



Suicidal Behaviors in U.S. Air Force Aviators

JOE WOOD, PsyD; JOHN HEATON, MA, AEROMEDICAL CONSULTATION SERVICE
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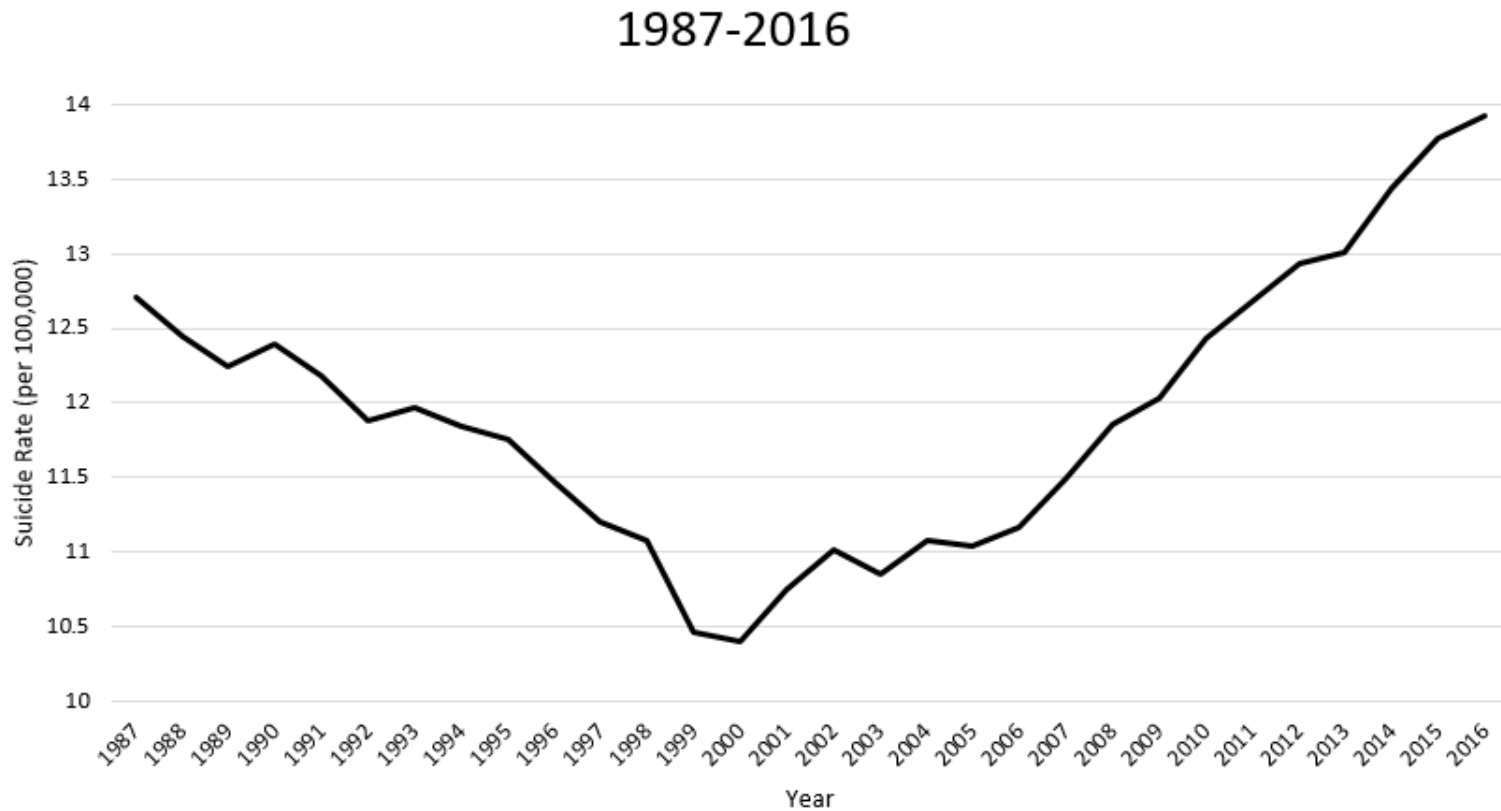
Disclaimer

- The views expressed are those of the authors and do not necessarily reflect the official policy or position of the Air Force, the Department of Defense, or the U.S. Government.

Suicide Rates

- Rates have been increasing for both general and military population
- >800,000 deaths by suicide yearly worldwide
- 2016 U.S. general population
 - 10th leading cause of death
 - 2nd leading cause of death for ages 10-34
 - 44,965 Americans committed suicide
 - 13.9 per 100,000
 - 77.23% were males
 - 25 attempts per death
 - 54% with no known psychiatric condition
 - Firearms most used method in U.S.
 - 2/3 of gun-related deaths
 - Poisoning most common for most of world
 - Most at-risk groups, white middle-aged and elderly men (32.63 and 34.37 per 100,000)
 - Military suicide has steadily increased over the past decade and now mirrors rates from the general population

U.S. Suicide Rates



Based on CDC data

Risk Factors

- Demographics
 - White, American Indian, male, middle-aged
- History of suicide attempts, suicidal ideation, or self-harm
- History of trauma
- Psychiatric disorders
- Real or anticipated loss
 - Legal issues
 - Loss of status, rejection
- Firearm ownership

Aeromedical Concerns

- Risk of death or serious injury
- Possibility of aircraft-assisted suicide
 - Rare in U.S. civilian pilots
 - 8 of 2,758 fatal aviation accidents between 2003-2012
- Can suggest serious psychopathology or underlying personality disorder
- Suicide attempters can be at elevated risk of additional suicide attempt
 - 25% of soldiers with hx of suicide attempt made subsequent attempt within 2 years
- Associated with substance use disorders
- Impact on the unit and mental health providers involved in the case

U.S. Air Force Flying Standards

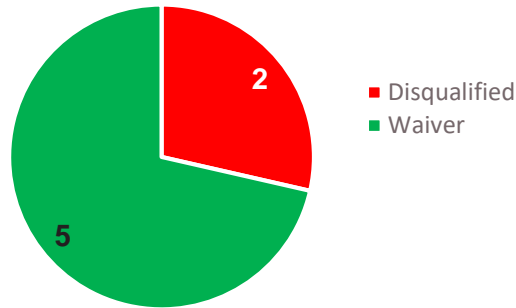
- Waiver Guide
 - Suicidal behavior is disqualifying for all flying duties
 - Waiver may be considered 6 months post-suicidal behavior
 - Must be asymptomatic and stable
 - Treatment may continue as needed:
 - Includes individual and marital psychotherapy
 - One of the following medications:
 - Sertraline (Zoloft®) up to 200 mg/day
 - Citalopram (Celexa®) up to 40 mg/day
 - Escitalopram (Lexapro®) up to 20 mg/day
 - Bupropion (Wellbutrin®) SR or XL up to 450 mg/day

Previous Aeromedical Consultation Service (ACS) Research

- Examined 14 trained aviators seen at ACS between 1981 and 1996
 - 11/14 (79%) received waiver recommendations
 - Underlying stressors included:
 - Failed intimate relationships
 - Administrative or legal problems
 - Psychiatric disorders
 - Death of spouse
 - Job conflicts
 - 54% were abusing alcohol

Current Study - 7 trained aviators seen at ACS between 2004 - 2018

- Waiver recommendations



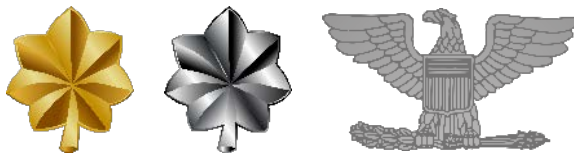
- Gender:



- Age:



- Rank:



- 4 married

Current Study - 7 trained aviators seen at ACS between 2004 - 2018

- Airframes
 - Fighter; bomber; cargo; intelligence, surveillance, reconnaissance; remotely piloted aircraft

- Methods
 - 3 firearms, 2 knives, 1 cord, 1 railroad tracks
 - 3 had preparatory behavior

- 3 used alcohol

- No drugs involved

U.S. Air Force photo by Senior Airman Julianne Showalter

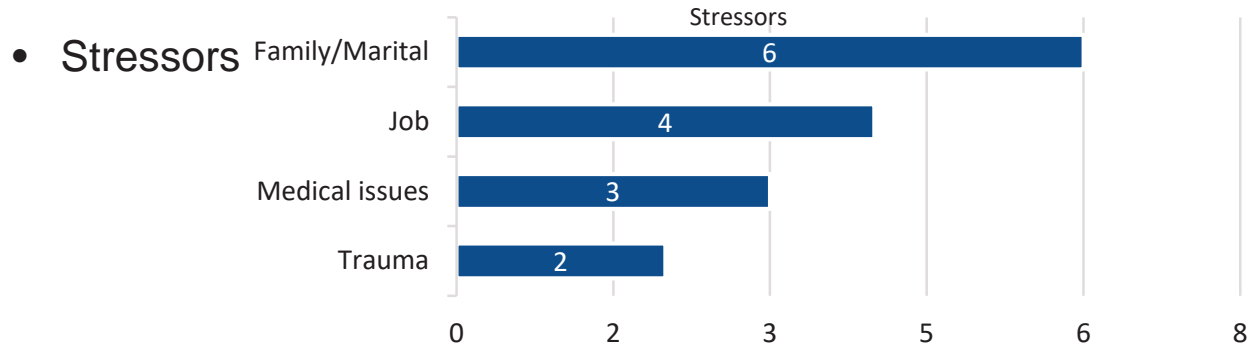


U.S. Air Force photo by Master Sgt. Val Gempis

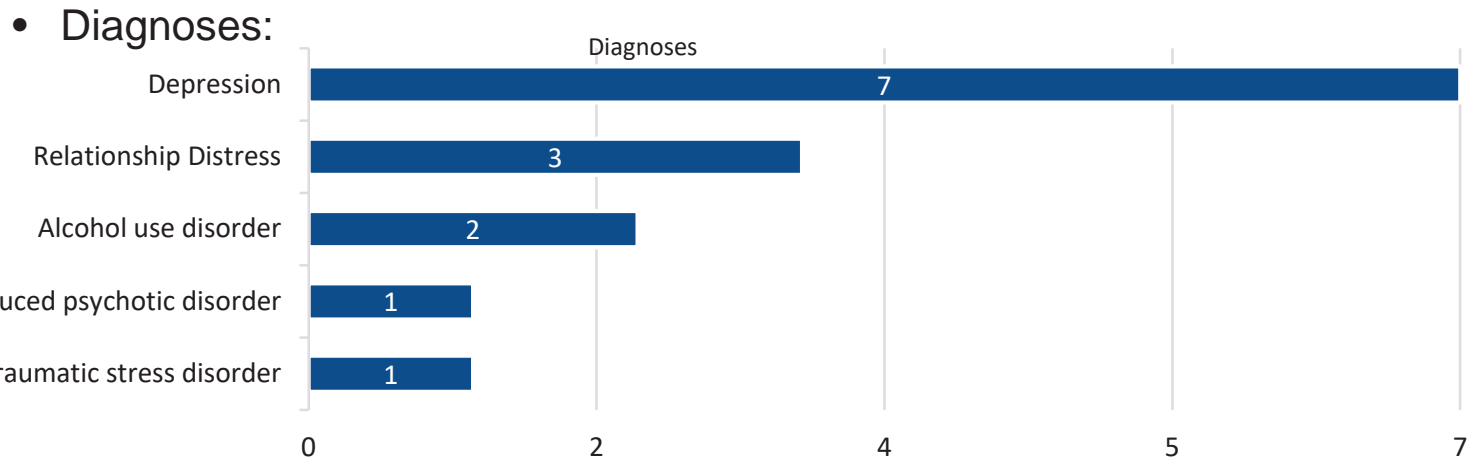


U.S. Air Force photo by Master Sgt. Dennis J. Henry Jr.

Current Study - 7 trained aviators seen at ACS between 2004 - 2018



- 6 were hospitalized
- ALL received psychotherapy
- 42% (3) treated with antidepressant



Case Study

- 28-year-old cargo pilot
 - Upon return home from deployment his fiancé leaves him
 - Experiences depressed mood, poor concentration, hopelessness, low motivation, and anhedonia
 - Holds a gun to his head on 7 separate occasions
 - Self-referred to the mental health clinic
 - Referred for 12-day inpatient hospitalization
 - Upon return home, continues psychotherapy and Wellbutrin 150 mg
 - He returns to baseline functioning within 2 months of suicidal behavior
 - 10 months post-hospitalization is referred to the ACS for flying evaluation

Case Study

- ACS evaluation
 - Identified previous suicide attempt as an adolescent
 - Overdosed on pills in response to a friend's death
 - Psychological testing
 - Superior intelligence (average for pilots)
 - Very high level of introversion
 - Subclinical, persistent depression
 - Diagnosed with Persistent Depressive Disorder, resolved
 - Recommended for waiver
 - At 1-year follow-up
 - Had deployed successfully
 - Had romantic break-up without deterioration in functioning
 - Mood had continued to improve
 - At 2-year follow-up
 - Continued stability

Conclusions

- Suicide and suicidal behaviors are rare but do occur in otherwise stable and high functioning pilots
- Precipitating factors are similar to the general population
- Pilots who have received adequate treatment are waiver eligible after 6 months
- Majority of pilots evaluated at the ACS for history of suicidality are recommended to continue to fly

Questions?