



## DoD Numbers for Traumatic Brain Injury Worldwide – Totals

2008

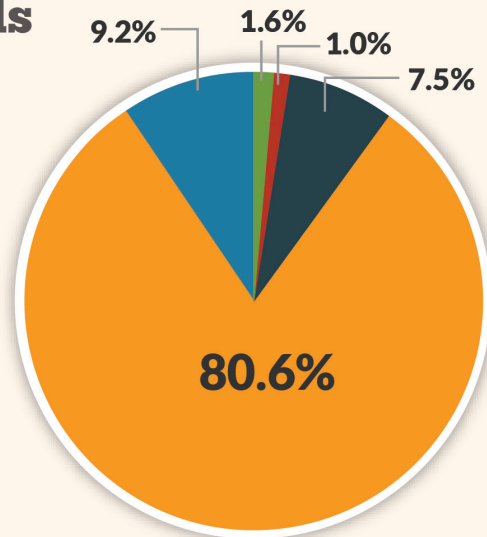
Penetrating	469
Severe	273
Moderate	2,146
Mild	22,959
Not Classifiable	2,633

**Total - All Severities 28,480**

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

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

\*Percentages do not add up to 100% due to rounding



2008, as of June 21, 2018

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.

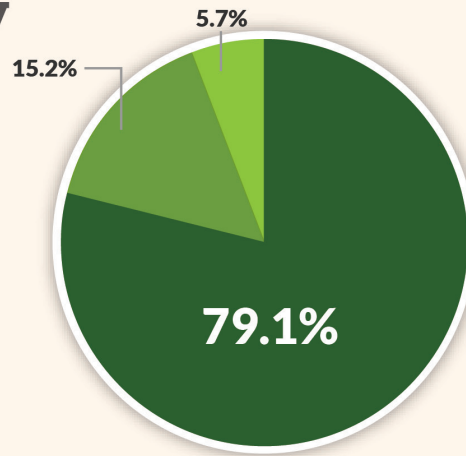


## DoD Numbers for Traumatic Brain Injury Worldwide – Army

2008

Active	15,521
Guard	2,985
Reserve	1,125

**Total - Army** 19,631



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

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2008, as of June 21, 2018

Service	Component	Severity	Diagnosed
Army	Active	Penetrating	313
		Severe	159
		Moderate	1,098
		Mild	11,869
		Not Classifiable	2,082
	Guard	Penetrating	38
		Severe	27
		Moderate	236
		Mild	2,394
		Not Classifiable	290
	Reserve	Penetrating	13
		Severe	13
		Moderate	97
		Mild	937
		Not Classifiable	65

2008, 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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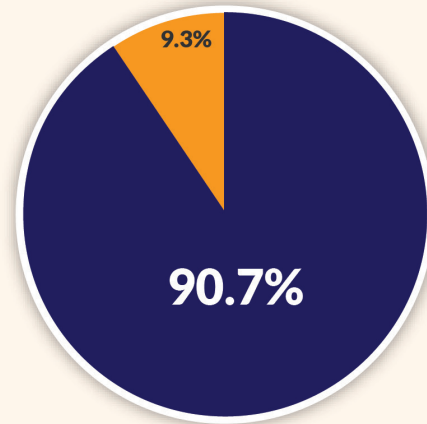
## DoD Numbers for Traumatic Brain Injury Worldwide – Navy

2008

Active	2,558
Reserve	262

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**Total - Navy** 2,820



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

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

2008, as of June 21, 2018

Service	Component	Severity	Diagnosed
Navy	Active	Penetrating	27
		Severe	18
		Moderate	220
		Mild	2,232
		Not Classifiable	61
	Reserve	Penetrating	2
		Severe	2
		Moderate	16
		Mild	234
		Not Classifiable	8

2008, 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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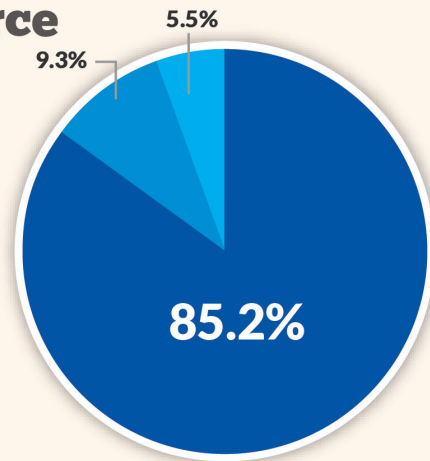
# DoD Numbers for Traumatic Brain Injury Worldwide – Air Force

2008

<span style="color: #0056b3;">■</span> Active	2,237
<span style="color: #00a0e3;">■</span> Guard	243
<span style="color: #00bfff;">■</span> Reserve	145

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**Total - Air Force** **2,625**



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

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

2008, as of June 21, 2018

Service	Component	Severity	Diagnosed
Air Force	Active	Penetrating	25
		Severe	25
		Moderate	183
		Mild	1,944
		Not Classifiable	60
	Guard	Penetrating	2
		Severe	-
		Moderate	21
		Mild	217
		Not Classifiable	3
	Reserve	Penetrating	-
		Severe	1
		Moderate	12
		Mild	127
		Not Classifiable	5

2008, 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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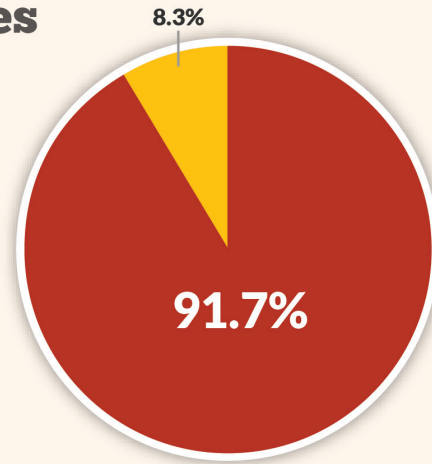
## DoD Numbers for Traumatic Brain Injury Worldwide – Marines

2008

Active	3,120
Reserve	284

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**Total - Marines**                      **3,404**



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

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

2008, as of June 21, 2018

Service	Component	Severity	Diagnosed
Marines	Active	Penetrating	46
		Severe	27
		Moderate	239
		Mild	2,763
		Not Classifiable	45
	Reserve	Penetrating	3
		Severe	1
		Moderate	24
		Mild	242
		Not Classifiable	14

2008, 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)