# **EXECUTIVE SUMMARY**

This annual report of the Department of Defense (DoD) Suicide Event Report (DoDSER) program summarizes calendar year (CY) 2011 fatal and nonfatal suicide events reported and submitted by 26 April 2012. This report consists of aggregated DoDSER data for the overall DoD and individually for the Air Force, Army, Marine Corps, and Navy. Personally identifiable information has been redacted from this report.

## Background

The DoDSER program is a collaborative effort of the National Center for Telehealth & Technology (T2) and the Services' suicide prevention program offices. Since 1 January 2008, the DoDSER program has standardized suicide surveillance across the Services with the ultimate goal of facilitating the DoD's suicide prevention mission. When a death is ruled a suicide by the Armed Forces Medical Examiner System (AFMES), a designated professional from the respective Service reviews records, conducts interviews when appropriate, and responds to the DoDSER items via the secure web-based DoDSER application (https://dodser.t2.health.mil). As of 1 January 2010, all Services have been collecting data on both suicides and suicide attempts, with some Services collecting data on additional nonfatal suicide events. The DoDSER items collect comprehensive information about the Service Member and the suicide event.

## Results

The AFMES indicates that 301 Service Members died by suicide in 2011 (Air Force = 50, Army = 167, Marine Corps = 32, Navy = 52). This number includes deaths strongly suspected to be suicides that are pending final determination. DoDSER Points of Contact (POCs) submitted reports for 100% of AFMES confirmed 2011 suicides (Air Force = 46, Army = 159, Marine Corps = 31, Navy = 51) as of the data extraction date (26 April 2012). A total of 915 Service Members attempted suicide in 2011 (Air Force = 241, Army = 432, Marine Corps = 156, Navy = 86). DoDSERs were submitted for 935 suicide attempts (Air Force = 251, Army = 440, Marine Corps = 157, Navy = 87). Of the 915 Service Members who attempted suicide, 896 had one attempt, 18 had two attempts, and 1 had three attempts.

## Dispositional/Personal Factors

- Demographic data and other individual characteristics of 2011 suicides were similar to those of 2010 and 2009 and are consistent with trends of the general US population [1]. Data derived from the AFMES and DoDSERs provided the following information:
- Service Members who were Caucasian, non-Hispanic or Latino, under the age of twenty-five, junior enlisted (E1-E4), or high school educated, were at increased risk for suicide relative to their respective demographic comparison groups in crude rate comparisons.
- The suicide rate for divorced Service Members was 55% higher than the suicide rate for married Service Members.



- The majority of suicides were completed by Regular component Service Members (88.70%), followed by the National Guard (7.31%), and Reserve (3.99%).
- Female Service Members accounted for 5.32% of suicides and 26.52% of suicide attempts in 2011.
- Compared to suicide decedents, a larger percentage of Service Members who attempted suicide were under the age of twenty-five (57.22% of suicide attempts, 37.87% of decedents), junior enlisted (71.02% of suicide attempts, 49.17% of decedents), and had more than a high school education (39.79% of suicide attempts, 20.60% of decedents).

#### Suicide Event Details

- Service Members most frequently used firearms to end their lives (n = 172, 59.93% for all firearms, n = 141, 49.13% for non-military issue firearms), or hanging (n = 59, 20.56%). Drug overdose was the most frequent method for suicide attempt (n = 559, 59.79%), followed by injury with a sharp or blunt object (n = 112, 11.98%).
- Drug and alcohol use were more common during nonfatal suicide events, with 598 suicide attempts (63.96%) involving drug use and 292 (31.23%) involving the use of alcohol. Among Service Members who attempted suicide with known drug use, prescription drugs were the most frequently misused (n = 382, 63.88% of any drugs used, 40.86% of total DoDSERs submitted).
- Most Service Members were not known to have communicated their potential for self-harm with others prior to dying by suicide (n = 212, 73.87%) or attempting suicide (n = 709, 75.83%). Those who did disclose their potential for self-harm most frequently communicated with spouses, friends, and other family members. These communications were most frequently verbal (n = 46, 16.03% of suicides; n = 129, 13.80% of attempted suicides). Other modes of communication included text messages (n = 11, 3.83% of suicides; n = 20, 2.14% of attempted suicides) and via Facebook (n = 4, 1.39% of suicides, n = 8, 0.86% of attempted suicides).

#### **Contextual Factors**

- Suicide decedents most frequently lived in homes or apartments off of their assigned installations (n = 130, 45.30%) or in shared living environments on their installations (n = 76, 26.48%). For Service Members who attempted suicide, 360 (38.50%) lived in homes or apartments off of their assigned installations and 381 (40.75%) lived in shared living environments on their installations.
- Firearms were present in the home or immediate environment of 144 (50.17%) suicide decedents and of 105 (11.23%) Service Members who attempted suicide.

#### Clinical Health Factors

- A prior history of self-injurious behavior was reported for 38 suicide decedents (13.24%) and 268 suicide attempts (28.66%).
- The majority of Service Members who died by suicide (n = 158, 55.05%) did not have a known history of a

behavioral health disorder. Mood disorders were reported for 57 decedents (19.86%); the most frequently reported mood disorder was major depressive disorder (n = 32, 11.15%). Forty-seven decedents (16.38%) were known to have had an anxiety disorder, most frequently post-traumatic stress disorder (PTSD; n = 18, 6.27%). Approximately one-fourth of Service Members who died by suicide had a known history of substance abuse (n = 69, 24.04%).

- The majority of Service Members who attempted suicide had a known history of a behavioral health disorder (n = 604, 64.60%). Mood disorders were reported in 322 suicide attempt DoDSERs (34.44%), most frequently major depressive disorder (n = 194, 20.75%). Approximately one-fourth of DoDSERs for suicide attempts (n = 241, 25.78%) reported diagnoses of anxiety disorders, the most frequent were PTSD (n = 115, 12.30%), followed by other anxiety disorders (n = 91, 9.73%). More than one-fourth (n = 256, 27.38%) had a known history of substance abuse.
- Known use of psychotropic medication was reported more frequently for suicide attempts (n = 400, 42.78%) compared to suicides (n = 75, 26.13%). Antidepressants were the most frequently used psychotropic medication among suicide decedents (n = 64, 22.30%) and those who attempted suicide (n = 342, 36.58%).
- DoDSERs indicated that 48 decedents (16.72%) had received outpatient behavioral health services within the month prior to suicide. Service Members who attempted suicide used outpatient behavioral health services more frequently (n = 570, 60.96%) than those who died by suicide (n = 114, 39.72%).

## Historical/Developmental Factors

- Approximately one-half of all DoDSERs included a known failure in a spousal or intimate relationship (n = 134, 46.69% of decedents; n = 487, 52.09% of suicide attempt DoDSERs), with many experiencing the failure within the month prior to suicide (n = 79, 27.53% of decedents; n = 306, 32.73% of suicide attempt DoDSERs).
- The most frequent known legal issue was Article 15 proceedings/non-judicial punishment (n = 52, 18.12% of suicide DoDSERs; n = 175, 18.72% of suicide attempt DoDSERs), followed by civil legal problems (n = 37, 12.89% for suicide DoDSERs and n = 67, 7.17% of suicide attempt DoDSERs).
- DoDSERs for suicides and suicide attempts included more incidents of reported known abuse victimization (n = 52, 18.12% of suicides, n = 612, 65.46% of suicide attempts) compared to incidents of reported known abuse perpetration (n = 39, 13.24% of suicides, n = 106, 11.34% of suicide attempts). Due to limitations in collecting comprehensive abuse data, interpretation of these data should be made with caution.
- DoDSERs included known history of job loss and instability (e.g., demotion) for 61 suicides (21.25%) and 290 suicide attempts (31.02%).

## Deployment Factors

 A minority of suicides (n = 29, 10.10%) and suicide attempts (n = 23, 2.46%) occurred during Operation Enduring Freedom (OEF) and Operation New Dawn (OND) deployments. There were 18 (6.27%) suicides in OEF locations and 11 (3.83%) in OND locations.



- Nearly one-half of suicide decedents had a history of OEF, Operation Iraqi Freedom (OIF), or OND deployment (n = 134, 46.69%), and twenty-three of these (8.01%) had a history of multiple deployments. Suicide attempt DoDSERs reported more previous deployments than did suicide DoDSERs (n = 377, 40.32%).
- Direct combat experience was reported for 44 suicide decedents (15.33%) and 158 suicide attempts (16.90%).

### Conclusion

The DoDSER program has continued to improve the accuracy and comprehensiveness of DoD suicide surveillance data collection since the program's inception in 2008. This DoDSER Annual Report reflects consistent patterns of data across time. Differences that may exist between Service Members with and without suicide events are currently unknown. Until comprehensive control data are available, it is not possible to determine statistically if any given DoDSER variable is a risk factor for suicide. T2 is currently conducting a pilot study to examine a process to collect these control data.