

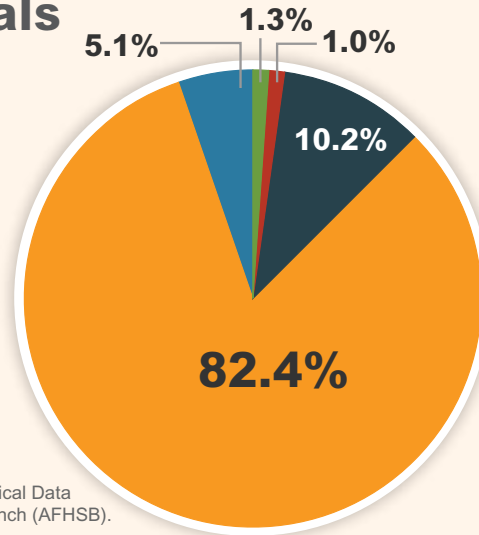


DoD Numbers for Traumatic Brain Injury Worldwide — Totals

2000-2019 Q4

Penetrating	5,388
Severe	4,362
Moderate	42,642
Mild	343,980
Not Classifiable	21,131

Total - All Severities 417,503



Source: Defense Medical Surveillance System (DMSS), Theater Medical Data Store (TMDS) provided by the Armed Forces Health Surveillance Branch (AFHSB). Prepared by the Defense and Veterans Brain Injury Center (DVBIC)

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

2000-2019 Q4, as of March 10, 2020

Definitions and Revisions

Effective March 2020, the Armed Forces Health Surveillance Branch (AFHSB) 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 AFHSB since 2000.

From 2018 (Q2) through 2019 (Q3), AFHSB temporarily halted the distribution of this report and the Defense and Veterans Brain Injury Center (DVBIC) used the MHS Data Repository to ensure this report was completed on a timely basis. While DVBIC 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.

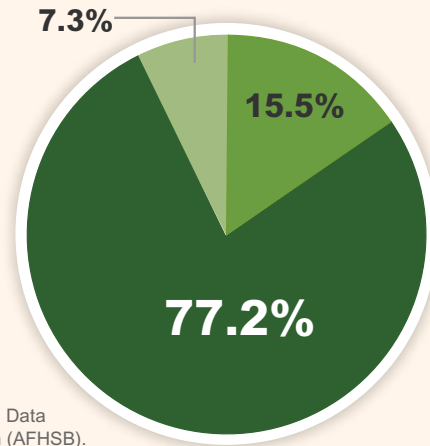
Penetrating TBI, or open head injury, is characterized by the following: A head injury in which the scalp, skull and dura mater (the outer layer of the meninges) are penetrated. Penetrating injuries can be caused by high-velocity projectiles or objects of lower velocity such as knives, or home fragments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



DoD Numbers for Traumatic Brain Injury Worldwide — Army

2000-2019 Q4

Active	188,906
Guard	37,937
Reserve	17,733
Total - Army	244,576



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

Prepared by the Defense and Veterans Brain Injury Center (DVBIC)

2000-2019 Q4, as of March 10, 2020

Service	Component	Severity	Diagnosed
Army	Active	Penetrating	2,622
		Severe	2,004
		Moderate	18,622
		Mild	153,983
		Not Classifiable	11,675
	Guard	Penetrating	502
		Severe	393
		Moderate	3,636
		Mild	31,142
		Not Classifiable	2,264
	Reserve	Penetrating	177
		Severe	194
		Moderate	1,722
		Mild	14,508
		Not Classifiable	1,132

2000-2019 Q4, as of March 10, 2020

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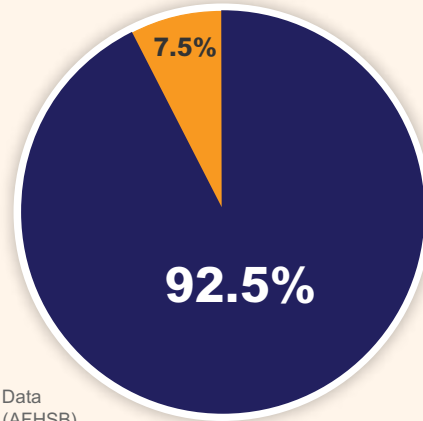
Prepared by the Defense and Veterans Brain Injury Center (DVBIC)



DoD Numbers for Traumatic Brain Injury Worldwide — Navy

2000-2019 Q4

Active	52,644
Reserve	4,264
Total - Navy	56,908



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Prepared by the Defense and Veterans Brain Injury Center (DVBIC)

2000-2019 Q4, as of March 10, 2020

Service	Component	Severity	Diagnosed
Navy	Active	Penetrating	624
		Severe	512
		Moderate	5,953
		Mild	43,287
		Not Classifiable	2,268
	Reserve	Penetrating	48
		Severe	33
		Moderate	450
		Mild	3,566
		Not Classifiable	167

2000-2019 Q4, as of March 10, 2020

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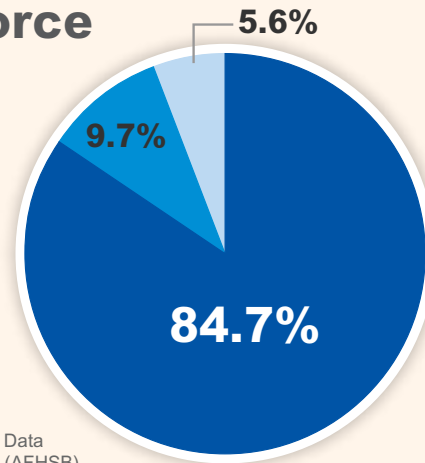


DoD Numbers for Traumatic Brain Injury Worldwide — Air Force

2000-2019 Q4

Active	48,404
Guard	5,535
Reserve	3,218

Total - Air Force 57,157



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2000-2019 Q4, as of March 10, 2020

Service	Component	Severity	Diagnosed
Air Force	Active	Penetrating	518
		Severe	454
		Moderate	4,775
		Mild	41,338
		Not Classifiable	1,319
	Guard	Penetrating	56
		Severe	43
		Moderate	591
		Mild	4,694
		Not Classifiable	151
	Reserve	Penetrating	32
		Severe	26
		Moderate	345
		Mild	2,721
		Not Classifiable	94

2000-2019 Q4, as of March 10, 2020

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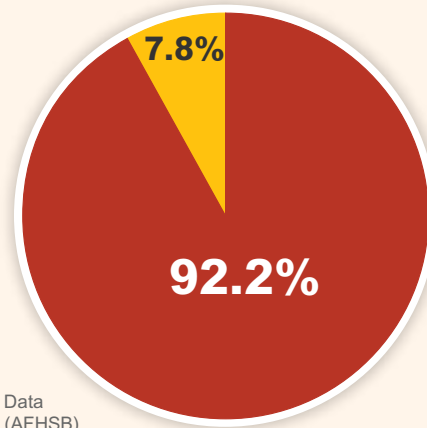


DoD Numbers for Traumatic Brain Injury Worldwide — Marines

2000-2019 Q4

Active	54,263
Reserve	4,599

Total - Marines **58,862**



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Prepared by the Defense and Veterans Brain Injury Center (DVBIC)

2000-2019 Q4, as of March 10, 2020

Service	Component	Severity	Diagnosed
Marines	Active	Penetrating	742
		Severe	649
		Moderate	6,064
		Mild	44,943
		Not Classifiable	1,865
	Reserve	Penetrating	67
		Severe	54
		Moderate	484
		Mild	3,798
		Not Classifiable	196

2000-2019 Q4, as of March 10, 2020

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