ANNUAL REPORT ON SUICIDE IN THE MILITARY

CALENDAR YEAR 2022

Including the Department of Defense Suicide Event Report (DoDSER)

DEPARTMENT OF DEFENSE

UNDER SECRETARY OF DEFENSE
FOR PERSONNEL AND READINESS

IF YOU OR SOMEONE YOU KNOW NEEDS HELP:

Veterans Crisis Line
Military Crisis Line
DIAL 988 then PRESS 1

IN CASE OF AN EMERGENCY, DIAL 911 or your local emergency number for immediate assistance.

FREE and CONFIDENTIAL | AVAILABLE 24/7

Qualified and caring responders understand the challenges that Service members and their loved ones face, and they are ready to assist Service members and their families in crisis.

CALL 988 then press 1

CHAT www.MilitaryCrisisLine.net

TEXT 838255

Europe
Call **00800 1273 8255** or **DSN 118**

Japan/Korea
Call **0808 555 118** or **DSN 118**

Philippines
Call **#MYVA** or **02-8550-3888** and **press 7**

For the latest overseas calling information, please check www.MilitaryCrisisLine.net/

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NONCRISIS SERVICES ARE FREE, CONFIDENTIAL, AND AVAILABLE 24/7.

Service members, including the National Guard and Reserve, and eligible family members can get support for noncrisis concerns, such as relationship, family, or financial challenges.

Face-to-face, phone, online, or video counseling sessions are available.

TABLE OF CONTENTS

SAFE REPORTING ON SUICIDE

Words Matter in Suicide Prevention
The Department follows best practices for safe reporting on suicide.

ABOUT THIS REPORT

THE PUBLIC HEALTH APPROACH STARTS WITH DATA

The U.S. Department of Defense (DoD) Annual Report on Suicide in the Military serves as the **official source for annual suicide counts and rates for DoD**.

In addition, this report contains the calendar year (CY) **2022 Department of Defense Suicide Event Report (DoDSER) System Data Summary**, which provides contextual information related to Service member suicide deaths and attempts.

This annual report also highlights key current and ongoing Department-wide efforts to reduce suicide risk among Service members and their families.

TRANSPARENCY, ACCOUNTABILITY, COMMITMENT, AND COLLABORATION

The Department's transparency, accountability, and commitment to preventing suicide is reflected in this report. It was developed in collaboration with the Military Departments, Military Services, National Guard Bureau, Joint Chiefs of Staff, Office of the Assistant Secretary of Defense for Manpower and Reserve Affairs, Office of the Assistant Secretary of Defense for Health Affairs, Office of the Assistant Secretary of Defense for Readiness, and the Defense Human Resources Activity.

Report Icon Guides

Executive Summary | Data

Service Members | 2022

492 Total Service members died by suicide

331 Active | **64** Reserve | **97** Guard

Suicide rates per 100,000 Service members

- **25.1** Active Component Service members
- **19.1** Reserve Service members
- **22.2** National Guard Service members

Family Members | 2021*

168 Total Family Members died by suicide

114 Spouses | **54** Dependents

Suicide rates per 100,000 family members

- **6.5** Family Members spouses and dependents
- **11.2** Spouses
- **3.4** Dependents**

*Latest year of available data
**Includes minor (<18 years) & non-minor (18-22 years)

KEY TAKEAWAYS

SERVICE MEMBERS

Active Component suicide rates gradually increased from 2011 to 2022. Although, rates in the last two years appear slightly lower than in 2020.

Reserve and National Guard suicide rates did not have an increasing or decreasing trend between 2011 and 2022, although they fluctuated year to year.

Military suicide rates were similar to the U.S. population in most years between 2011 and 2021,* after accounting for age and sex differences.

Use of a firearm was the most common method of suicide across Components and Services. **69%**

Most Service members who died by suicide were young, enlisted men. However, other Service members can still be at risk for suicide.

HEALTH AND LIFE STRESSORS

45% Select behavioral health diagnoses
42% Relationship problems
26% Workplace issues
26% Administrative/legal issues
10% Financial issues

Behavioral health problems are treatable, and **seeking help is a sign of strength.**

* 2021 was the latest year of available U.S. population data.

FAMILY MEMBERS

Suicide rates for family members (spouses and children) appear slightly lower than in previous years.

Of note, suicide rates for male spouses and dependents appear lower in 2021 versus 2020.

In 2021, suicide rates for spouses and dependents were similar to the suicide rates in the U.S. population when accounting for age and sex differences.

Use of a firearm was the most common method of suicide for spouses and dependents.

Spouses **61%** **Dependents** **56%**

SPOUSES

52% Female
84% < 40 years old
48% Service history

DEPENDENTS

30% Female
69% < 18 years old
<5% Service history

WHAT THIS TELLS US:

Suicide is multifaceted, and suicide prevention needs a comprehensive and integrated approach. Thus, DoD aims to:

- ► Foster supportive environments.
- ► Address stigma as a barrier to care.
- ► Improve delivery of mental health care.
- ► Promote a culture of lethal means safety.
- ► Revise suicide prevention training

Executive Summary | Current and Ongoing Efforts

Foster a Supportive Environment

Quality of life is key to suicide prevention and force readiness.

Delivered key benefits to the military community through the Taking Care of Our People initiative, including pay raises, basic allowance for housing increases, additional commissary savings, military spouse employment opportunities, and childcare program improvements.

Hired and trained over 400 members of a dedicated, specialized prevention workforce to work with leaders to build healthy and harm-free environments.

Through 2023, conducted On-Site Installation Evaluations (OSIE) at 19 sites and 12 ships that reviewed best practices and improvement areas for prevention of harmful behaviors.

Expanded a yearlong suicide prevention communication campaign to include new resources, outreach efforts, expanded platforms, and evaluation measures.

Address Stigma as a Barrier to Getting Help

Stigma is a long-standing barrier, and addressing it is a priority to improve access to care.

Reviewed over 600 policy documents in an ongoing effort to identify and remove stigmatizing language. DoD Components continue to review and work toward eliminating stigmatizing language to change perceptions toward seeking behavioral health services, to increase help-seeking, and to improve access to care.

Revitalized the Real Warriors Campaign, which aims to reduce stigma associated with mental health and to support the military community's psychological health and readiness.

Created resources to support parents and educators. Topics included discussing feelings with elementary-age children and sharing healthy relationship and military care resources.

Improve Delivery of Mental Health Care

DoD aims to deliver the highest-quality clinical health care services.

Implemented the ability for Service members to request referrals for mental health evaluations for any reason, improving the process for Service members to confidentially seek mental health and wellness support.

Oversaw studies that examined clinical and implementation intervention methods. Ongoing efforts will help translate knowledge more rapidly into clinical practice and advance evidence-based clinical practice guidelines to reduce the risk of suicide.

Implemented programs that help address unique challenges in accessing mental health services among the National Guard and Reserve.

Promote a Culture of Lethal Means Safety (LMS)

In crisis, time and space from lethal means can be lifesaving.

Partnered with federal agencies to examine a policy for safe storage and lethal means messaging, advancing the White House's strategy to reduce military and veteran suicide.

Enforcing existing restrictions on private firearms in barracks and promoting secure storage of privately owned firearms when residing on installation in barracks/dormitories and in family housing when children reside in the home.

Initiated pilot programs to explore appropriate settings and effective communication for safe storage of lethal means in early military career training across all Services.

Published an updated policy on program evaluation and supported Service-level lethal means safety (LMS) program evaluation capabilities.

Way Forward

"We all share a profound responsibility to ensure the wellness, health, and morale of the Total Force."

— Secretary Lloyd J. Austin III, March 2023

The Department is pursuing a campaign with the five lines of effort listed below, which will guide suicide prevention moving forward. In September 2023, Secretary Austin approved a series of key enabling tasks within each line of effort, adopted and modified from the Suicide Prevention and Response Independent Review Committee (SPRIRC) recommendations.

Foster a Supportive Environment. The Department will implement 26 approved SPRIRC recommendations to enhance well-being, including:

- Invest in Taking Care of People priorities.
- Improve morale, welfare, and recreation activities and facilities to enhance quality of life, holistic health, and wellness.
- Empower leaders to improve schedule predictability.

Improve the Delivery of Mental Health Care. The Department will begin implementing 24 additional SPRIRC recommendations to improve mental health service delivery and achieve the following priorities:

- Expand training programs and actions to better recruit, support, and retain mental health providers.
- Remove obstacles to improve coordination of care.
- Eliminate barriers to provider pay equity, timely hiring, and efficient onboarding.
- Increase appointment availability by revising mental health staffing models to ensure that mental health clinics have the administrative and case management support they need.

Address Stigma and Other Barriers to Care. The Department will begin implementing 14 approved SPRIRC recommendations to advance the following objectives:

- Expand availability of confidential services, including non-medical counseling for suicide prevention.
- Increase mental health services in primary care.
- Expand availability of tele-health care and other digital tools.
- Provide additional resources to support unit leaders in reducing stigma.

Revise Suicide Prevention Training. The Department will begin implementing 20 approved SPRIRC recommendations to revise the Department's suicide prevention and postvention training intended to:

- Modernize content, delivery, and dosage of suicide prevention training.
- Train behavioral health technicians in evidence-based practices.
- Integrate leaders at all levels into suicide prevention training.
- Centralize the core suicide prevention training curriculum.

Promote a Culture of Lethal Means Safety. The Department will begin implementing eight approved SPRIRC recommendations, including the following next steps to promote lethal means safety:

- Launch a comprehensive public education campaign.
- Offer funding incentives for safer ways to store firearms.
- Provide additional on-base secure storage options for personal firearms.
- Enforce existing restrictions on private firearms in barracks.
- Make improvements to reducing risk in barracks and dormitories.

Service Members

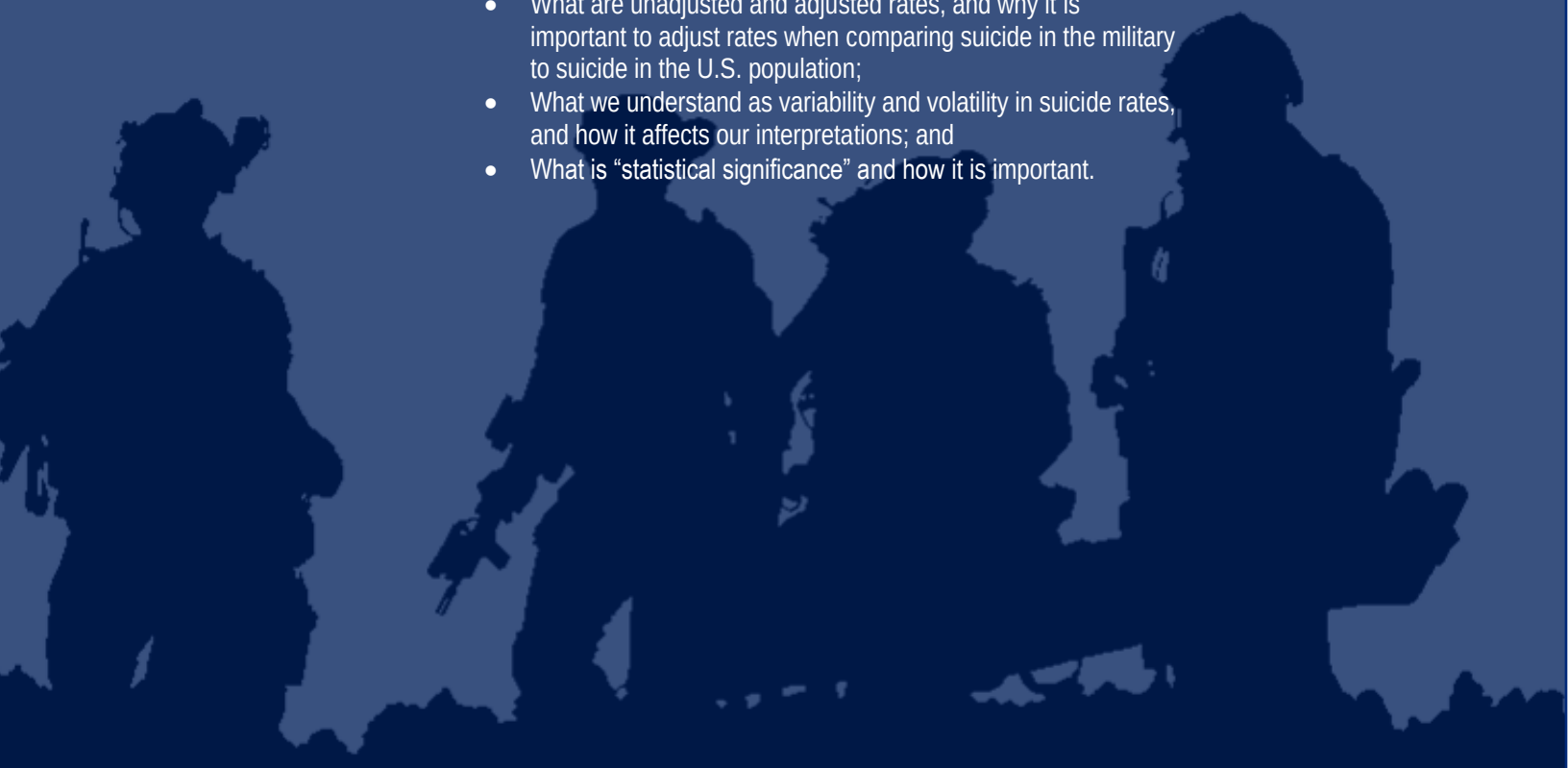
Key Data

IN THIS SECTION

This section includes counts and rates for CY 2022 and updated counts and rates for CY 2021 and CY 2020. These results are organized by military population and Service branch. This section also includes rate comparisons across time within military populations, rate comparisons between the military and U.S. general populations, demographic and military characteristics, and method of suicide in 2022.

See Appendix A for additional information on the following:

- Who verifies and reports suicide deaths for Service members;
- What are suicide counts and rates, and why understanding both is important;
- Who reports counts and rates;
- Why counts are not enough to understand suicide trends;
- What are unadjusted and adjusted rates, and why it is important to adjust rates when comparing suicide in the military to suicide in the U.S. population;
- What we understand as variability and volatility in suicide rates, and how it affects our interpretations; and
- What is “statistical significance” and how it is important.



OVERVIEW | Service Member Suicide Counts and Rates per 100,000, CY 2020 2022

Table 1. Annual Suicide Counts and Unadjusted Rates per 100,000 Service Members in the Active Component, Reserve, and National Guard and by Service, CY 2020–2022

	CY 2020		CY 2021		CY 2022	
	Rate	Count	**Rate**	Count	**Rate**	Count
Active Component	***28.6***	383	***24.3***	328	***25.1***	331
Army	***36.2***	174	***36.1***	175	***28.9***	135
Marine Corps	***34.5***	63	***23.9***	43	***34.9***	61
Navy	***19.0***	65	***17.0***	59	***20.6***	71
Air Force	***24.3***	81	***15.3***	51	***19.7***	64
Space Force	--	NA	--	NA	--	0
Reserve	***21.7***	77	***21.8***	76	***19.1***	64
Army	***22.2***	42	***24.8***	46	***20.8***	37
Marine Corps	--	10	--	14	--	6
Navy	--	13	--	10	--	7
Air Force	--	12	--	6	--	14
National Guard	***27.5***	121	***27.0***	120	***22.2***	97
Army	***31.5***	105	***31.2***	105	***24.8***	82
Air Force	--	16	--	15	--	15

Notes: Data sourced from Armed Forces Medical Examiner System (AFMES). The table includes both confirmed and suspected suicides *as of March 31, 2023*. Both confirmed and suspected suicides are included so that counts and rates are not underestimated as investigations continue. Per DoDI 6490.16, rates are not reported ("--") when the number/count of suicide deaths is under 20, because those rates are considered unstable and would not be reliable due to statistical instability.[1] Only DoD Services are reported here. The Coast Guard is under the U.S. Department of Homeland Security—unless operating under the Department of the Navy—therefore, the suicide rates of Coast Guard uniformed members are not included in this report.

Although Table 1 shows updated counts and rates for the last three years, it is not enough to understand how suicide rates in the military have changed over time (i.e., whether they are increasing, decreasing, or staying the same) and how they compare to the suicide rates in the U.S population. These additional analyses are presented in the next sections.

MORE IN THE NEXT SECTION

1 Trend: 2011–2022

Presents trend analysis of military suicide rates from 2011 to 2022 to see if there is an increasing, decreasing, or no trend over time.

2 Year-to-Year Comparison

Compares military suicide rates in 2022 to last year and the year before. Limited reliability

3 Compared to the U.S. Population

Assesses if the suicide rates in the military are different from the suicide rates in the U.S. population for each year between 2011 and 2021.

Active Component

KEY TAKEAWAY

Suicide rates for **Active Component Service members gradually increased from 2011 to 2022**.* Although in the **last two years, the rates were lower** than in 2020.†

In most years, the Active Component suicide rate was **similar to the suicide rate in the U.S. population,**† except in 2020 when the Active Component suicide rate was higher.*

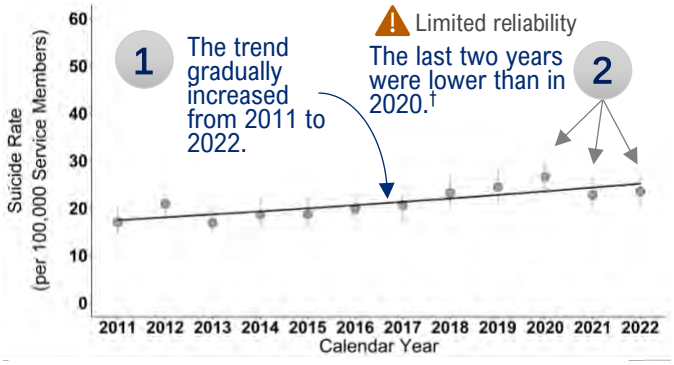


Figure 1 | Active Component Suicide Rates Over Time

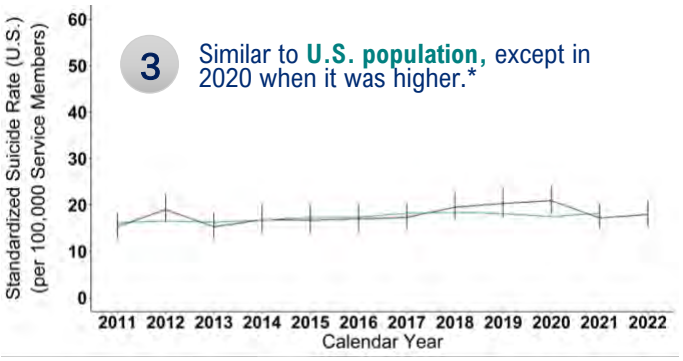


Figure 2 | Active Component versus U.S. Population Suicide Rates
⚠ CY 2021 was the latest year of available U.S. population data.

KEY TAKEAWAY

Suicide rates for each Service in 2022 had different year-to-year changes (see Figure 3). Suicide rates for **all Services gradually increased from 2011 to 2022**.*

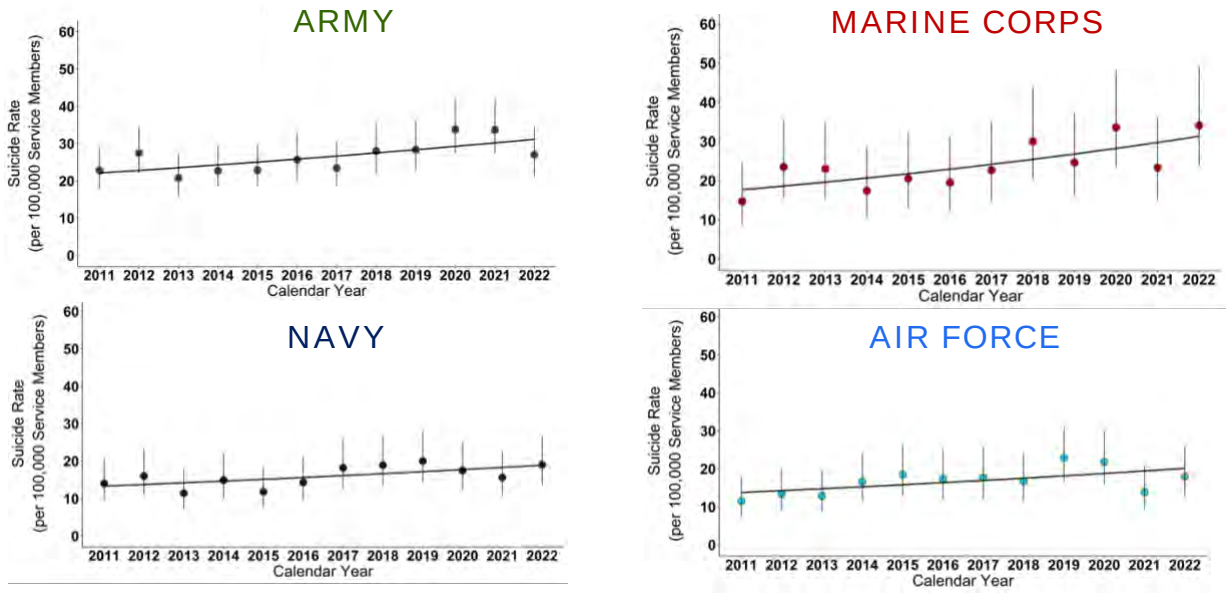


Figure 3 | Active Component Suicide Rates Over Time by Service, 2011–2022

Notes: Data sourced from AFMES (military populations) and the Centers for Disease Control and Prevention (CDC; U.S. population), ages 17–59. All rates are sex and age adjusted to account for differences within the military over time. Figure 2 shows the Active Component suicide rates, adjusted to age and sex differences, between the military and the U.S. population. The Space Force was established in 2019 and had no suicides from 2020 to 2022. Vertical bars around each rate are 95% confidence intervals.
*Statistically significant—high confidence this is a true difference and not due to chance.
†Not statistically significant—low confidence this is a true difference (e.g., likely due to chance or normal variation).

Active Component

Table 2. Demographic and Contextual Characteristics of Active Component Service Members Who Died by Suicide in CY 2022 (Rate per 100,000, count, percent)

	Rate	Count	Percent
Total	--	331	100%
Sex			
Male	28.3	308	93.1%
Female	9.9	23	6.9%
Age Group			
17–19	--	16	4.8%
20–24	31.9	135	40.8%
25–29	23.8	73	22.1%
30–34	24.0	51	15.4%
35–39	23.6	38	11.5%
40–44	--	16	4.8%
45–49	--	2	0.6%
50+	--	0	0.0%
Race			
White	26.3	237	71.6%
Black/African American	22.5	51	15.4%
Asian/Pacific Islander	--	18	5.4%
Am. Indian/Alaskan Native	--	4	1.2%
Other/Unknown	22.8	21	6.3%
Rank			
E (Enlisted)	28.2	301	90.9%
E1–E4	28.1	153	46.2%
E5–E9	28.3	148	44.7%
O (Commissioned Officer)	11.1	24	7.3%
W (Warrant Officer)	--	5	1.5%
Cadet	--	1	0.3%
Marital Status			
Never Married	27.6	165	49.8%
Married	22.4	147	44.4%
Divorced	--	19	5.7%
Widowed	--	0	0.0%

Notes: Data sourced from AFMES. Per DoDI 6490.16, rates are not reported ("--") when the number/count of suicide deaths is under 20, because those rates are considered unstable and would not be reliable due to statistical instability. Percentages may not add up to 100% due to rounding. Table 15 provides the Total Force demographics.

KEY TAKEAWAYS

Service members who died by suicide in 2022 were largely enlisted (91%), male (93%), white (72%), and under the age of 30 (68%).

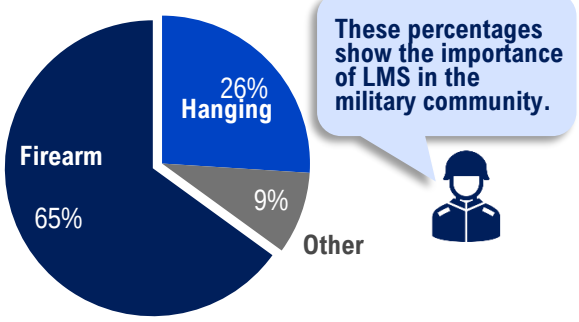
These characteristics are largely similar to previous years and to the overall demographic profile of the total force.

Service members in every demographic group can have suicide risk factors even if they do not make up the highest-percentage group.

KEY TAKEAWAYS

In 2022, use of a firearm was the most common method of suicide death (65%), which is consistent with previous years.

The percentage of suicide deaths by firearm was higher in the military than among the U.S. population (age/sex adjusted).



These percentages show the importance of LMS in the military community.

"Other" includes overdose, poisoning, blunt/sharp objects, and falling/jumping.

Active Component

KEY INFORMATION FROM THE CY 2022 DoDSER

From the data submitted to the DoDSER system for
Active Component Service Members who died by suicide in 2022:

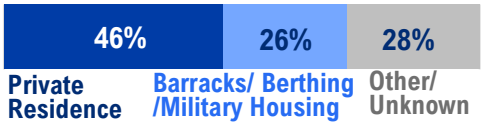
- 45% Reported select behavioral health diagnoses
  alcohol use disorder, depressive disorder, anxiety, trauma- or stressor-related disorder, sleep–wake disorder (one or more)
- 42% Reported intimate relationship problems
- 26% Reported workplace difficulties
- 26% Reported administrative/legal problems
  nonjudicial punishment, under investigation, administrative separation
- 10% Reported financial difficulties
  (within a year before death)

Experiencing different health or life stressors does not mean that someone is suicidal. Behavioral and mental health problems are treatable. **Seeking help for any of these problems is a sign of strength.**

Location information for 2022:

87% Reported suicide deaths occurred in the Continental U.S. (CONUS). Suicide deaths typically occur where there are large concentrations of Service members; for example, in California, Texas, Virginia, and North Carolina.

Most suicide deaths occurred in either private residences or military barracks/berthing/housing.



New in the DoDSER:

4% Identified as **gay, lesbian, or bisexual**

14% **Experienced abuse** before age 18

Over time, this new information from the DoDSER may help shape understanding of suicide risk.

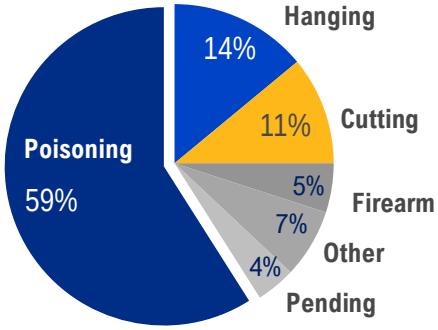
From the data submitted to the DoDSER system for the
1,278 reported suicide attempts among Active Component Service members in 2022:

319 Army | 274 Marine Corps | 282 Navy | 403 Air Force

31% of attempts were among **female** Service members.

69% of attempts were among **male** Service members.

- 48% Reported select behavioral health diagnoses
  (one or more – see above)
- 38% Reported intimate relationship problems
- 26% Reported workplace difficulties
- 20% Reported administrative/legal problems
  (see above)
- 11% Reported experiencing assault or harassment
- 10% Reported financial difficulties
  (within a year before the reported attempt)



Poisoning (drug and nondrug) was the most common method among those who experienced a nonfatal suicide attempt.

Reserve and National Guard

KEY TAKEAWAY

Suicide rates for the **Reserve and National Guard did not have an increasing or decreasing trend from 2011 to 2022.**† The suicide rates fluctuated year to year, and in 2022, suicide rates for both groups appear slightly lower† than in the previous two years.†

Between 2011 and 2021, **Reserve suicide rates were similar to suicide rates in the U.S. population.**† In the same time frame, the **National Guard suicides rates were similar**† **to the suicide rates in the U.S. population,** except in 2012 and 2013 when National Guard rates were higher.*

RESERVE

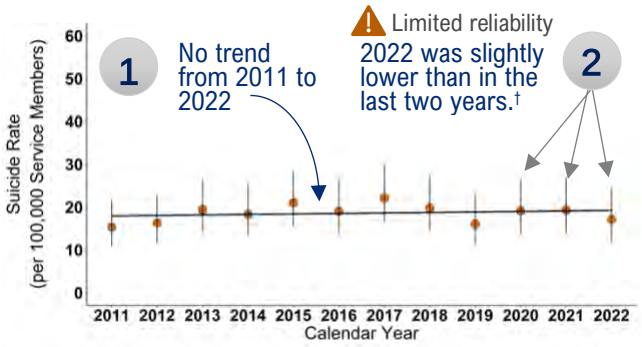


Figure 4 | Reserve Suicide Rates Over Time

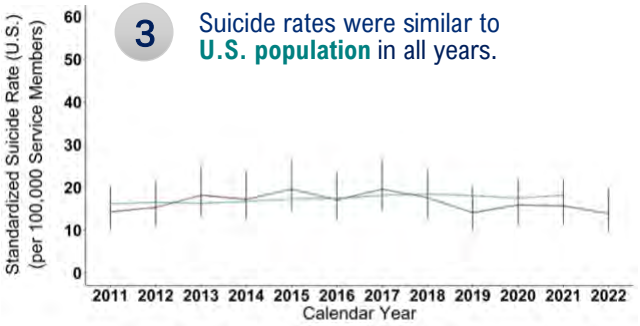


Figure 5 | Reserve versus U.S. Population Suicide Rates
⚠ CY 2021 was the latest year of available U.S. population data.

NATIONAL GUARD

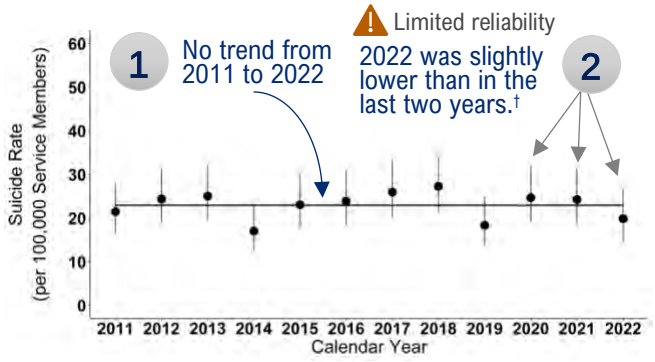


Figure 6 | National Guard Suicide Rates Over Time

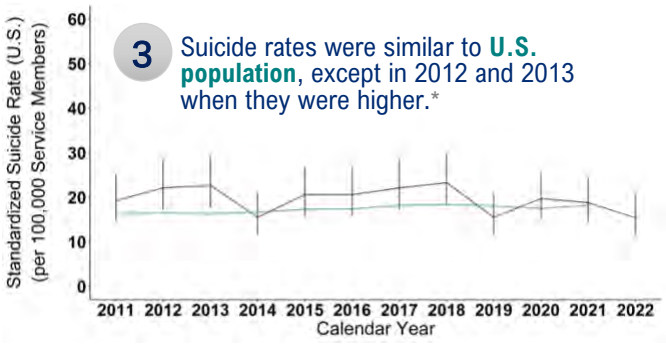


Figure 7 | National Guard versus U.S. Population Suicide Rates
⚠ CY 2021 was the latest year of available U.S. population data.

By Service | Army Reserve rates followed the same near- and long-term pattern as the overall Reserve (data not shown). Army National Guard rates followed the same near- and long-term pattern as the overall National Guard (data not shown). Marine Corps Reserve, Navy Reserve, Air Force Reserve, and Air National Guard rates/trends over time were not reported due to low Service-specific counts (DoDI 6490.16).

Notes: Data sourced from AFMES (military populations) and CDC (U.S. population), ages 17–59. All rates are sex and age adjusted to account for differences within the military over time. Figures show suicide rates, adjusted for age and sex differences, between the military and the U.S. population. Vertical bars around each rate are 95% confidence intervals.
*Statistically significant—high confidence this is a true difference and not due to chance.
†Not statistically significant—low confidence this is a true difference (e.g., likely due to chance or normal variation).

Reserve and National Guard

KEY TAKEAWAYS

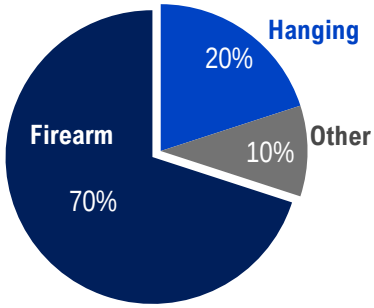
- Reserve and National Guard Service members who died by suicide in 2022 were largely enlisted, male, White, and under the age of 30.
- These characteristics are largely similar to previous years and to the overall demographic profile of the total force.
- In 2022, use of a firearm was the most common method of suicide death among the Reserve and National Guard, which has remained consistent over time.
- The percentage of suicide deaths by firearm was higher in the military than among the U.S. population (age/sex adjusted).*

Table 3. Demographic Characteristics of Reserve and National Guard Service Members Who Died by Suicide in CY 2022 (Rate per 100,000, count, percent)

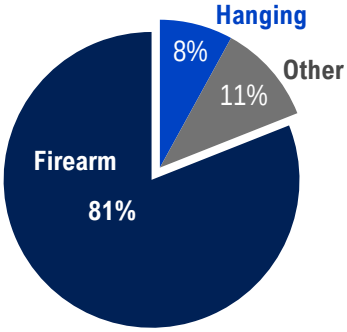
	Reserve			National Guard		
	Rate	Count	Percent	Rate	Count	Percent
Total	--	64	100%	--	97	100%
Sex						
Male	21.9	56	87.5%	25.2	88	90.7%
Female	--	8	12.5%	--	9	9.3%
Age Group						
17–19	--	5	7.8%	--	2	2.1%
20–24	--	15	23.4%	40.8	45	46.4%
25–29	--	18	28.1%	--	15	15.5%
30–34	--	8	12.5%	--	15	15.5%
35–39	--	9	14.1%	--	11	11.3%
40–44	--	5	7.8%	--	2	2.1%
45–49	--	3	4.7%	--	3	3.1%
50+	--	1	1.6%	--	4	4.1%
Race						
White	18.3	41	64.1%	22.7	77	79.4%
Black/African American	--	14	21.9%	--	14	14.4%
Asian/Pacific Islander	--	5	7.8%	--	3	3.1%
Am. Indian/Alaskan Native	--	3	4.7%	--	1	1.0%
Other/Unknown	--	1	1.6%	--	2	2.1%
Rank						
E (Enlisted)	22.7	58	90.6%	24.3	91	93.8%
E1–E4	30.8	37	57.8%	29.3	55	56.7%
E5–E9	14.6	21	32.8%	19.3	36	37.1%
O (Commissioned Officer)	--	6	9.4%	--	5	5.2%
W (Warrant Officer)	--	0	0.0%	--	1	1.0%
Cadet	--	0	0.0%	--	0	0.0%
Marital Status						
Never Married	25.0	38	59.4%	26.5	62	63.9%
Married	--	18	28.1%	14.6	26	26.8%
Divorced	--	8	12.5%	--	8	8.2%
Widowed	--	0	0.0%	--	1	1.0%

Notes: Data sourced from AFMES. Per DoDI 6490.16, rates are not reported ("--") when the number/count of suicide deaths is under 20, because those rates are considered unstable and would not be reliable due to statistical instability. Percentages may not add up to 100% due to rounding. Table 15 provide the Total Force demographics.

RESERVE



NATIONAL GUARD



"Other" includes overdose, poisoning, blunt/sharp objects, and falling/jumping.

Shows the importance of lethal means safety in the military community.

See the DoDSER enclosure for more contextual information for the Reserve and National Guard. In instances where there is incomplete information or a low number of events, some of the descriptive data, like percentages, may not be representative or may have limited reliability.

Family Members

Key Data

IN THIS SECTION

For this report, military family members are limited to spouses and dependent children (minor and nonminor) who are eligible to receive military benefits under Title 10 and who are registered in the Defense Enrollment Eligibility Reporting System (DEERS; a database of military sponsors and dependents who have registered to receive military benefits). For ease of reporting, dependent spouses are referred to as "spouses, and dependent children are referred to as "dependents. Appendix A describes why three data sources are used; Section 1072(2) of Title 10, U.S. Code provides a definition of a dependent with respect to a uniformed Service member (or former member).

The Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2015, Public Law 113 291 requires DoD to collect and report suicide data involving military family members. Data sources include (1) DEERS, (2) each Military Service, and (3) the CDC National Center for Health Statistics National Death Index (NDI; a database of death record information compiled from state offices). Data from all three sources were available starting in 2017. Due to the time it takes to process NDI data, these data lag one year relative to military data sources.

Military Family Members

OVERVIEW | Family Member Suicide Counts and Rates per 100,000, CY 2019 2021 (latest available)

This is the fifth year reporting on suicide data for military family members (spouses and dependents). Family member data sources were available starting in 2017 and lag one year relative to military data sources. U.S. population data from the NDI are available through 2021.

KEY TAKEAWAYS

The number (or count) of family members who died by suicide in 2021 was lower than in the previous two years. Similarly, the 2021 rate (total force) appears slightly lower than in 2019 and 2020.†

The same was true for spouses and dependents separately.

Suicide rates were similar for Active Component, Reserve, and National Guard family members.

Table 4. Military Family Member Suicide Rates per 100,000 Individuals by Their Service Member's Military Population, CY 2019–CY 2021

Military Population	CY 2019		CY 2020		CY 2021	
	Rate	Count	Rate	Count	Rate	Count
Total Force	**7.7**	202	**7.7**	202	**6.5**	168
Spouse	**12.6**	130	**13.0**	133	**11.2**	114
Dependent	**4.5**	72	**4.3**	69	**3.4**	54
Active Component	**7.1**	117	**7.9**	130	**6.4**	103
Spouse	**12.6**	85	**13.0**	87	**11.7**	78
Dependent	**3.3**	32	**4.4**	43	**2.6**	25
Reserve	**8.7**	40	**8.4**	38	**8.1**	36
Spouse	--	17	**15.0**	25	**12.3**	20
Dependent	**7.9**	23	--	13	--	16
National Guard	**8.5**	45	**6.5**	34	**5.6**	29
Spouse	**14.6**	28	**11.1**	21	--	16
Dependent	--	17	--	13	--	13

Table 5. Military Spouse and Dependent Suicide Rates per 100,000 Individuals by Sex, CY 2019–CY 2021

SPOUSES	CY 2019		CY 2020		CY 2021	
	Male	Female	Male	Female	Male	Female
Total Force	**51.2**	**6.8**	**47.4**	**7.7**	**39.6**	**6.7**
Active Component	52.0	7.0	47.5	7.9	42.2	7.1
Reserve	--	--	--	--	--	--
National Guard	--	--	--	--	--	--
DEPENDENTS						
Total Force	**6.7**	--	**6.2**	--	**4.8**	--
Active Component	4.4	--	5.9	--	4.3	--
Reserve	--	--	--	--	--	--
National Guard	--	--	--	--	--	--

Notes: Data sourced from DEERS, Military Services, NDI, Defense Manpower Data Center (DMDC; denominators only). Rates for groups with fewer than 20 suicides are not reported because of statistical instability (DoDI 6490.16). Only DoD Services are reported here; therefore, Coast Guard family member suicide rates are not included in this report. The table includes family members who were themselves Service members to capture the full extent of suicide among military family members (22.8% currently serving in CY 2021, 18.8% in CY 2020, 27.7% in CY 2019).

*Statistically significant—high confidence this is a true difference and not due to chance.
†Not statistically significant—low confidence this is a true difference (e.g., likely due to chance or normal variation).

KEY TAKEAWAYS

SPOUSES

In 2021, suicide rates for male and female spouses appear lower than in prior years.†

In 2021, suicide rates for female and male spouses were similar to their female and male counterparts in the U.S. population ages 18 to 60 (data not shown).†

DEPENDENTS

The CY 2021 suicide rate for male dependents appears lower than in prior years.†

Suicide rates for male dependents were similar to the male suicide rates in the U.S. population under 23 years old.

Military Family Members

KEY TAKEAWAYS

SPOUSES

- Male spouses accounted for about 48% of spouse suicides but made up about 14% of all military spouses across the DoD.
- About 84% of spouses who died by suicide were under 40 years old (similar to overall military spouses).
- About 48% of spouses who died by suicide had prior or current service history (78% of men and 20% of women; data not shown).
- Like in previous years, use of a firearm was the most common method of suicide death.
- About 44% of female military spouses who died by suicide used a firearm, whereas about 35% of women ages 18 to 60 in the U.S. population used a firearm (data not shown).

Table 6. Military **Spouse** Suicide Counts and Percentages by Demographics, CY 2021

Demographic	Count	Percent
Sex	**114**	**100%**
Male	55	48.2%
Female	59	51.8%
Age Group	**114**	**100%**
<40	96	84.2%
≥40	18	15.8%
Service History	**114**	**100%**
Any Service History	59	48.2%
Prior Service (Not Currently Serving)	29	25.4%
Currently Serving	26	22.8%
No Service History	55	51.8%
Method of Death	**114**	**100%**
Firearm	70	61.4%
Hanging/Asphyxiation	25	21.9%
Poisoning (Drugs/Alcohol/Nondrug)	13	11.4%
Sharp/Blunt Object	--	--
Falling/Jumping	--	<1%
Other	--	<2%
Unknown	--	<3%

Notes: Data sourced from DEERS, Military Services, NDI, DMDC (denominators only). Per CDC requirements, counts under 10 are suppressed, and corresponding percentages are suppressed or masked (i.e., < 1.0%) to protect the confidentiality of military family members. Only DoD Services are reported here; therefore, Coast Guard family member suicide rates are not included in this report. The table includes family members who were themselves Service members to capture the full extent of suicide among military family members (22.8% currently serving in CY 2021, 18.8% in CY 2020).

Table 7. Military **Dependent** Suicide Counts and Percentages by Demographics, CY 2021

Demographic	Count	Percent
Sex	**54**	**100%**
Male	38	70.4%
Female	16	29.6%
Age Group	**54**	**100%**
<18	37	68.5%
18-23	17	31.5%
Method of Death	**54**	**100%**
Firearm	30	55.6%
Hanging/Asphyxiation	15	27.8%
Poisoning (Drugs/Alcohol/Nondrug)	--	<14%
Sharp/Blunt Object	--	--
Falling/Jumping	--	<4%
Other	--	--
Unknown	--	--

Notes: Data sourced from DEERS, Military Services, NDI (suicide counts), DMDC (denominators). Per CDC requirements, counts under 10 are suppressed, and corresponding percentages are suppressed or masked (i.e., < 1.0%) to protect the confidentiality of military family members. Only DoD Services are reported here; therefore, Coast Guard family member suicide rates are not included in this report.

KEY TAKEAWAYS

DEPENDENTS

- Male dependents accounted for about 70% of dependent suicide deaths.
- About 69% of dependents who died by suicide were under 18 years old.
- Less than 5% of dependents who died by suicide had prior or current service history (data not shown).
- Like in previous years, use of a firearm was the most common method of suicide death.

Current and Ongoing Department Efforts

The DoD advanced and strengthened its comprehensive and integrated prevention approach to reduce suicide risk factors and amplify protective factors. This approach included a continuous internal review of existing initiatives and programs and a rigorous external review through the Secretary of Defense directed SPRIRC. The reviews resulted in deeper insights into the evolving needs of Service members and their families, thus enabling the DoD to better develop and deliver relevant and sustainable solutions.

Foster a Supportive Environment

Quality of life is key to suicide prevention and force readiness.

Military service can lead to unique life stressors, such as longer work hours, deployments, extended family separations, and unique financial issues. DoD works to create an environment that encourages personal and professional growth, provides assistance where and when needed, and promotes well-being for Service members and their families to support them through any of life's challenges.

Quality of life is a key component of suicide prevention. DoD empowers Service members and their families to access support options across key aspects of well-being, such as financial stability, employment opportunities, interpersonal relationships, housing conditions, health care, education, leisure activities, safety, and matters of religion or spirituality.

DoD also continues to deliver key benefits to strengthen quality of life through the Taking Care of Our People initiatives (Taking Care of Our People [defense.gov]), which includes pay raises, higher housing allowances, better employment opportunities for military spouses, and improving childcare programs.[2]

DoD regularly engages with installations and local communities to understand the needs of the military community and develops resources and programs to support overall force fitness and quality of life. In 2021, the Department began fielding a specialized and dedicated prevention workforce, hiring and training over 400 individuals to work with leaders to build healthy and harm-free environments (Prevention | Workforce). Through 2023, the Department also conducted OSIEs at 19 sites and 12 ships, in addition to the sites visited in 2021. The OSIE reviewed best practices and areas of improvement across DoD installations in the prevention of sexual assault, harassment, suicide, domestic abuse, and other harmful behaviors. The OSIE allows for the sharing of best practices between installations and across the Military Services, which strengthens integrated capabilities in the prevention of these harmful behaviors.

Service- and installation-level initiatives also support the quality of life of Service members and their families. The Services offer programs that aim to reduce relationship and family stressors and to increase a sense of belonging. Select examples of these programs include the Strong Bonds Program, which is offered by the Air National Guard, and Building Strong and Ready Teams, which is offered by the Army National Guard. The purpose of these programs is to enhance relationships between intimate partners and spouses. The Navy's Naval Air Station North Island opened an off-base Child Development Center in partnership with the City of San Diego. The partnership promotes increased access to childcare for a military community that faces unique childcare challenges due to their geographic location.[1] The Army's Better Opportunities for Single Soldiers is designed to enhance morale and welfare of single Soldiers on their first or second duty assignment. The program also supports increased retention and sustained combat readiness.

These combined efforts contribute to total force readiness by supporting the daily lives of Service members and their families and by addressing many common suicide risk factors.

Address Stigma as a Barrier to Getting Help

Stigma is a long-standing barrier, and addressing it is a priority to improve access to care.

Stigma is the fear that acknowledging one's struggles or seeking help for them may lead to negative career or social impacts.[1] It is a dynamic process in which a person's identity is shaped by perceived negative attitudes or beliefs toward people with mental health disorders (e.g., perceived ability to complete one's mission). Stigma may contribute to adverse outcomes such as discrimination and isolation, may serve as a barrier to seeking care and treatment, and may exacerbate symptoms. By challenging the stigma associated with seeking mental health support, DoD strives to create an environment where Service members and their families feel empowered to prioritize their mental well-being without judgment—an environment where mental health is health.

Efforts aimed at reducing stigma are central to DoD's integrated primary prevention approach to suicide prevention. The American Psychological Association (APA) reports that Generation Z (generally defined as Americans born between 1997 and the early 2010s), which represents our youngest and future military force, views behavioral health and associated care differently from previous generations. For example, compared to older age groups, Generation Z is more open about their behavioral health, less reluctant to report experiencing poor behavioral health, and more likely to seek health care.[3]

One way DoD is working to change negative perceptions toward clinical services is through policy change. As an ongoing effort, the DoD has reviewed over 600 policy documents, working toward removing language that stigmatizes stress reactions, mental health issues, and treatment.[4] Also, help-seeking is not limited to clinical services. DoD actively promotes a broad spectrum of supportive options, both clinical and nonclinical, that are available to Service members and their families, including chaplaincy and financial and life skills counseling. The motivation for implementing service-led policies that embed mental health providers and other behavioral health extenders in military units is to reduce stigma, increase help-seeking behavior, and improve access to care.

Senior leadership can also shape attitudes toward mental health and help-seeking.[1] For example, research shows that Service leaders who share their own personal struggles with mental health help reduce stigma and increase positive perceptions of help-seeking.[1]

Members of the military community themselves play a key role in reducing stigma and improving attitudes toward help-seeking. DoD and Service-led education and training programs (e.g., Ask, Care, Escort [ACE]) teach community members how to access care for themselves and for others, destigmatize psychological distress, and portray help-seeking as a sign of strength.

The DoD, based on a partnership between the Psychological Health Center of Excellence (PHCoE) and the Defense Suicide Prevention Office (DSPO), revitalized the Real Warriors Campaign (Real Warriors Campaign | Health.mil) to reduce stigma associated with mental health and to support psychological health and readiness. The Real Warriors Campaign promotes a culture of support and emphasizes that mental health care is health care – that psychological fitness is as much of a priority as physical fitness. The campaign serves to anchor the message that reaching out for help is a sign of strength.

Taken together, such efforts are a framework for eliminating stigma by normalizing help-seeking and mitigating misconceptions related to these efforts.[5]

Improve Delivery of Mental Health Care

DoD aims to deliver the highest-quality clinical health care services.

Elevating high-quality, evidence-informed clinical support services is critical to DoD's suicide prevention program. DoD is committed to delivering top-tier clinical support services coupled with effective screening to Service members and their families to identify and aid those at increased risk of suicide.

Clinical services are standardized across all Military treatment facilities (MTFs). Support services are based on clinical practice guidelines and were co-developed with the U.S. Department of Veterans Affairs (VA).[6] These guidelines represent the gold standard in evidence-based care for suicide risk as well as for certain clinical conditions that increase suicide risk, such as substance use disorder, post-traumatic stress disorder (PTSD), traumatic brain injury (TBI), and depression. To ensure accessibility, Service members and their families can, in some situations, also access care through community providers.

As part of its integrated approach to suicide prevention, DoD also actively uses nonclinical options to supplement clinical services. For example, community-based prevention is especially important for Service members experiencing increased exposure to risk factors (e.g., geographic isolation) and decreased access to protective factors (e.g., social connections). These efforts serve to strengthen relationships between Service members in need with military leaders and chaplains, as well as their families, peers, and spouses.

The DoD has implemented the ability for Service members to request referrals for mental health evaluations for any reason, which improves the process for Service members to confidentially seek mental health and wellness support. More specifically, the DoD published a directive-type memorandum (DTM), "Self-Initiated Referral Process for Mental Health Evaluations of Members of the Armed Forces," allowing Service members to initiate a referral for a mental health evaluation from a commanding officer or supervisor who is in a grade above E-5 on any basis, at any time, and in any environment.[7] This guidance expands to other avenues available to Service members, so they can easily and readily access behavioral health care.[8]

The Defense Health Agency's administrative instruction, "Suicide Risk Care Pathway for Adult Patients in the Defense Health Agency," establishes procedures to screen, assess, manage, track, and treat patients for suicide risk.[9] Military members are screened for behavioral health challenges annually as well as routinely with each primary care visit, during other health care visits when clinically indicated, at pre-deployment, and twice following post-deployment. This administrative instruction also includes guidance for training on suicide risk care, measuring outcomes, and reporting suicide deaths and attempts identified in Service members.

The National Guard implemented the Star Behavioral Health Providers (SBHP) program to provide continuing education programs to enhance behavioral health providers' knowledge and skills for treating Service members, veterans, and their families. SBHP maintains an online registry to make it easy to find trained, local support. This program helps address unique challenges in accessing mental health services; for example, a lack of available providers in remote locations and civilian community providers with military cultural literacy.

Additionally, DoD oversaw two noteworthy studies in CY 2022. The first study examined "Caring Contacts," an intervention involving periodic and personalized contact (e.g., sending a brief note) to someone who sought help indicative of increased suicide risk. The intent is to facilitate a sense of connection and to increase perceptions of social support. The results indicated a protective effect against attempting suicide.[10] The second study examined 73 different interventions following a nonfatal

suicide attempt.[11] These studies help translate knowledge into evidence-based health care guidelines and services focused on reducing the risk of reattempting suicide. Other resources can be found on the Psychological Health Center of Excellence (PHCoE) website: https://health.mil/Military-Health-Topics/Centers-of-Excellence/Psychological-Health-Center-of-Excellence.

Promote a Culture of Lethal Means Safety (LMS)

In crisis, time and space from lethal means can be lifesaving.

LMS is crucial to reducing suicide deaths. Lethal means is defined as a "method for suicide that has a high likelihood of resulting in death (e.g., firearms, drugs, and poisons)."[1] In the case of Service members and their families, firearms—especially privately owned—are the leading method of suicide death.

LMS is intended to put time and distance between a person in crisis and a lethal means. This strategy decreases the ability for a person in crisis to make a fatal suicide attempt.[12]

LMS continues to be a key national priority for reducing suicide in the military and veteran communities and features prominently in the White House's *Military and Veteran Suicide Prevention Strategy* and the *White House Report on Mental Health Research Priorities*.[13] The Department continues to prioritize LMS through multiple efforts, including partnering with federal agencies, such as the VA and the U.S. Department of Health and Human Services (HHS), to further the White House's LMS goals, and through examining the Department's internal policies and directives to ensure safe messaging is communicated throughout all DoD issuances. The Department is working with internal stakeholders to examine how to improve safe storage practices throughout the Department.

Through pilot programs, the Department is exploring appropriate settings and effective conversations on safe storage of firearms in early military career training across all Services. The Department is also supporting the Services in increasing LMS program evaluation capabilities, which is underpinned by the newly published policy update (DoDI 6490.16) directing the Services to engage in program evaluation for suicide prevention related activities and efforts (see more on program evaluation below).

Available DoD resources for educating the wider military community on LMS include the Lethal Means Safety Suite of Tools, which discusses how to safely store firearms and medications (available at Defense Suicide Prevention Office [dspo.mil]). Another resource is Counseling on Access to Lethal Means (CALM), a training program for mental health and medical professionals (Counseling on Access to Lethal Means | Zero Suicide [edc.org]). CALM teaches counseling strategies to promote safe use and storage of firearms. LMS training is now also actively promoted throughout the Services.

Fostering a culture of LMS is a cornerstone of DoD's integrated primary prevention approach. Proper storage of lethal means creates a barrier to an impulsive act and promotes an overall safe environment for Service members and their families.

Additional and Service-Specific Efforts

Evaluating the Effectiveness of Suicide Prevention Programs

The long-term goal of all DoD suicide prevention initiatives is to reduce suicide risk factors and increase protective factors. Program evaluation is a systematic way to assess whether an initiative has been successful in achieving these intended outcomes.

The evaluation process allows stakeholders to continuously develop lessons learned, identify best practices, and build infrastructure for programs. In 2023, DoD Instruction 6490.16 for the "Defense Suicide Prevention Program" was updated to outline a framework to evaluate the effectiveness of suicide prevention efforts.[1] This includes:

- Relevance and utility—to ensure the evaluation supports the needs of stakeholders.
- Rigor—to ensure adherence to scientific principles and standards.
- Independence and objectivity—to support the integrity of the findings.
- Transparency—to enable appropriate accountability throughout the evaluation lifecycle.
- Ethics—to safeguard the rights of those being served.

Adherence to these standards ensures reliable data to systematically evaluate the effectiveness and outcomes of an intervention. Such data supports the development, implementation, and dissemination of initiatives in real-world settings.[12]

Real-world implementation of suicide prevention programs requires sensitivity to the diversity of backgrounds and identities in the military community. The *White House Report on Mental Health Research Priorities* includes a call for addressing disparities in health care across different demographic groups and for ensuring a diverse and culturally competent mental health work force.[13] Thorough evaluation of these programs and services will help DoD meet its commitment to ensuring that all Service members have equitable and inclusive access to suicide prevention programs and services.

Put into practice, DoD is currently involved in a two-year effort to develop, distribute, and evaluate a version of CALM that has been adapted to the needs of nonclinical military gatekeepers. "CALM-Adaptation for the Military" intends to teach this group of gatekeepers how to effectively engage in conversations about lethal means with Service members in distress. Another example is the Real Warriors Campaign, an ongoing public health awareness campaign established in 2009 that is aimed at reducing stigma and, more recently, amplifying suicide prevention initiatives. This campaign is conducted in collaboration with other federal agencies and includes a formal evaluation plan.

Program evaluation is an important component of any suicide prevention effort. DoD is committed to systematically evaluating and continuously improving the safety, effectiveness, usability, accessibility, and scalability of all the support options it provides to Service members and their families.

Highlighted Service specific Suicide Prevention Efforts

The following section includes highlights of select Service-specific suicide prevention efforts and initiatives, which is newly added to the report this year. This is not an exhaustive list of efforts.

U.S. Army Suicide Prevention Initiatives (Highlighted efforts not exhaustive)

Ask, Care, Escort (ACE) Suicide Prevention Pilot Program

- The goal of this pilot program is to increase awareness of suicide risk and protective factors, strategies for intervention, and prevention resources.
- This training is comprised of four modules. A base module and selected "+1" additional modules will complete the Army's annual suicide prevention training requirement.
- This pilot program enables participants to successfully lead suicide prevention with interactive activities and discussions to prompt critical thinking. Additionally, the modular format allows leaders to select the best prevention education for their Soldiers, supported by current research and academic literature on suicide prevention and instructional best practices.
- Website: https://www.armyresilience.army.mil/suicide-prevention/pages/about.html

Lethal Means Safety (LMS) Toolkit

- LMS plays an important role in preventing suicide. The Army has initiated efforts to integrate LMS across the enterprise.
- From September to November 2022, Headquarters Department of the Army (HQDA) successfully piloted the CALM training with chaplains. Twenty-three chaplains were effectively trained to educate Soldiers and family members on safe firearm storage practices.
- The Army established a LMS microsite (https://www.armyresilience.army.mil/Lethal-Means/LMS-Home.html) with a communications toolkit, an LMS catalogue, and a community of practice for Army professionals.
- Website: https://www.armyresilience.army.mil/lethal-means/lms-home.html

Spiritual Readiness Initiative Pilot Program

- Army chaplains and behavioral health professionals partnered to develop the Spiritual Readiness Initiative to build Army spiritual readiness and to reduce harmful behaviors and negative outcomes, like suicide and self-harm.
- From November 2021 to December 2022, the chief of chaplains hosted 13 Spiritual Readiness training events that were conducted at multiple Army installations with approximately 2,500 participants.
- The initiative informed the new Spiritual Readiness Training, which covers the science of spirituality and the policy and doctrine concerning spirituality. It is a 3-hour course for the Chaplain Corps and was published and distributed in March 2023.

Wellness Checks for Soldiers Pilot Program

- The Wellness Checks for Soldiers initiative requires Soldiers of all ranks to complete a wellness check to support personal resilience, promote personal development, and introduce Soldiers to the counseling process.
- In 2022, Walter Reed Army Institute of Research (WRAIR) and leadership at Fort Riley implemented the Wellness Checks initiative. Approximately 7,800 Soldiers participated in mandatory, confidential 30- to 60-minute counseling sessions with Military and Family Life Counseling (MFLC) counselors.
- Participating Soldiers reported being more likely to seek help when needed and increased levels of resilience and thriving. The initiative advances the larger goal of reducing stigma toward help-seeking.

Commander Suicide Prevention Training

- The United States Reserve Command (USARC) executes a virtual command team suicide prevention training. This training assists commanders in building prevention programs that empower Soldiers and leaders at all levels to identify and address high-risk behavior early on.
- Soldiers—down to the squad-leader level—are empowered to escort any Soldier in crisis to immediate lifesaving care. Soldiers who perform these duties and those who need help are authorized paid duty status.

U.S. Marine Corps Suicide Prevention Initiatives (Highlighted efforts not exhaustive)

Integrated Training and Education

- The U.S. Marine Corps (USMC) is focusing on Marine Corps Total Force Fitness from a holistic wellness approach of mental, physical, spiritual, and social influence.
- The Marine Corps is partnering with the USMC Safety Division to test a new initiative that provides a cognitive behavioral therapy (CBT) curriculum and evidence-based activity boxes to a small number of participants quarterly over the course of the year.
- The Marine Corps is developing a public-facing online interactive Suicide Prevention Resource space for Active Duty, families, and those who love and support their Marines.
- The Marine Corps gathered a senior leader advisory group from across the Marine Corps operational forces, installations, Chaplain Corps, and medical personnel to inform recommendations to senior leaders.

Death by Suicide Review Board (DSRB)

- The DSRB meets annually to review every death by suicide among Active Component Marines.
- The purpose of the DSRB is to identify common individual and community factors, systems-level gaps, and opportunities to improve the Marine Corps Suicide Prevention System.
- Findings and operational recommendations are provided and distributed across the fleet in an annual report.
- For more information, contact behavioral.programs.research@usmc.mil.

Suicide Prevention Research Reports

- Headquarters Marine Corps (HQMC), Behavioral Programs, Program Evaluation and Research, summarizes existing military and non-military research findings for use by commanders and professional staff working in suicide prevention.
- Reports also provide actionable prevention strategies and tips to commanders and professional staff to reduce suicide risk factors, enhance protective factors, and deal with substance abuse issues.
- For more information, contact behavioral.programs.research@usmc.mil.

Suicide Prevention Awareness

- HQMC Behavioral Programs released Public Service Announcements (PSA) from Senior Leaders in September in support of Suicide Prevention Month and partnered with the regional leadership teams and Marine Corps Association (MCA) for suicide awareness summits with junior leaders.
- HQMC Behavioral Programs continue to focus on ongoing monthly communication through various media (e.g., podcasts, publications, articles) to educate Marines and families on how to access services to navigate the stressors of life, support command and leadership, and encourage alignment with core values.
- Website and USMC Suicide Prevention Podcasts: Suicide Prevention Capability (usmc.mil)

U.S. Navy Suicide Prevention Initiatives (Highlighted efforts not exhaustive)

Lethal Means Safety (LMS)

- Fleet and Family Support Centers (FFSC) and Navy Operational Support Centers (NOSC) distributed 413,400 gun locks to Sailors and their families.
- More than 1,500 suicide prevention coordinators are trained to support their commands in preventing and reporting suicide-related behaviors.
- Bases are increasingly providing access to safe storage of lethal means for Sailors who voluntarily surrender their firearms during times of stress.
- The Navy partnered with DSPO and the Centers for Naval Analyses to conduct a formal evaluation of LMS programs.
- The Navy is collaborating with academic partners to increase the depth and breadth of LMS programs.
- Website: https://Suicide.Navy.mil

Expanded Avenues for Care

- Sailor Assistance and Intercept for Life (SAIL) is an evidence-based program for reintegration assistance following suicide ideation or a suicide attempt. Since inception in CY 2017, over 8,000 Sailors have voluntarily participated in SAIL. In CY 2022, over 2,400 Sailors voluntarily accepted and participated in SAIL, which, to date, is the highest number enrolled in a given year.
- The Expanded Operational Stress Control (E-OSC) program leverages Command Resilience Teams and deckplate leadership to provide more accessible, collaborative resources and real-time assessments of unit culture. The E-OSC is designed to inform and empower Sailors to identify signs of distress and difficulty coping within themselves and others and to know where to turn to get help.
- The Embedded Mental Health (EMH) provider program places trained mental health professionals within operational units to reduce barriers to seeking help and to improve timely access to care. Approximately 35% of all Navy mental health officer and enlisted billets are embedded.
- The Navy's suicide prevention strategy includes deploying more chaplains as regular crew members on more ships.
- Website: https://Suicide.Navy.mil

Project 1 Small Act (P1SA)

- This toolkit is designed to provide those engaged in Navy suicide prevention with materials (e.g., graphics, talking points, event ideas) and resources to refresh local engagement on suicide-related topics such as risk factors, LMS, help-seeking, and Navy support resources.
- The toolkit is customized to fit unique command needs, including the Reserve Force.
- Website: https://navstress.wordpress.com/

U.S. Air Force & Space Force Suicide Prevention Initiatives
(Highlighted efforts not exhaustive)

Time-Based Prevention (TBP)

- Time-Based Prevention (TBP) focuses on promoting safe storage of personal firearms to put time and space between an Airman or Guardian who is at risk for suicide and access to lethal means.
- TBP was implemented across the Department of the Air Force (DAF) in March 2022 and included the "Go SLO" campaign, LMS videos for social media, training materials, and a Firearm Retailer Toolkit.
- A centralized contract was established to facilitate the purchase and distribution of cable-style gun locks. To date, more than 280,000 locks have been distributed across the Department of the Air Force.
- Website: https://www.resilience.af.mil/Time-Based-Prevention/

Wingman Connect/Guardian Connect (WC/GC)

- Wingman Connect/Guardian Connect (WC/GC) is a primary prevention program that strengthens protective relationship networks and skills for managing career, family, and personal challenges. It is the only universal prevention program associated with reduced suicidal ideation and depressive symptoms within a nonclinical population. Through peer-to-peer activities, Airmen and Guardians learn to grow and sustain four protective strengths: (1) healthy relationships and accountability, (2) meaning and value in work and life, (3) informal and formal help-seeking, and (4) activities that give strength and maintain perspective. While learning together, participants develop group connections/cohesion and shared, healthy norms. WC/GC is an interactive group training, based on research-validated strategies, including (1) high-energy activities that maintain interest, motivation, and personal meaningfulness; (2) drawing out real-world strengths from participants as primary teaching method; and (3) exercises inside and outside of training that reinforce the application and retention of skills.
- WC/GC will expand to include Airmen and Guardians during Technical Training School. The effects of this expansion will be formally evaluated.
- Additional evaluation studies will take place at operational bases located throughout Air Force Global Strike Command from mid-2023 to 2026.

Suicide Prevention Virtual Reality Training (SPVR)

- Suicide Prevention Virtual Reality Training (SPVR) is intended to provide Airmen and Guardians the tools to enable them to recognize a distressed individual, to have a difficult conversation with the distressed individual, and to guide that person to safety.
- Trainees interact with a distressed Service member in a realistic and safe virtual environment, receive real-time feedback, and learn to apply the ACE model.
- Initial results from a study with over 8,000 Airmen found increased confidence, preparedness, and willingness to intervene, with 97% of participants willing to recommend the training to others.
- A study examining the effectiveness of SPVR relative to training as usual is currently underway with results expected in 2024.
- Website: https://vimeo.com/549063799

Uniformed Services University of the Health Sciences Department of the Air Force (DAF) Standardized Suicide Fatality Analysis (DAF StandS)

- The first standardized, unified, scientific, and public health-driven methodology for suicide death reviews in the DAF were completed in CY 2020.
- Comprehensive reviews of all suicide deaths since CY 2018 will be conducted to improve prevention programming.
- Each year, installations will be required to review the DAF StandS analysis report and identify suicide prevention priority actions that should be taken to reduce suicide risk.

True North Program

- True North is an Air Force initiative to build resilient forces and families by providing direct, in-unit access to behavioral and spiritual care.
- In-unit services include education and team-building activities, resources and referrals, mental health counseling (Active Duty only), and confidential spiritual counseling (ID cardholders/authorized dependents).
- Website: https://www.resilience.af.mil/True-North

National Guard Suicide Prevention Initiatives (Highlighted efforts not exhaustive)

Project SafeGuard (PSG)

- Project SafeGuard (PSG) provides training on LMS, peer counseling, and gun locks to Service members. The program incorporates principles of motivational interviewing to encourage voluntary safe storage practices and to promote protective environments.
- Trained Service members deliver the initiative to Service members as a peer-to-peer program.
- Currently available in three states.

Start Training

- Start is an online training for gatekeepers to improve their ability to identify and respond to Service members at risk for suicide. The program includes a database of resources to easily connect Service members with support.
- The National Guard Bureau (NGB) partners with Start to distribute the training broadly to Service members, spouses, leaders, and community partners.
- Start has trained more than 1,400 National Guard participants since FY 2019 and has shown evidence for improving confidence in gatekeeper skills immediately after the course.
- Website: https://www.livingworks.net/start

Connectedness and Relationship Education (CARE) Program

- The Connectedness and Relationship Education (CARE) program is designed to build trust through counseling and relationship skills training for first-line leaders.
- CARE provides first-line leaders with advanced training for conducting effective individual counseling with Service members by building professional relationships with subordinates and facilitating unit cohesion.
- The main pillars of CARE are communicating skills, trust, and identifying and using Service members' diversity as a leader.
- Statistical analysis shows positive trends and substantial change in leadership, interpersonal relationships, knowledge, and connectedness.

APPENDIX

Appendix A: Methodology Approach

This appendix describes common questions about suicide surveillance in the military and provides a brief overview of the analytic methods used within this report.

Suicide Data and Interpretation

Reporting Suicide Deaths for Service Members

By policy, the Armed Forces Medical Examiner System (AFMES) determines the counts and rates for Service member suicide deaths. This includes cadets and midshipmen. AFMES verifies and reports suicide deaths for all Active Component Service members and Reserve Component Service members that are on active duty at the time of death.[a] Reserve Component Service members not on active duty status at the time of death are reported to AFMES by individual Service branches. Suicide counts and rates for the Reserve and National Guard include members of the Selected Reserve (SELRES) with active-duty status and non-duty status.

Reporting Suicide Deaths for Military Family Members

DSPO compiles data from three data sources to determine the counts and rates for military family member suicide deaths. Data sources include (1) the Defense Enrollment Eligibility Reporting System (DEERS; a database of military sponsors and dependents who have registered to receive military benefits), (2) Military Services, and (3) CDC National Center for Health Statistics National Death Index (NDI; a database of death record information compiled from state offices). Data from all three sources were available starting in 2017 and lag one year relative to Service member data due to the time lag in collection of NDI data. No single data source fully captures suicide deaths. The majority of military family members are civilians whose deaths do not occur on a military installation and DoD does not have visibility of or jurisdiction over these deaths. Therefore, it is necessary to combine multiple data sources for DoD to ensure it is capturing the most complete information possible from both military and civilian data sources. This may not account for all suicide deaths included in the 10 U.S.C. 1072(2) definition, and suicide counts and rates presented in this report may be underestimated for this population.

Defining Military Family Member

The definition of “dependent” (also referred to as “military family members”) for the purposes of this report is individuals who are sponsored by a Service member, are enrolled in DEERS, and meet the requirement for a military dependent as defined by Section 1072(2) of Title 10, U.S. Code, which defines a dependent with respect to a uniformed Service member (or former member) as a/an:

1. Spouse;
2. Un-remarried widow or widower;
3. A biological, step-, foster, ward, pre-adoptive, or adopted child who is:
   a. Unmarried and under the age of 21;
   b. Physically or mentally incapable of self-support (regardless of age); or
   c. Enrolled in full-time course of study at an institution of higher learning, dependent on the Service member for over one-half of their support, and under the age of 23;
4. Un-remarried former spouse of a current or former Service member;

[a] Service member deaths occur in both military and civilian jurisdictions. AFMES conducts about 15%–20% of all death investigations (for suicide and all other causes). All other investigations are completed by civilian medical and legal authorities and are reported to AFMES by the Military Services.

5. Unmarried person who is placed in the legal custody of the Service member as a result of a court order (e.g., a sibling);[b] and
6. Parent or parent-in-law who is dependent on the Service member for over one-half of his/her support and residing in his/her household.

In this report, "dependent spouses" are referred to as "spouses" and "dependent children" as "dependents." To align with CDC standards on reporting suicide deaths, the present analysis only considers suicide deaths among dependents aged 10 years and up.[14]

Counts versus Rates

Suicide death counts represent the number of people that died by suicide (also known as absolute magnitude). Suicide death rates represent the number of people that died for every 100,000 people in that group/population in a year. Counts alone are not enough to compare two groups or to understand if suicide is changing over time. In fact, counts alone can be misleading. Using a rate ensures that any observed differences in suicide are not the result of one group being larger than the other. For this report, to calculate a crude rate, the number of deaths is divided by the size of the group, and multiplied by 100,000. Although rates account for differences in size, they do not explain why changes occur over time and do not account for many other factors that may affect suicide rates. Comparing suicide rates between groups that do not have the same proportion of people with those characteristics would be misleading. To fix that, suicide rates are adjusted during analysis to make the two groups more like each other based on the chosen characteristics. In the case of this report, rates are adjusted for the age and sex composition of each group. A rate that is not adjusted is called an unadjusted or crude rate.

Understanding Variability in Suicide Rates

All data related to human behavior have some natural variability. This can include, for example, a basic change in the frequency of the behavior or outcome (e.g., decrease in suicide deaths in a given year). It can also reflect variability in how standardized criteria are applied in examining the behavior (e.g., medical examiners determining suicide as the cause of death). This results in natural variability from year to year in the rates being examined. Variability can happen in either direction, resulting in adding or removing suicide deaths. If adding or removing a small number of suicide deaths (e.g., two or three) changes the rate noticeably (at least within one decimal place), then the rate is considered volatile. This is true for suicide rates in the military for which the number of suicide deaths is mathematically small compared to the size of the entire military population.

Both of these situations can apply to suicide rates in the military and in certain instances make it difficult to reliably understand what is real change ("signal") and what is a natural variation in data ("noise"). This does not automatically mean that suicide rate data are unreliable or unusable. It means that interpretation of this data, especially for short timeframes or smaller groups, should be made with caution and with as much context as possible in order to reliably inform policy, programs, or decision-making.

Understanding Statistical Significance

Statistical significance is a scientific term that describes how confident we are that a result of a comparison is not purely due to chance or natural variability. A statistically significant result does *not* tell the reader whether a result is subjectively important.

A result can be statistically significant while still only representing a *small* difference or effect; on the other hand, an observation may suggest a *large* difference or effect, but the data may be too limited to say that the result is statistically significant—in these cases, more data or observations may be required to confirm any findings.

Statistical tests—as part of larger study design, sampling, and conceptual considerations—help researchers answer a variety of questions. For example, some tests can help us determine the extent to which findings are

[b] Additional criteria may apply (see section 1072(2) of Title 10, U.S. Code).

generalizable (e.g., whether a survey about the attitudes of young, male Service members can be generalized to all Service members). Statistical tests can also tell us about the strength of particular relationships (e.g., how strong the relationship is between adverse childhood experiences and risk for mental illness) or how meaningful these relationships are (e.g., how well a medication works at reducing depression symptoms).

In this report, statistical significance is determined in two ways: (1) by interpreting results using *p* values—a predetermined level of probability, and (2) by examining whether 95% confidence intervals do not overlap.

What are *p* values?

The probability with which the result could have occurred due to chance or natural variability. A common threshold for determining significance is $p < 0.05$. This means, if a result is significant (or in other words $p < 0.05$), the chances of obtaining this result when no real difference exists is less than 5%.

What are 95% confidence intervals?

A level of uncertainty is associated with suicide rates due to random error and volatility, such as the possible misclassification of a suicide. Confidence intervals provide a range of possible values for the suicide rate that accounts for this uncertainty. With a 95% confidence interval, one can be 95% confident the range of values covers the true suicide rate.

Analysis

Calculating Unadjusted and Adjusted Suicide Rates

In this report, anytime suicide rates were compared, an **adjusted suicide rate** was used. Unadjusted suicide death rates represent the number of people that died for every 100,000 people in that group/population in a year. Adjusted rates are estimated using a generalized log-linear regression model based on the Poisson distribution (i.e., change is linear in the log of the rate) and a large matrix or contingency table with decedent and population totals by strata (e.g., year, age category, sex, Component or Service). When adjusting for age and sex, the model also uses weighted effects coding.[c] A Poisson distribution is well suited to estimate counts or rates for rare or low base rate events, such as suicide. See **Figure 1** for an example showing age- and sex- adjusted rates for each year.

Estimating Change Over Time in Suicide Rates

A line of best fit using log-linear modeling, which is well suited for rate data with a low base rate, was calculated to describe trends in suicide rates over time. This approach models the observed event count, with consideration for the population size, and uses the distribution as a weight, which is well suited to account for high variance in low-count data. More specifically, the log-linear model is achieved by using a Generalized Linear Model (GLM) with a log-link function and is used to account for population size as well as suicide death counts. The estimated rates are obtained by exponentiating the log rates from the trend analysis, and the trend of the rates is then a slight curve. This approach assumes that change over time is log-linear in nature and that it follows a Poisson distribution. A Poisson distribution is used to determine the probability of rare events and allows for contingency tables or a matrix to adjust for multiple variables, such as age and sex. This method was applied to describe trends from CY 2011 to CY 2021 (see the Service Member Suicide Data section) and was the same analytic approach that was used in CY 2019 and the prior DoDSER Annual Reports. To describe shorter or more near-term changes, this report compared the rate for a given year to each of those for the last two years using a pair-

[c] Description of weighted effects coding: https://journal.r-project.org/archive/2017/RJ-2017-017/RJ-2017-017.pdf

wise comparison approach. The result of the trend analysis, for both the near and long term, was a single estimated rate of change for the period, also known as the incidence rate ratio. A statistical test was then performed to determine if the trend direction (increasing or decreasing) was statistically significant for the period of interest. Rates were adjusted to account for age and sex differences across the period of interest.

Assessing Risk for Death by Suicide Among Specific Demographics Groups

Rate ratios between the rate for each demographic group (listed in Table 2) and the average population rate were calculated to assess suicide risk for specific demographic groups. Rate ratios are used to assess whether a given demographic group is at a higher risk of dying by suicide relative to another group. Rate ratios are a measure of association which can be used to quantify the relationship between two groups in the occurrence of suicide. For the purposes of the analyses in this report, the suicide rate for decedents from a specific demographic group was compared to the overall suicide rate for the Component in which they served. An overall, combined suicide rate was calculated for the Reserves and National Guard to ensure meaningful interpretation of findings. This was done owing to the relatively small number of decedents in each of these groups.

A generalized log-linear regression model based on the Poisson distribution was used to obtain the rate estimates for each group that was compared. Weighted effects coding was applied to each of the demographic groups to ensure the rate ratios reflected a risk relative to the population average. The model's parameter estimates (regression coefficients) describe the ratio of the suicide rate of any given demographic group to that of the population average (i.e., the rate ratio). For example, see the "Demographic and Military Characteristics" section within the Service Member Suicide Data section of this report for an assessment of whether male Service members have a higher risk for suicide in the military population.

Comparing Military Suicide Rates to the U.S. Population

Accounting for sex and age is vital when comparing suicide rates between the military and the U.S. population because the military has more men and more young people (i.e., under 30). This requires standardizing for age or sex differences between the military and U.S. population, then adjusting for age and sex differences in suicide rates within the military. Without such standardization and adjustment, the comparisons between the unadjusted or crude rates in the military and the U.S. population suicide rates would be misleading or distorted.

When making comparisons between the military and U.S. populations, we used **indirect standardization** to account for differences in the demographic makeup because the number of suicide deaths within subsets of the military population are very small. A Poisson distribution along with the military age- and sex-specific stratum population size was then used to estimate the standardized mortality ratio between the military and U.S. populations. This mirrors the approach used in CY 2019 and prior DoDSER Annual Reports. For more details, see CY 2019 DoDSER Appendix D (DoD, USD[P&R], 2021).

An indirectly standardized rate for the military can be compared with the U.S. population rate, but not to another indirectly standardized rate. The 95% confidence interval associated with the indirectly standardized rate was used to test for a significant difference between the military and U.S. populations. If the span of the confidence interval for the military population did not cover the U.S. population rate, then the probability of observing no true difference was less than 5%—in other words, one can be 95% confident that the two rates are statistically different. For an example of this analysis, see the "Suicide Rates Over Time" section within the Service Member Suicide Data section of this report. U.S. population data were obtained using CDC Wide-ranging ONline Data for Epidemiologic Research (WONDER).

Appendix B: Unadjusted and Adjusted Rates Over Time

Tables 9–11 present unadjusted and adjusted rates for the CY 2011–CY 2022 trend analyses presented in the **Service Member Suicide Data** section of this report. A rate is considered unadjusted when it is calculated using only the raw number of suicide deaths that occurred and the total size of the population. However, Service member populations fluctuate over time. The number of Service members of a certain age or sex can vary across years (e.g., 2019 compared to 2020). Since both age and sex are associated with suicide risk, when making comparisons across years, it is important to adjust rates for age and sex differences (i.e., adjusted rates). This avoids potentially misleading comparisons of unadjusted rates.

Suicide rates from the CY 2011–CY 2022 trend analyses were adjusted for age and sex over the defined time period. The unadjusted rates, presented below, may not match the unadjusted rates in **Table 1** of the report because the unadjusted suicides rates for the CY 2011–CY 2022 trend analyses were limited to ages 17–59 for the purpose of these analyses. Additionally, as new years of data are added to the analysis (e.g., CY 2022), the adjusted rates will change to incorporate the population (and their associated demographic characteristics) from that year. See **Appendix A** for more information about adjusting for age and sex.

Table 9. Service Member Suicide Rates by Component, Rates per 100,000 Service Members, CY 2011–CY 2022

	Active Component		Reserve		National Guard	
Year	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
2011	18.7	17.0	18.1	15.3	24.9	21.5
2012	22.9	20.9	19.3	16.3	28.2	24.4
2013	18.4	16.9	23.1	19.4	28.9	25.1
2014	20.2	18.6	21.6	18.3	19.6	17.1
2015	20.2	18.7	24.8	21.0	26.4	23.1
2016	21.5	19.9	22.3	19.0	27.3	23.9
2017	22.2	20.6	25.8	22.1	29.6	26.0
2018	24.9	23.2	22.9	19.8	30.8	27.3
2019	26.2	24.4	18.5	16.1	20.5	18.4
2020	28.5	26.6	21.7	19.1	27.5	24.7
2021	24.4	22.8	21.8	19.3	27.1	24.3
2022	25.1	23.5	19.1	17.1	22.2	19.9

Notes: Data sourced from AFMES. Unadjusted rates are age bound to 17–59. Adjusted rates are age bound to 17–59 and adjusted for age and sex.

Table 10. Active Component Service Member Suicide Rates per 100,000 Service Members by Service, CY 2011–CY 2022

	Army		Navy		Marine Corps		Air Force	
Year	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
2011	24.8	22.8	16.0	14.0	15.4	14.7	12.9	11.5
2012	29.8	27.5	18.1	16.0	24.3	23.5	15.0	13.4
2013	22.5	20.8	12.8	11.4	23.6	23.0	14.4	12.9
2014	24.4	22.7	16.6	14.9	17.9	17.4	18.5	16.6
2015	24.4	22.9	13.1	11.8	21.2	20.5	20.6	18.4
2016	27.4	25.7	15.9	14.3	20.1	19.5	19.4	17.4
2017	24.9	23.4	20.1	18.2	23.4	22.7	19.6	17.7
2018	29.9	28.0	20.7	18.9	30.8	30.0	18.5	16.7
2019	30.5	28.4	21.8	20.0	25.3	24.6	25.1	22.8
2020	36.2	33.8	19.0	17.5	34.5	33.6	24.0	21.8
2021	36.1	33.7	17.0	15.6	23.9	23.3	15.3	13.9
2022	28.9	27.0	20.7	19.0	34.9	34.1	19.7	18.0

Notes: Data sourced from AFMES. Unadjusted rates are age bound to 17–59. Adjusted rates are age bound to 17–59 and adjusted for age and sex. No suicide deaths for Space Force were recorded in 2022 and thus no rates were calculated

Table 11. Reserve and National Guard Suicide Rates per 100,000 Service Members by Service, CY 2011–CY 2022

	Army Reserve		Army National Guard	
Year	Unadjusted	Adjusted	Unadjusted	Adjusted
2011	21.4	18.4	27.4	23.8
2012	24.7	21.2	30.8	26.8
2013	29.6	25.4	33.7	29.5
2014	21.4	18.4	21.5	18.8
2015	27.2	23.5	28.7	25.1
2016	21.1	18.3	31.6	27.7
2017	32.1	28.0	35.5	31.3
2018	25.3	22.4	35.6	31.6
2019	19.4	17.2	22.9	20.6
2020	22.2	19.8	31.5	28.4
2021	24.8	22.3	31.3	28.1
2022	20.8	18.7	24.8	22.3

Notes: Data sourced from AFMES. Unadjusted rates are age bound to 17–59. Adjusted rates are age bound to 17–59 and adjusted for age and sex. Marine Corps Reserve, Navy Reserve, Air Force Reserve, and Air National Guard rates are not reported due to low Service-specific counts (DoDI 6490.16).

Appendix C: Demographics of Suicide Decedents by Service

Tables 12–14 present the counts, percentages, and rates of suicide decedents by demographic subgroups for each Service and Component. All data are sourced from AFMES.

Table 12. Active Component Service Member Suicide Counts by Service, Rates per 100,000 Service Members and Percentages, CY 2022

	Army			Navy			Marine Corps			Air Force		
	Rate	Count	Percent	Rate	Count	Percent	Rate	Count	Percent	Rate	Count	Percent
Total	28.9	135	100%	20.6	71	100%	34.9	61	100%	19.7	64	100%
Sex												
Male	32	126	93.3%	23.8	65	91.5%	37.2	59	96.7%	22.7	58	90.6%
Female	--	9	6.7%	--	6	8.5%	--	2	3.3%	--	6	9.4%
Age Group												
17–19	--	5	3.7%	--	6	8.5%	--	5	8.2%	--	0	0.0%
20–24	32.2	46	34.1%	30.1	31	43.7%	42.4	35	57.4%	24.7	23	35.9%
25–29	32.2	36	26.7%	--	10	14.1%	--	9	14.8%	--	18	28.1%
30–34	32.6	25	18.5%	--	9	12.7%	--	3	4.9%	--	14	21.9%
35–39	--	14	10.4%	--	9	12.7%	--	8	13.1%	--	7	10.9%
40–44	--	8	5.9%	--	5	7.0%	--	1	1.6%	--	2	3.1%
45–49	--	1	0.7%	--	1	1.4%	--	0	0.0%	--	0	0.0%
50–54	--	0	0.0%	--	0	0.0%	--	0	0.0%	--	0	0.0%
55–59	--	0	0.0%	--	0	0.0%	--	0	0.0%	--	0	0.0%
60–74	--	0	0.0%	--	0	0.0%	--	0	0.0%	--	0	0.0%
Race												
White	29	92	68.1%	20.6	44	62.0%	35.6	50	82.0%	22.6	51	79.7%
Black or African American	28.4	28	20.7%	--	14	19.7%	--	6	9.8%	--	3	4.7%
American Indian/ Alaska Native	--	2	1.5%	--	0	0.0%	--	0	0.0%	--	2	3.1%
Asian/ Pacific Islander	--	8	5.9%	--	5	7.0%	--	3	4.9%	--	2	3.1%
Other/Unknown	--	5	3.7%	--	8	11.3%	--	2	3.3%	--	6	9.4%
Rank												
E (Enlisted)	33.3	123	91.1%	23.0	65	91.5%	35.9	55	90.2%	22.3	58	90.7%
E1–E4	30.1	57	42.2%	21.9	28	39.4%	34	35	57.4%	26.7	33	51.6%
E5–E9	36.7	66	48.9%	23.9	37	52.1%	40	20	32.8%	18.3	25	39.1%
O (Commissioned Officer)	--	8	5.9%	--	5	7.0%	--	5	8.2%	--	6	9.4%
W (Warrant Officer)	--	4	3.0%	--	0	0.0%	--	1	1.6%	--	0	0.0%
Cadet	--	0	0.0%	--	1	1.4%	--	0	0.0%	--	0	0.0%
Marital Status												
Never Married	29.5	58	43.0%	24.9	41	57.7%	35.1	35	57.4%	23.2	31	48.4%
Married	28.6	70	51.9%	15.8	26	36.6%	30.2	21	34.4%	17.4	30	46.9%
Divorced	--	7	5.2%	--	4	5.6%	--	5	8.2%	--	3	4.7%
Widowed	--	0	0.0%	--	0	0.0%	--	0	0.0%	--	0	0.0%

Table 13. Reserve Service Member Suicide Counts by Service, Rates per 100,000 Service Members and Percentages, CY 2022

	Army Reserve			Navy Reserve			Marine Corps Reserve			Air Force Reserve		
	Rate	Count	Percent	Rate	Count	Percent	Rate	Count	Percent	Rate	Count	Percent
Total	20.8	37	100%	--	7	100%	--	6	100%	--	14	100%
Sex												
Male	22.5	30	81.1%	--	6	85.7%	--	6	100.0%	--	14	100.0%
Female	--	7	18.9%	--	1	14.3%	--	0	0.0%	--	0	0.0%
Age Group												
17–19	--	4	10.8%	--	0	0.0%	--	1	16.7%	--	0	0.0%
20–24	--	8	21.6%	--	1	14.3%	--	3	50.0%	--	3	21.4%
25–29	--	9	24.3%	--	3	42.9%	--	1	16.7%	--	5	35.7%
30–34	--	6	16.2%	--	1	14.3%	--	0	0.0%	--	1	7.1%
35–39	--	6	16.2%	--	0	0.0%	--	0	0.0%	--	3	21.4%
40–44	--	2	5.4%	--	1	14.3%	--	1	16.7%	--	1	7.1%
45–49	--	1	2.7%	--	1	14.3%	--	0	0.0%	--	1	7.1%
50–54	--	1	2.7%	--	0	0.0%	--	0	0.0%	--	0	0.0%
55–59	--	0	0.0%	--	0	0.0%	--	0	0.0%	--	0	0.0%
60–74	--	0	0.0%	--	0	0.0%	--	0	0.0%	--	0	0.0%
Race												
White	18.2	21	56.8%	--	3	42.9%	--	6	100.0%	--	11	78.6%
Black or African American	--	11	29.7%	--	2	28.6%	--	0	0.0%	--	1	7.1%
American Indian/ Alaska Native	--	1	2.7%	--	1	14.3%	--	0	0.0%	--	1	7.1%
Asian/ Pacific Islander	--	4	10.8%	--	1	14.3%	--	0	0.0%	--	0	0.0%
Other/Unknown	--	0	0.0%	--	0	0.0%	--	0	0.0%	--	1	7.1%
Rank												
E (Enlisted)	24.4	34	91.9%	--	6	85.7%	--	5	83.3%	--	13	92.9%
E1–E4	31.8	23	62.2%	--	0	0.0%	--	5	83.3%	--	9	64.3%
E5–E9	--	11	29.7%	--	6	85.7%	--	0	0.0%	--	4	28.6%
O (Commissioned Officer)	--	3	8.1%	--	1	14.3%	--	1	16.7%	--	1	7.1%
W (Warrant Officer)	--	0	0.0%	--	0	0.0%	--	0	0.0%	--	0	0.0%
Cadet	--	0	0.0%	--	0	0.0%	--	0	0.0%	--	0	0.0%
Marital Status												
Never Married	24.9	21	56.8%	--	4	57.1%	--	4	66.7%	--	9	64.3%
Married	--	10	27.0%	--	3	42.9%	--	1	16.7%	--	4	28.6%
Divorced	--	6	16.2%	--	0	0.0%	--	1	16.7%	--	1	7.1%
Widowed	--	0	0.0%	--	0	0.0%	--	0	0.0%	--	0	0.0%

Table 14. National Guard Service Member Suicide Counts by Service, Rates per 100,000 Service Members and Percentages, CY 2022

	Army National Guard			Air National Guard		
	Rate	Count	Percent	Rate	Count	Percent
Total	24.8	82	100%	--	15	100%
Sex						
Male	27.3	73	89.0%	--	15	100.0%
Female	--	9	11.0%	--	0	0.0%
Age Group						
17–19	--	2	2.4%	--	0	0.0%
20–24	44.5	42	51.2%	--	3	20.0%
25–29	--	12	14.6%	--	3	20.0%
30–34	--	12	14.6%	--	3	20.0%
35–39	--	7	8.5%	--	4	26.7%
40–44	--	1	1.2%	--	1	6.7%
45–49	--	2	2.4%	--	1	6.7%
50–54	--	4	4.9%	--	0	0.0%
55–59	--	0	0.0%	--	0	0.0%
60–74	--	0	0.0%	--	0	0.0%
Race						
White	25.1	64	78.0%	--	13	86.7%
Black or African American	--	12	14.6%	--	2	13.3%
American Indian/ Alaska Native	--	1	1.2%	--	0	0.0%
Asian/ Pacific Islander	--	3	3.7%	--	0	0.0%
Other/Unknown	--	2	2.4%	--	0	0.0%
Rank						
E (Enlisted)	27.5	78	95.2%	--	13	86.7%
E1–E4	30.3	49	59.8%	--	6	40.0%
E5–E9	23.7	29	35.4%	--	7	46.7%
O (Commissioned Officer)	--	3	3.7%	--	2	13.3%
W (Warrant Officer)	--	1	1.2%	--	0	0.0%
Cadet	--	0	0.0%	--	0	0.0%
Marital Status						
Never Married	26.5	52	63.4%	--	10	66.7%
Married	20.4	24	29.3%	--	2	13.3%
Divorced	--	5	6.1%	--	3	20.0%
Widowed	--	1	1.2%	--	0	0.0%

Table 15. Service Member Suicide Rates per 100,000 Service Members, Counts, Percentages, and Total Force Counts and Percentages by Demographic Characteristics, CY 2022

	Active Component					Reserve					National Guard				
	Suicide			Total Force		Suicide			Total Force		Suicide			Total Force	
	Rate	Count	Percent	Count	Percent	Rate	Count	Percent	Count	Percent	Rate	Count	Percent	Count	Percent
Total	--	331	100%	1,318,363	100%	--	64	100%	335,650	100%	--	97	100%	436,612	100%
Sex															
Male	28.3	308	93.1%	1,086,715	82.4%	21.9	56	87.5%	255,729	76.2%	25.2	88	90.7%	349,738	80.1%
Female	9.9	23	6.9%	231,648	17.6%	--	8	12.5%	79,921	23.8%	--	9	9.3%	86,875	19.9%
Age Group															
17–19	--	16	4.8%	85,647	6.5%	--	5	7.8%	13,291	4.0%	--	2	2.1%	31,611	7.2%
20–24	31.9	135	40.8%	422,660	32.1%	--	15	23.4%	65,054	19.4%	40.8	45	46.4%	110,169	25.2%
25–29	23.8	73	22.1%	306,694	23.3%	--	18	28.1%	61,087	18.2%	--	15	15.5%	82,748	19.0%
30–34	24.0	51	15.4%	212,866	16.1%	--	8	12.5%	57,382	17.1%	--	15	15.5%	70,455	16.1%
35–39	23.6	38	11.5%	161,318	12.2%	--	9	14.1%	54,539	16.2%	--	11	11.3%	58,330	13.4%
40–44	--	16	4.8%	82,648	6.3%	--	5	7.8%	38,400	11.4%	--	2	2.1%	38,197	8.7%
45–49	--	2	0.6%	31,420	2.4%	--	3	4.7%	21,209	6.3%	--	3	3.1%	20,803	4.8%
50–54	--	0	0.0%	11,849	0.9%	--	1	1.6%	16,135	4.8%	--	4	4.1%	15,841	3.6%
55–59	--	0	0.0%	2,815	0.2%	--	0	0.0%	7,892	2.4%	--	0	0.0%	7,906	1.8%
60–74	--	0	0.0%	441	0.0%	--	0	0.0%	662	0.2%	--	0	0.0%	552	0.1%
Race															
White	26.3	237	71.6%	902,185	68.4%	18.3	41	64.1%	223,854	66.7%	22.7	77	79.4%	339,525	77.8%
Black/African American	22.5	51	15.4%	226,824	17.2%	--	14	21.9%	63,303	18.9%	--	14	14.4%	62,664	14.4%
Am. Indian/Alaskan Native	--	4	1.2%	14,155	1.1%	--	3	4.7%	2,966	0.9%	--	1	1.0%	3,010	0.7%
Asian/Pacific Islander	--	18	5.4%	83,025	6.3%	--	5	7.8%	24,655	7.3%	--	3	3.1%	19,583	4.5%
Other/Unknown	22.8	21	6.3%	92,175	7.0%	--	1	1.6%	20,873	6.2%	--	2	2.1%	11,830	2.7%
Rank															
E (Enlisted)	28.2	301	90.9%	1,068,940	81.0%	22.7	58	90.6%	263,320	78.4%	24.3	91	93.8%	373,691	85.6%
E1–E4	28.1	153	46.2%	545,114	41.3%	30.8	37	57.8%	119,967	35.7%	29.3	55	56.7%	187,557	43.0%
E5–E9	28.3	148	44.7%	523,826	39.7%	14.6	21	32.8%	143,353	42.7%	19.3	36	37.1%	186,134	42.6%
O (Commissioned Officer)	11.1	24	7.3%	217,113	16.5%	--	6	9.4%	68,391	20.4%	--	5	5.2%	53,956	12.4%
W (Warrant Officer)	--	5	1.5%	19,210	1.5%	--	0	0.0%	3,938	1.2%	--	1	1.0%	8,965	2.1%
Cadet	--	1	0.3%	13,100	1.0%	--	0	0.0%	0	0.0%	--	0	0.0%	0	0.0%
Marital Status															
Never Married	27.6	165	49.8%	597,205	45.3%	25	38	59.4%	152,066	45.3%	26.5	62	63.9%	233,779	53.5%
Married	22.4	147	44.4%	655,613	49.7%	--	18	28.1%	159,153	47.4%	14.6	26	26.8%	177,923	40.8%
Divorced	--	19	5.7%	63,977	4.9%	--	8	12.5%	23,819	7.1%	--	8	8.2%	24,333	5.6%
Legally Separated	--	0	0.0%	671	0.1%	--	0	0.0%	147	0.0%	--	0	0.0%	174	0.0%
Widowed	--	0	0.0%	897	0.1%	--	0	0.0%	464	0.1%	--	1	1.0%	403	0.1%

Appendix D: Glossary

Acronyms

AFMES – Armed Forces Medical Examiner System

CALM – Counseling on Access to Lethal Means

CDC – Centers for Disease Control and Prevention

CONUS/OCONUS – Continental United States/Outside Continental United States

CY – Calendar Year

DEERS – Defense Enrollment Eligibility Reporting System

DHRA – Defense Human Resources Activity

DMDC – Defense Manpower Data Center

DoD – Department of Defense

DoDI – Department of Defense Instruction

DoDSER – Department of Defense Suicide Event Report

DSPO – Defense Suicide Prevention Office

FY – Fiscal Year

MCL – Military Crisis Line

NDAA – National Defense Authorization Act

NDI – National Death Index

OSIE – On-Site Installation Evaluation

SELRES – Selected Reserve

SPARRC – Suicide Prevention and Risk Reduction Committee

SPGOSC – Suicide Prevention General Officer Steering Committee

USD(P&R) – Under Secretary of Defense for Personnel and Readiness

VA – Department of Veterans Affairs

WONDER – CDC Wide-ranging ONline Data for Epidemiologic Research

Terms and Definitions[d]

Active Component: Refers collectively to the active duty segments of the Army, Navy, Air Force, Space Force, and Marine Corps that are funded directly from DoD active duty military personnel appropriations pursuant to Section 115(a), Title 10, U.S. Code (DoDI 1120.11[15]).

Active Duty: Full-time duty in the active military service of the United States. This includes full-time training duty, annual training duty, and attendance, while in the active military service, at a school designated as a service school by law or by the Secretary of the military department concerned. Such term does not include full-time National Guard duty (10 U.S. Code § 101(d)(1)).

Adjusted and Unadjusted Suicide Rates: A rate is considered *unadjusted* when it is calculated using only the raw number of suicide deaths that occurred and the total size of the population. However, Service member populations fluctuate over time. For this reason, to ensure accurate comparisons across years or subpopulations, it is important to account or *adjust* for differences between the groups being compared. In this report, rates were adjusted for sex and age.

Armed Forces Medical Examiner System (AFMES): The AFMES is established as a subordinate element of the DHA to: (1) Perform forensic pathology investigations in accordance with Section 1471 of Title 10, U.S.C. (2) Exercise DoD scientific authority for the identification of remains of DoD-affiliated personnel in deaths from past conflicts and other designated conflicts as provided in Section 1509 of Title 10, U.S.C. (DoDI 5154.30).[16]

Defense Enrollment Eligibility System (DEERS): A computerized database of military sponsors (active duty, retired, or member of the Reserve Component) and their eligible family members. DEERS registration is required for certain military benefits, including TRICARE (https://www.tricare.mil/deers/).

Department of Defense Suicide Event Report (DoDSER) System Data Summary: A report that characterizes Service member suicide data through a coordinated, web-based data collection system (DoDI 6490.16).

Integrated Primary Prevention: Refers to prevention activities that simultaneously address multiple self-directed harm and prohibited abusive or harmful acts or the inclusion of prevention activities across self-directed harm and prohibited abusive or harmful acts into a cohesive, comprehensive approach that promotes unity of effort, avoids unnecessary duplication, and lessens training fatigue (DoDI 6400.09).

Military Family Members (or Military Dependents): For the purpose of this report, military family members (also known as military dependents) are those who are sponsored by a Service member, are enrolled in DEERS, and meet the requirement for a military dependent as defined by Title 10 U.S. Code, Section 1072(2). In this report, “dependent spouses” are referred to as “spouses” and “dependent children” as “dependents” (DoDI 6490.16).

National Death Index (NDI): A centralized database of death record information on file in state vital statistics offices (DoDI 6490.16).

Postvention: Response activities that should be undertaken in the immediate aftermath of a suicide that has impacted the unit. Postvention has two purposes: to help suicide attempt survivors cope with their grief and to prevent additional suicides. It also may provide an opportunity to disseminate accurate information about suicide, encourage help-seeking behavior, and provide messages of resilience, hope, and healing. It is also known as “tertiary prevention” (DoDI 6490.16).

[d] Definitions lacking a parenthetical source reference were developed by the authors for the purposes of this report.

Primary Prevention: Stopping a self-directed harm and prohibited abusive or harmful act before it occurs. Can be implemented for an entire group or population without regard to risk (universal primary prevention) or can be implemented for individuals, groups, or a population that is at risk (selected primary prevention) (DoDI 6400.09).

Protective Factors: Individual or environmental characteristics, conditions, or behaviors that reduce the effects of stressful life events (e.g., inclusion, help-seeking behavior, financial literacy). These factors increase the ability to avoid risks and promote healthy behaviors to thrive in all aspects of life (DoDI 6400.09).

Public Health Approach: A prevention approach that impacts groups or populations of people versus treatment of individuals. Public health focuses on preventing suicidal behavior before it ever occurs (primary prevention) and addresses a broad range of risk and protective factors. The public health approach values multi-disciplinary collaboration, which brings together many different perspectives and experiences to enrich and strengthen the solutions for the many diverse communities (DoDI 6490.16).

Reserve Component (Reserves): Refers collectively to the Army National Guard, the Army Reserve, the Navy Reserve, the Marine Corps Reserve, the Air National Guard, the Air Force Reserve, and the Coast Guard Reserve, when the Coast Guard is operating as a Service of the Department of the Navy (DoDI 1225.08).[17]

Risk Factors: Factors caused by stress, trauma, or other circumstances that cause a schism in protective factors. Factors that make it more likely those individuals will develop a disorder or pre-dispose one to high-risk for self-injurious behaviors. Risk factors may encompass biological, psychological, or social factors in the individual, family, and environment (DoDI 6490.16).

Selected Reserve (SELRES): 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 (DoDI 6490.16).

Statistically Significant: A comparison is considered statistically significant if the probability of observing that difference, or a more extreme difference, is less than 5% if there is no actual difference in the population.

Stigma: The negative perception that seeking mental health care or other supportive services will negatively affect or end their careers; a set of negative and often untrue beliefs that a society or group of people have about something (DoDI 6400.09). In the military context, this is often the negative perception that seeking mental health care or other supportive services will negatively affect or end their careers (DoDI 6490.16).

Suicidal Behaviors: Behaviors related to suicide, including preparatory acts, suicide attempts, and death (DoDI 6490.16).

Suicide: Death caused by self-directed injurious behavior with an intent to die as a result of the behavior (DoDI 6490.16).

Suicide Attempt: A non-fatal, self-directed, potentially injurious behavior with any intent to die as a result of the behavior (DoDI 6490.16).

Suicide Decedent: An individual who died by suicide.

Suicide Event Status (Pending and Confirmed) (DoDI 6490.16):

- **Pending Confirmation of Suicide:** A designation by AFMES as the manner of death when the circumstances are consistent with suicide but the determination is not yet final. Final determination may take many months. Importantly, suspected suicides are included by DSPO and AFMES when reporting suicide counts.
- **Confirmed Suicide:** A designation by AFMES that assigns suicide as the final determination of the manner of death.

Suicide Rate: The average number of deaths by suicide in a fixed population per unit of time. As suicide is relatively rare, the suicide rate is commonly standardized to deaths per 100,000 persons per year. As presented in this report, suicide rates are calculated by dividing the number of deaths by suicide in the unit of time (in DoD, typically a calendar year) by the size of the population (in DoD, the average of 12 monthly totals of the number of personnel in that population [i.e., end-strengths]).

ENCLOSURE

Calendar Year 2022 DoDSER System Data Report

Calendar Year 2022 Department of Defense Suicide Event Report

The following tables contain summary data from the Department of Defense Suicide Event Report (DoDSER). Tables 1–8 display data for Active Component events, and tables 9–12 display data for National Guard and Reserve events. Only events with a form submitted by March 31, 2023, are included in the tables. The total event counts may not correspond to the official event counts used to calculate rates.

The tables display percentages corresponding to affirmative responses to selected items in DoDSER event forms. In the tables, negative responses include instances in which information was not available or not provided. When possible, data for nested response options are provided. We did not provide data for items or categories with low counts of affirmative responses (fewer than 20 across services or overall for the National Guard and Reserve) or when there were concerns about individual-level identification. In some circumstances, we provide partial data for an item or response category and suppress low event frequencies with an asterisk (*).

The Space Force uses the DoDSER for event reporting. For calendar year (CY) 2022, there were zero deaths by suicide and five suicide-attempt forms. These forms were not included in the tables below because of the low event count.

The Defense Suicide Prevention Office (DSPO) incorporated DoDSER data and analysis into the Annual Suicide Report for CY 2022. The tables below provide reference data. The Psychological Health Center of Excellence, Research Support Division, Research & Engineering Directorate, Defense Health Agency prepared this document.

Table 1. Demographic characteristics, suicide forms, Active Component, percent

Item	Total	Army	Marine Corps	Navy	Air Force
Sex					
Female	7.5	7.1	3.3	9.8	10.6
Male	92.5	92.9	96.7	90.2	89.4
Identify as gay, lesbian, or bisexual	3.7	*	*	*	*
Age					
17–24	48.1	39.7	65.6	54.1	40.4
25–29	22.0	26.2	14.8	16.4	27.7
30–34	14.2	18.3	4.9	11.5	19.1
35–59	15.6	15.9	14.8	18.0	12.8
Race					
Asian/Pacific Islander	5.4	*	*	*	*
Black/African American	16.6	21.4	9.8	21.3	6.4
White/Caucasian	74.2	70.6	85.2	63.9	83.0
Other/Unknown	3.7	*	*	*	*
Hispanic ethnicity	21.7	21.4	21.3	23.0	21.3
Education					
High school graduate or less	80.0	73.8	91.8	80.3	80.9
Some college	9.8	*	*	*	*
4-year degree	10.2	*	*	*	*
Marital status					
Never married	49.2	41.3	57.4	57.4	48.9
Married	44.1	51.6	34.4	37.7	44.7
Separated/Divorced/Widowed	5.8	*	*	*	*
Unknown	1.0	*	*	*	*
Rank/grade					
E1–E4	47.1	42.1	59.0	41.0	53.2
E5–E9	42.7	47.6	32.8	50.8	31.9
Officer	8.1	*	*	*	*
Unknown	2.0	*	*	*	*
Number of contingency operations[a]					
0	56.9	52.4	67.2	62.3	48.9
1	21.4	24.6	14.8	18.0	25.5
2	11.2	11.9	9.8	11.5	10.6
3 or more	10.5	11.1	8.2	8.2	14.9
Time since end of last contingency operation					
0–24 months	8.8	6.3	4.9	8.2	21.3
25 or more months	34.2	41.3	27.9	29.5	29.8
History of direct combat	16.3	28.6	11.5	*	*

Note: Percentages based on 295 total forms (126 Army, 61 Marine Corps, 61 Navy, and 47 Air Force).
[a]Number of contingency operations outside the U.S. based on the Contingency Tracking System.
*Data not presented because of small counts.

Table 2. Event characteristics, suicide forms, Active Component, percent

Item	Total	Army	Marine Corps	Navy	Air Force
Occurred in the continental United States	86.8	84.1	83.6	91.8	91.5
Event setting					
Barracks/Berthing	16.6	16.7	26.2	11.5	10.6
Other military housing	9.8	11.9	4.9	8.2	12.8
Private residence	45.8	44.4	36.1	54.1	51.1
Other/Unknown	27.8	27.0	32.8	26.2	25.5
Mechanism of injury					
Firearm	66.8	69.0	60.7	63.9	72.3
Suffocation/Asphyxiation/Hanging	25.8	22.2	37.7	27.9	17.0
Other/Unknown	7.5	8.7	1.6	8.2	10.6
Communicated intent for self-harm					
Yes[a]	29.5	29.4	29.5	31.1	27.7
Mental health staff	10.5	7.9	11.5	14.8	10.6
Friend	7.8	6.3	6.6	14.8	4.3
Spouse/Partner	10.2	15.9	6.6	4.9	6.4
No	70.5	70.6	70.5	68.9	72.3
Evidence event was planned	20.3	20.6	18.0	19.7	23.4
Event observable	29.2	28.6	29.5	29.5	29.8
Left a suicide note	25.4	23.0	27.9	27.9	25.5
Residence at time of event					
Barracks/Berthing	29.2	27.0	52.5	18.0	19.1
Other military housing	9.8	11.1	4.9	9.8	12.8
Private residence	54.6	54.0	41.0	62.3	63.8
Other/Unknown	6.4	7.9	1.6	9.8	4.3
Duty environment[a]					
Garrison	78.6	81.0	82.0	67.2	83.0
Training	5.1	3.2	8.2	9.8	0.0
Other/Unknown	26.8	25.4	26.2	36.1	19.1

Note: Percentages based on 295 total forms (126 Army, 61 Marine Corps, 61 Navy, and 47 Air Force).
[a]Subcategories are not mutually exclusive.

Table 3. Behavioral health characteristics, suicide forms, Active Component, percent

Item	Total	Army	Marine Corps	Navy	Air Force
Any behavioral health diagnosis					
Yes[a]	45.4	44.4	50.8	39.3	48.9
Alcohol use disorder	17.6	19.0	23.0	9.8	17.0
Depressive disorder	25.4	18.3	32.8	29.5	29.8
Anxiety disorder	16.9	15.1	24.6	16.4	12.8
Trauma- or stressor-related disorder	14.2	16.7	13.1	11.5	12.8
Sleep–wake disorder	11.2	10.3	16.4	9.8	8.5
No/no known history	54.6	55.6	49.2	60.7	51.1
Psychotropic medication prescription at time of event					
Yes	29.2	23.8	29.5	29.5	42.6
Antidepressant	22.0	19.0	23.0	18.0	34.0
No/No known history	70.8	76.2	70.5	70.5	57.4
Family history of mental illness	15.3	17.5	6.6	13.1	23.4
Prior self-harm	12.5	16.7	9.8	9.8	8.5
Ever inpatient for mental health	21.0	23.8	16.4	16.4	25.5
Outpatient mental health services, last year	45.8	50.8	39.3	41.0	46.8

Note: Percentages based on 295 total forms (126 Army, 61 Marine Corps, 61 Navy, and 47 Air Force).
[a]Subcategories are not mutually exclusive.

Table 4. Contextual factors, suicide forms, Active Component, percent

Item	Total	Army	Marine Corps	Navy	Air Force
Intimate relationship problems, last year	42.4	42.1	57.4	29.5	40.4
Death by suicide of friend or family member, last year	5.8	*	*	*	*
Administrative/legal problems, last year					
Yes[a]	26.1	28.6	29.5	21.3	21.3
Nonjudicial punishment	8.5	13.5	*	*	*
Under investigation	14.2	18.3	16.4	4.9	12.8
Administrative separation	7.8	10.3	*	*	*
No/No known history	73.9	71.4	70.5	78.7	78.7
Financial difficulties, last year	9.8	10.3	9.8	8.2	10.6
Workplace difficulties, last year	26.1	20.6	39.3	18.0	34.0
Experienced abuse before age 18					
Yes[a]	13.6	15.9	13.1	8.2	14.9
Physical	9.2	12.7	8.2	*	*
Sexual	5.1	6.3	*	*	*
Emotional	9.8	13.5	*	*	*
No/No known history	86.4	84.1	86.9	91.8	85.1

Note: Percentages based on 295 total forms (126 Army, 61 Marine Corps, 61 Navy, and 47 Air Force).
[a]Subcategories are not mutually exclusive.
*Data not presented because of small counts.

Table 5. Demographic characteristics, suicide-attempt forms, Active Component, percent

Item	Total	Army	Marine Corps	Navy	Air Force
Sex					
Female	31.1	29.8	19.0	34.8	38.0
Male	68.8	70.2	81.0	64.9	62.0
Unknown	0.1	0.0	0.0	0.4	0.0
Age					
17–19	11.3	17.2	17.5	6.4	6.0
20–24	55.9	50.8	64.2	56.4	54.1
25–29	20.0	19.4	13.1	25.2	21.6
30–34	6.8	6.6	2.9	8.2	8.7
35–59	5.6	5.6	2.2	3.5	9.2
Unknown	0.3	0.3	0.0	0.4	0.5
Race					
Asian/Pacific Islander	5.6	4.4	4.4	9.6	4.7
Black/African American	25.7	30.7	16.1	27.7	27.0
White/Caucasian	63.8	61.8	76.6	56.4	61.8
Other/Unknown	4.9	3.1	2.9	6.4	6.5
Hispanic ethnicity	21.8	17.2	29.9	23.0	19.1
Education					
Up to high school graduation	87.0	82.8	96.7	91.1	80.9
Some college	7.4	10.3	*	*	11.4
4-year degree	5.5	6.6	*	*	7.7
Unknown	0.2	0.3	0.0	0.4	0.0
Marital status					
Never married	61.0	65.8	69.3	61.7	51.1
Married	34.6	30.1	28.8	34.0	42.4
Separated/Divorced/Widowed	4.2	3.8	1.8	3.9	6.5
Unknown	0.2	0.3	0.0	0.4	0.0
Rank/grade					
E1–E4	74.5	74.6	85.8	68.8	70.7
E5–E9	21.8	20.7	12.4	29.1	24.1
Officer	2.2	2.2	1.1	1.8	3.2
Unknown	1.5	2.5	0.7	0.4	2.0
Number of contingency operations[a]					
0	76.2	78.1	86.9	77.3	66.7
1	14.2	15.0	8.8	16.0	15.9
2	4.6	3.4	3.3	3.9	6.9
3 or more	5.0	3.4	1.1	2.8	10.4
Time since end of last contingency operation					
0–24 months	4.5	3.8	2.2	3.2	7.7
25 or more months	19.2	18.2	10.9	19.5	25.6
History of direct combat	5.2	7.8	4.4	1.4	6.2

Note: Note: Percentages based on 1,278 total forms (319 Army, 274 Marine Corps, 282 Navy, and 403 Air Force). Five Space Force events are not included in this table because of small event counts.
[a]Number of contingency operations outside the U.S. based on the Contingency Tracking System.
*Data not presented because of small counts.

Table 6. Event characteristics, suicide-attempt forms, Active Component, percent

Item	Total	Army	Marine Corps	Navy	Air Force
Occurred in the continental United States	76.3	70.5	82.1	80.1	74.2
Event setting					
Barracks/Berthing	40.4	51.1	60.9	36.5	20.6
Other military housing	11.0	11.3	7.3	4.3	17.9
Private residence	33.1	20.4	22.6	39.7	45.7
Other/Unknown	15.6	17.2	9.1	19.5	15.9
Mechanism of injury					
Cutting/Piercing	11.1	10.7	12.0	11.0	10.9
Falling	2.7	1.3	4.0	3.2	2.5
Firearm	5.4	5.3	4.0	2.1	8.7
Transportation	4.1	3.8	2.9	2.8	6.0
Poisoning	58.8	58.6	58.8	62.4	56.6
Suffocation/Asphyxiation/Hanging	14.0	16.0	16.4	12.1	12.2
Other/Unknown	3.9	4.4	1.8	6.4	3.2
Communicated intent for self-harm					
Yes[a]	16.4	21.0	11.3	9.6	20.8
Mental health staff	4.5	4.1	2.2	3.2	7.4
Friend	7.1	9.1	6.9	4.3	7.7
Spouse/Partner	5.6	7.8	3.3	2.5	7.4
No	83.6	74.6	69.7	60.3	77.2
Evidence event was planned	12.4	14.4	11.3	6.4	15.9
Event observable	29.5	25.7	32.8	23.0	34.7
Left a suicide note	11.1	14.1	7.3	9.2	12.7
Residence at time of event					
Barracks/Berthing	42.7	60.5	55.5	33.7	26.3
Other military housing	10.5	9.1	6.6	3.2	19.4
Private residence	30.0	20.4	16.1	26.2	49.9
Other/Unknown	16.7	10.0	21.9	36.9	4.5
Duty environment[a]					
Garrison	71.6	73.7	67.2	56.4	83.6
Training	6.1	11.9	7.7	0.7	4.2
Other/Unknown	26.1	16.0	29.6	45.7	17.9

Note: Note: Percentages based on 1,278 total forms (319 Army, 274 Marine Corps, 282 Navy, and 403 Air Force). Five Space Force events are not included in this table because of small event counts.
[a]Subcategories are not mutually exclusive.

Table 7. Behavioral health characteristics, suicide-attempt forms, Active Component, percent

Item	Total	Army	Marine Corps	Navy	Air Force
Any behavioral health diagnosis					
Yes[a]	48.4	54.9	34.3	33.3	63.5
Alcohol use disorder	10.7	14.4	10.6	7.8	9.9
Substance use disorder	4.1	7.8	2.6	2.5	3.5
Depressive disorder	31.6	30.4	24.1	24.1	42.9
Anxiety disorder	20.9	25.1	14.6	16.0	25.3
Trauma- or stressor-related disorder	20.7	24.5	13.1	15.2	26.8
Personality disorder	5.9	2.5	3.6	6.0	9.9
Sleep-wake disorder	4.1	7.8	*	*	4.5
No/No known history	51.6	45.1	65.7	66.7	36.5
Psychotropic medication prescription at time of event					
Yes[a]	35.0	37.0	25.5	24.5	47.1
Antidepressant	31.5	32.3	21.5	22.3	44.2
Anxiolytic	11.0	11.0	8.8	7.8	14.6
No/No known history	65.0	63.0	74.5	75.5	52.9
Family history of mental illness	28.8	31.0	16.4	22.0	40.2
Prior self-harm					
Yes	24.1	28.5	16.4	23.8	26.1
One prior event	14.5	16.9	8.0	13.5	17.6
More than one prior event	8.0	10.0	6.6	8.2	7.2
No/No known history	75.9	71.5	83.6	76.2	73.9
Ever inpatient for mental health	21.5	22.3	17.9	16.7	26.8
Outpatient mental health services, last year	50.9	64.6	36.5	32.3	63.0

Note: Percentages based on 1,278 total forms (319 Army, 274 Marine Corps, 282 Navy, and 403 Air Force). Five Space Force events are not included in this table because of small event counts.
[a]Subcategories are not mutually exclusive.
*Data not presented because of small counts.

Table 8. Contextual factors, suicide-attempt forms, Active Component, percent

Item	Total	Army	Marine Corps	Navy	Air Force
Intimate relationship problems, last year	38.3	37.9	24.8	27.0	55.8
Death by suicide of friend or family member, last year	7.4	11.6	5.8	5.3	6.5
Administrative/Legal problems, last year					
Yes[a]	20.2	30.1	15.3	12.1	21.3
Nonjudicial punishment	8.5	12.9	5.8	6.0	8.4
Under investigation	7.7	9.7	4.4	3.9	11.2
Administrative separation	7.3	13.8	6.2	3.2	5.7
Civil legal action	3.4	4.4	4.0	*	4.2
No/No known history	79.8	69.9	84.7	87.9	78.7
Financial difficulties, last year	10.8	16.0	3.6	8.2	13.4
Workplace difficulties, last year					
Yes	25.6	27.3	13.5	20.9	35.7
Poor performance review	7.3	8.2	4.7	3.9	10.7
Limited duty	7.2	8.2	3.3	2.8	12.2
Increase job duties	5.1	5.3	3.6	5.7	5.5
Conflict with coworkers	7.6	9.1	4.7	5.3	9.9
Conflict with command	8.8	9.7	4.4	6.4	12.9
No/No known history	74.4	72.7	86.5	79.1	64.3
Experienced abuse before age 18					
Yes[a]	32.0	40.8	20.4	18.1	42.7
Physical	17.5	24.1	9.9	10.3	22.6
Sexual	17.1	23.8	9.5	8.9	22.8
Emotional	24.4	31.7	14.6	12.4	33.7
No/No known history	68.0	59.2	79.6	81.9	57.3
Experienced assault or harassment, last year					
Yes[a]	11.3	14.7	7.3	8.9	13.2
Physical assault	5.0	8.8	3.3	2.1	5.2
Sexual assault	7.4	8.5	4.7	7.1	8.4
Sexual harassment	3.4	5.0	2.6	3.5	2.5
No/No known history	88.7	85.3	92.7	91.1	86.8

Note: Note: Percentages based on 1,278 total forms (319 Army, 274 Marine Corps, 282 Navy, and 403 Air Force). Five Space Force events are not included in this table because of small event counts.
[a]Subcategories are not mutually exclusive.
*Data not presented because of small counts.

Table 9. Demographic characteristics, National Guard (NG) and Reserve (R), percent

Item	NG, Suicide	R, Suicide	NG, Suicide attempt	R, Suicide attempt
Service				
Army	76.6	15.4	29.0	31.1
Marine Corps	NA	19.2	NA	13.3
Navy	NA	26.9	NA	22.2
Air Force	23.4	38.5	71.0	33.3
Sex				
Female	*	*	31.9	33.3
Male	*	*	66.7	66.7
Unknown	0.0	0.0	1.4	0.0
Identify as gay, lesbian, or bisexual	*	*	8.7	11.1
Age				
17–24	40.4	30.8	42.0	37.8
25–29	19.1	34.6	20.3	24.4
30–34	21.3	11.5	17.4	6.7
35–59	19.1	23.1	18.8	31.1
Unknown	0.0	0.0	1.4	0.0
Race				
Black	14.9	19.2	15.9	26.7
White	83.0	73.1	78.3	46.7
Other/Unknown	2.1	7.7	5.8	26.7
Hispanic ethnicity	10.6	15.4	14.5	13.3
Education				
High school graduate or less	63.8	73.1	34.8	64.4
Some college	27.7	15.4	56.5	20.0
4-year degree	8.5	11.5	7.2	15.6
Unknown	0.0	0.0	1.4	0.0
Marital status				
Never married	61.7	69.2	50.7	57.8
Married	27.7	26.9	42.0	35.6
Separated/Divorced/Widowed	10.6	3.8	5.8	6.7
Unknown	0.0	0.0	1.4	0.0
Rank/grade				
E1–E4	48.9	46.2	52.2	46.7
E5–E9	40.4	38.5	43.5	44.4
Officer	*	15.4	*	*
Unknown	*	0.0	*	*
Number of contingency operations[b]				
0	55.3	53.8	65.2	57.8
1	27.7	23.1	13.0	22.2
2 or more	17.0	23.1	21.7	20.0
History of direct combat	19.1	19.2	7.2	20.0

Note: Data based on 47 death and 69 attempt forms (National Guard) and 26 death and 45 attempt forms (Reserve). NA indicates that a category was not applicable.

[a]Number of contingency operations outside the U.S. based on the Contingency Tracking System.

*Data not presented because of small counts.

Table 10. Event characteristics, National Guard (NG) and Reserve (R), percent

Item	NG, Suicide	R, Suicide	NG, Suicide attempt	R, Suicide attempt
Event occurred at a private residence	76.6	61.5	59.4	44.4
Mechanism of injury				
Firearm	83.0	84.6	14.5	8.9
Poisoning	0.0	0.0	36.2	51.1
Suffocation/Asphyxiation/Hanging	10.6	15.4	18.8	11.1
Other/Unknown	6.4	0.0	30.4	28.9
Communicated intent for self-harm				
Yes[a]	38.3	15.4	17.4	24.4
Friend	29.8	*	*	11.1
Spouse/Partner	21.3	*	10.1	6.7
No/No known history	61.7	84.6	82.6	75.6
Evidence event was planned	29.8	26.9	15.9	15.6
Event observable	31.9	30.8	37.7	40.0
Left a suicide note	25.5	34.6	10.1	13.3
In a duty status at the time of the event	34.0	*	49.3	82.2

Note: Data based on 47 death and 69 attempt forms (National Guard) and 26 death and 45 attempt forms (Reserve).
[a]Subcategories are not mutually exclusive.
*Data not presented because of small counts.

Table 11. Behavioral health characteristics, National Guard (NG) and Reserve (R), percent

Item	NG, Suicide	R, Suicide	NG, Suicide attempt	R, Suicide attempt
Any behavioral health diagnosis				
Yes[a]	48.9	38.5	52.2	55.6
Depressive disorder	34.0	23.1	44.9	40.0
Anxiety disorder	25.5	23.1	27.5	26.7
Trauma- or stressor-related disorder	29.8	*	24.6	37.8
No/no known history	51.1	61.5	47.8	44.4
Psychotropic medication prescription at time of event	23.4	26.9	34.8	42.2
Family history of mental illness	*	*	27.5	26.7
Prior self-harm	27.7	*	23.2	28.9
Ever inpatient for mental health	17.0	*	15.9	22.2
Outpatient mental health services, last year	25.5	34.6	44.9	51.1

Note: Data based on 47 death and 69 attempt forms (National Guard) and 26 death and 45 attempt forms (Reserve).
[a]Subcategories are not mutually exclusive.
*Data not presented because of small counts.

Table 12. Contextual factors, National Guard (NG) and Reserve (R), percent

Item	NG, Suicide	R, Suicide	NG, Suicide attempt	R, Suicide attempt
Intimate relationship problems, last year	40.4	26.9	33.3	26.7
Death of friend or family member, last year	10.6	0.0	*	13.3
Administrative/Legal problems, last year	19.1	19.2	17.4	13.3
Financial difficulties, last year	14.9	23.1	27.5	20.0
Workplace difficulties, last year	29.8	19.2	26.1	31.1
Experienced abuse before age 18				
Yes[a]	14.9	0.0	17.4	37.8
Physical	10.6	0.0	7.2	17.8
Sexual	*	0.0	7.2	22.2
Emotional	12.8	0.0	14.5	26.7
No/No known history	85.1	100.0	82.6	62.2
Experienced assault or harassment, last year	*	0.0	*	11.1

Note: Data based on 47 death and 69 attempt forms (National Guard) and 26 death and 45 attempt forms (Reserve).
[a]Subcategories are not mutually exclusive.
*Data not presented because of small counts.

Methods

Suicide Case Definition

"Death by suicide" includes all deaths where the manner was confirmed or suspected (pending confirmation) as suicide. This report does not include events that occurred among Service members in a permanent absent-without-leave or deserter status. The Armed Forces Medical Examiner System (AFMES) maintains a case list of deaths by suicide among Service members in the Active Component or active-duty National Guard and Reserve. Service-specific Suicide Prevention Program Managers provide information on deaths by suicide that occur among members of the National Guard and Reserve who were not in a duty status at the time of death.

Suicide Attempt Case Definition

Per the Centers for Disease Control and Prevention, a suicide attempt is defined as a self-inflicted, potentially injurious behavior with a nonfatal outcome for which there is evidence of intent to die.

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, personnel, and investigative records. Form completers may interview the Service member (suicide attempts). If authorized, form completers may conduct interviews with spouses, extended family, friends, and/or peers.

Other Data Sources

The AFMES provides data about the official manner and cause of death. 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 contingency operations data from the Contingency Tracking System, the repository of official deployment-related information.

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