

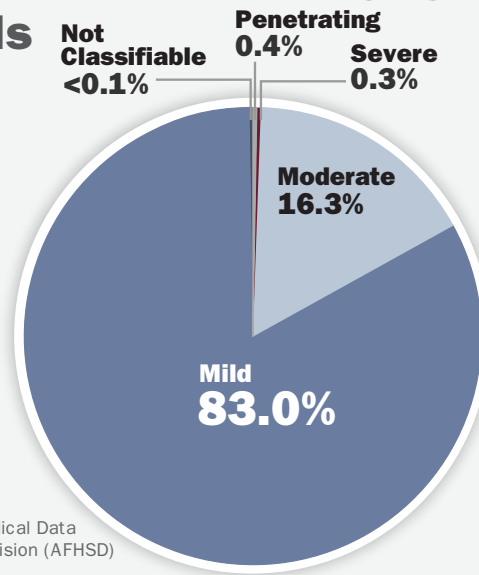


DOD Numbers for Traumatic Brain Injury Worldwide — Totals

2021

Penetrating	78
Severe	65
Moderate	3,059
Mild	15,620
Not Classifiable	2

Total - All Severities 18,824



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)

*Percent may not add to 100% due to rounding

2021, as of February 9, 2023

Definitions and Revisions

Note: 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 (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.

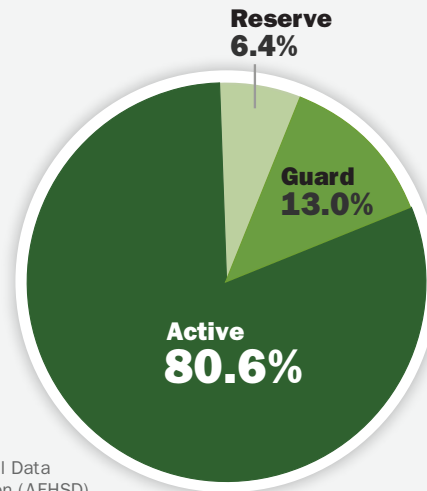


DOD Numbers for Traumatic Brain Injury Worldwide — Army

2021

Active	8,741
Guard	1,410
Reserve	693

Total - Army 10,844



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

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2021, as of February 9, 2023

Service	Component	Severity	Diagnosed
Army	Active	Penetrating	26
		Severe	25
		Moderate	1,372
		Mild	7,318
		Not Classifiable	-
	Guard	Penetrating	8
		Severe	10
		Moderate	245
		Mild	1,147
		Not Classifiable	-
	Reserve	Penetrating	4
		Severe	1
		Moderate	117
		Mild	571
		Not Classifiable	-

2021, as of February 9, 2023

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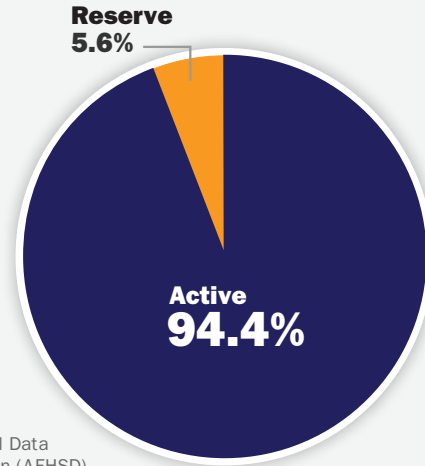


DOD Numbers for Traumatic Brain Injury Worldwide — Navy

2021

Active	2,607
Reserve	155

Total - Navy 2,762



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2021, as of February 9, 2023

Service	Component	Severity	Diagnosed
Navy	Active	Penetrating	13
		Severe	9
		Moderate	467
		Mild	2,116
		Not Classifiable	2
	Reserve	Penetrating	1
		Severe	-
		Moderate	25
		Mild	129
		Not Classifiable	-

2021, as of February 9, 2023

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

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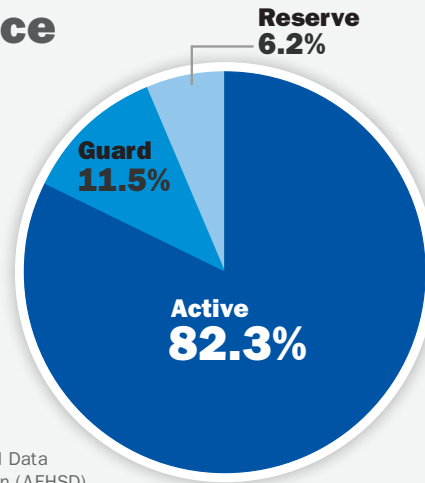


DOD Numbers for Traumatic Brain Injury Worldwide — Air Force

2021

Active	2,198
Guard	308
Reserve	165

Total - Air Force 2,671



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2021, as of February 9, 2023

Service	Component	Severity	Diagnosed
Air Force	Active	Penetrating	4
		Severe	5
		Moderate	333
		Mild	1,856
		Not Classifiable	-
	Guard	Penetrating	1
		Severe	3
		Moderate	65
		Mild	239
		Not Classifiable	-
	Reserve	Penetrating	-
		Severe	-
		Moderate	36
		Mild	129
		Not Classifiable	-

2021, as of February 9, 2023

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

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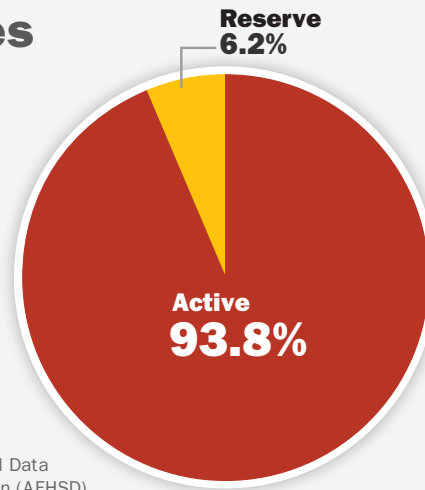


DOD Numbers for Traumatic Brain Injury Worldwide — Marines

2021

■ Active	2,390
■ Reserve	157

Total - Marines **2,547**



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2021, as of February 9, 2023

Service	Component	Severity	Diagnosed
Marines	Active	Penetrating	20
		Severe	12
		Moderate	366
		Mild	1,992
		Not Classifiable	-
	Reserve	Penetrating	1
		Severe	-
		Moderate	33
		Mild	123
		Not Classifiable	-

2021, as of February 9, 2023

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

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