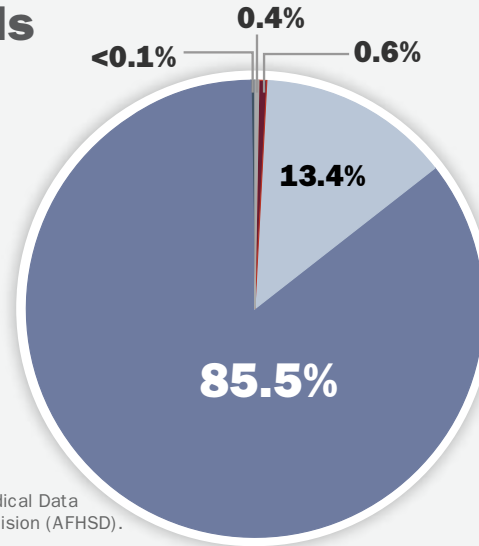




DoD Numbers for Traumatic Brain Injury Worldwide — Totals

2019

Penetrating	89
Severe	125
Moderate	2,703
Mild	17,202
Not Classifiable	9
Total - All Severities	20,128



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)

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

2019, as of Feb 16, 2021

Definitions and Revisions

Note: From 2018 (Q2) through 2019 (Q3), AFHSD temporarily halted the distribution of this report and the Traumatic Brain Injury Center of Excellence (TBI CoE) used the MHS Data Repository to ensure this report was completed on a timely basis. While TBI CoE 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.

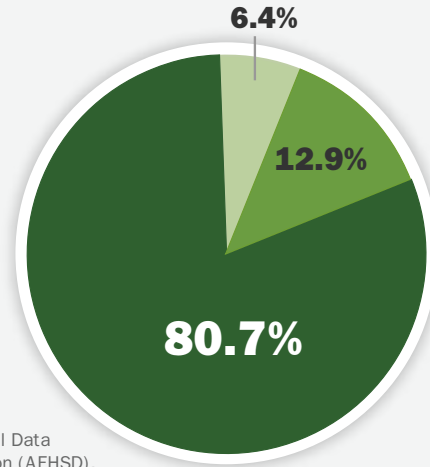


DoD Numbers for Traumatic Brain Injury Worldwide — Army

2019

 Active	9,390
 Guard	1,501
 Reserve	750

Total - Army **11,641**



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)

2019, as of Feb 16, 2021

Service	Component	Severity	Diagnosed
Army	Active	Penetrating	31
		Severe	59
		Moderate	1,210
		Mild	8,090
		Not Classifiable	-
	Guard	Penetrating	8
		Severe	13
		Moderate	257
		Mild	1,223
		Not Classifiable	-
	Reserve	Penetrating	6
		Severe	7
		Moderate	105
		Mild	632
		Not Classifiable	-

2019, 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)

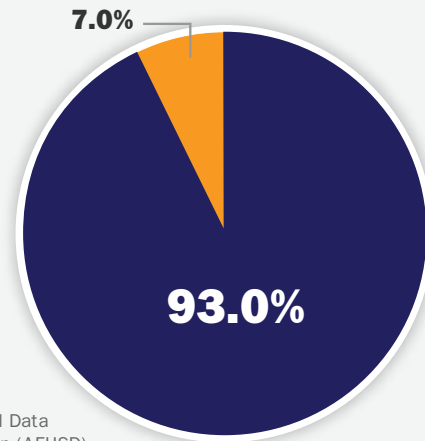


DoD Numbers for Traumatic Brain Injury Worldwide — Navy

2019

Active	2,644
Reserve	198

Total - Navy 2,842



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)

2019, as of Feb 16, 2021

Service	Component	Severity	Diagnosed
Navy	Active	Penetrating	16
		Severe	19
		Moderate	333
		Mild	2,269
		Not Classifiable	7
	Reserve	Penetrating	3
		Severe	1
		Moderate	29
		Mild	165
		Not Classifiable	-

2019, 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)

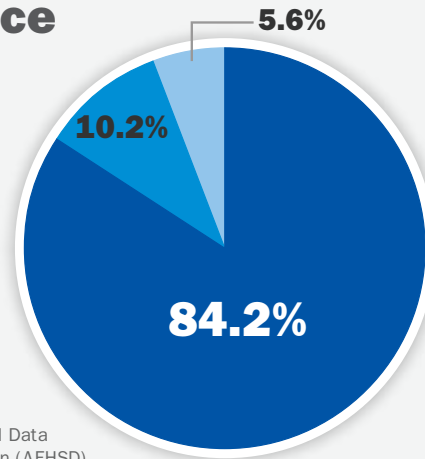


DoD Numbers for Traumatic Brain Injury Worldwide — Air Force

2019

Active	2,444
Guard	297
Reserve	162

Total - Air Force 2,903



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)

2019, as of Feb 16, 2021

Service	Component	Severity	Diagnosed
Air Force	Active	Penetrating	13
		Severe	14
		Moderate	299
		Mild	2,118
		Not Classifiable	-
	Guard	Penetrating	2
		Severe	-
		Moderate	56
		Mild	239
		Not Classifiable	-
	Reserve	Penetrating	1
		Severe	1
		Moderate	30
		Mild	130
		Not Classifiable	-

2019, 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)

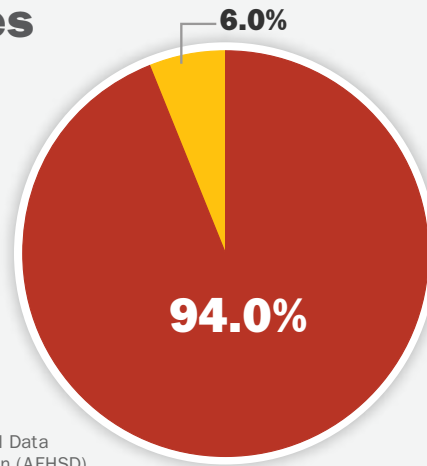


DoD Numbers for Traumatic Brain Injury Worldwide — Marines

2019

■ Active	2,578
■ Reserve	164

Total - Marines **2,742**



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)

2019, as of Feb 16, 2021

Service	Component	Severity	Diagnosed
Marines	Active	Penetrating	8
		Severe	10
		Moderate	358
		Mild	2,200
		Not Classifiable	2
	Reserve	Penetrating	1
		Severe	1
		Moderate	26
		Mild	136
		Not Classifiable	-

2019, 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 (TBI CoE)