

# U.S. Military Casualty Statistics: Operation New Dawn, Operation Iraqi Freedom, and Operation Enduring Freedom

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## **Summary**

This report presents statistics regarding U.S. military casualties in the active Operation Enduring Freedom (OEF, Afghanistan), as well as operations that have ended: Operation New Dawn (OND, Iraq) and Operation Iraqi Freedom (OIF, Iraq). This report includes statistics on post-traumatic stress disorder (PTSD), traumatic brain injury (TBI), amputations, evacuations, and the demographics of casualties. Some of these statistics are publicly available at the Department of Defense's (DOD's) website, whereas others have been obtained through contact with experts at DOD.

This report will be updated as needed.

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#### Overall Casualties in OIF, OND, and OEF

On August 31, 2010, President Obama announced that the U.S. combat mission in Iraq (Operation Iraqi Freedom, OIF) had ended. A transitional force of U.S. troops remained in Iraq under Operation New Dawn (OND), which ended on December 15, 2011. Several thousand U.S. civilian personnel, contract personnel, and a limited number of U.S. military personnel remain in Iraq carrying out U.S. government business and cooperative programs under the auspices of agreements with the Iraqi government.

Operation Enduring Freedom (OEF) is ongoing.

**Table 1** gives the overall casualties in OIF, OND, and OEF.

Table I. Overall Casualties in OIF, OND, and OEF

(as of February 5, 2013)

	U.S. Servicemember Deaths	U.S. Department of Defense Civilian Deaths	U.S. Servicemembers Wounded in Action
Operation Iraqi Freedom <sup>a</sup>	4,409	13	31,925
Operation New Dawn <sup>b</sup>	66	0	295
Operation Enduring Freedom <sup>c</sup>	2,165	3	18,230

- Department of Defense, "Operation Iraqi Freedom (OIF) U.S. Casualty Status," Fatalities as of February 5, 2013, 10 a.m. EDT, at http://www.defense.gov/news/casualty.pdf.
- b. Department of Defense, "Operation New Dawn (OND) U.S. Casualty Status," Fatalities as of February 5, 2013, 10 a.m. EDT, at http://www.defense.gov/news/casualty.pdf.
- Department of Defense, "Operation Enduring Freedom (OEF) U.S. Casualty Status," Fatalities as of February 5, 2013, 10 a.m. EDT, at http://www.defense.gov/news/casualty.pdf.

Daily updates of total U.S. military casualties in OND, OIF, and OEF can be found at the Department of Defense's (DOD's) website, at http://www.defense.gov/news/casualty.pdf. In addition, CRS Report R41084, *Afghanistan Casualties: Military Forces and Civilians*, contains statistics on Afghan civilian casualties as well as regular updates on American and coalition fatalities in OEF

#### Post-Traumatic Stress Disorder

The U.S. Army Office of the Surgeon General (OSG), using the Defense Medical Surveillance System (DMSS), provided the statistics below on the incidence of post-traumatic stress disorder (PTSD) cases. According to Dr. Michael Carino of the OSG, a case of PTSD is defined as an individual having at least two outpatient visits or one or more hospitalizations at which PTSD was diagnosed. The threshold of two or more outpatient visits is used in the DMSS to increase the likelihood that the individual has, or had, PTSD. A single visit on record commonly reflects someone who was evaluated for possible PTSD, but did not actually meet the criteria for diagnosis.

All those who have been diagnosed as having PTSD during deployment were diagnosed at least 30 days after the individual deployed. However, it is not possible to be certain that the PTSD

resulted from an event associated with the deployment. The PTSD could have resulted from an event that occurred prior to a deployment.<sup>1</sup>

Table 2 and Figure 1 present yearly PTSD diagnoses for all services.

Table 2. Annual New Post-Traumatic Stress Disorder Diagnoses in All Services (as of December 7, 2012)

Year	Not Deployed	Deployed
2000	1,610	0
2001	1,694	0
2002	1,697	133
2003	1,609	1,100
2004	1,777	3,095
2005	1,912	7,015
2006	1,893	7,745
2007	2,272	11,763
2008	2,589	14,405
2009	2,676	13,975
2010	2,638	14,828
2011	2,806	15,702
2012 (to December 3 <sup>rd</sup> )	2,376	14,031
Total	27,549	103,792

**Source:** CRS communication with Dr. Michael Carino, Army Office of the Surgeon General, December 13, 2012. Data source is the Defense Medical Surveillance System (DMSS).

<sup>&</sup>lt;sup>1</sup> CRS communication with Department of Defense, Office of the Secretary of Defense liaison, September 21, 2010.

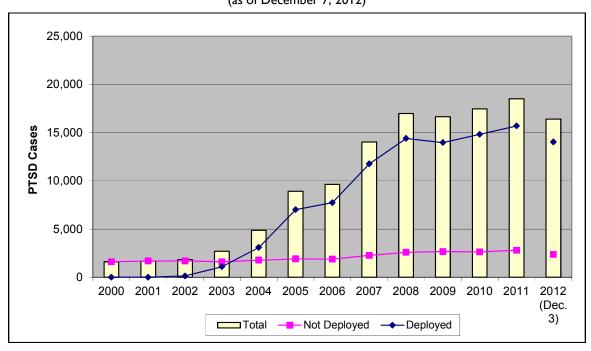


Figure 1. Annual Post-Traumatic Stress Disorder Diagnoses in All Services
(as of December 7, 2012)

**Source:** CRS communication with Dr. Michael Carino, Army Office of the Surgeon General, December 13, 2012. Data source is the Defense Medical Surveillance System (DMSS). Traumatic Brain Injury (TBI)

# **Traumatic Brain Injury**

Of the total 253,330 traumatic brain injury (TBI) cases between January 1, 2000 and August 20, 2012, 194,561 have been mild, 42,063 have been moderate, 6,476 have been severe or penetrating, and 10,210 have not been classifiable. Table 3 and Figure 2 show the relative rates of mild, moderate, severe, penetrating, and not classifiable TBIs whereas Figure 3 shows the number of TBI diagnoses over time.

of membranes that envelops the central nervous system, is 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.

categorizes TBI cases as mild, moderate, severe, or penetrating. Mild TBI is characterized by a confused or disoriented state lasting less than 24 hours; loss of consciousness for up to thirty minutes; memory loss lasting less than 24 hours; and structural brain imaging that yields normal results. Moderate TBI is characterized by a confused or disoriented state that lasts more than 24 hours; loss of consciousness for more than 30 minutes, but less than 24 hours; memory loss lasting greater than 24 hours but less than seven days; and structural brain imaging yielding normal or abnormal results. Severe TBI is characterized by a confused or disoriented state that lasts more than 24 hours; loss of consciousness for more than 24 hours; memory loss for more than seven days; and structural brain imaging yielding normal or abnormal results. A penetrating TBI, or open head injury, is a head injury in which the dura mater, the outer layer of the system

Table 3. Traumatic Brain Injury (TBI) 2000-2012 Q2

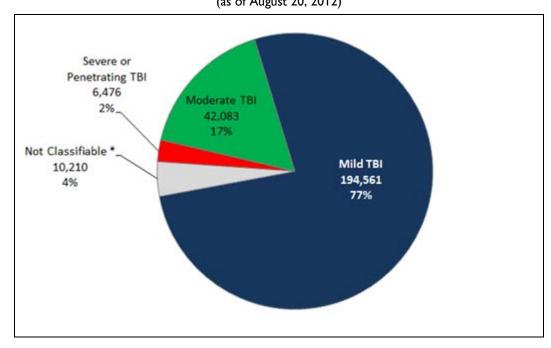
(as of August 20, 2012)

Incident Diagnoses	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012 Q1-Q2	2000- 2012 Q2
Severe or Penetrating TBI	450	478	380	449	463	407	521	591	686	809	553	525	164	6,476
Moderate TBI	4,150	3,553	3,077	2,643	2,281	1,906	2,466	3,708	3,343	3,751	4,294	4,822	2,089	42,083
Mild TBI	6,326	7,760	8,974	9,770	10,536	9,857	13,919	18,665	21,859	22,673	24,989	25,564	13,669	194,561
Not Classifiable <sup>a</sup>	37	39	39	36	32	41	52	210	2,679	2,022	1,571	2,238	1,214	10,210
Total Incident Diagnoses	10,963	11,830	12,470	12,898	13,312	12,211	16,958	23,174	28,567	29,255	31,407	33,149	17,136	253,330

**Source:** CRS communication with Dr. Michael Carino, Army Office of the Surgeon General, December 13, 2012. Data source is Defense Medical Surveillance System (DMSS), Defense and Veterans Brain Injury Center, http://www.dvbic.org/dod-worldwide-numbers-tbi.

a. Requires additional incident information and further investigation prior to TBI categorization.

Figure 2. Traumatic Brain Injury (TBI) 2000-2012 Q2 (as of August 20, 2012)



**Source:** Chart provided by Dr. Michael Carino, Army Office of the Surgeon General, December 13, 2012. Data source is the Armed Forces Health Surveillance Center (AFHSC), Defense and Veterans Brain Injury Center, http://www.dvbic.org/dod-worldwide-numbers-tbi.

 $\textbf{Notes}: * \ \text{Requires additional incident information and further investigation prior to TBI categorization.}$ 

35,000 30,000 25,000 Inciden Diagnoses 20,000 15,000 10,000 5,000 0 2001 2003 2004 2008 2009 2010 2011 2012 2000 2002 2005 2006 2007 Q1-Q2 Total Incident Diagnoses Severe or Penetrating TBI -Not Classifiable\* Moderate TBI

Figure 3. Traumatic Brain Injury (TBI) 2000-2012 Q2

(as of August 20, 2012)

**Source:** CRS communication with Dr. Michael Carino, Army Office of the Surgeon General, December 13, 2012. Data source is the Defense Medical Surveillance System (DMSS), Defense and Veterans Brain Injury Center, http://www.dvbic.org/dod-worldwide-numbers-tbi.

Notes: \* Requires additional incident information and further investigation prior to TBI categorization.

# **Amputations**

**Table 4** shows the number of individuals with battle-injury amputations for OIF/OND and OEF by service. The total number of amputations in OIF/OND and OEF as of December 3, 2012 is 1,715.

Table 4. Individuals with Battle-Injury Amputations by Service for OIF/OND and OEF

(as of December 3, 2012)

Theater	Type of Amputation	Army	Marine	Navy	Air Force	Grand Total
OIF/OND	Major Limb (e.g. Leg)	613	161	16	7	797
	Minor Limb (e.g. Partial Foot, Fingers)	156	31	4	3	194
OEF	Major Limb (e.g. Leg)	394	273	16	13	696
	Minor Limb (e.g. Partial Foot, Fingers)	16	8	I	3	28
Total		1,179	473	37	26	1,715

**Source:** CRS communication with Dr. Michael Carino, Army Office of the Surgeon General, December 13, 2012.

From 2003 until the first quarter of 2009, the majority of the major limb amputations due to battle injuries occurred in OIF. In the second quarter of 2009, however, the trend changed, and since that time the majority of the major limb amputations due to battle injuries have occurred in OEF. **Figure 4** charts the number of major-limb amputations due to a battle injury in OIF/OND and OEF from January 2009 through December 2012 for all services. Major limb amputations include limb(s), partial limb(s), or full or partial hand and/or foot amputations.

80 70 Battle Inury, Major Limb Amputation 60 50 40 30 20 10 0 Qtr1 Qtr2 Qtr3 Qtr4 2009 2010 2011 2012 OEF OIF OND → OIF OND OEF

Figure 4. Major-Limb Amputations Due to Battle Injuries in OIF/OND and OEF

(as of January 3, 2013)

**Source:** CRS communication with Dr. Michael J. Carino, Army Office of the Surgeon General, February 5, 2013. Data from DOD-VA Extremity Trauma & Amputation Center of Excellence (EACE).

#### **Self-Inflicted Wounds**

According to DOD's casualty website, as of January 9, 2013, 235 servicemembers died of self-inflicted wounds while serving in OIF/OND and 97 died of self-inflicted wounds while serving in OEF.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> Department of Defense Personnel and Procurement Statistics, Statistical Information and Analysis Department, OIF at https://www.dmdc.osd.mil/dcas/pages/report\_oif\_type.xhtml, OND at https://www.dmdc.osd.mil/dcas/pages/report\_ond\_type.xhtml, and OEF at https://www.dmdc.osd.mil/dcas/pages/report\_oef\_type.xhtml.

#### Gender Distribution of Deaths

**Table 5** and **Table 6** provide statistics on the gender distribution of OIF/OND and OEF casualties (also available on DOD's website, http://www.dmdc.osd.mil/dcas/). All numbers for OIF/OND and OEF are current as of January 17, 2013. Percentages may not total 100 due to rounding.

Table 5. OIF/OND Gender Distribution of Deaths

(as of January 17, 2013)

Gender	Military Deaths	% of Total Deaths
Male	4,365	97.5
Female	110	2.5
Total	4,475	100.0

Source: Data from Defense Manpower Data Center, at https://www.dmdc.osd.mil/dcas/pages/casualties.xhtml.

**Table 6. OEF Gender Distribution of Deaths** 

(as of January 17, 2013)

Gender	Military Deaths	% of Total Deaths
Male	2,122	98.0
Female	42	2.0
Total	2,164	100.0

Source: Data from Defense Manpower Data Center, at https://www.dmdc.osd.mil/dcas/pages/casualties.xhtml.

# Race/Ethnicity Distribution of Deaths

**Table 7** and **Table 8** provide statistics on the race and ethnicity distribution of OIF/OND and OEF casualties (also on DOD's website, http://www.dmdc.osd.mil/dcas). All numbers for OIF/OND and OEF are current as of January 17, 2013. Percentages may not total 100 due to rounding.

Table 7. OIF/OND Race/Ethnicity Distribution of Deaths

(as of January 17, 2013)

Race/Ethnicity	Military Deaths	% of Total Deaths
American Indian/Alaska Native	43	1.0
Asian	78	1.7
Black or African American	444	9.9
Native Hawaiian or Other Pacific Islander	18	0.4
White	3,696	82.6
Multiple Races	63	1.4
Unknown	133	3.0
Total	4,475	100.0

Source: Data from Defense Manpower Data Center, at https://www.dmdc.osd.mil/dcas/pages/casualties.xhtml.

Table 8. OEF Race/Ethnicity Distribution of Deaths

(as of January 17, 2013)

Race/Ethnicity	Military Deaths	% of Total Deaths
American Indian/Alaska Native	27	1.3
Asian	58	2.7
Black or African American	170	7.9
Native Hawaiian or Other Pacific Islander	6	0.3
White	1,848	85.4
Multiple Races	26	1.2
Unknown	29	1.3
Total	2,164	100.0

Source: Data from Defense Manpower Data Center, at https://www.dmdc.osd.mil/dcas/pages/casualties.xhtml.

# Medical Evacuation Statistics for U.S. Military Personnel

There were 52,065 unique servicemembers evacuated for medical reasons from OIF/OND and 23,742 unique servicemembers evacuated for medical reasons from OEF. One servicemember may have had multiple deployments or multiple evacuation events. Similarly, servicemembers may be counted in OIF/OND and OEF due to multiple deployments. **Table 9** and **Table 10** list total medical evacuations from each theater, not unique servicemember totals. All numbers for OIF/OND and OEF are current as of December 3, 2012. Percentages may not total 100 due to rounding.

Table 9. OIF/OND Medical Evacuations

(as of December 3, 2012)

	Number	Percentage
OIF/OND Battle Injuries	9,042	16.9
OIF/OND Disease/Non-Battle Injuries	11,607	83.1
Total	20,649	100.0

**Source:** CRS correspondence with Dr. Michael J. Carino, Army Office of the Surgeon General, December 13, 2012. Data from Transportation Command (TRASCOM), TRAC2ES.

**Table 10. OEF Medical Evacuations** 

(as of December 3, 2012)

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	Number	Percentage
OEF Battle Injuries	5,746	23.7
OEF Disease/Non-Battle Injuries	18,463	76.3
Total	24,209	100.0

**Source:** CRS correspondence with Dr. Michael J. Carino, Army Office of the Surgeon General, December 13, 2012. Data from Transportation Command (TRASCOM), TRAC2ES.

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