Special Surveillance Report
Veteran Health and Suicide

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Department of Health and Human Services

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Introduction

The Nevada Department of Health and Human Services has collected data for reporting on Veteran Health status, specifically for insights on Suicides. This annual report will be published as data collected are finalized in order to inform professionals and the public. The Office of Analytics has limited data sets to monitor veteran health and are working to include a wider scope of measurements in future reporting to provide a more comprehensive report on veteran health. As such, this report will focus on suicides in the veteran population.

Suicide is defined as an act of intentional self-harm resulting in death and is a pressing public health concern in Nevada. High rates of suicide can result in public complacency, diminishing discussion, and community action. The consequence can be a lack of preparedness for preventing these deaths and the secondary harm they cause.

Suicide is an action often taken by individuals who feel isolated and hopeless, with high levels of emotional pain, physical pain, family and personal problems, and financial stress. Nevada's military veterans, particularly younger veterans, are dying from suicide at rates above the state's rate. A veteran who is recently released from active duty, reserve, or National Guard is often one who has experienced wars of the last decade. Veterans may have endured deployments that disrupt life with family and friends, even considering the unprecedented access to technology that enhances communication with loved ones. Deployments bring exposure to long periods of numbing routine with time to worry about crises occurring at home, interspersed with moments of extreme violence and death.

Individuals in uniform yet not deployed into actual war zones may experience continuous training for performing a wartime mission, longer assignments to other hot regions, delayed discharges, emotional turmoil of friends who are injured or killed, and guilt for "not being there to help." The stress of being in military service can include feeling cut off and isolated from "the real world" where birthdays and holidays are observed along with weddings, funerals, and the arrival of new babies. Deployment brings concern for family back home who deal with everyday emergencies such as car or home repairs and school activities.

The paradox of military service during wartime is that even though exposure to trauma, violence, and isolation from loved ones occurs, the service member often feels a tremendous sense of pride, belonging, purpose, and accomplishment. The dynamics of belonging to a unit with support structures and certainty enhances the resilience of the individual. However, discharge or return to reserve status can strip away these supports, plunging an individual into a struggling economy characterized by loss of jobs, homes, and friends. This confluence of circumstance and experience can result in feelings of loss and hopelessness that for some leads to thoughts of suicide.

The data and information contained in this report highlights the need for efforts to identify, address and prevent veteran health conditions, especially around veteran suicides. This document is intended to be a brief examination of veteran health and suicide where data are available, not a full discussion or action plan.

Data Sources

Behavioral Risk Factor Surveillance System (BRFSS)
BRFSS is a state-based system of health surveys that collects information on health risk behaviors, preventive health practices, chronic health conditions, and use of preventive services. More than 350,000 adults are interviewed each year, making the BRFSS the largest telephone health survey in the world. For many states, the BRFSS is the only available source of timely and accurate data on health-related behaviors. The survey consists of a set of federally grant funded core questions and individual states may include and pay for their own questions in the survey. While the survey's focus is chronic disease and injury, topics covered by the survey include car safety, obesity, and exercise among many others. Since state-added questions are not asked nationwide, these questions are not comparable.

Center for Health Information and Analysis (CHIA): Hospitalization data in this report are collected by CHIA, a research center housed at the University of Nevada, Las Vegas. CHIA collects billing records from all hospital inpatient, outpatient and ambulatory surgical centers. More information can be found at http://www.chiaunlv.com/index.php.

Nevada Electronic Death Registry System
Mortality data in this report are from Nevada's Electronic Death Registry System, collected by the Office of Vital Records. In this report, the top 10 primary causes of death are ranked from highest to lowest based on frequency of occurrence. Death data from 2014 to 2018 have been finalized as of October of 2019. This included the addition of out of state deaths and data cleaning. Data in previous reports were preliminary and therefore may not match exactly to data in this report.

Nevada Veteran Population Demographics: Nevada veteran population by age groups and sex from 2014 to 2018 were gathered from the U.S. Department of Veteran Affairs website. More information at https://www.va.gov/vetdata/veteran_population.asp.

Nevada Non-Veteran Population Demographics
Non-veteran population estimates were calculated by subtracting the veteran populations from the Nevada population estimates. Nevada population estimates are from vintage year 2018 data, provided by the Nevada State Demographer. Data include individuals living in group quarters, as defined by the Nevada State Demographer.

Nevada Veteran Health Survey
The Nevada Department of Veteran Services conducted a survey to determine and help Nevada veterans file claims for Veterans Administration (VA) compensation for 2020. This can be found at https://nvhealth.qualtrics.com/jfe/form/SV_51Og7q890Lvoy2h.

U.S. Population
The U.S. Census Bureau's U.S. 2010 standard population was used to create age-adjusted weights. More information at https://www.census.gov/prod/cen2010/briefs/c2010br-03.pdf.

Technical Notes

Age-adjusted rates are included in this report. Age-adjusting is used in order to control the effects of differences in rates that result from age differences in the populations being compared. For example, heart disease death rates would be higher in a population comprised of older individuals compared to a population comprised of younger individuals. In this report, age-adjusting is applied to eliminate the effects of age distribution between veteran and non-veteran populations.

Age-adjusted rates are weighted to the 2010 standard population provided by the U.S. Census. Population distributions changed significantly between 2000 and 2010. Some previous versions of this report used 2000 standard populations, and therefore there are differences in rates from previously published reports. The weights table can be found in the Appendix Section, Figure A1.

All age-adjusted rates are based on the standard population distribution for the population aged 20 and older. The Nevada veteran population breakdown by age groups is provided by the U.S. Department of Veteran Affairs, which categorizes all veterans under the age of 20 into a single population group. Some Nevadans aged under 18 had the "Military Status" box checked as "yes" on their death certificates due to error or perhaps enrollment in delayed military entry programs. Since these individuals cannot be considered veterans and are not the target group in this report, and may skew age-adjusted rates, only individuals aged 20 and over at time of death are included in this report.

Race/Ethnicity in this report are broken down into White, Black, Native American, Asian, Hispanic and Other/Unknown. White, Black, Native American and Asian categories are all non-Hispanic.

Identifying veteran status within the hospitalization data collected by CHIA is reliant (with limitations) to a payer code of TRICARE (formerly CHAMPUS, Civilian Health and Medical Program of the Uniformed Services) and CHAMPVA (Civilian Health and Medical Program of the Department of Veteran's Affairs). TRICARE is a Department of Defense health care program for "active duty and retired members of the uniformed services, their families, and survivors," per benefits.gov, and CHAMPVA is a Veteran's Affairs program. Because of this limitation the hospitalization section of this report may contain dependents and spouses of veterans who are covered through these payer sources.

Hospitalization data from CHIA is representative of the number of visits and not the number of unique individuals. Therefore, a single person may be counted multiple times.

Due to the transition in billing schemas from ICD-9 to ICD-10, suicide attempt on or before October 1, 2015 are identified by an External Code of Injury (E-Codes), and suicide attempts after October 1, 2015 are identified by specific T and X codes. Due to these coding changes, please use caution when comparing data before and after October 1, 2015.

Veteran-Related Deaths

In preparing this section of the report it was determined to compare the Nevada veteran population to Nevada's non-veteran population. This determination was made to ensure a person's veteran status was clearly identified through an individual's death certificate, and no assumptions were made to the status. The Nevada death certificate inquires on veteran status, but this is not always completed. Due to this limitation, care should be taken in comparing total number of deaths, percentages and rates reported within this report to other topical reports, as well as the total number of deceased Nevada residents in any given year.

Between 2014 and 2018, there were a total of 117,335 Nevada resident deaths. Of these deaths, 1,972 were under the age of 20, 529 deaths had an unknown age, and 2,971 had an unknown veteran status. Records with age under 20, unknown age, and unknown veteran status were not mutually exclusive, and there were cases of overlap. For comparative purposes, individuals with either unknown age, ages under 20, and/or unknown veteran have been excluded from this section of the report, leaving a total of 111,961 deaths.

The four leading causes of death are the same for both veteran and non-veterans, which are heart disease, malignant neoplasms or cancers, chronic lower respiratory disease, and cerebrovascular disease (stroke).

When comparing primary causes of death, non-veterans had a higher percentage of total deaths for cerebrovascular diseases (5%) and non-transport accidents (5%), where veteran percentage is 4% and 3%, respectively. Alzheimer's disease, diabetes mellitus, and influenza and pneumonia each accounted for the same percentage of total deaths in both veteran and non-veteran populations at 3%.

Nephritis, nephrotic syndrome and nephrosis was the 10th ranked primary cause of death in the veteran population (1%) and all other causes accounting for the remaining 22% of total deaths. In the non-veteran population, the 10th ranked primary cause of death was chronic liver diseases and cirrhosis at 2%, and all other causes accounting for 23% of total deaths. Some of the differences found may be due to service-connected disabilities or diseases that veterans face. The Nevada Veteran Health Survey found that 53% of surveyed individuals responding "yes" to being diagnosed, including presumptive conditions (Figure A7).

Figure 1. Top 10 Primary Causes of Death by Veteran Status. Nevada Residents, 2014-2018 Combined.

Rank	Primary Cause of Death	Count	% of Total Deaths
Veteran			
1	Diseases of the heart	8,999	30%
2	Malignant neoplasms	6,803	23%
3	Chronic lower respiratory diseases	2,308	8%
4	Cerebrovascular diseases (stroke)	1,192	4%
5	Alzheimer's disease	848	3%
6	Nontransport accidents	812	3%
7	Influenza and pneumonia	769	3%
8	Diabetes mellitus	672	2%
9	**Intentional self-harm (suicide)**	**603**	**2%**
10	Nephritis, nephrotic syndrome and nephrosis	433	1%
11	All Other Causes	6,155	22%
Total		**29,594**	**100%**
Non-Veteran			
1	Diseases of the heart	20,853	25%
2	Malignant neoplasms	18,112	22%
3	Chronic lower respiratory diseases	5,643	7%
4	Cerebrovascular diseases (stroke)	4,067	5%
5	Nontransport accidents	3,783	5%
6	Alzheimer's disease	2,716	3%
7	**Intentional self-harm (suicide)**	**2,197**	**3%**
8	Influenza and pneumonia	2,136	3%
9	Diabetes mellitus	1,863	2%
10	Chronic liver disease and cirrhosis	1,740	2%
11	All Other Causes	19,257	23%
Total		**82,367**	**100%**

Suicide ranks as the number ninth primary cause of death among veterans (two percent of total veteran deaths), and seventh among non-veterans (three percent of total non-veteran deaths).

Figure 2. Total Count of Deaths by Veteran Status and Age Group. Nevada Residents Ages 20+, 2014-2018.

Year of Death	Veteran Status	Age Group								Total
		20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	
2014	Non-Veteran	156	395	643	1,459	2,518	3,257	3,233	3,150	14,811
	Veteran	6	39	46	154	603	1,412	1,895	1,555	5,710
2015	Non-Veteran	162	456	683	1,438	2,725	3,459	3,507	3,454	15,884
	Veteran	6	29	47	192	519	1,453	1,869	1,739	5,854
2016	Non-Veteran	189	470	700	1,534	2,810	3,714	3,863	3,635	16,915
	Veteran	8	21	41	170	525	1,497	1,918	1,728	5,908
2017	Non-Veteran	180	495	677	1,450	2,869	3,784	4,018	3,708	17,181
	Veteran	6	27	56	158	535	1,550	1,958	1,892	6,182
2018	Non-Veteran	164	475	775	1,424	2,965	3,824	4,154	3,795	17,576
	Veteran	1	35	33	134	453	1,538	1,933	1,813	5,940
Total	**Non-Veteran**	**851**	**2,291**	**3,478**	**7,305**	**13,887**	**18,038**	**18,775**	**17,742**	**82,367**
	Veteran	**27**	**151**	**223**	**808**	**2,635**	**7,450**	**9,573**	**8,727**	**29,594**

Total veteran deaths comprise a range of 25% (2018) to 28% (2014) of total deaths in Nevada of individuals aged 20+. This fluctuation is expected and should not be interpreted as significant changes. It represents both changes in numbers of total deaths as well as population changes.

Figure 3. Non-Veteran Death Counts by Manner of Death and Race/Ethnicity. Nevada Residents Ages 20+, 2014-2018.

Manner of Death	Year of Death	Race/Ethnicity						Total
		White	Black	Native American	Asian	Hispanic	Other/ Unknown	
Assault	2014	56	48	1	6	31	0	142
Intentional Self-harm	2014	310	20	8	14	50	1	403
Accident	2014	584	74	13	32	104	11	818
All Other	2014	10,084	1,094	104	790	1,286	90	13,448
Total	2014	11,034	1,236	126	842	1,471	102	14,811
Assault	2015	64	47	1	4	36	8	160
Intentional Self-harm	2015	302	17	5	23	46	14	407
Accident	2015	661	78	12	44	145	55	995
All Other	2015	10,489	1,194	113	905	1,319	302	14,322
Total	2015	11,516	1,336	131	976	1,546	379	15,884
Assault	2016	49	52	1	11	47	3	163
Intentional Self-harm	2016	331	27	5	29	57	15	464
Accident	2016	706	98	15	50	122	61	1,052
All Other	2016	11,005	1,252	140	1,009	1,438	392	15,236
Total	2016	12,091	1,429	161	1,099	1,664	471	16,915
Assault	2017	61	59	3	12	38	4	177
Intentional Self-harm	2017	326	30	3	29	50	7	445
Accident	2017	764	85	10	46	140	63	1,108
All Other	2017	10,955	1,371	145	1,105	1,522	353	15,451
Total	2017	12,106	1,545	161	1,192	1,750	427	17,181
Assault	2018	61	60	3	6	50	0	180
Intentional Self-harm	2018	357	24	5	31	60	1	478
Accident	2018	781	109	23	59	147	7	1,126
All Other	2018	11,422	1,456	154	1,175	1,522	63	15,792
Total	2018	12,621	1,649	185	1,271	1,779	71	17,576
Assault	**2014-2018**	**291**	**266**	**9**	**39**	**202**	**15**	**822**
Intentional Self-harm	**2014-2018**	**1,626**	**118**	**26**	**126**	**263**	**38**	**2,197**
Accident	**2014-2018**	**3,496**	**444**	**73**	**231**	**658**	**197**	**5,099**
All Other	**2014-2018**	**53,955**	**6,367**	**656**	**4,984**	**7,087**	**1,200**	**74,249**
Total	**2014-2018**	**59,368**	**7,195**	**764**	**5,380**	**8,210**	**1,450**	**82,367**

Figure 4. Veteran Death Counts by Manner of Death and Race/Ethnicity. Nevada Residents Ages 20+, 2014-2018.

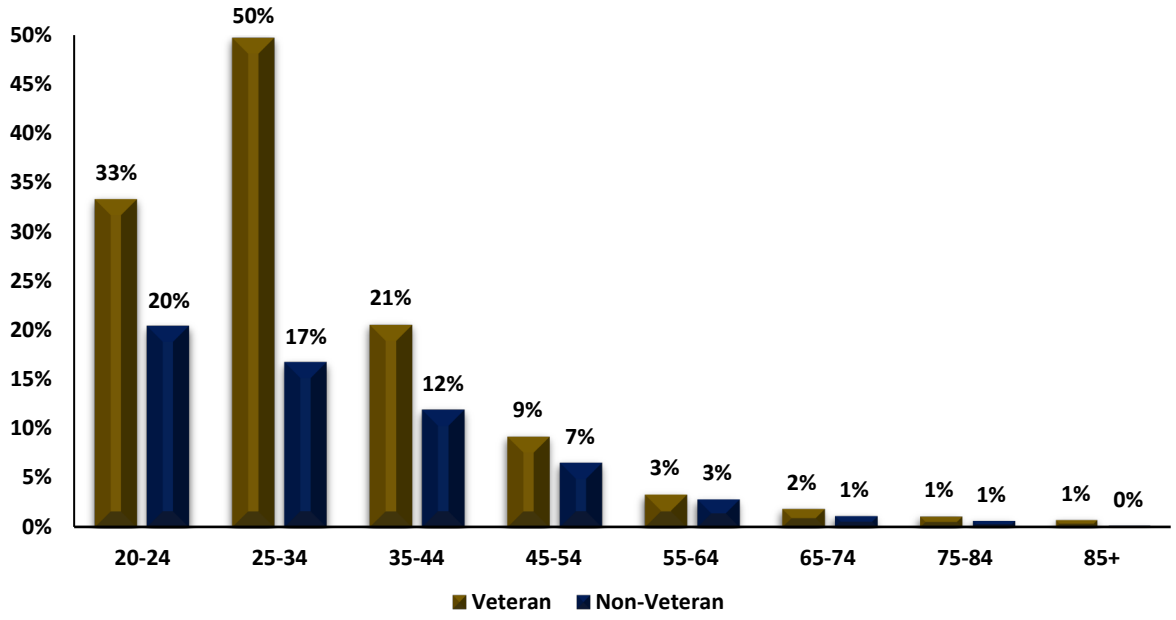
Manner of Death	Year of Death	Race/Ethnicity						Total
		White	Black	Native American	Asian	Hispanic	Other/ Unknown	
Assault	2014	11	2	0	0	2	0	15
Intentional Self-harm	2014	112	6	0	1	6	0	125
Accident	2014	144	9	3	4	11	0	171
All Other	2014	4,755	321	35	118	142	28	5,399
Total	2014	5,022	338	38	123	161	28	5,710
Assault	2015	12	0	0	1	1	1	15
Intentional Self-harm	2015	91	3	1	4	5	3	107
Accident	2015	149	14	3	1	11	6	184
All Other	2015	4,723	364	33	108	179	141	5,548
Total	2015	4,975	381	37	114	196	151	5,854
Assault	2016	9	1	1	1	1	1	14
Intentional Self-harm	2016	116	6	1	1	3	4	131
Accident	2016	182	17	0	4	4	12	219
All Other	2016	4,720	364	34	109	165	152	5,544
Total	2016	5,027	388	36	115	173	169	5,908
Assault	2017	8	3	0	0	3	0	14
Intentional Self-harm	2017	112	5	1	1	5	2	126
Accident	2017	194	17	0	7	9	11	238
All Other	2017	4,901	420	27	144	182	130	5,804
Total	2017	5,215	445	28	152	199	143	6,182
Assault	2018	5	5	1	0	1	0	12
Intentional Self-harm	2018	102	4	0	1	7	0	114
Accident	2018	193	27	4	6	8	0	238
All Other	2018	4,752	432	43	156	174	19	5,576
Total	2018	5,052	468	48	163	190	19	5,940
Assault	**2014-2018**	**45**	**11**	**2**	**2**	**8**	**2**	**70**
Intentional Self-harm	**2014-2018**	**533**	**24**	**3**	**8**	**26**	**9**	**603**
Accident	**2014-2018**	**862**	**84**	**10**	**22**	**43**	**29**	**1,050**
All Other	**2014-2018**	**23,851**	**1,901**	**172**	**635**	**842**	**470**	**27,871**
Total	**2014-2018**	**25,291**	**2,020**	**187**	**667**	**919**	**510**	**29,594**

When veteran deaths are broken down by race/ethnicity, Whites accounted for 85% of the total deaths (N=25,291), followed by Blacks accounting for 7% of total veteran deaths (N=2,020), and Hispanics at 3% (N=919) between 2014 and 2018. This race/ethnicity breakdown of deaths differs from the non-veteran

population, which Whites accounted for 72% of deaths, followed by Hispanics at 10% and Blacks at 9% of deaths.

Among veteran suicides from 2014 to 2018, 88% were White, followed by 4% Black, 4% Hispanic, and 1% for each Native American and Asian race. The racial breakdown of non-veteran suicides is 74% White, 12% Hispanic, 6% Asian, 5% Black, and 1% Native American.

Figure 5. Percentage of Total Deaths that had a Cause of Death Indicated as Suicide by Veteran Status by Age Group. Nevada Residents Ages 20+, 2014-2018 Combined.



When broken down by age groups between 2014 and 2018, 50% of the veteran deaths of Nevada residents aged 25-34 (N=151) were due to suicide (N=75). This is not like the non-veteran population in the same age group with 17% of deaths in this age group (N=2,291) due to suicide (N=382). Suicides made up a higher percentage of deaths among veterans compared to non-veterans in all but two age groups, where it was equally at three percent in the 55-64 age group and at one percent in the 75-84 age group.

When examining percentages, the reader should take into consideration that most people aged 25-34 are less likely to pass away due to disease and natural causes compared to older adults.

Figure 6. Total Count of Suicide-Related Deaths by Veteran Status and Age Group. Nevada Residents Ages 20+, 2014-2018.

Year of Death	Veteran Status	Age Group								Total
		20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	
2014	Veteran	1	16	9	18	19	27	20	15	125
	Non-Veteran	33	71	75	85	72	36	23	8	403
2015	Veteran	3	13	8	13	13	33	15	9	107
	Non-Veteran	30	70	74	94	90	28	18	3	407
2016	Veteran	3	9	10	14	18	30	32	15	131
	Non-Veteran	30	87	91	101	72	50	28	5	464
2017	Veteran	2	15	11	19	24	21	18	16	126
	Non-Veteran	43	79	77	96	70	42	33	5	445
2018	Veteran	0	22	8	11	14	29	21	9	114
	Non-Veteran	37	75	97	102	90	48	20	9	478
Total	**Veteran**	**9**	**75**	**46**	**75**	**88**	**140**	**106**	**64**	**603**
	Non-Veteran	**173**	**382**	**414**	**478**	**394**	**204**	**122**	**30**	**2,197**

Of the 111,961 deaths included within this report between 2014 and 2018, 2,800 died due to suicide, and 603 (22%) of those suicide deaths were reported as having a veteran status. The highest number of reported veteran suicides occurred in 2016 (N=131) with the lowest number reported the previous year (N=107). From 2014 to 2018 there were no significant increases or decreases in the number of veteran suicides in Nevada.

Figure 7. Counts of Suicide-Related Deaths by Year and Veteran Status. Nevada Residents Ages 20+, 2014-2018.

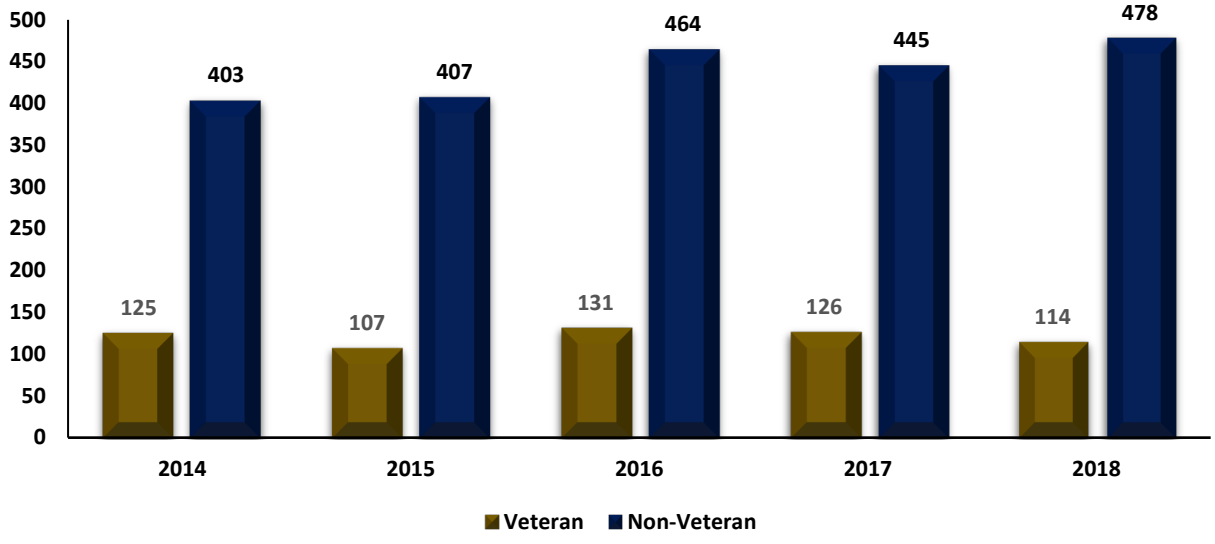
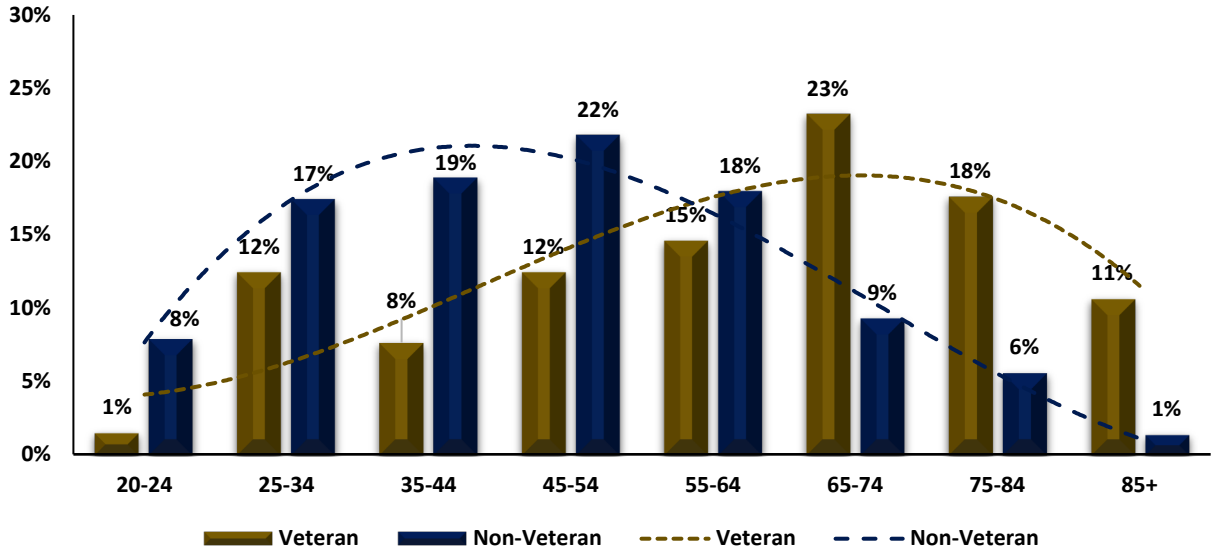


Figure 8. Age Distribution of Suicide-Related Deaths by Veteran Status. Nevada Residents Aged 20+, 2014-2018 Combined.



The trend shows an increase in non-veteran suicide deaths as age increases until the 45-54 age group, followed by a steady decline. This is different in the veteran population, where suicide deaths increase as age increases until the 65-74 age group before they start to decline. This demonstrates that veteran suicides are skewed to an older population.

The differences in the age distributions between veteran and non-veteran suicides represented above are likely due to the differences in the age distributions of those populations in general. Notice from Figure 9 that veteran vs. non-veteran populations follow a similar distribution.

Figure 9. Age Distribution of Population by Veteran Status. Nevada Residents Ages 20+, 2014-2018 Combined.

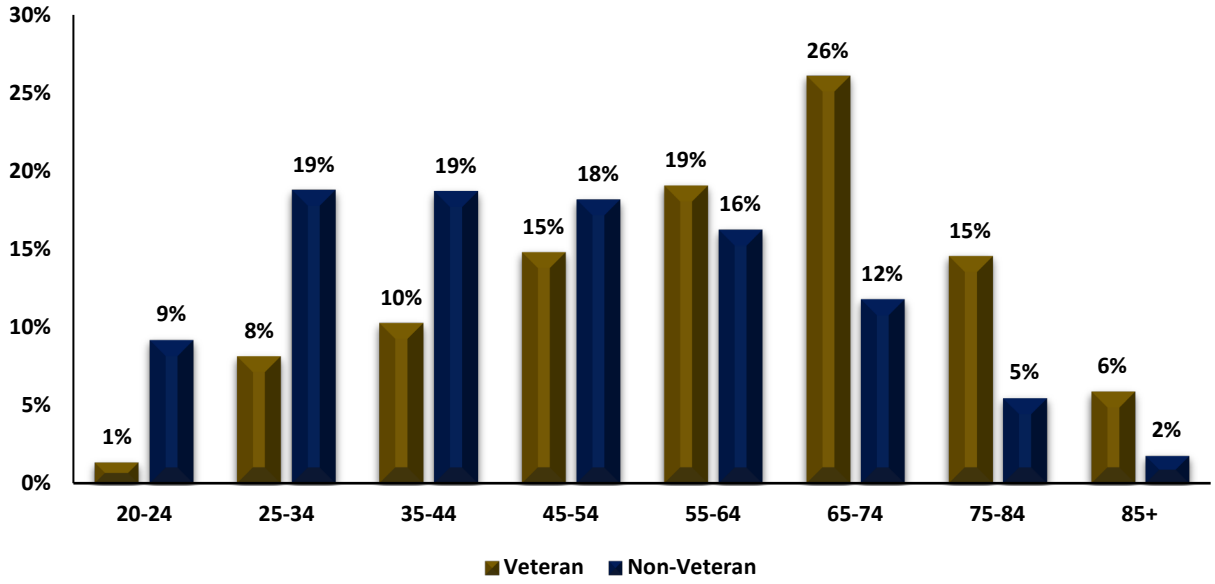


Figure 10. Age Distribution of Suicide-Related Deaths by Veteran Status. Nevada Residents Ages 20+, 2014-2018.

Year of Death	Veteran Status	Age Group								Total
		20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	
2014	Veteran (N=125)	1%	13%	7%	14%	15%	22%	16%	12%	100%
	Non-Veteran (N=403)	8%	18%	19%	21%	18%	9%	6%	2%	100%
2015	Veteran (N=107)	3%	12%	7%	12%	12%	31%	14%	8%	100%
	Non-Veteran (N=407)	7%	17%	18%	23%	22%	7%	4%	1%	100%
2016	Veteran (N=131)	2%	7%	8%	11%	14%	23%	24%	11%	100%
	Non-Veteran (N=464)	6%	19%	20%	22%	16%	11%	6%	1%	100%
2017	Veteran (N=126)	2%	12%	9%	15%	19%	17%	14%	13%	100%
	Non-Veteran (N=445)	10%	18%	17%	22%	16%	9%	7%	1%	100%
2018	Veteran (N=114)	0%	19%	7%	10%	12%	25%	18%	8%	100%
	Non-Veteran (N=478)	8%	16%	20%	21%	19%	10%	4%	2%	100%
Total	**Veteran (N=603)**	**1%**	**12%**	**8%**	**12%**	**15%**	**23%**	**18%**	**11%**	**100%**
	Non-Veteran (N=2,197)	**8%**	**17%**	**19%**	**22%**	**18%**	**9%**	**6%**	**1%**	**100%**

Figure 11. Suicide-Related Deaths by Year, Veteran Status, and Method of Suicide. Nevada Residents Ages 20+, 2014-2018.

Year of Death	Veteran Status	Method of Suicide							
		Poisoning by Solid, Liquid or Gaseous Substance	Hanging/ Strangulation/ Suffocation	Drowning/ Submersion	Firearm/ Airgun/ Explosive	Cutting/ Piercing Instrument	Jumping from Height	Other	Total
2014	Veteran	14	16	1	87	2	2	3	125
	Non-Veteran	79	96	2	202	6	9	9	403
2015	Veteran	9	13	1	81	1	0	2	107
	Non-Veteran	88	101	0	191	5	15	7	407
2016	Veteran	17	10	1	101	1	1	0	131
	Non-Veteran	112	102	5	207	12	16	10	464
2017	Veteran	19	18	0	84	3	1	1	126
	Non-Veteran	96	94	0	217	8	22	8	445
2018	Veteran	12	10	1	83	2	4	2	114
	Non-Veteran	85	108	3	253	9	15	5	478
Total	**Veteran**	**71**	**67**	**4**	**436**	**9**	**8**	**8**	**603**
	Non-Veteran	**460**	**501**	**10**	**1,070**	**40**	**77**	**39**	**2,197**

Among the veteran population from 2014 to 2018, the highest percentage of suicides occurred in the 65-74 age group, accounting for 23% of the 603 suicide-related deaths, compared to 9% of the non-veteran suicide deaths. The highest percentage of suicides among the non-veteran population occurred in the 45-54 age group, accounting for 22% of the deaths, compared to 12% of veteran deaths. Disparities occur between the veteran and non-veteran populations among all eight age groups, ranging from a 3% to a 12% difference.

Figure 12. Percent of Non-Veteran Suicide-Related Deaths by Method and Sex. Nevada Residents Ages 20+, 2014-2018 Combined.

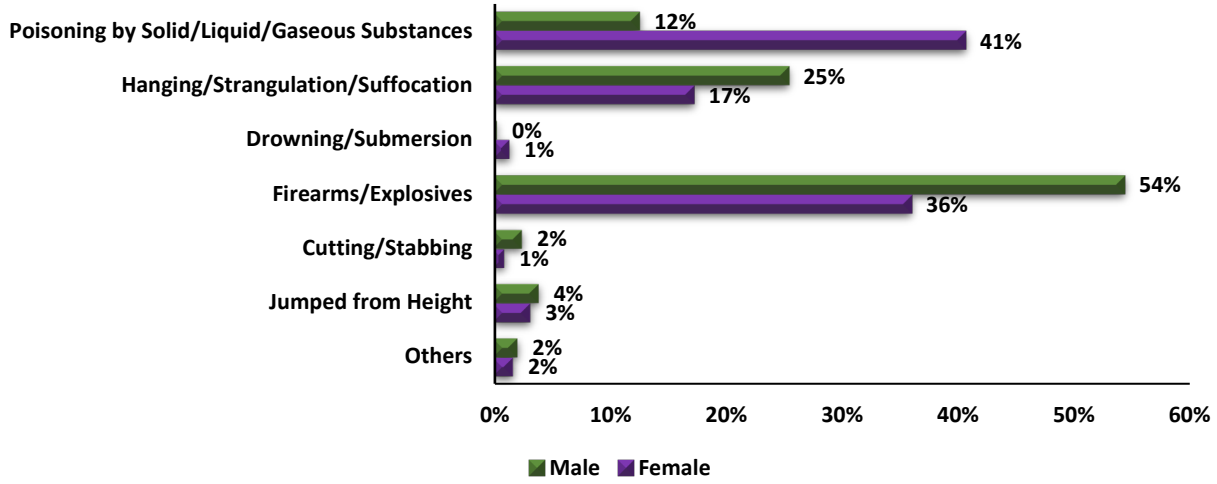
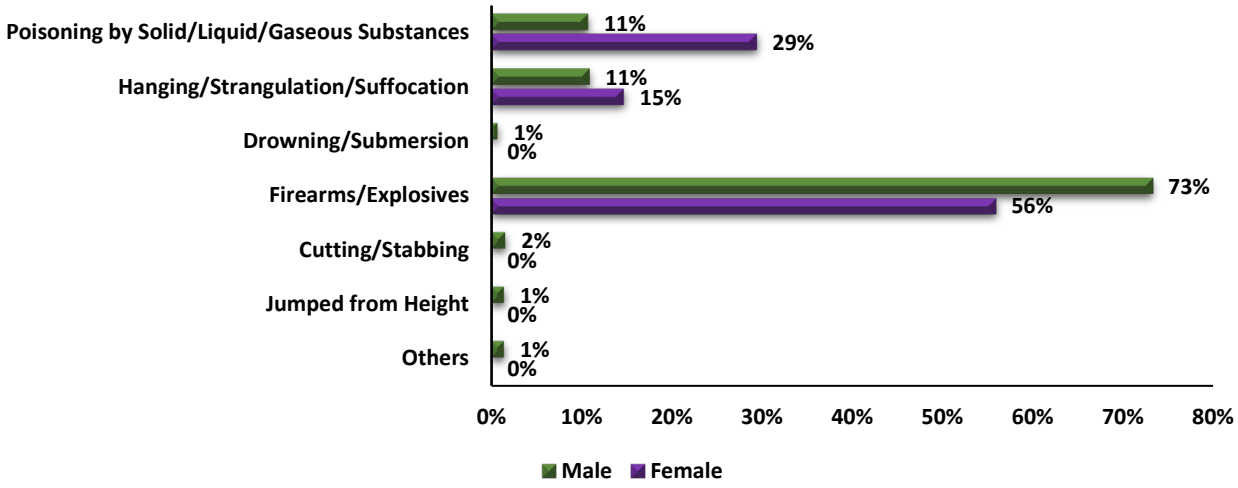
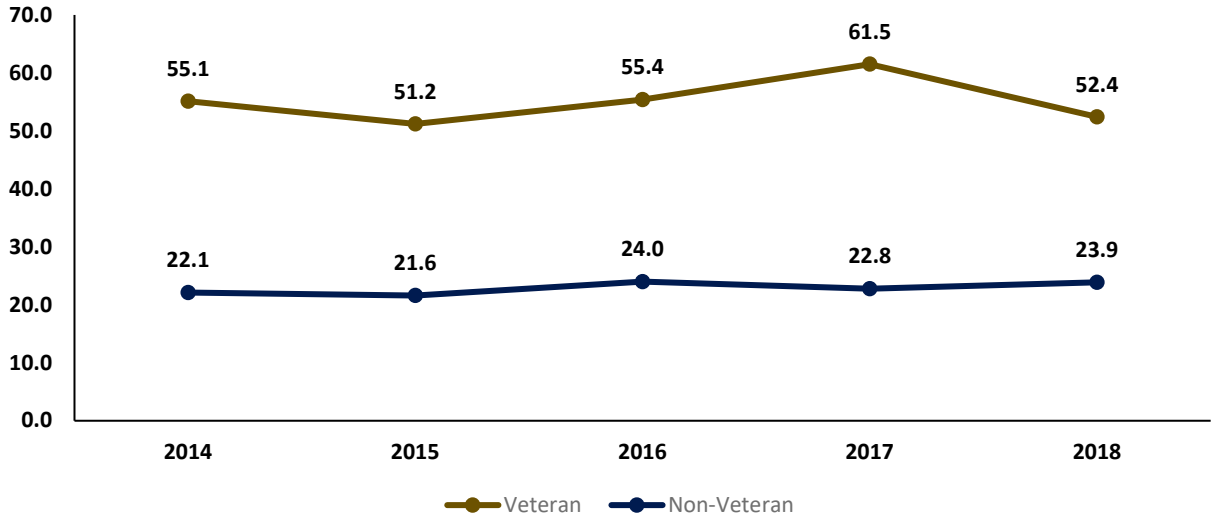


Figure 13. Percent of Veteran Suicide-Related Deaths by Method and Sex. Nevada Residents Ages 20+, 2014-2018 Combined.



Among the male population, 73% of the veteran suicides committed were by firearm/airgun/explosive, compared to approximately half of non-veteran suicides (54%). Among the female population, the greatest difference in method was firearms/explosives, which accounted for 56% of veteran suicide deaths and 36% of non-veteran suicide deaths.

Figure 14. Suicide Age-Adjusted Rates (per 100,000) by Year and Veteran Status. Nevada Residents Ages 20+, 2014-2018.



Veteran suicide rates (per 100,000) have varied between 2014 and 2018 with a peak rate of 61.5 per 100,000 veteran population in 2017 compared to the lowest rate of 51.2 per 100,000 veteran population in 2015. This contrasts with the rate per 100,000 of non-veteran suicides, with rates continually between 21.6 and 24.0 per 100,000 non-veterans. These rates demonstrate a significant increased risk for a veteran to complete suicide compared to the non-veteran population of Nevada residents.

Complete tables of counts, crude rates, age-adjusted rates and confidence intervals for each year from 2014 to 2018 can be viewed in the appendices.

Figure 15. Methods of Suicide Age-Adjusted Rates (per 100,000) by Year, Veteran Nevada Residents Ages 20+, 2014-2018.

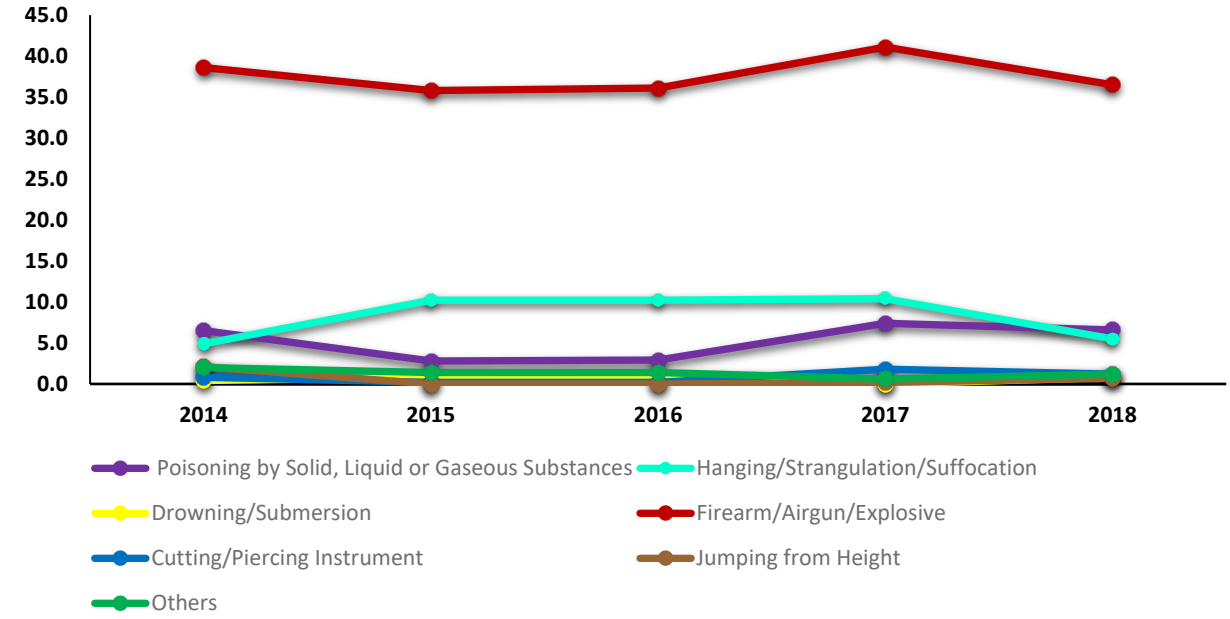


Figure 16. Methods of Suicide Age-Adjusted Rates (per 100,000) by Year, Non-Veteran Nevada Residents Ages 20+, 2014-2018.

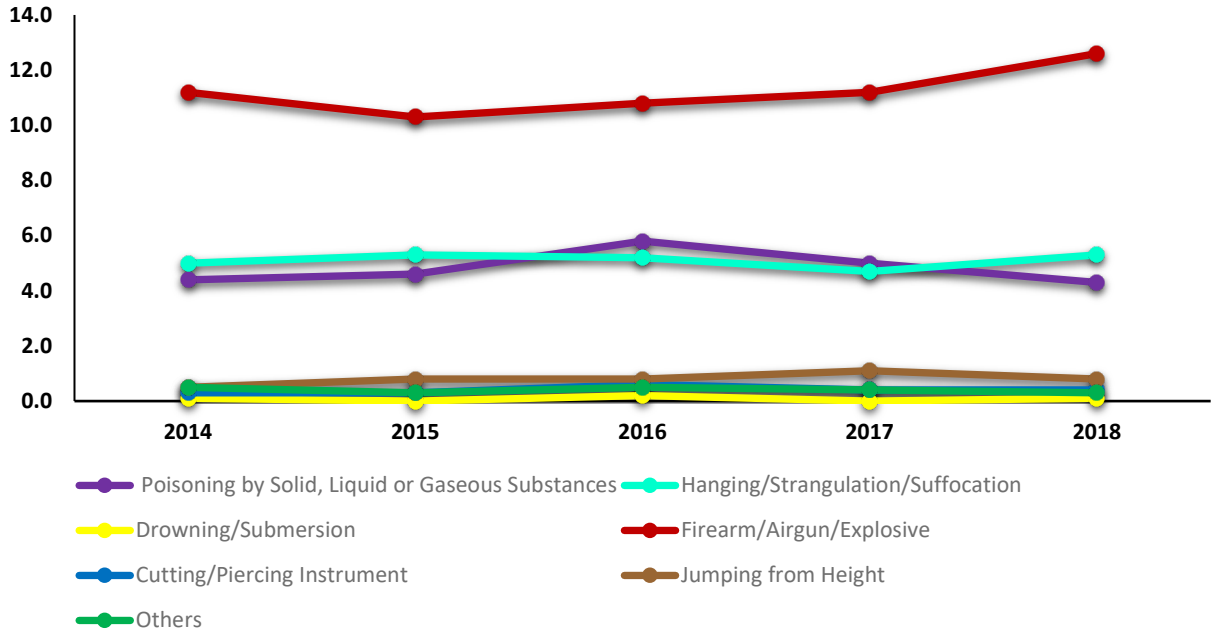
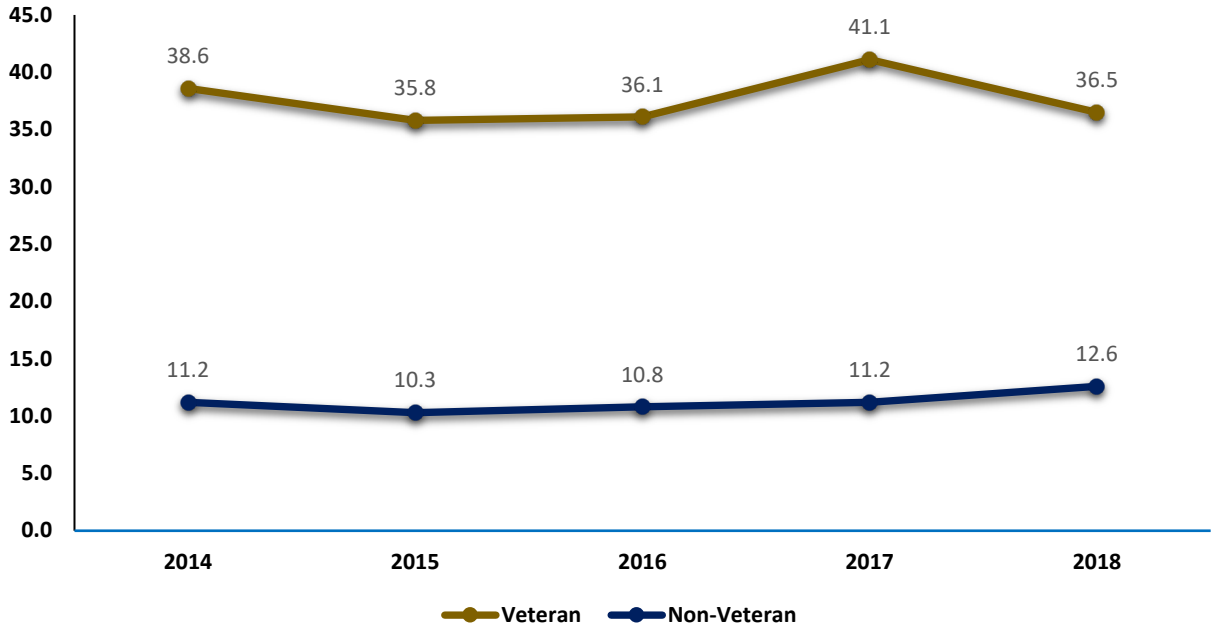


Figure 17. Firearms/Explosives as the Method of Suicide, Age-Adjusted Rates (per 100,000) by Year and Veteran Status. Nevada Residents Ages 20+, 2014-2018.



The rates (per 100,000) at which firearms/explosives were used as the method of suicide was greater in the veteran population compared to non-veteran population in all years from 2014 to 2018. The veteran suicide rate by firearms/explosives varied from a low of 35.8 in 2015 to a high of 41.1 in 2017. The rate of suicide by firearms/explosives in the non-veteran community was consistent from 2014 to 2018, varying in a range from 10.3 to 12.6. Of the 603 veteran suicides between 2014 and 2018, 72% (N=436) had a reported method of suicide as firearms/explosions. When broken down by gender a firearm was the method of suicide in 73% of veteran suicides completed by males (N=417), and 56% of females (N=19).

Suicide-Related Hospitalizations

TRICARE and Civilian Health and Medical Program of the Department of Veteran's Affairs (CHAMPVA), are health care benefits programs in which the Department of Defense and Department of Veteran's Affairs, respectively, share the cost of health care services. Because service members' families are covered by these two programs and veteran status is not identified in the billing data, the term "military community" is used in this report to distinguish the veteran population from the non-veteran population. The veteran population in the suicide-related emergency department visits and inpatient admissions section includes any individual that is covered through TRICARE and CHAMPVA, including spouses and dependents of military members.

In the military community there were 402 emergency department visits and 284 inpatient admissions related to suicide in 2014-2018 combined. Of the 402 visits, three individuals died, and 174 were discharged, transferred, left against medical advice, entered hospice, or admitted as an inpatient. Of the 284 inpatient admissions, seven individuals died, and 189 admissions were discharged, transferred, entered hospice, or left against medical advice.

In the non-military community there were 19,877 emergency department visits and 9,302 inpatient admissions related to suicide in 2014 to 2018 combined. Of the 19,877 visits, 141 individuals died, and 11,358 visits were discharged, transferred, left against medical advice, entered hospice, or admitted as an inpatient. Of the 9,302 admissions, 250 individuals died, and 4,823 admissions were discharged, transferred, entered hospice, or left against medical advice.

Figure 18. Suicide-Related Emergency Department Visits and Inpatient Admissions by Military Community Status and Sex. Nevada Residents, 2014-2018 Combined.

In contrast to the gender distribution of suicide deaths, suicide-related emergency department visits among the military community (N=402) between 2014 and 2018 were more common in females (60%, N=243) than males (40%, N=159). The same trend is seen for inpatient admissions, with a majority of females comprising visits, 56% (N=160), compared to males (44%, N=124). Females in the non-military community comprised the majority as well of both emergency department visits (60%) and inpatient admissions (59%).

Figure 19. Suicide-Related Emergency Department Visits and Inpatient Admissions by Military Community Status and Age-Group. Nevada Residents, 2014-2018 Combined.

Age Group	Military Community				Non-Military Community			
	Emergency Department Visits		Inpatient Admissions		Emergency Department Visits		Inpatient Admissions	
	Count	%	Count	%	Count	%	Count	%
5-14	22	5%	29	10%	1,204	6%	341	4%
15-24	148	37%	85	30%	6,577	33%	1,877	20%
25-34	82	20%	47	17%	4,414	22%	1,696	18%
35-44	53	13%	29	10%	3,155	16%	1,621	17%
45-54	40	10%	33	12%	2,622	13%	1,658	18%
55-64	43	11%	45	16%	1,307	7%	1,251	13%
65-74	11	3%	11	4%	402	2%	555	6%
75-84	2	0%	2	1%	128	1%	215	2%
85+	1	0%	3	1%	51	0%	88	1%
Total	**402**	**100%**	**284**	**100%**	**19,877**	**100%**	**9,302**	**100%**

The 15-24 age-group had the highest number of inpatient admissions and emergency department visits between 2014 and 2018 in both communities and categories of hospitalizations. It is important to note that the individuals in the military community included in Figure 19 may include spouses and dependents of military members, as well as veterans, and may not be comparable to the suicide death data. It is unclear if the released patients received mental and behavioral health services after the attempts.

Figure 20. Suicide-Related Emergency Department Visits by Military Community Status, Method of Attempts and Year. Nevada Residents, 2014-2018.

Method of Suicide Attempt	Year					Total	%
	2014	2015	2016	2017	2018		
Military Community							
Poisoning by Solid, Liquid or Gaseous Substance	51	38	37	21	24	171	62%
Hanging/Strangulation/Suffocation	0	1	0	0	0	1	0%
Firearm/Air Gun/Explosive	1	0	1	1	0	3	1%
Cutting/Piercing Instrument	20	21	8	19	11	79	28%
Jumping from Height	0	0	0	0	0	0	0%
Late effects of self-inflicted injury	0	0	0	0	0	0	0%
Other and unspecified means	2	2	9	7	4	24	9%
Total	**74**	**62**	**55**	**48**	**39**	**278**	**100%**
Non-Military Community							
Poisoning by Solid, Liquid or Gaseous Substance	1,928	1,877	1,276	1,259	1,117	7,457	54%
Hanging/Strangulation/Suffocation	91	87	4	3	3	188	1%
Firearm/Air Gun/Explosive	30	23	24	27	13	117	1%
Cutting/Piercing Instrument	943	1,014	821	916	786	4,480	32%
Jumping from Height	13	21	16	12	14	76	1%
Late effects of self-inflicted injury	8	6	4	0	1	19	0%
Other and unspecified means	320	331	344	299	266	1,560	11%
Total	**3,333**	**3,359**	**2,489**	**2,516**	**2,200**	**13,897**	**100%**

In total, the highest reported method of attempted suicide resulting in emergency department visits is poisonings, accounting for 62% of all methods of attempted suicide among the military community and 54% of the non-military community.

A single suicide-related hospitalization may have multiple methods listed. Therefore, the numbers listed in Figure 20 cannot be summed to equal the total number of suicide-related hospitalizations. This applies to both the inpatient and emergency department sections.

Figure 21. Suicide-Related Inpatient Admissions by Military Community Status, Method of Attempts and Year. Nevada Residents, 2014-2018.

Method of Suicide Attempt	Year					Total	%
	2014	2015	2016	2017	2018		
Military Community							
Poisoning by Solid, Liquid or Gaseous Substance	21	19	14	20	15	89	43%
Hanging/Strangulation/Suffocation	0	2	0	0	0	2	1%
Firearm/Air Gun/Explosive	0	0	1	6	1	8	4%
Cutting/Piercing Instrument	1	11	9	19	35	75	37%
Jumping from Height	1	0	1	0	1	3	1%
Late effects of self-inflicted injury	0	0	4	5	10	19	9%
Other and unspecified means	0	4	1	3	6	14	7%
Total	**23**	**34**	**30**	**52**	**66**	**205**	**102%**
Non-Military Community							
Poisoning by Solid, Liquid or Gaseous Substance	1,056	1,054	864	903	892	4,769	72%
Hanging/Strangulation/Suffocation	39	24	1	1	0	65	1%
Firearm/Air Gun/Explosive	31	23	25	38	9	126	2%
Cutting/Piercing Instrument	116	151	137	162	139	705	11%
Jumping from Height	15	12	12	8	5	52	1%
Late effects of self-inflicted injury	15	16	239	106	334	710	11%
Other and unspecified means	61	91	66	63	83	364	5%
Total	**1,313**	**1,338**	**1,313**	**1,252**	**1,418**	**6,634**	**102%**

In total, the highest reported method of attempted suicide resulting in inpatient admissions is poisonings, indicated on 43% of the admissions in the military community and 72% of admissions in the non-military community.

A single suicide-related hospitalization may have multiple methods listed. Therefore, the numbers listed in Figure 21 cannot be summed to equal the total number of suicide-related hospitalizations. This applies to both the inpatient and emergency department sections.

Behavioral Risk Factor Surveillance System (BRFSS)

The BRFSS inquires on each participant's veteran status. Between 2014 and 2018, BRFSS participants were asked "During the past 12 months have you ever seriously considered attempting suicide?" Survey results are limited and are not available for further break down beyond what is provided below. This question was not asked for the survey conducted in 2014.

Figure 22. Percentage who Reported Suicide Ideology by Veteran Status and Year. Nevada Residents, 2015-2018.

Survey Year	Veteran Status	Percent Reported Suicide Ideation in Last 12 months	Confidence Interval
2015	Veteran	2%	(0.1% - 3.1%)
	Non-Veteran	2%	(1.4% - 2.8%)
2016	Veteran	2%	(0.5%-3.2%)
	Non-Veteran	4%	(2.8%-4.8%)
2017	Veteran	2%	(0.0%-3.7%)
	Non-Veteran	3%	(2.3%-4.5%)
2018	Veteran	3%	(1.1%-4.9%)
	Non-Veteran	3%	(2.3%-4.6%)

Regarding percentage of participants who reported seriously considering attempting suicide during the past 12 months of taking the BRFSS survey, there is not a notable disparity between veteran and non-veteran populations.

Nevada Veteran Health Survey

In a continued effort to identify the unique health, disabilities, diseases and conditions directly related to military service, the Nevada Department of Veteran Services in collaboration with the Department of Health and Human Services developed a survey for veterans to better assess and understand exposure risk.

Question 18 of the survey inquires on a veteran's service-connected disability or disease. At the time of this publication, 53.49% of question respondents self-identified having been diagnosed with a service-connected disability or disease. More data are needed to further understand the types of service-connected disability and disease.

Figure 22. Nevada Veterans Health Survey 2020, Question 18.

Q18 – Have you been diagnosed with a service-connected disability or disease, including presumptive condition(s)?	
Response	Percent
Yes	53.49%
No	46.51%
Total	**100%**

Conclusion

This report demonstrates the need for continued data collection and monitoring of veteran overall health indicators including morbidity and mortality, as well as continued suicide prevention efforts for this population. The rates of suicide among the veteran population fluctuates from year to year but overall remains more than double the rate of the non-veteran community.

Data highlights include:

- The aging veteran population of Nevada residents seems in particular risk for suicide.
- There is a demonstrated access to firearms and use of firearms as lethal means within the veteran population not demonstrated in the non-veteran population when it comes to method of suicide resulting in suicide deaths.
- Efforts to prevent drug overdose and poisonings could assist in lowering the number of hospitalizations due to suicide attempts. Wrap around services for veterans and military families are needed to ensure identification of suicide ideology. If suicide ideology is discovered and addressed, this could prevent more members of the military community from attempting or taking their lives.

Appendix

Figure A1. Age-Adjusted weights

Age Group	Weight
Age20_24_WEIGHT	0.095734399
Age25_29_WEIGHT	0.093587182
Age30_34_WEIGHT	0.088532365
Age35_39_WEIGHT	0.089497173
Age40_44_WEIGHT	0.092651902
Age45_49_WEIGHT	0.10071312
Age50_54_WEIGHT	0.098892694
Age55_59_WEIGHT	0.087213859
Age60_64_WEIGHT	0.074587877
Age65_69_WEIGHT	0.055150675
Age70_74_WEIGHT	0.041148878
Age75_79_WEIGHT	0.032454588
Age80_84_WEIGHT	0.025471786
Age85_WEIGHT	0.024363501