

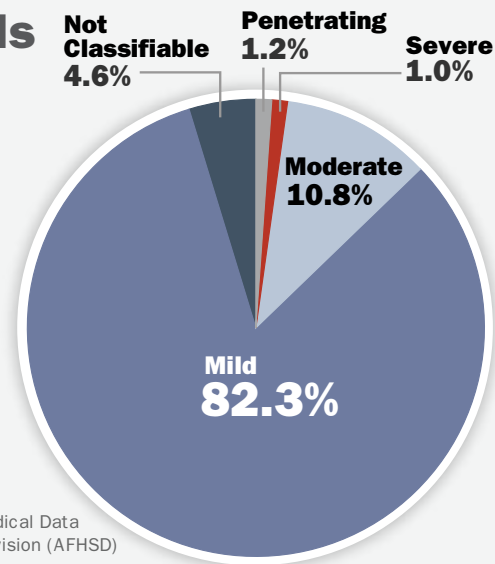


DOD Numbers for Traumatic Brain Injury Worldwide — Totals

2000–2021 Q4

Penetrating	5,606
Severe	4,591
Moderate	49,055
Mild	373,710
Not Classifiable	20,957

Total - All Severities 453,919



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 Q4, as of February 11, 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.

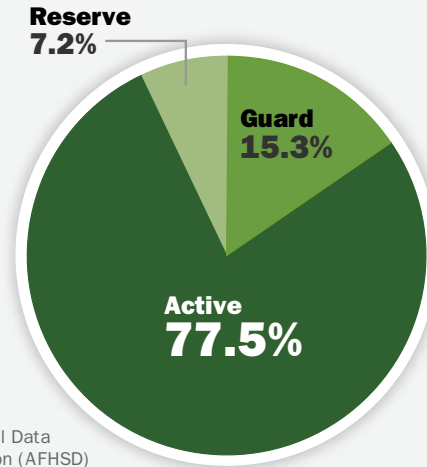
Penetrating TBI, or open head injury, is characterized by the following: A head injury in which the scalp, skull and dura mater (the outer layer of the meninges) are penetrated. Penetrating injuries can be caused by high-velocity projectiles or objects of lower velocity such as knives, or home fragments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



DOD Numbers for Traumatic Brain Injury Worldwide — Army

2000–2021 Q4

Active	205,751
Guard	40,764
Reserve	19,073
Total - Army	265,588



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2000–2021 Q4, as of February 11, 2022

Service	Component	Severity	Diagnosed
Army	Active	Penetrating	2,696
		Severe	2,107
		Moderate	21,626
		Mild	167,764
		Not Classifiable	11,558
	Guard	Penetrating	528
		Severe	410
		Moderate	4,126
		Mild	33,450
		Not Classifiable	2,250
	Reserve	Penetrating	183
		Severe	200
		Moderate	1,972
		Mild	15,597
		Not Classifiable	1,121

2000–2021 Q4, as of February 11, 2022

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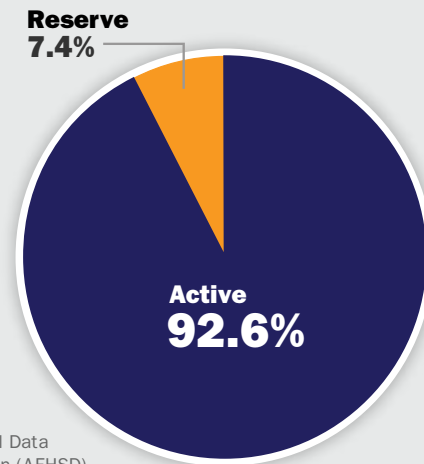
Prepared by the Traumatic Brain Injury Center of Excellence (TBI CoE)



DOD Numbers for Traumatic Brain Injury Worldwide — Navy

2000–2021 Q4

Active	57,546
Reserve	4,570
Total - Navy	62,116



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2000–2021 Q4, as of February 11, 2022

Service	Component	Severity	Diagnosed
Navy	Active	Penetrating	663
		Severe	547
		Moderate	6,797
		Mild	47,281
		Not Classifiable	2,258
	Reserve	Penetrating	50
		Severe	34
		Moderate	501
		Mild	3,818
		Not Classifiable	167

2000–2021 Q4, as of February 11, 2022

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

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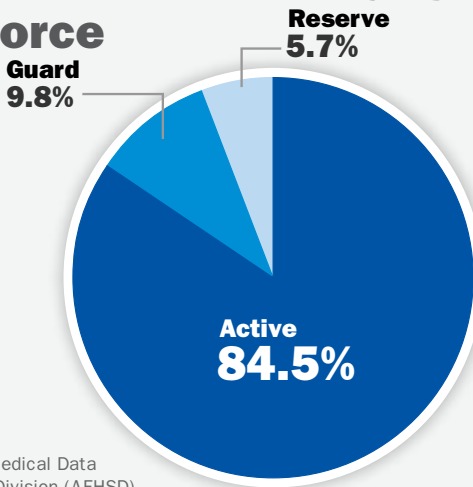


DOD Numbers for Traumatic Brain Injury Worldwide — Air Force

2000–2021 Q4

Active	52,547
Guard	6,079
Reserve	3,551

Total - Air Force 62,117



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 Q4, as of February 11, 2022

Service	Component	Severity	Diagnosed
Air Force	Active	Penetrating	543
		Severe	482
		Moderate	5,458
		Mild	44,753
		Not Classifiable	1,311
	Guard	Penetrating	59
		Severe	49
		Moderate	712
		Mild	5,108
		Not Classifiable	151
	Reserve	Penetrating	34
		Severe	29
		Moderate	415
		Mild	2,979
		Not Classifiable	94

2000–2021 Q4, as of February 11, 2022

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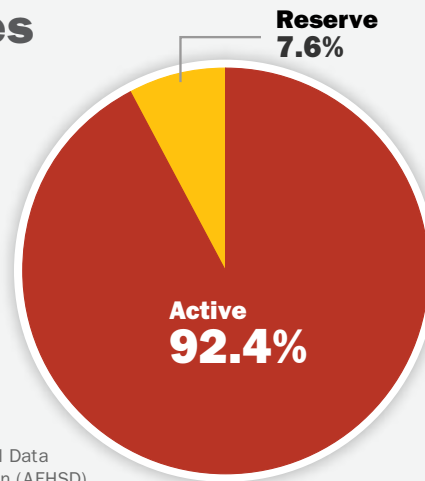


DOD Numbers for Traumatic Brain Injury Worldwide — Marines

2000–2021 Q4

Active	59,154
Reserve	4,884

Total - Marines 64,038



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2000–2021 Q4, as of February 11, 2022

Service	Component	Severity	Diagnosed
Marines	Active	Penetrating	781
		Severe	675
		Moderate	6,912
		Mild	48,935
		Not Classifiable	1,851
	Reserve	Penetrating	69
		Severe	58
		Moderate	536
		Mild	4,025
		Not Classifiable	196

2000–2021 Q4, as of February 11, 2022

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

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