



## DoD Numbers for Traumatic Brain Injury Worldwide – Totals

2000-2016

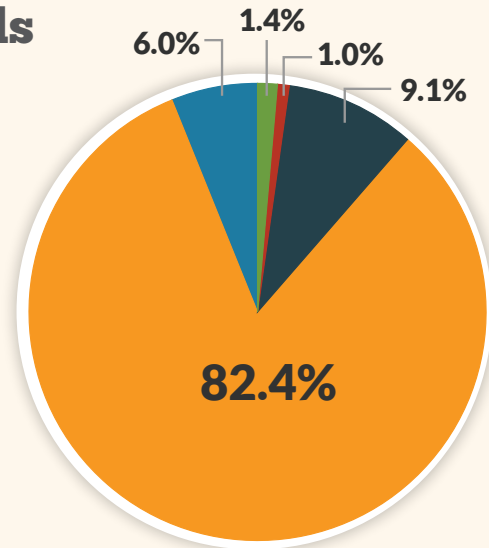
Penetrating	5,065
Severe	3,770
Moderate	32,951
Mild	297,478
Not Classifiable	21,828

**Total - All Severities 361,092**

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 may not add up to 100% due to rounding*



2000-2016, as of Feb 17, 2017

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.

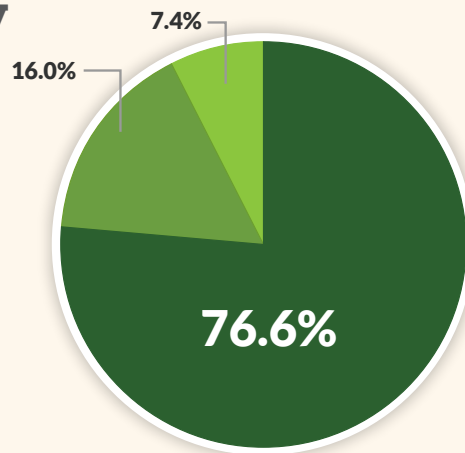


## DoD Numbers for Traumatic Brain Injury Worldwide – Army

2000-2016

Active	161,959
Guard	33,895
Reserve	15,574

**Total - Army 211,428**



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2000-2016, as of Feb 17, 2017

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Service	Component	Severity	Diagnosed
Army	Active	Penetrating	2,474
		Severe	1,741
		Moderate	13,964
		Mild	131,595
		Not Classifiable	12,185
	Guard	Penetrating	481
		Severe	342
		Moderate	2,777
		Mild	28,007
		Not Classifiable	2,288
	Reserve	Penetrating	164
		Severe	168
		Moderate	1,319
		Mild	12,764
		Not Classifiable	1,159

2000-2016, as of 17 Feb, 2017

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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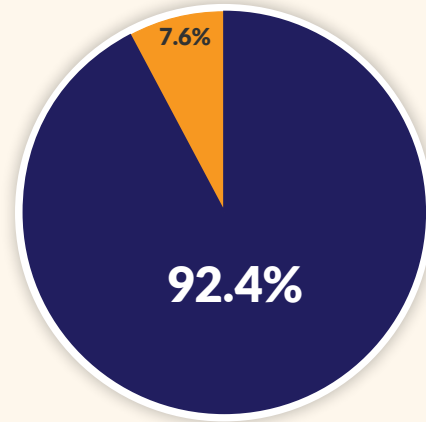
## DoD Numbers for Traumatic Brain Injury Worldwide – Navy

2000-2016

Active	45,264
Reserve	3,703

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**Total - Navy** **48,967**



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

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2000-2016, as of Feb 17, 2017

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Service	Component	Severity	Diagnosed
Navy	Active	Penetrating	575
		Severe	424
		Moderate	4,775
		Mild	37,193
		Not Classifiable	2,297
	Reserve	Penetrating	45
		Severe	29
		Moderate	350
		Mild	3,109
		Not Classifiable	170

2000-2016, as of 17 Feb, 2017

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)



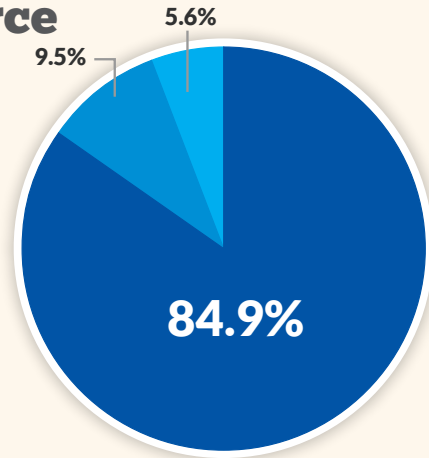
# DoD Numbers for Traumatic Brain Injury Worldwide – Air Force

2000-2016

<span style="color: #0056b3;">■</span> Active	41,704
<span style="color: #00a0e3;">■</span> Guard	4,691
<span style="color: #00bfff;">■</span> Reserve	2,743

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**Total - Air Force** **49,138**



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)

2000-2016, as of Feb 17, 2017

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

Service	Component	Severity	Diagnosed
Air Force	Active	Penetrating	480
		Severe	384
		Moderate	3,727
		Mild	35,762
		Not Classifiable	1,351
	Guard	Penetrating	51
		Severe	31
		Moderate	405
		Mild	4,048
		Not Classifiable	156
	Reserve	Penetrating	29
		Severe	24
		Moderate	238
		Mild	2,357
		Not Classifiable	95

2000-2016, as of 17 Feb, 2017

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)

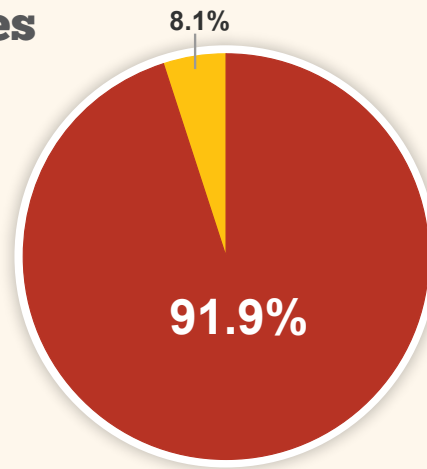


## DoD Numbers for Traumatic Brain Injury Worldwide – Marines

2000-2016

Active	47,367
Reserve	4,192

**Total - Marines 51,559**



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)

2000-2016, as of Feb 17, 2017

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Service	Component	Severity	Diagnosed
Marines	Active	Penetrating	701
		Severe	576
		Moderate	4,984
		Mild	39,177
		Not Classifiable	1,929
	Reserve	Penetrating	65
		Severe	51
		Moderate	412
		Mild	3,466
		Not Classifiable	198

2000-2016, as of 17 Feb, 2017

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)