

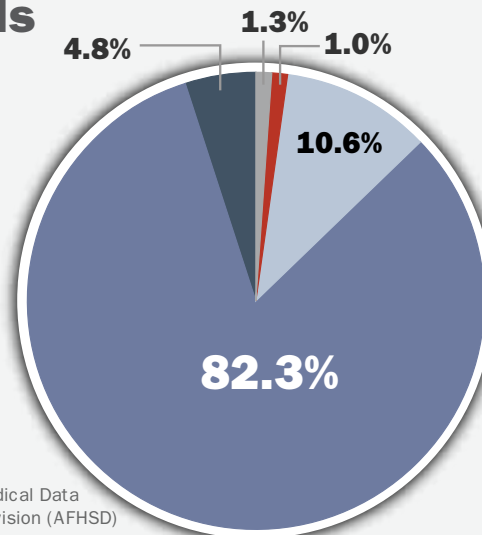


DOD Numbers for Traumatic Brain Injury Worldwide — Totals

2000–2021 Q1

Penetrating	5,544
Severe	4,545
Moderate	46,716
Mild	361,848
Not Classifiable	20,956

Total - All Severities 439,609



Source: Defense Medical Surveillance System (DMSS), Theater Medical Data Store (TMDS) provided by the Armed Forces Health Surveillance Division (AFHSD)
Prepared by the Traumatic Brain Injury Center of Excellence (TBICoE)

**Percent may not add to 100% due to rounding*

2000–2021 Q1, as of June 02, 2021

Definitions and Revisions

Effective March 2020, the Armed Forces Health Surveillance Division (AFHSD) resumed the distribution of data from the Defense Medical Surveillance System (DMSS) used in this report. The current report reflects up-to-date data from the AFHSD since 2000.

From 2018 (Q2) through 2019 (Q3), AFHSD temporarily halted the distribution of the data used in this report and the Traumatic Brain Injury Center of Excellence (TBICoE) used the MHS Data Repository to ensure this report was completed on a timely basis. While TBICoE used a different data source, the approach was consistent with the historical methodology.

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.

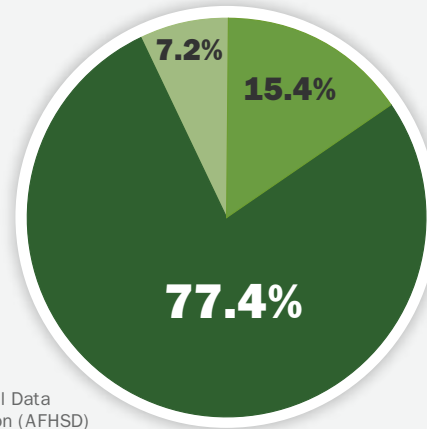
Penetrating TBI, or open head injury, is characterized by the following: A head injury in which the scalp, skull and dura mater (the outer layer of the meninges) are penetrated. Penetrating injuries can be caused by high-velocity projectiles or objects of lower velocity such as knives, or home fragments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



DOD Numbers for Traumatic Brain Injury Worldwide — Army

2000–2021 Q1

Active	199,213
Guard	39,681
Reserve	18,513
Total - Army	257,407



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2000–2021 Q1, as of June 02, 2021

Service	Component	Severity	Diagnosed
Army	Active	Penetrating	2,673
		Severe	2,088
		Moderate	20,619
		Mild	162,275
		Not Classifiable	11,558
	Guard	Penetrating	520
		Severe	403
		Moderate	3,924
		Mild	32,584
		Not Classifiable	2,250
	Reserve	Penetrating	180
		Severe	199
		Moderate	1,875
		Mild	15,138
		Not Classifiable	1,121

2000-2021 Q1, as of June 02, 2021

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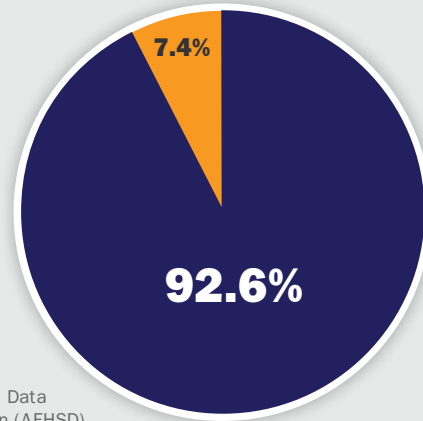


DOD Numbers for Traumatic Brain Injury Worldwide — Navy

2000–2021 Q1

Active	55,467
Reserve	4,455

Total - Navy 59,922



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2000–2021 Q1, as of June 02, 2021

Service	Component	Severity	Diagnosed
Navy	Active	Penetrating	652
		Severe	540
		Moderate	6,429
		Mild	45,589
		Not Classifiable	2,257
	Reserve	Penetrating	50
		Severe	34
		Moderate	481
		Mild	3,723
		Not Classifiable	167

2000-2021 Q1, as of June 02, 2021

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

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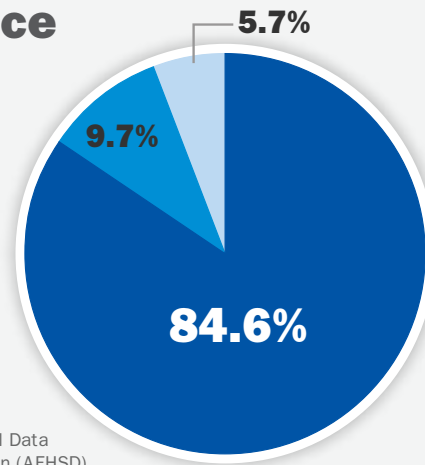


DOD Numbers for Traumatic Brain Injury Worldwide — Air Force

2001–2021 Q1

Active	50,922
Guard	5,828
Reserve	3,423

Total - Air Force 60,173



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

Prepared by the Traumatic Brain Injury Center of Excellence (TBI CoE)

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2000–2021 Q1, as of June 02, 2021

Service	Component	Severity	Diagnosed
Air Force	Active	Penetrating	542
		Severe	480
		Moderate	5,214
		Mild	43,375
		Not Classifiable	1,311
	Guard	Penetrating	58
		Severe	46
		Moderate	656
		Mild	4,917
		Not Classifiable	151
	Reserve	Penetrating	34
		Severe	29
		Moderate	383
		Mild	2,883
		Not Classifiable	94

2000–2021 Q1, as of June 02, 2021

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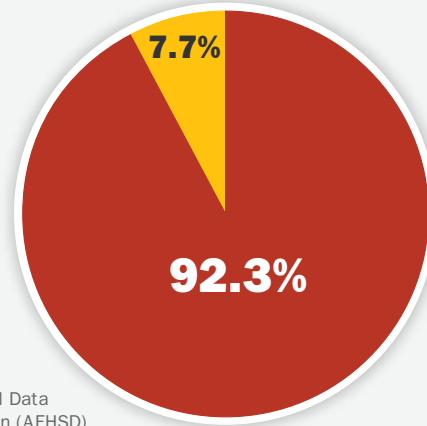


DOD Numbers for Traumatic Brain Injury Worldwide — Marines

2000–2021 Q1

Active	57,353
Reserve	4,754

Total - Marines 62,107



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2000–2021 Q1, as of June 02, 2021

Service	Component	Severity	Diagnosed
Marines	Active	Penetrating	767
		Severe	668
		Moderate	6,627
		Mild	47,440
		Not Classifiable	1,851
	Reserve	Penetrating	68
		Severe	58
		Moderate	508
		Mild	3,924
		Not Classifiable	196

2000-2021 Q1, as of June 02, 2021

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

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