

# KEY FINDINGS

## Surveillance of Suicidal Behavior Publication, 2016



**ARMY PUBLIC HEALTH CENTER**



Joseph A. Pecko, PhD LCSW

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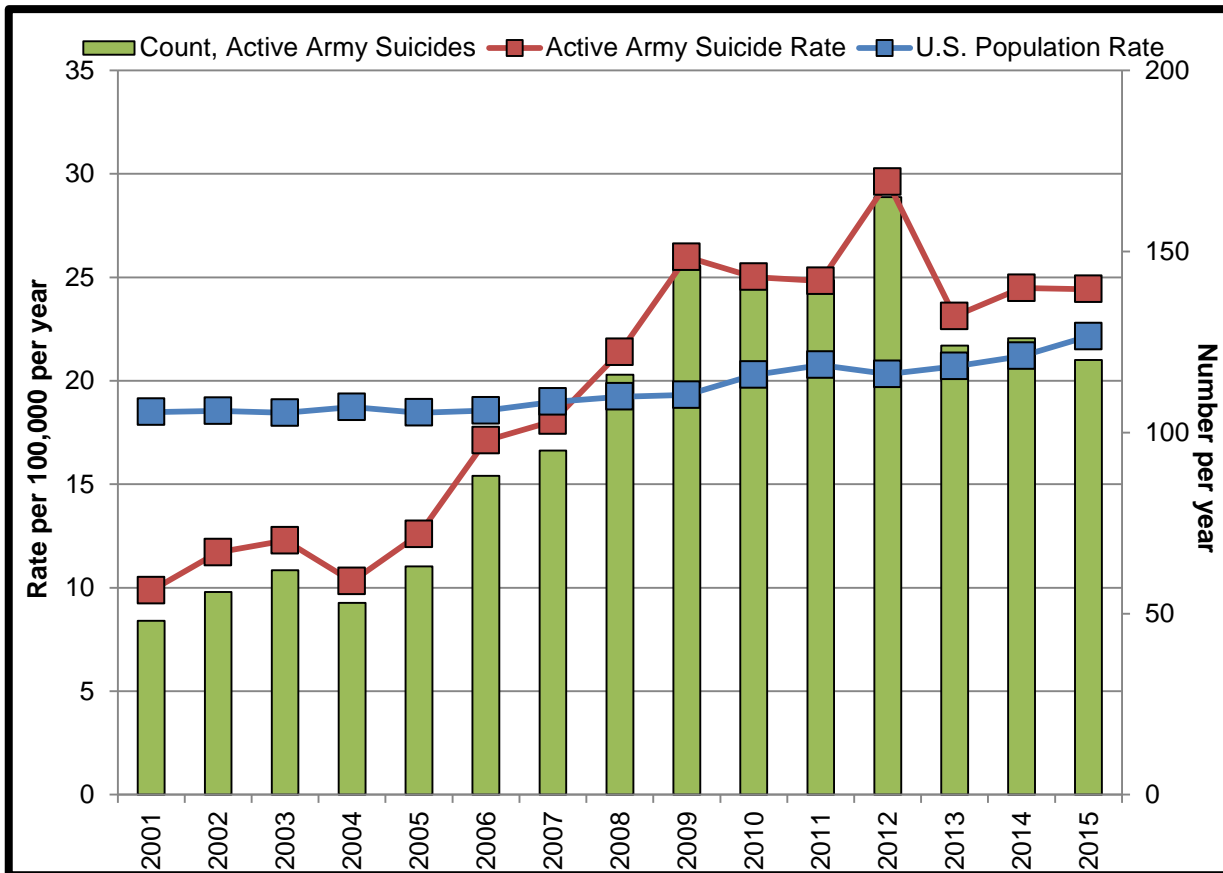
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- The suicide and suicide attempt rates in 2016 for Active Army Soldiers aged 17–59 increased from 2014 and 2015. The suicidal ideation rate was the highest observed since suicidal ideation data became available in 2007.
- Nearly three-fourths (73%) of Soldiers with suicidal behavior had previous behavioral health (BH) diagnoses. This might signal improvements in identifying Soldiers in need, greater willingness of Soldiers to seek care, and better delivery of BH care.
- The most prevalent personal and legal/administrative issues reported for Soldiers (relationship problems, work stress, legal problems) are consistent with risks for suicidal behavior in the U.S. population.

- Comparison of Army and Civilian Suicide Rates
- Key Findings
  - Suicidal Events and Rates
  - Demographic and Military Characteristics
  - Distribution of Suicides by Installation
  - Event Characteristics
  - Personal and Legal/Administrative Issues
  - Behavioral Health Indicators
  - Other Medical Indicators
  - Drug Testing History and ASAP Intake Screening
- Summary

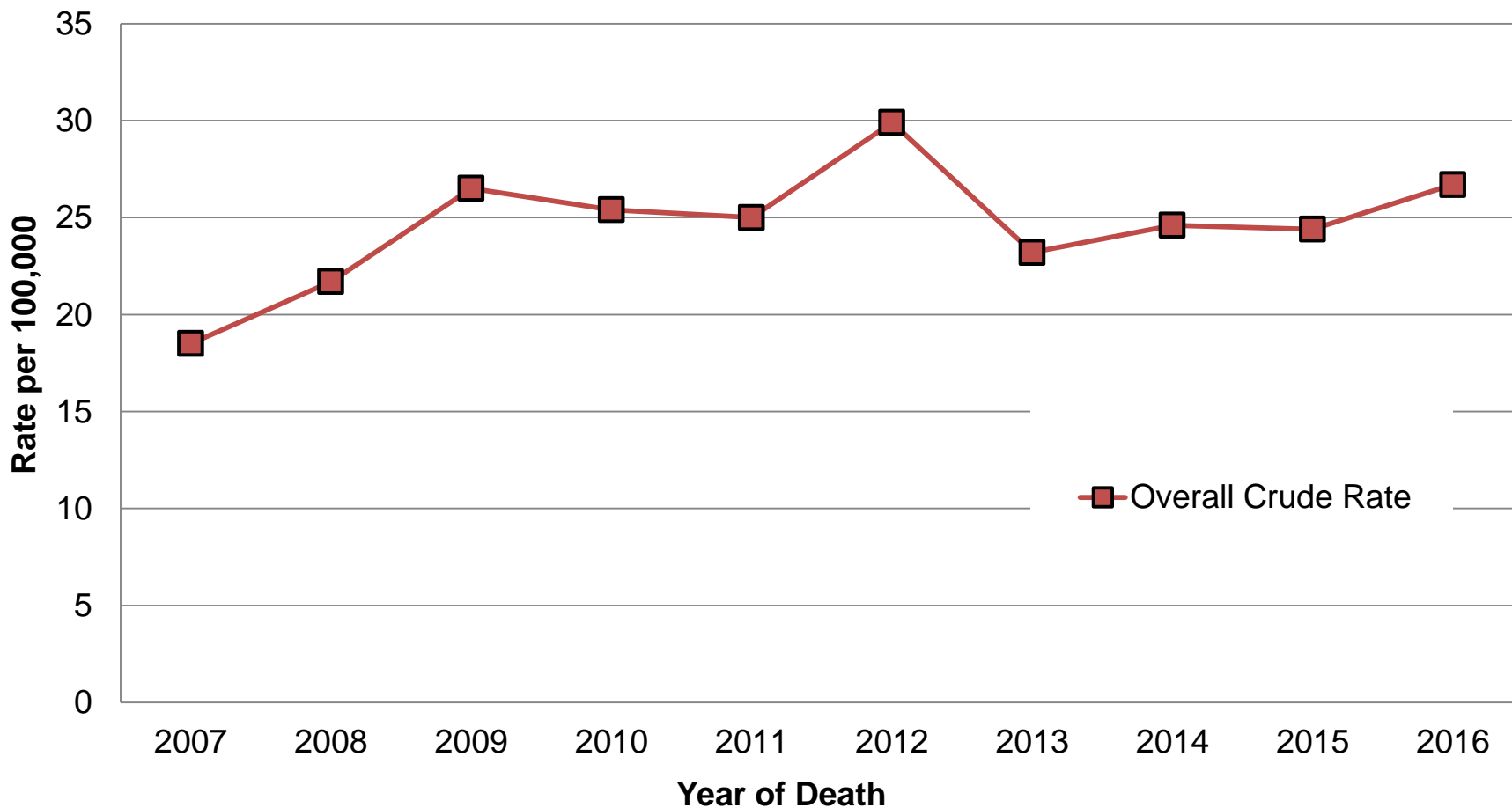
## Suicide Counts and Rates, Directly Adjusted for Age & Sex, 2001–2015



- From 2001 to 2007, the direct age- and sex-adjusted suicide rate among Active Army Soldiers was lower than the U.S. Civilian rate.
- From 2008 to 2015, the Active Army rate surpassed the U.S. Civilian rate.
- The suicide rate among Active Army Soldiers reached a potential peak in 2012.
- Active Army and U.S. Civilian rates differed statistically before 2006, from 2009–2010, and in 2012.

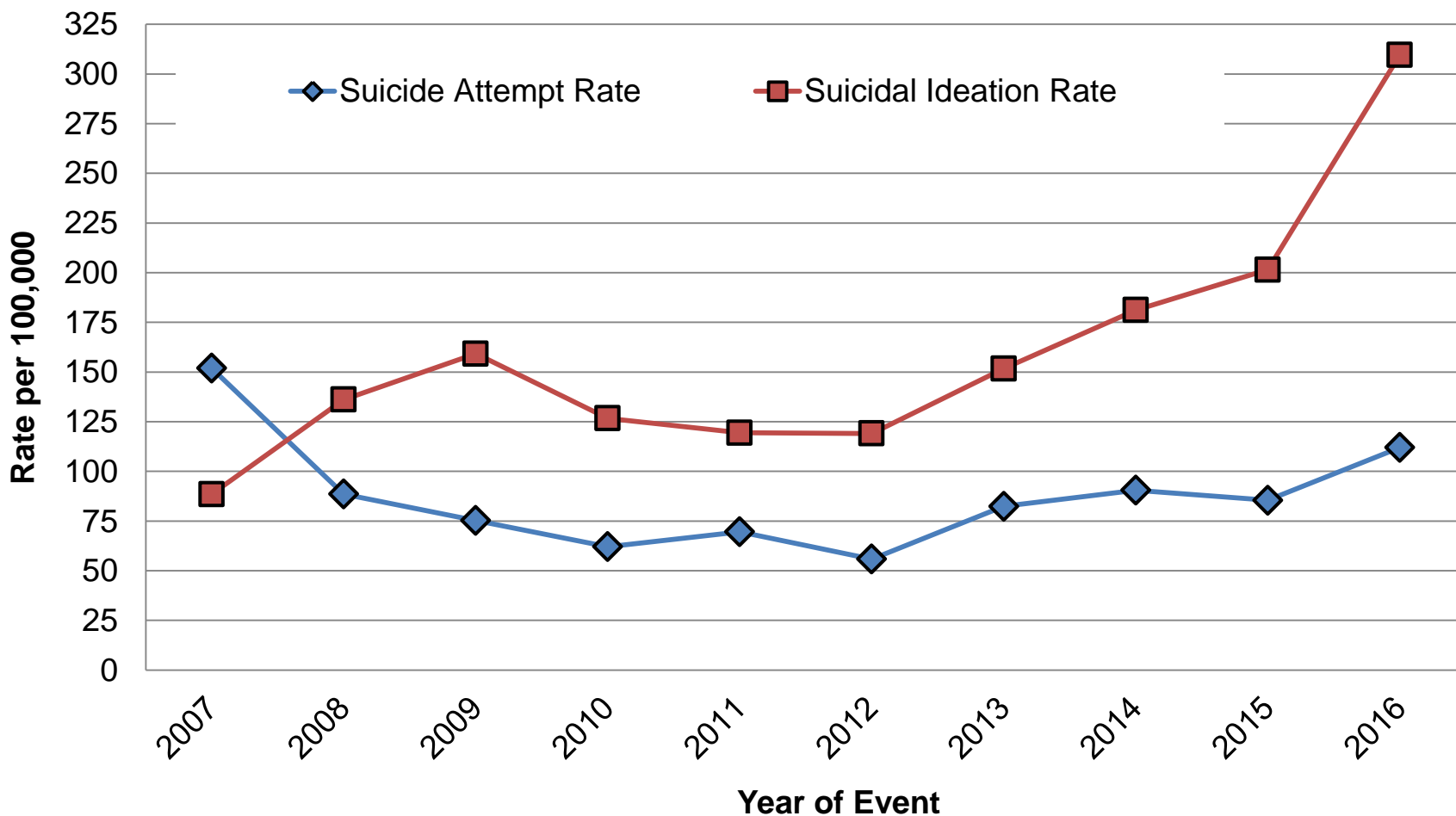
Notes: Rates have been direct adjusted by age and gender, using the 2015 U.S. Army distribution as a standard population. U.S. Army suicide rates and counts include Active Army Soldiers, aged 17–59.

## Crude Suicide Rates,\* per 100,000, Active Army Soldiers, 2007–2016



\*Rates include only Active Army cases, aged 17–59.

## Crude Suicide Attempt and Suicidal Ideation Rates,\* per 100,000, Active Army Soldiers, 2007–2016



\*Rates include only Active Army cases, aged 17–59.

## Cases of Suicidal Behavior by Year, Active Army , 2014–2016

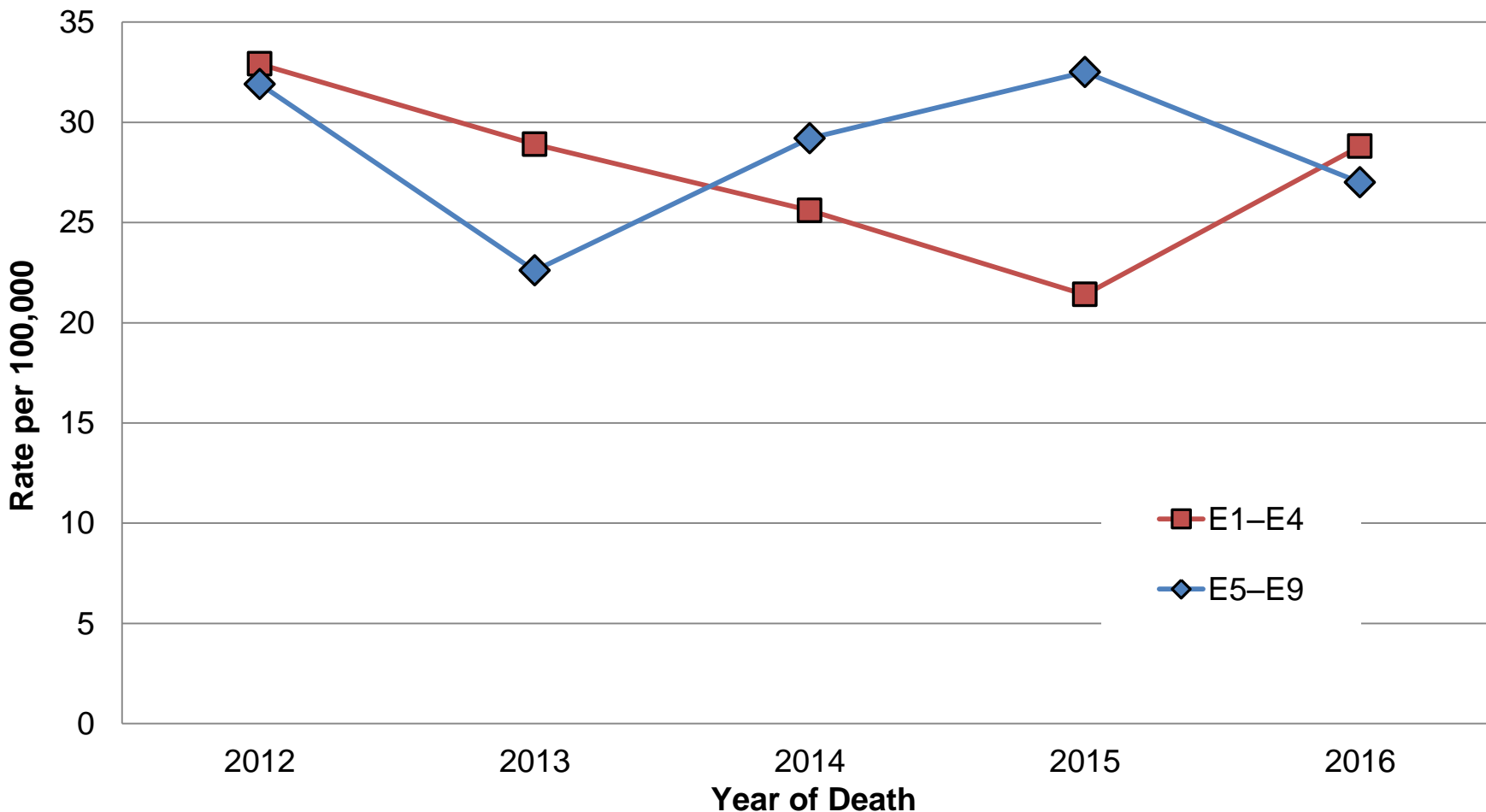
	2014	2015	2016
Suicidal Event – n			
Suicide Cases	126	120	127
Suicide Attempt Cases	464	420	532
Suicidal Ideation Cases	929	990	1470

## Most Prevalent Demographic and Military Characteristics of Soldiers with Suicidal Behavior, Active Army, 2016

	Suicide Cases (n=127)	Attempt Cases (n=532)	Ideation Cases (n=1470)
Characteristic – %			
Male	92	74	78
17–34 Years of Age	82	92	88
Non-Hispanic White	68	48	54
Enlisted Rank	83	96	96

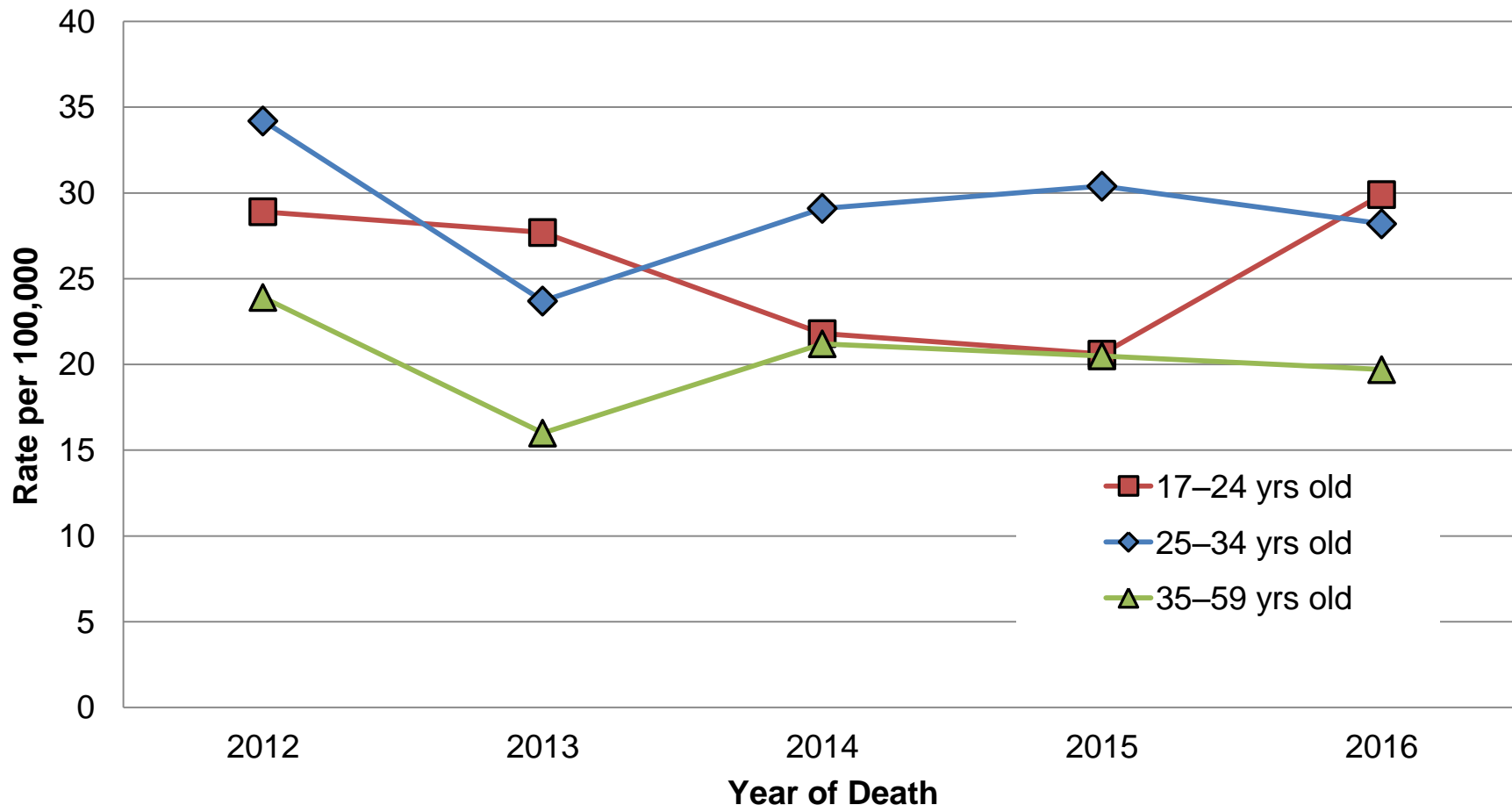


## Crude Suicide Rates,\* per 100,000, Stratified by Rank, Active Army Soldiers, 2012–2016



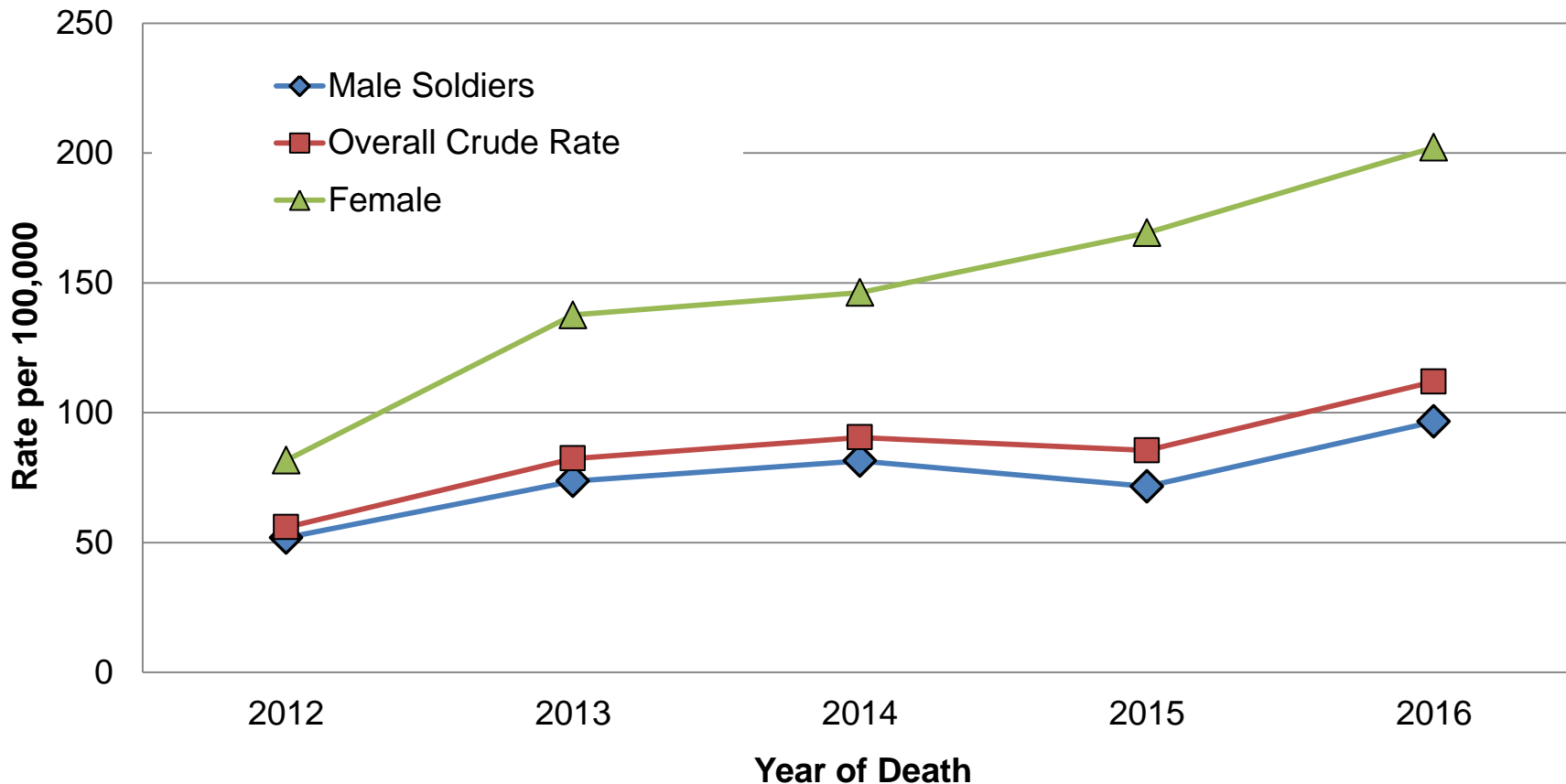
\*Rates include only Active Army cases, aged 17–59.

## Crude Suicide Rates,\* per 100,000, Stratified by Age Group, Active Army Soldiers, 2012–2016



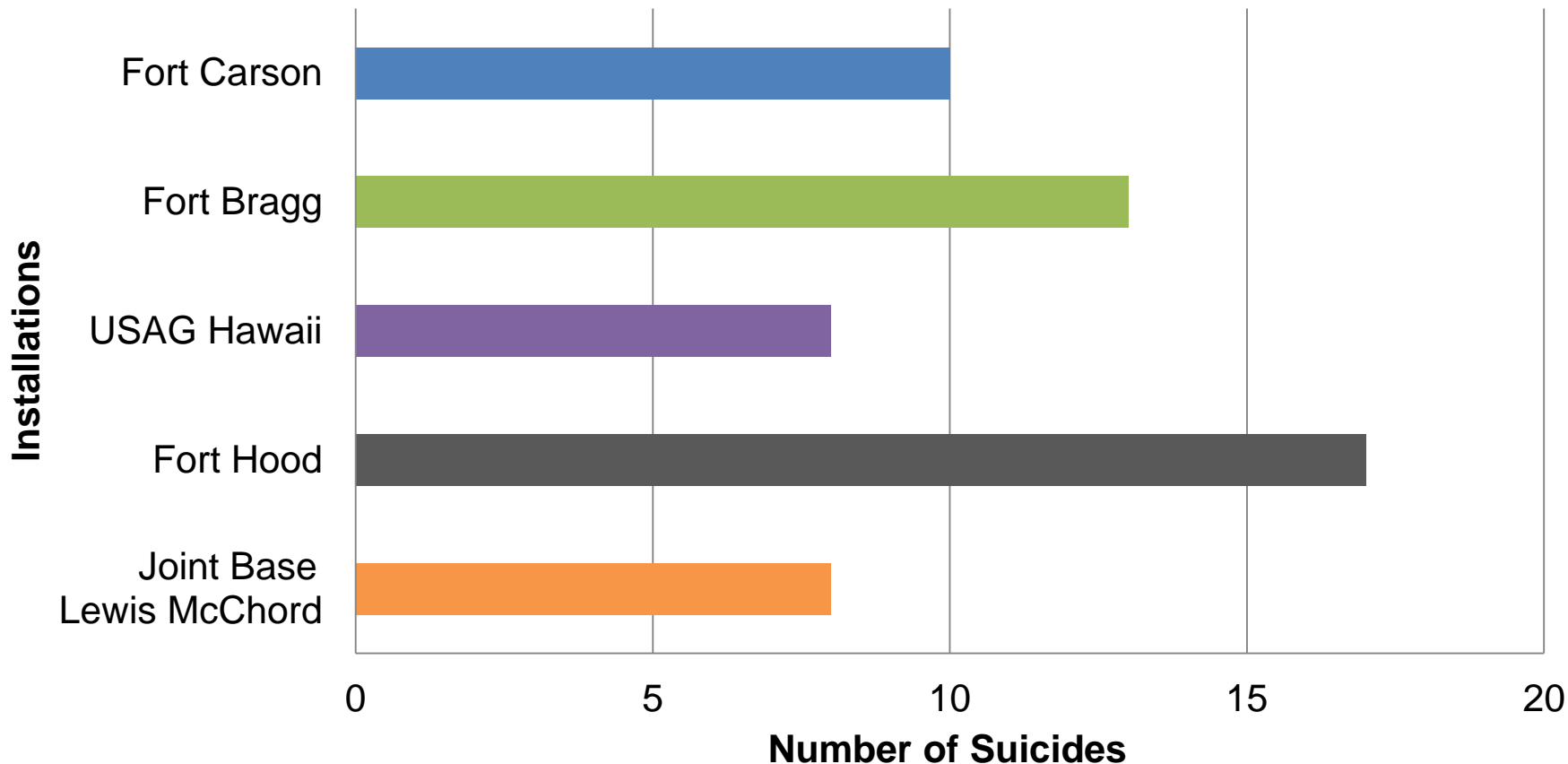
\*Rates include only Active Army cases, aged 17–59.

## Crude Suicide Attempt Rates,\* per 100,000, Stratified by Sex, Active Army Soldiers, 2012–2016



\*Rates include only Active Army cases, aged 17–59.

## Installations with the Largest Number of Suicides, Active Army Soldiers, U.S. Army, 2016



Note: These installations are among those with the largest populations of Soldiers.

## Event Characteristics, by Type of Suicidal Behavior, Active Army Soldiers, 2016

	Suicides (n=127)	Attempts (n=532)
Characteristic – %		
Location: USA	91	84
Method		
Gunshot Wound	65	4
Hanging/Asphyxiation	25	14
Overdose	2	49
Substance Involvement <sup>a,b</sup>		
Alcohol	17	27
Drugs	7	49

Notes: <sup>a</sup>Drugs or alcohol were used at the time of the suicidal event, but were not necessarily the method of death or attempted death. <sup>b</sup>A DoDSER was not available for 1 suicide case.

## Principal Personal and Legal/Administrative Issues Reported for Active Army Soldiers with Suicidal Behavior, 2016

	Suicide Cases (n=126 <sup>c</sup> )	Attempt Cases (n=532)
Personal and Legal/Admin. History <sup>a,b</sup> – %		
Relationship Problems <sup>d</sup>	52	50
Work Stress <sup>d</sup>	22	36
Legal Problems <sup>d</sup>	25	32
Physical Health Problems <sup>d</sup>	21	19
Ever a Victim of Abuse	14	32

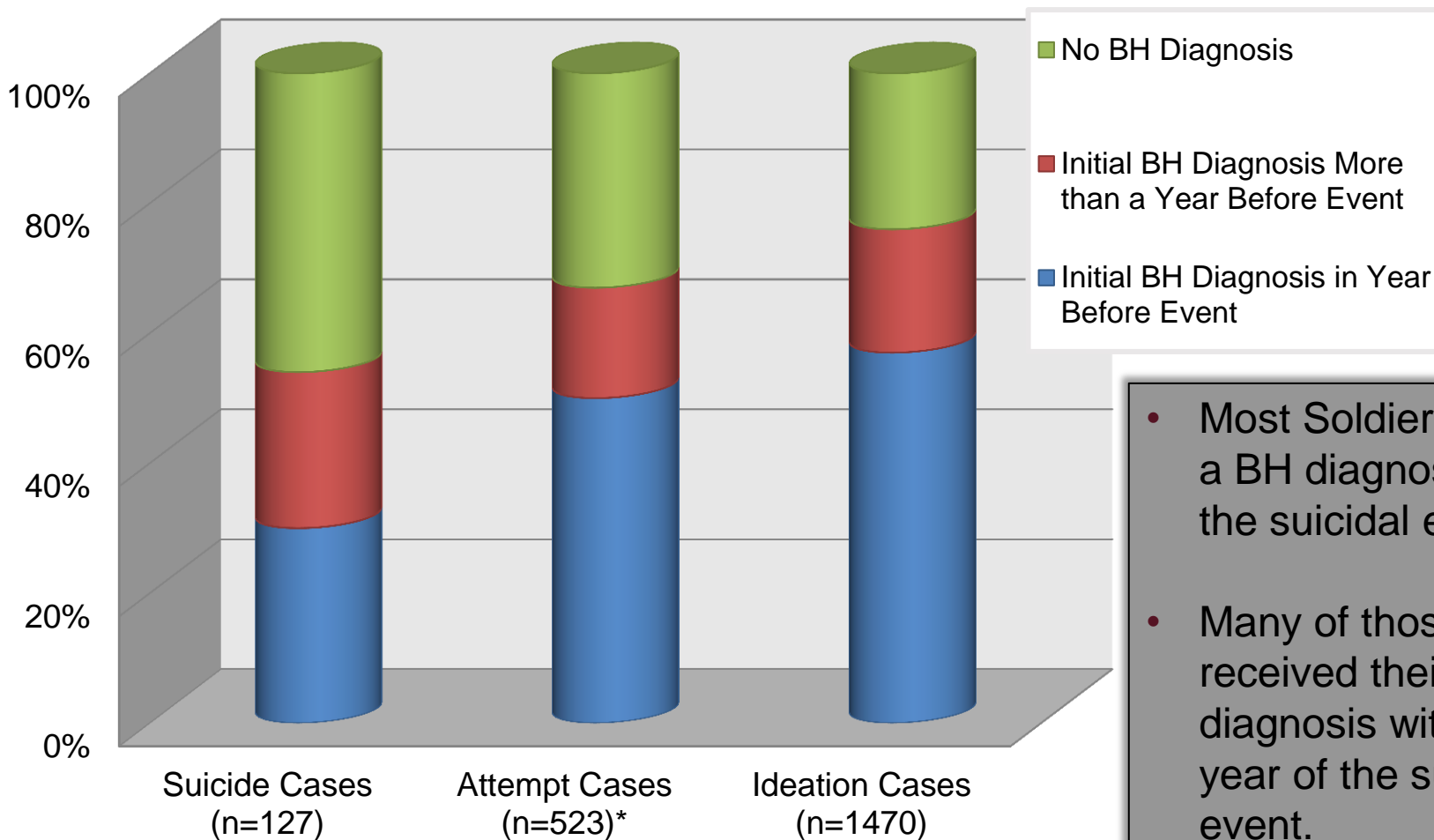
Notes: <sup>a</sup>Information on personal and legal/administration issues from DoDSERs. <sup>b</sup>More than one may apply. <sup>c</sup>A DoDSER was not available for 1 suicide case. <sup>d</sup>Reported in the year preceding the suicidal event.

## Behavioral Health Indicators by Type of Suicidal Behavior, Active Army Soldiers, 2016

	Suicide Cases (n=127)	Attempt Cases (n=523 <sup>a</sup> )	Ideation Cases (n=1470)
Behavioral Health Indicator – %			
BH Encounter in 30 Days Before Event	35	60	68
Any BH Diagnosis <sup>b</sup>	54	67	76
Adjustment Disorder <sup>b</sup>	39	54	60
Mood Disorder <sup>b</sup>	31	39	45
PTSD <sup>b</sup>	13	15	17
Other Anxiety Disorder <sup>b</sup>	24	28	33
Substance Use Disorder <sup>b</sup>	22	24	21

Notes: <sup>a</sup>Medical claims data were not available for 9 attempt cases. <sup>b</sup>Diagnoses since entry into service and before suicidal event.

## Behavioral Health (BH) Diagnosis by Type of Suicidal Behavior, Active Army Soldiers, 2016



- Most Soldiers received a BH diagnosis prior to the suicidal event.
- Many of those Soldiers received their first BH diagnosis within one year of the suicidal event.

\*Medical claims data were not available for 9 attempt cases.



## Other Medical Indicators by Type of Suicidal Behavior, Active Army Soldiers,\* 2016

	Suicide Cases (n=127)	Attempt Cases (n=523 <sup>a</sup> )	Ideation Cases (n=1470)
Other Medical Indicators – %			
Traumatic Brain Injury Diagnosis Since Entry into Service	15	13	15
Chronic Pain Diagnosis in Year Before Suicidal Event	7	7	6
Sleep Diagnosis in Year Before Suicidal Event	19	27	26
Polypharmacy <sup>b</sup> at the Time of the Suicidal Event	7	6	5

Notes: <sup>a</sup>Medical claims data were not available for 9 attempt cases. <sup>b</sup>Denominator is full count of cases (127 suicide cases, 532 suicide attempt cases, 1470 suicidal ideation cases).

## Alcohol Use Screening, by Type of Suicidal Behavior, Active Army Soldiers, 2016

	Suicide Cases (n=95 <sup>a</sup> )	Attempt Cases (n=374 <sup>a</sup> )	Ideation Cases (n=1069 <sup>a</sup> )
Alcohol Use – %			
Unhealthy Drinking	8	6	7
Probable Alcohol Disorder	2	2	1

Notes: <sup>a</sup>Alcohol screening data from recent Periodic Health Assessments were not available for 32 suicide cases, 158 attempt cases, and 401 ideation cases.

## Drug Testing History, by Type of Suicidal Behavior, Active Army Soldiers, 2016

	Suicide Cases (n=120 <sup>a</sup> )	Attempt Cases (n=461 <sup>a</sup> )	Ideation Cases (n=1311 <sup>a</sup> )
Drug Test History – %			
Positive Drug Test	4	6	5
Positive Drug Tests <sup>b</sup>			
Amphetamines	0	25	7
Cannabis	80	57	48
Cocaine	0	21	33
Opiates	20	0	4
Oxycodone/Oxymorphone	0	7	7

Notes: <sup>a</sup>Drug testing data were not available for 7 suicide, 71 attempt, and 159 ideation cases. <sup>b</sup>Percent out of cases with a positive drug test.

## Army Substance Abuse Program (ASAP), Intake Screening History, by Type of Suicidal Behavior, Active Army Soldiers,\* 2016

	Suicide Cases (n=127)	Attempt Cases (n=532)	Ideation Cases (n=1470 <sup>a</sup> )
ASAP Intake Screening <sup>a</sup> – %			
Screened for Intake	12	14	10
Enrolled in Treatment <sup>b</sup>	87	79	77

Notes: <sup>a</sup>Screened in year before event. <sup>b</sup>Percent out of cases screened for intake.

- The 2016 suicide rate increased slightly compared to 2014 and 2015.
- Most Soldiers with suicidal behavior are enlisted, non-Hispanic white males, younger than 35 years of age.
- Approximately three-fourths (73%) of Soldiers with suicidal behavior had previously been diagnosed with a behavioral health disorder: 54% of suicide cases, 67% of suicide attempt cases, and 76% of suicidal ideation cases.
- The principal personal and legal/administrative issues reported for suicide and suicide attempt cases have not changed over time. They include relationship problems, work stress, physical health problems, and legal problems.