

ADJUSTMENT DISORDERS

Does Not Include Acute Stress Reaction or Post Traumatic Stress Disorder (PTSD); For PTSD, See “Post-Traumatic Stress Disorder” Case Definition.

Background

This case definition was developed by the Armed Forces Health Surveillance Center (AFHSC) Medical Surveillance Monthly Report (MSMR) staff for the purpose of descriptive epidemiological reports on mental disorders and mental health problems among active duty Service members.¹ The reports provide a comprehensive look at the status of mental health in the Services and provide in depth information on numbers, rates, and trends of adjustment disorders and other mental health diagnoses that fall within the range of ICD-9-CM codes 290-319 (mental disorders).

Clinical Description

An adjustment disorder is a psychological response to an identifiable stressor or group of stressors that cause(s) significant emotional or behavioral symptoms that do not meet criteria for another specific Axis I disorder.² Symptoms cause marked distress that is in excess of what would be expected from exposure to the stressor and may cause significant impairment in social or occupational functioning. Symptoms do not represent bereavement, must occur within three months of the event(s) or stressor(s), and must persist for no longer than six months after the stressor, or its consequences, have been removed.³

Case Definition and Incidence Rules

For surveillance purposes, a case of adjustment disorder is defined as:

- *One hospitalization* with any of the defining diagnoses of adjustment disorder (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 adjustment disorder (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 any of the defining diagnoses of adjustment disorder (see ICD9 and ICD10 code list below) in the *first or second* diagnostic position.

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¹ Armed Forces Health Surveillance Center. Mental Disorders and Mental Health Problems, Active Component, U.S. Armed Forces, January 2000 – December 2009. *Medical Surveillance Monthly Report (MSMR)*. 2010 November; Vol.17 (11): 6- 12.

² Top-level of the DSM “multi-axial” system of diagnosis. Represents acute symptoms or a primary diagnosis that needs treatment (e.g., major depressive disorder, panic disorder, anxiety disorder); DSM IV.

³ American Psychiatric Association Diagnostic and Statistical Manual of Mental Disorders. Fourth Edition. 1994.



Case Definition and Incidence Rules (cont.)

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 adjustment disorder.
- An individual is considered an incident case *once per surveillance period*.

Exclusions:

- None

Codes

The following ICD-9 and ICD10 codes are included in the case definition:

Condition	ICD-10-CM Codes	ICD-9-CM Codes
Adjustment Disorders	F43.2 (adjustment disorders)	309 Adjustment Reaction
	- F43.20 (adjustment disorder, unspecified)	309.9 (unspecified adjustment reactions)
	- F43.21 (adjustment disorder with depressed mood)	309.0 (adjustment disorder with depressed mood) 309.1 (prolonged depressive reaction)
	- F43.22 (adjustment disorder with anxiety)	309.24 (adjustment disorder with anxiety)
	- F43.23 (adjustment disorder with mixed anxiety and depressed mood)	309.28 (adjustment disorder with mixed anxiety and depressed mood)
	- F43.24 (adjustment disorder with disturbance of conduct)	309.3 (adjustment disorder with disturbance of conduct)
	- F43.25 (adjustment disorder with mixed disturbance of emotions and conduct)	309.4 (adjustment disorder with mixed disturbance of emotions and conduct)
	- F43.29 (adjustment disorder with other symptoms)	309.29 (other adjustment reactions with predominant disturbance of other emotions)
	—	309.8 (other specified adjustment reactions) <i>(continued on next page)</i>



	F43.8 (other reactions to severe stress)	309.82 (adjustment reaction with physical symptoms) 309.83 (adjustment reaction with withdrawal) 309.8 (other specified adjustment reactions)
	F43.9 (reaction to severe stress, unspecified)	309.9 (above)
	—	309.2 (adjustment reaction with predominant disturbance of other emotions)
	F93.0 (separation anxiety disorder of childhood)	- 309.21 (separation anxiety disorder) –
	F94.8 (other childhood disorders of social functioning)	- 309.22 (emancipation disorder of adolescence and early adult life) - 309.23 (specific academic or work inhibition)
	F94.9 (childhood disorder of social functioning, unspecified)	-

Development and Revisions

- In December of 2014 the case definition was updated to include ICD10 codes.
- This 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.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

- 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” cases of adjustment disorder would have a second encounter within that interval. Also, adjustment disorders generally do not persist for longer than 6 months.

Code Set Determination and Rationale

- ICD9 code 309.21 (separation anxiety disorder) is included in the code set as data show there are approximately 125 cases/year. ICD9 code 309.22 (emancipation disorder of adolescence and early adult life) is included with approximately 10 cases/year) and ICD9 309.23 (specific academic or work inhibition) with 120-595 cases/year and a trend that increasing over time. In ICD10 these codes are specific to pediatric patients aged 0-17. The SMS workgroup recommends including ICD10 codes F93.0 (separation anxiety disorder of childhood), F94.8 (other childhood disorders of social functioning) and F94.9 (childhood disorder of social functioning, unspecified) with further analyses when data is available.



- The code set and groupings of mental health disorder-specific diagnoses used in this case definition are based on code sets developed by Garvey *et al.*⁴ and Seal *et al.*⁵ The final code set was selected after a review of the scientific literature and of the relevant codes in the International Classification of Diseases, 9th Revision.
- ICD9 309.81/ICD10 F43.1 (post-traumatic stress disorder) is included in the ICD9 309 (Adjustment reaction) / ICD10 F43 (reaction to severe stress, and adjustment disorders) series. These codes are not included in the code set for this case definition because: (1) PTSD is generally categorized as an anxiety disorder - not an adjustment disorder - provoked by a severe psychological trauma; (2) adjustment disorders may occur in response to stressors of lesser severity; and (3) the symptoms of PTSD differ from those of adjustment disorders and tend to last longer.
- ICD9 308.x (acute reactions to stress)/ICD10 F43.0 (acute stress reaction) are not included in this code set because adjustment disorders by definition are marked by a symptoms lasting longer than 1 month.

Reports

AFHSC reports on adjustment disorders 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

Dec 2014	Case definition reviewed and updated by the AFHSC Surveillance Methods and Standards (SMS) working group.
July 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.

Comments

Burden of Disease Reports: AFHSC 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 ICD-9-CM codes, into 139 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.⁶ In general, the GBD system groups diagnoses with common pathophysiology or etiologic bases and/or significant international health policymaking importance.

⁴ Garvey Wilson A, Messer S, Hoge C. U.S. military mental health care utilization and attrition prior to the wars in Iraq and Afghanistan. *Soc Psychiatry Psychiatr Epidemiol.* 2009; 44(6):473-481.

⁵ Seal KH, Bertenthal D, Miner CR, Sen S, Marmar C. Bringing the War Back Home: Mental Health Disorders Among 103 788 US Veterans Returning From Iraq and Afghanistan Seen at Department of Veterans Affairs Facilities. *Arch Intern Med.* March 12, 2007; 167(5):476-482.

⁶ 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.



The AFHSC 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.⁷

Because reports on disease burden are based on the total number of medical encounters for a specific condition, a slightly different case definition is used for these analyses. The case definition requires only “*one inpatient or outpatient medical encounter with any defining ICD9 codes between 001 and 999*” and uses the diagnosis in the *primary* diagnostic position only. An individual is allowed one medical encounter per condition per day.

Comprehensive AFHSC Mental Health Reports: For analyses and reports requiring data on *all* mental disorders, AFHSC includes all mental health diagnoses that fall within the range of ICD-9-CM codes 290-319 (mental disorders) with a few exceptions.

- ICD9 code 305.1 (tobacco use disorder) 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.
- ICD9 codes 299.xx (pervasive developmental disorders) and ICD9 codes 317.xx -319.xx (mild, other, and unspecified intellectual disabilities) are not included as these conditions do not represent mental health disorders that AFHSC is trying to track with these reports.

⁷ Armed Forces Health Surveillance Center. Absolute and Relative Morbidity Burdens Attributable to Various Illnesses and Injuries, U.S. Armed Forces, 2011. *Medical Surveillance Monthly Report (MSMR)*. 2012 April; Vol.19 (4): 4-9.

