

Effective October 2015, the International Classification of Diseases was updated. With the improved information, more moderate traumatic brain injuries can be counted. Previously, some cases were categorized as "unclassifiable" severity due to more limited surveillance information. Also in 2015, the Assistant Secretary of Defense clarified the TBI case definition. A subsequent review found that some of the remaining "unclassifiable" cases were likely moderate TBI. This change also will contribute to higher counts of moderate TBI surveillance cases.

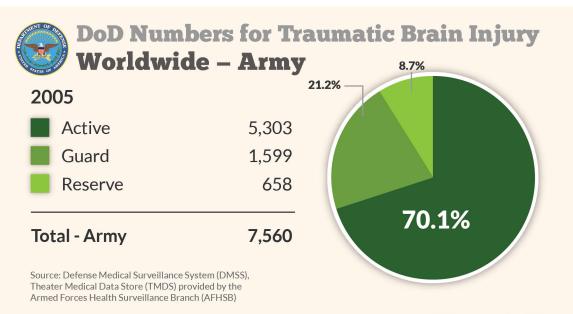
Worldwide numbers represent medical diagnoses of TBI that occurred anywhere U.S. forces are located including the continental United States since 2000.

**Concussion/Mild TBI is characterized by the following:** Confused or disoriented state which lasts less than 24 hours; or loss of consciousness for up to 30 minutes; or memory loss lasting less than 24 hours. Excludes penetrating TBI. A CT scan is not indicated for most patients with a Mild TBI. If obtained, it is normal.

**Moderate TBI is characterized by the following:** Confused or disoriented state which lasts more than 24 hours; or loss of consciousness for more than 30 minutes, but less than 24 hours; or memory loss lasting greater than 24 hours but less than seven days; or meets criteria for Mild TBI except an abnormal CT scan is present. Excludes penetrating TBI. A structural brain imaging study may be normal or abnormal.

**Severe TBI is characterized by the following:** Confused or disoriented state which lasts more than 24 hours; or loss of consciousness for more than 24 hours; or memory loss for more than seven days. Excludes penetrating TBI. A structural brain imaging study may be normal but usually is abnormal.

**Penetrating TBI, or open head injury, is characterized by the following:** A head injury in which the scalp, skull and dura mater (the outer layer of the meninges) are penetrated. Penetrating injuries can be caused by high-velocity projectiles or objects of lower velocity such as knives, or bone fragments from a skull fracture that are driven into the brain.



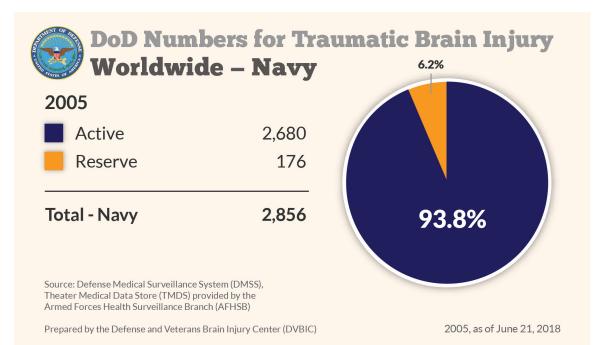
Prepared by the Defense and Veterans Brain Injury Center (DVBIC)

2005, as of June 21, 2018

Service	Component	Severity	Diagnosed
Army	Active	Penetrating	109
		Severe	83
		Moderate	586
		Mild	4,324
		Not Classifiable	200
	Guard	Penetrating	57
		Severe	19
		Moderate	170
		Mild	1,309
		Not Classifiable	44
	Reserve	Penetrating	9
		Severe	6
		Moderate	70
		Mild	558
		Not Classifiable	15

2005, as of June 21, 2018

Source: Defense Medical Surveillance System (DMSS) and Theater Medical Data Store (TMDS) provided by the Armed Forces Health Surveillance Branch (AFHSB) Prepared by the Defense and Veterans Brain Injury Center (DVBIC)

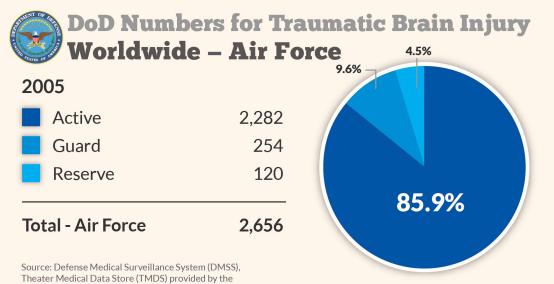


Service	Component	Severity	Diagnosed
Navy	Active	Penetrating	47
		Severe	29
		Moderate	333
		Mild	2,212
		Not Classifiable	59
	Reserve	Penetrating	3
		Severe	2
		Moderate	15
		Mild	153
		Not Classifiable	3

2005, as of June 21, 2018

Source: Defense Medical Surveillance System (DMSS) and Theater Medical Data Store (TMDS) provided by the Armed Forces Health Surveillance Branch (AFHSB)

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Armed Forces Health Surveillance Branch (AFHSB)

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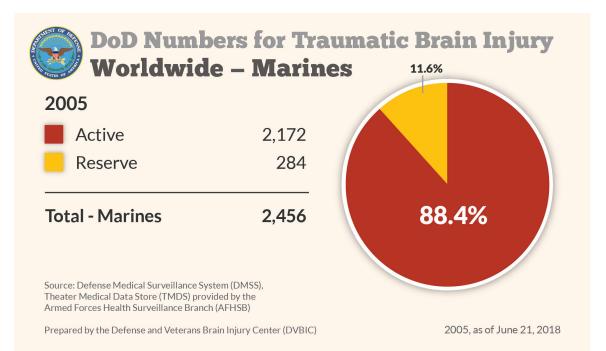
2005, as of June 21, 2018

Service	Component	Severity	Diagnosed
Air Force	Active	Penetrating	37
		Severe	24
		Moderate	201
		Mild	1,957
		Not Classifiable	63
	Guard	Penetrating	1
		Severe	1
		Moderate	23
		Mild	221
		Not Classifiable	8
	Reserve	Penetrating	-
		Severe	1
		Moderate	12
		Mild	101
		Not Classifiable	6

2005, as of June 21, 2018

Source: Defense Medical Surveillance System (DMSS) and Theater Medical Data Store (TMDS) provided by the Armed Forces Health Surveillance Branch (AFHSB)

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Service	Component	Severity	Diagnosed
Marines	Active	Penetrating	57
		Severe	28
		Moderate	252
		Mild	1,778
		Not Classifiable	57
	Reserve	Penetrating	6
		Severe	3
		Moderate	27
		Mild	221
		Not Classifiable	27

2005, as of June 21, 2018

Source: Defense Medical Surveillance System (DMSS) and Theater Medical Data Store (TMDS) provided by the Armed Forces Health Surveillance Branch (AFHSB)

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