

*\* Proposed new case definition; to be confirmed by AFHSB following analyses of data*

## MENTAL HEALTH - RELATED PROBLEMS

*Problems Related to Psychosocial and Socioeconomic Circumstances defined by ICD9 V-codes and ICD10 Z-codes that do not meet the DSM-5 criteria for a diagnosis of a Mental Health Disorder.*

### Background

This case definition was developed by the Armed Forces Health Surveillance Branch (AFHSB) for the purpose of descriptive epidemiological reports on mental health-related problems among active duty Service members. For the purposes of this document, “mental health-related *problems*” are ICD9 V-coded and ICD10 Z-coded problems that do not meet the specific Diagnostic and Statistical Manual of Mental Disorders (DSM-5)<sup>1</sup> criteria required for a diagnosis of a mental health *disorder*. These problems often require behavioral health interventions and medical encounters and contribute to the care burden on the healthcare system

### Clinical Description

Mental health-related problems are life circumstances, often related to relationships and family, identified in the clinical setting that influence an individual’s health status or care, but are not considered a current illness or injury. The presenting problem is usually the focus of treatment; however, the individual has no mental health condition that meets the DSM-V criteria for a mental health disorder.

### Case Definition and Incidence Rules

For surveillance purposes, a case of a mental health-related problem is defined as:

- *One hospitalization* with any of the defining diagnoses of a mental health-related problem (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 any of the defining diagnoses of a mental health-related problem (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-related care specialty setting*, defined by Medical Expense and Performance Reporting System (MEPRS) code BF, with any of the defining diagnoses of a mental health-related problem (see ICD9 and ICD10 codes list below) in the *first or second* diagnostic position.

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<sup>1</sup> American Psychiatric Association (2013). Diagnostic and Statistical Manual of Mental Disorders (5<sup>th</sup> Edition).



### Case Definition and Incidence Rules *(continued)*

#### *Incidence rules:*

For individuals who meet the case definition:

- An individual is only eligible to be a V or Z-coded incident case if they have never had a documented incident mental health diagnosis in the code range of ICD9 290-319 (mental disorders) and ICD10 F01-F99 (mental, behavioral and neurodevelopmental disorders).
- The incidence date is considered the date of the first hospitalization or outpatient medical encounter that includes a diagnosis of a mental health-related problem.
- An individual is considered an incident case *once per surveillance period*.

#### *Exclusions:*

- None

### Codes

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

Problem	ICD-10-CM Codes	ICD-9-CM Codes
Problems related to education and literacy	<i>Z55 (problems related to education and literacy)</i>	V62.3 (educational circumstances)
	Z55.0 (illiteracy and low-level literacy)	
	Z55.1 (schooling unavailable and unattainable)	
	Z55.2 (failed school examinations)	
	Z55.3 (underachievement in school)	
	Z55.4 (educational maladjustment and discord with teachers and classmates)	
	Z55.8 (other problems related to education and literacy)	
	Z55.9 (problems related to education and literacy, unspecified)	
Problems related to employment and unemployment	<i>Z56 (problems related to employment and unemployment)</i>	V62.0 (unemployment) V62.1 (adverse effects of work environment)
	Z56.0 (unemployment, unspecified)	
	Z56.1 (change of job)	

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	Z56.2 (threat of job loss)	V62.29 (other occupational circumstances or maladjustment)
	Z56.3 (stressful work schedule)	
	Z56.4 (discord with boss and workmates)	
	Z56.5 (uncongenial work environment)	
	Z56.6 (other physical and mental strain related to work)	
	Z56.8 (other problems related to employment)	
	- Z56.81 (sexual harassment on the job)	
	- Z56.82 (military deployment status)	
	- Z56.89 (other problems related to employment)	
	Z56.9 (unspecified problems related to employment)	
Problems related to housing and economic circumstances <i>(added)</i>	<i>Z59 (problems related to housing and economic circumstances)</i>	--
	Z59.0 (homelessness)	V60.0 (lack of housing)
	Z59.1 (inadequate housing)	V60.1 (inadequate housing)
	Z59.2 (discord with neighbors, lodgers and landlord)	V60.89 (below)
	Z59.3 (problems related to living in residential institution)	V60.6 (persons living in residential institution)
	Z59.4 (lack of adequate food and safe drinking water)	V60.2 (inadequate material resources)
	Z59.5 (extreme poverty)	
	Z59.6 (low income)	
	Z59.7 (insufficient social insurance and welfare support)	
	Z59.8 (other problems related to housing and economic circumstances)	V60.89 (other specified housing or economic circumstances)
Z59.9 (problems related to housing and economic circumstances, unspecified)	V60.9 (unspecified housing or economic circumstances)	
Problems related to social environment	<i>Z60 (problems related to social environment)</i>	V60.3 (person living alone)
	Z60.0 (problems of adjustment to life-cycle transition)	V62.4 (social maladjustment)
	Z60.2 (problems related to living alone)	V62.89 (below)
	Z60.3 (acculturation difficulty)	
	Z60.4 (social exclusion and rejection)	

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	Z60.5 (target of, perceived, adverse discrimination and persecution)	
	Z60.8 (other problems related to social environment)	
	Z60.9 (problems related to social environment, unspecified)	
Problems related to upbringing	<i>Z62 (problems related to upbringing)</i>	V61.29 (other parent-child problems)
	Z62.0 (inadequate parental supervision and control)	V61.8 (below)
	Z62.1 (parental overprotection)	V60.81 (foster care, status)
	Z62.2 (upbringing away from parents)	
	- Z62.21 (child in welfare custody)	
	- Z62.22 (institutional upbringing)	
	- Z62.29 (other upbringing away from parents)	
	Z62.3 (hostility towards and scapegoating of child)	
	Z62.6 (inappropriate (excessive) parental pressure)	
	Z62.8 (other specified problems related to upbringing)	
	- Z62.81 (personal history of abuse in childhood)	
	- Z62.810 (personal history of physical and sexual abuse in childhood)	
	- Z62.811 (personal history of psychological abuse in childhood)	
	- Z62.812 (personal history of neglect in childhood)	
	- Z62.819 (personal history of unspecified abuse in childhood)	
	- Z62.82 (parent-child conflict)	
	- Z62.820 (parent-biological child conflict)	
	- Z62.821 (parent-adopted child conflict)	
	- Z62.822 (parent-foster child conflict)	
	- Z62.89 (other specified problems related to upbringing)	

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	- Z62.890 (parent-child estrangement NEC)	
	- Z62.891 (sibling rivalry)	
	- Z62.898 (other specified problems related to upbringing)	
Other problems related to primary support group, including family circumstances	<i>Z63 (other problems related to primary support group, including family circumstances)</i>	V61.0 (family disruption)
	Z63.0 (problems in relationship with spouse or partner)	V61.05 (family disruption due to child in welfare custody)
	Z63.1 (problems in relationship with in-laws)	V61.8 (below)
	Z63.3 (absence of family member)	--
	- Z63.31 (absence of family member due to military deployment)	V61.01 (family disruption due to family member on military deployment)
	- Z63.32 (other absence of family member)	V61.06 (family disruption due to child in foster care or in care of non-parental family member) V61.08 (family disruption due to other extended absence of family member)
	Z63.4 (disappearance and death of family member)	V61.07 (family disruption due to death of family member) V62.82 (bereavement, uncomplicated)
	Z63.5 (disruption of family by separation and divorce)	V61.03 (family disruption due to divorce or legal separation)
	Z63.6 (dependent relative needing care at home)	V61.49 (other problems within the family)
	Z63.7 (other stressful life events affection family and household)	--
	- Z63.71 (stress on family due to return of family member from military deployment)	V61.02 (family disruption due to return of family member from military deployment)
	- Z63.72 (alcoholism and drug addiction in family)	V61.41 (alcoholism in family)
	- Z63.79 (other stressful life events affecting family and household)	V61.3 (problems with aged parents or in-laws)
	Z63.8 (other specified problems related to primary support)	V61.04 (family disruption due to parent-child estrangement) V61.09 (other family disruption) V61.8 (other specified family circumstances)
	Z63.9 (problems related to primary support group, unspecified)	V61.9 (unspecified family circumstance) <i>(continued on next page)</i>



Problems related to certain psychosocial circumstances	<i>Z64 (problems related to certain psychosocial circumstances)</i>	--
	Z64.0 (problems related to unwanted pregnancy)	V61.6 (illegitimacy or illegitimate pregnancy) V61.7 (other unwanted pregnancy)
	Z64.1 (problems related to multiparity)	V61.5 (multiparity)
	Z64.4 (discord with counselors)	V62.89 (below)
Problems related to other psychosocial circumstances	<i>Z65 (problems related to other psychosocial circumstances)</i>	--
	Z65.0 (conviction in civil and criminal proceedings without imprisonment)	V62.5 (legal circumstances)
	Z65.1 (imprisonment and other incarceration)	
	Z65.2 (problems related to release from prison)	
	Z65.3 (problems related to other legal circumstances)	
	Z65.4 (victim of crime and terrorism)	V62.89 (below)
	Z65.5 (exposure to disaster, war and other hostilities)	V62.22 (personal history of return from military deployment)
	Z65.8 (other specified problems related to psychosocial circumstances)	V62.21 (personal current military deployment status) V62.81 (interpersonal problems, not elsewhere classified) V62.89 (other psychological or physical stress, not elsewhere classified)
Z65.9 (problems related to unspecified psychosocial circumstances)	V62.9 (unspecified psychosocial circumstance)	
Encounter for mental health services for victim and perpetrator of abuse	<i>Z69 (encounter for mental health services for victim and perpetrator of abuse)</i>	--
	Z69.0 (encounter for mental health services for child abuse problems)	V61.21 (counseling for victim of child abuse)
	Z69.01 (encounter for mental health services for parental child abuse)	
	- Z69.010 (encounter for mental health services for victim of parental child abuse)	
	- Z69.011 (encounter for mental health services for perpetrator of parental child abuse)	V61.22 (counseling for perpetrator of parental child abuse)
	Z69.02 (encounter for mental health services for non-parental child abuse)	--



	- Z69.020 (encounter for mental health services for victim of non- parental child abuse)	V61.21 (above)
	- Z69.021 (encounter for mental health services for perpetrator of non- parental child abuse)	V62.83 (counseling for perpetrator of physical/sexual abuse)
	Z69.1 (encounter for mental health services for spousal or partner abuse problems)	--
	- Z69.11 (encounter for mental health services for victim of spousal or partner abuse)	V61.11 (counseling for victim of spousal and partner abuse)
	- Z69.12 (encounter for mental health services for perpetrator of spousal or partner abuse)	V61.12 (counseling for perpetrator of spousal and partner abuse)
	Z69.8 (encounter for mental health services for victim or perpetrator of other abuse)	--
	- Z69.81 (encounter for mental health services for victim of other abuses) <i>Note: includes rape victim</i>	V65.49 (below)
	- Z69.82 (encounter for mental health services for perpetrator of other abuses)	V62.83 (counseling for perpetrator of physical/sexual abuse)
Counseling related to sexual attitude, behavior and orientation <i>(added)</i>	<i>Z70 (counseling related to sexual health, behavior and orientation)</i>	V65.49 (below)
	Z70.0 (counseling related to sexual attitude)	
	Z70.1 (counseling related to patient's sexual behavior and orientation)	
	Z70.2 (counseling related to sexual behavior and orientation of third party)	
	Z70.3 (counseling related to combined concerns regarding sexual attitude, behavior and orientation)	
	Z70.8 (other sex counseling)	
	Z70.9 (sex counseling, unspecified)	
Persons encountering health services for counseling and medical advice, not elsewhere classified	<i>Z71 (persons encountering health services for counseling and medical advice, not elsewhere classified)</i>	--
	Z71.0 (persons encountering health services to consult on behalf of another person)	V65.19 (other person consulting on behalf of another person)
	Z71.1 (persons with feared health complaint in whom no diagnosis is made)	V65.5 (persons with feared health complaint in whom no diagnosis is made)



	Z71.2 (persons consulting for explanation of examination of test finding)	V65.8 (other reason for seeking consultation)
	Z71.3 (dietary counseling and surveillance)	V65.3 (dietary surveillance and counseling)
	Z71.4 (alcohol abuse counseling and surveillance)	V65.42 (counseling on substance use and abuse)
	- Z71.41 (alcohol abuse counseling and surveillance of alcoholic)	
	- Z71.42 (counseling for family member of alcoholic)	
	Z71.5 (drug abuse counseling and surveillance)	
	- Z71.51 (drug abuse counseling and surveillance of drug abuser)	
	- Z71.52 (counseling for family member of drug abuser)	
	Z71.6 (tobacco abuse counseling)	
	Z71.7 (human immunodeficiency virus [HIV] counseling)	
	Z71.8 (other specified counseling)	V65.49 (below)
	- Z71.81 (spiritual or religious counseling)	
	- Z71.89 (other specified counseling)	V61.2 (parent-child problems)
		V61.20 (counseling for parent-child problem; unspecified)
		V61.23 (counseling for parent-biological child problem)
		V61.24 (counseling for parent-adopted child problem)
		V61.25 (counseling for parent, guardian,- foster child problem)
		V61.1 (counseling for marital and partner problems)
		V61.10 (counseling for marital and partner problems, unspecified)
		V65.49 (other specified counseling)
	Z71.9 (counseling, unspecified)	V65.40 (counseling NOS)
		V65.9 (unspecified reason for consultation)
Problems related	<i>Z72 (problems related to lifestyle)</i>	--



to lifestyle <i>(added)</i>	Z72.0 (tobacco use) – <i>evaluate; see comments below</i>	V69.8 (other problems related to lifestyle)	
	Z72.3 (lack of physical exercise)	V69.0 (lack of physical exercise)	
	Z72.4 (inappropriate diet and eating habits)	V69.1 (inappropriate diet and eating habits)	
	Z72.5 (high risk sexual behavior)	V69.2 (high risk sexual behavior)	
	- Z72.51 (high risk heterosexual behavior)		
	- Z72.52 (high risk homosexual behavior)		
	- Z72.53 (high risk bisexual behavior)		
	Z72.6 (gambling and betting)	V69.3 (gambling and betting)	
	Z72.8 (other problems related to lifestyle)	--	
	- Z72.81 (antisocial behavior)	--	
	- Z72.810 (child and adolescent antisocial behavior)	V71.02 (observation for childhood or adolescent antisocial behavior)	
	- Z72.811 (adult antisocial behavior)	V71.01 (observation for adult antisocial behavior)	
	- Z72.82 (problems related to sleep)	--	
	- Z72.820 (sleep deprivation)	V69.4 (lack of adequate sleep)	
	- Z72.821 (inadequate sleep hygiene)	V69.8 (above)	
	- Z72.89 (other problems related to lifestyle)		
	Z72.9 (problem related to lifestyle, unspecified)	V69.9 (unspecified problem related to lifestyle)	
	Problems related to life management difficulty <i>(added)</i>	<i>Z73 (problems related to life management difficulty)</i>	--
		Z73.0 (burn-out)	V69.8 (above)
Z73.1 (type A behavior pattern)			
Z73.2 (lack of relaxation and leisure)			
Z73.3 (stress, not elsewhere classified)			
Z73.4 (inadequate social skills, not elsewhere classified)		V62.4 (above)	
Z73.5 (social role conflict, not elsewhere classified)			
Z73.6 (limitation of activities due to disability)		V62.89 (above)	
Z73.8 (other problems related to life)	--		



	management difficulty)	
	- Z73.81 (behavioral insomnia of childhood)	V69.5 (behavioral insomnia of childhood)
	- Z73.810 (...sleep-onset association type)	
	- Z73.811 (... limit setting type)	
	- Z73.812 (... combined type)	
	- Z73.819 (... unspecified type)	
	- Z73.82 (dual sensory impairment)	V49.85 (dual sensory impairment)
	- Z73.89 (other problems related to life management difficulty)	V69.5 (above)
	Z73.9 (problems related to life management difficulty, unspecified)	V69.9 (above)
Other mental and behavioral problems	<i>Translated code F48.9 (nonpsychotic mental disorder, unspecified) not included; categorized under anxiety disorders.</i>	V40 (mental and behavior problems) V40.2 (other mental problems)
	<i>Translated code F69 (unspecified disorder of adult personality and behavior) not included; no longer included in DSM-5.</i>	V40.3 (other behavioral problems) V40.31 (wandering in diseases classified elsewhere) V40.39 (other specified behavioral problem) V40.9 (unspecified mental or behavioral problem)

### Development and Revisions

- In February of 2016 the case definition was updated by the SMS working group to include ICD10 codes and a new code set to accommodate significant changes in the ICD-10-CM coding manual. See *Code Set Determination and Rationale* below for a detailed description of changes.
- The original case definition was developed in November of 2010 by AFHSC MSMR staff for a MSMR article on mental disorders and mental health problems among active duty Service members.<sup>1</sup> The original code set and groupings of mental health problems used in this definition were based on code sets developed by Garvey *et al.*,<sup>2</sup> and Seal *et al.*<sup>3</sup> The code set included all ICD9 codes indicative of a mental health *problem* that are outside the range of 290–319 (mental disorders). All codes were V-codes with the inclusion of ICD9 code 995.8 (other specified adverse effects, not elsewhere classified).

### Case Definition and Incidence Rule Rationale

- To increase the specificity of the case definition for outpatient encounters, two such encounters with the defining diagnoses are required. The period of 180 days was established to allow for the likelihood that “true” mental health-related problems would have a second encounter within that interval.



### Code Set Determination and Rationale

- In 2016 AFHSB reviewed the ICD9 and ICD10 code sets and made the following corrections, updates, and changes to the “Mental Health Problems” case definition. These changes are based upon the recommendations of the SMS workgroup and will be further evaluated when ICD10 data are available.
  - The title of the case definition was changed from “Mental Health Problems” to “Mental Health-Related Problems” defined as problems related to psychosocial and socioeconomic circumstances defined by ICD9 V-codes and ICD10 Z-codes that do not meet the DSM-5 criteria for a diagnosis of mental health disorder.
  - The updated code set includes most codes in ICD10 categories Z55-Z65 (persons with potential health hazards related to socioeconomic and psychosocial circumstances) and Z69-Z76 (persons encountering health services in other circumstances). Codes that are not included are: Z57- (occupational exposure to risk factors), Z74- (problems related to care provider dependency); Z75- (problems related to medical facilities and other health care); and, Z76 (persons encountering health services in other circumstances). Upon initial consideration, AFHSB determined these codes would not be associated with a mental-health related problem. This hypothesis will be evaluated when additional ICD10 data are available.
  - Codes ICD9 V62.85/ICD10 R45.850 (homicidal ideations) and ICD9 V62.84/ICD10 R45.851 (suicidal ideation) were removed from this code set. In ICD10, suicidal and homicidal ideations were reclassified as symptoms in the category R45 (symptoms and signs involving emotional state). They are no longer coded with V/Z codes. For surveillance of these condition see AFHSB case definition “Suicidal and Homicidal Ideation; Symptom”.
  - Maltreatment-related problems identified by ICD9 codes 995.80- 995.95 were removed from the code set. Although these conditions may be associated with a mental-health related problem they are not V-coded diagnoses and, therefore, are not included in this case definition.
- ICD10 Z72.0 (tobacco use) is a new code in the ICD-10-CM manual that falls within the categories of codes used for this case definition. AFHSB will evaluate the use and impact of including this code in the case definition when ICD10 data are available.
- The following codes were not included in the original ICD9 code set and are not included here: ICD9 V62.6 (refusal of treatment for reasons of religion or conscience / ICD10 Z53.1 (procedure and treatment not carried out because of patient’s decision for reasons of belief and group pressure); ICD9 V40.0 (mental and behavioral problems with learning / ICD10 F81.9 (developmental disorder of scholastic skill, unspecified) and ICD9 V40.1 (mental and behavioral problems with communication, including speech) / ICD10 Z86.59 (personal history of other mental and behavioral disorders).

### Reports

AFHSB reports on mental health problems 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).



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**Review**

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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 MSMR staff.

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**Comments**

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None

