TOTAL FORCE DAF STANDARDIZED SUICIDE FATALITY ANALYSIS

Calendar Year 2020 Leadership Report

2023

USU Uniformed Services University

SUICIDE CPR INITIATIVE
Suicide Care, Prevention, and Research Initiative

Suicide Care, Prevention, and Research Initiative (Suicide CPR Initiative)
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Disclaimer:
The opinions expressed in this report are those of the authors and do not necessarily reflect the views of the Uniformed Services University of the Health Sciences, the Department of Defense, and/or the Department of the Air Force.

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Dedicated to the Air Force Active Duty Personnel, Members of the Air National Guard and Reserves, and Civilians Who Served Their Nation and Whose Suicide Death Served as the Basis of Lessons Learned and Recommendations Put Forth Here

TABLE OF CONTENTS

EXECUTIVE SUMMARY

1. Background

- In 2021, the Uniformed Services University of the Health Sciences (USU) and the Department of the Air Force (DAF) executed an Interagency Agreement to adapt the Department of Defense Standardized Suicide Fatality Analysis (DoD StandS) for the review of all Calendar Year (CY) 2020 Total Force DAF suicides.
- DoD StandS is a comprehensive suicide death review methodology framework, developed by lead scientists at the USU Suicide Care, Prevention, and Research (CPR) Initiative, in partnership with and funded by the Defense Suicide Prevention Office (DSPO).
- The goals of DoD StandS are twofold: (1) To standardize suicide death review processes to understand individual trajectories toward suicide; and (2) To generate lessons learned and actionable recommendations for military suicide prevention, intervention, and postvention.
- The CY 2020 Total Force DAF Standardized Suicide Fatality Analysis, hereafter referred to as DAF StandS, retained essential elements of DoD StandS with certain adjustments for a more expedited and cost-effective review.
- The **Total Force DAF StandS CY 2020 Leadership Report**, hereafter referred to as the *Leadership Report*, has been prepared specifically for DAF leadership and the Suicide Prevention Program (SPP). The *Leadership Report* provides: (1) a summary of the DAF StandS methodology; (2) a brief narrative overview of findings, including basic descriptive information and potential contributing factors, for Total Force DAF suicides occurring in CY 2020; and (3) actionable recommendations to inform DAF suicide prevention, intervention, and postvention programming.
- The **Total Force DAF StandS CY 2020 Scientific Report**, hereafter referred to as the *Scientific Report*, has been prepared for the broader DoD and scientific communities of researchers, medical and mental health providers, and policy makers. The *Scientific Report* provides more comprehensive descriptive statistics.

2. Overview of CY 2020 DAF Suicide Mortality

- In CY 2020, there were 117 Total Force DAF suicides: 81 (69.2%) active duty, 17 (14.5%) National Guard, 11 (9.4%) Reserve, and 8 (6.8%) federal civilians.
- Most suicide decedents were male (93.2%) with an average age of 30.6 years (*SD* = 10.8). Almost all military suicide decedents (90.8%) were enlisted at the time of death.
- Firearm use (68.4%) was the most common method of death. The majority of firearms used in suicide were personal possessions either owned by the decedent (70.0%) or by another person (6.3%).
- Alcohol was known to have been used during over a third (39.3%) of suicide deaths.
- Evidence of lifetime self-directed violence was as follows: 16.2% of decedents had a lifetime history of non-suicidal self-directed violence, and 26.5% had a lifetime history of suicidal self-directed violence, otherwise known as a history of prior suicide attempts.
- Nearly three quarters (68.4%) of decedents disclosed suicidal thoughts at some point during their life, and over half (58.1%) communicated their intent to die by suicide at some point during their life.
- Approximately 70.9% of decedents had contact with a primary care provider for any reason in the 12-months prior to death, and 39.3% of decedents had contact with a mental health provider for any reason in the 12-months prior to death.
- Decedents had documented problems with intimate relationship partners (74.4%), family members (37.6%), and other military members (24.8%). Workplace (53.8%), administrative/legal (43.6%), and financial (29.9%) problems were also common. Multiple stressors were often present; 80.3% of decedents had more than one interpersonal, workplace, administrative/legal, and/or financial problem.

3. An Examination of Potential Contributing Factors to DAF Suicides

- The Social-Ecological Model used by the United States (U.S.) Centers for Disease Control and Prevention (CDC) offers a framework to examine and organize factors that may contribute to suicide risk. No one factor exists in a vacuum—the Social-Ecological Model highlights the interplay among factors at the societal, community, relational, and individual levels. A thematic summary of these factors pertaining to CY 2020 are provided below and explained further in the body of this report:

Level	Potentially Contributing Factors
Societal	▪ Stigma about Mental Health ▪ Accessibility and Acceptability of Firearms ▪ Stereotypes of Masculinity and Military Identity
Military Community	▪ Military Occupational Stressors ▪ Normalization of Problematic Alcohol Use ▪ Acceptance of Joking about Suicide ▪ Insufficient Leadership Engagement, Mentorship, and Support ▪ Concerns About Mental Health Care and Impact to Military Career ▪ Problems with Mental Health Care Access ▪ Inadequate Recognition/Response to Warning Signs for Suicide ▪ Limited Use of Evidence-Informed or Evidence-Based Suicide Interventions within Military Healthcare Settings
Relational	▪ Romantic Relationship Conflict ▪ Romantic Relationship Dissolution and Rejection ▪ Family/Partner/Parenting Relationship Stressors ▪ Lack of Connectedness ▪ Exposure to Suicide and Death ▪ Inadequate Responses following Communication of Suicide Risk
Individual	▪ Adverse Childhood Experiences ▪ Mental Health Conditions ▪ Physical Health Conditions including Sleep Problems ▪ Lifetime History of Self-Directed Violent Thoughts and/or Behaviors ▪ Alcohol Use as a Primary Coping Strategy ▪ Hopelessness ▪ Perceived Burdensomeness ▪ Unhealthy Attitudes towards Romantic Relationships ▪ Financial Stressors ▪ Administrative/Legal Stressors ▪ Means of Firearm Acquisition and Storage

4. Assumptions and Limitations

- The first key assumption is that DAF leadership will be provided with copies of both the Leadership Report and the Scientific Report. These two reports, while stylistically different in presentation and focus, complement one another and when taken together, capture the entirety of the work performed on the CY 2020 DAF StandS.

- The second key assumption is that the recommendations put forth in this report will be reviewed closely by the DAF Suicide Prevention Program and considered as preliminary data in the context of their ongoing community approach to suicide prevention for the Air Force. We anticipate that the DAF StandS for CYs 2021, 2019, and 2018 suicides will provide additional information about how to best prioritize the recommendations put forth. Given that the recommendations for CY 2020 rely exclusively on 117 suicides, it is certainly premature to address every recommendation contained within this report. Ultimately, feasibility, applicability, resources, cost, and potential anticipated and unanticipated impact associated with the implementation of such recommendations need to be fully considered along with a thoughtful system for the tracking of outcomes based on any changes made.
- The first major limitation involves missing data. DAF StandS relied exclusively on the review of existing, closed suicide decedent records. Categories of source documents for the CY 2020 DAF Total Force suicide decedents included: (1) Department of Defense Suicide Event Reports (DoDSERs), (2) medical records, (3) personnel records, and (4) Reports of Investigation (ROIs). Not all categories of source documents were available for all decedents, and the extent of information available within each category of source document varied considerably (please refer to Table 1 for a summary of source documents available).
- The second major limitation involves data extraction and interpretation based on administrative records. In reviewing each CY 2020 suicide death, source documents were examined for evidence of particular factors (e.g., military sexual trauma) or events (e.g., Driving Under the Influence [DUI] convictions). It is possible that certain factors or events were present but not documented in the records reviewed by our team. In addition, in most instances, non-occurrence of an event was difficult if not impossible to determine, especially for decedents for whom key source documents were not available.

5. Recommendations

- Given the complexity of suicide, we recognize that a multicomponent approach is required for suicide risk mitigation, suicide-focused care and interventions, and the management of the aftermath of suicide attempts and deaths.
- Similar to systematic investigations about aviation accidents and other equipment mishaps, a review of an individual's trajectory toward suicide can generate valuable ideas for improvement. We recognize that humans are the most critical resource for the Air Force and therefore, the aspirational intent of this *Leadership Report* is to focus primarily on areas that can be *further* enhanced to save a life.
- Overall, a total of 68 recommendations are provided in this *Leadership Report*. DAF leadership and the DAF SPP are encouraged to carefully review and consider each recommendation, its alignment with the current DAF Suicide Prevention Strategic Model, and its feasibility for implementation. Each offered recommendation is mapped to the following:
  - 1 of the 5 White House Priority Goals released on November 10, 2021
  - 1 of the 7 CDC Strategies for Suicide Prevention published in 2017
  - 1 of the 11 Core Elements of the Air Force Suicide Prevention Program
    At the time of publication of this report, the number of elements had increased from 11 to 15.
- Recommendations for suicide prevention cover Leadership Involvement, Professional Military Education, Guidelines for Commanders, Unit-Based Prevention, Wingman Culture, Investigative Interview Policy, Community Action Boards and Teams, Limited Privilege Suicide Prevention Program, Commanders Consultation Assessment Tool, and Firearm Access and Safe Storage.
- Recommendations for suicide intervention cover mental health access, management of suicidal crises, medical documentation practices, and delivery of evidence-informed and evidence-based suicide-focused care across all healthcare settings.
- Recommendations for suicide postvention cover system-related enhancements in reference to the management of the aftermath of suicide attempts and suicide deaths involving taking care of Airmen and Guardians directly exposed to suicides, effective organizational communication about suicide-related incidents, training for Security Forces, and updated processes for the Air Force Office of Special Investigations and MAJCOMs within this domain.

Photo by Capt Kip Sumner

METHODOLOGY

The procedures used to examine the 117 Calendar Year (CY) 2020 Total Force Department of the Air Force (DAF) suicides are described below.

This section is organized into two main subsections:

1. Adaptation of the DoD StandS Framework
2. DAF StandS Methodology

1. Adaptation of the DoD StandS Framework

The Department of Defense Standardized Suicide Fatality Analysis (DoD StandS) is a comprehensive suicide death review methodology or framework, developed by lead scientists at the Suicide Care, Prevention, and Research (CPR) Initiative located at the Uniformed Services University of the Health Sciences (USU), in partnership with and funded by the Defense Suicide Prevention Office (DSPO).

The goals of DoD StandS are twofold:

1. To standardize suicide death review processes to understand individual trajectories toward suicide; and
2. To generate lessons learned and actionable recommendations for military suicide prevention, intervention, and postvention.

The DoD StandS framework was finalized in 2020 and pilot tested in 2021. DoD StandS builds upon the invaluable work of prior Service-level suicide death reviews (e.g., suicide analysis boards or "deep dives"), and addresses a significant gap within the military suicide prevention community. Prior service-level reviews were limited by a lack of DoD-wide standard operating procedures, year-to-year fluctuations in methodology, and minimal reliance on scientific, public health-driven, and theoretical approaches for understanding each Service member's suicide. The resulting idiosyncrasies within and across Service-level reviews can limit the validity and reliability of findings as well as confidence in identified lessons learned and subsequent recommendations put forth. The USU-DSPO collaboration on DoD StandS resulted in the first standardized, unified, scientific and public health-driven methodology for the conduct of suicide death reviews across the DoD.

Broadly speaking, DoD StandS is strategically aligned with the following:

1. National and DoD Suicide Prevention Goal to improve the timeliness and usefulness of National and DoD surveillance systems relevant to suicide prevention, and improve the ability to collect, analyze, and use this information for improving suicide prevention efforts[1,2]
2. DoD Task Force on the Prevention of Suicide Recommendation to "standardize suicide investigations and expand their focus to learn about the last hours, days, and weeks preceding a suicide or attempted suicide"[3]

The DoD StandS framework consists of the following key elements:

1. Data Dictionary Development and Database Construction
2. Receipt and Organization of Source Documents
3. Review of Source Documents and Data Extraction
4. Preparation of Case Summaries, Timelines, and PowerPoint Presentations for Each Suicide Decedent
5. Selection of Multidisciplinary Suicide Expert Review Panel Members (SERPs) Including One or More of the Following:
   - Criminal investigation representative
   - Military cultural representative
   - Suicide Prevention Program (SPP) manager or designee

- DSPO member or other policy representative
- General counsel, legal, Judge Advocate General (JAG), or bioethicist
- Medical provider
- Mental health provider
- Chaplain
- Suicidology subject matter expert
- Survivor of military suicide
- Methodologist (e.g., epidemiologist, public health researcher)

6. Presentation of Case Summaries and Timelines to SERPs
7. Facilitated Discussion Following Presentation of Each Decedent to:
   - Identify potential contributing factors using the Social-Ecological Model;
   - Discuss potential missed opportunities for prevention; and
   - Generate actionable recommendations for suicide prevention, intervention, and postvention
8. Preparation of Report on SERP Findings for Sponsor

Given the expansive methodology of DoD StandS, USU lead scientists and the DAF SPP collaborated to retain key elements of the framework while adjusting other elements to meet DAF SPP goals. In 2021, USU and DAF executed an Interagency Agreement (IAA) with the purpose of adapting DoD StandS to review all CY 2020 Total Force DAF suicides. The rationale for adaptation instead of direct application was to expedite the review process and complete required deliverables within the project timeline and budget. The CY 2020 Total Force DAF Standardized Suicide Fatality Analysis, hereafter referred to as DAF StandS, retained essential elements of DoD StandS while omitting others, such as the formal multidisciplinary SERP. However, the DAF StandS review team at USU had combined subject matter expertise in the following domains: Air Force criminal investigative processes, military culture, mental health, suicidology, and research methodology.

2. DAF StandS Methodology

The step-by-step procedures for DAF StandS, adapted from the DoD StandS framework, were as follows:

A. Step 1. Construct Data Dictionary and Database

DoD StandS laid much of the groundwork for DAF StandS variable operationalization, data dictionary development, and database construction. A multi-disciplinary team of prior military and civilian research personnel, with the guidance of USU lead scientists, identified, selected, and operationalized over 1,000 variables within the following 13 domains:

1. Demographics
2. Military Service
3. Suicide Event
4. Lethal Means
5. Alcohol and Substance Use
6. Psychosocial Stress
7. Military Transitions
8. Military Stressors
9. Interpersonal Relationships
10. Financial and Legal Stressors
11. Medical/Mental Health History
12. Non-Medical Helping Sources
13. Zero Suicide Initiative

Variables were identified based on a comprehensive review of the scientific literature, previous service-level suicide death reviews, and DoD Suicide Event Reports (DoDSERs). A standardized Database Dictionary and Training Guide provided operational definitions for each variable as well as guidance for extracting data and entering it into a de-identified database. The electronic data capture system used for DAF StandS was based on the original DoD StandS system built by Navitas Clinical Research, Inc. using OpenClinica Enterprise®, specifically designed for clinical data management.

B. Step 2. Receive and Organize Source Documents

DAF StandS relies exclusively on the review of existing, closed suicide decedent records. Categories of source documents for the CY 2020 DAF Total Force suicide decedents included: (1) DoDSERs, (2) medical records, (3) personnel records, and (4) Reports of Investigation (ROIs). Not all categories of source documents were available for all decedents, and the extent of information available within each category of source document varied considerably (see Table 1).

Table 1. *Categories of Source Documents Available by Component*

	Total Force *N* = 117		Active *n* = 81		Guard *n* = 17		Reserve *n* = 11		Civilian *n* = 8	
	No.	%	No.	%	No.	%	No.	%	No.	%
DoDSER	103	88.0	77	95.1	17	100.0	9	81.8	0	0.0
Medical Records	108	92.3	81	100.0	17	100.0	10	90.9	0	0.0
Personnel Records	103	88.0	75	92.6	12	70.6	9	81.8	7	87.5
ROI	89	76.1	80	98.8	2	11.8	4	36.4	3	37.5

Note: DoDSER = Department of Defense Suicide Event Report; ROI = Report of Investigation

Transfer of existing closed suicide decedent records from DAF to USU occurred via encrypted, password-protected compact discs (CDs) and DoD Secure Access File Exchange (SAFE). The USU Suicide CPR Initiative Data Manger received all incoming source documents, documented the transfer in writing, and organized the source documents into a project-specific USU Google Drive folder approved for use by USU for the purposes of programmatic research.

C. Step 3. Review Source Documents and Extract Data

Trained coders reviewed available source documents and used the standardized Database Dictionary and Training Guide to extract information for variables within the 13 domains. Extracted data were de-identified, entered into the OpenClinica electronic data capture system, and then exported into a password-protected Excel file for secure storage in the project-specific USU Google Drive. Approximately 20% of cases were reviewed by groups of three to four bachelor's- and master's-level coders to facilitate a shared understanding of how to use the Database Dictionary, reconcile discrepancies in data extraction, and increase coding accuracy.

D. Step 4. Draft Case Summaries and Timelines

A brief written case summary was drafted for every DAF suicide decedent to provide:

1. An introduction to the suicide decedent (e.g., demographics, military service characteristics, prominent distal and proximal stressors);
2. A description of the suicide event (e.g., means of death, contextual factors); and
3. An overview of medical and mental health-related factors and receipt of care.

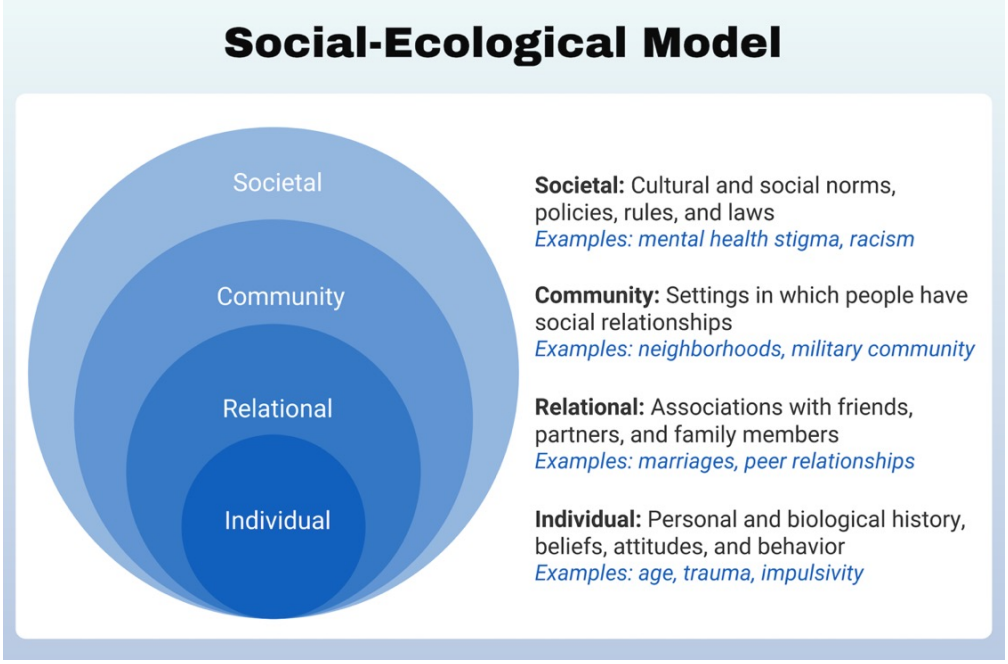
In addition, timelines were drafted to provide a brief chronological illustration of each decedent's suicide trajectory. As noted above, DAF StandS omitted the formal multidisciplinary SERP used in DoD StandS, which relied upon presentation of comprehensive case summaries and timelines in lieu of direct access to source documents. In contrast, the DAF StandS subject matter experts had access to all source documents, and case summaries and timelines prepared for DAF StandS were intended solely to provide a rough, high-level overview of contextual factors and events in order to help orient reviewers.

E. Step 5. Review Cases and Formulate Recommendations

Case summaries, timelines, and source documents for each DAF suicide decedent were reviewed by members of the USU team with subject matter expertise in Air Force criminal investigative processes, military culture, mental health, suicidology, and methodology. For each suicide decedent, reviewers identified the following:

1. Potential contributing factors based on the Social-Ecological Model
2. Missed opportunities for prevention
3. Actionable recommendations for suicide prevention, intervention, and postvention
4. Potential COVID-19-related impacts

The Social-Ecological Model, promoted by the Centers for Disease Control and Prevention[4], provides a framework for understanding risk and protective factors within four interacting levels: (1) Individual (e.g., personal and biological history); (2) Relational (e.g., other people such as friends, partners, and family members); (3) Community (e.g., settings such as neighborhoods, schools, or work); and (4) Societal (e.g., culture, social norms, laws). This framework has recently been applied to current suicide prevention efforts[5] and to military health research[6] with the goals of identifying multi-level risk and protective factors, identifying gaps in research and practice, and informing programmatic efforts.



After all case summaries, timelines, and source documents were comprehensively reviewed for each DAF suicide decedent, USU lead scientists organized potential contributing factors within each level of the Social-Ecological Model: individual, relational, military community, and societal. Missed opportunities and corresponding recommendations were organized based on four critical resources: (1) the 2021 White House Strategy for Reducing Military and Veteran Suicide[7]; (2) the 2017 CDC Preventing Suicide Technical Package[4]; (3) the 2020 DAF Suicide Prevention Strategic Model[8]; and (4) the 11 Elements of the DAF SPP[9]. At the time of publication of this report, the number of elements in the DAF SPP had increased to 15. These documents provide a framework for organizing recommendations to facilitate contextualization within current National and DAF suicide prevention, intervention and postvention priorities.

F. Step 6. Prepare Leadership and Scientific Reports

Two separate reports were prepared for different target audiences:

1. The **Total Force DAF StandS CY 2020 Leadership Report,** hereafter referred to as the *Leadership Report*, was prepared specifically for DAF leadership and the SPP. The *Leadership Report* provides: (1) a summary of the DAF Stands methodology; (2) a brief narrative overview of findings, including basic descriptive information and potential contributing factors, for Total Force DAF suicides occurring in CY 2020; and (3) actionable recommendations to inform DAF suicide prevention, intervention, and postvention programming.
2. The **Total Force DAF StandS CY 2020 Scientific Report,** hereafter referred to as the *Scientific Report*, was written for the broader DoD and scientific communities of researchers, medical and mental health providers, and policy makers. The *Scientific Report* provides more comprehensive descriptive statistics.

G. Conclusion

Please note that presentation of descriptive information in the DAF StandS reports is similar to information provided by the DoDSER. However, it is important to note that descriptive information presented may not fully replicate information presented in the DoDSER due to differences in breadth and depth of available information. Per DoD Instruction 6490.16,[10] DoDSERs are completed within 60 days following confirmation of a suicide death by the Armed Forces Medical Examiner System (AFMES), and entries are based on information available within that timeframe. However, investigative activities may take several months to conclude, and what is known about the circumstances of a suicide death may change as more information comes to light. Notably, ROIs were available for over three quarters of CY 2020 Total Force DAF suicide decedents (Table 1), allowing for review and extraction of additional information that was likely unavailable at the time of initial DoDSER submission. Collectively, the information provided by the DoDSER, the newly established DoD Annual Suicide Report (ASR), and the DAF StandS reports can be used to guide suicide prevention programing within the Air Force.

Photo by TSgt Nicolas A. Myers

FINDINGS

Findings presented in this Leadership Report consist of a brief descriptive and narrative summary of key suicide mortality information as well as an inventory of all major themes observed within the 117 CY 2020 Total Force DAF suicides.

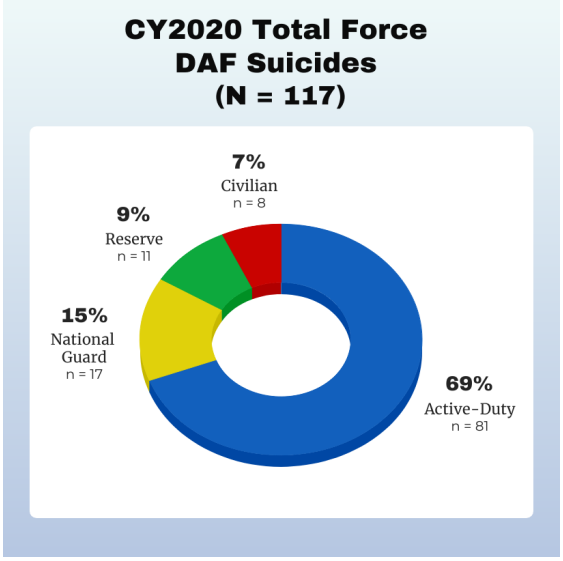
This section is organized into two main subsections:

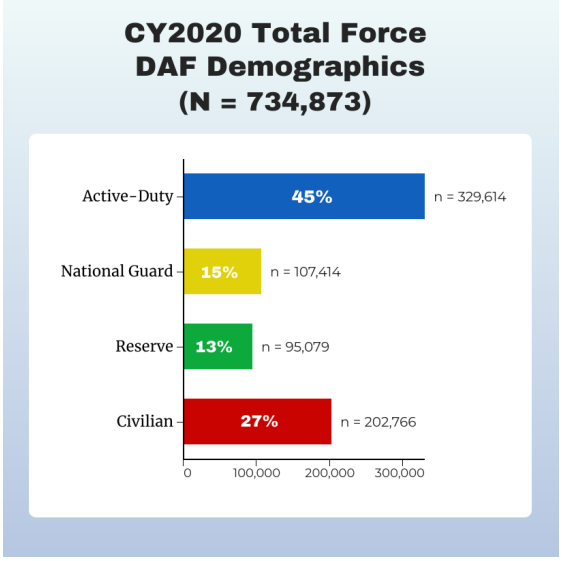
1. Brief Overview of CY 2020 DAF Suicide Mortality
2. Potentially Contributing Factors to DAF Suicides

1. Brief Overview of CY 2020 DAF Suicide Mortality

A. Suicide Mortality

In CY 2020, there were 117 Total Force DAF suicides: 81 (69.2%) Active-Duty, 17 (14.5%) National Guard, 11 (9.4%) Reserve, and 8 (6.8%) federal civilian. See below for a visual breakdown of the CY 2020 Total Force DAF suicides and information from the CY 2020 Total Force DAF demographics.[11] Note for Total Force demographics, civilian personnel consist of DoD appropriated and DoD non-appropriated funds civilians.





B. Demographic Characteristics

Briefly summarized, most suicide decedents were male (93.2%) with an average age of 30.6 years (*SD* = 10.8).

Race/ethnicity was as follows: 4.3% American Indian/Alaska Native, 6.8% Asian/Pacific Islander, 10.3% Black/African American, 72.7% White/Caucasian, 2.6% Other, 3.4% Unknown, and 16.2% Hispanic ethnicity.

Nearly half (44.4%) had a high school degree or equivalent and about half (49.6%) had at least some college or a higher-level degree.

Less than half (43.6%) had never been married, about a third (34.2%) were married at time of death, and less than a quarter (20.5%) were separated/divorced at time of death.

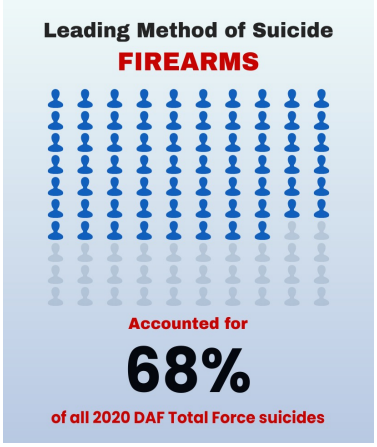
Average time in federal or military service for all Total Force DAF suicide decedents was 8.8 years (*SD* = 7.8). Almost all military suicide decedents (90.8%) were enlisted at the time of death. The rank/grade breakdown was as follows: 48.6% E1-E4, 42.2% E5-E9, 8.3% officers, and 0.9% cadet.

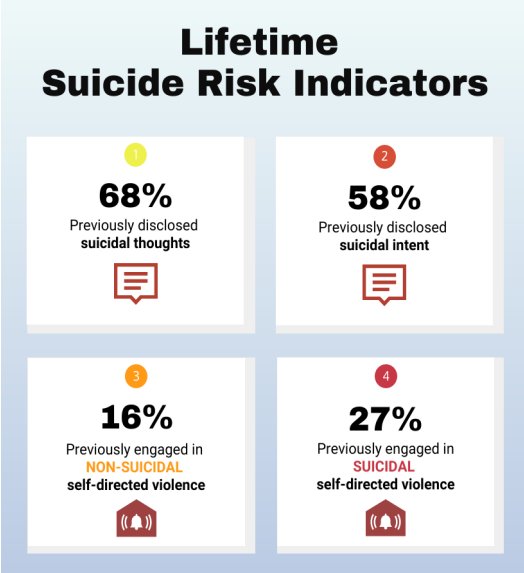
C. Event Characteristics

Briefly summarized, firearm use (68.4%) was the most common method of death. The majority of firearms used in suicide were personal possessions either owned by the decedent (70.0%) or by another person (6.3%). Only 3.8% were military-issued, and 18.8% were of unknown provenance.

Hanging (22.2%) was the second most common method of death.

The most common event settings were decedents' personal residences (51.3%), decedents' automobiles (16.2%), and the dormitories (11.1%). Alcohol was known to have been used during over a third (39.3%) of suicide deaths.





D. Mental Health Characteristics

Briefly summarized, approximately 70.9% of decedents had any contact with a primary care provider in the 12-months prior to death, for any reason, and 39.3% of decedents had any contact with a mental health provider in the 12-months prior to death, for any reason.

Nearly half (46.2%) of decedents had at least one documented lifetime mental and/or behavioral health diagnoses.

Among decedents with one or more mental health diagnoses, the most common diagnostic categories included mood disorders (50.0%), adjustment disorders (48.1%), anxiety disorders (40.7%), and substance-related diagnoses (35.2%), most commonly nicotine dependence. Multiple diagnoses were often present.

Evidence of lifetime self-directed violence was as follows: 16.2% of decedents had a lifetime history of non-suicidal self-directed violence, and 26.5% had a lifetime history of suicidal self-directed violence, otherwise referred to as a history of prior suicide attempts.

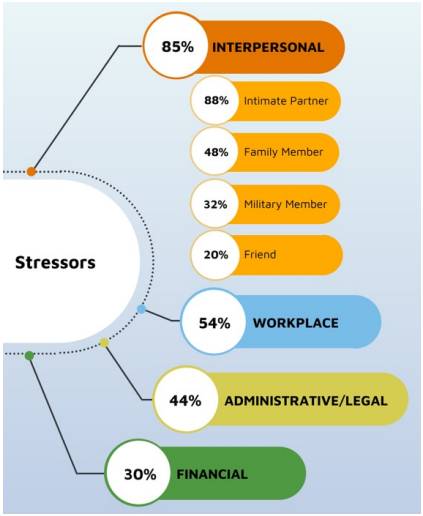
Nearly three quarters (68.4%) of decedents disclosed suicidal thoughts at some point during their life, and over half (58.1%) communicated their intent to die by suicide at some point during their life.

E. Stressors

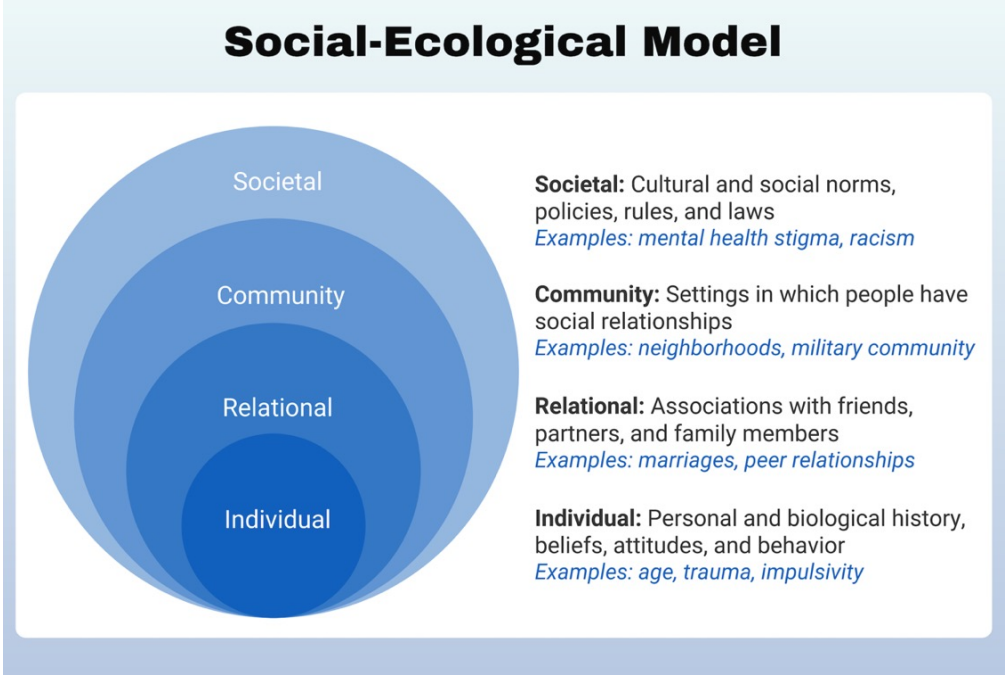
Decedents had documented problems with intimate relationship partners (74.4%), family members (37.6%), and other military members (24.8%).

Workplace (53.8%), administrative/legal (43.6%), and financial (29.9%) problems were also common.

Multiple stressors were often present; 80.3% of decedents had more than one interpersonal, workplace, administrative/legal, and/or financial problem.



2. Potentially Contributing Factors to DAF Suicides



Suicide is a complex and dynamic phenomenon involving multiple, and perhaps unique, factors for each individual. As described in the Methodology section previously, the Social-Ecological Model as applied to suicide prevention offers a four-layered framework for the examination and organization of multiple factors that may contribute to suicide risk.[4,5]

Some factors may have a significant and activating impact on suicide risk (e.g., recent loss of a romantic relationship, charges of child pornography), while others contribute to greater chronic vulnerability over the course of a lifetime (e.g., adverse childhood experiences, lack of social support). Some factors may not be amenable to change (e.g., age), while others may be modifiable based on one or more interventions (e.g., loneliness). Finally, some factors may exacerbate risk for one person, but have no impact on risk for another person (e.g., divorce).

No *one* factor exists in a vacuum—the Social-Ecological Model helps explore the interplay between individual, relational, community, and societal factors influencing suicide. Therefore, the overview of potentially contributing factors for the CY 2020 Total Force DAF suicides provided below cannot be reduced easily to descriptive statistics. Rather, this narrative summary is based on themes and trends observed by members of the USU team. Its inclusion in this *Leadership Report* is meant to promote further discussion and strategic planning for the prevention of suicide. Note that when a particular factor could fit within multiple levels (e.g., alcohol use is impacted by societal laws, community subgroup norms, relationships between people, and individual behaviors), it is presented within the levels at which it seemed to have the most significant impact on decedents' suicide trajectories. Potentially contributing factors are summarized in Table 2.

Prevalence of specific contextual factors, regardless of whether or not they were identified as potentially contributing to suicide, are presented in full in the *Scientific Report*.

Table 2. *CY 2020 Total Force DAF Observed Potentially Contributing Factors Organized by the Social-Ecological Model*

Level	Potentially Contributing Factors
Societal	▪ Stigma about Mental Health ▪ Accessibility and Acceptability of Firearms ▪ Stereotypes of Masculinity and Military Identity
Military Community	▪ Military Occupational Stressors ▪ Normalization of Problematic Alcohol Use ▪ Acceptance of Joking about Suicide ▪ Insufficient Leadership Engagement, Mentorship, and Support ▪ Concerns About Mental Health Care and Impact to Military Career ▪ Problems with Mental Health Care Access ▪ Inadequate Recognition/Response to Warning Signs for Suicide ▪ Limited Use of Evidence-Informed or Evidence-Based Suicide Interventions within Military Healthcare Settings
Relational	▪ Romantic Relationship Conflict ▪ Romantic Relationship Dissolution and Rejection ▪ Family/Partner/Parenting Relationship Stressors ▪ Lack of Connectedness ▪ Exposure to Suicide and Death ▪ Inadequate Responses following Communication of Suicide Risk
Individual	▪ Adverse Childhood Experiences ▪ Mental Health Conditions ▪ Physical Health Conditions including Sleep Problems ▪ Lifetime History of Self-Directed Violent Thoughts and/or Behaviors ▪ Alcohol Use as a Primary Coping Strategy ▪ Hopelessness ▪ Perceived Burdensomeness ▪ Unhealthy Attitudes towards Romantic Relationships ▪ Financial Stressors ▪ Administrative/Legal Stressors ▪ Means of Firearm Acquisition and Storage

A. Societal Level

The societal level of the Social-Ecological Model includes culture, social norms, policies, rules, and laws outside of the military framework that may be viewed as potentially contributing factors to suicide. Themes and trends observed across the CY 2020 DAF Total Force suicides can be best captured by the following domains:

1. Stigma about Mental Health
2. Accessibility and Acceptability of Firearms
3. Stereotypes of Masculinity and Military Identity

A1. Stigma about Mental Health

Stigma can be defined as a characteristic that is "deeply discrediting" and that reduces someone "from a whole and usual person to a tainted, discounted one."[12] Beliefs that having mental health problems makes one unstable, weak, or unsuitable for military service contribute to stigma and can serve as a barrier to seeking help for mental health-related concerns.[13,14] The following themes and trends pertaining to stigma about mental health were observed among CY 2020 Total Force DAF decedents:

- There was a notable lack of documented help-seeking from medical/mental health as well as non-medical helping resources by DAF suicide decedents in general, as well as among those who communicated suicidal thoughts and/or intent and those who had a history of prior suicide attempt.
- Some individuals reported to others that they avoided mental health care for fear of being labeled as "broken" or hurting the reputation of self, family, and/or unit.

A2. Accessibility and Acceptability of Firearms

Within the U.S., firearms account for 52.8% of suicide deaths.[15] Greater access to firearms is associated with greater risk of suicide death,[16] and societal-level factors, such as variations in state gun laws, are significantly associated with suicide rates.[17] The following themes and trends pertaining to ease of firearm accessibility were observed among CY 2020 Total Force DAF decedents:

- Firearm laws varied considerably across states in which decedents were stationed.
- There was broad acceptability of firearm ownership, and people rarely discussed decedents' firearms, even when decedents initiated conversations about newly acquired firearms.
- Decedents were often able to acquire firearms quickly and easily from a variety of sources including friends, family members, roommates, gun shops, pawn shops, and the Base Exchange, even when they had a known history of suicide risk.
- Safe storage practices were often not employed by decedents, their friends, roommates, or family members. Firearms and ammunition were often stored in easily accessible locations such as in nightstands, dressers, closets, and vehicles.
- At times, friends or family members held onto firearms for decedents when they were experiencing periods of heightened suicide risk. Firearms were ultimately returned to the decedent.

A3. Stereotypes of Masculinity and Military Identity

In the U.S., suicide rates for males are over three and half times greater than the rates for females.[18] Adherence to stereotypically masculine traits of stoicism and self-reliance has been linked with thwarted belongingness, an indicator of the desire for suicide, among military personnel.[19] Stoicism and self-reliance can limit self-disclosure, reduce access to social support, and prevent timely help-seeking.[20] The following themes and trends were observed among CY 2020 Total Force DAF decedents:

- There was a general unwillingness to self-disclose about life stressors, show weakness, and/or express emotional distress to people in general, including to close others such as friends and family members.

- Self- and other-imposed expectations to be resilient, strong, self-reliant, capable, and stoic delayed timely help-seeking and in some cases prevented help-seeking altogether.
- Some decedents displayed a problematic pattern of taking care of everyone and focusing on goal achievement and career advancement while neglecting self-care.
- Denial or minimization of mental health problems, notably alcohol use severity and suicidal thoughts, was common and reduced the likelihood of connecting with care.
- When decedents engaged with care, many did not disclose life stressors or suicidal thoughts to providers, limiting the ability of providers to deliver appropriate care.

B. Military Community Level

The community level of the Social-Ecological Model includes the settings in which people have social relationships, such as neighborhoods, schools, or workplaces. For the CY 2020 Total Force DAF suicide review, military-specific community level factors were considered. Observed themes and trends can be best captured by the following domains:

1. Military Occupational Stressors
2. Normalization of Problematic Alcohol Use
3. Acceptance of Joking about Suicide
4. Insufficient Leadership Engagement, Mentorship, and Support
5. Concerns About Mental Health Care and Military Career
6. Problems with Mental Health Care Access
7. Inadequate Recognition/Response to Warning Signs for Suicide
8. Limited Use of Evidence-Informed or Evidence-Based Suicide Interventions within Military Healthcare Settings

B1. Military Occupational Stressors

Military service encompasses many unique stressors inherent to the profession of arms and an individual Airman's role and contribution to the mission. These stressors may serve as primary contributing factors or may serve as compounding factors to increase suicide risk. The following themes and trends were observed:

- Military-related transitions involving anticipation of deployment, deployment (combat or non-combat), return from deployment, permanent change of station (PCS), and frequent role/duty changes were noted challenges in many decedents' lives.
- Operations tempo and thus, increased responsibilities, were at times above and beyond what the Airmen were able to manage effectively.
- For some decedents, dissatisfaction with assigned duties, roles, and/or Air Force Specialty Code (AFSC) seems to have persisted from early career to time of death.

B2. Normalization of Problematic Alcohol Use

The Air Force has made efforts to deglamorize alcohol use, yet a culture of normalization and at times promotion of problematic alcohol consumption and underage drinking persists in some units.[21] In addition many Airmen enter the Air Force already socialized to use alcohol at problematic levels.[22] The following themes and trends were observed:

- In some circumstances, senior enlisted members were drinking with junior enlisted members and perhaps neglecting problematic signs.
- At times, persistent heavy underage drinking in the dorms seemed to go undetected.
- Alcohol was occasionally provided to underage Airmen by fellow Airmen.

- Problematic alcohol use was often minimized by decedents and other Airmen; decedents underreported alcohol use to providers, and other Airmen perceived decedents' heavy drinking as "normal."
- There was a common misconception among Airmen that even if someone was drinking heavily, if they did not "act drunk" (e.g., didn't slur or stumble), then they were not intoxicated.
- Some decedents overestimated their ability to function while intoxicated from alcohol, as evidenced by carrying firearms with them to parties and bars and driving while intoxicated.
- There seemed to be a general lack of awareness that heavy alcohol use can increase suicide risk, especially when firearms are easily accessible. For example, it was unclear whether or not Alcohol and Drug Abuse Prevention and Treatment (ADAPT) programming addressed the link between alcohol use and suicide risk.

B3. Acceptance of Joking About Suicide

"Gallows humor" is a common coping method within high stress jobs,[23-27] including within the DoD. Many DoD and DAF suicide prevention efforts focus on recognizing and responding to warning signs. For these efforts to effectively prevent suicides, mitigating factors that inhibit recognition and response, such as a culture of joking about suicide, is needed. The following themes and trends were observed:

- Joking about suicide was common within some units in general and among some decedents specifically.
- Suicidal comments, images, references, and at times behaviors, were not always taken seriously as they were often viewed or delivered as a joke.

B4. Insufficient Leadership Engagement, Mentorship, and Support

The presence and perception of social support is recognized as an important protective factor against suicide.[5] Thus, the support provided by first-line supervisors, first sergeants, commanders, and other leaders serves as a critical buffer against suicide risk. Conversely, the absence of supportive leadership, engagement, and mentorship of Airmen can result in a sense of thwarted belongingness or perceived burdensomeness, two factors theorized to increase desire for suicide.[28] The following themes and trends were observed:

- Insufficient support ranged in severity from occasionally toxic leaders (e.g., bullying the decedent) to more commonly disengaged or absent leaders.
- Presence of toxic leaders added substantial stress to decedents' lives.
- Perceptions of poor leadership support were sometimes due to the nature of actions taken by leadership to protect the Service member from harm (e.g., duty restrictions).
- Leaders at times reported not knowing decedents well and were often unaware of stressors decedents were experiencing outside of their immediate work setting. This appeared to be more common when the suicide occurred shortly after the decedent had a PCS or a change in leadership.
- Several decedents were dissatisfied with their Air Force careers (e.g., frustrated with performance reports, passed over for promotion, enlisted later in life, overworked), and there was little evidence of leadership engagement or mentorship.

B5. Concerns About Mental Health Care and Military Career

The Air Force is typically viewed as an "up or out" system commonly resulting in significant stress regarding performance. Not surprisingly, many Airmen continue to believe that even minor negative performance indicators may significantly impact their careers. One notable concern is the belief that seeking mental health care will have negative career-related impacts, a belief held by about a third of Service members.[14,21] It is important to note that mental health treatment can at times result in career-affecting provider recommendations, but the extent to which recommendations negatively impact one's career likely depend on a variety of factors including symptom severity, chronicity, safety considerations, and others.[29,30] The following themes and trends were observed:

- Several decedents disclosed to friends and family members that they believed seeking help for mental health-related problems would negatively impact their careers.

- At times, decedents' friends, family members, and intimate partners did not disclose information about the decedents that they believed could negatively impact their careers.
- There were signs of general reluctance to disclose mental health symptoms and suicidal thoughts and/or behaviors when care was utilized.
- Concerns about the impact of seeking mental health care on one's career seemed to be magnified when decedents were experiencing financial or performance-related stressors.
- It is possible that overly conservative underdiagnosis of mental health conditions or lack of referral from medical to mental health care may have been carried out to protect Airmen from career-related impacts or to reduce stigma.

B6. Problems with Mental Health Care Access

Although not a focus in the Air Force 11 Elements, for decades the Air Force Medical Service has targeted access to effective care as a strategy for suicide prevention and overall mental fitness of the Total Force. The following themes and trends were observed:

- At times there appeared to be inadequate communication and coordination between medical and mental health, as some decedents were frequently seen by medical for persistent symptoms (e.g., sleep issues) or psychotropic medications but were not referred to mental health.
- Mental health care access standards, especially during the COVID-19 pandemic, were not met, resulting in delayed engagement with much needed care.
- The wait time for mental health appointments at some locations appeared unreasonable.
- Mental health providers occasionally struggled to find room within psychiatric inpatient units for high-risk decedents, and decedents were ultimately not hospitalized despite high risk.

B7. Inadequate Recognition/Response to Warning Signs for Suicide

In efforts to establish a "Wingman Culture," the Air Force has used multiple methods to train and equip Airmen to recognize suicide warning signs in order to take prompt action to save a life. However, individuals in decedents' social network including friends, family members, intimate partners, military coworkers, and/or leaders (e.g., front-line supervisors, first sergeants, commanders) at times missed warning signs for suicide or noted warning signs but did not adequately respond. The following themes and trends were observed:

- Suicide risk indicators warranting timely inquiry and supportive action (e.g., repeatedly late to work, appearing depressed or disheveled, sudden decline in work performance, problematic alcohol use, new purchase of a firearm) were at times neglected.
- Clear and serious suicide warning signs warranting immediate action (e.g., text message indicating suicidality, stated intent to kill self if a particular situation occurred) were at times not directly addressed.
- Friends, family members, and intimate partners noticed warning signs more often than military coworkers and leaders, but there was little evidence of subsequent intervention. When members of the decedents' social network did intervene, it was not always in coordination with military leaders. When they tried to coordinate with military leaders, it often went poorly (e.g., leadership was not available, family members did not have adequate information to facilitate a welfare check) or in several cases, leaders arrived at the scene minutes too late.

B8. Limited Use of Evidence-Informed or Evidence-Based Suicide Interventions within Military Healthcare Settings

Specific to mental health care, a significant number of probable deviations from existing practice guidance (e.g., VA/DoD Clinical Practice Guideline for the Assessment and Management of Patients at Risk for Suicide[31]) and policies (e.g., AFI 44-172 Mental Health[32]) were found. The following trends were observed:

- There was evidence of partially completed Safety Plans. For example, some Safety Plans did not contain names and phone numbers of supportive contacts or did not adequately address lethal means safety.

- Medical documentation in some instances showed limited or non-existent actions to assess for access to lethal means nor to conduct lethal means counseling.
- Psychiatric inpatient discharges did not sync adequately with outpatient follow-up visits; thus, coordination of care appeared faulty in some instances.
- A lack of effective and timely communication and coordination of mental health care, especially to resolve inconsistent findings regarding compliance, was concerning in several instances.
- At times, some providers were unable to effectively identify changes in the mental health of the individual across time, for instance due to underreporting of symptoms or length of time between appointments.
- Periodic Health Assessments (PHA) revealing psychiatric symptoms or possible alcohol misuse did not trigger further inquiry for some decedents.
- If decedents did not explicitly endorse suicide ideation, they were often seen as not at risk for suicide, even when there were multiple documented life stressors, heightened psychiatric symptom severity, and/or history of suicide-related ideation and/or behavior.

C. Relational Level

The relational level of the Social-Ecological Model includes interpersonal relationships including with friends, romantic partners, family members, coworkers, and other community members. Observed themes and trends can be best captured by the following domains:

1. Romantic Relationship Conflict
2. Romantic Relationship Dissolution and Rejection
3. Family/Partner/Parenting Relationship Stressors
4. Lack of Connectedness
5. Exposure to Suicide and Death
6. Inadequate Responses Following Communication of Suicide Risk

C1. Romantic Relationship Conflict

Romantic relationship conflict can have a significant impact on suicidal thoughts and behaviors[33] and is recognized as a relational-level contributing factor for suicide.[4,5] Romantic relationship conflicts were prevalent among decedents ranging from arguments to infidelity to intimate partner violence. The following themes and trends were observed:

- Several decedents had a history of romantic relationship problems that served as an early catalyst for suicidal thoughts and/or behaviors.
- Intimate partner violence was perpetrated by decedents, their romantic partners, or both.
- Several decedents had a documented legal/administrative history of intimate partner violence, while for others, this first documented occurrence was on the day of death.
- Infidelity was perpetrated by decedents, their romantic partners, or both.
- Many decedents had a significant altercation with their romantic partner in the days, hours, and minutes before death.
- Altercations were often focused on concerns about infidelity or relationship dissolution.
- Both decedents and their romantic partners often lacked emotion regulation and problem-solving skills within their relationships.
- Romantic relationship conflict was commonly preceded by the decedent's heavy alcohol consumption.
- Multiple decedents died by firearm after locking themselves in a separate room during an argument with their partner.

C2. Romantic Relationship Dissolution and Rejection

Relationship dissolution and rejection are recognized risk indicators for suicide.[34] Consistent with previous research,[35] a breakup or rejection was often proximal to the suicide event and was frequently noted as a primary motivation for suicide when examining suicide notes and text messages sent by decedents shortly prior to death. The following themes and trends were observed:

- Decedents who experienced relationship dissolution often received some indication that their former romantic partner had moved on (e.g., created an account on a dating site, began a new relationship, planned to get married or re-married) shortly before taking their own lives.
- In most cases, the decedent's partner initiated the breakup.
- In instances of romantic rejection, it was generally a male decedent who expressed interest in a former female partner or a female friend who was then rejected by the former partner or friend.
- Several decedents experienced multiple romantic rejections in a short period of time.
- In cases of romantic relationship dissolution, suicide risk appeared to be exacerbated by the belief that the decedent's partner was their "true love" or "soulmate."
- In several instances, decedents told their romantic partners that they intended to kill themselves if the relationship ended.

C3. Family/Partner/Parenting Relationship Stressors

Family or partner stressors are common among suicide decedents in the Air Force, as well as across the DoD.[36] These stressors typically involve the family of origin, a romantic partner, and/or children. The following themes and trends were observed:

- Examples of family of origin stressors included:
  - Strained relationships secondary to adverse childhood experiences
  - Legal concerns (e.g., crime victimization, incarceration, parental divorce)
  - Financial concerns (e.g., borrowing money, loaning money, or expectations to financially support family)
  - Caregiver concerns (e.g., taking care of extended family members)
  - Decedents feeling that they did not live up to their family's expectations
  - Rejection due to sexual orientation
- Examples of romantic partner stressors included:
  - Physical and mental health concerns (e.g., complications following birth, cancer, substance/alcohol abuse, and suicide ideation/attempts)
  - Financial stress (e.g., partner's spending habits, partner not working or unexpectedly leaving their job)
  - Unique stressors for dual military relationships (e.g., increased conflict following a partner's career advancement or being stationed at different duty stations)
- Examples of parenting stressors included:
  - Child custody/co-parenting concerns secondary to divorce or separation
  - Children's medical conditions, particularly if they required ongoing care
  - Removal of a child from the home following allegations or charges of abuse and/or neglect

C4. Lack of Connectedness

Social isolation and withdrawal are recognized relational-level contributing factors for suicide.[5,7] Loneliness, especially during COVID-19, has been referred to as a bigger health risk than obesity.[37] Social disconnection, to include loneliness, perceived or actual lack of social support, rejection from friends or peers, a sense of thwarted belongingness or perceived burdensomeness,[28] and geographical separation were noted among some suicide decedents. The following themes and trends were observed:

- Some decedents experienced a lack of social connection so severe that there was no evidence of friendships or romantic relationships.
- Several decedents lacked supportive social networks and instead relied solely on their romantic partner for support.
- Many decedents had social support networks, but they did not disclose information about life stressors to individuals within their networks and appeared to lack close, meaningful connections.
- At times decedents appeared to withdraw from family and friends, often due to a perceived slight or betrayal.
- Some decedents experienced rejection from friends, peers, or military coworkers.
- Many decedents struggled with geographical separation from romantic partners, family, and friends (e.g., stationed outside the contiguous U.S. [OCONUS] or deployed, at a duty station far from home, due to COVID-19 mitigation measures, due to court or military order following allegations of abuse).

C5. Exposure to Suicide and Death

Exposure to suicide or death of a loved one are recognized as relational-level contributing factors for suicide, and suicide exposure in particular has strong evidence as a risk indicator for suicide.[5] Many decedents either experienced the loss of a loved one to suicide or non-suicide death or were anticipating losing a loved one. The following themes and trends were observed:

- Several decedents were exposed to the loss of a family member, friend, or coworker to suicide or had a family member or friend attempt suicide.
- Suicide exposure occurred during both childhood (e.g., friends' deaths, parent attempting suicide) and adulthood.
- Some decedents experienced the suicide or non-suicide death of a loved one within days, weeks, or months prior to their suicide, and there was little evidence that members of leadership were aware of these losses or that supportive resources were provided.
- Several decedents experienced multiple losses in a short period of time.

C6. Inadequate Responses Following Communication of Suicide Risk

Consistent with previous findings of Air Force suicide death reviews,[35] decedents frequently communicated suicidal thoughts and/or suicide intent to romantic partners, family members, and/or friends. These disclosures were often met with inaction or responses that may have exacerbated suicide risk. The following themes and trends were observed:

- The most common inadequate response was inaction. Rarely did someone attempt to inform healthcare providers or the decedent's chain of command about the decedent's communicated suicidal thoughts and/or intent.
- Current and/or former romantic partners were often the only people aware of the decedent's suicidality.
- In several relationships, discussion about suicide was commonplace (e.g., decedents frequently threatened to kill themselves during arguments), and therefore the suicide risk of the decedent may have not been taken seriously and instead viewed as manipulative behavior.
- Some friends and family members did attempt to increase environmental safety by offering to secure firearms. In these instances, it was common for the decedent to decline or for firearms to be returned to the decedent after some time.
- In some instances, disclosure of suicidal thoughts and/or intent was met with responses that exacerbated risk (e.g., recipient mocking or encouraging the decedent's suicide).

D. Individual Level

The individual level of the Social-Ecological Model refers to a person's history and their individual characteristics, including age, gender, mental and physical health, attitudes, and behaviors.[4] Observed themes and trends can be best captured by the following domains:

1. Adverse Childhood Experiences
2. Mental Health Conditions
3. Physical Health Conditions including Sleep Problems
4. Lifetime History of Self-Directed Violent Thoughts and/or Behaviors
5. Alcohol Use as a Primary Coping Strategy
6. Hopelessness
7. Perceived Burdensomeness
8. Unhealthy Attitudes towards Romantic Relationships
9. Financial Stressors
10. Administrative/Legal Stressors
11. Means of Firearm Acquisition and Storage

D1. Adverse Childhood Experiences

Adverse childhood experiences (ACEs) are associated with numerous physical and mental health problems across the lifespan[38] and include parental divorce, parental incarceration, parental mental illness or substance abuse, household violence, sexual abuse, and physical or emotional abuse or neglect. The impact of ACEs is cumulative; compared to people who have not experienced any ACEs, the odds of attempting suicide are 30 times higher for people who have experienced four or more ACEs.[39] Relative to civilians, some evidence indicates that military members in particular may have experienced a greater number of ACEs.[40] The following themes and trends were observed among CY 2020 Total Force DAF decedents:

- Many decedents experienced ACEs. For some decedents, their siblings and parents also experienced ACEs, contributing to a generational effect.
- A history of ACEs tended to contribute to strained and at times manipulative relationships within decedents' families of origin.
- ACEs were sometimes but not always noted in decedents' medical records. In many instances, only a decedents' romantic partner was aware of the decedents' childhood experiences.

D2. Mental Health Conditions

Mental health conditions are among the most common health problems in the U.S.[41] More than 50% of people will be diagnosed with a mental health condition at some point in their life,[42] and about one in five U.S. adults had a mental health condition in 2020.[43] Although nearly half of people who die by suicide do not have a known mental health condition,[44] mental health problems remain strongly linked to suicide risk.[45] The following themes and trends were observed among CY 2020 Total Force DAF decedents:

- Nearly half of decedents had a history of a diagnosed mental health condition documented within source documents.
- Prevalence of mental health conditions is likely an underestimate among CY 2020 Total Force DAF decedents, as many decedents never had contact with mental health, and at times, there seemed to be evidence of underdiagnosis or non-referral to mental health despite severe psychiatric symptoms.
- Among decedents with diagnosed mental health conditions, the most common categories included mood, adjustment, anxiety, and substance use disorders.

D3. Physical Health Conditions including Sleep Problems

Physical health problems can negatively impact suicide risk.[46] For example, a national U.S. study found that those with chronic pain were twice as likely as the general population to have a history of suicidal thoughts, plans, and attempts.[47] Sleep problems such as insomnia, nightmares, and sleep apnea are also associated with suicide risk.[48,49] In 2018, approximately 40% of Service members reported having been diagnosed with a chronic physical condition, and 20% reported trouble sleeping.[21] Military service can present a number of challenges to Service members' sleep,[50] and nearly half of military

Service members report poor sleep quality.[51] The following themes and trends were observed among CY 2020 Total Force DAF decedents:

- Physical health problems (e.g., chronic pain, tinnitus, traumatic brain injury, migraines, heart problems, respiratory problems, reproductive health problems) were common among decedents.
- A new medical diagnosis within a year of death and a recurrent medical issue during service were noted among some of the decedents.
- Although very few decedents were diagnosed with a sleep condition, many had evidence of sleep problems, including insomnia, difficulties falling or staying asleep, and reported difficulties adjusting to shift work.
- Decedents with evidence of sleep problems frequently self-medicated with alcohol, although some also used over-the-counter or prescribed sleep medication.

D4. Lifetime History of Self-Directed Violent Thoughts and/or Behaviors

The CDC defines self-directed violence as "behavior that is self-directed and deliberately results in injury or the potential for injury to oneself."[52] Nonsuicidal self-directed violence, also called nonsuicidal self-injury (NSSI),[53] is self-directed behavior that deliberately results in injury or the potential for injury to oneself, without evidence of suicidal intent.[52] A recent study of NSSI among male Service members found that common methods of NSSI included burning with cigarettes, cutting, and burning with lighters.[54] Suicidal self-directed violence, also called suicide attempt, is self-directed behavior that deliberately results in injury or the potential for injury to the self, with evidence of suicidal intent.[52] Self-directed violence is one of the top categories of predictors of future suicide attempt and death.[55] The following themes and trends were observed among CY 2020 Total Force decedents:

- Over a quarter of decedents had a lifetime history of suicidal self-directed violence, otherwise referred to as a history of prior suicide attempts, and several had a lifetime history of nonsuicidal self-directed violence.
- The majority of decedents communicated suicidal thoughts at some point during their life, and over half communicated their intent to die by suicide at some point during their life.
- Decedents frequently communicated suicidal thoughts and intent to romantic partners.

D5. Alcohol Use a Primary Coping Strategy

Drinking alcohol as a coping strategy is associated with a number of problems including depressive symptoms, heavy drinking, drinking alone, and alcohol abuse.[56] When people drink alcohol to manage negative emotions, they tend to repeatedly rely on this strategy rather than more effective coping strategies.[57] Among people psychiatrically hospitalized for a recent suicide attempt, using alcohol as a general coping strategy was associated with increased odds of heavy drinking during suicide attempt,[58] and about a third of suicide decedents have alcohol in their systems at time of death.[59] The following themes and trends were observed among CY 2020 Total Force DAF decedents:

- Decedents tended to drink alcohol regularly in social situations and many exhibited evidence of problematic alcohol use including drinking to intoxication and drinking alone.
- Over a third of decedents used alcohol shortly before death, and prevalence of alcohol use at time of death was greater among active-duty personnel. Use of alcohol at time of death is likely underestimated given lack of event-specific information for many decedents.
- Decedents tended to minimize their problematic alcohol use and also regularly underreported alcohol use in PHAs and medical and mental health encounters.
- Decedents continued to use alcohol even when they were involved in ADAPT or Alcoholics Anonymous (AA).
- Younger decedents tended to be more likely to have evidence of problematic alcohol use, and about a quarter of decedents who used alcohol shortly before death were 21 years old or younger.

D6. Hopelessness

Hopelessness is defined as a lack of positive expectations or enthusiasm, coupled with a motivational tendency to give up.[60] Hopelessness is a significant predictor of suicidal thoughts, attempt, and death.[61] The following themes and trends were observed among CY 2020 Total Force DAF decedents:

- Many decedents communicated hopelessness or were perceived by others as being hopeless in response to a variety of problems including romantic relationship dissolution or rejection, inability to meet financial obligations, dissatisfaction with one's military careers, chronic physical or emotional pain, and ongoing criminal investigations.
- In suicide notes, some decedents expressed hopelessness as "giving up" and described being unable to continue living within their current circumstances given that they did not expect their situations to ever improve.

D7. Perceived Burdensomeness

Perceived burdensomeness is the belief that one is a burden to family, friends, and/or society and is theorized to increase desire for suicide.[28] In one study conducted with suicidal military members, the link between workplace bullying and suicidal thoughts was due to increased perceived burdensomeness among Service members who experienced bullying.[62] Perceived burdensomeness may also serve as a barrier to disclosure of emotional distress or suicidal thoughts[63] especially when decedents believe that disclosure may lead to their being escorted to the Emergency Department, placed on unit watch, or receiving duty restrictions. The following themes and trends were observed for CY 2020 Total Force DAF decedents:

- In suicide notes and other communications before death, many decedents expressed that their death would make others' lives easier and they would no longer "drag down", "hold back", or "worry" their friends, family, and coworkers.

D8. Unhealthy Attitudes towards Romantic Relationships

As described above under the relational level, relationship distress and dissolution can increase suicide risk.[33-34] However, the extent to which relationship distress and dissolution contribute to risk likely depends on a number of individual-level factors, including interpersonal dependency, attachment, commitment, and investment within the relationship,[34,64] as well as beliefs that romantic partners should be responsible for satisfying all of one's needs.[65] The following themes and trends were observed for CY 2020 Total Force DAF decedents:

- Decedents often exhibited poor problem-solving and emotion regulation skills when interacting with romantic partners.
- Not knowing how to leave a toxic relationship promoted a sense of helplessness and hopelessness among decedents.
- Several decedents exhibited trust-related issues, jealousy, and possessiveness of partners, and at times decedents tried to control their partners' behavior (e.g., taking their keys or phones).
- Typically, male decedents exhibited an overreliance on their female partners to provide emotional support, and many decedents disclosed emotional distress, history of ACEs and prior suicide attempts, and suicide ideation solely to their romantic partners.
- Several decedents explicitly stated their intent to kill themselves if their romantic relationship ended, and some decedents described their romantic partners as their "one true love" or "soulmate" along with a belief that they would never again find romantic fulfillment after losing their partner.

D9. Financial Stressors

Financial stressors play a major role in suicide, with individuals experiencing financial stressors having a suicide risk twenty times higher than those without financial strain.[66] The following themes and trends were observed for CY 2020 Total Force DAF decedents:

- Decedents experienced a range of financial problems including having debt, spending outside their means, living paycheck to paycheck, serving as the sole breadwinner, and being financially responsible for extended family members.

- There was little evidence of use of financial counseling services, although several decedents requested approval to obtain second jobs.
- Delays in pay, errors in pay, and delays in reimbursement of expenses added additional stress on top of ongoing issues decedents were experiencing.

D10. Administrative/Legal Stressors

Military Service members are unique in that they are subject to both civil and military legal systems, and at times there is overlap between military administrative and legal processes. Legal problems are associated with suicide ideation among military personnel,[67] and legal and/or administrative problems can serve as a catalyst for suicide or exacerbate chronic levels of risk. The following themes and trends were observed for CY 2020 Total Force DAF decedents:

- Nearly half of decedents had evidence of ongoing or anticipated administrative and/or legal problems, and many experienced multiple types of problems (e.g., Absent Without Official Leave [AWOL], drunk driving, charges of physical or sexual assault).
- Divorce and child custody-related legal problems were the most commonly experienced type of legal stressor.
- Administrative/legal issues that were likely to have major career impacts or that would likely confer time in prison exacerbated suicide risk to a greater degree (e.g., being under investigation for illegal drug use).
- Legal issues concerning allegations of child pornography, child sexual assault, or child abuse or neglect served as a major contributing factor to suicide. In some cases, decedents had not yet been formally charged or arrested or were still under investigation for these crimes when they died by suicide.
- Stress from administrative or legal issues was occasionally compounded by financial strain, experiences of stigma or shame, loss of social support, and feeling less valued within the unit.

D11. Means of Firearm Acquisition and Storage

As indicated above, firearms are used in most suicide deaths within the U.S.,[15] as well as within the military.[36] The vast majority of firearms used in military suicide are personally owned by the decedent.[36] Research conducted with military personnel indicate that how firearms are stored is associated with suicide risk. The link between suicide ideation and self-reported likelihood of engaging in a future suicide attempt is stronger when individuals store their firearms loaded and in an unsecure location (e.g., a dresser drawer),[68] and safe storage is less common among Service members with a history of suicide ideation.[69] The following themes and trends were observed for CY 2020 Total Force DAF decedents:

- Nearly all decedents who died by suicide using a firearm used a personally owned weapon; very few decedents used a military-issued weapon.
- Decedents acquired firearms from a variety of sources including friends, family members, roommates, gun shops, pawn shops, and the Base Exchange.
- At times, decedents acquired a firearm within hours or days of suicide death.
- Decedents employed a variety of storage methods. Some decedents stored firearms in cases or gun safes, but it was more common that firearms were stored loaded and in unsecure locations such as on nightstands, in dressers or closets, or in vehicles.
- In several instances, decedents stored their personal firearms in their vehicles on base, despite prohibitions, or took their firearms with them to parties and bars, where they consumed large quantities of alcohol.
- Some decedents seemed to lack basic knowledge about how to safely use firearms.

Photo by A1C Joseph Morales

RECOMMENDATIONS

In the wake of these terrible tragedies, we ask ourselves impossible questions. What signs did we miss? What more could we have done? The truth is, there's no easy answer. There's no simple solution. But there is hope.

President Joseph Robinette Biden, Jr.

This section provides a series of actionable recommendations pertaining to suicide prevention, intervention, and postvention based on the review of all CY 2020 Total Force DAF suicides. Given the complexity of suicide, we recognize that a combination of strategies or a multicomponent approach is required for suicide risk mitigation, suicide-focused care and interventions, and the management of the aftermath of suicide attempts and deaths. It is rather unlikely that a single strategy or the implementation of a single recommendation is adequate on its own to reduce the public health burden of suicide. Having said that, it is important to know that every recommendation put forth here, regardless of its potential impact upon adoption, is inspired and informed by the suicide death of an Airman or Guardian.

The suicide of each deceased member of the DAF Total Force presents a unique avenue to consider potential missed opportunities for suicide prevention broadly, and to generate specific lessons learned. Similar to systematic investigations about aviation accidents and other equipment mishaps, a review of an individual's trajectory toward suicide can generate valuable ideas for improvement. We recognize that humans are the most critical resource for the Air Force and therefore, the aspirational intent of this *Leadership Report* is to focus primarily on areas that can be further enhanced to save a life.

The actionable recommendations offered in this section are organized in line with the 11 overlapping core elements of the Air Force Suicide Prevention Program, emphasizing both leadership and community involvement. This framework has been recognized as a leading model in suicide prevention globally and domestically. Not surprisingly, structurally speaking, the Air Force Suicide Prevention framework has stood the test of time. Functionally, continuous refinements and improvements within each of the 11 domains directly support Air Force values of integrity first, service before self, and excellence in all we do, and promote a sustained commitment to the mission readiness of the force.

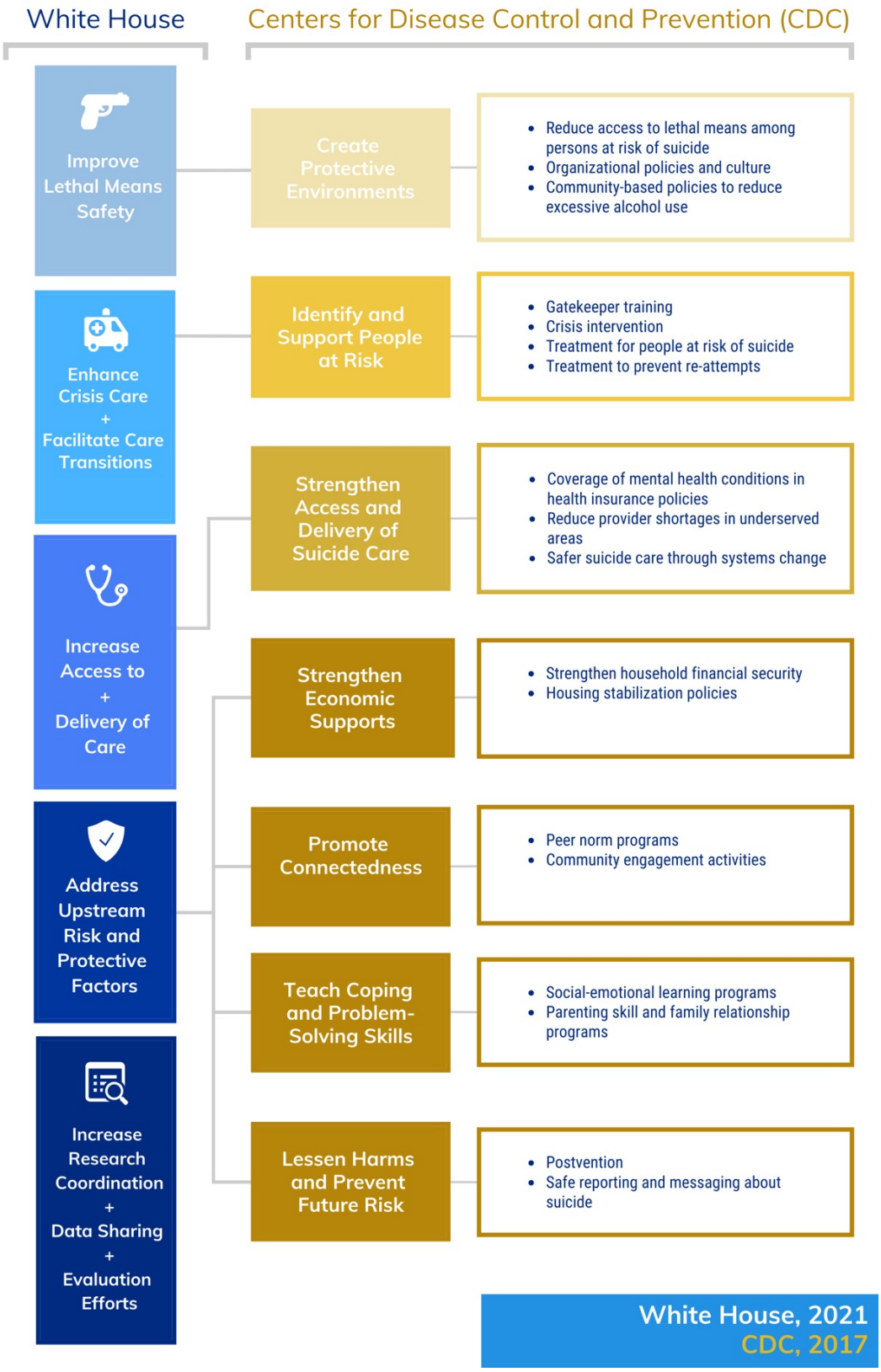
Overall, a total of 68 recommendations are provided in this *Leadership Report*. DAF leadership and the DAF SPP are encouraged to carefully review and consider each recommendation, its alignment with the current DAF Suicide Prevention Strategic Model, and its feasibility for implementation. Each offered recommendation is mapped to the following:

- 1 of the 5 White House Priority Goals[7] released on November 10, 2021
- 1 of the 7 CDC Strategies for Suicide Prevention[4] published in 2017
- 1 of the 11 Core Elements of the Air Force Suicide Prevention Program[9]
  At the time of publication of this report, the number of elements had increased from 11 to 15.

Table 3 provides a brief overview of this mapping system to aid DAF leadership.

Please note that suicide-related terms are used throughout this section. For clarity, Appendix A provides an abbreviated listing of these terms and associated definitions highlighted by the 2012 National Strategy for Suicide Prevention: Goals and Objectives for Action, a report of the United States Surgeon General and the National Action Alliance for Suicide Prevention.[1]

National Suicide Prevention Priorities



Core Element 1.

Leadership Involvement: AF leaders actively support the entire spectrum of suicide prevention initiatives in the community.

Recommendations:

1.1. Require DAF leaders at the Air and Space Forces, MAJCOM and base level to review this report on an annual basis to actively support and routinely enhance the entire spectrum of suicide prevention initiatives in their communities.

1.2. Within each MAJCOM, mandate an annual joint meeting to include the MAJCOM commander and Commander Chief Master Sergeant, as well as senior MAJCOM representatives for Primary Care, Mental Health, Family Advocacy, Alcohol and Drug Abuse Prevention and Treatment Program (ADAPT), Suicide Prevention Program, Sexual Assault Response and Prevention, Staff Judge Advocate, Security Forces, and chaplaincy to improve overall communication and coordination on suicide prevention.

a. Highlight the primary purpose will be to assess how AF leadership within the MAJCOM can best support the entire spectrum of suicide prevention initiatives in their community.

b. Generate annual MAJCOM goals; track, and report outcomes at the MAJCOM Community Action Board (CAB) to enable leadership to evaluate progress made.

1.3 Require DAF leadership at all levels, including the Secretary of the Air Force, the Air Force and Space Force Service Chiefs, senior enlisted, and frontline supervisors, to promote a culture of safe firearm storage across the DAF. As a safety-oriented culture, firearm safety can be incorporated as a foundational component within the Air Force through the following leadership actions:

a. Communicate regular messages regarding secure storage of personally owned firearms.

b. Resource and support safe firearm storage initiatives recommended in this report.

c. Promote responsibility to safely store personal firearms, as well as educate Airmen on the benefits and range of options for such storage.

Core Element 2.

Addressing Suicide Prevention through Professional Military Education (PME): PME provides periodic and targeted Suicide Prevention training for Airmen and Guardians, specifically oriented to the individual's rank and level of responsibility.

Recommendations:

2.1 Review current Professional Military Education (PME), beginning with Basic Military Training and/or Air Force Technical School, to ensure that three core mental fitness skills are taught: (1) rational thinking; (2) emotion regulation; and (3) problem-solving. If the three core skills are not currently taught, develop evidence-informed or evidence-based curricula that promotes skill building in these areas.

a. Evaluate entry-level PME mental fitness training for acceptability, utilization, and mental health benefits.

b. Utilize lessons learned in entry level PME to systematically expand tailored mental fitness training into progressively higher level PME to promote skills practice over an individual's Air Force career, and include continued evaluation of acceptability, utilization, and effectiveness.

2.2 Review current PME, targeting non-medical gatekeepers such as first sergeants and frontline supervisors, to ensure that key risk reduction strategies are covered. If these strategies are not currently covered, develop evidence-informed or evidence-based curricula that includes the following elements:

- Recognizing signs of stress and engaging with Airmen experiencing life changes and stress
- Offering and helping to connect Airmen with appropriate community resources
- Discussing and planning for personal, relational, and environmental safety (e.g., a conversation about lethal means safety and safe storage practices)
- Program evaluation of non-medical gatekeeper risk reduction training for acceptability, utilization, and effectiveness

2.3 Implement a posting requirement for Suicide Warning Signs and helpful resources similar to the requirement for Fire Exit Posters across all MAJCOMs such that messaging about suicide is visible within all work environments in order to replicate the messaging from Homeland Security, "If you see something, say something."

- A full listing of suicide warning signs is available through the National Institute of Mental Health or the American Foundation for Suicide Prevention websites.

2.4 Review current targeted suicide prevention training, in coordination with Suicide Prevention Coordinators at each MAJCOM, and implement the following actions:

a. Remove outdated materials

b. Add new materials in line with findings and recommendations provided in this and future reports

c. Highlight information from Voices of Suicide Decedents (see Appendix E) from last CY Total Force DAF suicide death reviews

d. Provide direct guidance on how to best manage text messages, social media posts, joking, and other communications that convey suicide risk and/or suicide-related images (e.g., sharing a photo of self with gun to the head)

e. Integrate instruction on cultural diversity in the context of communications about suicide risk with the key message being that individuals from different backgrounds may have different approaches in communicating about their emotional distress and pain

2.5 Generate an easy-to-follow multi-step guide or infographic for Airmen and Guardians on firearm safety practices with Do's and Don'ts in line with DoD and Air Force Force Instructions (DoDIs and AFIs) and policies.

a. Ensure easy access to the infographic and encourage leaders at all levels to routinely inquire about ownership of personal firearms and use the infographic to educate personnel on safety practices

2.6 Shift the focus of the "Go SLO" campaign (Safes, Locks, Storing Means Outside the Home) from suicide risk reduction specifically to firearm safety generally by replacing "Means" with "Firearms" to reduce all risks associated with unsafe storage practices. Develop an infographic to support the campaign.

2.7 Develop an approach to firearm safety modeled after the motorcycle and all-terrain vehicle (ATV) operator training program (see AFI 91-207)[70] to enable commander awareness of firearm ownership, as well as ensure all firearm owners are trained in safe practices and have a plan and means to safety store all firearms.

2.8 Adapt evidence-informed approaches, such as Counseling on Access to Lethal Means (CALM), to develop a brief, tailored eLearning or video-based training to teach AF leaders and non-medical gatekeepers when and how to strategically engage Airmen and Guardians in conversations about lethal means and safety.

2.9 In light of recent changes to DoD policy regarding possession of privately owned firearms on DoD property, update PME targeting non-medical gatekeepers such as first sergeants and frontline supervisors, to include information about these policies as well as procedural guidance for permitting the carrying of privately owned firearms on DoD property by DoD personnel for purposes that are not associated with the performance of official duties (see DoDD 5210.56).[71]

2.10 Enhance the Ask, Care, Escort model by directly teaching Airmen and Guardians strategies for managing situations in which an individual minimizes risk or directly (e.g., says "no, thank you") or indirectly (e.g., rolling eyes) refuses to be escorted to a qualified professional or leadership.

2.11 Require DAF chaplains to complete the evidence-informed Chaplains-CARE training online in order to enhance knowledge, skills, and abilities in intervening with at-risk Airmen, Guardians, and family members.

- Chaplains-CARE, a program funded by DSPO and created by educators at USU in partnership with military chaplains, serves as adjunctive training to LivingWorks Applied Suicide Intervention Skills Training (ASIST).
- MilLife Learning is currently hosting Chaplains-CARE and the course can be accessed via the Course Catalog. In 2023, the course will receive an update and may be temporarily not available.

Core Element 3.

Guidelines for Commanders on Use of Mental Health Services: Commanders receive training on how and when to use mental health services and guidance on their role in encouraging early help seeking behavior.

Recommendations:

3.1 Develop and provide tailored, evidence-informed or evidence-based training to DAF leaders on how and when to motivate timely, preferably early, help-seeking behavior, particularly when presented with Airmen and Guardians experiencing the following:

- Suicide Warning Signs
  Examples: Change in Behavior or Presence of Entirely New Behaviors
- Thoughts about Death and Dying or Thoughts about Suicide
- Non-Suicidal and/or Suicidal Self-Directed Violence
- Problematic Drinking and/or Drug Use Behavior
- Loneliness and/or Social Disconnection
- Exposure to Significant Life Events
  Examples: Trauma, Loss, Divorce, Suicide, Sexual Assault, Custody Battle
- Interpersonal Violence
- Administrative and/or Legal Stressors
- Shame-Inducing Events
  Examples: Letter of Counseling, Physical Fitness Test Failure, Removal of Child due to Allegations of Abuse
- Fall from Grace Incidents
  Examples: Allegations of Child Pornography, Domestic Violence Charges
- Odd and Bizarre Behavior Noticed by Multiple Individuals
- Persistent Sleep Related Problems Not Being Addressed
- Decline in Duty Performance or Personal Care
- Chronic Physical Pain
- Cognitive Impairment and/or Traumatic Brain Injury
- Signs of Depression, Anxiety, Agitation, and/or Anger
- Occupational and/or Deployment Related Stressors
- Professional Burnout
- A Medical Evaluation Board or Other Fitness for Duty Determination

3.2 Develop and provide tailored, evidence-informed or evidence-based training to commanders, first sergeants, and supervisors to support them in their role as a gateway to mental health care for Airmen who are experiencing stressors noted above. Encourage the following actions for leaders:

a. Provide instruction on how leaders can engage with Airmen to learn about the situation, inquire about suicide risk, and provide support, to include making an informal, non-mandatory recommendation to seek care from a mental health provider.

b. Consult in a timely manner with a mental health provider regarding a potential Command-Directed Evaluation (CDE), when Airmen do not seek care or discontinue care.

c. Consult with a mental health provider if uncertain whether a CDE is needed prior to or in addition to encouraging care-seeking.

3.3 Commanders, first sergeants, or supervisors recommending mental health care should engage in the following actions:

a. Offer to assist with care-seeking and normalize help-seeking as a positive action.

b. Contact the mental health provider to provide observations prompting the informal referral and other observations of concern.

c. Follow-up with the Airman to see if care was pursued, troubleshoot barriers to care, encourage continuation of care, and inquire about perceived benefits.

3.4 Move AFI 44-172[72] instructions specific to commanders to a non-medical AFI directly related to command; expand the information in this AFI to include guidance related to recommendations in this report and other related sources.

3.5 Form a Task Group consisting of commanders, first sergeants, chaplains, and mental health providers to develop a series of safety measures built around reprimands such as Letters of Counseling (e.g., do not reprimand an Airman or Guardian immediately before a weekend, especially a holiday weekend), and make the guidance available to all commanders.

3.6 Develop a new standard or practice, in collaboration with DAF leadership and mental health providers, such that Airmen and Guardians assigned to work within the Armory are required to be evaluated by a mental health provider on fitness for duty every 6-months.

a. Develop guidelines and training for mental health providers for conducting such evaluations, to include communicating and coordinating with DAF leadership to optimize feasibility of this approach.

b. Establish an infographic for dissemination to armories across MAJCOMs to highlight warning signs for suicide risk.

3.7 Review and evaluate existing mental health consultation services available to Air Force leaders at all levels who may be struggling with decisions pertaining to Airmen and Guardians exhibiting mental health issues.

a. Assess leadership awareness, use, facilitators, barriers, and perceived benefits of mental health consultation.

b. Assess leadership perceptions of the confidentiality of existing mental health consultation services and beliefs regarding whether consultation may harm the career of the leader requesting consultation or the Airmen on whom consultation is sought.

c. Address lack of awareness of mental health consultation services or inaccurate perceptions of these services in relevant PME and development of an infographic.

d. Modify existing services based on program evaluation efforts or develop new resources to enhance acceptability, feasibility, use, and effectiveness of mental health consultation services.

e. Consider extending existing confidential mental health consultation services to romantic partners, spouses, peers, and family members of Airmen and Guardians.

Core Element 4.

Unit-Based Preventive Services: Helping-agency professionals partner with unit leaders to provide services at the work site to increase access, encourage help-seeking, and promote familiarity, rapport, and trust with the force and families.

Recommendations:

4.1 Outline the specific functions of the unit-based preventive services in the realm of DAF suicide prevention such that the desired community outcomes can be effectively and programmatically tracked over time.

– Unit-based preventative services have an integral role to play given challenges associated with mental health care access, barriers to care, reluctance to seeking mental health care, and at times, potential lack of trust of mental health due to concerns about military career progression.

4.2 Evaluate biennially commanders' and helping agencies' compliance with the requirement to provide services at worksites to increase access, promote help-seeking, and promote familiarity, rapport, and trust with uniformed Airmen and their families (AFI 90-5001, 5.4.4.); encourage commanders to invite helping agency professionals to unit functions and to visit duty sections to build rapport with assigned personnel.

a. Ensure helping agencies are resourced sufficiently to provide the level of unit involvement required by AFI 90-5001, 5.4.4.

b. Evaluate availability and accessibility of helping resources at the worksite and at service locations to ensure hours of availability align with operational schedules and tempo.

c. Incorporate reporting of evaluation results and any corrective action planning into existing Integrated Resilience processes.

d. Encourage communication and coordination between commanders and helping agencies such that helping agencies are made aware of duty sections of concern and to facilitate focused, tailored engagement of appropriate helping agencies within those duty sections.

4.3 Generate a pathway for unit-based preventive services and unit leaders to promptly refer Airmen or Guardians to the DAF Emergency Financial Assistance Program as soon as issues with pay such as delayed or erroneous payments occur or as soon as any financial-related strain has been noted.

4.4 Create guidelines and step-by-step instructions for evidence-informed Wellness Checks to be performed by unit leaders or unit-based preventive services or peers or family members, whenever needed.

a. Include guidance for initiating Wellness Checks through base or local authorities when unit-based checks are not possible or appropriate.

b. Ensure that these Wellness Checks, especially if prompted by others' concerns, result in a timely connection to mental health and other helping resources within the unit.

c. Educate the entire military community including family members, romantic partners, spouses, and adult children of Airmen and Guardians about how an anonymous request for Wellness Checks can be initiated and disseminate information on ONE primary point of contact for each MAJCOM in case of an emergency and the Military Crisis Line information (1-800-273-8255) as an avenue for confidential consultation with a trained professional.

d. Generate a holiday back-up plan for Wellness Checks to ensure availability of unit leaders and/or unit-based preventive services during long weekends or national holidays.

4.5 Require installations to provide Airmen and Guardians who have limited availability for day-time appointments, top secret clearances, or sensitive roles (e.g., Air Force Special Operations, pilots, Remotely Piloted Aircraft pilots) access to medical, mental health, chaplaincy, and other helping agency and support services aligned with unit operational schedules.

a. Encourage leaders of Airmen and Guardians in sensitive roles to be particularly vigilant to early signs of concern. Ignoring or neglecting signs of concern heightens risk of negative impacts on the member, the unit, the mission, as well as the risk of suicide.

b. Encourage leaders to engage with Airmen and Guardians to understand the nature of the concern and promote use of non-medical, confidential counseling and spiritual support services (e.g., Military OneSource, Military Family Life Counselors, Chaplains) when appropriate and when early signs of distress are noticed.

c. Encourage leaders to promote early help-seeking through medical or mental health services when concerns about fitness for duty or risk of harm to self or others are present. Intervene early to minimize risk and the potential for negative career-related impact.

d. Encourage leaders to consult with a mental health provider when uncertain about the appropriate level or nature of services to encourage a member to utilize. This may be especially helpful when there are concerns, held either by the leader or the member, that engagement in supportive services may impact one's career, as attempts to protect an individual's career may backfire and result in inadequate safeguards or life-saving treatments.

Core Element 5.

Wingman Culture: Wingmen practice healthy behaviors and make responsible choices and encourage others to do the same. Wingmen foster a culture of early help-seeking. Wingmen recognize the risk factors and warning signs of distress in themselves and others and take protective action.

Recommendations:

5.1 Create, pilot test, and disseminate public health messaging for the Total Force to tackle the issue of joking in relation to suicide.

a. Build a Wingman culture where joking about suicide is not tolerated similar to how joking about having a bomb on a passenger airplane is not tolerated.

b. Encourage peers, family members, first sergeants, and supervisors to take joking about suicide, whether during face-to-face interactions or in written form (e.g., text messages, social media), seriously rather than viewing such joking as harmless and not as a true indicator of suicide risk.

5.2 Broaden and strengthen the existing culture of personal accountability for physical fitness to emphasize all components of Comprehensive Airman Fitness to include Mental, Physical, Social, and Spiritual (AFI 90-5001, Table 1.1), such that Airmen and Guardians gain a better understanding and appreciation for routine self-care and maintenance.

a. Develop messaging to enhance Airman and Guardian understanding of self-care, for example, aircraft maintenance cannot be postponed and/or neglected due to the detrimental impact of a potential aviation accident. The same logic can be used to promote routine maintenance of one's mental, physical, social, and spiritual fitness which is critical for Total Force mission readiness.

b. Emphasize early help-seeking as a sign of strength and commitment to one's family, friends, and the DAF as an organization, analogous to the importance of self-aid and buddy care to be able to address injuries on the battlefield.

c. Develop and provide resources to support and strengthen mental fitness similar to existing resources to support and strengthen physical fitness (e.g., physical fitness centers, trainings, and assessments), social fitness (e.g., efforts to foster unit cohesion), and spiritual fitness (e.g., religious settings, services, and studies).

5.3 Develop a series of evidence-informed training programs to help Airmen and Guardians strengthen their skills in the context of romantic relationships with emphasis on the following:

- Emotion Regulation and Distress Tolerance
- Strategies for Managing Relational Conflict
- Tips for How to Best Navigate a Relationship Breakup
- How to Effectively Manage Geographical Separations and Deployments
- Text Messaging and Social Media Influences on Relationship Conflict
- Sexual Health and Safe Sex Practices
- Finance-Related Stressors and Communication about Money
- Jealousy, Infidelity, and/or Fear of Abandonment
- New Parent-Related Stress and Relationship Changes
- Recognizing Warning Signs of Interpersonal Violence
- Impact of Alcohol Misuse on Relationship
- Safety Planning around Suicidal Thoughts and Communication of Pain through Non-Suicidal or Suicidal Self-Directed Violence
- Lethal Means Safety and Environmental Safety
- Community Resources for Romantic Relationship Problems including New Parent Support Programs

5.4 Develop and implement an educational campaign to destigmatize the acknowledgement of adverse childhood events (e.g., child abuse, parental divorce, parental death, exposure to domestic violence, neighborhood violence) in order to encourage Airmen and Guardians to seek help, coaching, or mentorship to help overcome the negative impact of adverse childhood events.

- The experience of adverse childhood events is common in our society, but due to shame and stigma, one's negative childhood-related experiences may not be shared during the time of accession.
- A campaign such as this can convey that DAF is aware of the problem and cares about addressing it rather than wanting to take an easy path to either ignore it or strategize to exclude those seen as damaged out of military service.
- This can also reinforce that our history does not dictate our destiny; therefore, Airmen and Guardians, despite adverse childhood events, can make meaningful contributions to DAF but only if these negative experiences carried from childhood are faced through early help-seeking.

5.5 Disseminate the evidence-based program, Wingman-Connect,[73] across all MAJCOMs to help Airmen and Guardians to build social connections and group cohesion to help reduce overall suicide risk and promote unit cohesion.

- It is extremely rare to have robust and rigorous programmatic evaluations of group-level interventions.
- Wingman-Connect has been built and evaluated within the DAF culture and the program may have more important implications for the Total Force now as our society transitions to the post-COVID-19 realities and adjustments.
- Important to note is that the Wingman-Connect program resulted in improvements across multiple outcomes including skills for managing career and personal stressors.

5.6 Continue to educate Airmen and Guardians about their rights to report, and the benefits of reporting, harassment, bullying, intimidation, sexual assault, bias, and discriminatory practices.

a. Provide information for the Air Force Equal Opportunity (EO) via various channels and include information about the right to file complaints of discrimination based on race, religion, national origin, sex (including pregnancy, gender identity, and sexual orientation), age, genetic information, disability, or prior EO activity (reprisal).

b. Widely disseminate the Discrimination and Sexual Harassment Hotline 24 hours a day number (1-888-231-4058 or 1-800-371-0617 for National Guard).

5.7 Mandate that first sergeants, supervisors, and leaders connect transitioning Airmen and Guardians to the inTransition program.

– "The inTransition program is a free, confidential program that offers specialized coaching and assistance for active-duty service members, National Guard members, reservists, veterans and retirees who need access to mental health care when:

» Relocating to another assignment

» Returning from deployment

» Transitioning from active duty to reserve component or reserve component to active duty

» Preparing to leave military service

» Any other time they need a new mental health provider or need a provider for the first time."

– Wingman culture respects caring for those who are physically and emotionally wounded and does not give up on any Airman or Guardian regardless of the circumstances involved. In some instances, units or individual members may struggle with an Airman or Guardian who is viewed as the "problem-child" leaving the service. The Airman's Creed, which is a promise to country and colleagues, ends with the following:

> *"I AM AN AMERICAN AIRMAN.*
> *WINGMAN, LEADER, WARRIOR.*
> ***I WILL NEVER LEAVE AN AIRMAN BEHIND,***
> *I WILL NEVER FALTER,*
> *AND I WILL NOT FAIL."*

Core Element 6.

Investigative Interview Policy: Following any investigative interview, the investigator is required to 'hand-off' the individual directly to the commander, first sergeant, or supervisor. The unit representative is then responsible for assessing the individual's emotional state and contacting a mental health provider if any question about the possibility of suicide exists.

Recommendations:

6.1 Update this Core Element and any associated AFIs such that unit representatives are not responsible for assessing the Airman or Guardian's emotional state and possibility of suicide following any investigative interview; instead, once the 'hand-off' to the commander, first sergeant, or supervisor occurs, seek a same-day mental health consultation to discuss suicide risk, plan for connection with mental health, and facilitate the member's participation in the Limited Privilege Suicide Prevention (LPSP) program. The following considerations may be helpful:

– Assessing and recognizing suicide risk is a complicated process for even well-trained medical and mental health professionals. Unit representatives are very likely not to have the knowledge, skills, and abilities necessary to make such determinations on their own.

– If the hand-off to leadership occurs when mental health clinic services are not available, prior to releasing the member, the command is advised to consult with the on-call mental health provider regarding potential risk indicators, support, and safety planning and to connect the member with mental health at the earliest availability

– If the member declines the recommended mental health connection, prior to releasing the member, the command is advised to consult with a mental health provider regarding whether a CDE is warranted for evaluation of suicide risk.

– Above and beyond the suicide risk determination issue, it is good practice to use this opportunity to ensure that an Airman or Guardian is connected with mental health and understands the benefits of the LPSP program.

6.2 Determine if unit representatives for Airmen or Guardians under investigation can disseminate an informational handout, approved by the Office of the Air Force General Counsel, on legal aid, mental health, and financial aid resources as well as on potential advocates without financial interests or conflicts of interest (e.g., a chaplain) to be present during sensitive and potentially stressful meetings.

6.3 Ensure that immediate command notification is made in cases where a child is removed from an Airman or Guardian's home due to allegations of abuse.

Core Element 7.

Post-Suicide Response (Postvention): Suicide impacts coworkers, families, and friends. Offering support early is associated with increased help-seeking behavior.

Recommendations:

7.1 Expand the AFI 44-153 Disaster Mental Health Response & Combat and Operational Stress Control[74] guidance that, following an all-hazard incident, individuals can seek up to four, one-on-one meetings with a member of the Disaster Mental Health (DMH) team for the purpose of education and consultation (para 2.5.4 & 2.5.4.1) to specifically include incidents outside the scope of an all-hazards incident, to include individuals with direct exposure to suicide or other untimely, unexpected, and/or accidental deaths that may affect personnel.

a. Encourage commanders, first sergeant and leaders to promote the use of this option when direct exposure to suicide occurs or other untimely, unexpected, and/or accidental death occurs.

b. Equip DMH team members and leaders with an infographic tailored specifically to direct exposure that both promotes utilization and explains the nature of this opportunity, including that it is non-medical and thus is not documented in the medical record.

c. Develop training for DMH team members on evidence-informed, suicide prevention and trauma exposure tailored education and consultation to furnish to survivors when providing this service.

7.2 Implement a clear procedure for the dissemination of information about an adverse event or a sentinel event (e.g., suicide death of a patient) to include a written memo or email to be disseminated to the entire clinic or treatment facility or unit in order to responsibly and systematically manage the flow of accurate and de-identified information within the system.

– This preemptive approach minimizes the chances of rumors and spreading of false information.

– In addition, personnel absent during the oral notification can at the very least receive the written notification.

7.3 Provide a brief training to Security Forces, Fire, Medical/Ambulance, Emergency Department, and Public Affairs personnel regarding best practices for steps to take in the event of a suicide attempt or suicide death of an Airman or Guardian.

7.4 Request that MAJCOMs generate a system for tracking postvention services offered to the unit, coworkers, peers, and family members to ensure accountability but also to generate lessons learned for system-related enhancements.

7.5 Create a new system for the Air Force Office of Special Investigations (AFOSI) to generate a brief, "good-faith" report to be shared directly with immediate family members of the deceased Airman or Guardian within 90 days from the date of investigation closure, in collaboration and coordination with the Tragedy Assistance Program for Survivors (TAPS).

Core Element 8.

Community Action Board (CAB) and Community Action Team (CAT): At the Air and Space Forces, MAJCOM, and base levels, the CAB and CAT provide a forum for the cross-organizational review and resolution of individual, family, installation, and community issues that impact the force readiness and the quality of life.

Recommendations:

8.1 Require Community Action Board (CAB) and Community Action Team (CAT) at the Air and Space Forces, MAJCOM and base level to review this report, and future such reports, as an additional source of information for developing the Community Action Plan.

8.2 Emphasize to CAB and CAT members at all levels their central role and purpose in preventing suicides.

- The CAB/CAT predecessors, the Community Action Information Board (CAIB) and Integrated Delivery System (IDS), was one of the Air Force Suicide Prevention Integrated Product Team's major programmatic recommendations in the development of the Air Force Suicide Prevention Program.
- The hope was the IDS would offer "more comprehensive prevention services, which will increase protective factors and decrease behavioral risk factors in the Air Force community" (see AFPAM 44-160, p. 24).[75]
- It is important that each agency/office represented in the CAB/CAT recognizes through their respective roles that they have a responsibility for the enhancement of protective factors, active awareness and action in response to risk factors, and promotion of early help-seeking.

8.3 Require base Community Action Boards (CAB) and Community Action Teams (CAT) to create an easy to reference handout on local firearm storage options to include Air Force and civilian locations for their own MAJCOM community; review and post these on the DAF Resiliency and Suicide Prevention website.

Core Element 9.

Limited Privilege Suicide Prevention Program: Patients undergoing legal action who are at risk for suicide are afforded increased confidentiality when seen by mental health providers.

Recommendations:

9.1 Review, discuss, and re-invigorate the messaging around the LPSP Program; create an infographic and informational video to disseminate across all MAJCOMs; require that AFOSI provide Airmen or Guardians with a 1-page infographic on the program on the same day they are notified about a pending investigation.

- The LPSP Program is often recognized as one of the most innovative elements of the Air Force Suicide Prevention Program for helping Airmen and Guardians undergoing legal action, yet knowledge about this program continues to be very limited.

9.2 Create a formal tracking system for information made available on the Limited Privilege Suicide Prevention Program, referrals to mental health, and the number of Airmen and Guardians utilizing this program in any given year.

- It is not clear whether the Air Force has ever evaluated the efficacy or helpfulness of this program from the perspective of the target audience and the stakeholders involved. Therefore, a program evaluation, even if small in scope, is a step in the right direction.

Core Element 10.

Commanders Consultation Assessment Tool: Commanders use a variety of assessments (e.g., Unit Climate Assessment, Air force Community Assessment Survey, Airman Comprehensive Assessment) recommended by appropriate agencies, to gain insight into unit strengths and areas of vulnerability.

Recommendations:

10.1 Review the Air Force Community Feedback Tool to specifically identify and track suicide-relevant outcomes; ensure that these outcomes are in line with the DAF Suicide Prevention Strategic Model.

Core Element 11.

Suicide Event Tracking and Analysis: Information on all AF suicides and suicide attempts are entered into a central database, currently the Department of Defense Suicide Event Report (DoDSER), to identify suicide risk factors and trends.

Recommendations:

11.1 Update Core Element 11 to reflect the DoD Annual Suicide Report (ASR) and the annual DAF Standardized Suicide Fatality Analysis (DAF StandS) as supplements to the DoDSER.

- The DAF StandS methodology will be next applied to the CY 2018, CY 2019, and CY 2021 Total Force DAF suicides.
- Future iterations of DAF StandS will result in one Final Report, consolidating content from the *Leadership and Scientific Reports*.

11.2 Ensure that, moving forward, completed DoDSERs are on file for each Airman and Guardian who dies by suicide and made available to the DAF StandS team.

11.3 Consider ways in which information from the Family Advocacy Program, specifically nature of services offered and documentation available, can be shared with the DAF StandS team for review and analysis of suicide deaths.

11.4 Require that AFOSI complete an investigation into every DAF Total Force suicide, including for Guardians, Reserve Airmen, and federal civilians; ensure that completed Reports of Investigation (ROIs) as well as all exhibits are available to the DAF StandS team.

11.5 Expand the information available for Total Force DAF suicide death reviews to include records from the Automated Military Justice Analysis & Management System (AMJAMS), records pertaining to ongoing investigations (e.g., for sexual assault or child abuse), and strive to obtain complete personnel records and medical and mental health records. Ensure that all available source documents are available to the DAF StandS team.

Additional Recommendations

12. Firearm Access and Storage and Environmental Safety Precautions

12.1 Develop a suicide prevention campaign targeting Base Exchanges across all MAJCOMs to include education about suicide risk warning signs, public health messaging about "Go SLO" (Safes, Locks, Storing Means Outside the Home), information on the dangers of mixing alcohol and firearms (i.e., similar to dangers of mixing intoxication and driving), and 1-page infographics on safe and secure firearm storage options, including pricing for safes and gun locks.

12.2 Assemble a task group with expertise in laws and regulations, public health, suicide prevention, mental health, firearm safety, and security forces to examine the responsible sale of firearms at Base Exchanges across all MAJCOMs to involve consideration of the following factors:

1. Minimum age requirement of 21 years for carrying a privately owned firearm for personal protection
2. Procedures for the correct identification of red flags, as listed under the Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF) Firearms Transaction Record Form 4473 (Revised May 2020),[76] in particular:
   - » Item 21b (felony/UCMJ violation)
   - » Item 21e (unlawful drug user)
   - » Item 21f (psychiatric hospitalization)
   - » Item 21h (subject to court order including Military Protection Order)
   - » Item 21i (misdemeanor crime of domestic violence)
3. Procedures for the correct identification of additional red flags not listed on ATF Form 4473 including:
   - » Placement on the High Interest List (HIL) at an Air Force treatment facility
   - » Placement on the "Do Not Arm" list for reasons related to risk for self-harm or interpersonal violence
4. Procedures for identifying Airmen and Guardians placed on the "Do Not Arm" list
5. Procedures for compliance with DoD Directive 5210.56.[71]

12.3 Create a commander decision aid to include a series of easy-to-follow and systematic steps to guide leaders with the decision-making involved to remove access to firearms due to suicide risk and to return access to firearms; fund research that advances understanding of best practices.

12.4 Establish a task group to review environmental safety within DAF dormitories in order to generate ideas for maximizing safety of all Airmen and Guardians (e.g., master key maintenance, alcohol use, firearm storage).

Please also refer to the following recommendations presented previously in reference to Firearm Access and Storage:

1.3 Require DAF leadership at all levels, including the Secretary of the Air Force and the Air Force and Space Force Service Chiefs as well as senior enlisted and frontline supervisors, to promote a culture of safe firearm storage across the DAF. As a safety-oriented culture, firearm safety can be incorporated as a foundational component within the Air Force through the following leadership actions:

a. Communicate regular messages regarding secure storage of personally owned firearms.

b. Resource and support safe firearm storage initiatives recommended in this report.

c. Promote responsibility to safely store personal firearms, as well as educate Airmen on the benefits and range of options for such storage.

2.5 Generate an easy-to-follow multi-step guide or infographic for Airmen and Guardians on firearm safety practices with Do's and Don'ts in line with DoD and Air Force Instructions (DoDI and AFI) and policies.

2.6 Shift the focus of the "Go SLO" campaign (Safes, Locks, Storing Means Outside the Home) from suicide risk reduction specifically to firearm safety generally by replacing "Means" with "Firearms" to reduce all risks associated with unsafe storage practices. Develop an infographic to support the campaign.

2.7 Develop an approach to firearm safety modeled after the motorcycle and all-terrain vehicle (ATV) operator training program (AFI 91-207 The US Air Force Traffic Safety Program, para 4.4) to enable commander awareness of firearm ownership, as well as ensure all firearm owners are trained in safe practices and have a plan and means to safety store all firearms.

2.8 Adapt evidence-informed approaches, such as Counseling on Access to Lethal Means (CALM), to develop a brief, tailored eLearning or video-based training to teach AF leaders and non-medical gatekeepers when and how to strategically engage Airmen and Guardians in conversations about lethal means and safety.

2.9 In light of recent changes to DoD policy regarding possession of privately owned firearms on DoD property, update PME targeting non-medical gatekeepers such as first sergeants and frontline supervisors, to include information about these policies as well as procedural guidance for permitting the carrying of privately owned firearms on DoD property by DoD personnel for purposes that are not associated with the performance of official duties (see DoDD 5210.56).[71]

8.3 Require Community Action Board (CAB) and Community Action Team (CAT) to create an easy to reference handout on local firearm storage options to include Air Force and civilian locations for their own MAJCOM community; review and post these on the DAF Resiliency and Suicide Prevention website.

13. Health Care Services for Airmen and Guardians

13.1 Review Alcohol and Drug Abuse Prevention and Treatment (ADAPT) programming to determine extent to which evidence-informed suicide prevention content is included; update curriculum as needed particularly in the realm of alcohol and firearm safety; create consistent messaging to be used across all ADAPT delivery platforms to address the mixing of firearms and alcohol – A Firearm, Not Your Drinking Buddy! – and the mixing of alcohol and prescription medications; make efforts to widen the reach of ADAPT to members of the National Guard and Reserves.

13.2 Form a multi-disciplinary task force with at least one individual with suicide prevention expertise to review any existing standardized templates or forms designed to capture comprehensive information on suicide risk assessment, management, and treatment for members and civilians treated at Air Force treatment facilities; enhance existing templates or develop a new template to comprehensively document all suicide risk assessment, management, and treatment occurring within Air Force treatment facilities. This *Unified Suicide Risk Assessment, Management, and Treatment Form* is recommended to include the following:

1. Information on lifetime non-suicidal directed violence, suicide ideation, and suicide attempt history (i.e., based on self-report, clinical interview, collateral sources [family reports], suicide screenings, and other suicide-related assessments)
2. Information on prior suicide risk assessment, management, and treatment services obtained from other healthcare institutions (noting the number of lifetime psychiatric hospitalizations) and/or from previous primary and/or specialty care providers
3. Information on recent and current suicide-relevant data (e.g., risk and protective factors) obtained at the time of pre-admission and initial psychiatric evaluation (see Franklin et al.'s 2017 meta-analysis[55] for the most up-to-date science on this topic)
4. Information on current suicide risk level of the patient and supporting justification with a full understanding of the fluidity of suicide risk[77] and limitations in accurately predicting suicide risk[78]

5. Information on methods used for previous lifetime suicide attempts and lethality of these methods as well as patient's current plans and preferred methods for suicide
6. Information on common themes (e.g., hopelessness, thwarted belongingness, shame) communicated by the patient about a desire to die by suicide while receiving care
7. Information from any clinically and/or research-driven assessments pertaining to suicide risk performed with each patient
8. Information on patient's reasons for dying and reasons for living and any notable changes in these reasons over time
9. Information on patient's safety plan and any updates to the safety plan over time
10. Information on specific suicide-targeted interventions offered to the patient, compliance with these interventions, and outcomes monitored to track patient progress
11. Information on family members to contact in case of a suicide crisis
12. Information on recommendations for relapse prevention upon discharge from psychiatric inpatient care
13. Information on access to lethal means for suicide, lethal means counseling, and integration of this information into the safety plan for patients scheduled for psychiatric discharge
14. Information on any other domains that the working committee deems necessary to capture and monitor within this unified and consolidated form.

a. Establish a task group to evaluate facilitators and barriers of effective use of existing templates and therecommended Unified Suicide Risk Assessment, Management, and Treatment Form including: staffing shortages, lack of specialized staff members (e.g., case managers), demand for and capacity to provide services, provider burn-out, outdated or inefficient information systems, and any other factors identified by the task group.

b. Evaluate and provide resources required to support the development, utilization, and refinement of the Unified Suicide Risk Assessment, *Management, and Treatment Form*.

13.3 Train and continually re-train all mental health providers on effective and promising interventions for suicide-focused care with suicidal patients (e.g., Safety Planning Intervention [SPI], Crisis Response Plan [CRP], Cognitive Therapy for Suicide Prevention [CT-SP], Brief Cognitive Therapy for Suicide Prevention [BCBT], Collaborative Assessment and Management of Suicidality [CAMS]); track progress on adoption and adherence of evidence-informed and evidence-based suicide-focused care practices.

a. Provide targeted training to ensure compliance with AFI 44-172, 2.4.5, requiring all patients be asked if they plan to acquire or currently possess a privately owned firearm, ammunition, or other weapons/means of hurting themselves at intake appointments.

b. Provide targeted training to promote discussion of safe firearm storage, consistent with the DAF culture of safety, when patients report personal firearm ownership at intake.

c. Provide targeted training to address discrepancies when patients either: (1) endorse no mental health-related symptoms in the presence of notable life events and stressors (e.g., divorce, legal charges), or (2) endorse no suicidal thoughts or behaviors in the presence of multiple mental health-related symptoms.

d. Provide all mental health providers with biennial updates on current recommended best practices regarding effective suicide focused care, to include training on new treatment modalities or revisions to existing interventions.

e. Develop and incorporate standardized peer review tools to evaluate use of suicide-focused care, including lethal means counseling, and require Mental Health Clinic Directors to incorporate them into existing peer review processes of all HIL cases.

f. Disseminate the following sources to all mental health providers to provide helpful information on evidence-informed and evidence-based suicide-focused care practices:

» VA/DoD Clinical Practice Guidelines for Assessment and Management of Patients at Risk for Suicide (2019)

» Air Force Guide for Suicide Risk Assessment, Management, and Treatment (2014)

» Zero Suicide Initiative

» Counseling on Access to Lethal Means (CALM)

13.4 a. Require all MAJCOM Behavioral Health Consultants or equivalents to organize an annual virtual summit with all Clinic Directors to discuss ideas and progress made on system-level enhancements to suicide-focused care and exchange lessons learned; consolidate and report lessons learned to the DAF SPP.

b. Require senior ANG and AFRC Behavioral Health leadership to organize an annual virtual summit with all Directors of Psychological Health or similar installation-level suicide prevention leaders to discuss ideas and progress made on system-level enhancements to suicide-focused care and exchange lessons learned; consolidate and report lessons learned to the DAF SPP.

13.5 Generate a flagging system in mental health electronic records to identify individuals with chronic or recurring mental health problems and indicators of past suicide risk, with or without current, non-clinically significant risk, who may benefit from focused intervention and monitoring; request for a medical chart review of each case and form a multidisciplinary group of providers at each clinic, with the presence of a medical ethics specialist, to make decisions about future course of treatment and desired outcomes.

a. Consider creating this flagging system for individuals who do not currently meet criteria for placement on the HIL, but who may be added to the HIL if and when suicide risk reaches clinical significance.

13.6 Train and continually re-train providers in primary care, emergency care, the Family Advocacy Program, ADAPT, and mental health specialty care on Counseling on Access to Lethal Means (CALM) such that they have the knowledge, skills, and abilities to help Airmen and Guardians at risk for suicide through a conversation about lethal means safety and environmental safety.

13.7 Educate medical providers working in Air Force treatment settings about the dangers associated with underdiagnosing a chronically ill Airman or Guardian.

13.8 Initiate a messaging campaign for mental health providers serving the DAF to be aware of the following three key issues noted in medical records of deceased Airmen and Guardians:

1. Lack of endorsement of any mental health-related symptoms on self-report measures, in the presence of notable life events and stressors (e.g., divorce, legal charges), may be a significant finding worth further discussion.
2. Lack of endorsement of any suicidal thoughts or behaviors on screening measures, in the presence of multiple self-reported mental health-related symptoms, and in some cases moderate to high symptom severity, may be a significant finding worth further discussion.
3. Lack of documentation regarding conversations between providers and patients about lethal means may indicate that providers are either not engaging in these conversations, or they are not being adequately documented.

a. Educate clinicians to explore and discuss discrepancies in self-reported life stressors, mental health-related symptoms, and suicidal thoughts and behaviors; clinicians may normalize the presence of mental health-related symptoms and suicidal thoughts during stressful life events in an effort to facilitate disclosure if present.

13.9 Appoint a group of civilian and military subject matter experts in suicidology and comprehensively review the HIL processes for DAF as this is an integral program for protecting Airmen and Guardians with recognized suicide risk; the program must be periodically reviewed and improved upon.

13.10 Recommend that each treatment facility conduct a multidisciplinary clinical analysis within 30 days following AFMES confirmation of every suicide death and suicide attempt of an Airman or Guardian, to identify potential missed opportunities for prevention and intervention and lessons learned.

13.11 Consider adding a question about Family History of Suicide and exposure to Adverse Childhood Experiences (ACEs) into existing wellness screening questionnaires utilized early in one's time in the Air Force.

a. Create a new "initial" Periodic Health Assessment (PHA) process done one time during an Airman's first PHA in the Air Force that includes such historical information. Adapt annual forms to screen for exposure to suicide or any loss of a friend, family member or loved one since the last PHA.

b. Use technology to have the historical risk factors automatically populated into the annual PHA template so promote review and consideration on potential impacts in light of current PHA response/life situations.

c. Use technology to have these risk factors also populated into the medical history section of the Electronic Medical Record so they are available for all healthcare providers to review to better understand the whole person when applicable.

d. Train healthcare providers, and particularly PHA providers, on the relevance of ACEs and other historical factors as well as guidance on use of this information in consultation, education and identification of relevant resources during PHA exam or other medical encounters.

13.12 Update the 11 Elements of the Air Force Suicide Prevention Program to include new elements targeting the following critical areas: (1) suicide intervention; and (2) lethal means safety.

– A close review of Table 3 in this report highlights the exceptionally strong alignment of the 11 elements of the Air Force Suicide Prevention Program with the suicide *prevention* and *postvention* domains. However, the domain of suicide *intervention* (e.g., access to healthcare, evidence-based or evidence-informed care, quality of care, best practices for documentation, coordination and continuity of care, and effectiveness of care) is not explicitly addressed by the 11 core elements of the Air Force Suicide Prevention Program. Furthermore, lethal means safety and more specifically firearm safety are not captured in the 11 elements of the Air Force Suicide Prevention Program.

Table 3. *Alignment of Leadership Report Recommendations with White House, CDC, and DAF Suicide Prevention Priorities*

WHITE HOUSE 2021	1 Improve Lethal Means Safety	2 Enhance Crisis Care and Facilitate Care Transitions	3 Increase Access to and Delivery of Effective Care	4 Address Upstream Risk and Protective Factors	5 Increase Research Coordination, Data Sharing, and Evaluation Efforts
Centers for Disease Control and Prevention (CDC) 2017	▪ Create Protective Environments	▪ Identify and Support People at Risk	▪ Strengthen Access and Delivery of Suicide Care	▪ Strengthen Economic Supports ▪ Promote Connectedness ▪ Teach Coping and Problem-Solving Skills ▪ Lessen Harms and Prevent Future Risk	
11 Elements of Air Force Suicide Prevention Program 2022				**Element 1.** Leadership Involvement **Element 2.** Addressing Suicide Prevention through Professional Military Training **Element 3.** Guidelines for Commanders: Use of Mental Health Services **Element 4.** Unit-based Preventive Services **Element 5.** Wingman Culture **Element 6.** Investigative Interview Policy **Element 7.** Post Suicide Response (Postvention) **Element 8.** Community Action Board (CAB) and Community Action Team (CAT) **Element 9.** Limited Privilege Suicide Prevention Program **Element 10.** Commanders Consultation Assessment Tool	**Element 11.** Suicide Event Tracking and Analysis
DAF StandS Leadership Report Recommendations 2023	1.3 2.5 - 2.9 8.3 12.1 - 12.4	3.6 4.4 13.6	2.10 4.1 - 4.5 13.1 - 13.12	1.1. - 1.3 2.1 - 2.11 3.1 - 3.7 5.1 - 5.7 6.1 - 6.3 7.1 - 7.5 8.1 - 8.3 9.1 - 9.2 10.1	3.7 5.1, 5.5 11.1 - 11.5

Note. The following 5 priorities were identified by DAF to reduce suicides in 2020: (1) Totally-new 2020 Total Force suicide prevention training; (2) Strengthen suicide prevention program implementation; (3) Time-based intervention; (4) Empowering and equipping families; and (5) Suicide postvention.

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LOOKING AHEAD

The Air Force SPP is commended for their continual active engagement and valuable contributions to saving lives of Airmen, Guardians, and civilians serving within the Department of the Air Force. We must emphasize that the intent behind providing a comprehensive list of recommendations is not to overburden DAF leadership or the SPP with additional tasks or ideas that may have limited implementation feasibility.

Change in a complex and dynamic organization such as DAF requires time and sustained effort. The recommendations put forth must be considered in the context of the DAF culture, mission readiness priorities, and resources. We trust that the DAF leadership serving as the target audience for this *Leadership Report* will achieve system-related enhancements in those domains recognized to be most salient, feasible, impactful, and the most likely to result in favorable outcomes not just for suicide risk mitigation but also for the overall health of the Total Force.

Photo by Joshua J. Seybert

APPENDIX A. GLOSSARY

Best Practices	Activities or programs that are in keeping with the best available evidence regarding what is effective.
Evidence-Based	Programs or interventions that have undergone scientific evaluation and have proven to be effective.
Evidence-Informed	Programs or interventions that may have not undergone scientific evaluation but those that rely on research evidence, clinician experience, and the people experiencing the practice.
Intervention	A strategy or approach that is intended to prevent an outcome or to alter the course of an existing condition (such as providing lithium for bipolar disorders, educating providers about suicide prevention, or reducing access to lethal means among individuals with suicide risk).
Means	The instrument or object used to carry out a self-destructive act (e.g., firearm, chemicals, medications, illicit drugs).
Nonsuicidal Self-Directed Violence	Also called nonsuicidal self-injury (NSSI), is self-directed behavior that deliberately results in injury or the potential for injury to oneself, without evidence of suicidal intent.
Nonsuicidal Self-Injury	Also called nonsuicidal self-directed violence, is self-directed behavior that deliberately results in injury or the potential for injury to oneself, without evidence of suicidal intent.
Perceived Burdensomeness	The belief that one is a burden to family, friends, and/or society and is theorized to increase desire for suicide.
Postvention	Response to and care for individuals affected in the aftermath of a suicide attempt or suicide death.
Prevention	A strategy or approach that reduces the likelihood of risk of onset or delays the onset of adverse health problems or reduces the harm resulting from conditions or behaviors.
Safety Plan	Written list of warning signs, coping responses, and support sources that an individual may use to avert or manage a suicide crisis.

Self-Directed Violence	Behavior that is self-directed and deliberately results in injury or the potential for injury to oneself. Self-directed violence can be non-suicidal or suicidal.
Suicidal Behaviors	Behaviors related to suicide, including preparatory acts, as well as suicide attempts and deaths.
Suicidal Intent	Evidence (explicit and/or implicit) that at the time of injury the individual intended to kill him or herself or wished to die and that the individual understood the probable consequences of his or her actions.
Suicidal Plan	A thought regarding a self-initiated action that facilitates self-harm behavior or a suicide attempt, often including an organized manner of engaging in suicidal behavior such as a description of a time frame and method.
Suicidal Self-Directed Violence	Also called suicide attempt - a non-fatal self-directed potentially injurious behavior with any intent to die as a result of the behavior. A suicide attempt may or may not result in injury.
Suicide	Death caused by self-directed injurious behavior with any intent to die as a result of the behavior.
Suicide Attempt	A non-fatal self-directed potentially injurious behavior with any intent to die as a result of the behavior. A suicide attempt may or may not result in injury.
Suicide Crisis	A suicide crisis, suicidal crisis, or potential suicide, is a situation in which a person is attempting to kill him or herself or is seriously contemplating or planning to do so. It is considered a medical emergency, requiring immediate suicide intervention and emergency medical treatment.
Suicide Ideation	Thoughts of engaging in suicide-related behavior.
Suicide Loss Survivors	Family members, friends, and others affected by the suicide of a loved one (also referred to as bereaved by suicide).

Photo by SSgt Shawn White

APPENDIX B. ACRONYMS

AA	Alcoholics Anonymous
ACC	Air Combat Command
ACE	Adverse Childhood Experience
ADAPT	Alcohol and Drug Abuse Prevention and Treatment
AETC	Air Education and Training Command
AF	Air Force
AFDW	Air Force District of Washington
AFGSC	Air Force Global Strike Command
AFI	Air Force Instruction
AFMC	Air Force Materiel Command
AFMES	Armed Forces Medical Examiner
AFOSI	Air Force Office of Special Investigations
AFRC	Air Force Reserve Command
AFSC	Air Force Specialty Code
AFSOC	Air Force Special Operations Command
AMC	Air Mobility Command
AMJAM	Automated Military Justice Analysis & Management System
ANG	Air National Guard
ASIST	Applied Suicide Intervention Skills Training
ASR	Annual Suicide Report
ATF	Bureau of Alcohol, Tobacco, Firearms, and Explosives
ATV	All-Terrain Vehicle
AWOL	Absent Without Official Leave
BCBT	Brief Cognitive Therapy for Suicide Prevention
CAB	Community Action Board
CAIB	Community Action Information Board
CALM	Counseling on Access to Lethal Means

CAMS	Collaborative Assessment and Management of Suicidality
CAT	Community Action Team
CD	Compact Disc
CDC	Centers for Disease Control and Prevention
CDE	Command-Directed Evaluation
COVID-19	Coronavirus Disease 2019
CPR	Care, Prevention, and Research Initiative
CRP	Crisis Response Plan
CT-SP	Cognitive Therapy for Suicide Prevention
CY	Calendar Year
DAF	Department of the Air Force
DHHS	Department of Health and Human Services
DMH	Disaster Mental Health
DoD	Department of Defense
DoDD	Department of Defense Directive
DoDI	Department of Defense Instruction
DoDSER	Department of Defense Suicide Event Report
DSPO	Defense Suicide Prevention Office
EO	Equal Opportunity
GPS	Global Positioning System
HIL	High Interest List
IAA	Interagency Agreement
IDS	Integrated Delivery System
JAG	Judge Advocate General
LPSP	Limited Privilege Suicide Prevention Program
MAJCOM	Major Command
NSSI	Nonsuicidal self-injury
OCONUS	Outside Contiguous United States
PACAF	Pacific Air Forces

PCS	Permanent Change of Station
PHA	Periodic Health Assessment
PME	Professional Military Education
ROI	Report of Investigation
SAFE	Secure Access File Exchange
SERP	Suicide Expert Review Panel
SPI	Safety Planning Intervention
SPP	Suicide Prevention Program
StandS	Standardized Suicide Fatality Analysis
TAPS	Tragedy Assistance Program for Survivors
UCMJ	Uniform Code of Military Justice
US	United States
USAFA	United States Air Force Academy
USAFE-AFAFRICA	United States Air Forces in Europe-Air Forces Africa
USSF	United States Space Force
USU	Uniformed Services University of the Health Sciences
VA	U.S. Department of Veterans Affairs
WHO	World Health Organization

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APPENDIX C. REFERENCES

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APPENDIX D. MAJCOM SPECIFIC FINDINGS

An overview of findings for the 117 Calendar Year (CY) 2020 Total Force Department of the Air Force (DAF) suicides is presented below, organized by major command (MAJCOM) and components, including the United States Space Force (USSF). Given the small numbers, we caution against comparisons between MAJCOMs, components, and branch. In the years to come, as more data are available, we anticipate exploring hypothesized trends within and between these organizational levels.

Table D0. *Suicide Mortality by MAJCOM, Component, and Branch*

	Total Force *N* = 117		Active *n* = 81		Guard *n* = 17		Reserve *n* = 11		Civilian *n* = 8	
	No.	%	No.	%	No.	%	No.	%	No.	%
ACC	28	23.9	27	96.4	--	--	--	--	1	3.6
AETC	10	8.5	10	100.0	--	--	--	--	0	0.0
AFDW	0	0.0	0	0.0	--	--	--	--	0	0.0
AFGSC	7	6.0	7	100.0	--	--	--	--	0	0.0
AFMC	11	9.4	5	45.5	--	--	--	--	6	54.5
AFRC	11	9.4	--	--	--	--	11	100.0	--	--
AFSOC	5	4.3	5	100.0	--	--	--	--	0	0.0
AMC	15	12.8	15	100.0	--	--	--	--	0	0.0
ANG	17	14.5	--	--	17	100.0	--	--	--	--
PACAF	5	4.3	4	80.0	--	--	--	--	1	20.0
USAFA	2	1.7	2	100.0	--	--	--	--	0	0.0
USAFE-AFAFRICA	2	1.7	2	100.0	--	--	--	--	0	0.0
USSF	4	3.4	4	100.0	--	--	--	--	0	0.0
Total Force	**117**	**100.0**	**81**	**69.2**	**17**	**14.5**	**11**	**9.4**	**8**	**6.8**

Note: ACC = Air Combat Command; AETC = Air Education and Training Command; AFDW = Air Force District of Washington; AFGSC = Air Force Global Strike Command; AFMC = Air Force Materiel Command; AFRC = Air Force Reserve Command; AFSOC = Air Force Special Operations Command; AMC = Air Mobility Command; ANG = Air National Guard; PACAF = Pacific Air Forces; USAFA = United States Air Force Academy; USAFE-AFAFRICA = United States Air Forces in Europe-Air Forces Africa; USSF = United States Space Force

The remainder of this appendix presents a brief overview of suicide mortality findings for MAJCOMs that experienced 10 or more suicide deaths in CY 2020, the Air National Guard (ANG), and the Reserves (AFRC). Findings for MAJCOMs that experienced fewer than 10 suicide deaths are not presented due to limited utility and to decrease the likelihood of identifying individual decedents within smaller subgroups. Also, note that most Airmen transition between multiple MAJCOMs over the course of their career, making findings and recommendations for the Total Force generalizable across MAJCOMs, including those with fewer than 10 suicide deaths in CY 2020. This appendix is organized into the following six main subsections:

1. Air Combat Command (ACC)
2. Air Education and Training Command (AETC)
3. Air Force Material Command (AFMC)
4. Air Force Reserve Command (AFRC)
5. Air Mobility Command (AMC)
6. Air National Guard (ANG)

1. Air Combat Command (ACC)

A. Suicide Mortality

In CY 2020, there were 28 suicides within ACC: 27 (96.4%) active-duty and 1 (3.6%) federal civilian.

Table D1. *Availability of Source Documents for ACC Decedents (N = 28)*

	DoDSER		Medical Records		Personnel Records		ROI	
	No.	%	No.	%	No.	%	No.	%
Available	24	85.7	27	96.4	26	92.9	28	100.0
Not Available	4	14.3	1	3.6	2	7.1	0	0.0

Note: DoDSER = Department of Defense Suicide Event Report; ROI = Report of Investigation

B. Demographic Characteristics

Briefly summarized, most ACC suicide decedents were male (96.4%) with an average age of 27.0 years (*SD* = 8.9).

Race/ethnicity was as follows: 3.6% American Indian/Alaska Native, 7.1% Asian/Pacific Islander, 7.1% Black/African American, 75.0% White/Caucasian, 7.1% Other/Unknown, and 10.7% Hispanic ethnicity.

Over a third (39.3%) had at least some college or a higher-level degree.

Over half (57.1%) had never been married, about a third (32.1%) were married at time of death, and a few (10.7%) were separated/divorced at time of death.

Average time in federal or military service for all ACC suicide decedents was 5.4 years (*SD* = 5.2). Almost all active-duty suicide decedents (85.2%) were enlisted at time of death. The rank/grade breakdown was as follows: 66.7% E1-E4, 18.5% E5-E9, and 14.8% officers.

C. Event Characteristics

Briefly summarized, firearm use (75.0%) was the most common method of death within ACC. The majority of firearms used in suicide were personal possessions either owned by the decedent (90.5%) or by another person (4.8%). Only one suicide

(4.8%) resulted from use of a military-issued firearm.

Hanging (17.9%) was the second most common method of death.

Alcohol was known to have been used during nearly half (46.4%) of suicide deaths. The most common event settings were decedents' personal residences (50.0%), the dormitories (14.3%), and decedents' automobiles (10.7%).

D. Mental Health Characteristics

Briefly summarized, 42.9% of ACC decedents had at least one documented current or past mental or behavioral health diagnosis.

Among decedents with one or more mental health diagnoses, common diagnostic categories included adjustment disorders (46.7%), mood disorders (40.0%), substance use disorders (26.7%), and anxiety disorders (20.0%). Multiple diagnoses were often present.

Evidence of lifetime self-directed violence was as follows: 21.4% of ACC decedents had a lifetime history of non-suicidal self-directed violence, and the same percentage (21.4%) had a lifetime history of suicidal self-directed violence, otherwise referred to as a history of prior suicide attempts.

Most (82.1%) decedents disclosed suicidal thoughts at some point during their life, and nearly three quarters (71.4%) communicated their intent to die by suicide at some point during their life.

Nearly all (92.9%) ACC decedents had contact with a primary care provider in the 12 months prior to death, and 50.0% of decedents had contact with a mental health provider in the 12 months prior to death.

E. Stressors

Interpersonal (89.3%), workplace (57.1%), administrative/legal (35.7%), and financial (35.7%) problems were common stressors.

Among decedents with interpersonal problems, problems commonly involved one or more intimate partners (92.0%), family members (52.0%), military members (40.0%), or friends (36.0%). Multiple interpersonal problems were often present.

F. Contextual Factors for Future Exploration

The following observations are presented below to highlight potential unique contextual factors for ACC when compared with the Total Force on average. Please note that observations are not based on formal statistical analyses given small sample sizes and inclusion of ACC in Total Force descriptive information. Nonetheless, these contextual factors may be further explored in the years to come as we continue to build on the standardized analysis of Total Force DAF suicide fatalities.

- **Younger Age.** On average, ACC decedents were younger than Total Force decedents (M = 27.0 years, SD = 8.9 versus M = 30.6 years, SD = 10.8).
- **Marital Status.** A greater percentage of ACC decedents, relative to the Total Force, had never been married (57.1% versus 43.6%). Fewer ACC decedents, relative to the Total Force, were separated/divorced at time of death (10.7% versus 20.5%).
- **Military Service.** On average, ACC decedents had less time in federal or military service than Total Force decedents (M = 5.4 years, SD = 5.2 versus M = 8.8 years, SD = 7.8). A greater percentage of active-duty ACC decedents, relative to the Total Force, were E1-E4 (66.7% versus 48.6%) or officers (14.8% versus 8.3%), and a smaller percentage were E5-E9 (18.5% versus 42.2%).
- **Firearms.** A greater percentage of ACC decedents, relative to the Total Force, died using a firearm (75.0% versus 68.4%).
- **Alcohol.** A greater percentage of ACC decedents, relative to the Total Force, used alcohol at the time of death (46.4% versus 39.3%).

- **Event Location.** A smaller percentage of ACC suicides, relative to the Total Force, occurred in automobiles (10.7% versus 16.2%).
- **Lifetime Self-Directed Violence.** A greater percentage of ACC decedents, relative to the Total Force, had a lifetime history of non-suicidal self-directed violence (21.4% versus 16.2%).
- **Communication of Suicidal Thoughts and Intent.** A greater percentage of ACC decedents, relative to the Total Force, disclosed suicidal thoughts at some point during their life (82.1% versus 68.4%) and communicated their intent to die by suicide at some point during their life (71.4% versus 58.1%).
- **Health Care Utilization.** A greater percentage of ACC decedents, relative to the Total Force, had contact with a primary care provider (92.9% versus 70.9%) or a mental health provider (50.0% versus 39.3%) in the past 12 months.
- **Stressors.** A smaller percentage of ACC decedents, relative to the Total Force, had administrative/legal problems (35.7% versus 43.6%). A greater percentage of ACC decedents had financial problems (35.7% versus 29.9%). Among decedents with interpersonal problems, a greater percentage of ACC decedents, relative to the Total Force, had problems involving one or more military members (40.0% versus 32.3%), or friends (36.0% versus 20.2%).

2. Air Education and Training Command (AETC)

A. Suicide Mortality

In CY 2020, there were a total of 10 suicides within AETC: 10 (100.0%) active-duty.

Table D2. *Availability of Source Documents for AETC decedents (N = 10)*

	DoDSER		Medical Records		Personnel Records		ROI	
	No.	%	No.	%	No.	%	No.	%
Available	10	100.0	10	100.0	9	90.0	10	100.0
Not Available	0	0.0	0	0.0	1	10.0	0	0.0

Note: DoDSER = Department of Defense Suicide Event Report; ROI = Report of Investigation

B. Demographic Characteristics

Briefly summarized, all AETC suicide decedents were male (100.0%) with an average age of 26.9 years (*SD* = 14.3).

Race/ethnicity was as follows: 10.0% American Indian/Alaska Native, 10.0% Asian/Pacific Islander, 40.0% Black/African American, 40.0% White/Caucasian, and 20.0% Hispanic ethnicity.

Less than a quarter (20.0%) had at least some college or a higher-level degree.

The majority (70.0%) of AETC decedents had never been married, less than a quarter (20.0%) were married at time of death, and only 1 (10.0%) was separated/divorced at time of death.

Average time in military service was 3.69 years (*SD* = 3.67). The majority of suicide decedents (90.0%) were enlisted at time of death. The rank/grade breakdown was as follows: 70.0% E1-E4, 20.0% E5-E9, and 10.0% officer.

C. Event Characteristics

Briefly summarized, firearm use (70.0%) was the most common method of death within AETC. The majority of firearms used in suicide were personal possessions either owned by the decedent (71.4%) or by another person (14.3%). No firearms were military-issued.

Hanging (20.0%) was the second most common method of death.

Alcohol was known to have been used during over a third (40.0%) of suicide deaths. The most common event settings were the dormitories (30.0%), decedents' personal residences (20.0%), and decedents' automobiles (20.0%).

D. Mental Health Characteristics

Briefly summarized, less than a third (30.0%) of AETC decedents had at least one current or past mental health diagnosis in their medical record.

Among decedents with one or more mental health diagnoses, common diagnostic categories included mood disorders (66.7%), anxiety disorders (66.7%), adjustment disorders (33.3%), and substance use disorders (33.3%). Multiple diagnoses were often present.

Evidence of lifetime self-directed violence was as follows: 10.0% of AETC decedents had a lifetime history of non-suicidal self-directed violence, and 70.0% had a lifetime history of suicidal self-directed violence, otherwise referred to as a history of prior suicide attempts.

All AETC decedents disclosed suicidal thoughts at some point during their life (100.0%), and most (80.0%) communicated their intent to die by suicide at some point during their life.

Most (80.0%) AETC decedents had contact with a primary care provider in the 12 months prior to death, and 30.0% of decedents had contact with a mental health provider in the 12 months prior to death.

E. Stressors

Interpersonal (100.0%), administrative/legal (40.0%), and workplace (40.0%) problems were common stressors. Financial stressors were less common (10.0%).

Among decedents with interpersonal problems, problems commonly involved one or more intimate partners (90.0%), family members (40.0%), friends (30.0%), or military members (20.0%). Multiple interpersonal problems were often present.

F. Contextual Factors for Future Exploration

The following observations are presented below to highlight potential unique contextual factors for AETC when compared with the Total Force on average. Please note that observations are not based on formal statistical analyses given small sample sizes and inclusion of AETC in Total Force descriptive information. Nonetheless, these contextual factors may be further explored in the years to come as we continue to build on the standardized analysis of Total Force DAF suicide fatalities.

- **Younger Age.** On average, AETC decedents were younger than Total Force decedents (M = 26.9 years, SD = 14.3 versus M = 30.6 years, SD = 10.8).
- **Marital Status.** A greater percentage of AETC decedents, relative to the Total Force, had never been married (70.0% versus 43.6%). Fewer ACC decedents, relative to the Total Force, were separated/divorced at time of death (10.0% versus 20.5%).
- **Race.** A smaller percentage of AETC decedents, relative to the Total Force, were White/Caucasian (40.0% versus 72.7%). A greater percentage of AETC decedents were Black/African American (40.0% versus 10.3%).
- **Military Service.** On average, AETC decedents had less time in federal or military service than Total Force decedents (M = 3.69 years, SD = 3.67 versus M = 8.8 years, SD = 7.8).
- **Rank**. A greater percentage of active-duty AETC decedents, relative to the Total Force, were E1-E4 (70.0% versus 48.6%) and a smaller percentage were E5-E9 (20.0% versus 42.2%).
- **Event Location.** A smaller percentage of AETC suicides, relative to the Total Force, occurred in decedents' personal residences (20.0% versus 51.3%). A greater percentage of AETC suicides occurred in the dormitories (30.0% versus 10.3%)..

- **Mental Health History.** A smaller percentage of AETC decedents, relative to the Total Force, had at least one documented current or past mental health (30.0% versus 46.2%).
- **Lifetime Self-Directed Violence.** A smaller percentage of AETC decedents, relative to the Total Force, had a lifetime history of non-suicidal self-directed violence (10.0% versus 16.2%). A greater percentage of AETC decedents a lifetime history of suicidal self-directed violence (70.0% versus 26.5%), otherwise referred to as a history of prior suicide attempts.
- **Communication of Suicidal Thoughts and Intent.** A greater percentage of AETC decedents, relative to the Total Force, disclosed suicidal thoughts at some point during their life (100.0% versus 68.4%) and communicated their intent to die by suicide at some point during their life (80.0% versus 58.1%).
- **Health Care Utilization.** A greater percentage of AETC decedents, relative to the Total Force, had contact with a primary care provider (80.0% versus 70.9%) in the past 12 months. A smaller percentage had contact with a mental health provider (30.0% versus 39.3%) in the past 12 months.
- **Stressors.** A greater percentage of AETC decedents, relative to the Total Force, had interpersonal problems (100.0% versus 84.6%). A smaller percentage of AETC decedents had workplace problems (40.0% versus 53.8%) or financial problems (10.0% versus 29.9%). Among decedents with interpersonal problems, a smaller percentage of AETC decedents, relative to the Total Force, had problems involving one or more family members (40.0% versus 47.5%) or military members (20.0% versus 32.3%), and a greater percentage of AETC decedents had problems involving one or more friends (30.0% versus 20.2%).

3. Air Force Material Command (AFMC)

A. Suicide Mortality

In CY 2020, there were a total of 11 suicides within AFMC: 5 (45%) active-duty and 6 (55%) federal civilian.

Table D3. *Availability of Source Documents for AFMC Decedents (N = 11)*

	DoDSER		Medical Records		Personnel Records		ROI	
	No.	%	No.	%	No.	%	No.	%
Available	5	45.5	5	45.5	11	100.0	6	54.5
Not Available	6	54.5	6	54.5	0	0.0	5	45.5

Note: DoDSER = Department of Defense Suicide Event Report; ROI = Report of Investigation

B. Demographic Characteristics

Briefly summarized, all AFMC suicide decedents were male (100.0%) with an average age of 40.0 years (*SD* = 14.3). Active-duty decedents were notably younger (*n* = 5, *M* = 28.8 years, *SD* = 4.5) than civilian decedents (*n* = 6, *M* = 49.3 years, *SD* = 12.7).

Race/ethnicity breakdown was as follows: 9.1% Asian/Pacific Islander, 18.2% Black/African American, 54.5% White/Caucasian, 18.2% Other, and 27.3% Hispanic ethnicity.

Approximately three quarters (72.7%) had at least some college or a higher-level degree.

Approximately a quarter (27.3%) had never been married, over half (54.5%) were married at time of death, and less than a quarter (18.2%) were separated/divorced at time of death.

Average time in federal or military service for all AFMC suicide decedents was 10.8 years (SD = 8.6). The majority of active-duty suicide decedents (80.0%) were enlisted at time of death. The rank/grade breakdown was as follows: 40.0%% E1-E4, 40.0% E5-E9, and 20.0% officer.

C. Event Characteristics

Briefly summarized, firearm use (81.8%) was the most common method of death within AFMC. Over half (55.6%) of firearms used in suicide were personally owned by decedents. Only one firearm (11.1%) was military-issued, and a third (33.3%) were of unknown provenance.

Hanging (9.1%) was the second most common method of death.

Alcohol was known to have been used during about a third (36.4%) of suicide deaths. The most common event settings were decedents' personal residences (45.5%) and decedents' automobiles (27.3%).

D. Mental Health Characteristics

Briefly summarized, nearly two thirds (63.6%) of AFMC decedents had at least one documented current or past mental or behavioral health diagnosis. Note that medical records were not available to the USU team for civilian decedents. However, suicide analysis board slide decks were available for 2 AFMC civilian decedents, and both slide decks noted mental health conditions.

Evidence of lifetime self-directed violence was as follows: 9.1% of AFMC decedents had a lifetime history of non-suicidal self-directed violence, and 27.3% had a lifetime history of suicidal self-directed violence, otherwise referred to as a history of prior suicide attempts.

Nearly two thirds (63.6%) of AFMC decedents disclosed suicidal thoughts at some point during their life, and over half (54.6%) communicated their intent to die by suicide at some point during their life.

About half (54.6.%) of AFMC decedents had contact with a primary care provider in the 12 months prior to death, and about a quarter (27.3%) had contact with a mental health provider in the 12 months prior to death.

E. Stressors

Interpersonal (63.6%), workplace (63.6%), and administrative/legal (45.5%) problems were common stressors. Financial stressors were less common (18.2%).

Among decedents with interpersonal problems, problems commonly involved one or more intimate partners (100.0%) or family members (42.9%). Problems with military members (14.3%), or friends (14.3%) were less common. Multiple interpersonal problems were often present.

F. Contextual Factors for Future Exploration

The following observations are presented below to highlight potential unique contextual factors for AFMC when compared with the Total Force on average. Please note that observations are not based on formal statistical analyses given small sample sizes and inclusion of AFMC in Total Force descriptive information. Nonetheless, these contextual factors may be further explored in the years to come as we continue to build on the standardized analysis of Total Force DAF suicide fatalities.

- **Civilians.** A greater percentage of AFMC decedents, relative to the Total Force, were federal civilians. In CY 2020, there were a total of 8 federal civilian suicides within the Total Force, accounting for 6.8% of all Total Force DAF suicides. Three quarters (75.0%) of these federal civilians were within AFMC, accounting for 54.5% of all AFMC suicides.
- **Lack of Available Source Documents.** Of the 11 AFMC suicide deaths, ROIs were only available for 6 decedents (54.5%): 5 (100.0%) active-duty decedents and 1 (16.7%) civilian decedent. Therefore, given the small number of active-duty AFMC suicide deaths and the lack of contextual information available for civilian AFMC suicide deaths, we do not present additional observations about potentially unique contextual factors for AFMC when compared with the Total Force.

4. Air Force Reserve Command (AFRC)

A. Suicide Mortality

In CY 2020, there were 11 suicides within AFRC: 11 (100.0%) Reserve.

Table D4. *Availability of Source Documents for AFRC Decedents (N = 11)*

	DoDSER		Medical Records		Personnel Records		ROI	
	No.	%	No.	%	No.	%	No.	%
Available	9	81.8	10	90.9	9	81.8	4	36.4
Not Available	2	18.2	1	9.1	2	18.2	7	63.6

Note: DoDSER = Department of Defense Suicide Event Report; ROI = Report of Investigation

B. Demographic Characteristics

Briefly summarized, all AFRC suicide decedents were male (100.0%) with an average age of 36.9 years (*SD* = 9.7).

Race/ethnicity was as follows: 9.1% American Indian/Alaska Native, 18.2% Asian/Pacific Islander, 9.1% Black/African American, 54.5% White/Caucasian, 9.1% Other/Unknown, and 9.1% Hispanic ethnicity.

Nearly two thirds (63.6%) had at least some college or a higher-level degree.

Very few (9.1%) had never been married, nearly half (45.5%) were married at time of death, and about a quarter (27.3%) were separated/divorced at time of death.

Average time in military service for AFRC suicide decedents was 15.1 years (*SD* = 10.4). Almost all suicide decedents (81.8%) were enlisted at time of death. The rank/grade breakdown was as follows: 9.1% E1-E4, 72.7% E5-E9, and 18.2% officers.

C. Event Characteristics

Briefly summarized, firearm use (63.6%) was the most common method of death within AFRC. Over half (57.1%) of firearms used in suicide were personal possessions owned by the decedent. No firearms were military-issued, and 42.9% were of unknown provenance.

Hanging (18.2%) was the second most common method of death.

Alcohol was known to have been used in 18.2% of AFRC suicide deaths; however, this information was commonly extracted from ROIs, and ROIs were only available for 4 (36.4%) AFRC decedents. The most common event settings were decedents' personal residences (54.6%) and decedents' automobiles (27.3%).

D. Mental Health Characteristics

Briefly summarized, few (18%) AFRC decedents had at least one documented current or past mental or behavioral health diagnosis. Note that although military medical records were available for the majority (90.9%) of AFRC decedents, usually included documents consisted of Periodic Health Assessments (PHAs) and clearances for special duty. Records rarely included information on care received, and civilian medical and mental health records were not available. Therefore, this is likely an underestimate.

There was no evidence of lifetime history of non-suicidal self-directed violence or suicidal self-directed violence among AFRC decedents. Few (18.2%) AFRC decedents ever disclosed suicidal thoughts, and there was no evidence that any AFRC decedents ever communicated their intent to die by suicide. Note these percentages are likely underestimates, given that history of self-directed violence, disclosure of suicidal thoughts, and communication of suicide intent was commonly extracted from ROIs, and few ROIs were available for AFRC decedents.

Less than a quarter (18.2%) of AFRC decedents had contact with a primary care provider in the 12 months prior to death, and no decedents had contact with a mental health provider in the 12 months prior to death. Again, this is likely due to the limited nature of available medical records noted above.

E. Stressors

Interpersonal (63.6%), administrative/legal (36.4%), and financial (27.3%) problems were noted stressors. There was no evidence of workplace problems.

Among decedents with interpersonal problems, problems commonly involved one or more intimate partners (85.7%) or family members (28.6%). There was no evidence of problems with military members or friends.

F. Contextual Factors for Future Exploration

The following observations are presented below to highlight potential unique contextual factors for AFRC when compared with the Total Force on average. Please note that observations are not based on formal statistical analyses given small sample sizes and inclusion of AFRC in Total Force descriptive information. Nonetheless, these contextual factors may be further explored in the years to come as we continue to build on the standardized analysis of Total Force DAF suicide fatalities.

- **Lack of Available Source Documents.** Of the 11 AFRC suicide deaths, ROIs were only available for 4 decedents (36.4%). In addition, available medical records were limited, rarely included information on care received, and civilian medical and mental health records were not available. Therefore, given the lack of known contextual information for AFRC suicide deaths, we are limiting additional observations about potentially unique contextual factors for AFRC to known demographic characteristics.
- **Older Age.** On average, AFRC decedents were older than Total Force decedents (M = 36.9 years, SD = 9.7 versus M = 30.6 years, SD = 10.8).
- **Race/Ethnicity.** A smaller percentage of AFRC decedents, relative to the Total Force, were White/Caucasian (54.5% versus 72.7%), and a greater percentage of AETC decedents were American Indian/Alaska Native (9.1% versus 4.3%) or Asian/Pacific Islander (18.2% versus 6.8%). A smaller percentage of AFRC decedents were Hispanic (9.1% versus 16.2%).
- **Education.** A greater percentage of AFRC decedents, relative to the Total Force, had at least some college or a higher-level degree (63.6% versus 49.6%).
- **Marital Status.** A greater percentage of AFRC decedents, relative to the Total Force, were married at the time of death (45.5% versus 34.2%) and were separated or divorced at the time of death (27.3% versus 20.5%). A smaller percentage of AFRC decedents were never married (9.1% versus 43.6%).
- **More Time in Military.** On average, AFRC decedents had spent more time in military service than Total Force decedents (M = 15.1 years, SD = 10.4 versus M = 8.8 years, SD= 7.8).
- **Rank.** A smaller percentage of AFRC decedents, relative to the Total Force, were E1-E4 (9.1% versus 43.6%). A greater proportion of AFRC decedents were E5-E9 (72.7% versus 42.4%) or officers (18.2% versus 8.3%).
- **Firearms.** A greater percentage of the firearms used in AFRC suicides, relative to the Total Force, were of unknown provenance (42.9% versus 18.8%), likely due to a lack of ROIs, which typically provide background information on the firearm used in the suicide death event.

5. Air Mobility Command (AMC)

A. Suicide Mortality

In CY 2020, there were 15 suicides within AMC: 15 (100%) active-duty.

Table D5. *Availability of Source Documents for AMC Decedents (N = 15)*

	DoDSER		Medical Records		Personnel Records		ROI	
	No.	%	No.	%	No.	%	No.	%
Available	15	100.0	15	100.0	13	86.7	14	93.3
Not Available	0	0.0	0	0.0	2	13.3	1	6.7

Note: DoDSER = Department of Defense Suicide Event Report; ROI = Report of Investigation

B. Demographic Characteristics

Briefly summarized, most AMC suicide decedents were male (80.0%) with an average age of 26.5 years (*SD* = 6.1).

Race/ethnicity was as follows: 6.7% Black/African American, 93.3% White/Caucasian, and 13.3% Hispanic ethnicity.

Nearly half (46.7%) had at least some college or a higher-level degree.

A third (33.3%) had never been married, less than half (40.0%) were married at time of death, and a quarter (26.7%) were separated/divorced at time of death.

Average time in military service for AMC decedents was 7.1 years (*SD* = 6.5). All AMC suicide decedents (100.0%) were enlisted at time of death. The rank/grade breakdown was as follows: 46.7% E1-E4 and 53.3% E5-E9.

C. Event Characteristics

Briefly summarized, firearm use (53.3%) was the most common method of death within AMC. The majority of firearms used in suicide were personal possessions either owned by the decedent (62.5%) or by another person (25.0%). None were military-issued, and 12.5% were of unknown provenance.

Hanging (46.7%) was the only other method of death.

Alcohol was known to have been used in over half (60.0%) of AMC suicide deaths, and the most common event settings were decedents' personal residences (66.7%) and the dormitories (20.0%). No AMC decedents died in their automobiles.

D. Mental Health Characteristics

Briefly summarized, nearly three quarters (73.3%) of AMC decedents had at least one documented current or past mental or behavioral health diagnosis.

Among AMC decedents with a mental health diagnosis, common diagnostic categories included mood disorders (54.5%), adjustment disorders (54.5%), anxiety disorders (36.4%), and substance use disorders (18.2%).

Evidence of lifetime self-directed violence was as follows: 40.0% of AMC decedents had a lifetime history of non-suicidal self-directed violence, and 40.0% had a lifetime history of suicidal self-directed violence, otherwise referred to as a history of prior suicide attempts.

Nearly all (86.7%) decedents disclosed suicidal thoughts at some point during their life, and nearly three quarters (73.3%) communicated their intent to die by suicide at some point during their life.

Most (80.0%) AMC decedents had contact with a primary care provider in the 12 months prior to death, and over half (60.0%) had contact with a mental health provider in the 12 months prior to death.

E. Stressors

Interpersonal (93.3%), workplace (86.7%), administrative/legal (66.7%), and financial (53.3%) problems were noted stressors.

Among decedents with interpersonal problems, problems commonly involved one or more intimate partners (92.9%), military members (57.1%), or family members (50.0%). Problems with friends were less common (14.3%).

F. Contextual Factors for Future Exploration

The following observations are presented below to highlight potential unique contextual factors for AMC when compared with the Total Force on average. Please note that observations are not based on formal statistical analyses given small sample sizes and inclusion of AMC in Total Force descriptive information. Nonetheless, these contextual factors may be further explored in the years to come as we continue to build on the standardized analysis of Total Force DAF suicide fatalities.

- **Younger Age.** On average, AMC decedents were younger than Total Force decedents (M = 26.5 years, SD = 6.1 versus M = 30.6 years, SD = 10.8).
- **Race**. A greater percentage of AMC decedents, relative to the Total Force, were White/Caucasian (93.3% versus 72.7%). No AMC decedents were American Indian/Alaska Native or Asian/Pacific Islander, versus 4.3% and 6.8% of the Total Force, respectively.
- **Marital Status.** A greater percentage of AMC decedents, relative to the Total Force, were married at the time of death (40.0% versus 34.2%) and were separated or divorced at the time of death (26.7% versus 20.5%). A smaller percentage of AMC decedents were never married (33.3% versus 43.6%).
- **Rank.** All AMC suicide decedents (100.0%) were enlisted at time of death, relative to 90.8% of the Total Force.
- **Method of Death.** A smaller percentage of AMC decedents, relative to the Total Force, died using a firearm (53.3% versus 68.4%). A greater percentage of AMC decedents died by hanging (46.7% versus 26.5%).
- **Alcohol.** A greater percentage of AMC decedents, relative to the Total Force, used alcohol at the time of death (60.0% versus 39.3%).
- **Event Location.** A greater percentage of AMC suicides, relative to the Total Force, occurred in dormitories (20.0% versus 10.3%) or the decedents' personal residences (66.7% versus 51.3%). No AMC suicides occurred in automobiles, versus 16.2% of Total Force suicides.
- **Mental Health History.** A greater percentage of AMC decedents, relative to the Total Force, had at least one current or past mental health diagnosis in their medical record (73.3% versus 46.2%).
- **Lifetime Self-Directed Violence.** A greater percentage of AMC decedents, relative to the Total Force, had a lifetime history of non-suicidal self-directed violence (40.0% versus 16.2%). A greater percentage of AMC decedents also had a lifetime history of suicidal self-directed violence (40.0% versus 26.5%), otherwise referred to as a history of prior suicide attempts.
- **Communication of Suicidal Thoughts and Intent.** A greater percentage of AMC decedents, relative to the Total Force, disclosed suicidal thoughts at some point during their life (86.7% versus 68.4%) and communicated their intent to die by suicide at some point during their life (73.3% versus 58.1%).
- **Health Care Utilization.** A greater percentage of AMC decedents, relative to the Total Force, had contact with a primary care provider (80.0% versus 70.9%) or a mental health provider (60.0% versus 39.3%) in the past 12 months.
- **Stressors.** A greater percentage of AMC decedents, relative to the Total Force, had interpersonal (93.3% versus 84.6%), workplace (86.7% versus 53.8%), administrative/legal (66.7% versus 43.6%), or financial (53.3% versus 29.9%) problems. Among decedents with interpersonal problems, a greater percentage of AMC decedents, relative to the Total Force, had problems involving one or more military members (57.1% versus 32.3%).

6. Air National Guard (ANG)

A. Suicide Mortality

In CY 2020, there were 17 suicides within the ANG: 15 (100%) Guard.

Table D6. *Availability of Source Documents for ANG Decedents (N = 17)*

	DoDSER		Medical Records		Personnel Records		ROI	
	No.	%	No.	%	No.	%	No.	%
Available	17	100.0	17	100.0	12	70.6	2	11.8
Not Available	0	0.0	0	0.0	5	29.4	15	88.2

Note: DoDSER = Department of Defense Suicide Event Report; ROI = Report of Investigation

B. Demographic Characteristics

Briefly summarized, most ANG suicide decedents were male (82.4%) with an average age of 37.2 years (*SD* = 10.4).

Race/ethnicity was as follows: 5.9% American Indian/Alaskan Native; 11.8% Asian/Pacific Islander; 5.9% Black/African American, 76.5% White/Caucasian, and 11.8% Hispanic ethnicity.

Nearly two thirds (64.7%) had at least some college or a higher-level degree.

Over a third (41.2%) had never been married, few (17.6%) were married at time of death, and over a third (41.2%) were separated/divorced at time of death.

Average time in military service for ANG suicide decedents was 15.3 years (*SD* = 8.3). Almost all decedents (94.1%) were enlisted at the time of death. The rank/grade breakdown was as follows: 29.4% E1-E4, 64.7% E5-E9, and 5.9% officers.

C. Event Characteristics

Briefly summarized, firearm use (82.4%) was the most common method of death within the ANG. Nearly half (42.9%) of firearms used in suicide were personal possessions owned by the decedent. No firearms were military-issued, and 57.1% were of unknown provenance.

Hanging (11.8%) was the second most common method of death.

Alcohol was known to have been used in 11.8% of ANG suicide deaths; however, this information was commonly extracted from ROIs, and ROIs were only available for 2 (11.8%) ANG decedents. The most common event settings were decedents' personal residences (58.8%) and decedents' automobiles (17.6%).

D. Mental Health Characteristics

Note that although military medical records were available for the majority (90.9%) of ANG decedents, documents usually included things like results of PHAs and clearances for special duty. Records rarely included information on care received, and civilian medical and mental health records were not available.

Briefly summarized, 41.2% of ANG decedents had at least one documented current or past mental or behavioral health diagnosis.

Evidence of lifetime self-directed violence was as follows: 5.9% of decedents had a lifetime history of non-suicidal self-directed violence, and 29.4% had a lifetime history of suicidal self-directed violence, otherwise referred to as a history of prior suicide attempts. Note these percentages are likely an underestimate, given that history of self-directed violence was commonly extracted from ROIs, and few ROIs were available for ANG decedents.

Over half (52.9%) of ANG decedents ever disclosed suicidal thoughts, and over half (52.9%) ever communicated their intent to die by suicide.

Nearly half (47.1%) of ANG decedents had contact with a primary care provider in the 12 months prior to death, and about a third (35.3%) had contact with a mental health provider in the 12 months prior to death.

E. Stressors

Interpersonal (82.4%), workplace (41.2%), administrative/legal (47.1%), and financial (29.4%) problems were noted stressors.

Among decedents with interpersonal problems, problems commonly involved one or more intimate partners (85.7%) or family members (28.6%). Problems with military members (14.3%) and friends (7.1%) were less common.

F. Contextual Factors for Future Exploration

The following observations are presented below to highlight potential unique contextual factors for the ANG when compared with the Total Force on average. Please note that observations are not based on formal statistical analyses given small sample sizes and inclusion of the ANG in Total Force descriptive information. Nonetheless, these contextual factors may be further explored in the years to come as we continue to build on the standardized analysis of Total Force DAF suicide fatalities.

- **Lack of Available Source Documents.** Of the 17 ANG suicide deaths, ROIs were only available for 2 decedents (11.8%). Therefore, given the lack of contextual information available for ANG suicide deaths, we are limiting additional observations about potentially unique contextual factors for ANG to known demographic characteristics and information about means of death.
- **Older Age.** On average, ANG decedents were older than Total Force decedents (*M* = 37.2 years, *SD* = 10.4 versus *M* = 30.6 years, *SD* = 10.8).
- **Education.** A greater percentage of ANG decedents, relative to the Total Force, had at least some college or a higher-level degree (64.7% versus 49.6%).
- **Marital Status.** A greater percentage of ANG decedents, relative to the Total Force, were separated/divorced at time of death (41.2% versus 20.5%). Fewer ANG decedents, relative to the Total Force, were married at the time of death (17.6% versus 34.2%)
- **More Time in Military.** On average, ANG decedents had spent more time in military service than Total Force decedents (M = 15.1 years, SD = 10.4 versus M = 8.8 years, SD= 7.8).
- **Rank.** A smaller percentage of ANG decedents, relative to the Total Force, were E1-E4 (9.1% versus 43.6%). A greater proportion of ANG decedents were E5-E9 (72.7% versus 42.4%) or officers (18.2% versus 8.3%).
- **Firearms.** A greater percentage of ANG decedents, relative to the Total Force, died using a firearm (82.4% versus 68.4%). A greater percentage of the firearms used in ANG suicides, relative to the Total Force, were of unknown provenance (57.1% versus 18.8%), likely due to a lack of ROIs, which typically provide background information on the firearm used in death.

Photo by Yasuo Osakabe

APPENDIX E. VOICES OF SUICIDE DECEDENTS

Nearly half (44.4%; *n* = 52) of CY 2020 DAF Total Force suicide decedents wrote one or more suicide notes. However, notes were available for review by the USU team for only 27.4% (*n* = 32) of decedents. All suicide notes were reviewed by members of our team. Suicide notes are an act of communication between the writer and the recipient[79] and provide an opportunity to hear from decedents in their own words. Out of consideration for the decedents and their loved ones, composite quotes using combined quotes from three or more decedents[80] were generated to represent each of the following six themes identified in the review:

1. Comfort for Loved Ones
2. Instructions for Recipient
3. Apologies
4. Explanation for Decision to Die by Suicide
5. Negative Self Evaluation
6. Expressions of Anger and/or Blame

1. Comfort for Loved Ones

Comforting loved ones was the most prominent theme reflected in the suicide notes. Decedents expressed their love, hopes, and appreciation for loved ones and provided reassurance.

- **Love.** A variation of "I love you" was present in two thirds of suicide notes:

  "I love you. Please don't worry about me."

- **Appreciation.** Decedents expressed their appreciation for the recipients of the suicide notes. This included gratitude for specific actions, stating the positive impact that they had on the decedent's life, reliving a cherished memory, and praising characteristics they admired about those they were close to.

  "Thank you for your unconditional love and support."

  "I was a better man because you were in my life."

- **Hope for Loved Ones**. Decedents shared their hopes for the future of their current or former partner, children, parents, siblings, friends, and coworkers. Most often, decedents wished for their happiness and/or success.

  "I hope you have a happy life."

- **Reassurance.** Decedents often reassured the recipients of the suicide notes that their suicide death was not their fault and that they would see one another again.

  "Don't blame yourself."

  "You did everything you could. There is nothing anyone could have done to stop this from happening."

  "I'm no longer in pain."

  "I'm in a better place now. We'll see each other again. I'll say hi to [loved one]."

2. Instructions for Recipient

Decedents frequently communicated instructions for the care of their loved ones, what to do with their possessions, and their burial.

- **Care for Loved Ones.** Decedents provided instructions regarding the care of their family, especially children and pets.

  "Please help my children remember me."

- **Possessions.** Decedents provided instructions on who should receive their possessions.

  "Give everything to my children."

- **Burial.** Decedents provided instructions for their funeral or burial, including where they would like to be buried, what they would like to be buried with, and who they would like to be involved.

3. Apologies

Decedents apologized for choosing to die by suicide and the impact their death may have on others, as well as for perceived wrongdoings:

"I'm sorry for the pain this is going to cause you. I just couldn't do it anymore."

"I never meant to hurt you. I'm sorry for everything."

4. Explanation for Decision to Die by Suicide

Many decedents provided an explanation for their decision to die by suicide, including a description of their ambivalence about living and dying, loss of a reason to live, unbearable emotional pain, and suicide as the solution to their problem.

- **Ambivalence About Living and Dying.** Decedents described the struggle between living and dying that they experienced. In many instances, this struggle was characterized as a long-term fight which the decedent "lost" or was "tired" of fighting. For other decedents, they struggled with whether to live or die after some acute event, usually the dissolution of a relationship:

  "I have been fighting for so long and I am tired. I can't do it anymore. I wasn't strong enough."

  "I am confused. I don't know what to do."

- **Loss of a Reason to Live.** Decedents described losing their reason to live. Most often, a romantic partner was their reason to live. This is likely why some decedents described struggling over whether to live or die after a relationship dissolution.

  "I can't live without her. She was my reason to live and she's gone."

- **Unbearable Emotional Pain.** Decedents described unbearable emotional pain and a belief that their circumstances would never improve. Common emotions identified include loneliness, sadness, hopelessness, and helplessness.

  "I don't ever want to feel this way again. I just want the pain to stop. I can't do this anymore."

- **Suicide as the Solution.** Decedents described suicide as the only solution to their problems.

  "I've tried everything. This was the only way to make the pain stop."

5. Negative Self Evaluation

Decedents described themselves negatively, often reflecting feelings of low self-worth and perceived burdensomeness.

> *"I can't do anything right."*

> *"You're better off without me in your life."*

6. Expressions of Anger and Blame

A small number of decedents expressed anger and blame toward a former or estranged romantic partner, their military peers, or the military as a whole.

> *"You deserve this. I told you what was going on, you saw me hurting and did nothing."*

Photo by SrA Michael S. Murphy

APPENDIX F. COVID-19 RELATED TRENDS AND THEMES

1. Introduction

CY 2020 saw the onset of the COVID-19 pandemic. While the impact of COVID-19 on each DAF decedent's suicide trajectory cannot be fully known, in the context of our review, there were certainly indications that the pandemic directly (e.g., COVID diagnosis) or indirectly (e.g., separation from loved ones and travel restrictions) presented a number of additional challenges for the deceased. For a comprehensive analysis of the CY 2020 DAF suicides and COVID-19 findings, refer to the *Scientific Report*. In this Appendix, an overview of the observed trends and themes is provided.

The CDC conceptualizes CY 2020 as Early 2020, Mid 2020, and Late 2020 with regard to the COVID-19 response.[81] Of the 117 suicide deaths reviewed, 34 (29%) occurred during Early 2020, 42 (36%) occurred during Mid 2020, 40 (34%) occurred during Late 2020, and one (<1%) occurred at an unknown time. This framework serves to contextualize the experiences of the CY 2020 Total Force DAF suicide decedents as the pandemic progressed.

Early 2020 included the period between 1 January 2020 and 30 April 2020. Of the 34 suicide deaths that occurred in Early 2020, 12 occurred in January, 9 in February, 7 in March, and 6 in April.

- In the beginning of January, the World Health Organization (WHO) and CDC activated emergency response procedures due to concern about COVID-19. By the end of January, COVID-19 had begun to spread across the globe, including to the United States, and COVID-19 was declared a Public Health Emergency of International Concern.
- In February, lockdowns began internationally and the CDC cautioned that COVID-19's "disruption to everyday life may be severe." The WHO officially named the novel coronavirus COVID-19 on 11 February 2020.
- On 11 March 2020, the WHO declared COVID-19 a pandemic; within the U.S., a nationwide emergency was declared and U.S. states began to shut down.
- In April, all individuals on DoD property, installations, and facilities were directed to wear face coverings when they were unable to maintain six feet of social distance and all DoD Service members were directed to stop both domestic and international nonessential movement. Further, the U.S. became the global leader for COVID-19 deaths, and all 50 U.S. states had reported at least one COVID-19 related death, including the first death of an active-duty Service member from COVID-19.

Within the DoD, the early response to mitigate the spread of COVID-19 included the following events:

1. DoD installations worldwide were raised to Health Protection Condition Charlie;
2. 60-day stop movement order for all DoD uniformed and civilian personnel and their sponsored family members overseas was enacted;
3. 14-day quarantine was imposed for all Service members who have traveled from affected areas;
4. All elective surgeries, invasive procedures, and dental procedures at Military Medical Treatment Facilities and Dental Treatment Facilities were postponed for 60 days; and
5. Leaders were encouraged to maximize telework flexibilities for personnel.

Mid 2020 included the period between 1 May 2020 and 31 August 2020. Of the 42 suicide deaths that occurred in Mid 2020, 14 occurred in May, 9 in June, 8 in July, and 11 in August.

- In early May, the U.S. unemployment rate reached the highest level since the Great Depression, and Operation Warp Speed was launched. By late May, all 50 states began to partially lift COVID-19 mitigation restrictions.

Within the DoD, the Secretary of Defense provided guidance to commanders on changing local Force Health Protection Condition levels to allow bases to begin planning to return to normal operations and Military Medical Treatment Facilities and Dental Treatment Facilities began to resume previously suspended procedures. The CDC expanded the list of people at risk for severe COVID-19 illness, noting that risk increases with age and people with certain chronic conditions are at increased risk.

Late 2020 included the period between 1 September 2020 and 31 December 2020. Of the 40 suicide deaths that occurred in Late 2020, 7 occurred in September, 8 in October, 15 in November, and 10 in December. As the virus continued to spread, many Americans reportedly faced food insecurity – a significant increase from pre-pandemic numbers.

- By mid-November, the DoD reached over 100,000 presumed COVID-19 cases, to include military, military dependents, DoD civilian employees, and DoD contractors. The DoD extended maximum telework flexibilities that had been set in place in March 2020.
- In mid-December, the Food and Drug Administration issued Emergency Use Authorizations for the Pfizer-BioNTech and Moderna COVID-19 vaccines. The vaccination distribution plan within the DoD prioritized those providing direct medical care, maintaining essential national security and installation functions, deploying forces, and those beneficiaries at the highest risk for developing severe illness from COVID-19 before other members of the DoD population. By the end of 2020, over one million people in the U.S. were vaccinated against COVID-19 and COVID-19 variants had begun to spread.

2. Potential Impact of COVID-19 on Suicide Trajectories

The Social-Ecological Model is used to organize the potential impact of COVID-19 on the suicide trajectories of CY 2020 Total Force DAF suicide decedents, with consideration of the interplay of factors at the societal, military community, relational, and individual levels. A total of 14 themes were identified:

1. Concern about the Impact of COVID-19 on Society
2. Delay of Civil Proceedings
3. Impact on Civilian Employment
4. COVID-19 Delayed, Cancelled, and Restricted Personnel Movement
5. COVID-19 Reduced Interactions with Military Command and Peers
6. COVID-19 Impacted Work Routines, Structure, and Operational Tempo
7. COVID-19 Impacted Delivery of Medical and Mental Health Care
8. Military Legal/Administrative Delays
9. Separation from Friends and Family
10. Limited Social Life
11. Increased Contact with Loved Ones
12. Contracting COVID-19
13. Increased Alcohol Consumption
14. Fear of COVID-19

A. Societal

Theme 1: Concern about the Impact of COVID-19 on Society

Multiple decedents expressed concern about the long-term impact of the COVID-19 pandemic and the associated government and public responses. In the days before his death, one decedent who died just as lockdowns were beginning in the U.S., expressed concern about COVID-19 and its effects "across the world" and "travel restrictions." His loved ones stated he was "definitely stressed" about the "current political situation and the effects COVID-19 would have on society" and his belief that "government lockdowns could lead to a 'slippery slope' to authoritarianism." His mother described his outlook on COVID-19 as "doom and gloom." Another decedent attempted to manage his concerns by purchasing firearms in Late 2020 "because of the area around base and the current climate with everything going on in the media."

Theme 2: Delay of Civil Proceedings

COVID-19 impacted divorce and child custody proceedings. One decedent had a pending divorce, including the custody determination for his son, that had been placed on hold due to COVID-19.

Theme 3: Impact on Civilian Employment

Two decedents who were Reservists had their hours reduced at their civilian jobs due to COVID-19. Both decedents worked in aviation, which was significantly impacted by COVID-19. Their reduced employment resulted in significant concerns about finances.

B. Military Community

Theme 4: COVID-19 Delayed, Cancelled, and Restricted Personnel Movement

To mitigate the spread of COVID-19, personnel movement was delayed, cancelled, or restricted to varying degrees throughout CY 2020. One decedent was reportedly looking forward to an overseas PCS and was frustrated by the threats of constant delay. Another decedent was upset about not being able to deploy due to restriction of movement measures.

For decedents who were OCONUS, the restriction of movement may have contributed to difficulty adjusting to their new location and uncertainty about the duration of their assignment. One decedent had expressed frustration because they did not know when they would be able to leave. Another decedent, who had heard that his OCONUS duty station would be enjoyable, lamented that "he was not allowed to do anything fun due to COVID-19 prevention measures."

Decedents who were not PCSing, deploying, or OCONUS were still greatly affected by lockdowns and other new movement restrictions implemented due to COVID-19. One decedent reportedly cried after their squadron was briefed on the operational changes and restrictions due to COVID-19. Later, he complained to his family that they "were on lockdown and could not go off the installation" and expressed anger and frustration as restrictions, and punishments for failing to abide by restrictions, increased. After COVID-19 restrictions were implemented, he frequently voiced displeasure with the Air Force and "expressed how much he wanted to go home."

Theme 5: COVID-19 Reduced Interactions with Military Command and Peers

5.1 Reduced Access to Supervisors and Leadership

To mitigate the spread of COVID-19, social distancing measures were enacted, which included maximum telework flexibilities, reduced occupancy for in-person work, and mandatory quarantine following travel, exposure to COVID-19, or infection with COVID-19. Some decedents felt isolated from their coworkers and peers and that alterations in work shifts restricted access to their commander and first sergeant. In some cases, supervisors were teleworking and had minimal interaction with the Airmen for which they were responsible. Multiple Airmen attributed low morale to COVID-19 restrictions.

5.2 Isolation from Others

For some decedents, the reduction of social interaction in the work environment resulted in feelings of isolation, which may have exacerbated mental health issues. One decedent's underlying symptoms of psychosis contributed to paranoid interpretations of colleagues' intentions behind enacting social distancing measures to mitigate the spread of COVID-19 and a denial of exhibiting COVID-19 symptoms despite having an uncontrolled cough witnessed by multiple individuals. One decedent felt isolated while quarantined and used that time to plan his suicide (e.g., watching videos, changing his will), while another decedent died by suicide within 10 days of quarantine.

Theme 6: COVID-19 Impacted Work Routines, Structure, and Operational Tempo

For many decedents, the COVID-19 pandemic resulted in a change in operational tempo, workload, and job demands, largely dependent on their job and duty station. For instance, many decedents experienced increased work pace and told loved ones that their "work was busier" due to COVID-19. Others felt frustrated by having a lack of work – one decedent stopped coming to work, while another decedent elected to increase his hours at a secondary civilian job because "he didn't like the pace." Additionally, many decedents were required to quarantine, thus missing work, throughout CY 2020. Regarding this, one decedent stated he was "bored, and played video games throughout the day," while another decedent "would sleep a lot, wake up with nothing to do, and go back to sleep."

The COVID-19 pandemic significantly disrupted the work routine of many decedents. Some began working in-person alternate weeks or teleworking. One decedent who was a musician expressed frustration because an audition that could potentially advance their career was placed on hold and there were fewer opportunities to perform due to COVID-19. The mother of one decedent stated that COVID-19 "affected his overall schedule/routine." Further, after their unit went into the COVID-19 work schedule, one decedent chose to "spend a lot of time on the night shift," which a coworker opined was because he "did not want to deal with people and was introverted." One decedent, who was teleworking with young children at home, reportedly "would ask every day to come into the office and work instead of working at his residence."

Theme 7: COVID-19 Impacted Delivery of Medical and Mental Health Care

7.1 Primarily Telehealth Appointments

COVID-19 impacted the delivery method of mental health appointments, as many appointments were now conducted via telehealth. For some decedents, recurring appointments were shifted from in-person to telehealth; for others, their care was almost entirely virtual, including the intake assessment. Several decedents had expressed a preference for face-to-face appointments. Notably, one decedent continued to receive face-to-face behavioral health appointments due to "risk level and acuity," even after the clinic had modified operations due to COVID-19.

7.2 Difficulty Getting Appointments or Cancelled Appointments

Many decedents experienced delays or barriers to accessing care, secondary to COVID-19. Within primary care, some decedents had trouble getting appointments or waivers for health-related issues, including appointments to get refills of their anti-depressant prescription. Two decedents attempted to initiate care in March 2020 and experienced delays in obtaining follow up appointments. Many healthcare services were also cancelled or suspended, to include physical therapy appointments and Behavioral Health Optimization Program groups.

Theme 8: Military Legal/Administrative Delays

Several decedents experienced legal and/or administrative delays. These processes included Medical Evaluation Boards and military disciplinary action. Multiple decedents undergoing the Medical Evaluation Board experienced delays due to COVID-19. On the day of death, one decedent had been scheduled for a disciplinary action appointment for disobeying an order to quarantine due to COVID-19. Another decedent was on quarantine while trying to prepare his rebuttal for legal proceedings, and as a result of being on quarantine, had difficulty contacting his legal counsel. Ultimately, the legal proceedings determined that this decedent would separate from the USAF. When communicating with his first sergeant about his date of separation, he was told "Things have changed a little with COVID. A firm timeline is hard to give."

C. Relational

Theme 9: Separation from Friends and Family

Many decedents experienced separation from friends and family because of restriction of movement measures, to include delayed leave, cancelled leave, and inability for friends and family to visit. Decedents missed funerals, graduations, spring break, and visits with loved ones, though some were eventually authorized to travel as the conditions of the pandemic evolved. One decedent lamented that his friends and family were unable to attend his basic training or technical training graduations. Another decedent felt isolated from his wife because she was a healthcare professional who worked additional shifts during the pandemic.

Many decedents also experienced separation from friends and family because either they or their loved ones were infected with COVID-19. In the days before death, one decedent visited home for the holidays, but was unable to stay with his mother because she had contracted COVID-19; instead, he stayed with his on-again-off-again girlfriend, with whom he had a conflicted relationship. Another decedent and his estranged wife were scheduled to attend Family Advocacy Program counseling but "they tested positive for COVID-19." The decedent was living separately from his family and told a coworker that he was upset about "not being able to see his daughter due to her having contracted COVID-19."

Theme 10: Limited Social Life

Many decedents reportedly experienced significant disruptions in their social life. One decedent expressed frustration that he "could not enjoy life" outside of work due to COVID-19. Another decedent was unable to play hockey which had been an important social outlet for him. For another decedent, his friend group met less frequently due to COVID-19. To cope with the reduced contact due to COVID-19, the friend of one decedent reported that he and decedent had "talked daily on a group chat since COVID-19 began but became more distant as COVID-19 progressed." COVID-19 did not always lead to reduced social interaction, as one decedent reportedly "got antsy later into the COVID-19 pandemic and started hanging out with friends more and took up golfing."

Theme 11: Increased Contact with Loved Ones

For some decedents, the COVID-19 pandemic resulted in increased contact with loved ones. The father of one decedent reported that he had been teleworking with younger children at home and found it very stressful, as his responsibilities reportedly included watching and caring for his three children, preparing meals, cleaning the house, and helping step-daughter with homework, while simultaneously teleworking. Another decedent's girlfriend reportedly moved in "sooner than they'd planned because her college was evacuated early due to COVID-19." According to his mother, the decedent "did not feel ready to live together, but did not want to turn her away." According to his brother, the decedent "felt stuck in his apartment with his dog and girlfriend" and "did not want to live with her but did not say anything because he did not want to hurt her feelings."

D. Individual

Theme 12: Contracting COVID-19

Multiple decedents may have contracted COVID-19 at some point prior to death. Some decedents were not tested for COVID-19 due to a lack of testing availability, but were regarded as presumptive positive cases, while others had tested positive. The friend of one decedent stated that he was "nervous that [decedent] was locked inside during quarantine because of his mental history." The mother of another decedent believed "having to quarantine affected his mental state" and expressed concern to investigators about how COVID-19 may have affected his brain and "enhanced any suicidal thoughts he had." The father of another decedent reported that after contracting COVID-19, he "did not visit or keep in touch with him while quarantined" and "felt depressed" due to being separated from wife and child (note that this decedent was not legally allowed to have contact with them at this time).

Another decedent was the first person in his squadron to test positive for COVID-19, which occurred approximately 6 weeks before death. Reportedly, "several people may have contracted COVID" from this decedent, one of whom was admitted to the Intensive Care Unit. The decedent sought medical treatment for "ongoing COVID symptoms" in the weeks before death and reportedly had "difficulty sleeping as a result of stress from his diagnosis."

Theme 13: Increased Alcohol Consumption

Many decedents increased their alcohol consumption during the COVID-19 pandemic. One decedent reportedly had been consuming alcohol more frequently after having limited hours at work due to COVID-19 restrictions. Another decedent began to drink alcohol more frequently and was worried about gaining weight during quarantine; his supervisors and coworkers noted that he had gained approximately 20-30 pounds between March and May 2020.

Theme 14: Fear of COVID-19

Several decedents expressed fear of COVID-19. For one decedent in particular who contracted COVID-19, fear of passing it to his family was suspected to be a driving factor in his death. When a coworker was relaying well wishes following decedent's return to work following infection with COVID-19, he stated "I was more concerned with giving COVID to my family." Further, his wife and son both reported that he was depressed due to COVID-19 and "isolated himself from his family."

3. Future Directions to Further Examine Impact of COVID-19

While the long-term impact of COVID-19 and associated mitigation measures have yet to be seen, current research suggests it may not have significantly impacted suicide rates. In a study of the impact of COVID-19 on suicide trends in 21 countries, suicide rates remained unchanged or even declined in high-income and upper-middle-income countries.[82] In a study of the Global Positioning System (GPS) and internet searches in the United States during Early 2020, reduced movement was associated with an increase in internet researches related to mental health and suicide,[83] yet globally and in the U.S. during the first 12 months of the COVID-19 pandemic, internet searches for "suicide" were unchanged from pre-pandemic levels.[84]

On a relational level, COVID-19 mitigation measures were correlated with perpetration of physical and psychological intimate partner aggression. Surprisingly, COVID-19 related stress was found to be associated with physical intimate partner aggression for individuals who did not endorse heavy drinking, but this association was not found for individuals who did endorse heavy drinking.[85] For cohabitating intimate partners, higher relationship satisfaction during Early/Mid 2020 was associated with not having children in the home and lower financial stress. Further, younger age, lower relationship satisfaction, and higher verbal aggression were associated with thoughts of separation.[86]

Individual factors, to include demographics and health-related behaviors, may have affected the impact of the COVID-19 pandemic on suicide. One study found that suicide mortality increased among Black individuals, but decreased among White individuals.[87] A systematic review of alcohol and substance abuse during the COVID-19 pandemic concluded that alcohol consumption trended toward increasing and consumption of other substances significantly increased.[88] In Early and Mid 2020, adults in the U.S. who identified as male and White reported a significant increase in the number of drinking days per week compared to pre-pandemic levels.[89]

Moreover, individuals who purchased a firearm during the COVID-19 pandemic were more likely to report suicidal ideation than both non-firearm owners and firearm owners who did not purchase a firearm during COVID-19.[90] Further, pandemic-related stress increased insomnia in a sample of Veterans.[91] The research on the impact of COVID-19 infection on mental health symptoms is mixed. A systematic review of the long-term impact of COVID-19 infection on anxiety, depression, PTSD, and sleep disturbances found that COVID-19 infection was associated with no or mild symptoms,[92] though another study found that for people with pre-existing mental health conditions, infection with COVID-19 may exacerbate mental health symptoms.[93]

Overall, as CY 2018, CY 2019, and CY 2021 suicides are analyzed by our team, we plan to conduct some basic comparisons of pre- to post- COVID-19 findings to generate additional lessons learned and hypotheses for further examination.

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