

SUICIDAL AND HOMICIDAL IDEATION; SYMPTOM

Does Not Include Suicide Attempt, Intentional Self-Harm or Suicide; For Suicide, See “Suicide” Case Definition

Background

This case definition was developed by the Armed Forces Health Surveillance Branch (AFHSB) for the purpose of epidemiological surveillance of the symptoms of suicidal ideation and homicidal ideation in military-associated populations.

Clinical Description

Suicidal ideation, also known as suicidal thoughts, refers to thinking about, considering, or planning suicide. Suicidal behavior can be characterized as a spectrum that ranges from fleeting suicidal thoughts to completed suicide. It is often associated with depression and other mood disorders. Suicidal ideation is more common than attempted suicide attempt or suicide death. During 2008-2009, 3.7% of the adult U.S. population reported having suicidal thoughts within the past year.¹ Among the Armed Forces, the AFHSB *Medical Surveillance Monthly Report (MSMR)* reported the number of hospitalizations for suicidal ideation steadily increased from 5 in 2006 to 355 in 2010.² Most individuals with suicidal ideation do not go on to attempt suicide but the symptom is considered a risk factor.

Homicidal ideation, also known as homicidal thoughts, refers to thinking about, considering, or planning a homicide. Homicidal ideation accounts for an estimated 10-17% of patient presentations to psychiatric facilities in the United States.³

Case Definition and Incidence Rules

For surveillance purposes, a case of suicidal or homicidal ideation is defined as:

- *One hospitalization* with a case defining diagnosis of suicidal or homicidal ideation (see ICD9 and ICD10 code lists below) in the *first or second* diagnostic position; or
- *Two outpatient medical encounters, within 180 days* of each other, with a case defining diagnosis of suicidal or homicidal ideation (see ICD9 and ICD10 code lists below) in the *first or second* diagnostic position; or
- *One outpatient medical encounter in a psychiatric or mental health care specialty setting*, defined by Medical Expense and Performance Reporting System (MEPRS) code BF, with a case defining diagnosis of a suicidal or homicidal ideation (see ICD9 and ICD10 code lists below) in the *first or second* diagnostic position.

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¹ Surveillance Summaries. Suicidal Thoughts and Behaviors Among Adults Aged > 18 years -United States, 2008-2009. Centers for Disease Control and Prevention. Oct 21, 2011; 60(SS13); 1-22.

² Armed Forces Health Surveillance Center. Surveillance Snapshot: Hospitalizations for Suicidal Ideation. *Medical Surveillance Monthly Report (MSMR)*. 2011; Vol 18(4):23.

³ Stern, Theodore F; Schwartz, Jonathon H; Cremens, M Cornelia; Mulley, Albert G. The evaluation of homicidal patients by psychiatric residents in the emergency room: A pilot study. *Psychiatric Quarterly*. 1991; 62(4): 333–344.



Case Definition and Incidence Rules *(continued)*

Incidence rules:

For individuals who meet the case definition:

- The incidence date is considered the date of the first hospitalization or outpatient medical encounter that includes a diagnosis of a suicidal or homicidal ideation.
- An individual is considered an incident case *once per lifetime*.

Exclusions:

- None

Codes

The following ICD9 and ICD10 codes are included in the case definition:

Condition	ICD-10-CM Codes	ICD-9-CM Codes
Homicidal and suicidal ideation	<i>R45.85 (homicidal and suicidal ideations)</i>	--
	- R45.850 (homicidal ideations)	V62.85 (homicidal ideation)
	- R45.851 (suicidal ideations)	V62.84 (suicidal ideation)

Development and Revisions

- In February of 2016 the case definition was updated to include ICD10 codes.
- In February of 2016 a stand-alone case definition for suicidal ideation and homicidal ideation was created. The codes for suicidal ideation and homicidal ideation were previously included in the mental health problems case definition because they were coded with V codes in the ICD-9-CM classification system. In ICD10, suicidal and homicidal ideations were reclassified as symptoms in the ICD10 category R45 (symptoms and signs involving emotional state). They are no longer coded with V/Z codes.
- This case definition was developed in November of 2010 by AFHSC *Medical Surveillance Monthly Report (MSMR)* staff for an article on mental disorders and mental health problems among active duty Service members.¹ The case definition was developed based on reviews of the ICD9 codes, the scientific literature, and previous AFHSC analyses.

Case Definition and Incidence Rule Rationale

- For the purposes of counting new incident cases, AFHSB uses a once per lifetime incidence rule unless a specific timeframe is more appropriate and is specified (e.g., individuals may be counted



as an incident case once every 365 days). Historically, a "once per surveillance period" incidence rule was used due to limited data in the Defense Medical Surveillance System (DMSS), but that is no longer necessary.

Reports

AFHSB reports on suicidal and homicidal ideation in the following reports:

- Periodic *MSMR* articles on mental disorders and associated hospitalizations, outpatient medical encounters, and post-deployment illnesses.
- Annually: *MSMR* article on the "Absolute and relative morbidity burdens attributable to various illnesses and injuries. U.S. Armed Forces." (see *Comments* section below).

Review

May 2019	Case definition reviewed and updated by the AFHSB Surveillance Methods and Standards (SMS) working group.
Feb 2016	Case definition reviewed and updated by the AFHSB Surveillance Methods and Standards (SMS) working group.
Nov 2012	Case definition reviewed and adopted by AFHSC Surveillance Methods and Standards working group.
Nov 2010	Case definition developed and reviewed by AFHSC <i>MSMR</i> staff.

Comments

Burden of Disease Reports:

AFHSB articles and reports on the "burden" of illness and injury in the U.S. Armed Forces group all illness and injury-specific diagnoses, defined by ICD9 and ICD10 codes, into 142 burden of disease-related conditions and 25 categories based on a modified version of the classification system developed for the Global Burden of Disease (GBD) Study.⁴ In general, the GBD system groups diagnoses with common pathophysiologic or etiologic bases and/or significant international health policymaking importance.

The AFHSB disaggregates some diagnoses that are grouped into single categories in the GBD system (e.g., mental disorders) to increase the military relevance of the results. The category of mental health disorders is separated into the following sub-categories of "disorders": anxiety, substance abuse, adjustment, mood, tobacco dependence, psychotic, personality, somatoform, and all other mental disorders.⁵

Because reports on disease burden are based on the total numbers of medical encounters for specific conditions, a slightly different case definition is used for burden analyses. The case definition requires capturing only the diagnosis in the primary (first) diagnostic position of each record of an inpatient or outpatient medical encounter. Each individual is allowed only one medical encounter per

⁴ The global burden of disease: A comprehensive assessment of mortality and disability from diseases, injuries, and risk factors in 1990 and projected to 2020. Murray, CJ and Lopez, AD, eds. Harvard School of Public Health (on behalf of the World Health Organization and The World Bank), 1996:120-2.

⁵ Armed Forces Health Surveillance Branch. Absolute and relative morbidity burdens attributable to various illnesses and injuries, active component, *Medical Surveillance Monthly Report (MSMR)*. May 2018; Vol.25 (5): 2-9.



condition per day, and inpatient encounters are prioritized over outpatient encounters on the same day. Case defining codes are any ICD9 codes between 001 and 999, any ICD10 codes between A00 and T88, ICD10 codes beginning with Z37 (outcome of delivery), and DoD unique personal history codes DoD 0101-0105.

Comprehensive AFHSB Mental Health Reports:

For analyses and reports requiring data on *all* mental disorders, AFHSB includes *all* mental health diagnoses that fall within the range of ICD9 codes 290-319 / ICD10 codes F01-F99 (mental disorders) in the first or second diagnostic position. The following diagnoses are excluded from the analysis.

- Codes ICD9 310.2 / ICD10 F07.81 (post-concussion syndrome)
- Codes ICD9 305.1 / ICD10 F17* (tobacco use disorder / nicotine dependence) is not included as tobacco-cessation efforts are widespread within primary care clinics in the military and this diagnosis is not treated as a mental health disorder.
- Codes ICD9 317*-319* / ICD10 F70-F79 (mental retardation)
- Codes ICD9 315* / ICD10 F80*-F82*, F88-F89 (specific delays in development)
- Codes ICD9 299* / ICD10 F84* (pervasive developmental disorders)

Alternative Case Definition and Methodology

The Navy Satellite Cell of the Armed Forces Health Surveillance Branch (AFHSB) has developed a case definition and methodology for epidemiological surveillance of “Suicidal Behavior” among USMC Service Members. The methodology uses *one* hospitalization or *one* outpatient medical encounter with a case defining diagnosis in *any* diagnostic position, and, in addition to suicidal ideation, the code set also includes codes for suicide attempt and intentional self-harm.

