



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 Operation New Dawn (OND, Iraq), Operation Iraqi Freedom (OIF, Iraq), and Operation Enduring Freedom (OEF, Afghanistan), including those concerning 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, while others have been obtained through contact with experts at DOD.

Daily updates of total U.S. military casualties in OND, OIF, and OEF can be found at the DOD's website, at <http://www.defense.gov/news/casualty.pdf>. In addition, CRS Report R40824, *Iraq Casualties: U.S. Military Forces and Iraqi Civilians, Police, and Security Forces*, contains statistics on U.S. military and Iraqi civilian casualties, while CRS Report R41084, *Afghanistan Casualties: Military Forces and Civilians*, contains statistics on U.S. military and Afghan civilian casualties.

Operation Iraqi Freedom and Operation New Dawn have ended. However, updates to the casualty statistics continue for both operations.

This report will be updated as needed.

Contents

Current Operations.....	1
Rates of Post-Traumatic Stress Disorder, Traumatic Brain Injury, and Amputations.....	1
Post-Traumatic Stress Disorder (PTSD).....	1
Traumatic Brain Injury (TBI).....	3
Amputations.....	5
Gender Distribution of Deaths.....	6
Race/Ethnicity Distribution of Deaths.....	7
Self-Inflicted Wounds.....	8
Medical Evacuation Statistics for U.S. Military Personnel.....	8
Operation Iraqi Freedom and Operation New Dawn.....	8
Operation Enduring Freedom.....	9

Figures

Figure 1. Annual Post-Traumatic Stress Disorder Diagnoses in All Services.....	2
Figure 2. Traumatic Brain Injury (TBI) 2000-2011 Q4.....	4
Figure 3. Traumatic Brain Injury (TBI) 2000-2011 Q4.....	5
Figure 4. Major-Limb Amputations Due to Battle Injuries in OIF/OND and OEF.....	6

Tables

Table 1. Annual New Post-Traumatic Stress Disorder Diagnoses in All Services.....	2
Table 2. Traumatic Brain Injury (TBI) 2000-2011 Q4.....	4
Table 3. Individuals with Battle-Injury Amputations by Service for OIF/OND and OEF.....	5
Table 4. OIF/OND Gender Distribution of Deaths.....	7
Table 5. OEF Gender Distribution of Deaths.....	7
Table 6. OIF/OND Race/Ethnicity Distribution of Deaths.....	7
Table 7. OEF Race/Ethnicity Distribution of Deaths.....	8
Table 8. OIF/OND Medical Reasons for Evacuations.....	9
Table 9. OEF Medical Reasons for Evacuation.....	9

Contacts

Author Contact Information.....	10
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Current Operations

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 31, 2011.

As of May 7, 2012, 4,409 servicemembers died in OIF and 31,924 servicemembers were wounded in action. In addition, there were 40,241 non-hostile-related medical air transports.¹ In OND, as of May 7, 2012, 66 servicemembers died and 301 were wounded in action. A further 2,516 required non-hostile-related medical air transports.²

Operation Enduring Freedom (OEF) continues in Afghanistan. As of May 7, 2012, 1,951 servicemembers have died, 15,858 servicemembers have been wounded in action, and there have been 16,196 non-hostile-related medical air transports in OEF.³

Rates of Post-Traumatic Stress Disorder, Traumatic Brain Injury, and Amputations

Post-Traumatic Stress Disorder (PTSD)

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 actually had PTSD. A single visit on record commonly reflects someone who was evaluated for possible PTSD, but did not actually meet the established criteria for diagnosis.

For those who have been diagnosed with PTSD during deployment, although the diagnosis of PTSD occurred at least 30 days after the individual deployed, there is no way to determine 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.⁴ **Table 1** and **Figure 1** present yearly PTSD diagnoses for all services.

¹ Department of Defense, "Global War on Terrorism – Operation Iraqi Freedom by Casualty Category Within Service," March 19, 2003, to May 7, 2012, at <http://siadapp.dmdc.osd.mil/personnel/CASUALTY/oif-total.pdf>.

² Department of Defense, "Global War on Terrorism – Operation New Dawn by Casualty Category Within Service," September 1, 2010 to May 7, 2012, at <http://siadapp.dmdc.osd.mil/personnel/CASUALTY/ond-total.pdf>.

³ Department of Defense, "Global War on Terrorism – Operation Enduring Freedom by Casualty Category Within Service," September 1, 2010, to August 1, 2011, at <http://siadapp.dmdc.osd.mil/personnel/CASUALTY/wotsum.pdf>.

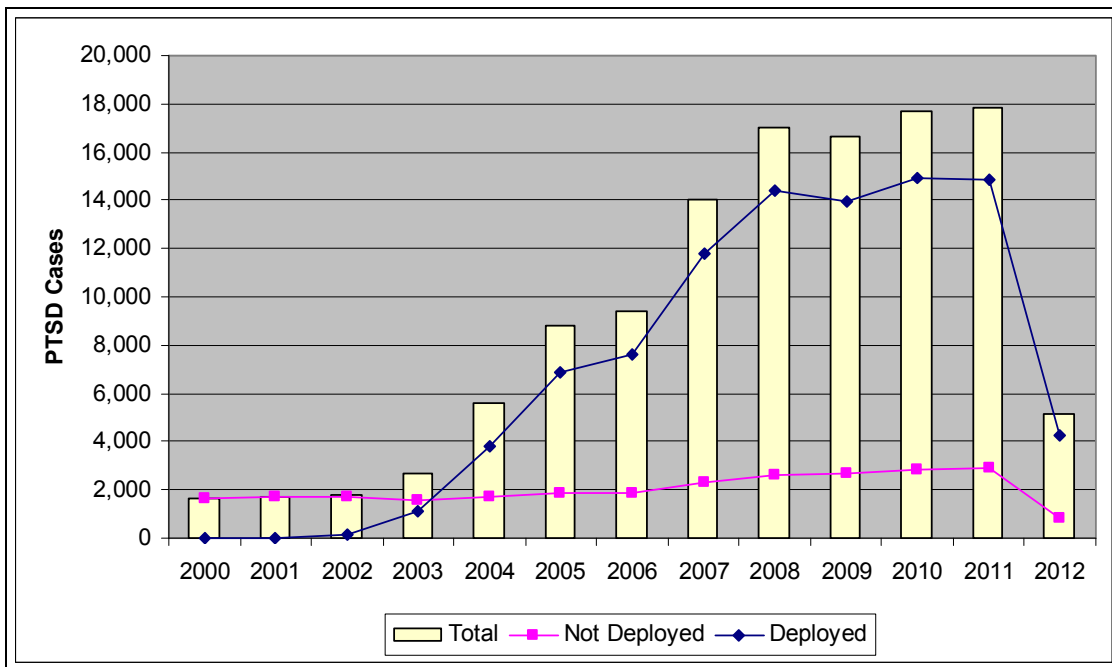
⁴ Personal communication with CRS from Department of Defense Office of the Secretary of Defense liaison, September 21, 2010.

Table I. Annual New Post-Traumatic Stress Disorder Diagnoses in All Services
As of May 7, 2012

Year	Not Deployed	Deployed
2000	1,610	—
2001	1,706	—
2002	1,689	133
2003	1,596	1,091
2004	1,739	3,835
2005	1,882	6,899
2006	1,839	7,579
2007	2,283	11,766
2008	2,619	14,379
2009	2,690	13,967
2010	2,820	14,892
2011	2,943	14,875
2012	836	4,279
Total	22,688	82,015

Source: Personal communication with Dr. Michael Carino, Army Office of the Surgeon General, May 7, 2012. Data source is the Defense Medical Surveillance System (DMSS).

Figure I. Annual Post-Traumatic Stress Disorder Diagnoses in All Services
As of May 7, 2012



Source: Personal communication with Dr. Michael Carino, Army Office of the Surgeon General, May 7, 2012. Data source is the Defense Medical Surveillance System (DMSS).

Traumatic Brain Injury (TBI)

Of the total 233,425 traumatic brain injury (TBI) cases since 2000, 178,961 have been mild, 38,943 have been moderate, 6,188 have been severe or penetrating, and 9,333 have not been classifiable.⁵ **Table 2** and **Figure 3** show the relative rates of mild, moderate, severe, penetrating, and not classifiable TBIs.

⁵ Defense and Veterans Brain Injury Center at <http://www.dvbic.org/TBI-Numbers.aspx>. The DOD 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 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.

Table 2. Traumatic Brain Injury (TBI) 2000-2011 Q4

As of February 10, 2012

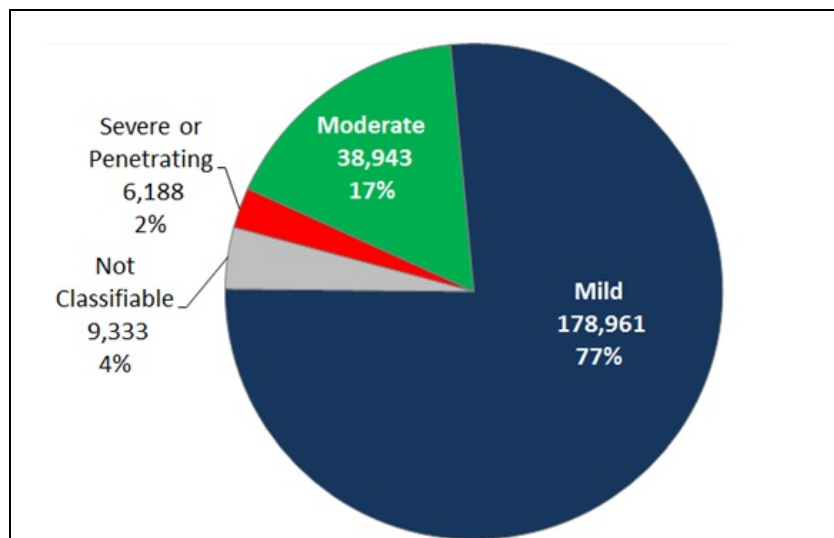
Incident Diagnoses	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2000-2011
Severe or Penetrating TBI	450	478	380	449	463	407	521	591	686	809	553	401	6,188
Moderate TBI	4,150	3,553	3,077	2,643	2,281	1,906	2,466	3,708	3,343	3,751	4,294	3,771	38,943
Mild TBI	6,326	7,760	8,974	9,770	10,536	9,857	13,919	18,665	21,859	22,673	24,989	23,633	178,961
Not Classifiable*	37	39	39	36	32	41	52	210	2,679	2,022	1,571	2,575	9,333
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	31,380	233,425

Source: Personal communication with Dr. Michael Carino, Army Office of the Surgeon General, May 7, 2012. Data source is Defense Medical Surveillance System (DMSS), Defense and Veterans Brain Injury Center, <http://www.dvbic.org/TBI-Numbers.aspx>.

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

Figure 2. Traumatic Brain Injury (TBI) 2000-2011 Q4

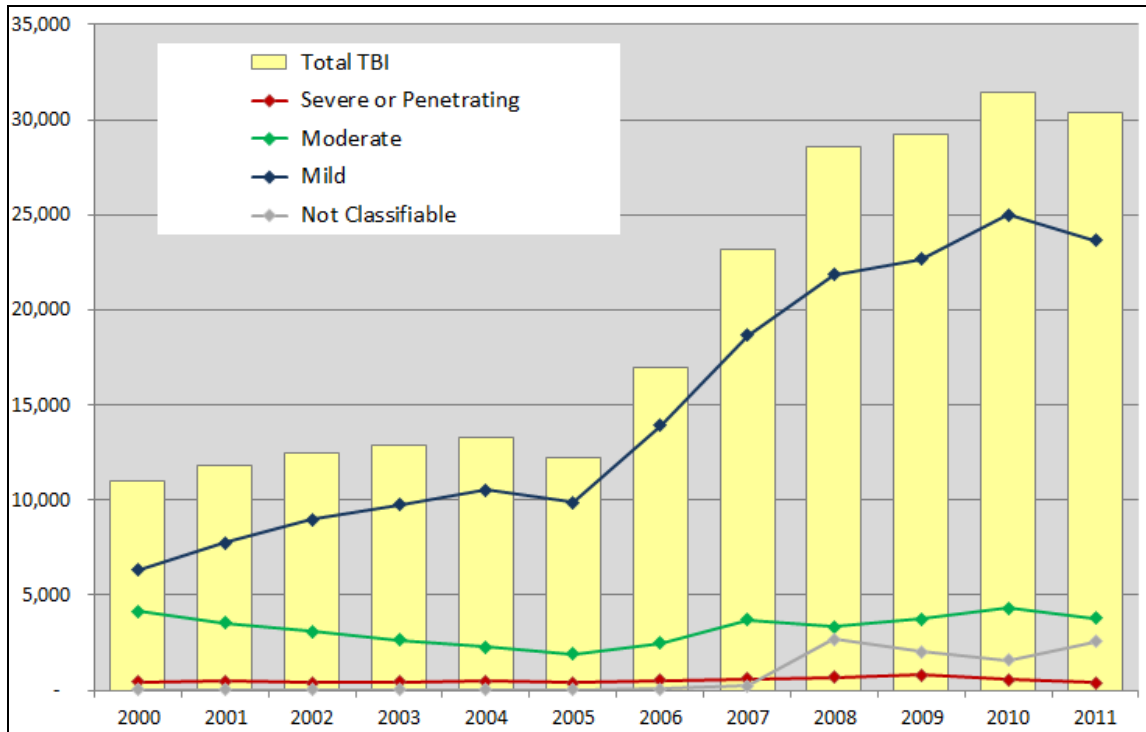
As of February 10, 2012



Source: Personal communication with Dr. Michael Carino, Army Office of the Surgeon General, May 7, 2012. Data source is the Armed Forces Health Surveillance Center (AFHSC), Defense and Veterans Brain Injury Center, <http://www.dvbic.org/TBI-Numbers.aspx>.

Figure 3. Traumatic Brain Injury (TBI) 2000-2011 Q4

As of February 10, 2012



Source: Personal communication with Dr. Michael Carino, Army Office of the Surgeon General, May 7, 2012. Data source is the Defense Medical Surveillance System (DMSS), Defense and Veterans Brain Injury Center, <http://www.dvbic.org/TBI-Numbers.aspx>.

Amputations

Table 3 shows the number of individuals with amputations for OIF/OND and OEF. The total number of amputations in all conflicts is 1,599.

Table 3. Individuals with Battle-Injury Amputations by Service for OIF/OND and OEF

As of May 3, 2012

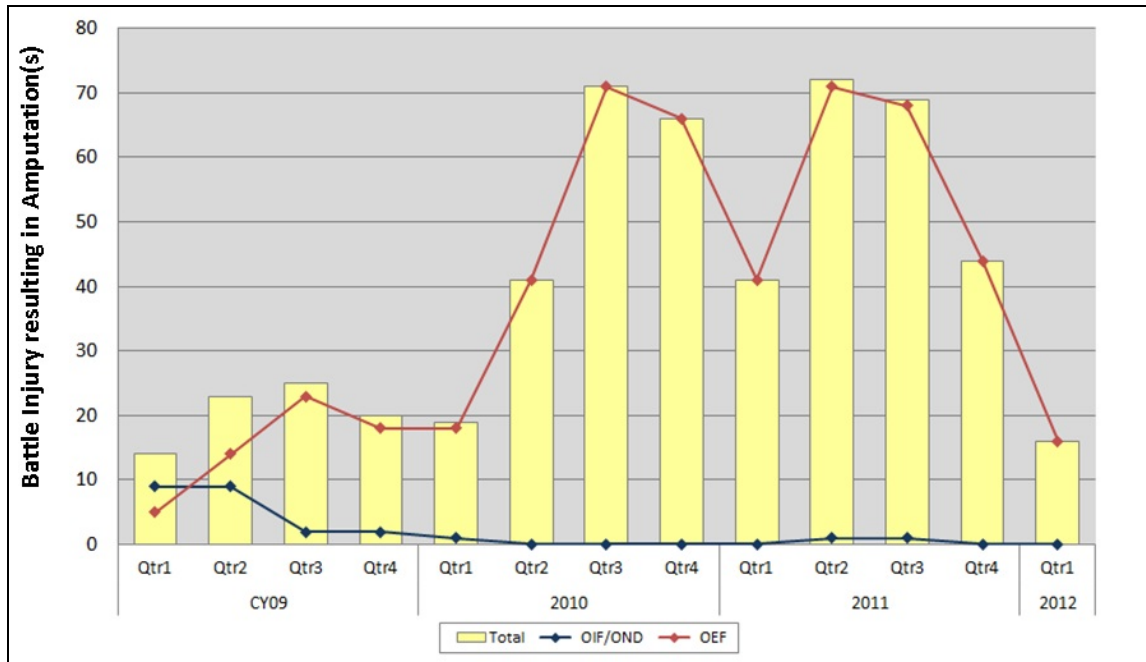
Theater	Type of Amputation	Army	Marine	Navy	Air Force	Grand Total
OIF/OND	Major Limb (e.g. Leg)	598	154	16	7	775
	Minor Limb (e.g. Partial Foot, Fingers)	169	37	4	3	213
OEF	Major Limb (e.g. Leg)	299	255	14	13	581
	Minor Limb (e.g. Partial Foot, Fingers)	18	10	1	1	30
Total		1,084	456	35	24	1,599

Source: Personal communication with Dr. Michael Carino, Army Office of the Surgeon General, May 3, 2012.

From 2003 until the first quarter of 2009, the majority of the major limb amputations due to battle injuries in the Army 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 in the Army have occurred in OEF. **Figure 4** charts the number of Army major-limb amputations due to a battle injury in OIF/OND and OEF from January 2009 to June 2011.

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

January 2009 to March 2012



Source: Personal correspondence with Dr. Michael J. Carino, Army Office of the Surgeon General, May 7, 2012.

Gender Distribution of Deaths

Table 4 and **Table 5** 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 May 7, 2012. Percentages may not total 100 due to rounding.

Table 4. OIF/OND Gender Distribution of Deaths

As of May 7, 2012

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

Source: Personal correspondence with Dr. Michael J. Carino, Army Office of the Surgeon General, May 7, 2012. Data from Defense Manpower Data Center, accessible at <http://siadapp.dmdc.osd.mil/personnel/CASUALTY/oif-deaths-total.pdf> and <http://siadapp.dmdc.osd.mil/personnel/CASUALTY/onddeaths.pdf>.

Table 5. OEF Gender Distribution of Deaths

As of May 7, 2012

Gender	Military Deaths	% of Total Deaths
Male	1,917	98.3
Female	34	1.7
Total	1,951	100.0

Source: Personal correspondence with Dr. Michael J. Carino, Army Office of the Surgeon General, May 7, 2012. Data from Defense Manpower Data Center, accessible at <http://siadapp.dmdc.osd.mil/personnel/CASUALTY/oefdeaths.pdf>.

Race/Ethnicity Distribution of Deaths

Table 6 and **Table 7** 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 and OEF are current as of May 7, 2012. Percentages may not total 100 due to rounding.

Table 6. OIF/OND Race/Ethnicity Distribution of Deaths

As of May 7, 2012

Race/Ethnicity	Military Deaths	% of Total Deaths
American Indian/Alaska Native	42	0.9
Asian	83	1.9
Black or African American	434	9.7
Hispanic or Latino	477	10.7
Multiple races, pending, or unknown	49	1.1
Native Hawaiian or Pacific Islander	52	1.2
White	3,338	74.6
Total	4,475	100.0

Source: Personal correspondence with Dr. Michael J. Carino, Army Office of the Surgeon General, May 7, 2012. Data from Defense Manpower Data Center, accessible at <http://siadapp.dmdc.osd.mil/personnel/CASUALTY/oif-deaths-total.pdf> and <http://siadapp.dmdc.osd.mil/personnel/CASUALTY/onddeaths.pdf>.

Table 7. OEF Race/Ethnicity Distribution of Deaths

As of May 7, 2012

Race/Ethnicity	Military Deaths	% of Total Deaths
American Indian or Alaska Native	23	1.2
Asian	34	1.7
Black or African American	148	7.6
Hispanic or Latino	168	8.6
Multiple races, pending or unknown	29	1.5
Native Hawaiian or Pacific Islander	22	1.1
White	1,527	78.3
Total	1,951	100.0

Source: Personal correspondence with Dr. Michael J. Carino, Army Office of the Surgeon General, May 7, 2012. Data from Defense Manpower Data Center, accessible at <http://siadapp.dmdc.osd.mil/personnel/CASUALTY/oefdeaths.pdf>.

Self-Inflicted Wounds

According to DOD's casualty website, as of May 7, 2012, 235 servicemembers died of self-inflicted wounds while serving in OIF/OND and 79 have died of self-inflicted wounds while serving in OEF.⁶

Medical Evacuation Statistics for U.S. Military Personnel

U.S. military personnel evacuation statistics as of August 1, 2011, can be found at the following DOD websites: <http://siadapp.dmdc.osd.mil/personnel/CASUALTY/oif-total.pdf> for OIF, <http://siadapp.dmdc.osd.mil/personnel/CASUALTY/ond-total.pdf> for OND, and <http://siadapp.dmdc.osd.mil/personnel/CASUALTY/wotsum.pdf> for OEF.

Operation Iraqi Freedom and Operation New Dawn

According to DOD, a total of 51,797 individuals were medically evacuated from OIF/OND from March 19, 2003, to May 7, 2012. Of the total number of medical evacuations, 42,757 were non-hostile-related medical air transports and the remaining 9,040 were for servicemembers who were wounded in action. Percentages may not total 100 due to rounding.

⁶ Department of Defense Personnel and Procurement Statistics, Statistical Information and Analysis Department, OIF at <http://siadapp.dmdc.osd.mil/personnel/CASUALTY/oif-total.pdf>, OND at <http://siadapp.dmdc.osd.mil/personnel/CASUALTY/ond-total.pdf>, and OEF at <http://siadapp.dmdc.osd.mil/personnel/CASUALTY/wotsum.pdf>.

Table 8. OIF/OND Medical Reasons for Evacuations

As of May 7, 2012

	Number	Percentage
Wounded in Action	9,040	17.5
Non-Hostile Injuries ^a	10,830	20.9
Disease/Other Medical	31,927	61.6
Total	51,797	100.0

Source: Personal correspondence with Dr. Michael J. Carino, Army Office of the Surgeon General, May 7, 2012. Data from Defense Manpower Data Center, accessible at <http://siadapp.dmdc.osd.mil/personnel/CASUALTY/oif-total.pdf> and <http://siadapp.dmdc.osd.mil/personnel/CASUALTY/ond-total.pdf>.

- a. The Department of Defense defines a “non-hostile injury” as an injury that is not directly attributable to hostile action or terrorist activity, such as casualties due to the elements, self-inflicted wounds, or combat fatigue.

Operation Enduring Freedom

According to DOD, a total of 21,047 individuals were medically evacuated from OEF from October 7, 2001, through May 7, 2012. Of the total number of medical evacuations, 16,196 were non-hostile-related medical air transports and the remaining 4,851 were for servicemembers who were wounded in action. Percentages may not total 100 due to rounding.

Table 9. OEF Medical Reasons for Evacuation

As of May 7, 2012

	Number	Percentage
Wounded in Action	4,851	23.0
Non-Hostile Injuries ^a	4,113	19.5
Disease/Other Medical	12,083	57.4
Total	21,047	100.0

Source: Personal correspondence with Dr. Michael J. Carino, Army Office of the Surgeon General, May 7, 2012. Data from Defense Manpower Data Center, accessible at <http://siadapp.dmdc.osd.mil/personnel/CASUALTY/wotsum.pdf>.

- a. The Department of Defense defines a “non-hostile injury” as an injury that is not directly attributable to hostile action or terrorist activity, such as casualties due to the elements, self-inflicted wounds, or combat fatigue.

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