diagnoses among suicide victims with a current mental health problem in Wisconsin\*



## 5 ANALYSIS CONSIDERATIONS

The National Violent Death Reporting System is a complex surveillance system designed to capture detailed information on all violent deaths from multiple sources. Several unique components of this surveillance system should be considered when reviewing the results provided in this report and when comparing the results presented here with those derived from other data sources or analysis methods.

## **VIOLENT DEATH CASE DEFINITION**

The NVDRS case definition includes suicides, homicides, deaths from legal intervention (a subtype of homicide where the victim is killed by law enforcement acting in the line of duty), unintentional firearm fatalities, and deaths of undetermined intent.<sup>12</sup>

According to the NVDRS Coding Manual, deaths with undetermined manner include those deaths "resulting from the use of force or power against oneself or another person for which the evidence indicating one manner of death is no more compelling than the evidence indicating another manner of death."<sup>12</sup> The policies and practices regarding the assignment of "undetermined manner of death" are not standardized throughout the U.S. Therefore, some states, such as Maryland and Utah, have a relatively high percentage of deaths from violence classified as "undetermined manner of death," whereas other states, such as South Carolina and Georgia, have a low percentage of deaths classified as "undetermined manner of death."

In this report, the full NVDRS case definition was used to determine the total number of deaths due to violence, and the total includes deaths of undetermined intent and unintentional firearm-related deaths. The main focus of this report, however, is suicide, which is defined in the NVDRS Coding Manual as "a death resulting from the intentional use of force against oneself. A preponderance of evidence should indicate that the use of force was intentional."<sup>12</sup>

## **ABSTRACTOR-ASSIGNED MANNER OF DEATH**

As previously mentioned, NVDRS data are captured from multiple sources, including death certificates, coroner and medical examiner reports, and law enforcement reports. A trained NVDRS state abstractor assigns a manner of death for each case based on these sources. Typically, each source assigns a manner (intent) of death, such as suicide, homicide, unintentional/accidental, or unknown/undetermined. In most instances, the different sources agree on the manner of death; however, occasionally, there can be a discrepancy between sources (for example, one source might categorize the death as a suicide while another source might categorize the death as undetermined manner).

In these instances, the abstractor is instructed to assign a manner of death based on the preponderance of information available from all sources. The manner of death assigned by the abstractor must agree with the manner of death assigned by at least one of the primary sources (death certificates, coroner and medical examiner reports, or law enforcement records). The "abstractor-assigned manner of death" was used to analyze the data for this report. Use of the abstractor-assigned manner of death to code NVDRS cases can result in slight differences in counts compared to cases coded by ICD-10<sup>15</sup> underlying cause of death codes on death certificates (the method used by the CDC National Center for Health Statistics, National Vital Statistics System, and Web-based Injury Statistics Query and Reporting System [WISQARS]<sup>1</sup>).

## OCCURRENT DEATHS AND OCCURRENT RATE CALCULATIONS

The NVDRS captures both resident and occurrent deaths. Resident deaths are those in which the decedent was a resident of the reporting state at the time of fatal injury, regardless of whether the injury occurred in the reporting state or another state. Occurrent deaths are those in which the decedent was fatally injured in the reporting state, whether or not the decedent was a resident of the reporting state.

This report uses occurrent rates (number of occurrent deaths per 100,000 resident population) rather than mortality rates based on residency status because occurrent rates provide a more comprehensive description of a state's burden of deaths from violence. The calculation includes the total number of deaths where the fatal injury occurred in the state, including both residents and non-residents, divided by the sum of the resident population estimates for the applicable period of time and multiplied by 100,000.

## RATE CALCULATION FOR VETERAN AND CURRENT ARMED FORCES SUICIDE DEATHS

Suicide deaths among veterans and those currently serving in the armed forces were identified through the "veteran/military" variable in the NVDRS, which is defined as, "Has the person ever served in the U.S. Armed Forces?" It includes both veterans and persons currently serving in one of the five armed services branches. The variable does not distinguish between a decedent who was a veteran or one who was currently serving in the military at the time of death. For this reason, rates were calculated by combining American Community Survey (ACS) population estimates for veterans and current armed forces.<sup>14</sup>

The ACS provides one-year, three-year, and five-year state population estimates of veterans, non-veterans, and armed forces personnel. Data from the 2010-2014 ACS five-year estimates were used to calculate rates for the 13 states presented in Table 1. Data from the 2010-2012 ACS three-year estimates were used to calculate rates for South Carolina. ACS one-year estimates were used to calculate rates for Ohio (2011-2014) and Georgia (2010-2011 and 2013-2014).

Veteran and non-veteran civilian population estimates were obtained from the "Sex by Age by Veteran Status for the Civilian Population 18 Years and Over" table in the ACS. Current armed forces population estimates were obtained from the "Sex by Age by Employment Status for the Population 16 Years and Over" table in the ACS. In the format available from the website, 16 and 17-year-olds cannot be removed from the employment table, which presents a challenge for combining the data. Given that the minimum age to enlist in the military is 17 (with parental consent) and 18 (without parental consent), it can be assumed that the armed forces population cannot include 16-year-olds. The data will however include 17-year-olds and thus introduce error in the rate calculations.

The ACS data is the only source of comparable population data available for veterans and current armed forces personnel and provide the best estimates for veteran and current armed forces and non -veteran civilian rate calculations. Due to the limitation described above, veteran and armed forces suicide rates among persons 18-34 years of age will likely be underestimated. Additionally, the veter-an/military question on the death certificate could possibly include those dishonorably discharged.

## **DATA QUALITY**

Data used for this report are from the 2010-2014 NVDRS Restricted Access Database (RAD). Definitions and terms can be found in Appendix A.

- Seventeen states were included in the 2010-2014 RAD dataset, but one state and specific years for three other states were excluded from the analysis:
  - Massachusetts was excluded due to a high percentage of suicides with "Unknown" entries in the NVDRS veteran/military variable. Prior to September 2014, the Massachusetts death certificate only captured a subset of current and former military personnel and did not match the format of the NVDRS veteran/military variable.
  - Ohio 2010 data was excluded because 2010 was the state's first year of data collection and only
    a subset of violent deaths in the state was collected for that year.
  - Georgia 2012 data was excluded because there was a disparately high number of suicides with "Unknown" veteran/military status for that year.
  - Data for 2013 and 2014 were also excluded for South Carolina because there was a disparately high number of suicides with "Unknown" veteran/military status for those two years.
- Only the 13 states with high quality data for all five years were included in Table 1.

## **RACE/ETHNICITY**

The race/ethnicity of suicide victims in each state was reported for the following categories: white (non-Hispanic), black (non-Hispanic), Asian/Pacific Islander (non-Hispanic), American Indian/Alaska Native (non-Hispanic), two or more races (non-Hispanic), other (non-Hispanic), and Hispanic (all races). If a race/ethnicity category was <1%, categories were collapsed.

## **ROUNDING PERCENTAGES**

Each state profile contains percentages for manners of violent death, suicide methods, race/ethnicity, marital status, and education level of suicide victims. Percentages were rounded to the nearest whole number and therefore the totals may not always add up to 100%.

## **CIRCUMSTANCES INFORMATION**

The percent of cases with a given circumstance (e.g., current mental health problem) is based on the total number of violent deaths where at least one circumstance of the death was known. Circumstance es information is not always collected or available for all cases of violent death. Circumstances are abstracted from information contained in coroner/medical examiner (CME) reports and/or law enforcement records based on CDC guidance. If CME and law enforcement reports were unable to be obtained for the case or if limited information was documented in the reports, circumstances information will be unknown.

## LIMITATIONS

For this report, crude rates were used to show general similarities and differences between the states and the combined state data. Use of crude rates instead of age-adjusted rates for comparisons of state overall suicide rates of veteran and armed forces and non-veteran civilian rates is a limitation of this report. This approach is consistent with the previous suicide report and the two previous reports from 2008 and 2014, which did not use age-adjusted death rates.<sup>8-10</sup>

## 6 APPENDIX A: Definition of Terms

Alcohol problem: A suicide circumstance in which the victim is perceived by self or others as having a problem with or being addicted to alcohol. A victim who is participating in an alcohol rehabilitation program or treatment, including self-help groups and 12-step programs, and has been clean and sober for less than five years is also considered as having this circumstance.

**Argument:** An argument or conflict that led to the victim's death. There must have been a specific argument or disagreement that is related to the violent death (e.g., an argument over money, a relationship problem or an insult).

**Circumstances known:** Indicates that information about the events or predisposing factors associated with the incident was available from either medical examiner/coroner records or law enforcement reports.

**Criminal legal problem:** A suicide circumstance in which the victim was facing a recent or impending arrest, police pursuit, or an impending criminal court date, and the consequence was relevant to the suicide event.

**Crisis (recent or imminent):** The victim experienced a crisis within two weeks of the incident, or a crisis was imminent within two weeks of the incident. A "crisis" is a current/acute event that is indicated in one of the source reports to have contributed to the death.

**Current mental health problem:** The victim was identified as currently having a diagnosed mental health problem, such as major depression, schizophrenia, and generalized anxiety disorder, as well as neurodevelopmental disorders (such as intellectual disability, autism, attention-deficit /hyperactivity disorder), eating disorders, personality disorders, and organic mental disorders (such as Alzheimer's and other dementias). There does not need to be any indication that the mental health condition directly contributed to the death.

**Current mental health treatment:** The victim was in current treatment (e.g., had a current prescription for a psychiatric medication, saw a mental health professional within the past two months or participated in treatment for substance abuse such as outpatient treatment or alcohol anonymous) for a mental health or substance abuse problem at the time of the injury.

**Death of friend or family:** Death of a family member or friend due to something other than suicide appears to have contributed to the suicide death.

**Depressed mood:** A suicide circumstance in which the person was noted by others to be sad, despondent, down, blue, unhappy, etc. at the time of injury. This circumstance can apply whether or not the person has a diagnosed mental health problem.

**Education:** Represents victim's educational level as measured by the highest degree attained or by years of education completed beyond kindergarten.

**Ever treated for mental health/substance abuse problem:** The victim was noted as ever having received treatment (e.g., had a current prescription for a psychiatric medication, saw a mental health professional within the past two months or participated in self-help program such as alcohol anonymous) for a mental health problem (including alcohol and other substance abuse problems), either at the time of death or in the past.

**Financial problem:** A suicide circumstance in which the victim was experiencing monetary issues such as bankruptcy, overwhelming debts, a gambling problem, or foreclosure of a home or business, and these problems appear to have contributed to the death.

**History of suicidal thoughts or plans:** Victim had a history of suicidal thoughts or plans. Disclosure of suicidal thoughts or plan can be verbal, written or electronic. This code is used for victims who have at any time in their life expressed suicidal thoughts or plans. The victim may or may not have disclosed suicidal thoughts and/or plans close to the time of the suicide.

**Homeless:** Homeless persons are those who reside in one of the following: 1) Places not designed for or ordinarily used as a regular sleeping accommodation for human beings, including the following: a car or other private vehicle; park, on the street or other outdoor place; abandoned building (i.e., squatting); bus or train station; airport; or camping ground; or 2) A supervised publicly or privately operated shelter or drop-in center designated to provide temporary living arrangements; congregate shelters; temporary accommodations provided by a homeless shelter (e.g., a motel room provided because the shelter was full); or transitional housing for homeless persons.

**Homicide:** A death resulting from the intentional use of force or power, threatened or actual, against another person, group, or community. A preponderance of evidence must indicate that the use of force was intentional.

**Incident:** All victims and suspects associated with a given incident are in one record. A violent death incident can be made up of any of the following: (1) single suicide, (2) death of undetermined intent, (3) single homicide, (4) multiple homicides, (5) homicide(s) followed by a suicide(s) (i.e., a homicide-suicide), (6) unintentional firearm death(s), (7) multiple suicides, or (8) other. Decisions about whether two or more deaths belong to the same incident are governed by the timing of the injuries, rather than the timing of the deaths. Specifically, deaths that occur within 24 hours of each other (i.e., the 24-hour rule) and are clearly linked by source documents would be considered part of the same incident.

Intimate partner: A current or former girlfriend/boyfriend, dating partner, ongoing sexual partner, or spouse. It does not include instances of sex/intimacy in exchange for money/goods. There must be evidence of an intimate relationship (this does not apply to instances where there is simply attraction/ infatuation between two individuals or in cases where one person is romantically interested in the other, but the feelings are not returned). The definition of intimate partner does not require sexual intimacy. This definition includes same-sex partners.

**Intimate partner problem:** Problems with a current or former intimate partner appear to have contributed to the suicide or undetermined death, such as a divorce, break-up, argument, jealousy, conflict, or discord.

**Job problem:** A suicide circumstance in which the victim was either experiencing a problem at work (such as tension with a co-worker, poor performance reviews, increased pressure, feared layoff) or was having a problem with joblessness (e.g., recently laid off, having difficulty finding a job), and this appears to have contributed to the death.

**Legal intervention death:** A death in which the decedent was killed by a law enforcement officer or other peace officer (persons with specified legal authority to use deadly force), including military police, acting in the line of duty. The term legal intervention is a classification from ICD-10 codes and does not denote the lawfulness or legality of the circumstances surrounding the death.

**Non-veteran civilian**: "Non-veteran civilian" includes cases where the NVDRS veteran/military variable entry was "No." Non-veteran civilians includes individuals who have never served in the armed forces (non-veteran) and those not currently serving (civilian).

**NVDRS states:** While 40 states, the District of Columbia and Puerto Rico are currently funded by the National Violent Death Reporting System (NVDRS) at the time of this report's publication (March 2018), only data from the 16 NVDRS states that contributed 2010-2014 data to the Restricted Access Data-

base (RAD) are included in this report. These states are Alaska, Colorado, Georgia, Kentucky, Maryland, New Jersey, New Mexico, North Carolina, Ohio, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin. All states include four years of data (2010-2014) except Georgia (2010-2011, 2013-2014), Ohio (2011-2014) and South Carolina (2010-2012).

**Occurrent death:** Those deaths in which the decedent was injured in the reporting state, whether or not the decedent was a resident of the reporting state.

**Other relationship problem:** A suicide circumstance in which the person was experiencing problems or conflict with a friend or associate (other than an intimate partner) that appeared to have contributed to the suicide.

**Other (non-alcohol) substance abuse problem:** The victim was perceived by self or others to have a problem with, or to be addicted to drugs other than alcohol. There does not need to be any indication that the addiction directly contributed to the death.

**Physical health problem:** A suicide circumstance in which the victim was experiencing terminal disease, debilitating condition, chronic pain, or other physical health problems relevant to the suicide event.

**Poisoning:** A state of illness caused by the presence of any substance that has been taken in excess (e.g. over-the-counter medicines) or any harmful or toxic substance that has been ingested, inhaled, applied to the skin, or resulted from any other form of contact.

**Restricted Access Database (RAD):** A de-identified, multi-state, case-level micro dataset (a subset of the national NVDRS database) available from the CDC for use by researchers and other investigators who meet certain criteria. To obtain the RAD, requestors must submit a proposal to CDC describing the intended use of the data. <u>https://www.cdc.gov/violenceprevention/nvdrs/rad.html</u>

**Resident:** The decedent was an official inhabitant of the state (or territory) including those portions of a Native American reservation within the state at the time of injury, according to the death certificate.

**School problem:** Problems at or related to school appear to have contributed to the death, including poor grades, difficulty with a teacher, bullying, social exclusion at school, school detention/suspension, or performance pressures.

**Sexual Orientation:** This variable captures whether the victim self-identified as heterosexual, gay, lesbian, or bisexual based on interviews of friends, family or acquaintances. Currently, this information is usually not collected systematically and consequently this variable will likely only detect decedents who were gay, lesbian or bisexual according to friends, families or acquaintances. Definitive information on sexual orientation may be unavailable. This variable was added in August 2013 and therefore states may have already collected 2013 data before the variable was made available, potentially undercounting the actual number of gay, lesbian, or bisexual decedents.

**Suicide:** A death resulting from the intentional use of force against oneself. A preponderance of evidence should indicate that the use of force was intentional.

**Suicide attempt history:** A suicide circumstance in which the victim was known to have previously tried to end his/her own life, regardless of the severity of the injury inflicted.

**Suicide intent disclosed:** The victim disclosed to another person suicidal thoughts and/or intent within the last month. Disclosure of suicidal thoughts or plan can be verbal, written or electronic.

**Suicide note:** A suicide circumstance in which the victim left a message, e-mail, video, or other communication that he or she intended to end his/her own life. A will or folder of financial papers near the victim does not constitute a suicide note.

**Suspect:** Person or persons suspected of having killed another person in an incident, whether intentionally (any method/weapon) or unintentionally (firearm only), or assisted in the homicide.

**Undetermined death:** A death resulting from the use of force or power against oneself or another person for which the evidence indicating one manner of death is no more compelling than the evidence indicating another manner of death.

**Unintentional firearm death:** A death resulting from a penetrating injury or gunshot wound from a weapon that uses a powder charge to fire a projectile when there was a preponderance of evidence that the shooting was not intentionally directed at the victim.

**Veteran and Armed Forces:** "Veteran and Armed Forces" includes cases where the NVDRS veteran/ military variable entry was "Yes." The NVDRS veteran/military data is collected from the death certificate in the section captioned, "Ever in the U.S. Armed Forces?"<sup>16</sup> Veterans and armed forces includes individuals who served in the armed forces in the past but are no longer serving (veterans) and those currently in the armed forces. The U.S. Armed Forces comprises five armed service branches: Air Force, Army, Coast Guard, Marine Corps, and Navy.

**Victim:** Person or persons who died in a suicide, violence-related homicide, legal intervention, as the result of a firearm injury, or from an undetermined manner.

**Weapon/Method/Mechanism:** The primary instrument used by a victim or suspect that contributed to someone's death.

## APPENDIX B: Methods

This report contains descriptive information using public health surveillance data from the National Violent Death Reporting System. The NVDRS is a population-based, active surveillance system developed and supported by the Centers for Disease Control and Prevention (CDC) designed to obtain a complete census of all resident and occurrent deaths from violence.

- Each participating state collects information from death certificates, medical examiner/coroner reports, and law enforcement reports. Some states collect information from additional sources, such as crime labs. As of 2016, 40 states, the District of Columbia, and Puerto Rico participated in the NVDRS. (See Appendix A: Definition of Terms)
- Cases consist of deaths from suicide, homicide, undetermined intent, legal intervention, and unintentional firearm injury. Related fatal injuries involving multiple victims that occur within 24 hours of each other are captured in one incident. The data submitted to the national NVDRS database do not contain personal identifiers such as a name and street address, but they do include potentially sensitive information, such as city of residence, county of injury, and a narrative of the incident.
- A full description of the data collection processes of the NVDRS can be found in a Surveillance Summary published annually by the CDC in the *Morbidity and Mortality Weekly Report*.<sup>11</sup> Additional information on data collection and definitions is available in the NVDRS Coding Manual.<sup>12</sup>

## **DATA SOURCES**

The NVDRS Restricted Access Database (RAD), a subset of the national database prepared by the CDC for use by researchers and other investigators, was the primary data source for this report. To obtain the RAD, requestors must submit a proposal to CDC describing the intended use of the data. The Safe States Alliance submitted a proposal to CDC in July 2016 for a special report on suicide using 2013-2014 data.<sup>8</sup> A scientific panel at the CDC reviewed and approved the use of the RAD data for the report. An addendum to the proposal was submitted in June 2017 to examine suicide among veterans and armed forces members during 2010 through 2014. The CDC approved the addendum and provided the additional years of data for the study. The RAD data file used in these analyses was finalized in September 2016.

Basic state demographic data included in the state profiles was obtained from 2015 U.S. Census Bureau Population Estimates.<sup>17</sup> Population estimates for calculating the number of occurrent deaths per 100,000 resident population were obtained from American Community Survey population estimates for veterans, non-veterans, and current armed forces.<sup>14</sup>

## **CASE SELECTION**

Cases included deaths that occurred during 2010-2014, regardless of the date of injury. Types of violent death (e.g., suicide or homicide) were categorized based on the abstractor-assigned manner of death. Occurrent deaths were used in all analyses. State occurrent deaths are defined as those deaths in which the initial injury occurred within the state, regardless of the state of residence of the victim. Although most occurrent deaths involve state residents, nonresidents were also included in the total number of occurrent deaths.

## **ANALYSIS METHODS**

This report provides descriptive information using public health surveillance data. Because this is not a research study, no specific hypotheses were tested and no statistical tests were conducted.

In general, three types of measurements are presented: (1) the number of occurrent deaths for a given violent death category, (2) the percent of the total number of violent deaths for a given category, and (3) the number of occurrent deaths per 100,000 resident population (a rate).

Numbers and proportions/percents describe the frequency of occurrence; rates are summary statistics that provide a standard unit of measurement that permits comparisons between groups and can reveal levels of risk.

As mentioned above, occurrent deaths can include both in-state and out-of-state residents. Use of an occurrent rate emphasizes the total burden of violent death in a state. The rates of occurrent deaths per 100,000 population were calculated using American Community Survey population estimates for veterans, non-veterans, and current armed forces for the appropriate state, sex, and age, when available. Rates were not age-adjusted.

State profiles include information on the percent of suicides having a given circumstance. These percentages are calculated based on the number of a given circumstance divided by the total number of suicides in the state with known circumstances. Circumstance information was not available for all suicides for all states. This is briefly discussed in the Analysis Consideration section of the report. Additionally, multiple circumstances could have been involved in the death.

## **CELL SIZE RESTRICTIONS**

Per the RAD users agreement with CDC, cells showing or derived from one to four deaths are suppressed. In general, occurrent rates are not computed for cells containing fewer than 5 deaths. Rates based on fewer than 20 deaths have been identified and should be interpreted with caution.

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