

# DoD SER

## Department of Defense Suicide Event Report Calendar Year 2019 Annual Report



The estimated cost of this report or study for the Department of Defense is approximately \$94,000 in Fiscal Years 2020 - 2021. This includes \$750 in expenses and \$93,000 in DoD labor.

**If you or anyone you know is experiencing thoughts of suicide, please reach out for help immediately.**



- Call 800-273-8255. If you're a Service member or Veteran, press 1 to talk to a qualified Department of Veterans Affairs (VA) responder.
  - In Europe, call 00800 1273 8255 or DSN 118
  - In Korea, call 0808 555 1188 or DSN 118
  - In Afghanistan, call 00 1 800 273 8255 or DSN 111
- Start a confidential online chat session at [www.VeteransCrisisLine.net/chat](http://www.VeteransCrisisLine.net/chat).
- Send a text message to **838255** to connect to a VA responder.
- If you are deaf or hard of hearing, you can connect through chat, text, or teletypewriter (TTY).

# **The Calendar Year 2019 DoDSER Annual Report**



**Psychological Health Center of Excellence  
Research and Development Directorate  
Defense Health Agency**

The estimated cost of this report or study for the Department of Defense is approximately \$94,000 for the 2020 and 2021 Fiscal Years. This includes \$750 in expenses and \$93,000 in DoD labor. Generated on 15 March 2021.  
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## Executive Summary

The Department of Defense Suicide Event Report (DoDSER) is the official reporting system for deaths by suicide and suicide attempts among Service members in the U.S. Air Force, Army, Marine Corps, Navy, and Space Force. The DoDSER Annual Report presents aggregated results generated from the DoDSER data collected by the Military Services during a specified calendar year. New for this year, the Calendar Year 2019 (CY19) DoDSER Annual Report also contains information in response to Section 741 of the National Defense Authorization Act (NDAA) for Fiscal Year 2020 (FY20), “Reports on Suicide among Members of the Armed Forces and Suicide Prevention Programs and Activities of the Department of Defense.” Section 741 required the Secretary of Defense to report on the total number of suicides, attempted suicides, and known cases of suicidal ideation among service members (including the reserve component) during a specified year; the number that occurred during the first 180 days of service along with the associated initial recruit training locations; and the number that occurred during a contingency operation deployment. The CY19 DoDSER Annual Report meets the requirements of Section 741 as described in Appendix A, “Section 741 NDAA FY20 Reporting Requirements.”

### CY19 Suicide Mortality Rates

There were 344 deaths by suicide identified among active-component service members. The suicide mortality rate was 25.9 deaths per 100,000 population.

The suicide mortality rates for each active-component service were as follows:

- Air Force: 25.1 suicides per 100,000 population
- Army: 29.8 suicides per 100,000 population
- Marine Corps: 25.3 suicides per 100,000 population
- Navy: 21.5 suicides per 100,000 population
- Space Force: 0 suicides per 100,000 population (from establishment of Space Force on December 20, 2019 through December 31, 2019)

The suicide mortality rates for the Reserve and the National Guard were 18.2 and 20.3 suicides per 100,000, respectively.

### Military Suicide Mortality Rates over Time

For the active-component population, the data indicated a per-year increase in the suicide mortality rate ratio from CY11 to CY19. The reserve-component population and the National Guard population showed no interpretable per-year increases in their rate ratios from CY11 to CY19.

### Comparison of Military Suicide Mortality Rates to the U.S. Adult Population

All changes observed in suicide mortality rates for the military populations for CY11-CY18 were consistent with the increase in the suicide mortality rate for the U.S. adult population over the same time frame. The comparison only extends through CY18 because CY19 data were not yet available for the U.S. population.

### DoDSER Active Component Data Summary

- Firearm use was the most common method of injury cited in suicide DoDSER forms, accounting for 59.9% of all CY19 suicides.
- Drug and/or alcohol overdose was the most common method of attempted suicide cited in DoDSER forms, accounting for 53.1% of reported CY19 suicide attempts.
- Less than half (43.6%) of those who died by suicide in CY19 had a documented behavioral health diagnosis.
- Regardless of whether or not an individual voluntarily disclosed – or was assessed for – suicidal thoughts, feelings, or behaviors, approximately half (52.4%) of all individuals who died by suicide in CY19 made contact with the Military Health System (MHS) in the 90 days prior to death.
- The prevalence of various risk factors, protective factors, and other suicide event characteristics among suicide and suicide-attempt DoDSER forms in CY19 were generally consistent with levels observed for previous years.

### DoDSER Reserve Component Data Summary

- Firearm use was the most common method of injury cited in CY19 suicide DoDSER forms for the Reserve (67.9%) and the National Guard (72.7%).
- Drug and/or alcohol overdose was the most common method of attempted suicide cited in CY19 DoDSER forms, accounting for 46.6% of reported suicide attempts for the Reserve and 44.8% of attempts for the National Guard.

## Chapter 1: Introduction

The Department of Defense Suicide Event Report (DoDSER) is the official reporting system for suicide events in the U.S. Air Force, Army, Marine Corps, Navy, and Space Force.<sup>1</sup> All cases of suicide death and suicide attempt among military Service members are to be reported via the DoDSER.<sup>2</sup> The Psychological Health Center of Excellence (PHCoE), a division of the Defense Health Agency Research and Development (J-9) Directorate, is responsible for the operation of the DoDSER, which has three primary elements:

1. A web-based **system** for collecting, organizing, and securing a standard set of case-level data for every service member who dies by suicide or makes a suicide attempt, regardless of military service, component, or duty status. The portal for the system is <https://dodser.t2.health.mil/>.<sup>1</sup>
2. A data-collection **form** that guides trained Military Health System (MHS) or command-level appointees on the data to assess and collect, as well as potential sources for required information. The content of the DoDSER form resulted from a collaborative process between the Military Services, civilian and military experts, senior military leaders, and key stakeholders. The form is periodically revised to reflect the evolving needs of each service; it currently contains more than 500 data elements. Table 1 displays the DoDSER form's content areas.

Table 1. DoDSER form content areas

Content Area	Variables and Types of Variables
Personal Information	Age, sex, ethnicity, education, marital status
Military Information	Job code, duty status, permanent duty station
Event Information	Access to firearms, event method, event setting
Medical History	Behavioral health and medical history
Military History	Deployment history, disciplinary action
Personal History	Developmental and family history, current stressors
Narrative Summary	Information on data-collection strategy

3. An **annual report** of aggregated results generated from the data collected during a given calendar year. It is the culmination of collaborative efforts between PHCoE, the Suicide Prevention Program Offices of the Air Force, Army, Marine Corps, and Navy, the National Guard Bureau, the Defense Suicide Prevention Office, and the Armed Forces Medical Examiner System (AFMES).

To distinguish between these elements, the words *system*, *form*, or *annual report* appear after the DoDSER acronym throughout this report.

### Interpretation of DoDSER Data

The reader is advised that this annual report's descriptions of specific risk and contextual factors must not be interpreted as underlying causes of suicide. It is not possible to determine whether any variable is a risk factor for suicide solely from the data presented in this report. Identifying such relationships requires formal research that includes individuals who do not die by suicide or

engage in a suicide attempt. This type of research is outside the surveillance function of the DoDSER system.

The reader should also take into account the content area of any given DoDSER item when interpreting results. While this report reflects the best data available, several items address contextual factors that may not be precisely determined using data from existing databases or from evidence collected following the event. As a result, these types of items include response options of “No Known History” and/or “Cannot Determine.” In this report, these response options are combined with “No” responses to differentiate them from “Yes” responses that indicate the existence of validating data or evidence. See Appendix B for more information about DoDSER data processes.

#### Special Note about the U.S. Space Force

The U.S. Space Force was established on December 20, 2019 within the Department of the U.S. Air Force. Given the date of establishment, the Space Force data for CY19 will be discussed in the Air Force chapter of this Report (see Chapter 4). All future DoDSER Annual Reports will have a chapter dedicated to the Space Force.

#### References and Notes

1. For more information on the DoDSER System, see the System of Record Notice (April 15, 2016, 81 FR 22240) at <https://dpcl.d.defense.gov/Privacy/SORNsIndex/DOD-wide-SORN-Article-View/Article/570683/edha-20-dod>
2. For more information on suicide death and attempt reporting via the DoDSER system, see DoD Instruction 6490.16, “Defense Suicide Prevention Program,” September 11, 2020 at <https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodi/649016p.pdf?ver=2020-09-11-122632-850>

## Chapter 2: Suicide Mortality Rates

This chapter first presents a primer on interpreting statistical data, which includes information about suicide mortality rate comparisons and a statistical measure of uncertainty, the confidence interval. The chapter then presents suicide mortality rate data for CY19 and the results of trend analyses of suicide mortality rates from CY11 through CY19. The chapter also presents results of comparisons between military and U.S. adult population rates for CY11 through CY18. For detailed information about the calculation of suicide rates, see Appendix C.

### A Primer on Interpreting Statistical Data

Annual suicide mortality rates represent the number of deaths by suicide per 100,000 individuals from a specified population for a specified year. For example, a rate of 20 per 100,000 individuals means that 20 suicide deaths occurred for every 100,000 individuals in the population.

Suicide mortality rates can be compared 1) between different populations during the same time period or 2) within the same population over different time periods. Before undertaking any rate comparison, one must consider whether the populations differed from one another in a way that could make a comparison misleading. For example, men have a higher suicide mortality rate than women in the U.S. adult population and the U.S. military population has a higher proportion of men than women. A direct comparison of the suicide mortality rates between these populations would show that the U.S. military rate is higher. This rate difference can be attributed, at least in part, to the unequal proportions of men in each population. Rate standardization is one technique that can be used to remove important imbalances between populations. Appendix C provides more detail on how rate standardization can be accomplished.

Suicide mortality rates and comparisons between them are considered estimates. It is not possible to know the true values of rates or differences between rates. However, the data collected (i.e., observed data) provide the best estimate of the difference. The observed data are used to estimate a confidence interval (CI). A CI defines a range of values that may contain the true value. A 95% CI is an interval that has a 95% probability of containing the true value. The estimated value from the data is considered consistent with a true value contained within the interval, including the endpoints.<sup>1</sup>

As an example, if the annual suicide mortality rate for population A was 21 per 100,000 for year X and for population B was 18 per 100,000 for year X, then the corresponding rate ratio is  $21/18=1.17$ . This means that the observed rate for population A was 17% greater than the observed rate for population B. The 95% CI for this comparison covers all values from 0.96 to 1.42. This means that the estimated ratio of 1.17 is consistent with a true ratio between 0.96 (or population A's rate as 4% less than population B's rate) and 1.42 (or population A's rate as 42% greater than population B's rate). Note that for rate ratios, a value of 1 indicates that there is no difference between the rates compared (e.g.,  $21/21=1$ ). Accordingly, when a confidence interval for a rate ratio covers the value of 1, the observed data are consistent with a true value of 1 (i.e., no real difference between the rates).

### CY19 Suicide Mortality Rates by Military Population

Table 2 displays suicide mortality counts and rates by military population for CY19. Tables 3-9 provide suicide mortality counts and rates across demographic categories for each military population (active component, Reserve, National Guard) and for the active-component populations of each service. Per DoD policy, suicide mortality rates are not reported for populations with fewer than 20 events.<sup>2</sup>

Table 2. Frequency and rate of death by suicide for CY19, by military population

Population	No.	Rate <sup>a</sup>
Active	344	25.9
Air Force	83	25.1
Army	142	29.8
Marine Corps	47	25.3
Navy	72	21.5
Reserve <sup>b</sup>	65	18.2
Air Force	13	--
Army	36	18.9
Marine Corps	9	--
Navy	7	--
National Guard <sup>b</sup>	89	20.3
Air	15	--
Army	74	22.3

<sup>a</sup>Unstandardized rate per 100,000 persons. Rates for subgroups with fewer than 20 suicides are not reported because of statistical instability.

<sup>b</sup>Rates for the Reserve and the National Guard include all service members, irrespective of duty status.

Table 3. Frequency and rate of death by suicide, active component, Air Force, Army, Marine Corps, and Navy combined, CY19, by demographic characteristics

	No.	Rate <sup>a</sup>
Total	344	25.9
Sex		
Female	29	12.9
Male	315	28.6
Race		
American Indian/Alaska Native	7	--
Asian/Pacific Islander	22	28.6
Black/African American	36	15.9
White/Caucasian	260	28.6
Other/Unknown	19	--
Hispanic ethnicity		
Yes	52	23.8
No	277	27.0
Unknown	15	--
Age		
17-19	27	25.7
20-24	134	31.0
25-29	92	30.1
30-34	40	19.4
35-39	32	20.8
40-44	16	--
45-49	3	--
50-54	0	--
55-59	0	--
Rank/grade		
Cadet/Midshipman	1	--
E1 – E4	170	30.0
E5 – E9	149	28.8
Officer	20	9.4
Warrant officer <sup>b</sup>	4	--
Education		
Some high school	2	--
Alternative high school certification	23	60.2
High school graduate	235	29.5
Some college, no degree	12	--
Associate's degree or technical certification	33	28.0
Four-year college degree	25	13.6
Master's degree or greater	7	--
Unknown	7	--
Marital status		
Never married	151	25.6
Married	170	25.3
Legally separated	0	--
Divorced	23	36.7
Widowed	0	--
Unknown	0	--

<sup>a</sup>Rate per 100,000 persons. Categories with fewer than 20 events do not have a rate reported because of statistical instability.

<sup>b</sup>Note: The Air Force does not have the rank of Warrant officer.

Table 4. Frequency and rate of death by suicide, Reserve, Air Force, Army, Marine Corps, and Navy combined, CY19, by demographic characteristics

	No.	Rate <sup>a</sup>
Total	65	18.2
Sex		
Female	3	--
Male	62	22.4
Race		
American Indian/Alaska Native	0	--
Asian/Pacific Islander	4	--
Black/African American	8	--
White/Caucasian	50	20.8
Other/Unknown	3	--
Hispanic ethnicity		
Yes	3	--
No	55	20.6
Unknown	7	--
Age		
17-19	4	--
20-24	16	--
25-29	13	--
30-34	15	--
35-39	6	--
40-44	5	--
45-49	6	--
50-54	0	--
55-59	0	--
Rank/grade		
Cadet/Midshipman	0	--
E1 – E4	32	23.2
E5 – E9	21	14.2
Officer	9	--
Warrant officer <sup>b</sup>	2	--
Unknown	1	--
Education		
Some high school	5	--
Alternative high school certification	1	--
High school graduate	37	20.3
Some college, no degree	6	--
Associate's degree or technical certification	3	--
Four-year college degree	8	--
Master's degree or greater	3	--
Unknown	2	--
Marital status		
Never married	32	19.4
Married	31	18.7
Legally separated	0	--
Divorced	1	--
Widowed	0	--
Unknown	1	--

<sup>a</sup>Rate per 100,000 persons. Categories with fewer than 20 events do not have a rate reported because of statistical instability.

<sup>b</sup>Note: The Air Force does not have the rank of Warrant officer.

Table 5. Frequency and rate of death by suicide, National Guard, Air Force and Army combined, CY19, by demographic characteristics

	No.	Rate <sup>a</sup>
Total	89	20.3
Sex		
Female	6	--
Male	83	23.3
Race		
American Indian/Alaska Native	1	--
Asian/Pacific Islander	2	--
Black/African American	11	--
White/Caucasian	74	21.4
Other/Unknown	1	--
Hispanic ethnicity		
Yes	5	--
No	65	16.8
Unknown	19	--
Age		
17-19	5	--
20-24	29	28.3
25-29	21	24.6
30-34	15	--
35-39	5	--
40-44	5	--
45-49	5	--
50-54	3	--
55-59	1	--
Rank/grade		
Cadet/Midshipman	0	--
E1 – E4	44	22.3
E5 – E9	36	19.8
Officer	7	--
Warrant officer <sup>b</sup>	2	--
Unknown		
Education		
Some high school	3	--
Alternative high school certification	10	--
High school graduate	38	21.1
Some college, no degree	14	--
Associate's degree or technical certification	5	--
Four-year college degree	7	--
Master's degree or greater	3	--
Unknown	9	--
Marital status		
Never married	49	21.2
Married	33	18.2
Legally separated	0	--
Divorced	7	--
Widowed	0	--
Unknown	0	--

<sup>a</sup>Rate per 100,000 persons. Categories with fewer than 20 events do not have a rate reported because of statistical instability.

<sup>b</sup>Note: The Air Force does not have the rank of Warrant officer.

Table 6. Frequency and rate of death by suicide, active component, Air Force, CY19, by demographic characteristics

	No.	Rate <sup>a</sup>
Total	83	25.1
Sex		
Female	10	--
Male	73	27.9
Race		
American Indian/Alaska Native	1	--
Asian/Pacific Islander	7	--
Black/African American	5	--
White/Caucasian	60	25.7
Other/Unknown	10	--
Hispanic ethnicity		
Yes	14	--
No	66	24.9
Unknown	3	--
Age		
17-19	7	--
20-24	28	29.4
25-29	24	29.6
30-34	9	--
35-39	11	--
40-44	4	--
45-49	0	--
50-54	0	--
55-59	0	--
Rank/grade		
Cadet/Midshipman	0	--
E1 – E4	36	28.3
E5 – E9	40	29.5
Officer	7	--
Warrant officer <sup>b</sup>	0	--
Education		
Some high school	1	--
Alternative high school certification	0	--
High school graduate	50	29.6
Some college, no degree	0	--
Associate's degree or technical certification	18	--
Four-year college degree	9	--
Master's degree or greater	4	--
Unknown	1	--
Marital status		
Never married	35	26.0
Married	37	20.9
Legally separated	0	--
Divorced	11	--
Widowed	0	--
Unknown	0	--

<sup>a</sup>Rate per 100,000 persons. Categories with fewer than 20 events do not have a rate reported because of statistical instability.

<sup>b</sup>Note: The Air Force does not have the rank of Warrant officer.

Table 7. Frequency and rate of death by suicide, active component, Army, CY19, by demographic characteristics

	No.	Rate <sup>a</sup>
Total	142	29.8
Sex		
Female	12	--
Male	130	32.2
Race		
American Indian/Alaska Native	1	--
Asian/Pacific Islander	8	--
Black/African American	22	21.6
White/Caucasian	110	34.2
Other/Unknown	1	--
Hispanic ethnicity		
Yes	16	--
No	126	31.7
Unknown	0	--
Age		
17-19	12	--
20-24	59	39.7
25-29	34	30.9
30-34	17	--
35-39	11	--
40-44	7	--
45-49	2	--
50-54	0	--
55-59	0	--
Rank/grade		
Cadet/Midshipman	1	--
E1 – E4	77	37.5
E5 – E9	57	32.7
Officer	4	--
Warrant officer	3	--
Education		
Some high school	0	--
Alternative high school certification	17	--
High school graduate	93	36.3
Some college, no degree	12	--
Associate's degree or technical certification	8	--
Four-year college degree	9	--
Master's degree or greater	2	--
Unknown	1	--
Marital status		
Never married	58	29.2
Married	79	31.3
Legally separated	0	--
Divorced	5	--
Widowed	0	--
Unknown	0	--

<sup>a</sup>Rate per 100,000 persons. Categories with fewer than 20 events do not have a rate reported because of statistical instability.

Table 8. Frequency and rate of death by suicide, active component, Marine Corps, CY19, by demographic characteristics

	No.	Rate <sup>a</sup>
Total	47	25.3
Sex		
Female	2	--
Male	45	26.5
Race		
American Indian/Alaska Native	2	--
Asian/Pacific Islander	4	--
Black/African American	1	--
White/Caucasian	38	25.5
Other/Unknown	2	--
Hispanic ethnicity		
Yes	9	--
No	38	26.3
Unknown	0	--
Age		
17-19	4	--
20-24	24	27.0
25-29	12	--
30-34	3	--
35-39	2	--
40-44	1	--
45-49	1	--
50-54	0	--
55-59	0	--
Rank/grade		
Cadet/Midshipman	0	--
E1 – E4	28	25.6
E5 – E9	17	--
Officer	1	--
Warrant officer	1	--
Education		
Some high school	1	--
Alternative high school certification	0	--
High school graduate	44	28.5
Some college, no degree	0	--
Associate's degree or technical certification	1	--
Four-year college degree	1	--
Master's degree or greater	0	--
Unknown	0	--
Marital status		
Never married	26	24.9
Married	21	27.7
Legally separated	0	--
Divorced	0	--
Widowed	0	--
Unknown	0	--

<sup>a</sup>Rate per 100,000 persons. Categories with fewer than 20 events do not have a rate reported because of statistical instability.

Table 9. Frequency and rate of death by suicide, active component, Navy, CY19, by demographic characteristics

	No.	Rate <sup>a</sup>
Total	72	21.5
Sex		
Female	5	--
Male	67	25.0
Race		
American Indian/Alaska Native	3	--
Asian/Pacific Islander	3	--
Black/African American	8	--
White/Caucasian	52	25.3
Other/Unknown	6	--
Hispanic ethnicity		
Yes	13	--
No	47	21.3
Unknown	12	--
Age		
17-19	4	--
20-24	23	23.1
25-29	22	26.8
30-34	11	--
35-39	8	--
40-44	4	--
45-49	0	--
50-54	0	--
55-59	0	--
Rank/grade		
Cadet/Midshipman	0	--
E1 – E4	29	23.4
E5 – E9	35	23.0
Officer	8	--
Warrant officer	0	--
Education		
Some high school	0	--
Alternative high school certification	6	--
High school graduate	48	22.0
Some college, no degree	0	--
Associate's degree or technical certification	6	--
Four-year college degree	6	--
Master's degree or greater	1	--
Unknown	5	--
Marital status		
Never married	32	20.9
Married	33	19.7
Legally separated	0	--
Divorced	7	--
Widowed	0	--
Unknown	0	--

<sup>a</sup>Rate per 100,000 persons. Categories with fewer than 20 events do not have a rate reported because of statistical instability.

Suicide Mortality Rates over Time

*Longer-Term Trends in Rates*

The age- and sex-adjusted annual suicide mortality rates for the active component, Reserve, and National Guard populations from CY11-CY19 are displayed in Figure 1. Similar graphs for the active-component population of each of the Military Services are displayed in Figure 2. The dashed line for each graph is the estimated rate from the linear trend assessment.

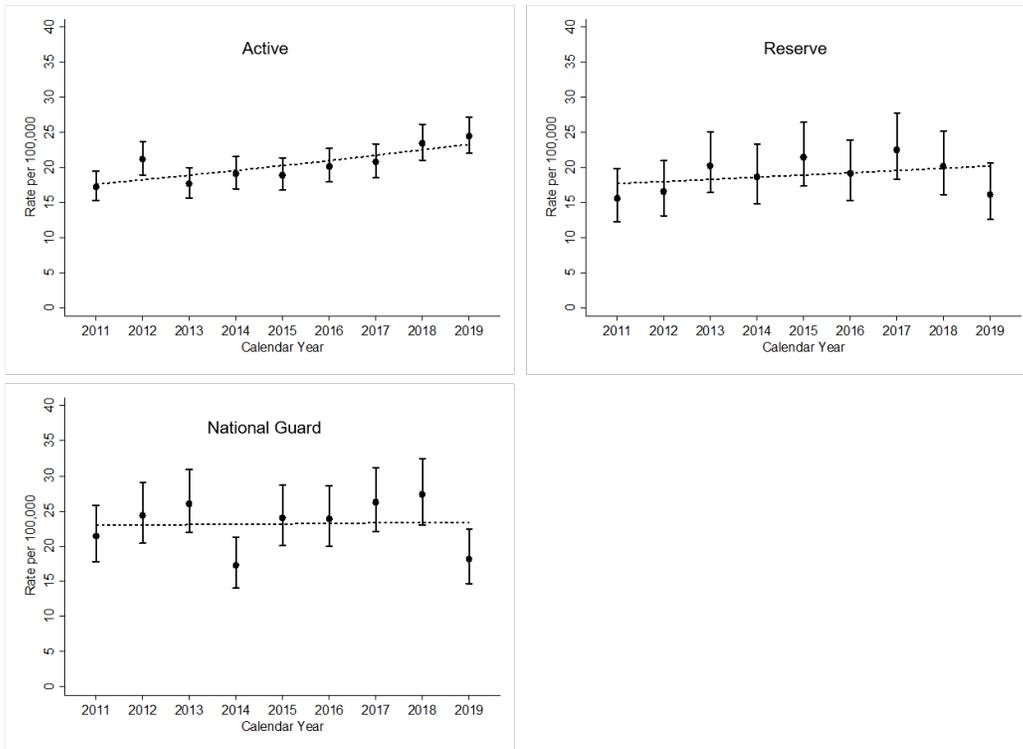


Figure 1. Age- and sex-adjusted annual suicide mortality rates for the active component, Reserve, and National Guard, CY11-CY19. Note: Annual rate estimates are presented as a scatter plot with 95% CIs. The dashed line is the estimated rate from the linear trend assessment.

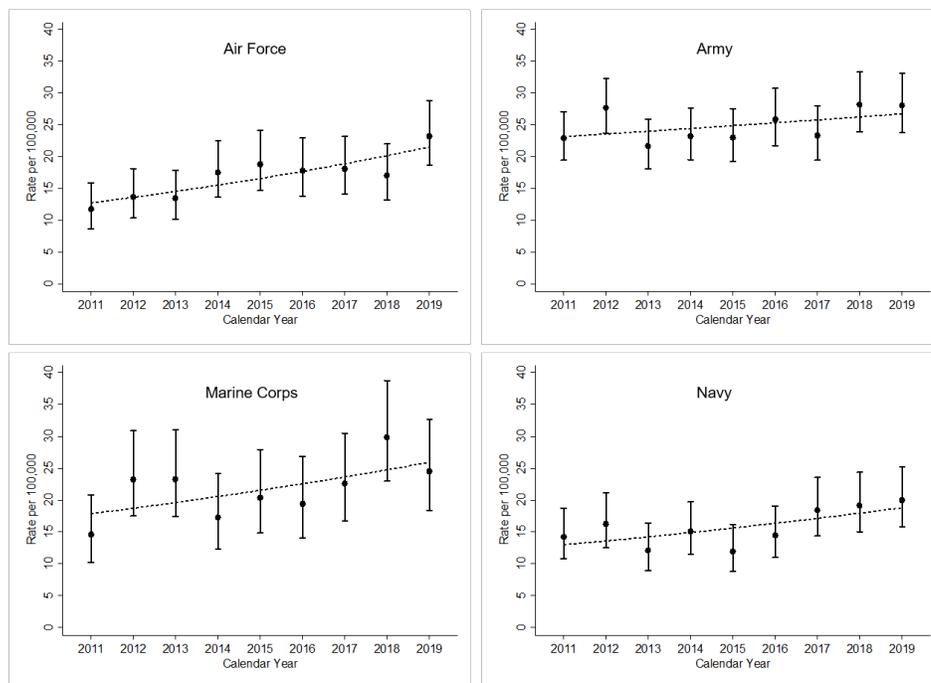


Figure 2. Age- and sex-adjusted annual suicide mortality rates for the active component, by Military Service, CY11-CY19. Note: Annual rate estimates are presented as a scatter plot with 95% CIs. The dashed line is the estimated rate from the linear trend assessment.

Table 10 displays the per-year rate ratios and associated 95% CIs from CY11 through CY19 for each of the populations (see Primer at the beginning of the chapter for an explanation of CIs). The per-year increases for the total active component population, and the active-component populations of the Air Force, Marine Corps, and Navy were consistent with true increases. In contrast, the ratios for the active-component Army population, Reserve, and National Guard populations were consistent with no true increases.

Table 10. Per-year change in suicide mortality rates, CY11-CY19, by population

Population	Per-year ratio <sup>a</sup>	95% CI <sup>b</sup>
Active	1.04	1.02, 1.05
Air Force	1.07	1.03, 1.10
Army	1.02	1.00, 1.04
Marine Corps	1.05	1.01, 1.09
Navy	1.05	1.01, 1.08
Reserve	1.02	0.99, 1.05
National Guard	1.00	0.98, 1.03

<sup>a</sup>Per-year rate ratio adjusted for age and sex. Ratios greater than 1 indicate a per-year increase in the associated suicide mortality rate.

<sup>b</sup>The 95% confidence interval (CI) indicates the range of plausible values for the true ratio. Note that when a confidence interval for a rate ratio covers the value of 1, the observed data are consistent with a true value of 1 (i.e., no real difference between the rates).

Comparison of U.S. Military Suicide Mortality Rates to the U.S. Adult Population

CY19 suicide mortality data for the U.S. population was not available at the time of this report. As a result, data analyses did not extend beyond CY18. The U.S. suicide mortality rates from CY11 to CY18 were restricted to the rates for adults aged 17-59 years and then used for analyses in this report. The age restriction was needed to make the military and U.S. populations more comparable. From CY11 through CY18, the U.S. adult population suicide mortality rate increased 2% per year.<sup>3</sup>

Figure 3 displays the annual standardized rates for the active component, Reserve, and National Guard populations. Figure 4 displays similar graphs for the active-component populations of each of the Military Services.

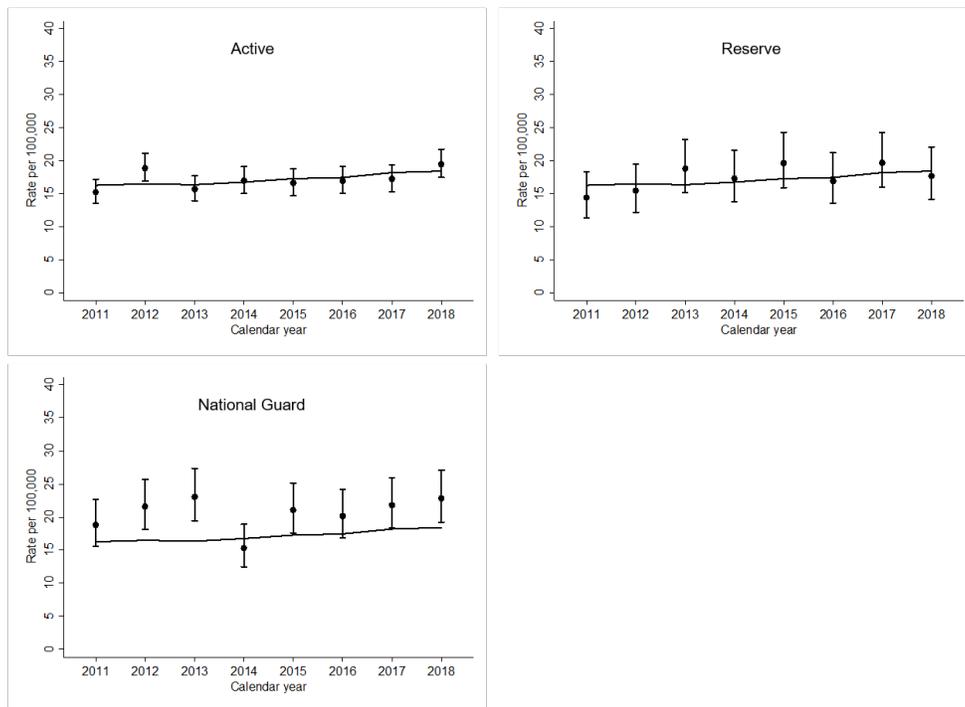


Figure 3. Age- and sex-standardized annual suicide mortality rates (points and 95% CIs), CY11-CY18, compared to the U.S. adult (ages 17-59) population suicide mortality rate, by military population.

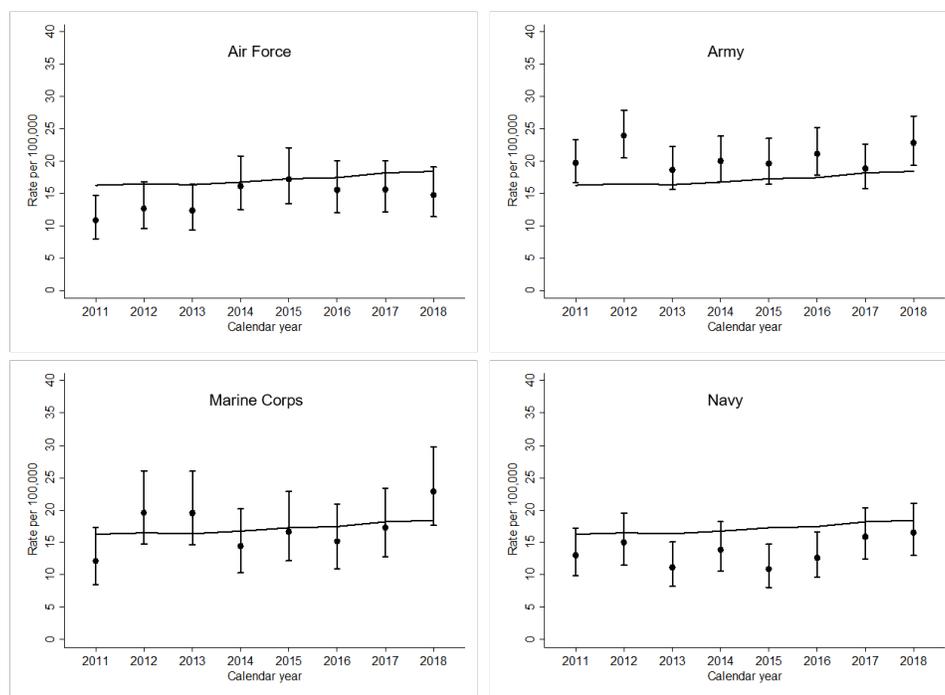


Figure 4. Age- and sex-standardized annual suicide mortality rates (points and 95% CIs), CY11-CY19, compared to the U.S. adult (ages 17-59) population suicide mortality rate, by Military Service.

Table 11 displays the unstandardized and age- and sex-standardized per-year change estimates for the active component (total and by service), Reserve, and National Guard populations. After standardization and accounting for the increase over time in the U.S. adult population suicide mortality rate, the increases in the suicide mortality rates for the military populations from CY11-CY18 were shown to be consistent with the increase that occurred in the U.S. adult population rate over the same time frame.

Table 11. Unstandardized and standardized linear trend estimates from CY11-CY18, by military population

Population	Unstandardized		Standardized <sup>a</sup>	
	Per-year ratio <sup>b</sup>	95% CI	Per-year ratio <sup>c</sup>	95% CI
Active	1.03	1.01, 1.05	1.00	0.98, 1.02
Air Force	1.06	1.02, 1.10	1.02	0.98, 1.07
Army	1.01	0.99, 1.04	0.98	0.96, 1.01
Marine Corps	1.05	1.01, 1.10	1.02	0.97, 1.07
Navy	1.04	1.00, 1.08	1.01	0.97, 1.05
Reserve	1.04	1.00, 1.07	1.01	0.98, 1.04
National Guard	1.03	1.00, 1.05	1.00	0.98, 1.07

<sup>a</sup>Standardized for age and sex using the CY18 U.S. adult suicide mortality rate (18.4 per 100,000).

<sup>b</sup>Adjusted for age and sex differences within each military population over time.

<sup>c</sup>Adjusted for age and sex differences within each military population over time and standardized to the U.S. adult population suicide mortality rates from CY11-CY18.

References and Notes

1. Anderson, A. A. (2019). Assessing statistical results: magnitude, precision, and model uncertainty. *The American Statistician*, 73(S1): 118-121. Doi: 10.1080/00031305.2019.1537889.
2. For more information on suicide rate reporting, see DoD Instruction 6490.16, “Defense Suicide Prevention Program,” September 11, 2020 at <https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodi/649016p.pdf?ver=2020-09-11-122632-850>.
3. Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2018 on CDC WONDER Online Database, released in 2020. Data are from the Multiple Cause of Death Files, 1999-2018, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed at <http://wonder.cdc.gov/ucd-icd10.html> on Mar 27, 2020

## Chapter 3: DoDSER Summary - Joint Forces

### Introduction

This chapter presents an overview of the combined Air Force, Army, Marine Corps, and Navy data for submitted active-component suicide and suicide-attempt DoDSER forms. The data tables for suicide and suicide attempt cases are presented separately. Data tables are organized by the following variable categories: demographic and military characteristics (Tables 12 and 13), suicide event characteristics (Tables 14 and 15), physical and mental health characteristics (Tables 16 and 17), and psychosocial and adverse experiences (Tables 18 and 19). Data tables contain joint data as well as data for each of the Military Services. Variables of particular interest are presented in the text of this chapter and the following four service-specific chapters.

### Suicide Mortality

There were 287 active-component suicide deaths confirmed by AFMES for CY19 as of January 31, 2020, all of which required a DoDSER form submission. For inclusion in this report, a DoDSER form for each event must have been submitted by March 31, 2020. A total of 284 of the required forms were submitted and three were not. There were an additional 57 events identified by AFMES as either a confirmed suicide or that were still pending confirmation after January 31, 2020. No forms were required for submission for these events prior to the cutoff date for this report; however, any forms submitted were included in the analysis here. We received a total of 35 of these forms, which brought the total forms available for this report to 319.

### Suicide Attempts

Over the course of CY19, DoDSER forms were submitted for 1,462 suicide attempts by 1,388 unique individuals. Note that some individuals made more than one suicide attempt during CY19.

### Occurrence of Previous Suicide Attempt(s) Reported via the DoDSER System

Four active-component CY19 suicides were associated with one or more previously reported suicide attempt(s) that occurred between CY10 (when attempts were first entered into the DoDSER system; CY08 for Army) and CY19.

Thirty-three individuals with a submitted CY19 suicide-attempt DoDSER form had one or more previous suicide attempt(s) recorded in the DoDSER system since CY10 (CY08 for Army). The median number of days between the first reported suicide attempt in CY19 and the most recent attempt prior to CY19 was 226 days.

### Demographic Characteristics

Demographic characteristics are presented in Tables 12 and 13. The demographic profiles for both suicide and suicide-attempt DoDSER forms were consistent between CY19 and the averages for CY16-CY18. Note that the three-year averages for CY16-CY18 were used to provide more stable statistical comparisons.

Method of Injury

Firearm use was the most common (59.9%) method of injury identified in suicide DoDSER forms. This was consistent with the average percentage for CY16-CY18. The majority (87.4%) of the firearms used were personal possessions. Relatively few firearm deaths (9.9%) resulted from the self-directed use of a military-issued firearm. For suicide-attempt DoDSER forms, drug and/or alcohol overdose was the most frequently reported method of injury (53.0%). This indicated a 6.1% reduction (95% CI = -11.3%, -0.6%) in attempts attributable to drug and/or alcohol overdose relative to the average for CY16-CY18.

Behavioral Health History

Among suicide DoDSER forms, 43.6% had at least one current or past behavioral health diagnosis in their medical record. Substance use disorders (20.7%) and adjustment and mood disorders (17.9% each) were the most common diagnostic categories. Among suicide-attempt DoDSER forms, 57.3% had at least one current or past behavioral health diagnosis in their medical record. Mood disorders (29.7%), substance use disorders (21.6%), and anxiety disorders (21.5%) were the most common diagnostic categories.

Figure 5 displays the prevalence of mental health diagnoses, prior self-harm, and the use of psychotropic medication in the 90 days prior to a suicidal behavior among active-component DoDSER forms submitted for CY19 and the three-year average for CY16-CY18. The prevalence estimates from CY19 suicide and suicide-attempt DoDSER forms were largely consistent with the average estimates for CY16-CY18. For suicide-attempt DoDSER forms, there was a 13.1% reduction (95% CI = -21.5%, -3.7%) in the prevalence of recent psychotropic medication usage relative to the average for CY16-CY18.

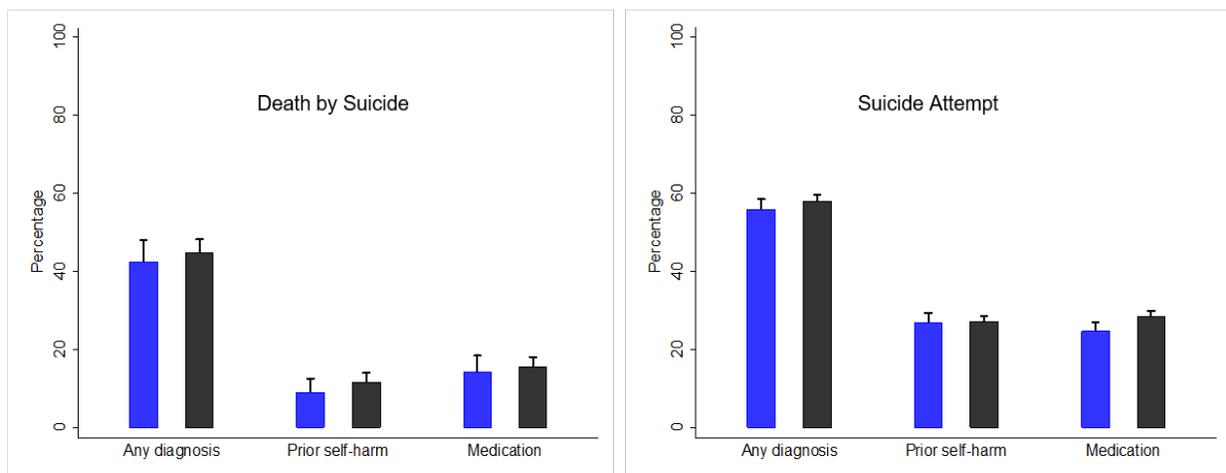


Figure 5. Percentages of active-component DoDSER forms that indicated selected mental health factors, by event type, CY16-CY19. Blue bars represent CY19 data, black bars are the three-year averages for CY16-CY18, and the whiskers are the half-width of the 95% confidence intervals.

Health Care Utilization

Regardless of whether or not an individual voluntarily disclosed – or was assessed for – suicidal thoughts, feelings, or behaviors, 52.4% of the Service members who died by suicide in CY19

had been in contact with the MHS in the 90 days prior to death. The most common type of appointment was a general visit to a medical treatment facility (45.8%) and the second most common type was a mental health visit (32.0%). Outpatient mental health services were utilized in 31.3% of cases while inpatient mental health services were utilized in 6.3% of cases.

For reported suicide attempts, 61.7% of the DoDSER forms indicated contact with the MHS in the 90 days prior to the behavior. The most common types of appointments were general visits to a medical treatment facility (50.4%) and mental health visits (47.2%). Outpatient mental health services were utilized in 45.1% of cases while inpatient mental health services were utilized in 14.7% of cases.

**Stressors**

Among suicide DoDSER forms, relationship (42.6%), legal/administrative (28.5%), and work (13.8%) stressors within 90 days of the event were the most common stressors identified in CY19 (Figure 6). Similarly, among suicide-attempt DoDSER forms, relationship (36.7%), legal/administrative (28.7%), and work (35.0%) stressors were the most common stressors identified in CY19 (Figure 6). The prevalence estimates from CY19 suicide and suicide-attempt DoDSER forms were largely consistent with the average estimates for CY16-CY18. For suicide DoDSER forms, there was a 31.8% reduction (95% CI = -49.6%, -7.5%) in the prevalence of work stressors relative to the average for CY16-CY18.

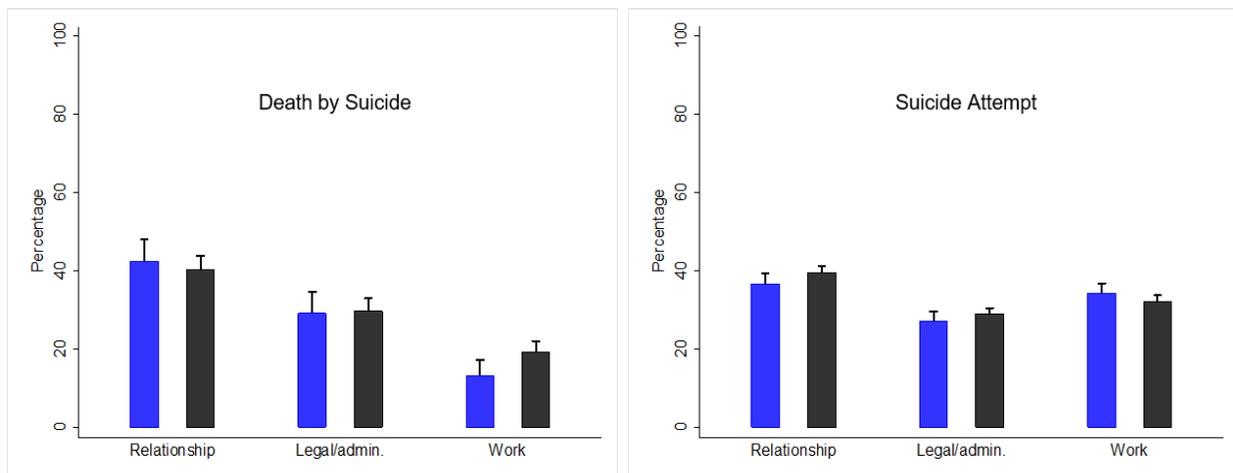


Figure 6. Percentages of active-component DoDSER forms that indicated selected contextual stressors within 90 days of the event, by event type, CY16-CY19. Blue bars represent CY19 data, black bars are the three-year averages for CY16-CY18, and the whiskers are the half-width of the 95% confidence intervals.

Table 12. Demographic characteristics, active-component suicide DoDSER forms, CY19

	Total		Air Force		Army		Marine Corps		Navy	
	No.	%	No.	%	No.	%	No.	%	No.	%
Sex										
Male	292	91.5	65	87.8	119	91.5	43	95.6	65	92.9
Female	27	8.5	9	12.2	11	8.5	2	4.4	5	7.1
Age										
17-19	23	7.2	5	6.8	11	8.5	4	8.9	3	4.3
20-24	129	40.4	26	35.1	56	43.1	24	53.3	23	32.9
25-29	84	26.3	21	28.4	30	23.1	10	22.2	23	32.9
30-34	35	11.0	8	10.8	14	10.8	3	6.7	10	14.3
35-39	30	9.4	10	13.5	11	8.5	2	4.4	7	10.0
40-44	15	4.7	4	5.4	6	4.6	1	2.2	4	5.7
45-59	3	0.9	0	0.0	2	1.5	1	2.2	0	0.0
Race										
American Indian/Alaska Native	7	2.2	1	1.4	1	0.8	2	4.4	3	4.3
Asian/Pacific Islander	20	6.3	7	9.5	6	4.6	4	8.9	3	4.3
Black/African American	33	10.3	5	6.8	19	14.6	1	2.2	8	11.4
White/Caucasian	243	76.2	54	73.0	103	79.2	36	80.0	50	71.4
Other/Unknown	16	5.0	7	9.5	1	0.8	2	4.4	6	8.6
Hispanic ethnicity										
Yes	49	15.4	13	17.6	14	10.8	9	20.0	13	18.6
No	269	84.3	61	82.4	116	89.2	36	80.0	56	80.0
Unknown	1	0.3	0	0.0	0	0.0	0	0.0	1	1.4
Education										
Less than high school	2	0.6	1	1.4	0	0.0	1	2.2	0	0.0
Alternative high school	21	6.6	0	0.0	15	11.5	0	0.0	6	8.6
High school graduate	225	70.5	45	60.8	90	69.2	42	93.3	48	68.6
Some college	38	11.9	15	20.3	15	11.5	1	2.2	7	10.0
4-year degree	25	7.8	9	12.2	8	6.2	1	2.2	7	10.0
Postgraduate	8	2.5	4	5.4	2	1.5	0	0.0	2	2.9
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Marital status										
Never married	142	44.5	32	43.2	53	40.8	25	55.6	32	45.7
Married	159	49.8	35	47.3	73	56.2	20	44.4	31	44.3
Legally separated	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Divorced	18	5.6	7	9.5	4	3.1	0	0.0	7	10.0
Widowed	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other/unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rank/grade										
Cadet/midshipman	1	0.3	0	0.0	1	0.8	0	0.0	0	0.0
E1-E4	157	49.2	31	41.9	72	55.4	26	57.8	28	40.0
E5-E9	138	43.3	36	48.6	50	38.5	17	37.8	35	50.0
Warrant officer	4	1.3	N/A	N/A	3	2.3	1	2.2	0	0.0
Commissioned officer	19	6.0	7	9.5	4	3.1	1	2.2	7	10.0
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

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Table 12 (cont). Demographic characteristics, active-component suicide DoDSER forms, CY19

	Total		Air Force		Army		Marine Corps		Navy	
	No.	%	No.	%	No.	%	No.	%	No.	%
DoD occupation group										
Enlisted										
Infantry, gun crews, and seamanship specialists	58	18.2	1	1.4	44	33.8	9	20.0	4	5.7
Electronic equipment repairers	31	9.7	7	9.5	10	7.7	0	0.0	14	20.0
Communications and intelligence specialists	30	9.4	6	8.1	16	12.3	5	11.1	3	4.3
Health care specialists	19	6.0	6	8.1	6	4.6	0	0.0	7	10.0
Other technical and allied specialists	13	4.1	4	5.4	5	3.8	2	4.4	2	2.9
Functional support and administration	27	8.5	13	17.6	6	4.6	6	13.3	2	2.9
Electrical/mechanical equipment repairers	58	18.2	16	21.6	16	12.3	8	17.8	18	25.7
Craftworkers	12	3.8	2	2.7	5	3.8	1	2.2	4	5.7
Service and supply handlers	35	11.0	10	13.5	11	8.5	6	13.3	8	11.4
Non-occupational	10	3.1	2	2.7	1	0.8	6	13.3	1	1.4
Officer										
General officers and executives	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Tactical operations officers	6	1.9	1	1.4	2	1.5	2	4.4	1	1.4
Intelligence officers	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Engineering and maintenance officers	6	1.9	2	2.7	1	0.8	0	0.0	3	4.3
Scientists and professionals	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Health care officers	3	0.9	0	0.0	1	0.8	0	0.0	2	2.9
Administrators	4	1.3	0	0.0	3	2.3	0	0.0	1	1.4
Supply, procurement, and allied officers	3	0.9	3	4.1	0	0.0	0	0.0	0	0.0
Non-occupational	2	0.6	1	1.4	1	0.8	0	0.0	0	0.0
Unknown	2	0.6	0	0.0	2	1.5	0	0.0	0	0.0
Number of deployments										
0	179	56.1	29	39.2	78	60.0	33	73.3	39	55.7
1	46	14.4	14	18.9	18	13.8	3	6.7	11	15.7
2	40	12.5	8	10.8	15	11.5	7	15.6	10	14.3
3 or more	54	16.9	23	31.1	19	14.6	2	4.4	10	14.3

Table 13. Demographic characteristics, active-component suicide-attempt DoDSER forms, CY19

	Total		Air Force		Army		Marine Corps		Navy	
	No.	%	No.	%	No.	%	No.	%	No.	%
Sex										
Male	1009	69.0	314	64.7	339	72.3	203	77.8	153	61.9
Female	453	31.0	171	35.3	130	27.7	58	22.2	94	38.1
Age										
17-19	214	14.6	56	11.5	89	19.0	53	20.3	16	6.5
20-24	813	55.6	254	52.4	233	49.7	169	64.8	157	63.6
25-29	260	17.8	105	21.6	83	17.7	24	9.2	48	19.4
30-34	100	6.8	37	7.6	36	7.7	10	3.8	17	6.9
35-39	55	3.8	27	5.6	18	3.8	4	1.5	6	2.4
40-44	13	0.9	3	0.6	7	1.5	1	0.4	2	0.8
45-59	7	0.5	3	0.6	3	0.6	0	0.0	1	0.4
Race										
American Indian/Alaska Native	20	1.4	4	0.8	7	1.5	4	1.5	5	2.0
Asian/Pacific Islander	75	5.1	16	3.3	37	7.9	10	3.8	12	4.9
Black/African American	290	19.8	92	19.0	111	23.7	37	14.2	50	20.2
White/Caucasian	957	65.5	319	65.8	306	65.2	197	75.5	135	54.7
Other/Unknown	120	8.2	54	11.1	8	1.7	13	5.0	45	18.2
Hispanic ethnicity										
Yes	194	13.3	92	19.0	40	8.5	23	8.8	39	15.8
No	1267	86.7	392	80.8	429	91.5	238	91.2	208	84.2
Unknown	1	0.1	1	0.2	0	0.0	0	0.0	0	0.0
Education										
Less than high school	1	0.1	0	0.0	1	0.2	0	0.0	0	0.0
Alternative high school	70	4.8	0	0.0	48	10.2	8	3.1	14	5.7
High school graduate	1196	81.8	402	82.9	351	74.8	240	92.0	203	82.2
Some college	117	8.0	57	11.8	34	7.2	7	2.7	19	7.7
4-year degree	62	4.2	23	4.7	24	5.1	6	2.3	9	3.6
Postgraduate	15	1.0	3	0.6	10	2.1	0	0.0	2	0.8
Unknown	1	0.1	0	0.0	1	0.2	0	0.0	0	0.0
Marital status										
Never married	851	58.2	259	53.4	285	60.8	178	68.2	129	52.2
Married	551	37.7	197	40.6	169	36.0	78	29.9	107	43.3
Legally separated	0	0.0								
Divorced	59	4.0	29	6.0	14	3.0	5	1.9	11	4.5
Widowed	1	0.1	0	0.0	1	0.2	0	0.0	0	0.0
Other	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rank/grade										
Cadet/midshipman	3	0.2	3	0.6	0	0.0	0	0.0	0	0.0
E1-E4	1105	75.6	347	71.5	364	77.6	217	83.1	177	71.7
E5-E9	313	21.4	125	25.8	88	18.8	39	14.9	61	24.7
Warrant officer	6	0.4	N/A	N/A	4	0.9	2	0.8	0	0.0
Commissioned officer	32	2.2	10	2.1	13	2.8	3	1.1	6	2.4
Unknown	3	0.2	0	0.0	0	0.0	0	0.0	3	1.2

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Table 13 (cont). Demographic characteristics, active-component suicide-attempt DoDSER forms, CY19

	Total		Air Force		Army		Marine Corps		Navy	
	No.	%	No.	%	No.	%	No.	%	No.	%
DoD occupation group										
Enlisted										
Infantry, gun crews, and seamanship specialists	227	15.5	11	2.3	130	27.7	62	23.8	24	9.7
Electronic equipment repairers	109	7.5	40	8.2	18	3.8	11	4.2	40	16.2
Communications and intelligence specialists	106	7.3	38	7.8	37	7.9	13	5.0	18	7.3
Health care specialists	131	9.0	49	10.1	55	11.7	1	0.4	26	10.5
Other technical and allied specialists	40	2.7	17	3.5	14	3.0	9	3.4	0	0.0
Functional support and administration	203	13.9	75	15.5	60	12.8	48	18.4	20	8.1
Electrical/mechanical equipment repairers	309	21.1	132	27.2	55	11.7	49	18.8	73	29.6
Craftworkers	43	2.9	15	3.1	11	2.3	12	4.6	5	2.0
Service and supply handlers	185	12.7	62	12.8	70	14.9	28	10.7	25	10.1
Non-occupational	67	4.6	33	6.8	1	0.2	23	8.8	10	4.0
Officer										
General officers and executives	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Tactical operations officers	11	0.8	4	0.8	3	0.6	3	1.1	1	0.4
Intelligence officers	5	0.3	1	0.2	2	0.4	1	0.4	1	0.4
Engineering and maintenance officers	4	0.3	0	0.0	4	0.9	0	0.0	0	0.0
Scientists and professionals	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Health care officers	10	0.7	4	0.8	4	0.9	0	0.0	2	0.8
Administrators	5	0.3	1	0.2	2	0.4	0	0.0	2	0.8
Supply, procurement, and allied officers	2	0.1	0	0.0	1	0.2	1	0.4	0	0.0
Non-occupational	4	0.3	3	0.6	1	0.2	0	0.0	0	0.0
Unknown	1	0.1	0	0.0	1	0.2	0	0.0	0	0.0
Number of deployments										
0	1052	72.0	308	63.5	354	75.5	224	85.8	166	67.2
1	214	14.6	79	16.3	61	13.0	18	6.9	56	22.7
2	93	6.4	45	9.3	23	4.9	8	3.1	17	6.9
3 or more	103	7.0	53	10.9	31	6.6	11	4.2	8	3.2

Table 14. Event characteristics, active-component suicide DoDSER forms, CY19

	Total		Air Force		Army		Marine Corps		Navy	
	No.	%	No.	%	No.	%	No.	%	No.	%
Event location country										
United States	283	88.7	66	89.2	116	89.2	41	91.1	60	85.7
Korea	4	1.3	0	0.0	3	2.3	1	2.2	0	0.0
Japan	11	3.4	3	4.1	1	0.8	2	4.4	5	7.1
Germany	4	1.3	1	1.4	3	2.3	0	0.0	0	0.0
United Kingdom	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other	15	4.7	3	4.1	6	4.6	1	2.2	5	7.1
Unknown	2	0.6	1	1.4	1	0.8	0	0.0	0	0.0
Event setting										
Own residence	140	43.9	41	55.4	52	40.0	17	37.8	30	42.9
Barracks	57	17.9	12	16.2	27	20.8	14	31.1	4	5.7
Residence of friend or family	24	7.5	3	4.1	10	7.7	4	8.9	7	10.0
Work/jobsite	16	5.0	1	1.4	6	4.6	3	6.7	6	8.6
Automobile	30	9.4	5	6.8	15	11.5	1	2.2	9	12.9
Inpatient medical facility	1	0.3	0	0.0	0	0.0	0	0.0	1	1.4
Hotel	9	2.8	1	1.4	3	2.3	1	2.2	4	5.7
Other	41	12.9	10	13.5	17	13.1	5	11.1	9	12.9
Unknown	1	0.3	1	1.4	0	0.0	0	0.0	0	0.0
Method of injury										
Drug/alcohol	7	2.2	2	2.7	0	0.0	2	4.4	3	4.3
Hanging/asphyxiation	96	30.1	19	25.7	45	34.6	13	28.9	19	27.1
Poison	13	4.1	5	6.8	5	3.8	2	4.4	1	1.4
Firearm	191	59.9	46	62.2	76	58.5	26	57.8	43	61.4
Military issued	19	6.0	2	2.7	9	6.9	3	6.7	5	7.1
Personally owned	167	52.4	44	59.5	64	49.2	21	46.7	38	54.3
Of unknown provenance	5	1.6	0	0.0	3	2.3	2	4.4	0	0.0
Trauma	12	3.8	2	2.7	4	3.1	2	4.4	4	5.7
Other	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Alcohol used during event										
Yes	88	27.6	22	29.7	28	21.5	12	26.7	26	37.1
No	127	39.8	29	39.2	60	46.2	18	40.0	20	28.6
Unknown	104	32.6	23	31.1	42	32.3	15	33.3	24	34.3
Drugs used during event										
Yes <sup>a</sup>	22	6.9	7	9.5	3	2.3	3	6.7	9	12.9
Drugs (illicit/illegal)										
Used, overdose	2	0.6	1	1.4	0	0.0	1	2.2	0	0.0
Used, no overdose	4	1.3	0	0.0	1	0.8	1	2.2	2	2.9
Prescription medications										
Used, overdose	5	1.6	1	1.4	1	0.8	1	2.2	2	2.9
Used, no overdose	10	3.1	4	5.4	2	1.5	0	0.0	4	5.7
Non-prescription medications										
Used, overdose	7	2.2	4	5.4	0	0.0	2	4.4	1	1.4
Used, no overdose	4	1.3	2	2.7	0	0.0	1	2.2	1	1.4
No	176	55.2	37	50.0	84	64.6	21	46.7	34	48.6
Unknown	121	37.9	30	40.5	43	33.1	21	46.7	27	38.6

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Table 14 (cont). Event characteristics, active-component suicide DoDSER forms, CY19

	Total		Air Force		Army		Marine Corps		Navy	
	No.	%	No.	%	No.	%	No.	%	No.	%
Communicated intent for self-harm										
Yes <sup>a</sup>	108	33.9	24	32.4	35	26.9	18	40.0	31	44.3
Spouse	42	13.2	12	16.2	13	10.0	5	11.1	12	17.1
Friend	37	11.6	7	9.5	11	8.5	7	15.6	12	17.1
Mental health staff	23	7.2	4	5.4	5	3.8	5	11.1	9	12.9
No/no known history	211	66.1	50	67.6	95	73.1	27	60.0	39	55.7
Is there evidence the event involved death-risk gambling?										
Yes	7	2.2	1	1.4	3	2.3	2	4.4	1	1.4
No	281	88.1	58	78.4	116	89.2	43	95.6	64	91.4
Unknown	31	9.7	15	20.3	11	8.5	0	0.0	5	7.1
Is there evidence the event was planned and/or premeditated?										
Yes	121	37.9	28	37.8	50	38.5	20	44.4	23	32.9
No	133	41.7	26	35.1	60	46.2	14	31.1	33	47.1
Unknown	65	20.4	20	27.0	20	15.4	11	24.4	14	20.0
Event observable										
Yes	64	20.1	18	24.3	28	21.5	4	8.9	14	20.0
No	247	77.4	52	70.3	98	75.4	41	91.1	56	80.0
Unknown	8	2.5	4	5.4	4	3.1	0	0.0	0	0.0
Left a suicide note										
Yes	76	23.8	21	28.4	23	17.7	10	22.2	22	31.4
No	207	64.9	42	56.8	93	71.5	29	64.4	43	61.4
Unknown	36	11.3	11	14.9	14	10.8	6	13.3	5	7.1
Residence at time of event										
Barracks	85	26.6	11	14.9	43	33.1	17	37.8	14	20.0
BEQ/BOQ	17	5.3	3	4.1	5	3.8	6	13.3	3	4.3
On-base family housing	36	11.3	12	16.2	16	12.3	5	11.1	3	4.3
Off-base	158	49.5	47	63.5	54	41.5	17	37.8	40	57.1
Ship	5	1.6	0	0.0	0	0.0	0	0.0	5	7.1
Other	17	5.3	0	0.0	12	9.2	0	0.0	5	7.1
Unknown	1	0.3	1	1.4	0	0.0	0	0.0	0	0.0
Resided alone at time of event										
Yes	115	35.8	31	41.9	49	37.7	13	28.9	22	31.4
No	191	59.5	37	50.0	74	56.9	32	71.1	48	68.6
Children resided with Service member	53	16.5	14	18.9	18	13.8	8	17.8	13	18.6
Unknown	13	4.0	6	8.1	7	5.4	0	0.0	0	0.0
Gun in home/immediate environment										
Yes	186	58.3	45	60.8	74	56.9	25	55.6	42	60.0
No	109	34.2	20	27.0	47	36.2	18	40.0	24	34.3
Unknown	24	7.5	9	12.2	9	6.9	2	4.4	4	5.7
Duty environment <sup>a</sup>										
Permanent command/garrison	235	73.7	57	77.0	102	78.5	34	75.6	42	60.0
Leave	25	7.8	2	2.7	13	10.0	3	6.7	7	10.0
Temporary duty assignment	12	3.8	2	2.7	3	2.3	5	11.1	2	2.9
Deployed	9	2.8	1	1.4	4	3.1	0	0.0	4	5.7
Training	15	4.7	3	4.1	4	3.1	4	8.9	4	5.7
Other	38	11.9	8	10.8	9	6.9	5	11.1	16	22.9

<sup>a</sup>Subcategories are not mutually exclusive.

Table 15. Event characteristics, active-component suicide-attempt DoDSER forms, CY19

	Total		Air Force		Army		Marine Corps		Navy	
	No.	%	No.	%	No.	%	No.	%	No.	%
Event location country										
United States	1148	78.5	368	75.9	375	80.0	205	78.5	200	81.0
Korea	38	2.6	16	3.3	20	4.3	2	0.8	0	0.0
Japan	63	4.3	24	4.9	7	1.5	25	9.6	7	2.8
Germany	43	2.9	29	6.0	14	3.0	0	0.0	0	0.0
United Kingdom	17	1.2	17	3.5	0	0.0	0	0.0	0	0.0
Other	49	3.4	23	4.7	14	3.0	4	1.5	8	3.2
Unknown	104	7.1	8	1.6	39	8.3	25	9.6	32	13.0
Event setting										
Own residence	513	35.1	229	47.2	130	27.7	53	20.3	101	40.9
Barracks	616	42.1	143	29.5	252	53.7	165	63.2	56	22.7
Residence of friend or family	76	5.2	29	6.0	10	2.1	13	5.0	24	9.7
Work/jobsite	48	3.3	13	2.7	10	2.1	6	2.3	19	7.7
Automobile	92	6.3	34	7.0	29	6.2	10	3.8	19	7.7
Inpatient medical facility	11	0.8	5	1.0	3	0.6	2	0.8	1	0.4
Hotel	15	1.0	7	1.4	4	0.9	0	0.0	4	1.6
Other	77	5.3	23	4.7	20	4.3	12	4.6	22	8.9
Unknown	14	1.0	2	0.4	11	2.3	0	0.0	1	0.4
Method of injury										
Drug/alcohol	776	53.1	238	49.1	260	55.4	133	51.0	145	58.7
Hanging/asphyxiation	226	15.5	84	17.3	66	14.1	53	20.3	23	9.3
Poison	54	3.7	18	3.7	27	5.8	5	1.9	4	1.6
Firearm	75	5.1	31	6.4	20	4.3	10	3.8	14	5.7
Military issued	11	0.8	3	0.6	4	0.9	3	1.1	1	0.4
Personally owned	64	4.4	28	5.8	16	3.4	7	2.7	13	5.3
Of unknown provenance	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Trauma	283	19.4	97	20.0	70	14.9	58	22.2	58	23.5
Other	24	1.6	12	2.5	9	1.9	1	0.4	2	0.8
Unknown	24	1.6	5	1.0	17	3.6	1	0.4	1	0.4
Alcohol used during event										
Yes	455	31.1	169	34.8	141	30.1	83	31.8	62	25.1
No	967	66.1	305	62.9	311	66.3	171	65.5	180	72.9
Unknown	40	2.7	11	2.3	17	3.6	7	2.7	5	2.0
Drugs used during event										
Yes <sup>a</sup>	694	47.5	210	43.3	213	45.4	125	47.9	146	59.1
Drugs (illicit/illegal)										
Used, overdose	54	3.7	19	3.9	19	4.1	4	1.5	12	4.9
Used, no overdose	22	1.5	6	1.2	5	1.1	2	0.8	9	3.6
Prescription medications										
Used, overdose	353	24.1	98	20.2	122	26.0	63	24.1	70	28.3
Used, no overdose	72	4.9	38	7.8	20	4.3	4	1.5	10	4.0
Non-prescription medications										
Used, overdose	274	18.7	58	12.0	81	17.3	64	24.5	71	28.7
Used, no overdose	66	4.5	29	6.0	17	3.6	6	2.3	14	5.7
No	729	49.9	262	54.0	238	50.7	131	50.2	98	39.7
Unknown	39	2.7	13	2.7	18	3.8	5	1.9	3	1.2

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Table 15 (cont). Event characteristics, active-component suicide-attempt DoDSER forms, CY19

	Total		Air Force		Army		Marine Corps		Navy	
	No.	%	No.	%	No.	%	No.	%	No.	%
Communicated intent for self-harm										
Yes <sup>a</sup>	340	23.3	124	25.6	117	24.9	38	14.6	61	24.7
Spouse	92	6.3	34	7.0	37	7.9	12	4.6	9	3.6
Friend	136	9.3	52	10.7	42	9.0	13	5.0	29	11.7
Mental health staff	65	4.4	26	5.4	14	3.0	7	2.7	18	7.3
No/no known history	1106	75.6	359	74.0	341	72.7	221	84.7	185	74.9
Unknown	16	1.1	2	0.4	11	2.3	2	0.8	1	0.4
Is there evidence the event involved death-risk gambling?										
Yes	94	6.4	39	8.0	34	7.2	12	4.6	9	3.6
No	1302	89.1	417	86.0	413	88.1	240	92.0	232	93.9
Unknown	66	4.5	29	6.0	22	4.7	9	3.4	6	2.4
Is there evidence the event was planned and/or premeditated?										
Yes	413	28.2	130	26.8	106	22.6	104	39.8	73	29.6
No	977	66.8	330	68.0	336	71.6	150	57.5	161	65.2
Unknown	72	4.9	25	5.2	27	5.8	7	2.7	13	5.3
Event observable										
Yes	542	37.1	181	37.3	182	38.8	91	34.9	88	35.6
No	883	60.4	295	60.8	268	57.1	164	62.8	156	63.2
Unknown	37	2.5	9	1.9	19	4.1	6	2.3	3	1.2
Left a suicide note										
Yes	193	13.2	67	13.8	61	13.0	26	10.0	39	15.8
No	1238	84.7	410	84.5	394	84.0	230	88.1	204	82.6
Unknown	31	2.1	8	1.6	14	3.0	5	1.9	4	1.6
Residence at time of event										
Barracks	707	48.4	163	33.6	289	61.6	187	71.6	68	27.5
BEQ/BOQ	13	0.9	7	1.4	1	0.2	2	0.8	3	1.2
On-base family housing	132	9.0	55	11.3	53	11.3	11	4.2	13	5.3
Off-base	529	36.2	236	48.7	108	23.0	52	19.9	133	53.8
Ship	23	1.6	0	0.0	0	0.0	1	0.4	22	8.9
Other	46	3.1	22	4.5	14	3.0	5	1.9	5	2.0
Unknown	12	0.8	2	0.4	4	0.9	3	1.1	3	1.2
Resided alone at time of event										
Yes	525	35.9	233	48.0	156	33.3	62	23.8	74	30.0
No	912	62.4	243	50.1	306	65.2	195	74.7	168	68.0
Children resided with Service member	154	10.5	65	13.4	45	9.6	17	6.5	27	10.9
Unknown	25	1.7	9	1.9	7	1.5	4	1.5	5	2.0
Gun in home/immediate environment										
Yes	151	10.3	60	12.4	52	11.1	15	5.7	24	9.7
No	1269	86.8	415	85.6	400	85.3	240	92.0	214	86.6
Unknown	42	2.9	10	2.1	17	3.6	6	2.3	9	3.6
Duty environment <sup>a</sup>										
Permanent command/garrison	1066	72.9	382	78.8	320	68.2	192	73.6	172	69.6
Leave	35	2.4	16	3.3	9	1.9	7	2.7	3	1.2
Temporary duty assignment	22	1.5	9	1.9	3	0.6	5	1.9	5	2.0
Deployed	32	2.2	11	2.3	13	2.8	1	0.4	7	2.8
Training	104	7.1	20	4.1	60	12.8	18	6.9	6	2.4
Other	138	9.4	56	11.5	24	5.1	19	7.3	39	15.8

<sup>a</sup>Subcategories are not mutually exclusive.

Table 16. Physical and mental health characteristics, active-component suicide DoDSER forms, CY19

	Total		Air Force		Army		Marine Corps		Navy	
	No.	%	No.	%	No.	%	No.	%	No.	%
Any mental health diagnosis										
Yes <sup>a</sup>	139	43.6	35	47.3	63	48.5	15	33.3	26	37.1
Mood	57	17.9	12	16.2	27	20.8	5	11.1	13	18.6
Anxiety	46	14.4	11	14.9	18	13.8	5	11.1	12	17.1
Adjustment	57	17.9	17	23.0	26	20.0	5	11.1	9	12.9
Substance use	66	20.7	11	14.9	35	26.9	7	15.6	13	18.6
No/no known history	180	56.4	39	52.7	67	51.5	30	66.7	44	62.9
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
History of sleep disorder										
Yes	38	11.9	7	9.5	20	15.4	3	6.7	8	11.4
No/no known history	281	88.1	67	90.5	110	84.6	42	93.3	62	88.6
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
History of traumatic brain injury										
Yes	6	1.9	0	0.0	4	3.1	1	2.2	1	1.4
No/no known history	313	98.1	74	100.0	126	96.9	44	97.8	69	98.6
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Family history of mental illness										
Yes	32	10.0	7	9.5	20	15.4	0	0.0	5	7.1
No/no known history	287	90.0	67	90.5	110	84.6	45	100.0	65	92.9
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Prior self-harm										
Yes	32	10.0	5	6.8	12	9.2	4	8.9	11	15.7
One prior event	18	5.6	2	2.7	3	2.3	3	6.7	10	14.3
More than one prior event	14	4.4	3	4.1	9	6.9	1	2.2	1	1.4
Most recent event similar to current event	7	2.2	0	0.0	3	2.3	2	4.4	2	2.9
No/no known history	287	90.0	69	93.2	118	90.8	41	91.1	59	84.3
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
History of psychotropic medication use										
Yes	69	21.6	17	23.0	31	23.8	7	15.6	14	20.0
No/no known history	250	78.4	57	77.0	99	76.2	38	84.4	56	80.0
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Use of psychotropic medications, last 90 days										
Yes <sup>a</sup>	49	15.4	12	16.2	22	16.9	5	11.1	10	14.3
Antidepressants	45	14.1	10	13.5	21	16.2	5	11.1	9	12.9
Anxiolytics	23	7.2	7	9.5	9	6.9	2	4.4	5	7.1
Antimanic	3	0.9	0	0.0	3	2.3	0	0.0	0	0.0
Anticonvulsant	3	0.9	2	2.7	1	0.8	0	0.0	0	0.0
Antipsychotic	1	0.3	1	1.4	0	0.0	0	0.0	0	0.0
Sleep medication	20	6.3	5	6.8	11	8.5	1	2.2	3	4.3
No/no known history	270	84.6	62	83.8	108	83.1	40	88.9	60	85.7

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Table 16 (cont). Physical and mental health characteristics, active-component suicide DoDSER forms, CY19

	Total		Air Force		Army		Marine Corps		Navy	
	No.	%	No.	%	No.	%	No.	%	No.	%
Pain medication use at time of event										
Yes	32	10.0	10	13.5	11	8.5	4	8.9	7	10.0
Opioid medication	4	1.3	0	0.0	1	0.8	1	2.2	2	2.9
No/no known history	287	90.0	64	86.5	119	91.5	41	91.1	63	90.0
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Health/social services, last 90 days										
Yes <sup>a</sup>	167	52.4	44	59.5	72	55.4	20	44.4	31	44.3
Medical treatment facility	146	45.8	41	55.4	63	48.5	17	37.8	25	35.7
Substance abuse services	29	9.1	4	5.4	15	11.5	4	8.9	6	8.6
Family assistance program	15	4.7	6	8.1	8	6.2	1	2.2	0	0.0
Mental health <sup>a</sup>	102	32.0	22	29.7	51	39.2	9	20.0	20	28.6
Outpatient	100	31.3	22	29.7	51	39.2	7	15.6	20	28.6
Inpatient	20	6.3	4	5.4	11	8.5	3	6.7	2	2.9
No/no known history	152	47.6	30	40.5	58	44.6	25	55.6	39	55.7
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

<sup>a</sup>Subcategories are not mutually exclusive.

Table 17. Physical and mental health characteristics, active-component suicide-attempt DoDSER forms, CY19

	Total		Air Force		Army		Marine Corps		Navy	
	No.	%	No.	%	No.	%	No.	%	No.	%
Any mental health diagnosis										
Yes <sup>a</sup>	838	57.3	288	59.4	249	53.1	139	53.3	162	65.6
Mood	434	29.7	153	31.5	128	27.3	65	24.9	88	35.6
Anxiety	315	21.5	111	22.9	94	20.0	50	19.2	60	24.3
Adjustment	306	20.9	118	24.3	97	20.7	37	14.2	54	21.9
Substance use	316	21.6	75	15.5	116	24.7	67	25.7	58	23.5
No/no known history	611	41.8	196	40.4	209	44.6	122	46.7	84	34.0
Unknown	13	0.9	1	0.2	11	2.3	0	0.0	1	0.4
History of sleep disorder										
Yes	103	7.0	29	6.0	46	9.8	9	3.4	19	7.7
No/no known history	1346	92.1	455	93.8	412	87.8	252	96.6	227	91.9
Unknown	13	0.9	1	0.2	11	2.3	0	0.0	1	0.4
History of traumatic brain injury										
Yes	61	4.2	10	2.1	23	4.9	13	5.0	15	6.1
No/no known history	1388	94.9	474	97.7	435	92.8	248	95.0	231	93.5
Unknown	13	0.9	1	0.2	11	2.3	0	0.0	1	0.4
Family history of mental illness										
Yes	512	35.0	185	38.1	161	34.3	65	24.9	101	40.9
No/no known history	937	64.1	299	61.6	297	63.3	196	75.1	145	58.7
Unknown	13	0.9	1	0.2	11	2.3	0	0.0	1	0.4
Prior self-harm										
Yes	440	30.1	138	28.5	151	32.2	72	27.6	79	32.0
One prior event	205	14.0	67	13.8	61	13.0	33	12.6	44	17.8
More than one prior event	229	15.7	71	14.6	84	17.9	39	14.9	35	14.2
Most recent event similar to current event	205	14.0	63	13.0	70	14.9	36	13.8	36	14.6
No/no known history	1008	68.9	345	71.1	307	65.5	189	72.4	167	67.6
Unknown	14	1.0	2	0.4	11	2.3	0	0.0	1	0.4
History of psychotropic medication use										
Yes	476	32.6	189	39.0	137	29.2	69	26.4	81	32.8
No/no known history	972	66.5	295	60.8	321	68.4	191	73.2	165	66.8
Unknown	14	1.0	1	0.2	11	2.3	1	0.4	1	0.4
Use of psychotropic medications, last 90 days										
Yes <sup>a</sup>	394	26.9	151	31.1	115	24.5	57	21.8	71	28.7
Antidepressants	351	24.0	141	29.1	99	21.1	47	18.0	64	25.9
Anxiolytics	159	10.9	56	11.5	50	10.7	26	10.0	27	10.9
Antimanic	14	1.0	10	2.1	3	0.6	1	0.4	0	0.0
Anticonvulsant	10	0.7	3	0.6	3	0.6	2	0.8	2	0.8
Antipsychotic	36	2.5	16	3.3	11	2.3	7	2.7	2	0.8
Sleep medication	183	12.5	77	15.9	64	13.6	19	7.3	23	9.3
No/no known history	1054	72.1	333	68.7	343	73.1	203	77.8	175	70.9
Unknown	14	1.0	1	0.2	11	2.3	1	0.4	1	0.4

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Table 17 (cont). Physical and mental health characteristics, active-component suicide attempt DoDSER forms, CY19

	Total		Air Force		Army		Marine Corps		Navy	
	No.	%	No.	%	No.	%	No.	%	No.	%
Pain medication use										
Yes	209	14.3	70	14.4	84	17.9	26	10.0	29	11.7
Opioid medication	36	2.5	21	4.3	9	1.9	2	0.8	4	1.6
No/no known history	1240	84.8	414	85.4	374	79.7	235	90.0	217	87.9
Unknown	13	0.9	1	0.2	11	2.3	0	0.0	1	0.4
Health/social services, last 90 days										
Yes <sup>a</sup>	902	61.7	310	63.9	294	62.7	151	57.9	147	59.5
Medical treatment facility	737	50.4	265	54.6	236	50.3	132	50.6	104	42.1
Substance abuse services	137	9.4	42	8.7	58	12.4	20	7.7	17	6.9
Family assistance program	54	3.7	25	5.2	18	3.8	4	1.5	7	2.8
Mental health <sup>a</sup>	690	47.2	235	48.5	237	50.5	99	37.9	119	48.2
Outpatient	659	45.1	227	46.8	224	47.8	95	36.4	113	45.7
Inpatient	215	14.7	75	15.5	75	16.0	33	12.6	32	13.0
No/no known history	547	37.4	174	35.9	164	35.0	110	42.1	99	40.1
Unknown	13	0.9	1	0.2	11	2.3	0	0.0	1	0.4

<sup>a</sup>Subcategories are not mutually exclusive.

Table 18. Contextual factors, active-component suicide DoDSER forms, CY19

	Total		Air Force		Army		Marine Corps		Navy	
	No.	%	No.	%	No.	%	No.	%	No.	%
Failed or failing relationship, last 90 days										
Yes <sup>a</sup>	136	42.6	32	43.2	60	46.2	15	33.3	29	41.4
Intimate relationship	126	39.5	28	37.8	56	43.1	15	33.3	27	38.6
Other relationship	36	11.3	6	8.1	13	10.0	3	6.7	14	20.0
No/no known history	183	57.4	42	56.8	70	53.8	30	66.7	41	58.6
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Friend and family stressors, last 90 days										
Yes <sup>a</sup>	17	5.3	4	5.4	6	4.6	3	6.7	4	5.7
Death of spouse or other family member (manner other than suicide)	7	2.2	2	2.7	2	1.5	1	2.2	2	2.9
Death of friend (manner other than suicide)	3	0.9	1	1.4	0	0.0	1	2.2	1	1.4
Serious illness of friend or family member	9	2.8	2	2.7	5	3.8	1	2.2	1	1.4
No/no known history	302	94.7	70	94.6	124	95.4	42	93.3	66	94.3
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
History of friend or family death by suicide										
Yes <sup>a</sup>	42	13.2	9	12.2	17	13.1	7	15.6	9	12.9
Spouse	1	0.3	0	0.0	1	0.8	0	0.0	0	0.0
Family other than spouse	17	5.3	4	5.4	4	3.1	3	6.7	6	8.6
Friend	27	8.5	5	6.8	13	10.0	5	11.1	4	5.7
No/no known history	277	86.8	65	87.8	113	86.9	38	84.4	61	87.1
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Administrative/legal problems, last 90 days										
Yes <sup>a</sup>	91	28.5	20	27.0	35	26.9	13	28.9	23	32.9
Courts martial proceedings	9	2.8	1	1.4	4	3.1	1	2.2	3	4.3
Article 15/Non-judicial punishment	13	4.1	3	4.1	4	3.1	1	2.2	5	7.1
Administrative separation proceedings	11	3.4	0	0.0	8	6.2	1	2.2	2	2.9
Away without leave/deserter status	8	2.5	2	2.7	2	1.5	2	4.4	2	2.9
Medical evaluation board proceedings	12	3.8	2	2.7	7	5.4	2	4.4	1	1.4
Civil legal proceedings	34	10.7	10	13.5	12	9.2	5	11.1	7	10.0
Non-selection for promotion	9	2.8	0	0.0	2	1.5	2	4.4	5	7.1
Under investigation	44	13.8	9	12.2	18	13.8	6	13.3	11	15.7
No/no known history	228	71.5	54	73.0	95	73.1	32	71.1	47	67.1
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Excessive debt/bankruptcy, last 90 days										
Yes	16	5.0	3	4.1	9	6.9	1	2.2	3	4.3
No/no known history	303	95.0	71	95.9	121	93.1	44	97.8	67	95.7
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Workplace difficulties, last 90 days										
Yes <sup>a</sup>	44	13.8	9	12.2	21	16.2	4	8.9	10	14.3
Job problems	32	10.0	5	6.8	16	12.3	3	6.7	8	11.4
Supervisor/coworker issues	18	5.6	4	5.4	10	7.7	1	2.2	3	4.3
Poor performance review	13	4.1	2	2.7	5	3.8	2	4.4	4	5.7
Unit/workplace hazing	1	0.3	1	1.4	0	0.0	0	0.0	0	0.0
No/no known history	275	86.2	65	87.8	109	83.8	41	91.1	60	85.7
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

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Table 18 (cont). Contextual factors, active-component suicide DoDSER forms, CY19

	Total		Air Force		Army		Marine Corps		Navy	
	No.	%	No.	%	No.	%	No.	%	No.	%
Abuse, assault, or harassment victimization, last year										
Yes <sup>a</sup>	21	6.6	3	4.1	10	7.7	3	6.7	5	7.1
Physical abuse or assault	7	2.2	2	2.7	3	2.3	1	2.2	1	1.4
Sexual abuse or assault	8	2.5	1	1.4	3	2.3	1	2.2	3	4.3
Emotional abuse	11	3.4	3	4.1	5	3.8	0	0.0	3	4.3
Sexual harassment	3	0.9	0	0.0	1	0.8	1	2.2	1	1.4
No/no known history	298	93.4	71	95.9	120	92.3	42	93.3	65	92.9
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Abuse, assault, or harassment perpetration, last year										
Yes <sup>a</sup>	33	10.3	7	9.5	13	10.0	3	6.7	10	14.3
Physical abuse or assault	17	5.3	3	4.1	8	6.2	3	6.7	3	4.3
Sexual abuse or assault	12	3.8	3	4.1	4	3.1	0	0.0	5	7.1
Emotional abuse	8	2.5	4	5.4	2	1.5	0	0.0	2	2.9
Sexual harassment	3	0.9	0	0.0	2	1.5	0	0.0	1	1.4
No/no known history	286	89.7	67	90.5	117	90.0	42	93.3	60	85.7
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

<sup>a</sup>Subcategories are not mutually exclusive.

Table 19. Contextual factors, active-component suicide-attempt DoDSER forms, CY19

	Total		Air Force		Army		Marine Corps		Navy	
	No.	%	No.	%	No.	%	No.	%	No.	%
Failed or failing relationship, last 90 days										
Yes <sup>a</sup>	537	36.7	205	42.3	136	29.0	102	39.1	94	38.1
Intimate relationship	468	32.0	176	36.3	121	25.8	88	33.7	83	33.6
Other relationship	146	10.0	58	12.0	39	8.3	23	8.8	26	10.5
No/no known history	912	62.4	279	57.5	322	68.7	159	60.9	152	61.5
Unknown	13	0.9	1	0.2	11	2.3	0	0.0	1	0.4
Friend and family stressors, last 90 days										
Yes <sup>a</sup>	173	11.8	38	7.8	66	14.1	27	10.3	42	17.0
Death of spouse or other family member (manner other than suicide)	62	4.2	11	2.3	30	6.4	8	3.1	13	5.3
Death of friend (manner other than suicide)	32	2.2	7	1.4	15	3.2	1	0.4	9	3.6
Serious illness of friend or family member	100	6.8	21	4.3	31	6.6	19	7.3	29	11.7
No/no known history	1276	87.3	446	92.0	392	83.6	234	89.7	204	82.6
Unknown	13	0.9	1	0.2	11	2.3	0	0.0	1	0.4
History of friend or family death by suicide										
Yes <sup>a</sup>	321	22.0	78	16.1	115	24.5	59	22.6	69	27.9
Spouse	2	0.1	1	0.2	1	0.2	0	0.0	0	0.0
Family other than spouse	115	7.9	32	6.6	41	8.7	20	7.7	22	8.9
Friend	239	16.3	50	10.3	91	19.4	46	17.6	52	21.1
No/no known history	1128	77.2	406	83.7	343	73.1	202	77.4	177	71.7
Unknown	13	0.9	1	0.2	11	2.3	0	0.0	1	0.4
Administrative/legal problems, last 90 days										
Yes <sup>a</sup>	419	28.7	138	28.5	142	30.3	69	26.4	70	28.3
Courts martial proceedings	27	1.8	10	2.1	10	2.1	4	1.5	3	1.2
Article 15/Non-judicial punishment	115	7.9	31	6.4	45	9.6	24	9.2	15	6.1
Administrative separation proceedings	115	7.9	32	6.6	46	9.8	20	7.7	17	6.9
Away without leave/deserter status	31	2.1	5	1.0	9	1.9	8	3.1	9	3.6
Medical evaluation board proceedings	110	7.5	40	8.2	35	7.5	14	5.4	21	8.5
Civil legal proceedings	76	5.2	32	6.6	23	4.9	7	2.7	14	5.7
Non-selection for promotion	40	2.7	16	3.3	12	2.6	10	3.8	2	0.8
Under investigation	131	9.0	53	10.9	44	9.4	19	7.3	15	6.1
No/no known history	1030	70.5	346	71.3	316	67.4	192	73.6	176	71.3
Unknown	13	0.9	1	0.2	11	2.3	0	0.0	1	0.4
Excessive debt/bankruptcy, last 90 days										
Yes	85	5.8	26	5.4	23	4.9	17	6.5	19	7.7
No/no known history	1363	93.2	458	94.4	435	92.8	244	93.5	226	91.5
Unknown	14	1.0	1	0.2	11	2.3	0	0.0	2	0.8
Workplace difficulties, last 90 days										
Yes <sup>a</sup>	512	35.0	170	35.1	163	34.8	68	26.1	111	44.9
Job problems	354	24.2	127	26.2	103	22.0	52	19.9	72	29.1
Supervisor/coworker issues	309	21.1	92	19.0	101	21.5	38	14.6	78	31.6
Poor performance review	124	8.5	46	9.5	43	9.2	14	5.4	21	8.5
Unit/workplace hazing	62	4.2	20	4.1	24	5.1	6	2.3	12	4.9
No/no known history	937	64.1	314	64.7	295	62.9	193	73.9	135	54.7
Unknown	13	0.9	1	0.2	11	2.3	0	0.0	1	0.4

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Table 19 (cont). Contextual factors, active-component suicide attempt DoDSER forms, CY19

	Total		Air Force		Army		Marine Corps		Navy	
	No.	%	No.	%	No.	%	No.	%	No.	%
Abuse, assault, or harassment victimization, last year										
Yes <sup>a</sup>	225	15.4	82	16.9	73	15.6	26	10.0	44	17.8
Physical abuse or assault	75	5.1	32	6.6	23	4.9	11	4.2	9	3.6
Sexual abuse or assault	84	5.7	33	6.8	23	4.9	10	3.8	18	7.3
Emotional abuse	123	8.4	42	8.7	48	10.2	14	5.4	19	7.7
Sexual harassment	52	3.6	14	2.9	17	3.6	7	2.7	14	5.7
No/no known history	1224	83.7	402	82.9	385	82.1	235	90.0	202	81.8
Unknown	13	0.9	1	0.2	11	2.3	0	0.0	1	0.4
Abuse, assault, or harassment perpetration, last year										
Yes <sup>a</sup>	81	5.5	41	8.5	28	6.0	6	2.3	6	2.4
Physical abuse or assault	49	3.4	25	5.2	16	3.4	4	1.5	4	1.6
Sexual abuse or assault	22	1.5	13	2.7	7	1.5	1	0.4	1	0.4
Emotional abuse	30	2.1	18	3.7	10	2.1	2	0.8	0	0.0
Sexual harassment	10	0.7	3	0.6	5	1.1	1	0.4	1	0.4
No/no known history	1368	93.6	443	91.3	430	91.7	255	97.7	240	97.2
Unknown	13	0.9	1	0.2	11	2.3	0	0.0	1	0.4

<sup>a</sup>Subcategories are not mutually exclusive.

## **Chapter 4: DoDSER Summary - Active-Component U.S. Air Force**

### Introduction

This chapter presents an overview of the active-component U.S. Air Force suicide and suicide attempt data. Data for all active-component events with a submitted DoDSER form are included in the descriptive summary and the data tables (Tables 12-19). While variables of particular interest are presented in this chapter's text, the reader is encouraged to review the data tables in Chapter 3 for additional information. This chapter presents case counts and proportions of the total number of cases observed; it does not present suicide rates, which are covered in Chapter 2.

### Special Note about the U.S. Space Force

The U.S. Space Force was established on December 20, 2019 within the Department of the U.S. Air Force. Per the Air Force, there were no suicide deaths and no reported suicide attempts among Space Force service members for CY19. Hence, the suicide events discussed in this chapter occurred among airmen only. The DoDSER system is being amended to include the Space Force as an armed service for reporting purposes. All future DoDSER Annual Reports will have a chapter dedicated to the Space Force.

### Suicide Mortality

There were 66 active-component suicide deaths confirmed by AFMES for CY19 as of January 31, 2020, all of which required a DoDSER form submission. For inclusion in this report, a DoDSER form for each event must have been submitted by March 31, 2020. A total of 63 of the required forms were submitted and three were not. There were an additional 17 events identified by AFMES as either a confirmed suicide or that were still pending confirmation after January 31, 2020. No forms were required for submission for these events prior to the cutoff date for this report; however, any forms submitted were included in the analysis here. We received 11 of these forms, which brought the total forms available for this report to 74.

### Suicide Attempts

Over the course of CY19, DoDSER forms were submitted for 485 suicide attempts in 448 unique individuals. Note that some individuals made more than one suicide attempt during CY19.

### Occurrence of Previous Suicide Attempt(s) Reported via the DoDSER System

One suicide DoDSER form was associated with one or more previously reported suicide attempt(s) that occurred between CY10 and CY19.

Fourteen individuals with a submitted CY19 suicide-attempt DoDSER form had one or more suicide attempt(s) recorded in the DoDSER system from CY10-CY18. The median number of days between the first reported suicide attempt in CY19 and the most recent attempt prior to CY19 was 145.5 days.

### Demographic Characteristics

The demographic profiles for both suicide and suicide-attempt DoDSER forms were consistent between CY19 and the averages for CY16-CY18.

**Method of Injury**

Firearm use was the most common (62.2%) method of injury identified in suicide DoDSER forms. This was consistent with the average percentage for CY16-CY18. The majority (95.7%) of the firearms used were personal possessions. Relatively few firearm deaths (4.3%) resulted from the self-directed use of a military-issued firearm.

For suicide-attempt DoDSER forms, drug and/or alcohol overdose was the most frequently reported method of injury (49.0%). This indicated a 13.2% reduction (95% CI = -22.2%, -3.1%) in attempts attributable to drug and/or alcohol overdose relative to the average for CY16-CY18.

**Behavioral Health History**

Among suicide DoDSER forms, 47.3% had at least one current or past behavioral health diagnosis in their medical record. Adjustment disorders (23.0%) and mood disorders (16.2%) were the most common diagnostic categories. Among Air Force suicide-attempt forms, 59.4% identified at least one current or past behavioral health diagnosis in their medical record. Mood disorders (31.5%) and adjustment disorders (24.3%) were the most common diagnostic categories.

Figure 7 displays the prevalence of mental health diagnoses, prior self-harm, and the use of psychotropic medication in the 90 days prior to a suicidal behavior among DoDSER forms submitted for CY19 and the three-year average for CY16-CY18. The prevalence estimates from CY19 suicide and suicide-attempt DoDSER forms were largely consistent with the average estimates for CY16-CY18. For suicide-attempt DoDSER forms, there was a 20.1% reduction (95% CI = -32.1%, -5.9%) in the prevalence of recent psychotropic medication usage relative to the average for CY16-CY18.

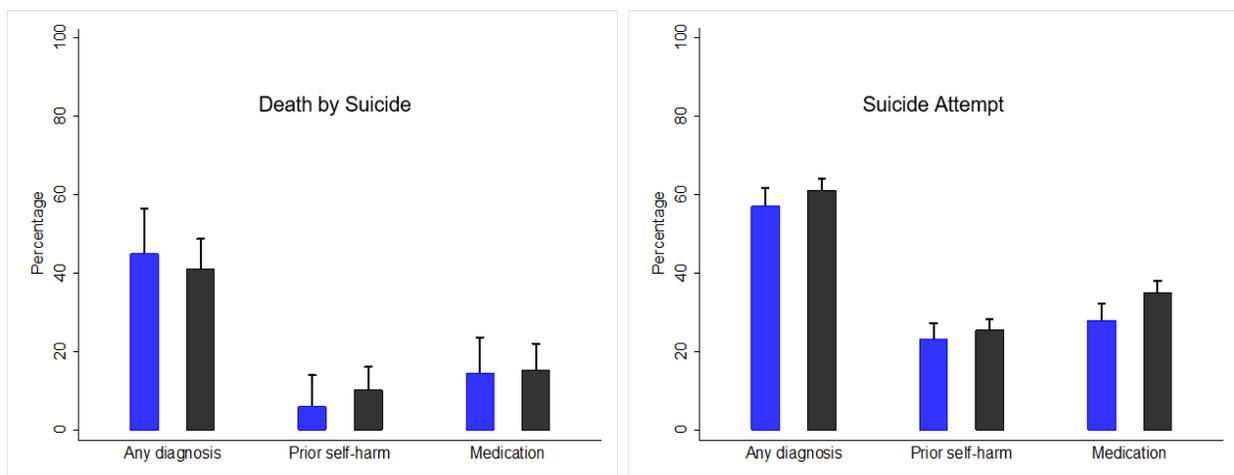


Figure 7. Percentages of active-component, Air Force DoDSER forms that indicated selected mental health factors, by event type, CY16-CY19. Blue bars represent CY19 data, black bars are the three-year averages for CY16-CY18, and the whiskers are the half-width of the 95% confidence intervals.

### Health Care Utilization

Regardless of whether or not an individual voluntarily disclosed – or was assessed for – suicidal thoughts, feelings, or behaviors, 59.5% of the airmen who died by suicide in CY19 had been in contact with the MHS in the 90 days prior to death. The most common type of appointment was a general visit to a medical treatment facility (55.4%) and the second most common type was a mental health visit (29.7%). Outpatient mental health services were utilized in 29.7% of cases while inpatient mental health services were utilized in 5.4% of cases.

In total, 63.9% of the Air Force suicide-attempt DoDSER forms indicated contact with the MHS in the 90 days prior to the behavior. The most common type of appointment was a general visit to a medical treatment facility (54.6%) while the second most common type was a mental health visit (48.5%). Outpatient mental health services were utilized by 46.8% of cases while inpatient mental health services were utilized by 15.5%.

### Stressors

Among suicide DoDSER forms, relationship (43.2%), legal/administrative (27.0%), and work (12.2%) stressors within 90 days of the event were the most common stressors identified in CY19 (Figure 8). A history of suicide in family member(s) or friend(s) was also a relatively common stressor (12.2%) for airmen who died by suicide. Among suicide-attempt DoDSER forms, relationship (42.3%), legal/administrative (28.5%), and work (35.1%) stressors were the most common stressors identified in CY19 (Figure 8). The prevalence estimates from CY19 suicide and suicide-attempt DoDSER forms were largely consistent with the average estimates for CY16-CY18. For suicide DoDSER forms, there was a 49.1% reduction (95% CI = -73.7%, -1.4%) in the prevalence of work stressors relative to the average for CY16-CY18.

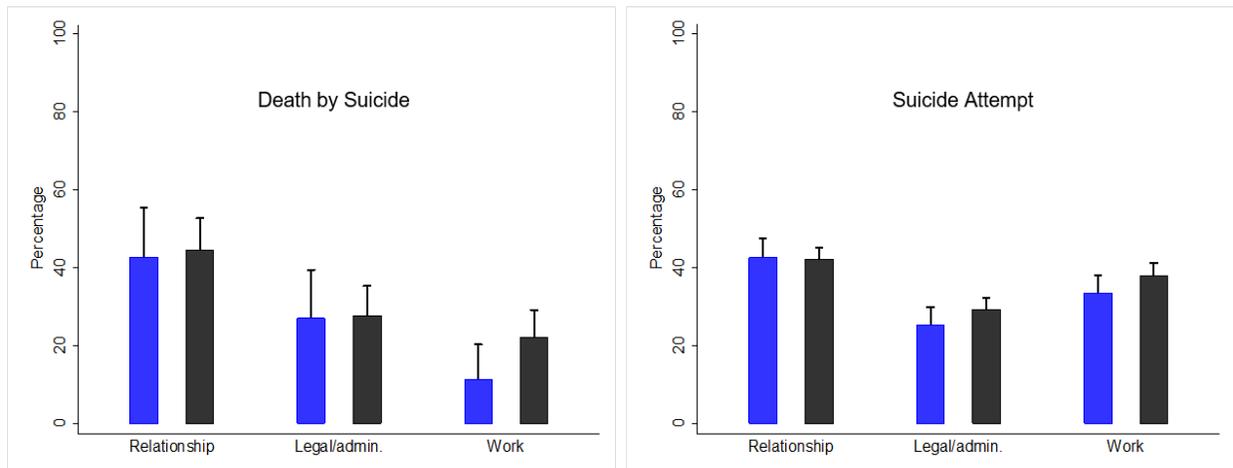


Figure 8. Percentages of active-component, Air Force DoDSER forms that indicated selected stressors within 90 days of the event, by event type, CY16-CY19. Blue bars represent CY19 data, black bars are the three-year averages for CY16-CY18, and the whiskers are the half-width of the 95% confidence intervals.

## **Chapter 5: DoDSER Summary - Active-Component U.S. Army**

### Introduction

This chapter presents an overview of the active-component U.S. Army suicide and suicide attempt data. Data for all events with a submitted DoDSER form are included in the descriptive summary and the data tables (Tables 12-19). While variables of particular interest are presented in this chapter's text, the reader is encouraged to review the data tables in Chapter 3 for additional information. This chapter presents case counts and proportions of the total number of cases observed; it does not present suicide rates, which are covered in Chapter 2.

### Suicide Mortality

There were 122 active-component suicide deaths confirmed by AFMES for CY19 as of January 31, 2020, all of which required a DoDSER form submission. For inclusion in this report, a DoDSER form for each event must have been submitted by March 31, 2020. All 122 of these forms were submitted. There were an additional 20 events identified by AFMES as either a confirmed suicide or that were still pending confirmation after January 31, 2020. No forms were required for submission for these events prior to the cutoff date for this report; however, any forms submitted were included in the analysis here. We received eight of these forms, which brought the total forms available for this report to 130.

### Suicide Attempts

Over the course of CY19, DoDSER forms were submitted for 469 suicide attempts in 454 unique individuals. Note that some individuals made more than one suicide attempt during CY19.

### Occurrence of Previous Suicide Attempt(s) Reported via the DoDSER System

Three suicide DoDSER forms were associated with one or more previously reported suicide attempt(s) that occurred between CY08 and CY19.

Eight individuals with a submitted CY19 suicide-attempt DoDSER form had one or more previous suicide attempt(s) recorded in the DoDSER system from CY08-CY18.

### Demographic Characteristics

The demographic profiles for both suicide and suicide-attempt DoDSER forms were consistent between CY19 and the averages for CY16-CY18.

### Method of Injury

Firearm use was the most common (58.5%) method of injury identified in suicide DoDSER forms. This was consistent with the average percentage for CY16-CY18. The majority (84.2%) of the firearms used were personal possessions. Relatively few firearm deaths (11.8%) resulted from the self-directed use of a military-issued firearm.

For suicide-attempt DoDSER forms, drug and/or alcohol overdose was the most frequently reported method of injury (55.2%). This was consistent with the average percentage for CY16-CY18.

Behavioral Health History

Among suicide DoDSER forms, 48.5% had at least one current or past behavioral health diagnosis in their medical record. Substance use disorders (26.9%) and mood disorders (20.8%) were the most common diagnostic categories. Among Army suicide-attempt DoDSER forms, 53.1% had at least one current or past behavioral health diagnosis present in their medical record. Mood disorders (27.3%) and substance use disorders (24.7%) were the most common diagnostic categories.

Figure 9 displays the prevalence of mental health diagnoses, prior self-harm, and the use of psychotropic medication in the 90 days prior to a suicidal behavior among DoDSER forms submitted for CY19 and the three-year average for CY16-CY18. The prevalence estimates from CY19 suicide and suicide-attempt DoDSER forms were consistent with the average estimates for CY16-CY18.

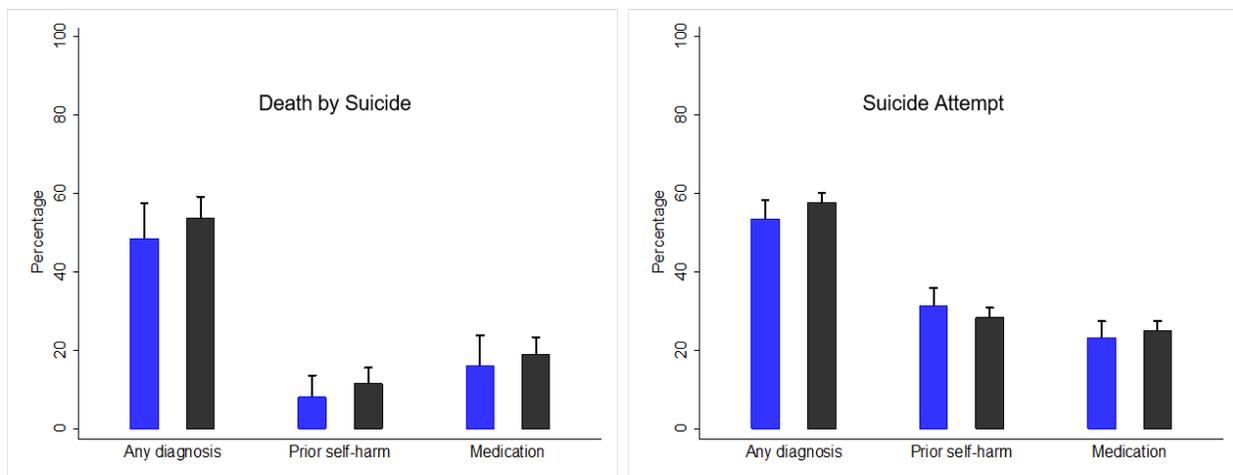


Figure 9. Percentages of active-component, Army DoDSER forms that indicated selected mental health factors, by event type, CY16-CY19. Blue bars represent CY19 data, black bars are the three-year averages for CY16-CY18, and the whiskers are the half-width of the 95% confidence intervals.

Health Care Utilization

Regardless of whether or not an individual voluntarily disclosed – or was assessed for – suicidal thoughts, feelings, or behaviors, 55.4% of the soldiers who died by suicide in CY19 had been in contact with the MHS in the 90 days prior to death. The most common type of appointment was a general visit to a medical treatment facility (48.5%) and the second most common type was a mental health visit (39.2%). Outpatient mental health services were utilized in 39.2% of cases while inpatient mental health services were utilized in 8.5% of cases.

In total, 62.7% of the Army suicide-attempt DoDSER forms indicated contact with the MHS in the 90 days prior to the behavior. The most common type of appointment was a mental health visit (50.5%) and the second most common type was a general visit to a medical treatment facility (50.3%). Outpatient mental health services were utilized in 47.8% of cases while inpatient mental health services were utilized in 16.0% of cases.

**Stressors**

Among suicide DoDSER forms, relationship (46.2%), legal/administrative (26.9%), and work (16.2%) stressors within 90 days of the event were the most common stressors identified in CY19 (Figure 10). Similarly, among suicide-attempt DoDSER forms, relationship (29.0%), legal/administrative (30.3%), and work (34.8%) stressors were the most common stressors identified in CY19 (Figure 10). The prevalence estimates from CY19 suicide and suicide-attempt DoDSER forms were largely consistent with the average estimates for CY16-CY18. For suicide-attempt DoDSER forms, there was an 18.6% reduction (95% CI = -30.6%, -4.6%) in the prevalence of relationship stressors relative to the average for CY16-CY18.

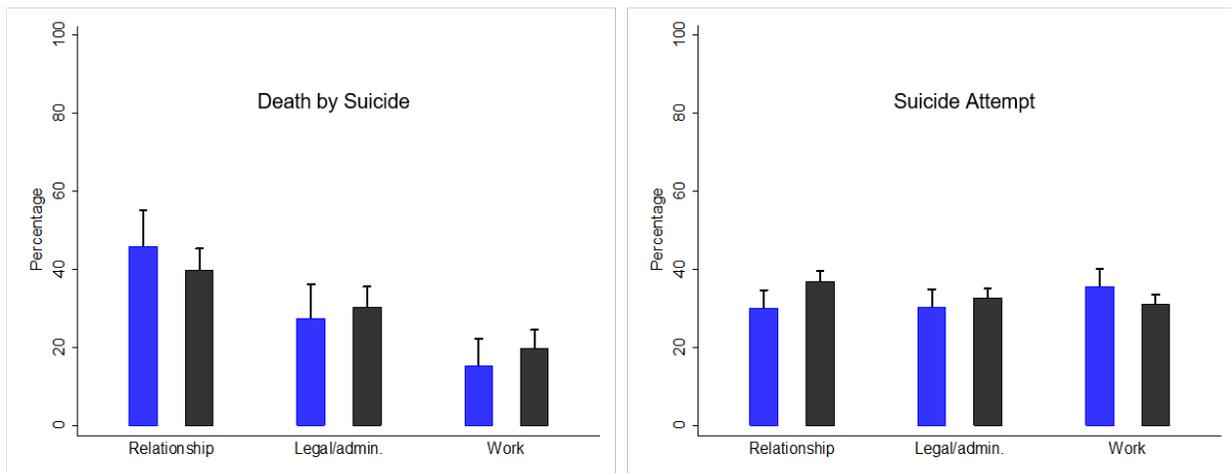


Figure 10. Percentages of active-component, Army DoDSER forms that indicated selected stressors within 90 days of the event, by event type, CY16-CY19. Blue bars represent CY19 data, black bars are the three-year averages for CY16-CY18, and the whiskers are the half-width of the 95% confidence intervals.

## **Chapter 6: DoDSER Summary - Active-Component U.S. Marine Corps**

### Introduction

This chapter presents an overview of the active-component U.S. Marine Corps suicide and suicide attempt data. Data for all events with a submitted DoDSER form are included in the descriptive summary and the data tables (Tables 12-19). While variables of particular interest are presented in this chapter's text, the reader is encouraged to review the data tables in Chapter 3 for additional information. This chapter presents case counts and proportions of the total number of cases observed; it does not present suicide rates, which are covered in Chapter 2.

### Suicide Mortality

There were 39 active-component suicide deaths confirmed by AFMES for CY19 as of January 31, 2020, all of which required a DoDSER form submission. For inclusion in this report, a DoDSER form for each event must have been submitted by March 31, 2020. All 39 of these forms were submitted. There were an additional eight events identified by AFMES as either a confirmed suicide or that were still pending confirmation after January 31, 2020. No forms were required for submission for these events prior to the cutoff date for this report; however, any forms submitted were included in the analysis here. We received six of these forms, which brought the total forms available for this report to 45.

### Suicide Attempts

Over the course of CY19, DoDSER forms were submitted for 261 suicide attempts in 250 unique individuals. Note that some individuals made more than one suicide attempt during CY19.

### Occurrence of Previous Suicide Attempt(s) Reported via the DoDSER System

No suicide DoDSER forms were associated with one or more previously reported suicide attempt(s) that occurred between CY10 and CY19.

Four individuals with a submitted CY19 suicide-attempt DoDSER form had one or more previous suicide attempt(s) recorded in the DoDSER system from CY10-CY18.

### Demographic Characteristics

The demographic profiles for both suicide and suicide-attempt DoDSER forms were consistent between CY19 and the averages for CY16-CY18.

### Method of Injury

Firearm use was the most common (57.8%) method of injury identified in suicide DoDSER forms. This was consistent with the average percentage for CY16-CY18. The majority (80.8%) of the firearms used were personal possessions. Relatively few firearm deaths (11.5%) resulted from the self-directed use of a military-issued firearm.

For suicide-attempt DoDSER forms, drug and/or alcohol overdose was the most frequently reported method of injury (50.8%). This was consistent with the average percentage for CY16-CY18.

**Behavioral Health History**

Among suicide DoDSER forms, 33.3% had at least one current or past behavioral health diagnosis in their medical record. Substance use disorders (15.6%) was the most common diagnostic category. Among Marine Corps suicide-attempt DoDSER forms, 53.3% had at least one current or past behavioral health diagnosis in their medical record. Substance use disorders (25.7%) and mood disorders (24.9%) were the most common diagnostic categories.

Figure 11 displays the prevalence of mental health diagnoses, prior self-harm, and the use of psychotropic medication in the 90 days prior to a suicidal behavior among DoDSER forms submitted for CY19 and the three-year average for CY16-CY18. The prevalence estimates from CY19 suicide and suicide-attempt DoDSER forms were largely consistent with the average estimates for CY16-CY18. For suicide-attempt DoDSER forms, there was a 25.2% reduction (95% CI = -42.9%, -2.2%) in the prevalence of recent psychotropic medication usage relative to the average for CY16-CY18.

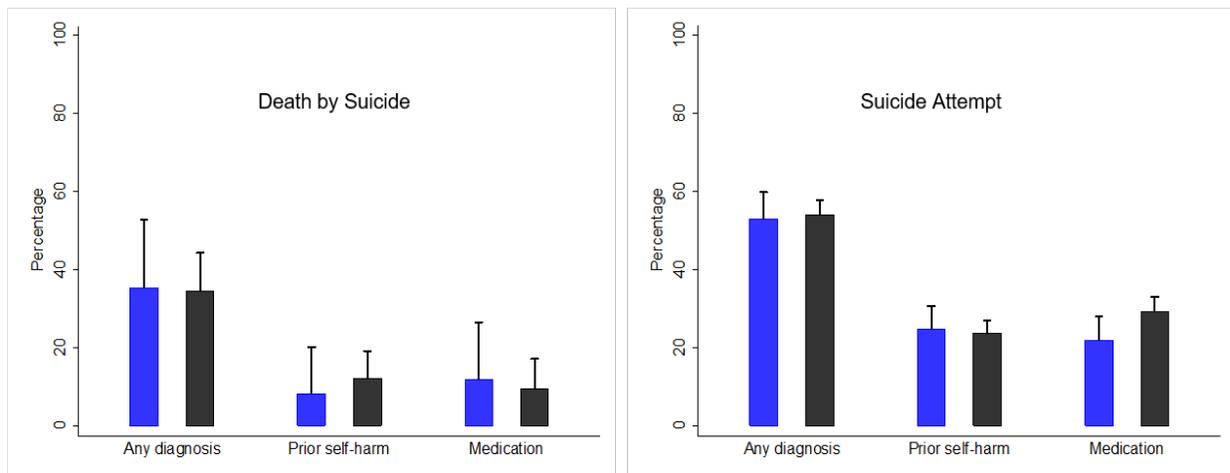


Figure 11. Percentages of active-component, Marine Corps DoDSER forms that indicated selected mental health factors, by event type, CY16-CY19. Blue bars represent CY19 data, black bars are the three-year averages for CY16-CY18, and the whiskers are the half-width of the 95% confidence intervals.

**Health Care Utilization**

Regardless of whether or not an individual voluntarily disclosed – or was assessed for – suicidal thoughts, feelings, or behaviors, 44.4% of the Marines who died by suicide in CY19 had been in contact with the MHS in the 90 days prior to death. The most common type of appointment was a general visit to a medical treatment facility (37.8%) and the second most common type was a mental health visit (20.0%). Outpatient mental health services were utilized in 15.6% of cases while inpatient mental health services were utilized in 6.7% of cases.

In total, 57.9% of the Marine Corps suicide-attempt DoDSER forms indicated contact with the MHS in the 90 days prior to the behavior. The most common type of appointment was a general visit to a medical treatment facility (50.6%) and the second most common type was a mental health visit (37.9%). Outpatient mental health services were utilized in 36.4% of cases while inpatient mental health services were utilized in 12.6% of cases.

Stressors

Among suicide DoDSER forms, relationship (33.3%), legal/administrative (28.9%), and work (8.9%) stressors within 90 days of the event were common stressors identified in CY19 (Figure 12). A history of suicide in family member(s) or friend(s) was also a common stressor for marines who died by suicide (15.6%). Among suicide-attempt DoDSER forms, relationship (39.1%), legal/administrative (26.4%), and work (26.1%) stressors were the most common stressors identified in CY19 (Figure 12). The prevalence estimates from CY19 suicide and suicide-attempt DoDSER forms were consistent with the average estimates for CY16-CY18.

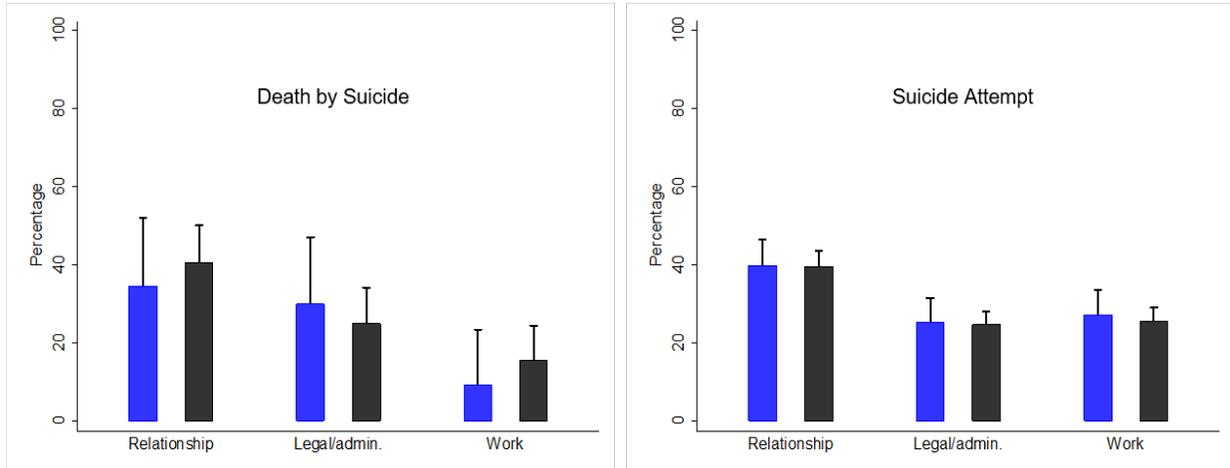


Figure 12. Percentages of active-component, Marine Corps DoDSER forms that indicated selected stressors within 90 days of the event, by event type, CY16-CY19. Blue bars represent CY19 data, black bars are the three-year averages for CY16-CY18, and the whiskers are the half-width of the 95% confidence intervals.

## Chapter 7: DoDSER Summary - Active-Component U.S. Navy

### Introduction

This chapter presents an overview of active-component U.S. Navy suicide and suicide attempt data. Data for all events with a submitted DoDSER form are included in the descriptive summary and the data tables (Tables 12-19). While variables of particular interest are presented in this chapter's text, the reader is encouraged to review the data tables in Chapter 3 for additional information. This chapter presents case counts and proportions of the total number of cases observed; it does not present suicide rates, which are covered in Chapter 2.

### Suicide Mortality

There were 60 active-component suicide deaths confirmed by AFMES for CY19 as of January 31, 2020, all of which required a DoDSER form submission. For inclusion in this report, a DoDSER form for each event must have been submitted by March 31, 2020. All 60 of these forms were submitted. There were an additional 12 events identified by AFMES as either a confirmed suicide or that were still pending confirmation after January 31, 2020. No forms were required for submission for these events prior to the cutoff date for this report; however, any forms submitted were included in the analysis here. We received 10 of these forms, which brought the total forms available for this report to 70.

### Suicide Attempts

Over the course of CY19, DoDSER forms were submitted for 247 suicide attempts in 235 unique individuals. Note that some individuals made more than one suicide attempt during CY19.

### Occurrence of Previous Suicide Attempt(s) Reported via the DoDSER System

No suicide DoDSER forms were associated with one or more previously reported suicide attempt(s) that occurred between CY10 and CY19.

Seven individuals with a submitted CY19 suicide-attempt DoDSER form had one or more previous suicide attempt(s) recorded in the DoDSER system from CY10-CY18.

### Demographic Characteristics

The demographic profiles for both suicide and suicide-attempt DoDSER forms were consistent between CY19 and the averages for CY16-CY18.

### Method of Injury

Firearm use was the most common (61.4%) method of injury identified in suicide DoDSER forms. This was consistent with the average percentage for CY16-CY18. The majority (88.4%) of the firearms used were personal possessions. Relatively few firearm deaths (11.6%) resulted from the self-directed use of a military-issued firearm.

For suicide-attempt DoDSER forms, drug and/or alcohol overdose was the most frequently reported method of injury (58.9%). This was consistent with the average percentage for CY16-CY18.

### Behavioral Health History

Among suicide DoDSER forms, 37.1% had at least one current or past behavioral health diagnosis in their medical record. Substance use and mood disorders (18.6% each) and anxiety disorders (17.1%) were the most common diagnostic categories. Among Navy suicide-attempt DoDSER forms, 65.6% had at least one current or past behavioral health diagnosis in their medical record. Mood disorders (35.6%) and anxiety disorders (24.3%) were the most common diagnostic categories.

Figure 13 displays the prevalence of mental health diagnoses, prior self-harm, and the use of psychotropic medication in the 90 days prior to a suicidal behavior among active-component DoDSER forms submitted for CY19 and the three-year average for CY16-CY18. The prevalence estimates from CY19 suicide and suicide-attempt DoDSER forms were consistent with the average estimates for CY16-CY18.

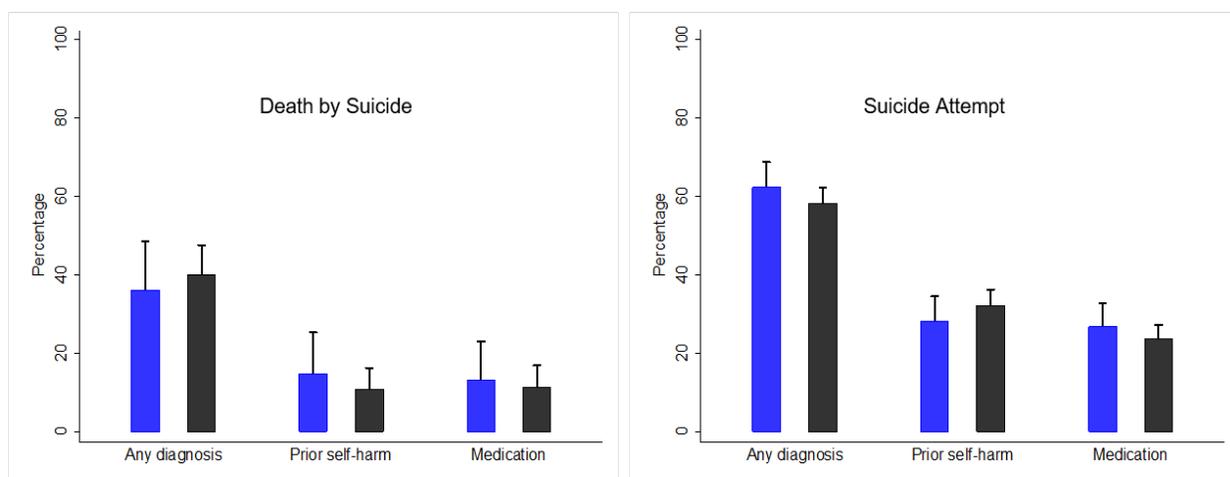


Figure 13. Percentages of active-component, Navy DoDSER forms that indicated selected mental health factors, by event type, CY16-CY19. Blue bars represent CY19 data, black bars are the three-year averages for CY16-CY18, and the whiskers are the half-width of the 95% confidence intervals.

### Health Care Utilization

Regardless of whether or not an individual voluntarily disclosed – or was assessed for – suicidal thoughts, feelings, or behaviors, 44.3% of the sailors who died by suicide in CY19 had been in contact with the MHS in the 90 days prior to death. The most common type of appointment was a general visit to a medical treatment facility (35.7%) and the second most common type was a mental health visit (28.6%). Outpatient mental health services were utilized in 28.6% of cases while inpatient mental health services were utilized in 2.9% of cases.

In total, 59.5% of the Navy suicide-attempt DoDSER forms indicated contact with the MHS in the 90 days prior to the behavior. The most common type of appointment was a mental health visit (48.2%) and the second most common type was a general visit to a medical treatment facility (42.1%). Outpatient mental health services were utilized in 45.7% of cases while inpatient mental health services were utilized in 13.0% of cases.

**Stressors**

Among suicide DoDSER forms, relationship (41.4%), legal/administrative (32.9%), and work (14.3%) stressors within 90 days of the event were common stressors identified in CY19 (Figure 14). The perpetration of abuse, assault, and/or harassment also served as a common stressor for sailors who died by suicide (14.3%). Among suicide-attempt DoDSER forms, relationship (38.1%), legal/administrative (28.3%), and work (44.9%) stressors were the most common stressors identified in CY19 (Figure 14). The prevalence estimates from CY19 suicide and suicide-attempt DoDSER forms were largely consistent with the average estimates for CY16-CY18. For suicide-attempt DoDSER forms, there was a 34.4% increase (95% CI = 11.6%, 62.0%) in the prevalence of work-related stressors relative to the average for CY16-CY18.

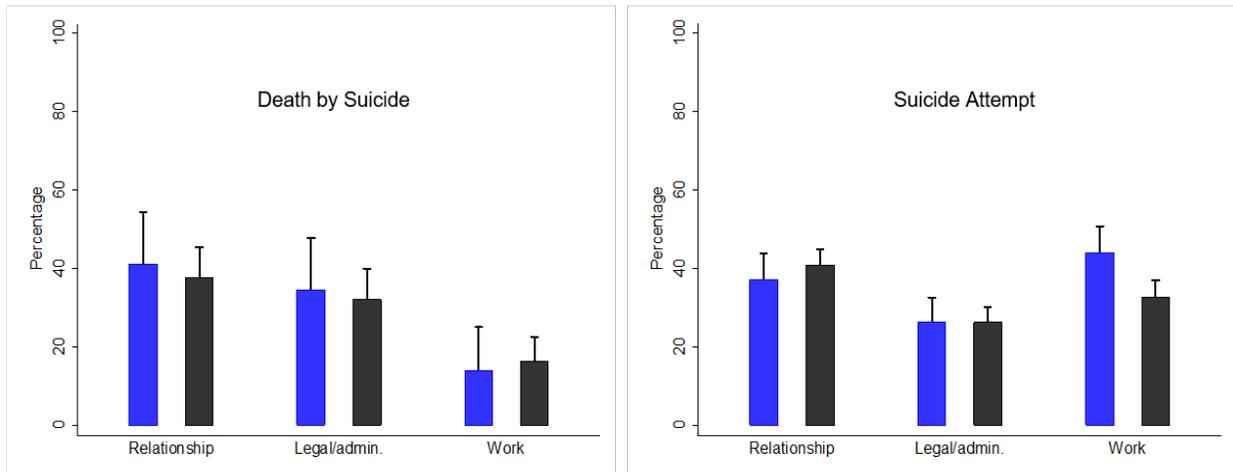


Figure 14. Percentages of active-component, Navy DoDSER forms that indicated selected stressors within 90 days of the event, by event type, CY16-CY19. Blue bars represent CY19 data, black bars are the three-year averages for CY16-CY18, and the whiskers are the half-width of the 95% confidence intervals.

## Chapter 8: DoDSER Summary - Reserve Component

### Introduction

This chapter presents an overview of Reserve-component suicide and suicide-attempt DoDSER data. Data for all events with a submitted DoDSER form, regardless of duty status at the time of the event, are included in the descriptive summary and the data tables (Tables 20-23). The inclusion of all duty statuses was first fully implemented in CY18.

### Suicide Mortality

There were nine Reserve suicide deaths that occurred while in a duty status and were confirmed by AFMES for CY19 as of January 31, 2020, all of which required a DoDSER form submission. For inclusion in this report, a DoDSER form for each event must have been submitted by March 31, 2020. All nine of these forms were submitted. There were an additional 56 events identified by AFMES as either a confirmed suicide or that were still pending confirmation after January 31, 2020. Events could also have occurred among service members not in a duty status. No forms were required for submission for these events prior to the cutoff date for this report; however, any forms submitted were included in the analysis here. We received 19 of these forms, which brought the total forms available for this report to 28.

There were 19 National Guard suicide deaths that occurred while in a duty status and were confirmed by AFMES for CY19 as of January 31, 2020, all of which required a DoDSER form submission. For inclusion in this report, a DoDSER form for each event must have been submitted by March 31, 2020. A total of 17 of these forms were submitted and two were not. There were an additional 70 events identified by AFMES as either a confirmed suicide or that were still pending confirmation after January 31, 2020. Events could also have occurred among service members not in a duty status. No forms were required for submission for these events prior to the cutoff date for this report; however, any forms submitted were included in the analysis here. We received 38 of these forms which brought the total forms available for this report to 55.

### Suicide Attempts

Over the course of CY19, DoDSER forms were submitted for 73 suicide attempts in 67 unique Reserve members and for 67 suicide attempts in 67 unique National Guard members. Note that some individuals made more than one suicide attempt during CY19.

### Method of Injury

For the Reserve, firearm use was the most common (67.9%) method of injury identified in suicide DoDSER forms. The majority (94.7%) of the firearms used were personal possessions. Relatively few firearm deaths (5.3%) resulted from the self-directed use of a military-issued firearm. Among Reserve suicide-attempt DoDSER forms, drug and/or alcohol overdose was the most frequently reported method of injury (46.6%).

For the National Guard, firearm use was the most common (72.7%) method of injury identified in suicide DoDSER forms. The majority (90.0%) of the firearms used were personal possessions. Relatively few firearm deaths (10.0%) resulted from the self-directed use of a military-issued

firearm. Among National Guard suicide-attempt DoDSER forms, drug and/or alcohol overdose was the most frequently reported method of injury (44.8%).

### Behavioral Health History

Among suicide DoDSER forms for the Reserve, 32.1% had at least one current or past behavioral health diagnosis in their medical record. Mood disorders (28.6%) and anxiety disorders (17.9%) were the most common diagnostic categories. Among suicide-attempt DoDSER forms for the Reserve, 47.9% had at least one current or past behavioral health diagnosis in their medical record. Mood and anxiety disorders (31.5% each) were the most common diagnostic categories.

Among suicide DoDSER forms for the National Guard, 45.5% had at least one current or past behavioral health diagnosis in their medical record. Substance use disorders (30.9%) and anxiety disorders (14.5%) were the most common diagnostic categories. Among suicide-attempt DoDSER forms for the National Guard, 53.7% had at least one current or past behavioral health diagnosis in their medical record. Mood disorders (25.4%) and anxiety and substance use disorders (20.9% each) were the most common diagnostic categories.

### Health Care Utilization

Among the Reserve, regardless of whether or not an individual voluntarily disclosed – or was assessed for – suicidal thoughts, feelings, or behaviors, 25.0% of service members who died by suicide in CY19 had been in contact with the MHS in the 90 days prior to death. The most common type of appointment was a mental health visit or a general visit to a military treatment facility (21.4% each). Outpatient mental health services were utilized in 17.9% of cases while inpatient mental health services were utilized in 10.7% of cases.

Among the Reserve, 50.7% of suicide-attempt DoDSER forms indicated contact with the MHS in the 90 days prior to the behavior. The most common type of appointment was a general visit to a medical treatment facility (42.5%) and the second most common type was a mental health visit (35.6%). Outpatient mental health services were utilized in 32.9% of cases while inpatient mental health services were utilized in 13.7% of cases.

Among the National Guard, regardless of whether or not an individual voluntarily disclosed – or was assessed for – suicidal thoughts, feelings, or behaviors, 25.5% of service members who died by suicide in CY19 had been in contact with the MHS in the 90 days prior to death. The most common type of appointment was a mental health visit (20.0%) and the second most common type was a general visit to a military treatment facility (12.7%). Outpatient mental health services were utilized in 18.2% of cases while inpatient mental health services were utilized in 5.5% of cases.

Among the National Guard, 49.3% of suicide-attempt DoDSER forms indicated contact with the MHS in the 90 days prior to the behavior. The most common type of appointment was a mental health visit (41.8%) and the second most common type was a general visit to a medical treatment facility (37.3%). Outpatient mental health services were utilized in 40.3% of cases while inpatient mental health services were utilized in 6.0% of cases.

### Stressors

Among Reserve suicide DoDSER forms, relationship (42.9%), legal/administrative (25.0%), and work (10.7%) stressors within 90 days of the event were common stressors identified in CY19.

Among Reserve suicide-attempt DoDSER forms, relationship stressors (39.7%), legal/administrative stressors (23.3%), and a history of suicide in family member(s) and/or friend(s) (20.5%) were common stressors identified in CY19.

Among National Guard suicide DoDSER forms, relationship (40.0%), legal/administrative (27.3%), and work (18.2%) stressors within 90 days of the event were common stressors identified in CY19. Similarly, among National Guard suicide-attempt DoDSER forms, relationship (38.8%), legal/administrative (20.9%), and work (26.9%) stressors were common stressors identified in CY19.

Table 20. Demographic characteristics, Reserve-component suicide and suicide-attempt DoDSER forms, CY19

	Suicide				Suicide attempt			
	Reserve		National Guard		Reserve		National Guard	
	No.	%	No.	%	No.	%	No.	%
Sex								
Male	27	96.4	53	96.4	47	64.4	43	64.2
Female	1	3.6	2	3.6	26	35.6	24	35.8
Age								
17-19	0	0.0	1	1.8	10	13.7	12	17.9
20-24	10	35.7	16	29.1	28	38.4	17	25.4
25-29	6	21.4	16	29.1	8	11.0	20	29.9
30-34	4	14.3	10	18.2	15	20.5	8	11.9
35-39	4	14.3	3	5.5	7	9.6	6	9.0
40-44	1	3.6	2	3.6	3	4.1	3	4.5
45-59	3	10.7	7	12.7	2	2.7	1	1.5
Race								
American Indian/Alaska Native	0	0.0	1	1.8	2	2.7	2	3.0
Asian/Pacific Islander	1	3.6	1	1.8	3	4.1	4	6.0
Black/African American	4	14.3	4	7.3	15	20.5	13	19.4
White/Caucasian	21	75.0	48	87.3	47	64.4	47	70.1
Other/Unknown	2	7.1	1	1.8	6	8.2	1	1.5
Hispanic ethnicity								
Yes	2	7.1	1	1.8	10	13.7	6	9.0
No	26	92.9	54	98.2	63	86.3	60	89.6
Unknown	0	0.0	0	0.0	0	0.0	1	1.5
Education								
Less than high school	1	3.6	0	0.0	4	5.5	5	7.5
Alternative high school	0	0.0	9	16.4	2	2.7	2	3.0
High school graduate	18	64.3	22	40.0	51	69.9	27	40.3
Some college	4	14.3	16	29.1	8	11.0	26	38.8
4-year degree	4	14.3	5	9.1	7	9.6	7	10.4
Postgraduate	1	3.6	2	3.6	1	1.4	0	0.0
Unknown	0	0.0	1	1.8	0	0.0	0	0.0
Marital status								
Never married	15	53.6	28	50.9	44	60.3	45	67.2
Married	13	46.4	23	41.8	26	35.6	18	26.9
Legally separated	0	0.0	0	0.0	0	0.0	0	0.0
Divorced	0	0.0	4	7.3	3	4.1	3	4.5
Widowed	0	0.0	0	0.0	0	0.0	1	1.5

*Continued on next page*

Table 20 (cont). Demographic characteristics, Reserve-component suicide and suicide-attempt DoDSER forms, CY19

	Suicide				Suicide attempt			
	Reserve		National Guard		Reserve		National Guard	
	No.	%	No.	%	No.	%	No.	%
DoD occupation group								
Service								
Air Force	8	28.6	13	23.6	23	31.5	34	50.7
Army	5	17.9	42	76.4	20	27.4	33	49.3
Marine Corps	8	28.6	0	0.0	15	20.5	0	0.0
Navy	7	25.0	0	0.0	15	20.5	0	0.0
Rank/grade								
Cadet/midshipman	0	0.0	0	0.0	0	0.0	0	0.0
E1-E4	14	50.0	26	47.3	43	58.9	42	62.7
E5-E9	10	35.7	24	43.6	26	35.6	22	32.8
Warrant officer <sup>a</sup>	0	0.0	1	1.8	1	1.4	0	0.0
Commissioned officer	4	14.3	4	7.3	3	4.1	3	4.5
Enlisted								
Infantry, gun crews, and seamanship specialists	5	17.9	12	21.8	7	9.6	2	3.0
Electronic equipment repairers	0	0.0	1	1.8	6	8.2	1	1.5
Communications and intelligence specialists	1	3.6	2	3.6	2	2.7	5	7.5
Health care specialists	0	0.0	3	5.5	5	6.8	4	6.0
Other technical and allied specialists	1	3.6	2	3.6	5	6.8	2	3.0
Functional support and administration	6	21.4	6	10.9	10	13.7	6	9.0
Electrical/mechanical equipment repairers	7	25.0	12	21.8	12	16.4	8	11.9
Craftworkers	1	3.6	0	0.0	3	4.1	4	6.0
Service and supply handlers	1	3.6	9	16.4	14	19.2	10	14.9
Non-occupational	2	7.1	3	5.5	5	6.8	22	32.8
Officer								
General officers and executives	0	0.0	0	0.0	0	0.0	0	0.0
Tactical operations officers	1	3.6	0	0.0	2	2.7	3	4.5
Intelligence officers	2	7.1	0	0.0	1	1.4	0	0.0
Engineering and maintenance officers	0	0.0	1	1.8	0	0.0	0	0.0
Scientists and professionals	0	0.0	0	0.0	0	0.0	0	0.0
Health care officers	0	0.0	1	1.8	0	0.0	0	0.0
Administrators	0	0.0	1	1.8	1	1.4	0	0.0
Supply, procurement, and allied officers	1	3.6	1	1.8	0	0.0	0	0.0
Non-occupational	0	0.0	1	1.8	0	0.0	0	0.0
Number of deployments								
0	14	50.0	25	45.5	42	57.5	40	59.7
1	4	14.3	13	23.6	17	23.3	10	14.9
2	4	14.3	9	16.4	5	6.8	11	16.4
3 or more	6	21.4	8	14.5	9	12.3	6	9.0

<sup>a</sup>Note: The Air Force does not have the rank of Warrant Officer.

Table 21. Event characteristics, Reserve-component suicide and suicide-attempt DoDSER forms, CY19

	Suicide				Suicide attempt			
	Reserve		National Guard		Reserve		National Guard	
	No.	%	No.	%	No.	%	No.	%
Event setting								
Own residence	16	57.1	30	54.5	29	39.7	18	26.9
Barracks	2	7.1	0	0.0	19	26.0	23	34.3
Residence of friend or family	5	17.9	7	12.7	6	8.2	5	7.5
Work/jobsite	0	0.0	4	7.3	0	0.0	2	3.0
Automobile	4	14.3	7	12.7	4	5.5	8	11.9
Inpatient medical facility	0	0.0	0	0.0	1	1.4	1	1.5
Hotel	0	0.0	1	1.8	5	6.8	2	3.0
Other	1	3.6	6	10.9	8	11.0	7	10.4
Unknown	0	0.0	0	0.0	1	1.4	1	1.5
Method of injury								
Drug/alcohol	0	0.0	0	0.0	34	46.6	30	44.8
Hanging/asphyxiation	8	28.6	12	21.8	7	9.6	13	19.4
Poison	0	0.0	1	1.8	5	6.8	4	6.0
Firearm	19	67.9	40	72.7	9	12.3	2	3.0
Military-issued	1	3.6	4	7.3	1	1.4	1	1.5
Personally-owned	18	64.3	36	65.5	8	11.0	1	1.5
Of unknown provenance	0	0.0	0	0.0	0	0.0	0	0.0
Trauma	0	0.0	2	3.6	15	20.5	14	20.9
Other	0	0.0	0	0.0	1	1.4	2	3.0
Unknown	1	3.6	0	0.0	2	2.7	2	3.0
Alcohol used during event								
Yes	4	14.3	16	29.1	28	38.4	21	31.3
No	13	46.4	24	43.6	41	56.2	42	62.7
Unknown	11	39.3	15	27.3	4	5.5	4	6.0
Drugs used during event								
Yes <sup>a</sup>	1	3.6	5	9.1	33	45.2	21	31.3
Drugs (illicit/illegal)								
Used, overdose	0	0.0	1	1.8	2	2.7	2	3.0
Used, no overdose	0	0.0	2	3.6	1	1.4	1	1.5
Prescription medications								
Used, overdose	0	0.0	0	0.0	18	24.7	10	14.9
Used, no overdose	1	3.6	1	1.8	3	4.1	3	4.5
Non-prescription medications								
Used, overdose	0	0.0	1	1.8	10	13.7	7	10.4
Used, no overdose	0	0.0	1	1.8	3	4.1	4	6.0
No	15	53.6	35	63.6	35	47.9	42	62.7
Unknown	12	42.9	15	27.3	5	6.8	4	6.0
Communicated intent for self-harm								
Yes <sup>a</sup>	7	25.0	22	40.0	23	31.5	20	29.9
Spouse	3	10.7	7	12.7	8	11.0	5	7.5
Friend	1	3.6	8	14.5	8	11.0	5	7.5
Mental health staff	1	3.6	1	1.8	3	4.1	3	4.5
No	21	75.0	33	60.0	49	67.1	46	68.7
No known history	0	0.0	0	0.0	1	1.4	1	1.5

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Table 21 (cont). Event characteristics, Reserve-component suicide and suicide-attempt DoDSER forms, CY19

	Suicide				Suicide attempt			
	Reserve		National Guard		Reserve		National Guard	
	No.	%	No.	%	No.	%	No.	%
Is there evidence the event involved death-risk gambling?								
Yes	1	3.6	2	3.6	5	6.8	7	10.4
No	24	85.7	49	89.1	61	83.6	59	88.1
Unknown	3	10.7	4	7.3	7	9.6	1	1.5
Is there evidence the event was planned and/or premeditated?								
Yes	15	53.6	25	45.5	16	21.9	14	20.9
No	7	25.0	24	43.6	45	61.6	48	71.6
Unknown	6	21.4	6	10.9	12	16.4	5	7.5
Event observable								
Yes	3	10.7	8	14.5	32	43.8	33	49.3
No	22	78.6	44	80.0	34	46.6	28	41.8
Unknown	3	10.7	3	5.5	7	9.6	6	9.0
Left a suicide note								
Yes	9	32.1	18	32.7	11	15.1	11	16.4
No	15	53.6	36	65.5	58	79.5	52	77.6
Unknown	4	14.3	1	1.8	4	5.5	4	6.0
Residence at time of event								
Barracks	2	7.1	2	3.6	20	27.4	26	38.8
BEQ/BOQ	2	7.1	0	0.0	2	2.7	0	0.0
On-base family housing	0	0.0	1	1.8	1	1.4	1	1.5
Off-base	23	82.1	49	89.1	42	57.5	37	55.2
Ship	0	0.0	0	0.0	0	0.0	0	0.0
Other	1	3.6	2	3.6	7	9.6	2	3.0
Unknown	0	0.0	1	1.8	1	1.4	1	1.5
Resided alone at time of event								
Yes	6	21.4	14	25.5	23	31.5	12	17.9
No	19	67.9	39	70.9	45	61.6	53	79.1
Children resided with Service member	3	10.7	14	25.5	12	16.4	9	13.4
Unknown	3	10.7	2	3.6	5	6.8	2	3.0
Gun in home/immediate environment								
Yes	19	67.9	40	72.7	15	20.5	20	29.9
No	7	25.0	11	20.0	52	71.2	41	61.2
Unknown	2	7.1	4	7.3	6	8.2	6	9.0
Duty environment <sup>a</sup>								
Permanent command/garrison	12	42.9	24	43.6	29	39.7	27	40.3
Leave	1	3.6	2	3.6	2	2.7	1	1.5
Temporary duty assignment	0	0.0	0	0.0	1	1.4	1	1.5
Deployed	0	0.0	1	1.8	6	8.2	7	10.4
Training	1	3.6	0	0.0	10	13.7	17	25.4
Not in a duty status	18	64.3	39	70.9	18	24.7	13	19.4
Other	17	60.7	31	56.4	27	37.0	18	26.9

<sup>a</sup>Subcategories are not mutually exclusive.

Table 22. Physical and mental health characteristics, Reserve-component suicide and suicide-attempt DoDSER forms, CY19

	Suicide				Suicide attempt			
	Reserve		National Guard		Reserve		National Guard	
	No.	%	No.	%	No.	%	No.	%
Any mental health diagnosis								
Yes <sup>a</sup>	9	32.1	25	45.5	35	47.9	36	53.7
Mood	8	28.6	7	12.7	23	31.5	17	25.4
Anxiety	5	17.9	8	14.5	23	31.5	14	20.9
Adjustment	2	7.1	4	7.3	8	11.0	10	14.9
Substance use	4	14.3	17	30.9	12	16.4	14	20.9
No/no known history	19	67.9	30	54.5	37	50.7	30	44.8
Unknown	0	0.0	0	0.0	1	1.4	1	1.5
History of sleep disorder								
Yes	3	10.7	2	3.6	10	13.7	7	10.4
No/no known history	25	89.3	53	96.4	62	84.9	59	88.1
Unknown	0	0.0	0	0.0	1	1.4	1	1.5
History of traumatic brain injury								
Yes	0	0.0	4	7.3	3	4.1	2	3.0
No/no known history		100.						
Unknown	28	0	51	92.7	69	94.5	64	95.5
Unknown	0	0.0	0	0.0	1	1.4	1	1.5
Family history of mental illness								
Yes	1	3.6	6	10.9	25	34.2	22	32.8
No/no known history	27	96.4	49	89.1	47	64.4	44	65.7
Unknown	0	0.0	0	0.0	1	1.4	1	1.5
Prior self-harm								
Yes	5	17.9	11	20.0	23	31.5	13	19.4
One prior event	2	7.1	8	14.5	9	12.3	7	10.4
More than one prior event	3	10.7	3	5.5	14	19.2	6	9.0
Most recent event similar to current event	3	10.7	2	3.6	14	19.2	5	7.5
No/no known history	23	82.1	44	80.0	49	67.1	53	79.1
Unknown	0	0.0	0	0.0	1	1.4	1	1.5
History of psychotropic medication use								
Yes	2	7.1	10	18.2	22	30.1	14	20.9
No/no known history	26	92.9	45	81.8	50	68.5	52	77.6
Unknown	0	0.0	0	0.0	1	1.4	1	1.5
Use of psychotropic medications, last 90 days								
Yes <sup>a</sup>	2	7.1	8	14.5	16	21.9	10	14.9
Antidepressants	2	7.1	8	14.5	16	21.9	9	13.4
Anxiolytics	0	0.0	4	7.3	5	6.8	4	6.0
Antimanic	0	0.0	1	1.8	1	1.4	2	3.0
Anticonvulsant	0	0.0	0	0.0	0	0.0	0	0.0
Antipsychotic	0	0.0	2	3.6	2	2.7	2	3.0
Sleep medication	2	7.1	1	1.8	6	8.2	4	6.0
No/no known history	26	92.9	47	85.5	56	76.7	56	83.6
Unknown	0	0.0	0	0.0	1	1.4	1	1.5

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Table 22 (cont). Physical and mental health characteristics, Reserve-component suicide and suicide-attempt DoDSER forms, CY19

	Suicide				Suicide attempt			
	Reserve		National Guard		Reserve		National Guard	
	No.	%	No.	%	No.	%	No.	%
Pain medication use at time of event								
Yes	1	3.6	1	1.8	10	13.7	5	7.5
Opioid medication	0	0.0	0	0.0	1	1.4	1	1.5
No/no known history	27	96.4	54	98.2	62	84.9	61	91.0
Unknown	0	0.0	0	0.0	1	1.4	1	1.5
Health/social services, last 90 days								
Yes <sup>a</sup>	7	25.0	14	25.5	37	50.7	33	49.3
Medical treatment facility	6	21.4	7	12.7	31	42.5	25	37.3
Substance abuse services	3	10.7	2	3.6	2	2.7	5	7.5
Family assistance program	0	0.0	0	0.0	2	2.7	2	3.0
Mental health services <sup>a</sup>	6	21.4	11	20.0	26	35.6	28	41.8
Outpatient	5	17.9	10	18.2	24	32.9	27	40.3
Inpatient	3	10.7	3	5.5	10	13.7	4	6.0
No/no known history	21	75.0	41	74.5	35	47.9	33	49.3
Unknown	0	0.0	0	0.0	1	1.4	1	1.5

<sup>a</sup>Subcategories are not mutually exclusive.

Table 23. Contextual factors, Reserve-component suicide and suicide-attempt DoDSER forms, CY19

	Suicide				Suicide attempt			
	Reserve		National Guard		Reserve		National Guard	
	No.	%	No.	%	No.	%	No.	%
Failed or failing relationship, last 90 days								
Yes <sup>a</sup>	12	42.9	22	40.0	29	39.7	26	38.8
Intimate relationship	11	39.3	21	38.2	27	37.0	21	31.3
Other relationship	3	10.7	7	12.7	11	15.1	7	10.4
No/no known history	16	57.1	33	60.0	43	58.9	40	59.7
Unknown	0	0.0	0	0.0	1	1.4	1	1.5
Friend and family stressors, last 90 days								
Yes <sup>a</sup>	1	3.6	1	1.8	7	9.6	12	17.9
Death of spouse or other family member (manner other than suicide)	0	0.0	1	1.8	1	1.4	2	3.0
Death of friend (manner other than suicide)	0	0.0	0	0.0	1	1.4	4	6.0
Serious illness of friend or family member	1	3.6	0	0.0	6	8.2	6	9.0
No/no known history	27	96.4	54	98.2	65	89.0	54	80.6
Unknown	0	0.0	0	0.0	1	1.4	1	1.5
History of friend or family death by suicide								
Yes <sup>a</sup>	0	0.0	9	16.4	15	20.5	10	14.9
Spouse	0	0.0	0	0.0	0	0.0	0	0.0
Family other than spouse	0	0.0	4	7.3	9	12.3	6	9.0
Friend	0	0.0	5	9.1	10	13.7	4	6.0
No/no known history		100.						
Unknown	28	0	46	83.6	57	78.1	56	83.6
Unknown	0	0.0	0	0.0	1	1.4	1	1.5
Administrative/legal problems, last 90 days								
Yes <sup>a</sup>	7	25.0	15	27.3	17	23.3	14	20.9
Courts martial proceedings	0	0.0	0	0.0	2	2.7	1	1.5
Article 15/Non-judicial punishment	0	0.0	2	3.6	1	1.4	4	6.0
Administrative separation proceedings	0	0.0	4	7.3	4	5.5	7	10.4
Away without leave/deserter status	1	3.6	4	7.3	1	1.4	3	4.5
Medical evaluation board proceedings	1	3.6	2	3.6	4	5.5	1	1.5
Civil legal proceedings	4	14.3	7	12.7	5	6.8	2	3.0
Non-selection for promotion	0	0.0	3	5.5	2	2.7	1	1.5
Under investigation	2	7.1	2	3.6	6	8.2	4	6.0
No/no known history	21	75.0	40	72.7	55	75.3	52	77.6
Unknown	0	0.0	0	0.0	1	1.4	1	1.5
Excessive debt/bankruptcy, last 90 days								
Yes	2	7.1	0	0.0	5	6.8	3	4.5
No/no known history	26	92.9	55	100.0	67	91.8	63	94.0
Unknown	0	0.0	0	0.0	1	1.4	1	1.5
Workplace difficulties, last 90 days								
Yes <sup>a</sup>	3	10.7	10	18.2	14	19.2	18	26.9
Job problems	3	10.7	10	18.2	8	11.0	11	16.4
Supervisor/coworker issues	0	0.0	2	3.6	6	8.2	10	14.9
Poor performance review	0	0.0	2	3.6	1	1.4	3	4.5
Unit/workplace hazing	0	0.0	0	0.0	2	2.7	3	4.5
No/no known history	25	89.3	45	81.8	58	79.5	48	71.6
Unknown	0	0.0	0	0.0	1	1.4	1	1.5

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Table 23 (cont). Contextual factors, Reserve-component suicide and suicide-attempt DoDSER forms, CY19

	Suicide				Suicide attempt			
	Reserve		National Guard		Reserve		National Guard	
	No.	%	No.	%	No.	%	No.	%
Abuse, assault, or harassment victimization, last year								
Yes <sup>a</sup>	1	3.6	1	1.8	11	15.1	13	19.4
Physical abuse or assault	1	3.6	0	0.0	2	2.7	2	3.0
Sexual abuse or assault	0	0.0	0	0.0	3	4.1	3	4.5
Emotional abuse	1	3.6	1	1.8	7	9.6	8	11.9
Sexual harassment	0	0.0	0	0.0	3	4.1	2	3.0
No/no known history	27	96.4	54	98.2	61	83.6	53	79.1
Unknown	0	0.0	0	0.0	1	1.4	1	1.5
Abuse, assault, or harassment perpetration, last year								
Yes <sup>a</sup>	2	7.1	4	7.3	1	1.4	3	4.5
Physical abuse or assault	1	3.6	2	3.6	1	1.4	2	3.0
Sexual abuse or assault	1	3.6	0	0.0	0	0.0	0	0.0
Emotional abuse	1	3.6	3	5.5	1	1.4	1	1.5
Sexual harassment	0	0.0	1	1.8	0	0.0	0	0.0
No/no known history	26	92.9	51	92.7	71	97.3	63	94.0
Unknown	0	0.0	0	0.0	1	1.4	1	1.5

<sup>a</sup>Subcategories are not mutually exclusive.

## Appendix A: Section 741 NDAAs FY20 Reporting Requirements

This appendix addresses specific requirements of Section 741 NDAAs FY20 (Public Law 116-92) and identifies whether they are addressed in this report or the CY19 Annual Suicide Report (ASR).<sup>1</sup> The introduction section then provides background information about military data sources and details the categories of suicide events presented. Limitations of the data are discussed. The appendix closes with descriptions of and data tables for CY19 suicide events.

### Reporting Requirements for Military Suicide Events

Section 741 NDAAs FY20 stipulated specific requirements for the reporting of military suicide events, starting with the CY19 events.<sup>1</sup> The fulfillment of these requirements was split between the two official DoD suicide reports – the DoDSER Annual Report and the ASR. The DoDSER Annual Report is the Department’s official source for detailed risk and contextual factors associated with suicide deaths and attempts among service members. The ASR serves as the official source for annual suicide counts and unadjusted rates for DoD and also describes departmental initiatives underway to combat suicide among service members and their families. The CY19 ASR is available at <https://www.dsps.mil/asr/>. Table 24 lists the NDAAs requirements and identifies the report that fulfills each requirement.

Table 24: NDAAs FY20 suicide event reporting requirements and DoD report fulfilling each requirement

Requirement <sup>a,b</sup>	Report
(A) The number of suicides, attempted suicides, and known cases of suicidal ideation involving a member of the Armed Forces, including the reserve components thereof, listed by Armed Force.	CY19 DoDSER Annual Report
(B) The number of suicides, attempted suicides, or known cases of suicidal ideation identified under subparagraph (A) that occurred during each of the following periods: (i) The first 180 days of the member serving in the Armed Forces. (ii) The period in which the member is deployed in support of a contingency operation.	CY19 DoDSER Annual Report
(C) With respect to the number of suicides, attempted suicides, or known cases of suicidal ideation identified under subparagraph (B)(i), the initial recruit training location of the member.	CY19 DoDSER Annual Report
(D) The number of suicides involving a dependent of a member.	CY19 ASR
(E) A description of any research collaborations and data sharing by the Department of Defense with the Department of Veterans Affairs, other departments or agencies of the Federal Government, academic institutions, or nongovernmental organizations.	CY19 ASR
(F) Identification of a research agenda for the Department of Defense to improve the evidence base on effective suicide prevention treatment and risk communication.	CY19 ASR
(G) The availability and usage of the assistance of chaplains, houses of worship, and other spiritual resources for members of the Armed Forces who identify as religiously affiliated and have attempted suicide, have experienced suicidal ideation, or are at risk of suicide, and metrics on the impact these resources have in assisting religiously affiliated members who have access to and utilize them compared to religiously-affiliated members who do not.	CY19 ASR
(H) A description of the effectiveness of the policies developed pursuant to section 567 of the Carl Levin and Howard P. “Buck” McKeon National Defense Authorization Act for Fiscal Year 2015 (Public Law 113–291; 10 U.S.C. 1071 note) and section 582 of the National Defense Authorization Act for Fiscal Year 2013 (Public Law 112–239; 10 U.S.C. 1071 note)...	CY19 ASR

<sup>a</sup>Wording of requirements taken directly from Section 741 NDAAs FY20 (Public Law 116-92).

<sup>b</sup>Throughout this report, Armed Force(s) does not include Coast Guard as this service does not access the .mil network and therefore does not have access to the DoDSER system for reporting purposes.

## Introduction

### *Military Data Sources*

Data for this appendix were obtained from four sources: the Armed Forces Medical Examiner System (AFMES), the DoDSER system, the Military Health System Data Repository (MDR), and the Defense Manpower Data Center (DMDC). The AFMES is the lead provider of medical-legal services for the DoD and is "...authoritatively responsible for determining the cause and manner of death for all active duty military members."<sup>2</sup> The AFMES also maintains the official case list of military suicide deaths for the DoD.

Established in 2008, the DoDSER system is a web-based system designed to collect, organize, and secure a standard set of case-level data for every DoD service member who dies by suicide or makes a suicide attempt.<sup>3</sup> Data are entered into the DoDSER system by trained representatives from the military services. DoDSER data undergo cleaning and verification procedures prior to aggregation for analysis. Aggregated data and analytic results are published on a calendar year basis in the DoDSER Annual Report.

The MDR is the centralized data repository for health care data for the Defense Health Agency. The MDR "...receives and validates data from the Department of Defense's (DoD) worldwide network of more than 260 health care facilities and from the TRICARE Purchase Care program."<sup>4</sup> Included in MDR data are records of service members identified as having reported a suicide attempt and/or suicidal ideation.

The DMDC is the central source for DoD personnel data.<sup>5</sup> Data for initial recruit training locations were obtained from the DMDC. The DMDC maintains the Contingency Tracking System (CTS) database, which was queried to obtain contingency operations data for this appendix. Data within the CTS may not reflect all contingency operation deployments.

### *Categories of Suicide Event Data*

This appendix presents three categories of suicide data: suicide deaths, suicide attempts, and known suicidal ideation. Suicide deaths include all deaths among active-component service members or active-duty, Reserve-component service members with a suicide manner determination by AFMES.<sup>6</sup> Suicide deaths that occurred among Reserve and National Guard service members who were not in a duty status at the time of death were reported to AFMES by the military services, but their manner of death was not determined by AFMES. For this appendix, the official CY19 case list for suicide deaths was obtained from AFMES.

A suicide attempt is defined within the DoDSER system as a self-inflicted, potentially injurious behavior with a nonfatal outcome for which there was evidence (either explicit or implicit) of intent to die. The military sServices are required to report all identified suicide attempts among service members to the DoDSER system.<sup>6</sup> Suicide attempts among service members may also be captured in the MDR. A suicide attempt in the MDR was defined as a health care encounter with an International Classification of Disease, Tenth Revision, Clinical Modification (ICD-10-CM) diagnostic code of T14.91 ("suicide attempt") with an A, B, or C in the seventh character position (e.g., T14.91xA). The A, B, or C character denotes a new health care encounter for a suicide attempt (as opposed to a follow-up encounter).<sup>7</sup> Two steps were taken to protect against

the inclusion of duplicate cases in the suicide attempt dataset: 1) an MDR suicide attempt case was not included in the dataset if the encounter date occurred within a week of a DoDSER suicide attempt date for the same service member and 2) when multiple MDR suicide attempt cases for the same service member occurred within a week of one another, only one of the MDR attempt cases was included in the dataset.

Known suicidal ideation was captured by the MDR and defined as a health care encounter with an ICD-10-CM diagnostic code of R45.851 (“suicide ideations”). To protect against the inclusion of duplicate cases in the ideation dataset, when multiple MDR ideation cases for the same service member occurred within a week of one another, only one of the MDR ideation cases was included in the dataset.

The initial recruit training locations for active-component service members with events that occurred during the first 180 days of military service were determined using the postal code for the duty unit to which each individual was attached at service entry. For Reserve and National Guard service members, the postal code associated with the assigned unit at service entry was used to determine the initial recruit training location. CTS data were used to determine whether an event occurred during a contingency deployment.

#### Limitations to Data Interpretation

The suicide event data presented in this appendix are associated with several important limitations and, as such, should be interpreted with caution. First, the coding of suicide attempts and known suicidal ideation events in the MDR could be influenced by service-level and/or clinic-level policies and procedures, provider familiarity with suicide event definitions and coding, and the ways in which patients report events, among other possible influencing factors. Hence, data in this appendix should not be used to make detailed comparisons between groups. Second, because suicide attempts and suicidal ideation among service members may go entirely unreported, the data in this appendix should not be considered conclusive. Finally, it should be noted that MDR data only reflect encounters within the Military Health System (MHS) and/or through the TRICARE Purchase Care program. Cases of suicide attempt and suicidal ideation that are coded in other health care systems are missing from the MDR. This is an especially important limitation for the Reserve and National Guard data because service members from these populations may only have access to the MHS and TRICARE Purchase Care program when they are in a duty status.

### Descriptive Summary of Data that Fulfills the NDAA FY20 Reporting Requirements

A total of 19,077 service members had one or more suicide events captured by AFMES, the DoDSER system, or the MDR for CY19. Table 25 presents the distribution of CY19 suicide events across each military population. The active component had 344 suicides in CY19, none of which occurred during the first 180 days of service and 10 of which occurred during a contingency operation deployment. There were a total of 2,283 suicide attempts among 2,106 active-component service members in CY19. Of the 2,283 attempts, 73 occurred in the first 180 days of service and 39 occurred during a contingency operation deployment. With respect to known suicidal ideation, there were a total of 22,482 events recorded among 16,224 active-component service members. Of the 22,482 ideation events, 1,225 occurred in the first 180 days of service and 367 occurred during a contingency operation deployment.

The Reserve had 65 suicides in CY19, one of which occurred during the first 180 days of service and none of which occurred during a contingency operation deployment. There were a total of 99 suicide attempts among 95 Reserve service members in CY19. Of the 99 attempts, five occurred in the first 180 days of service and seven occurred during a contingency operation deployment. With respect to known suicidal ideation, the Reserve had a total of 796 events recorded among 589 Reserve service members. Of the 796 ideation events, 56 occurred in the first 180 days of service and 60 occurred during a contingency operation deployment.

The National Guard had 89 suicides in CY19, two of which occurred during the first 180 days of service and one of which occurred during a contingency operation deployment. There were a total of 95 suicide attempts among 94 National Guard service members in CY19. Of the 95 attempts, 11 occurred in the first 180 days of service and 11 occurred during a contingency operation deployment. With respect to known suicidal ideation, the National Guard had a total of 1,004 events recorded among 770 National Guard service members. Of the 1,004 ideation events, 205 occurred in the first 180 days of service and 56 occurred during a contingency operation deployment.

Tables 26 and 27 present the initial recruit training locations for service members with a CY19 suicide event that occurred during their first 180 days of service. The locations for the active component reflect the primary training locations for the military services (Table 26). The locations for the Reserve and National Guard populations are specified by state (Table 27). Most members of the Reserve component either had an unspecified initial recruit training location or were affiliated with a training location where few other individuals also had events during the first 180 days of service.

### Special Note about the U.S. Space Force

The U.S. Space Force was established on December 20, 2019. As there were no suicide events reported for Space Force service members for CY19, the Space Force was not included in this chapter's data tables or text.

Table 25. Distribution of deaths by suicide, suicide attempts, and known suicidal ideation events among service members in CY19, by military population

Population	Individuals	Events <sup>a</sup>	First 180 days <sup>b</sup>	Contingency <sup>c</sup>
<b>Deaths by Suicide</b>				
Active	344	--	0	10
Air Force	83	--	0	2
Army	142	--	0	4
Marine Corps	47	--	0	0
Navy	72	--	0	4
Reserve	65	--	1	0
Air Force	13	--	0	0
Army	36	--	1	0
Marine Corps	9	--	0	0
Navy	7	--	0	0
Guard	89	--	2	1
Air Force	15	--	0	0
Army	74	--	2	1
<b>Suicide Attempts</b>				
Active	2,106	2,283	73	39
Air Force	498	561	5	11
Army	907	986	53	17
Marine Corps	343	358	2	4
Navy	358	378	13	7
Reserve	95	99	5	7
Air Force	24	26	1	2
Army	31	31	4	5
Marine Corps	19	19	0	0
Navy	21	23	0	0
Guard	94	95	11	11
Air Force	34	35	0	1
Army	60	60	11	10
<b>Suicidal Ideation Events</b>				
Active	16,224	22,842	1,225	367
Air Force	3,215	4,434	195	83
Army	8,355	12,626	690	226
Marine Corps	2,125	2,624	135	22
Navy	2,528	3,157	205	36
Reserve	589	796	56	60
Air Force	295	420	23	45
Army	60	72	14	1
Marine Corps	175	227	7	10
Navy	109	148	2	5
Guard	770	1,004	205	56
Air Force	109	148	2	5
Army	661	856	203	51

<sup>a</sup>Total number of events. Individuals can have more than one nonfatal event per year within a nonfatal event type.

<sup>b</sup>Number of events that occurred within 180 days of entry into military service.

<sup>c</sup>Number of events that occurred during a contingency operation. Contingency operation data was obtained from the Contingency Tracking System. This system may not capture all contingency operation deployments.

Table 26. Distribution of deaths by suicide, suicide attempts, and known suicidal ideation events among active-component service members in CY19 during their first 180 days of service, by initial recruit training location

Location	Death	Attempt	Ideation
Columbia, SC	0	2	253
Ft. Benning	0	17	173
Ft. Leonard Wood	0	26	212
Ft. Sill	0	8	49
Great Lakes, IL	0	13	203
Joint Base San Antonio	0	5	197
Parris Island, SC	0	0	104
San Diego, CA	0	2	31
Other/unknown	0	0	3

Table 27. Distribution of deaths by suicide, suicide attempts, and known suicidal ideation events among Reserve-component service members in CY19 during their first 180 days of service, by initial recruit training location

Location	Reserve			National Guard		
	Death	Attempt	Ideation	Death	Attempt	Ideation
Alabama	0	0	0	0	0	5
Alaska	0	0	0	0	0	1
Arizona	0	0	0	0	0	4
Arkansas	0	0	0	0	0	4
California	0	0	0	0	0	4
Colorado	0	0	0	0	0	1
Connecticut	0	0	0	0	0	0
Delaware	0	0	0	0	0	1
Florida	0	0	0	0	0	2
Georgia	0	0	0	0	0	2
Idaho	0	0	0	0	1	0
Illinois	0	0	0	0	0	7
Indiana	0	0	0	0	0	7
Iowa	0	0	0	0	0	3
Kentucky	0	0	0	0	1	5
Louisiana	0	0	0	0	0	3
Maryland	0	0	0	0	0	1
Massachusetts	0	0	0	0	0	5
Michigan	0	0	0	0	0	6
Minnesota	0	0	0	0	0	6
Mississippi	0	0	0	0	1	9
Missouri	0	0	0	0	0	7
Montana	0	0	0	0	0	2
Nebraska	0	0	0	0	0	0
Nevada	0	0	0	0	0	1
New Jersey	0	0	0	0	0	5
New York	0	0	0	0	0	6
North Carolina	0	0	0	0	1	1
Ohio	0	0	0	0	1	8
Oklahoma	0	0	0	0	1	3
Pennsylvania	0	0	0	0	1	2
Puerto Rico	0	0	0	0	0	1
South Carolina	0	0	0	0	1	3
Tennessee	0	0	0	0	0	0
Texas	0	0	0	1	0	9
Utah	0	0	0	0	0	1
Virginia	0	0	0	0	0	2
Washington	0	0	0	0	2	2
Wisconsin	0	0	0	0	0	2
Wyoming	0	0	0	0	0	1
Other/unknown	1	5	56	1	3	70

### References and Notes

1. For more information about the NDAA FY20 (Public Law 116-92) reporting requirements, see <https://www.congress.gov/bill/116th-congress/senate-bill/1790>
2. For more information about the AFMES, see <https://health.mil/Military-Health-Topics/Combat-Support/Armed-Forces-Medical-Examiner-System>
3. For more information about the DoDSER system, see the System of Record Notice (April 15, 2016, 81 FR 22240) at <https://dpcl.d.defense.gov/Privacy/SORNsIndex/DOD-wide-SORN-Article-View/Article/570683/edha-20-dod>
4. For more information about the MDR, see <https://www.health.mil/Military-Health-Topics/Technology/Clinical-Support/Military-Health-System-Data-Repository>
5. For more information about DMDC, see <https://www.dmdc.osd.mil/appj/dwp/index.jsp>
6. For more information about suicide case determination and event reporting via the DoDSER system, see DoD Instruction 6490.16, “Defense Suicide Prevention Program,” September 11, 2020 at <https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodi/649016p.pdf?ver=2020-09-11-122632-850>.
7. Hedegaard, H., Schoenbaum, M., Claassen, C., Crosby, A., Holland, K., Proescholdbell, S. (2018). *Issues in developing a surveillance case definition for nonfatal suicide attempt and intentional self-harm using International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) coded data*. National Health Statistics Reports; no 108. Hyattsville, MD: National Center for Health Statistics.

## **Appendix B: Methods - DoDSER Data Processes**

### Case Definitions and Verification

#### *Suicide Case Criteria*

Any death among a service member in the active component or the Selected Reserve (SELRES), irrespective of duty status, where the manner of death was ruled a suicide or was strongly suspected to be a suicide (but not definitively ruled as such by the time this report was written) was eligible for inclusion in this report. To conform to the definition of end-strength used in suicide rate calculations (Appendix C), suicide cases of service members in a permanent absent without leave or deserter status were excluded from this report.<sup>1</sup>

#### *Suicide Case Verification*

For each DoDSER Annual Report, AFMES determines an official case list of suicides among service members in the active component and in the SELRES. AFMES collates data for suicides among SELRES members not in a duty status from the military service-specific Suicide Prevention Program Manager (SPPM) reports for the Air Force, Army, Marine Corps, and Navy. The official case list is used in the reporting and analysis of annual suicide mortality rates. This list is also used to validate submitted DoDSER forms for deaths by suicide.

#### *Suicide Attempt Case Criteria*

To be included in the CY19 DoDSER Annual Report, each suicide attempt case must have:

1. Occurred between January 1, 2019, and December 31, 2019, and
2. Met the DoDSER definition of a suicide attempt, which is a self-inflicted, potentially injurious behavior with a nonfatal outcome for which there was evidence (either explicit or implicit) of intent to die

#### *Suicide Attempt Case Verification*

There has never been a formal verification process for suicide attempt cases included in the DoDSER annual report. The development of a process to verify suicide attempt cases would require input from service representatives, data experts, and other stakeholders. If a feasible verification process is identified, a cost-benefit analysis of that process should be used to determine whether implementation would be justifiable.

### Data Collection and Entry

All military services collect data about confirmed suicides among service members in the active component, confirmed suicides among members of the SELRES regardless of duty status, and suicide attempts. The Army also collects data about and submits DoDSER forms for other nonfatal events, such as non-suicidal self-harm and suicidal ideation.

#### *Common Sources for Data Collection*

Trained behavioral health providers and command officials on military installations and at medical treatment facilities collect data for each case of suicide and suicide attempt. Common sources of data for these cases include:

- Medical records
- Behavioral health records
- Personnel records
- Legal and/or investigative records
- Interviews with command officials
- Interviews with spouses, extended family, friends, and/or peers (if authorized)

For cases of suicide attempt, informed consent is sought to conduct a direct interview of the service member who made the attempt. Data collected by direct interview can be submitted via a DoDSER form.

#### *Data Entry for DoDSER Forms*

Trained users input data directly into the DoDSER system via a web-based form, available through a secure DoD website (<https://dodser.t2.health.mil/>). Standardized coding guidance was available during data entry, along with technical definitions of terms and item-by-item “help” text designed to aid in accurate reporting.

#### Reporting Timelines for Suicides

Military services must report and update suicide data within designated timelines in accordance with procedures established in DoDI 6490.16 via designated trained personnel, such as SPPMs. Considering their unique organizational structures, DoDI 6490.16 allows for flexibility in how the military services complete their internal data collection processes<sup>2</sup>. The basic process for the active and Reserve components of each service is as follows:

- Air Force: The Integrated Resilience Office receives the AFMES notification for a suicide death and contacts the corresponding major command’s Behavioral Health Consultant. The consultant then contacts the responsible Air Force mental health clinic and requests that a clinician complete and submit the DoDSER form within 60 days.
- Army: The DoDSER Program Manager at the Defense Health Agency Armed Forces Health Surveillance Branch Supporting Behavioral and Social Health Outcomes Practice receives the AFMES notification, contacts the behavioral health point of contact (POC) at the service member’s assigned medical treatment facility, and requests that a behavioral health clinician complete and submit a DoDSER form within 60 days.
- Navy: Following confirmation from AFMES, the SPPM’s office at the Navy’s 21st Century Sailor Office's Suicide Prevention Branch contacts the local command and requests that an appropriate POC complete and submit a DoDSER form within 60 days.
- Marine Corps: The DoDSER Program Manager, located within the Marine Corps Headquarters’ Suicide Prevention Section and Behavioral Health Branch, contacts the local command and requests that an appropriate POC complete and submit a DoDSER form within 15 working days.
- National Guard Bureau: Upon identification or acknowledgment that a suicide has occurred, information related to the suicide event is gathered and entered into the

DoDSER System. Forms are completed and submitted by the DoDSER Program Manager, SPPM, or Director of Psychological Health.

### Reporting Timelines for Suicide Attempts

In cases involving nonfatal events, such as suicide attempts, the military services complete a suicide-attempt DoDSER form within 30 days of the date when the attempt was identified.

### Data Augmentation

After a DoDSER form is submitted, additional information is obtained from enterprise sources in an effort to improve overall data completeness and accuracy. Data sources and the types of data they provide include the following:

- AFMES provides data about the official manner and cause of death as well as official demographic for suicides among service members. These data come from military or civilian autopsy reports, death certificates, written reports from military investigative agencies, or a verbal report from a civilian death investigator or coroner.
- DMDC provides demographic data from the Defense Enrollment Eligibility Reporting System for all events submitted to the DoDSER system. DMDC also provides deployment data from the Contingency Tracking System, the repository of official deployment-related information. At present, non-contingency deployments are not identified in the DoDSER annual report.

### Data Quality

The quality of the data entered into the DoDSER system is of paramount importance. The system uses several types of controls to ensure an overall high level of data quality. Some of these controls are:

- Form-field validation that requires users to adjudicate responses that are not logically possible (e.g., date of birth must be at least 17 years in the past).
- “Low data quality” flags for forms that are less than 80% complete. A flagged form warns the user that submitting the form will count against the service’s overall level of DoDSER compliance.
- Corroboration of DoDSER suicide cases against data from AFMES ensures that suicide cases are valid and present in both independent systems. If a suicide case is present in the DoDSER system without a corresponding AFMES report, it will not be included in the analytics of the DoDSER Annual Report.
- Identification of potential duplicate suicide event submissions by the DoDSER system helps to ensure that only one submitted form exists for each event. The military services’ DoDSER program managers select the submission that represents the most accurate and complete data.

- Review of open-ended text fields and the selection of the “Other” response option allows for the identification of text responses that correspond well with the form’s existing response options.
- Checking of DoDSER data against data from AFMES and DMDC improves the accuracy of DoDSER data. If data submitted via the DoDSER form differ from the information received from AFMES or DMDC, then the DoDSER data are replaced with the information contained in the AFMES or DMDC records.
- Provision of “help” text that informs users about the definitions and parameters relevant to each question – including relevant diagnostic codes and identification of data sources relevant to a given item. This “help” text is available as a separate “pop-up” window for each item on the DoDSER form, which means that the user does not need to navigate away from the data collection page to use the help text.

### Finalization of the Dataset

DoDSER forms for all confirmed suicide deaths must be submitted by the military services no later than March 31 of the following year. This deadline is 60 days after AFMES’ suicide confirmation deadline of January 31 of the following year. Accordingly, the DoDSER dataset used to generate this CY19 Annual Report was finalized (i.e., closed to new data) on April 1, 2020.

### References and Notes

1. For more information on the DoDSER System, see the System of Record Notice (April 15, 2016, 81 FR 22240) at <https://dpcl.d.defense.gov/Privacy/SORNsIndex/DOD-wide-SORN-Article-View/Article/570683/edha-20-dod>
2. For more information on suicide death and attempt reporting via the DoDSER system, see DoD Instruction 6490.16, “Defense Suicide Prevention Program,” September 11, 2020 at <https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodi/649016p.pdf?ver=2020-09-11-122632-850>.

## Appendix C: Methods - Suicide Mortality Rates

This appendix will provide a review of the methods for defining, calculating, standardizing, and analyzing suicide mortality rates. Note that official military suicide mortality rates for the calendar year are provided to the DoDSER team by AFMES. The DoDSER team then standardizes these rates to allow for comparisons between the military and U.S. general adult population.

### Definition of a Suicide Mortality Rate

Suicide mortality rates provide information on the occurrence of death by suicide over a defined period. The rates are based on both the number of suicides that occurred and the size of the population at risk for the event. The crude (descriptive) rates (which are not adjusted for any demographic characteristics) are expressed as a number of events per 100,000 persons at risk. This scale allows the rate to be expressed as a whole number of deaths to ease interpretation (e.g., 0.02% = 0.0002 and 0.0002\*100,000 = 20 deaths per 100,000 persons).

### Calculation of a Suicide Mortality Rate

DoD policy states that a CY suicide rate can be calculated no sooner than 90 days after the end of the CY to allow for resolution of case determinations.<sup>1</sup> March 31 serves as the final reporting date for cases used in the previous CY's annual rate calculations and for the previous CY's aggregate data from the DoDSER system.

DoD Instruction 6490.16 establishes rate calculation procedures. DoD data standards prohibit reporting rates associated with fewer than 20 instances of suicide because a high degree of statistical instability occurs in rates calculated from small numerators.<sup>1,2</sup> Overall and stratified rates are calculated separately for the following:

- Active component (in aggregate and individually for each service)
- Reserve SELRES members (regardless of duty status; in aggregate and individually for each service)
- National Guard SELRES members (regardless of duty status; in aggregate and individually for the Air Guard and Army Guard)

Stratified rates are calculated for sex, race, ethnicity, education, marital status, age, and rank/grade within these components. AFMES collaborates with DMDC to identify the number of service members in each combination of military service, component, and demographic characteristic at the end of each month; these totals are the monthly end-strengths. The average of the monthly end-strengths for the CY is the denominator for the rate calculations.

### Mathematical Formula

The following formula provides a mathematical expression of the rate calculation:

$$\text{Rate} = \frac{12s_g}{\sum_{m=1}^{12} ES_{mg}} \times 100,000$$

In this formula,  $s_g$  represents the number of suicides in a particular population group ( $g$ ) observed in one year, and  $ES_{mg}$  represents the end-strength of a particular month ( $m$ ) for the same population group in the same year. The populations used in each rate calculation correspond to the service and population groups described above.

### Standardization of a Suicide Mortality Rate

Rate standardizations for each DoDSER Annual Report are implemented using U.S. population data from the Centers for Disease Control and Prevention (CDC) WONDER Online Database.<sup>3</sup>

CY18 data were the most current population data available from CDC WONDER for the CY19 DoDSER Annual Report. For each CY, rates of suicide in the U.S. population were jointly stratified by age group (17–19, 20–24, 25–29, 30–34, 35–39, 40–44, 45–49, 50–54, 55–59) and sex (male, female) for each calendar year.

The technique of indirect standardization allows for calculation of the number of expected suicides in the military population given the adult U.S. population age- and sex-specific stratum rates. This technique was used to calculate the number of expected cases in each age- and sex-specific stratum of the component and service subpopulations. Indirect standardization is preferred to direct standardization when the number of events within strata of the target population (i.e., the military) are very small.<sup>4</sup>

Division of the observed number of suicides by the total number of expected suicides yields the standardized mortality ratio (SMR). The mathematical formula for the SMR is:<sup>4</sup>

$$SMR = \frac{\sum_i p_{ia} n_{ia}}{\sum_i p_{is} n_{ia}}$$

- $p_{ia}$  —Represents the stratum-specific rate for the study population (i.e., the specific component or military service under consideration)
- $n_{ia}$  —Represents the number of service members in that stratum
- $p_{is}$  —Represents the stratum-specific rate from the standard population (in this instance, the U.S. population)

The product of  $p_{ia}$  and  $n_{ia}$  gives the observed number of suicides within each stratum. The sum of the observed numbers across the strata yields the numerator for the formula. The product of  $p_{is}$  and  $n_{ia}$  yields the number of expected suicides for that stratum. The sum across the strata is the total number of expected suicides. Multiplication of the SMR by the crude rate of the standard population produces the standardized rate for the population of interest.

### *Practical Example of Indirect Rate Standardization*

Table 28 provides a practical example of this indirect method of rate standardization. The data used in Table 28 are for the active-component suicide rates from all military services combined for CY12. Data for the current calendar year are provided in Chapter 2.

The sum of the expected deaths column (the denominator of the SMR formula) is 289.782. The numerator of the SMR formula uses the same value as the total number of observed suicides for

the time-period: 321. Dividing 321 by 289.782 yields the SMR of 1.11. Multiplying the SMR by the unstandardized rate for the standard population (.000165) gives the standardized rate of .000183. This value is then multiplied by 100,000 to convert it into the more easily interpretable value of 18.3 suicides per 100,000 members of the population of interest.

Table 28. Demonstration of the calculation of the age- and sex-adjusted suicide rate using the indirect method for the active component, all military services, CY12

Stratum	CY12 Service-Aggregated Denominator ( $n_{ia}$ )	CY12 U.S. Population Rate ( $p_{is}$ )	Expected Deaths ( $n_{ia}p_{is}$ )
Male, 17–19	67726	.000153	10.362
Male, 20–24	375972	.000221	83.090
Male, 25–29	296051	.000240	71.052
Male, 30–34	188920	.000228	43.074
Male, 35–39	137064	.000248	33.992
Male, 40–44	87498	.000266	23.274
Male, 45–49	33105	.000288	9.534
Male, 50–54	8912	.000315	2.807
Male, 55–59	2082	.000309	0.643
Female, 17–19	13382	.000039	0.522
Female, 20–24	67558	.000049	3.310
Female, 25–29	52184	.000056	2.922
Female, 30–34	32318	.000062	2.004
Female, 35–39	20794	.000072	1.497
Female, 40–44	12161	.000082	0.997
Female, 45–49	4869	.000100	0.487
Female, 50–54	1603	.000104	0.167
Female, 55–59	513	.000091	0.047

Standardized rates allow for comparisons between the military population and the general U.S. population after accounting for known differences in the distribution of age and sex between the two populations.

The 95% CIs associated with the standardized rates were calculated using the Poisson distribution. Formally, a 95% CI relates to the probability that the end points of the interval cover the true value being estimated.<sup>5</sup> Assuming multiple generations of the data and subsequent analysis, 95% of the CIs will cover the true value. If the span of the CI for the military population does not cover the U.S. population rate, then one can conclude that the probability of observing that difference is less than 5% if in fact there is no true difference.

The use of indirect standardization limits the comparisons to just those involving the population of interest against expected rates in the U.S. general adult population. Within a particular year, it can be misleading to compare the SMRs, or associated standardized rates, between components or military services because the age and sex distributions will differ between the subpopulations.

## Data Analyses

### *Suicide Mortality Rate Data Analyses*

To compare the rates of suicide between years and between components and military services within a single year while accounting for different age and sex distributions, the DoDSER team conducted a separate set of analyses using a Poisson regression model.<sup>6</sup> This model is used with count data, such as the number of deaths in a particular group. The Poisson regression model estimates the natural logarithm of the observed event count. The equation below shows the basic specification of the model for the analysis.

$$\ln(d_{ia}) = b_0 + b_1 \text{year} + b_2 \text{sex} + \sum_{j=3}^{10} b_j \text{age}_{j-1} + \ln(n_{ia})$$

In the equation, the observed number of deaths ( $d$ ) for any stratum ( $i$ ) in the military population ( $a$ ) are modeled as a function of an intercept ( $b_0$ ) and a slope coefficient for year ( $b_1$ ) and the natural logarithm of the population size of the stratum ( $n_{ia}$ ). Additional terms in the model include weighted-effects codes<sup>7</sup> for sex and age group ( $j$ ; total number of age groups less 1 estimated). This coding allows for the interpretation of the intercept as the population-average log rate when year is set to 0. The coefficient for year would correspond to the log rate ratio of per-year change. Models were estimated separately for population groups; the  $a$  subscript is included here for continuity with earlier formulas.

The Poisson regression model was also used to compare change in the U.S. military population suicide mortality rates relative to expected change based on the U.S. adult population suicide mortality rates over the same time period. The model was modified to estimate the SMR instead of the rate.<sup>4</sup> This modification involved replacing the military population sizes with the expected deaths as defined above for indirect rate standardization. The new model form was:

$$\ln(d_{ia}) = b_0 + b_1 \text{year} + b_2 \text{sex} + \sum_{j=3}^{10} b_j \text{age}_{j-1} + \ln(p_{is} n_{ia})$$

The modified term shows the expected deaths in each stratum as the product of the standard population rate in the stratum ( $p_{is}$ ) and the military population size ( $n_{ia}$ ). This time, the coefficient for year ( $b_1$ ) is interpreted as the per-year log SMR. This estimate indicates the amount of change in the per-year suicide mortality rate after accounting for change in the standard population rate over the same time period.

### *Data Analyses for DoDSER Variables*

The majority of the CY19 DoDSER Annual Report describes the prevalence of suspected risk factors associated with the occurrence of suicide and suicide attempts among service members. Statistical comparisons of a limited set of variables have also been included to examine change over time within suicide and suicide-attempt DoDSER forms. These comparisons examine the stability of risk distributions over time. Poisson regression models were used to compare CY19 suicide and suicide-attempt DoDSER results to results from CY16-CY18. The three-year average

for CY16-CY18 was used to provide a more stable statistical comparison. The Poisson model was used instead of the more commonly employed logistic regression model to yield a direct estimate of the prevalence ratio as opposed to the odds ratio. Since the outcomes described below were generally common (>10% prevalence) in the case groups, the odds ratio would overestimate the prevalence ratio.<sup>8</sup> A robust variance estimator was used to correct the standard error estimation that occurs when using the Poisson model with dichotomous outcomes. All outcomes were simultaneously estimated separately for deaths and suicide attempts. All models were adjusted for age, sex, rank/grade, race/ethnicity. The models for the active-component overall were adjusted for Service affiliation. The models for the active-component populations of the military services used dummy codes and product terms to simultaneously produce estimates for each Service. The CY variables were included as three dummy codes in reference to CY16. The calculation of the comparison of CY19 to the CY16-CY18 average used post-estimation contrast coding for the coefficients of -1/3, -1/3, -1/3, 1 to correspond to the coefficients for CY16-CY19, respectively.

The specific variables included in the comparative analyses were:

- Method of injury (e.g., firearm use, asphyxiation, drug or alcohol overdose)
- Presence of any mental health diagnosis<sup>9</sup>
- History of prior self-harm
- Use of psychotropic medications in the 90 days prior to the event
- Relationship problems in the 90 days prior to the event
- Legal/administrative problems in the 90 days prior to the event
- Workplace issues in the 90 days prior to the event

These variables were selected for the current report because of their prominence in the suicide research literature as major determinants of suicide and suicide attempts. Each model was adjusted for demographic factors. Full information maximum likelihood estimation was used to account for missing data.<sup>10</sup> For individuals with multiple suicide attempts or with both an attempt and a suicide death in the CY16-CY19 DoDSER data, only the most recent report was retained for analysis to satisfy the assumption of independent observations in the regression model.

### References and Notes

1. For more information on suicide rate calculation, see DoD Instruction 6490.16, "Defense Suicide Prevention Program," September 11, 2020 at <https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodi/649016p.pdf?ver=2020-09-11-122632-850>.
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## Appendix D: Glossary

Unless otherwise noted, these terms and their definitions are specific to the collection, analysis, and reporting of DoDSER data.

Active Component	Per the Office of the Chief Management Officer, the active component is, “the portion of the armed forces as identified in the annual National Defense Authorization Acts as ‘active forces,’ and in section 115 of Title 10 USC as those active duty personnel paid from funds appropriated for active duty personnel.”
Annual Suicide Report	This report satisfies requirements established by the Office of the Under Secretary of Defense for Personnel and Readiness, requiring DSPO to produce an annual report that serves as the official source for annual suicide counts and unadjusted rates for the Department. This report provides information on available suicide data for military family members per Section 567 of the NDAA for FY 2015 (Public Law 113-291) and addresses requirements in Section 741 of the NDAA of FY 2020 (Public Law 116-92).
Article 15	A provision under the Uniform Code of Military Justice that gives commanding officers the ability to impose non-judicial punishment upon service members within their units who commit minor offenses.
Confidence Interval (95%)	“Over the collection of all 95% confidence intervals that could be constructed from repeated random samples of size $n$ , 95% will contain the parameter $\mu$ .” <sup>2</sup> Said another way, it is a range of values so defined that there is a 95% probability that it covers the true parameter value.
Contextual Factor	A factor that reflects a particular context of an individual or group.
Death-Risk Gambling	Any game of chance with death or serious injury as a potential outcome. One example is “Russian roulette.”
Deployment	Per the Office of the Chairman of the Joint Chiefs of Staff, “DOD Dictionary of Military and Associated Terms,” as amended, a deployment is defined as “[t]he movement of forces into and out of an operational area.” <sup>3</sup>
DoDSER Annual Report	A yearly summary providing a descriptive report of data from the U.S. Armed Forces on the occurrence of suicide and suicide attempts between January 1 and December 31 each year.

DoDSER Form	The DoDSER data-collection form utilized by each service to collect a core set of standardized data elements, as well as a set of service-specific items, regarding cases of suicide and suicide attempt.
DoDSER System	A secure web-based data-collection program, available at <a href="https://dodser.t2.health.mil">https://dodser.t2.health.mil</a> , through which DoDSER forms are completed and submitted.
Duty Status	Service members are considered to be in a duty status if they are members of the active component and are not identified as being in a deserter status. Per the Office of the Assistant Secretary of Defense for Reserve Affairs, service members of the Selected Reserve are also considered to be in a duty status if they are identified as currently engaged in drill or training, or in the Simultaneous Membership Program, active National Guard/Reserve, or Full-Time Support roles.
Medical Evaluation Board	An element of the disability evaluation system that evaluates the medical history of a service member to determine whether an injury and/or disease will respond to treatment protocols and whether the injury or disease may render the service member unfit for duty. <sup>4,5</sup>
Military Services	The military services included in this report include the Army, Navy, Air Force (including Space Force), and Marine Corps. At this time, the Coast Guard is not included in the DoDSER surveillance system.
Non-Suicidal Self-Directed Violence	“Behavior that is self-directed and deliberately results in injury or the potential for injury to oneself. There is no evidence, whether implicit or explicit, of suicidal intent.” <sup>6</sup>
Planned and/or Premeditated	Evidence that the event was planned and/or premeditated includes verbal discussion of a plan, written notes, e-mail and/or chat-room discussion, or other evidence of a plan such as preparatory behaviors (e.g., giving possessions away, purchase of materials to facilitate suicide, etc.).
Protective Factors	Factors that stem from physical, psychological, spiritual, family, social, financial, vocational, and emotional well-being; i.e., factors that make it less likely that individuals will develop a disorder. Protective factors may encompass biological, psychological, or social factors in the individual, family, and environment. <sup>7</sup>

Psychotropic Medication	A type of medication that directly affects mental, emotional, and behavioral states when consumed by an individual. Such medications are used to treat disorders such as depression or bipolar disorder.
Risk Factors	Characteristics, variables, or hazards that make it more likely that individuals will develop self-injurious behaviors. Risk factors may encompass biological, psychological, or social factors in the individual, family, and environment. <sup>7</sup>
Selected Reserve	Those units and individuals within the Ready Reserve designated by their respective services and approved by the Joint Chiefs of Staff as so essential to initial wartime missions that they have priority over all other Reserves. Selected Reservists actively participate in a Reserve Component training program. The Selected Reserve also includes persons performing initial active duty for training.
Self-Harm (Without Intent to Die)	A self-inflicted, potentially injurious behavior for which there is evidence (either implicit or explicit) that the person did not intend to kill himself or herself (i.e., had no intent to die). <sup>7</sup>
Sexual Assault	Intentional sexual contact characterized by use of force, threats, intimidation, or abuse of authority or when the victim does not or cannot consent. The term includes a broad category of sexual offenses consisting of the following specific Uniform Code of Military Justice offenses: rape, sexual assault, aggravated sexual contact, abusive sexual contact, forcible sodomy (forced oral or anal sex), or attempts to commit these acts. <sup>8</sup>
Suicidal Ideation	Any self-reported thoughts of engaging in suicide. <sup>7</sup>
Suicide	Self-inflicted death with evidence (either explicit or implicit) of intent to die. <sup>7</sup>
Suicide Attempt	A self-inflicted, potentially injurious behavior with a nonfatal outcome for which there is evidence (either explicit or implicit) of intent to die. <sup>7</sup>
Suicide Mortality Rate	The expected or observed number of suicide deaths for every 100,000 members of that specific population.

Traumatic Brain Injury	<p>A traumatically induced structural injury and/or physiological disruption of brain function as a result of an external force, indicated by new onset or worsening of at least one of these clinical signs immediately following the event:</p> <ul style="list-style-type: none"> <li>• Any period of loss of or a decreased level of consciousness</li> <li>• Any loss of memory for events immediately before or after the injury</li> </ul> <p>Any alteration in mental state at the time of the injury (confusion, disorientation, slowed thinking, etc.) or neurological deficits (weakness, loss of balance, change in vision, praxis, paresis/plegia, sensory loss, aphasia, etc.) that may or may not be due to a transient intracranial lesion used to treat disorders such as depression or bipolar disorder<sup>9</sup></p>
Undetermined Self-Directed Violence	<p>“Behavior that is self-directed and deliberately results in injury or the potential for injury to oneself. Suicidal intent is unclear based upon the available evidence.”<sup>6</sup></p>

### References and Notes

1. For more information, see Office of the Under Secretary of Defense, Personnel & Readiness Memorandum, “Designation of the Defense Suicide Prevention Office as the Official Release Authority of Suicide Data for the Department of Defense,” October 30, 2018.
2. Quote from page 191 of Rosner, B. (2006). *Fundamentals of Biostatistics* (6<sup>th</sup> Ed.). Belmont, CA: Thomson Brooks/Cole.
3. Office of the Chairman of the Joint Chiefs of Staff. *DOD Dictionary of Military and Associated Terms*, (Washington DC: The Joint Staff, January, 2021), page 62.
4. For more information, see DoD Instruction 1332.18, “Disability Evaluation System (DES),” August 5, 2014.
5. For more information, see <https://health.mil/Military-Health-Topics/Conditions-and-Treatments/Physical-Disability/Disability-Evaluation/Medical-Evaluation>.
6. Quotes from pages 63-64 of The Assessment and Management of Suicide Risk Work Group. (2019). *VA/DoD clinical practice guideline for the assessment and management of patients at risk for suicide*. Washington, DC: U.S. Department of Veterans Affairs and Department of Defense.

7. For more information, see Crosby AE, Ortega L, Melanson C. (2011). *Self-directed violence surveillance: Uniform definitions and recommended data elements, version 1.0*. Atlanta, GA: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control.
8. For more information, see DoD Directive 6495.01, “Sexual Assault Prevention and Response (SAPR) Program,” January 23, 2012, as amended.
9. For more information, see DoD Instruction 6490.13, “Comprehensive Policy on Traumatic Brain Injury-Related Neurocognitive Assessments by the Military Services,” March 31, 2017.

## Appendix E: Acronyms and Initialisms

AFMES	Armed Forces Medical Examiner System
ASR	Annual Suicide Report
CDC	Centers for Disease Control and Prevention
CI	Confidence Interval
CTS	Contingency Tracking System
CY	Calendar Year
DoD	Department of Defense
DoDSER	Department of Defense Suicide Event Report
DMDC	Defense Manpower Data Center
FY	Fiscal Year
ICD-10-CM	International Classification of Disease, Tenth Revision, Clinical Modification
MDR	Military Health System Data Repository
MHS	Military Health System
NDAA	National Defense Authorization Act
OEF	Operation Enduring Freedom
OIF	Operation Iraqi Freedom
OND	Operation New Dawn
POC	Point of Contact
PHCoE	Psychological Health Center of Excellence
SELRES	Selected Reserve
SMR	Standardized Mortality Ratio
SPPM	Suicide Prevention Program Manager
U.S.	United States

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## Appendix H: Frequently Asked Questions (FAQs)

Q: Why is only aggregated data presented in this report?

A: To protect and maintain the privacy of the individuals with information in the DoDSER system, no identifiable information or singular case-level data are presented.

Q: Why do the suicide counts for a certain year sometimes change from one DoDSER Annual Report to the next?

A: When necessary, data from previous years (e.g., 2018) are updated to reflect any cases for which the cause of death determination changed after AFMES' deadline for that year.

Q: Where can I find older DoDSER Annual Reports?

A: This report represents the DoDSER system's 12th year of operation. All 12 Annual Reports are available online via the PHCoE website: <http://www.pdhealth.mil/research-analytics/department-defense-suicide-event-report-dodser>.

Q: What is the main difference between the DoDSER Annual Report and the DoD ASR?

A: The DoDSER Annual Report was designed to be a comprehensive report about military suicide deaths and, secondarily, attempts. As such, the DoDSER Annual Report contains military suicide counts and rates as well as data on numerous demographic variables, physical and behavioral health characteristics, contextual factors, and event-related characteristics for suicide deaths and attempts. In addition, the DoDSER Annual Report provides standardized suicide mortality rates, which are used to compare rates between populations and over time. The reporting of suicidal ideation is an appendix to the CY19 DoDSER Annual Report that fulfills Section 741 NDAA FY20. As the ideation data came from the military medical record system instead of the DoDSER system, fewer details are provided for the ideation events than for deaths and attempts.

The DoD ASR serves as the official source for annual suicide counts and unadjusted rates for the Department. In addition, the ASR provides information on available suicide data for military family members per Section 567 of the NDAA for FY 2015 (Public Law 113-291). The ASR also describes current and future efforts underway to combat suicide in the DoD.

Q: Are DoDSER forms really submitted for each suicide event among service members, regardless of their duty status?

A: The DoDSER system is only accessible to authorized individuals via the .mil computer network. Individuals without access to that network cannot, at present, submit a DoDSER form for a suicide event. As such, suicide event data for service members who are not in a duty status at the time of the event may not be reported via the DoDSER system.

Q: Were there any changes to DoDSER operations recently?

A: Calendar year 2018 marked the first full year for which suicide and suicide attempt event data were collected for service members not in a duty status. This was in accordance with Section 567 NDAA FY15 (i.e., Public Law 113-291). Calendar year 2019 was the first year for which suicidal ideation cases were reported in the DoDSER Annual Report. The DoDSER team identified ideation cases among service members using DoD medical records. This reporting was in accordance with Section 741 NDAA FY20 (i.e., Public Law 116-92). For all data fulfilling the NDAA FY20 reporting requirements as well as the limitations of suicidal ideation data, see Appendix A of this report.

Q: What steps are being taken to protect DoDSER data?

A: To conform to all data protection and privacy standards, basic data-entry users only had access to the DoDSER data that they themselves submitted. Furthermore, the servers on which the DoDSER system operates are housed in a DoD Risk Management Framework-approved facility.