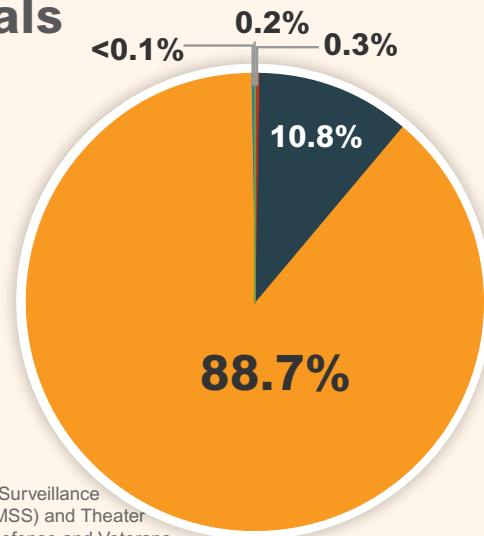


DoD Numbers for Traumatic Brain Injury Worldwide — Totals

2018

Penetrating	47
Severe	52
Moderate	2,043
Mild	16,801
Not Classifiable	6
Total - All Severities	18,949



Source: 2000 to 2018 Q1 data provided by the Armed Forces Health Surveillance Branch (AFHSB) using the Defense Medical Surveillance System (DMSS) and Theater Medical Data Store (TMDS); data starting 2018 Q2 provided by the Defense and Veterans Brain Injury Center (DVBIC) using the MHS Data Repository (MDR).

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

2018, as of November 08, 2019

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

Effective April 2018, due to changes in the dissemination of source data used historically to furnish this report, a new approach was used to gather data to ensure this report is completed on a timely basis. This approach identified a new data source and implemented methods that are consistent with 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.

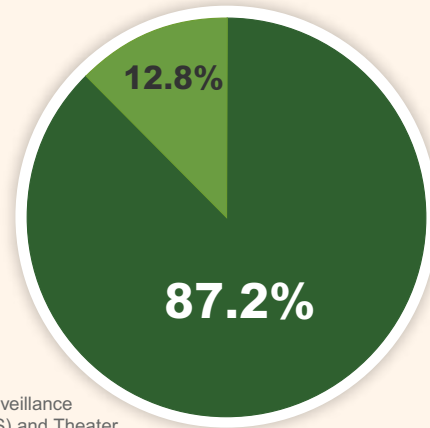


DoD Numbers for Traumatic Brain Injury Worldwide — Army

2018

Active	9,426
Guard/Reserve	1,379

Total - Army 10,805



Source: 2000 to 2018 Q1 data provided by the Armed Forces Health Surveillance Branch (AFHSB) using the Defense Medical Surveillance System (DMSS) and Theater Medical Data Store (TMDS); data starting 2018 Q2 provided by the Defense and Veterans Brain Injury Center (DVBIC) using the MHS Data Repository (MDR).

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

2018, as of November 08, 2019

Service	Component	Severity	Diagnosed
Army	Active	Penetrating	18
		Severe	20
		Moderate	931
		Mild	8,451
		Not Classifiable	6
	Guard/Reserve	Penetrating	4
		Severe	8
		Moderate	204
		Mild	1,163
		Not Classifiable	-

2018, as of November 08, 2019

Source: 2000 to 2018 Q1 data provided by the Armed Forces Health Surveillance Branch (AFHSB) using the Defense Medical Surveillance System (DMSS) and Theater Medical Data Store (TMDS); data starting 2018 Q2 provided by the Defense and Veterans Brain Injury Center (DVBIC) using the MHS Data Repository (MDR).

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

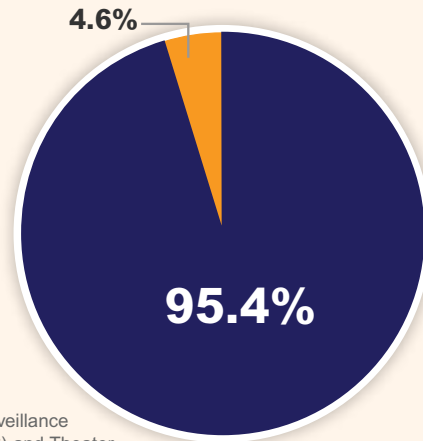


DoD Numbers for Traumatic Brain Injury Worldwide — Navy

2018

Active	2,717
Reserve	131

Total - Navy 2,848



Source: 2000 to 2018 Q1 data provided by the Armed Forces Health Surveillance Branch (AFHSB) using the Defense Medical Surveillance System (DMSS) and Theater Medical Data Store (TMDS); data starting 2018 Q2 provided by the Defense and Veterans Brain Injury Center (DVBIC) using the MHS Data Repository (MDR).

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

2018, as of November 08, 2019

Service	Component	Severity	Diagnosed
Navy	Active	Penetrating	10
		Severe	8
		Moderate	295
		Mild	2,404
		Not Classifiable	-
	Reserve	Penetrating	-
		Severe	2
		Moderate	18
		Mild	111
		Not Classifiable	-

2018, as of November 08, 2019

Source: 2000 to 2018 Q1 data provided by the Armed Forces Health Surveillance Branch (AFHSB) using the Defense Medical Surveillance System (DMSS) and Theater Medical Data Store (TMDS); data starting 2018 Q2 provided by the Defense and Veterans Brain Injury Center (DVBIC) using the MHS Data Repository (MDR).

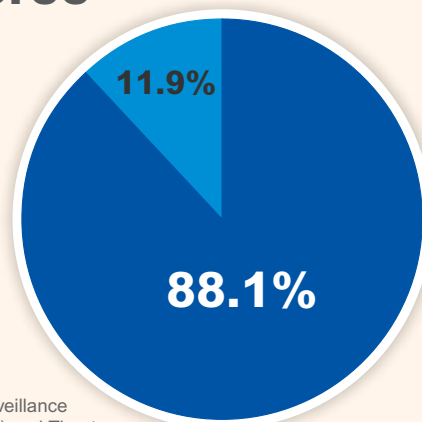
Prepared by the Defense and Veterans Brain Injury Center (DVBIC)



DoD Numbers for Traumatic Brain Injury Worldwide — Air Force

2018

Active	2,528
Guard/Reserve	341
Total - Air Force	2,869



Source: 2000 to 2018 Q1 data provided by the Armed Forces Health Surveillance Branch (AFHSB) using the Defense Medical Surveillance System (DMSS) and Theater Medical Data Store (TMDS); data starting 2018 Q2 provided by the Defense and Veterans Brain Injury Center (DVBIC) using the MHS Data Repository (MDR).

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

2018, as of November 08, 2019

Service	Component	Severity	Diagnosed
Air Force	Active	Penetrating	8
		Severe	7
		Moderate	274
		Mild	2,239
		Not Classifiable	-
	Guard/Reserve	Penetrating	-
		Severe	2
		Moderate	43
		Mild	296
		Not Classifiable	-

2018, as of November 08, 2019

Source: 2000 to 2018 Q1 data provided by the Armed Forces Health Surveillance Branch (AFHSB) using the Defense Medical Surveillance System (DMSS) and Theater Medical Data Store (TMDS); data starting 2018 Q2 provided by the Defense and Veterans Brain Injury Center (DVBIC) using the MHS Data Repository (MDR).

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

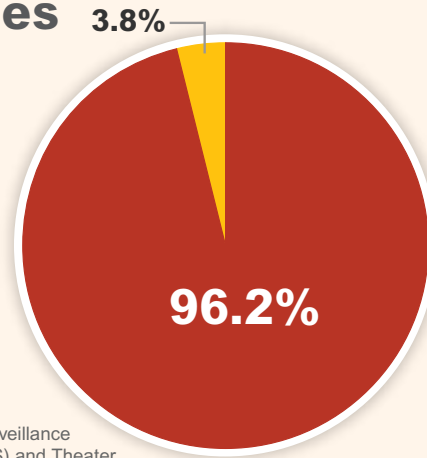


DoD Numbers for Traumatic Brain Injury Worldwide — Marines

2018

■ Active	2,334
■ Reserve	93

Total - Marines **2,427**



Source: 2000 to 2018 Q1 data provided by the Armed Forces Health Surveillance Branch (AFHSB) using the Defense Medical Surveillance System (DMSS) and Theater Medical Data Store (TMDS); data starting 2018 Q2 provided by the Defense and Veterans Brain Injury Center (DVBIC) using the MHS Data Repository (MDR).

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

2018, as of November 08, 2019

Service	Component	Severity	Diagnosed
Marines	Active	Penetrating	7
		Severe	3
		Moderate	264
		Mild	2,060
		Not Classifiable	-
	Reserve	Penetrating	-
		Severe	2
		Moderate	14
		Mild	77
		Not Classifiable	-

2018, as of November 08, 2019

Source: 2000 to 2018 Q1 data provided by the Armed Forces Health Surveillance Branch (AFHSB) using the Defense Medical Surveillance System (DMSS) and Theater Medical Data Store (TMDS); data starting 2018 Q2 provided by the Defense and Veterans Brain Injury Center (DVBIC) using the MHS Data Repository (MDR).

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