

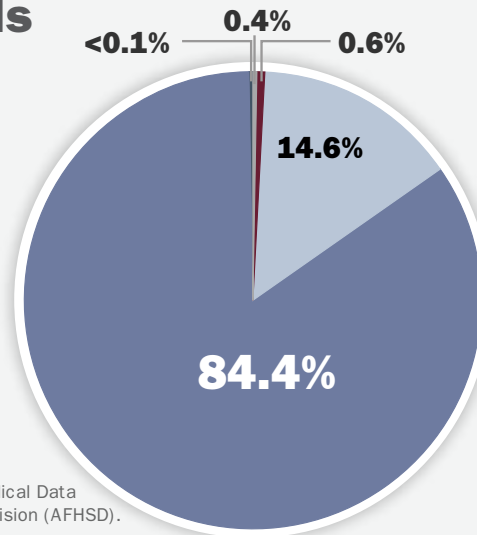


DoD Numbers for Traumatic Brain Injury Worldwide — Totals

2020 Q1–Q4

Penetrating	66
Severe	95
Moderate	2,357
Mild	13,679
Not Classifiable	1

Total - All Severities 16,198



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)

*Percentage may not add to 100% due to rounding.

2020 Q1–Q4, as of Feb 16, 2021

Definitions and Revisions

Note: In March 2020, due to Health Protection Condition (HPCON) in response to the COVID-19 pandemic, Service member operations, training, and leisure activities, activities at higher injury risk, were curtailed by base operations in response to public health recommendations. Additionally, due to restrictions placed on MHS hospitals and clinics, many services and procedures were reduced or suspended, impacting access to care and care seeking behavior and thus data shown in this report.¹

Effective March 2020, the Armed Forces Health Surveillance Branch (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 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.

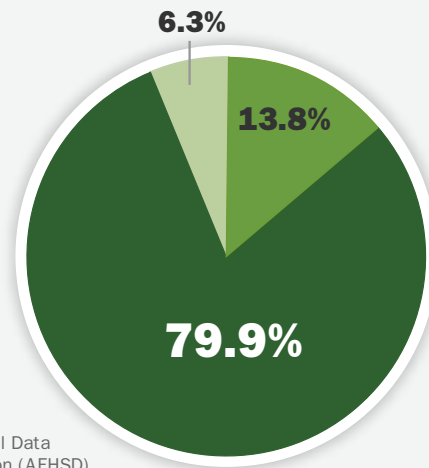
¹ <https://www.health.mil/Reference-Center/Policies/2020/03/24/Elective-Surgical-Invasive-and-Dental-Procedures-in-Military-Treatment-Facilities>



DoD Numbers for Traumatic Brain Injury Worldwide — Army

2020 Q1–Q4

Active	7,526
Guard	1,302
Reserve	596
Total - Army	9,424



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

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2020 Q1–Q4, as of Feb 16, 2021

Service	Component	Severity	Diagnosed
Army	Active	Penetrating	19
		Severe	37
		Moderate	1,057
		Mild	6,413
		Not Classifiable	-
	Guard	Penetrating	9
		Severe	7
		Moderate	171
		Mild	1,115
		Not Classifiable	-
	Reserve	Penetrating	3
		Severe	3
		Moderate	93
		Mild	497
		Not Classifiable	-

2020 Q1–Q4, as of Feb 16, 2021

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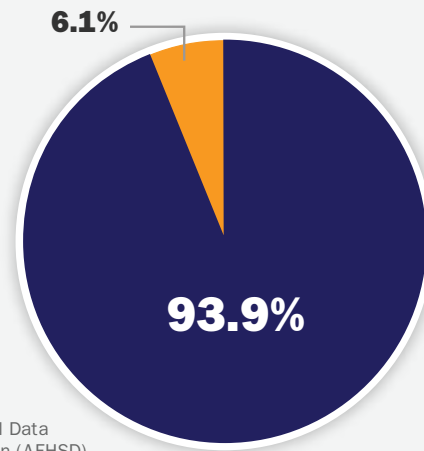


DoD Numbers for Traumatic Brain Injury Worldwide — Navy

2020 Q1–Q4

Active	2,152
Reserve	139

Total - Navy 2,291



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

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2020 Q1–Q4, as of Feb 16, 2021

Service	Component	Severity	Diagnosed
Navy	Active	Penetrating	11
		Severe	15
		Moderate	292
		Mild	1,833
		Not Classifiable	1
	Reserve	Penetrating	-
		Severe	-
		Moderate	22
		Mild	117
		Not Classifiable	-

2020 Q1–Q4, as of Feb 16, 2021

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

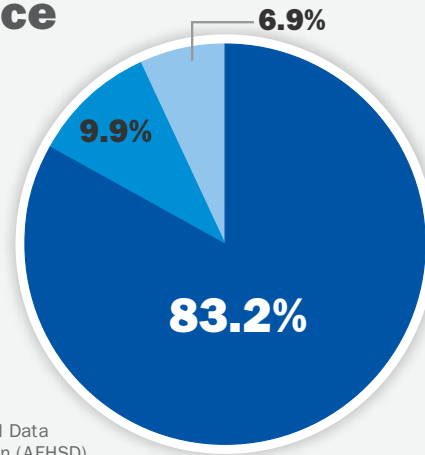
Prepared by the Traumatic Brain Injury Center of Excellence (TBICoE)



DoD Numbers for Traumatic Brain Injury Worldwide — Air Force

2020 Q1–Q4

Active	1,807
Guard	215
Reserve	149
Total - Air Force	2,171



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)

2020 Q1–Q4, as of Feb 16, 2021

Service	Component	Severity	Diagnosed
Air Force	Active	Penetrating	7
		Severe	14
		Moderate	284
		Mild	1,502
		Not Classifiable	-
	Guard	Penetrating	2
		Severe	2
		Moderate	37
		Mild	174
		Not Classifiable	-
	Reserve	Penetrating	2
		Severe	2
		Moderate	22
		Mild	123
		Not Classifiable	-

2020 Q1–Q4, as of Feb 16, 2021

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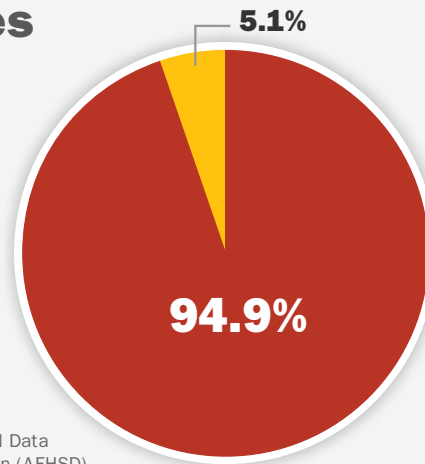


DoD Numbers for Traumatic Brain Injury Worldwide — Marines

2020 Q1–Q4

Active	2,193
Reserve	119

Total - Marines **2,312**



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

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2020 Q1–Q4, as of Feb 16, 2021

Service	Component	Severity	Diagnosed
Marines	Active	Penetrating	12
		Severe	12
		Moderate	364
		Mild	1,805
		Not Classifiable	-
	Reserve	Penetrating	1
		Severe	3
		Moderate	15
		Mild	100
		Not Classifiable	-

2020 Q1–Q4, as of Feb 16, 2021

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