DoD Numbers for Traumatic Brain Injury
Worldwide – Totals

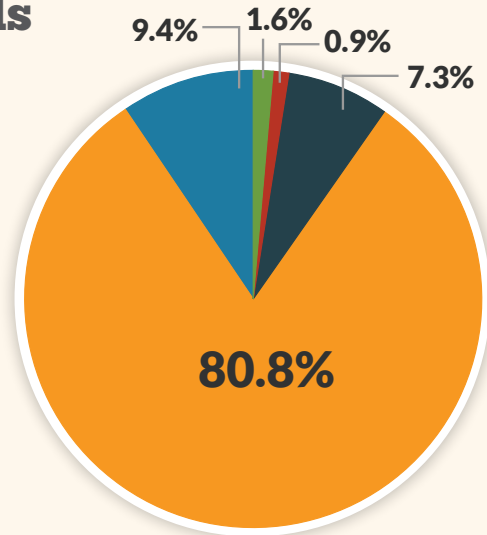### 2008

🟩	Penetrating	465
🟥	Severe	269
⬛	Moderate	2,067
🟧	Mild	22,993
🟦	Not Classifiable	2,676

Total - All Severities   **28,470**

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

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

Percentages may not add up to 100% due to rounding

Pie chart values: 9.4%, 1.6%, 0.9%, 7.3%, 80.8%

2008, as of Feb 17, 2017

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 bone fragments from a skull fracture that are driven into the brain.
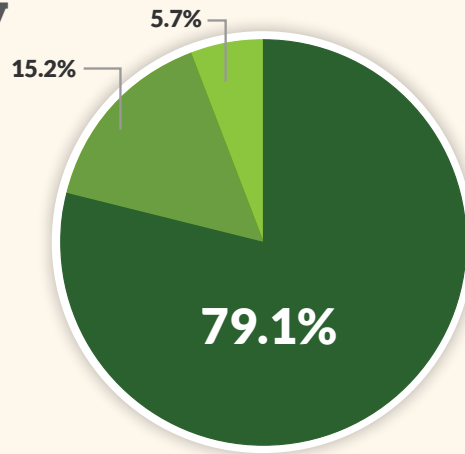
DoD Numbers for Traumatic Brain Injury
Worldwide – Army

2008

■	Active	15,514
■	Guard	2,984
■	Reserve	1,125

Total - Army — **19,623**

5.7%

15.2%

79.1%

2008, as of Feb 17, 2017

Service	Component	Severity	Diagnosed
Army	Active	Penetrating	312
		Severe	158
		Moderate	1,039
		Mild	11,883
		Not Classifiable	2,122
	Guard	Penetrating	38
		Severe	26
		Moderate	228
		Mild	2,401
		Not Classifiable	291
	Reserve	Penetrating	13
		Severe	13
		Moderate	96
		Mild	938
		Not Classifiable	65

2008, as of 17 Feb, 2017

DoD Worldwide TBI Numbers

DoD Numbers for Traumatic Brain Injury
Worldwide – Navy

2008

■ Active		2,557
■ Reserve		262

Total - Navy — **2,819**

9.3%

90.7%

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)

2008, as of Feb 17, 2017

Percentages may not add up to 100% due to rounding

Service	Component	Severity	Diagnosed
Navy	Active	Penetrating	27
		Severe	18
		Moderate	217
		Mild	2,235
		Not Classifiable	60
	Reserve	Penetrating	2
		Severe	2
		Moderate	15
		Mild	235
		Not Classifiable	8

2008, as of 17 Feb, 2017

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

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

DoD Numbers for Traumatic Brain Injury
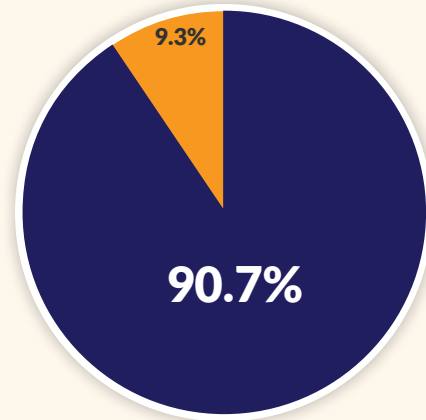## Worldwide – Air Force

2008

■	Active	2,237
■	Guard	243
■	Reserve	145

Total - Air Force   **2,625**

5.5%

9.3%

85.2%

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

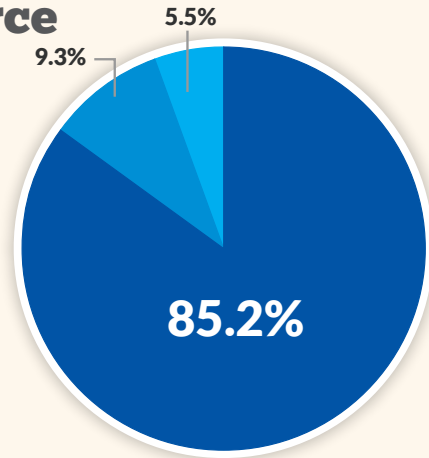Prepared by the Defense and Veterans Brain Injury Center (DVBIC)

2008, as of Feb 17, 2017

Percentages may not add up to 100% due to rounding

Service	Component	Severity	Diagnosed
Air Force	Active	Penetrating	23
		Severe	25
		Moderate	181
		Mild	1,948
		Not Classifiable	60
	Guard	Penetrating	2
		Severe	-
		Moderate	20
		Mild	217
		Not Classifiable	4
	Reserve	Penetrating	-
		Severe	1
		Moderate	12
		Mild	127
		Not Classifiable	5

2008, as of 17 Feb, 2017

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

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

DoD Numbers for Traumatic Brain Injury
Worldwide – Marines

2008

🟥	Active	3,119
🟨	Reserve	284

Total - Marines 3,403

8.3%

91.7%

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

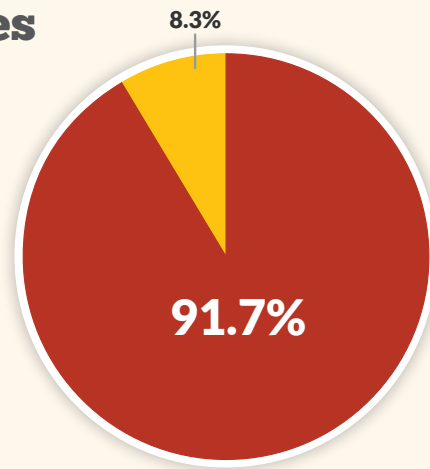Prepared by the Defense and Veterans Brain Injury Center (DVBIC)

2008, as of Feb 17, 2017

Percentages may not add up to 100% due to rounding

Service	Component	Severity	Diagnosed
Marines	Active	Penetrating	45
		Severe	25
		Moderate	235
		Mild	2,767
		Not Classifiable	47
	Reserve	Penetrating	3
		Severe	1
		Moderate	24
		Mild	242
		Not Classifiable	14

2008, as of 17 Feb, 2017

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

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