

US and Coalition Casualties in Iraq and Afghanistan

Catherine Lutz

Watson Institute, Brown University

June 6, 2011

1. US and Coalition Dead

The US military has carefully counted its uniformed dead in the wars in Iraq and Afghanistan. As of June 6, 2011, that number totaled 6,051, with 4,457 dead in Iraq and 1,594 dead in Afghanistan (See Table 1).

Table 1. US War Dead in Iraq and Afghanistan (uniformed through June 6, 2011, contractors through March 31, 2011)¹

	US Uniformed*	US Contractors	Total
Iraq (OIF and OND)	4457	1537	
Afghanistan (OEF)	1594	763	
Total	6051	2300 (est. 529 US citizens)**	8,351

*includes a small number of DoD civilian employees

**extrapolation from data showing that 23 percent of US contractors killed in Iraq and Afghanistan through April 2007 were US citizens²

The list of ways that these mostly young people died is a horrific catalogue of what actually happens in war. They died by the enemy's deadly targeting or mangled in the dangerous equipment they work with. They died because of the chaos of war, accidentally shooting each other, or at their own hands as the mental anguish of killing and being at risk of dying takes a self-destructive toll. The causes of death include hostile rocket-propelled grenade fire and the improvised explosive devices that have been responsible for roughly half of all deaths and injuries in Iraq and Afghanistan.³ But they also include truck rollovers and other vehicle crashes, electrocutions, heatstroke deaths, friendly fire, and suicides in theater. A total of 287 individuals have committed suicide while deployed, and 2,129 military suicides have occurred since 2001.⁴ In some cases, the official cause of death has been disputed (a death that appears to be a suicide being listed as an accident, for example) or as undetermined or pending determination.⁵

Cause of death aside, the casualties of US uniformed personnel are the war deaths that are best known by the public, announced solemnly on the evening news and tallied on websites with information on the who, how, what, where and when of each death. The human faces of each of these individuals have appeared in the US media throughout the war. This includes local media which announce the death and respectfully profile the soldier's⁶ life and personality and celebrate his or her character, and it includes websites that link those service members' faces, stories, and hometowns with the valleys and urban neighborhoods in Iraq and Afghanistan where they died (e.g., <http://projects.washingtonpost.com/fallen/>; <http://www.cnn.com/SPECIALS/war.casualties/index.html>).

While most Americans can give a close approximation of the number of US soldiers killed in the wars, military operations in Iraq and Afghanistan in fact have been prosecuted by, and produced fatalities from among, large and unrecognized numbers of private contractors. Such individuals now make up 54 percent of the total of US workforce in both countries.⁷ Contractors have died in the same manner and places as uniformed personnel: in hostile and non-hostile ways, shot down in helicopters and crashing while simply driving a truck down the road, through kidnapping-murders, and by their own hands.

While contractors have been killed in large numbers, a full and accurate accounting has not yet been done by the Pentagon⁸ (although Congress demanded such from the US military, State Department, and USAID in 2008).⁹ Failing to count these individuals suggests that the war has been far less costly in human terms than it in fact has been. The best and most recent estimate, however, as of March 31, 2011, is that 2,300 contractors had died in both war zones,¹⁰ with contractor deaths exceeding uniformed deaths for the first time in 2009 in Iraq and in the first six months of 2010 in Afghanistan (see Table 1).¹¹

This total of contractor deaths comes from US Department of Labor records of insurance claims filed under a compensation program required by a federal law known as the Defense Base Act. This act requires contract firms to purchase insurance to cover their civilian workers killed or wounded while working abroad on federal contracts.¹² Some unknown number of deaths have not been recorded, however, when either families or

employers have failed to seek compensation. The system established by the Defense Base Act is based in the assumption that defense contractors will inform all workers about their coverage with death benefits and workman's compensation, and will report deaths or injuries to the insurance company and the federal government. That those companies often do not is evidenced by the fact that while foreign workers represented over 60 percent of the war contractor work force between 2003 and 2007, they filed only 14 percent of all claims in that same period.¹³

What most distinguishes the contractor dead from the uniformed dead is that they are much less often US citizens. Many of these casualties have been Afghani and Iraqi nationals working under US government contracts. The contractor dead have come from a number of other countries, including Fiji, Turkey, Nepal, and the Philippines. In FY 2010, 24 percent of all contractors in Iraq and Afghanistan (including those working for Defense, State and USAID) were US nationals, 44 percent were local Iraqis or Afghans, and 32 percent were from third countries.¹⁴

Rather than the number usually given, therefore, the total number of US citizens who have died in the military efforts in Iraq and Afghanistan is 6,580 (6,051 uniformed and 529 contractors), and the total number of US military and contract workers who have died in the wars is at 8,351 (per Table 1). Even this number underestimates the US war dead, as it fails to include the numbers of soldiers and contractors who returned home and killed themselves or otherwise died as a result of higher prevalence risky behaviors associated with return from war (see below). The military does not report suicides among non-active duty reservists, and the Department of Veterans Affairs still (as of November 2010) does not report suicides among veterans, resulting in dramatic underreporting of the scale of the problem; fully three quarters of veterans of these two wars are not enrolled in the VA health care system and would be unlikely to be tracked in any case.¹⁵

A recent investigation using FOIA documents received from the VA found that at least 4,194 veterans of the Iraq and Afghanistan war have died since they were discharged, with one third dying within two years of being discharged.¹⁶ Approximately 1,200 of the deaths were of veterans with a mental health diagnosis, most commonly PTSD. Other data collected from California death records indicate that many deaths were the result of suicide, drug overdose, or vehicle crashes, and/or other risk-taking behaviors.¹⁷

In addition to these fatalities, international coalition partners recorded 1,192 uniformed dead, the largest group of whom was the 543 British soldiers killed (see Table 2).¹⁸ While rarely counted as such, the Afghan and Iraqi security forces (military and police) should also be counted among the allied uniformed dead. Their numbers have been estimated at 18,678 for a total of almost 20,000 allied war dead (see Table 2).

Table 2. Other International and Local Coalition War Dead in Iraq and Afghanistan (through May 9, 2011 for international allies, through April 26, 2011 for Iraqi security forces; through April 20, 2011 for Afghan security forces)¹⁹

	Non-US Allied Uniformed	Local Military and Police	Total
Iraq	318	9922	
Afghanistan	874	8756	
Total	1192	18678	19,870

In sum and conservatively, 28,221 (8,351 US plus 19,870 allies) people died while on the mission of waging the wars in Iraq and Afghanistan.

2. US Uniformed and Contractor Wounded

a. Injury Numbers

While war zone death figures are available and appear to be reliable with the exception of variance in the numbers available for Afghan and Iraqi forces, it is more difficult to get accurate figures for the total of those US citizens wounded in the wars in Iraq and Afghanistan. While the Department of Defense and some other coalition governments provide official numbers on their websites, the ISAF website does not. There is also a lack of transparency or clarity about the categorization of the injuries: the DoD gives the numbers of Wounded in Action and distinguishes them from non-hostile injuries and other medical problems, including heat stroke, suicide attempts, and vehicle crashes. Some unidentified number of the latter, however, should be considered a result of the wars, and therefore as much a combat injury, broadly speaking, as a bomb blast injury. A soldier who has a heart attack or traumatic reaction when his vehicle rolls over after a vehicle ahead in his convoy hits an IED is categorized as a “non-hostile diseases/other medical.” On the other hand, some number of health problems that individuals have experienced in these war zones would have occurred whether or not the soldier or

6/13/2011

contractor went to war. Only those of the latter which are serious enough to require medical evacuation are included in the DoD tallies.²⁰

In addition to this problem of counting the wounded and ill in the war zone itself, an even larger adjustment to the official DoD (and ISAF) figures must be made for the many war wounds that are undiagnosed, untreated, or not treated until after the soldier returns home. That larger number is reflected in the VA treatment figures, although some of the illnesses and injuries for which veterans are treated are ones that were not the result of their wartime exposures or injuries. On the other hand, many veterans of the Iraq and Afghanistan wars are not registered with the VA and their injuries have not yet been counted.

Within these limits, the following conclusions can be drawn.

As of April 4, 2011, the Department of Defense reported a total of 43,822 US troops “wounded in action” since the beginning of the wars (See Table 3).²¹ In addition, there are “non-hostile-related medical air transports” of sick and injured troops totaling 55,243 (see Table 3). Again, these include all medical evacuations from theater, including disease, heat stroke, self-inflicted injuries, and “combat fatigue,” but do not include casualties which do not involve air transport.²² All are categorized as “casualties” by the Department of Defense.²³

Numbers of US contractor wounded are available through the Department of Labor: as of May 10, 2011, there were 33,295 claims for injury or illness that involved lost time on the job, but these figures are acknowledged to be quite incomplete. Contractor injuries in both wars have been conservatively estimated at 51,031 through March 2011,²⁴ using Department of Labor numbers. If one takes the figure for the percentage of contract workers employed by the US military who died in Iraq and Afghanistan from the invasions up to March 2007 who were US citizens, which is 23 percent,²⁵ this would mean roughly 11,737 of the total contractor wounded figure of 51,031 were US citizens.

Together, then, these numbers bring the total of injured and ill DoD contractors and US troops in both wars to 150,096, and the number of US citizens who were acknowledged to have been injured or fallen ill in country in the two wars to 110,802.

Table 3. US Wounds, Injuries and Medical Problems Diagnosed while in Iraq and Afghanistan (through May 2011 for US uniformed, March 2011 for contractors)

	US Uniformed	US Contractors (US citizens)*	Total (US citizens)
Iraq		40,688	
hostile	32,100		
non-hostile	41,769		
Afghanistan		10,343	
hostile	11,722		
non-hostile	13,474		
Total	99,065	51,031 (11,737)	150,096 (110,802)

*Given that 23 percent of the contractor dead in Iraq and Afghanistan through April 2007 were US citizens, extrapolating to c. 11,737 US citizen injuries in Iraq and Afghanistan

This total, however, does not include the still large number of untreated or undiagnosed illnesses and war disability incurred by US forces. That the actual wounding of war is orders of magnitude larger than these official numbers indicate is evidenced by the fact that the US VA system alone has already treated more than 650,000 veterans of the two wars for a variety of problems and received 550,000 disability claims from veterans of the two wars.²⁶

The large additional number of those who are diagnosed as ill or injured beyond what the Department of Defense counts as the war wounded on its website is an index of how many individuals suffering from PTSD, depression, and other psychological injuries of war had not been counted by official sources, how much delayed detection and treatment of TBI and other problems has occurred, and how many uniformed rape victims or troops

with hearing loss from heavy equipment and explosions approach the VA system for help long after their injuries were first incurred in Iraq and Afghanistan.

There is controversy and disagreement, however, about what part of that number of 650,000 should be categorized as war injuries, and what part constitutes medical problems that the veterans would have contracted in any case.

Wounding has occurred as well, of course, among the other forces fighting alongside the US. Excluding this larger pool of injuries just mentioned that are not officially reported, the total for both wars, very conservatively figured, is 68,366 (see Table 4). The total number of wounded among all allied combatants in both wars, then, is at least 218,462.

Table 4. Non-US Allied Uniformed and Local Military and Police Wounded²⁷

	British	Canadian	Afghan	Iraqi	Other allied	Total
Iraq				29,766		
hostile	426					
non-hostile	3,283					
Afghanistan			26,268			
hostile	1,664	615				
non-hostile	3,138	1,244				
Total	8,511	1,859	26,268	29,766	1,962	68,366

b. Injury types

Common combat injuries have included a range of types of physical trauma. These include second and third degree burns, broken bones, shrapnel wounds, brain injuries, spinal cord injuries, nerve damage, paralysis, and loss of sight and hearing. Some of the brain-damaged have injuries so profound as to arguably be better placed in the category of killed in action.

One Army doctor vividly described the scale of the devastation in many individual cases: "I walk[ed] into the operating room and the general surgeons are doing their work and there is the body of this Navy SEAL, which is a physical specimen to behold," he told IPS. "And his abdomen is open, they're exploring both intestines. He's missing both legs below the knee, one arm is blown off, he's got incisions on his thighs to relieve the pressure on the parts of the legs that are hopefully gonna survive and there's genital injuries, and you just want to cry."²⁸

The wounds suffered by US soldiers and contractors are like those suffered by veterans of previous American wars in some ways and distinctive in others. Paul Sullivan, a leading veterans advocate, has argued that "The signature wounds from the wars will be (1) traumatic brain injury, (2) post-traumatic stress disorder, (3) amputations and (4) spinal cord injuries."²⁹

Traumatic brain injury. The Military Health System has recorded 195,547 troops with a diagnosis of traumatic brain injury (TBI) through September 2010.³⁰ This number alone is, of course, larger than the total number of injuries the Department of Defense records as reported in Table 3. DoD data shows diagnoses of 7,035 cases of TBI in 2010.³¹ A Rand report in 2008 found 19 percent of returning service members reported having experienced a possible traumatic brain injury, which produces a much higher total of 320,000 veterans of those conflicts through late 2007 alone.³² Researchers have questioned whether this latter estimate, which was based on screening questionnaires rather than full diagnostic work by a medical professional, may have overestimated the number of persons deployed to the wars who have incurred these injuries or incurred them to a disabling degree.³³ On the other hand, the DoD number likely underestimates the total given the possibility of no treatment or treatment having been acquired outside the military health system. Whatever the true number, TBI cases range from severe, penetrating TBI to the more common mild TBI which can display itself in psychosocial dysfunction, seizures, irritability and aggression, depression, confusion and memory loss. Moreover, some symptoms become visible only years after the injury.³⁴

Amputations. The widespread use of body armor protecting the vital organs has also meant an unusually high number of wounded soldiers with multiple amputations (including limbs and genitals) and complex combinations of injuries, including burns, blindness and deafness, and massive facial injuries. According to the Army Office of the Surgeon General, there were 1,621 amputations among US troops in Iraq, Afghanistan, and "unaffiliated conflicts" through September 1, 2010. Half of these were caused by improvised explosive devices (IEDs).³⁵ Blast injuries from IEDs often combine penetrating, blunt, and burn injuries. IED shrapnel can include nails, dirt, and clothing, and create enough small wounds to exsanguinate the victim. There has also been a high incidence of blinding injuries.³⁶

Mental injuries. Mental injuries, including PTSD, have also been common. The Veterans Administration reported 192,114 veterans of the wars in Iraq and Afghanistan had been diagnosed with PTSD through the end of 2010, with these numbers, however, excluding anyone diagnosed and treated outside the VA system.³⁷ A study of almost 290,000 veterans of the two wars treated at the VA in the period 2002-08 found that 37 percent

had received mental health diagnoses, 22 percent with PTSD and 17 percent with depression.³⁸ The Army Office of the Surgeon General reported 88,719 patients diagnosed with post-traumatic stress disorder (PTSD) through September 7, 2010.³⁹ The 2008 RAND study, based on screening for PTSD, anxiety and depression, found more than 26 percent of returning troops with likely mental health conditions, with a total of 113,000 diagnosed with depressive disorders by the VA alone.⁴⁰ Another estimate, based on controlling for the representativeness of the sample used in the RAND study, gives a higher estimate, based only on data through October 2007, of 226,000 veterans with PTSD as a result of deployment to Iraq and Afghanistan.⁴¹

Several features of these two wars have made emotional and cognitive impairment more common, including multiple and extended deployments with less rest between deployments (39 percent of all soldiers who have been to Iraq and Afghanistan have had two or more deployments⁴²), even after wounding, and more exposure to handling body parts and seeing friends killed, surviving with more grievous wounds, and higher rates of TBI.⁴³ Other predictors for PTSD include “killing of innocent bystanders, or having to witness such killings without the ability to intercede, [which] is also associated with more intense psychiatric manifestations. This is of significant concern due to the large numbers of civilians killed during this current conflict by both coalition forces and the insurgency.”⁴⁴

Sexual assault. Another injury common to veterans of these wars is rape within the US military and attendant physical and mental damage. The VA screening process has found 21 percent of all female veterans in 2008 with a diagnosis of “military sexual trauma.”⁴⁵ Another earlier study found that sixty percent of assaulted female veterans suffer from PTSD as a result of those attacks.⁴⁶

Other problems. Common complications for wounded soldiers have included high rates of pulmonary embolism and deep venous thrombosis. Wounded soldiers have also transmitted an epidemic of multidrug-resistant infection (*Acinetobacter baumannii*) between various military field stations and hospitals.⁴⁷

Recent research also suggests that, for a combination of reasons, including the widespread use of burn pits for the trash of US military posts in Iraq and Afghanistan, US troops in those countries have inhaled intensely toxic levels of heavy metal and bacteria-laden dust.⁴⁸ This and other vectors appear to explain otherwise inexplicably high rates of illnesses of the respiratory system (up 47 percent), nervous system (up 251 percent), and cardiovascular system (up 34 percent) that have been appearing anomalously in young and healthy individuals in the military. The Defense Department has announced that it sees no problems with toxic dust.

Finally, research has shown that the psychologically disabled of war are more likely to have other significant health problems than other disabled veterans. Department of Veterans Affairs record show that PTSD and TBI are both associated with higher rates of early onset Alzheimer's and stroke.⁴⁹

Contractor injuries. Contractors have also suffered the same kinds of injuries as the troops, including traumatic brain injury, loss of limbs, blindness, and PTSD. One 2007 study measured rates of depression and PTSD at a combined 24 percent for DynCorp employees returning from the battle zones, a figure within the range of that found in returning troops (23 to 31 percent).⁵⁰

Wounded contractors who are US citizens have had a more difficult time getting care than returning troops. Despite getting similarly injured, they have lacked the support network available to returning troops through Tricare or the Veterans Administration. Their care depends on getting workers' compensation payments, and they have often had to struggle with insurance companies to get quality care or even to get medical bills paid.⁵¹ In regard to contractors' claims made for medical care of serious injuries, the insurers protested those claims in 43 percent of cases, creating additional stress and delay of care to the wounded. This is despite the fact that the private insurance companies covering these contractors (on government contract for payment of premiums) made enormous profits, including American International Group, by far the largest, handling 90 percent of contractor claims, which made 38 percent in underwriting gains. The top insurers together earned almost \$600 million in profits, according to a report by the House Committee on Oversight and Government Reform in May 15, 2008.⁵²

Injured foreign contractors have had even more difficulty getting care than US citizens when they were injured performing their work in the war zones.

Improvement to battlefield care. Finally, these last ten years of war have also seen the circulation of much rhetoric suggesting that the medical care provided US soldiers has become so advanced that rates of survivorship have gone up, that is, that the massively injured, who would have died in past wars, are being saved. The Army Surgeon General claimed in 2008 Congressional testimony that the survival rate in Iraq had doubled over what it had been during the Vietnam War. While official numbers show that the percentage of all injured troops who die is historically low (at 10 percent in Iraq versus 16 percent in Vietnam) at least some part of that change has come about as the result of a strong rise in the number of minor injuries recorded, injuries that allowed the soldier to remain on duty; the introduction of body armor makes up some of the difference between Iraq and Vietnam rates as well, although with the attendant problems noted above. The more important fact to note is that the increased lethality of the weapons and tactics used in these current wars has meant that the great majority of combat deaths were the result of injuries so severe that those lives were not saveable under any circumstances.

As of the fall of 2010, 2,200,594 service members had ever been deployed to the two war zones; 867,003 of them had been deployed two or more times.⁵³ While most have returned home, what these numbers suggest is that a significant percentage, even the majority, has suffered mental and/or physical injury.

3. Conclusion: The Human Cost of the War to those who Have Fought It

In the United States, the cultural "gold standard," as Andrew Bacevich has put it, for the casualties that matter is the US uniformed soldier, killed in action. That number for Iraq

and Afghanistan, 6,051, is relatively small as America's wars—or anyone's wars, for that matter—go: over 53,000 US soldiers died in the Korean War, and 405,000 in World War II. But that small number is the result, one could argue, of the increasing emphasis over the years on force protection, cost containment, and of the extent to which other allied forces have fought, died, and been wounded alongside Americans. Force protection efforts have kept down the number of US soldier deaths at the expense of higher numbers of civilian deaths and injuries and, perhaps as well, of a more drawn out war with more insecurity and violence. Cost containment efforts have led to the privatization of many functions previously performed by soldiers and so high death and wounding rates among the contractors who do those jobs, and much higher proportions of non-citizens doing that work and taking the risk.

The Afghan, Iraqi, and other allied military deaths and injuries have been extensive. By conservative estimate, nearly 20,000 of these troops have died, and over 68,000 have been wounded. Together with the US numbers for troops and contractors of 8,000 dead and 150,000 wounded, the total grinds up to 28,000 dead and 218,000 wounded, officially or by conservative estimate. The true numbers are significantly higher. Considering that many TBI, mental injuries, and toxic exposures in all the troops and contractors involved are not symptomatic or diagnosed until return home, the actual wounded figure is likely at least double the official 218,000.

More than twice as many Americans have died as a result of taking the country to war after 9/11 as died on that day. The U.S. wounded of these wars – in uniform and out – now number in the hundreds of thousands. To examine the ongoing effects of these losses on the families and communities left behind in the United States is the task of the next chapter.

Endnotes

Acknowledgements: The research assistance of Sofia Quesada and Kathleen Millar is gratefully acknowledged, as is a reading and feedback from Linda Bilmes. Thanks also to Matthew Goldberg and Paul Sullivan for their valuable instruction and assistance.

¹ Department of Defense, *Casualty Report (2011)*, <http://www.defense.gov/news/casualty.pdf>; ICasualties, *Operation Enduring Freedom/Afghanistan: Afghanistan Coalition Military Fatalities by Year (2011)*, <http://www.icasualties.org>; and US Department of Labor, "Defense Base Act Case Summary Reports," *Cumulative Reports* (September 1, 2001 through March 31, 2011), <http://www.dol.gov/owcp/dlhwc/ladbareports.htm>.

² See Debusmann, Bernd, "In Outsourced U.S. Wars, Contractor Deaths Top 1,000," *Reuters*, July 3, 2007, www.reuters.com. Debusmann reports that of the 990 US contractors killed by the end of April 2007, 224 were US citizens. Note that the percentage of US contractors who are US citizens has gradually increased since 2007 (by December 2008, that figure was 20% and by December 2010 it was 35%; Moshe Schwartz and Joyprada Swain, "Department of Defense Contractors in Afghanistan and Iraq: Background and Analysis," *Congressional Research Service (2011)*, www.crs.gov.) and that it could therefore be expected that the percentage of US contractors killed who were US citizens would have also increased. Moreover, the figures given in Table 1 include only deaths reported in Iraq and Afghanistan. Some of the 58 contractor deaths in Kuwait reported to the Department of Labor were of war workers, as were some of the 74 whose nationality was not identified in BOL records.

³ Clay Wilson, "Improvised Explosive Devices (IEDs) in Iraq and Afghanistan: Effects and Countermeasures," *Congressional Research Service* (2007).

⁴ Veterans for Common Sense, *Fact Sheet, DoD: Consequences of Iraq and Afghanistan Wars* (April 27, 2011), www.veteransforcommonsense.org; Defense Manpower Data Center, "Global War on Terrorism – Operation Enduring Freedom by Casualty Category within Service, October 7, 2001 through May 31, 2011"; Defense Manpower Data Center, "Global War on Terrorism – Operation Iraqi Freedom by Casualty Category within Service, March 19, 2003 through May 31, 2011"; Defense Manpower Data Center, "Global War on Terrorism – Operation New Dawn by Casualty Category within Service, September 1, 2010 through May 31, 2011." Veterans for Common Sense provided primary source Department of Defense (DoD) and Department of Veterans Affairs (VA) statistics acquired through their Freedom of Information Act requests over the past five years.

⁵ Through May 31, 2011, 40 deaths were categorized as undetermined or pending.

⁶ While individuals from all the services have died and been wounded in the War, we use the term "soldier" as shorthand for all the troops.

⁷ The Pentagon as of mid-2010 had an estimated 250,000 contractors employed in the Middle East. It currently employs nearly as many contractors as uniformed personnel in Iraq, and 30,000 more contractors than uniformed workers in Afghanistan (Schwartz and Swain, "Department of Defense Contractors," 201).

⁸ GAO, Iraq and Afghanistan, "DOD, State, and USAID Face Continued Challenges in Tracking Contracts, Assistance Instruments, and Associated Personnel" *GAO-11-1* (October 2010): 41. See also GAO, "Contingency Contracting: Observations on Actions Needed to Address Systemic Challenges," *GAO-11-580* (April 25, 2011): 3-4.

⁹ Steven Schooner, "Why Contractor Fatalities Matter," *Parameters* (2008): 78.; Christian T. Miller, "Civilian Contractor Toll in Iraq and Afghanistan Ignored by Defense Department," *ProPublica* (October 9, 2009).

¹⁰ United States of America Department of Labor, Office of Workers Compensation Programs (OWCP), "Defense Base Act Summary by Employer" (May 9, 2011), <http://www.dol.gov/owcp/dlhwc/dbaallnation.htm>.

¹¹ Steven Schooner and Collin Swan, "Contractors and the Ultimate Sacrifice," *Service Contractor* (September 2010): 16-18.

¹² Valerie Grasso, Baird Webel, and Scott Szymendera, "The Defense Base Act (DBA): The Federally Mandated Workers' Compensation System for Overseas Government Contractors." Washington, DC: Congressional Research Service, July 22, 2009.

¹³ Miller, T. Christian, "Foreign Workers for the U.S. Are Casualties Twice Over," *ProPublica* (June 19, 2009).

¹⁴ Steven L. Schooner and Collin D. Swan, "Dead Contractors: The Un-examined effect of Surrogates on the Public's Casualty Sensitivity," *Journal of National Security Law and Policy* (2011), in press, 51.

¹⁵ The rate of suicide among active duty Army personnel rose higher than that of the general population in 2008. The civilian rate was 19.2 per 100,000 people in 2008, and 20.2 per 100,000 for Army personnel. A significant number of deaths (74) occurred as a result of drug overdoses. The number of accidental deaths among soldiers has tripled since 2001. During the same period, there were 1,713 attempted suicides in the Army; Department of the Army, "Health Promotion, Risk Reduction, and Suicide Prevention" [2010]). On the suicide total, see James Risen, "Several Warnings, Then a Soldier's Lonely Death," *The New York Times*, January 1, 2011.; Sig Christenson, "Military is Battling Alarming Suicide Rate," *The Houston Chronicle*, October 10, 2010.

¹⁶ The actual number of post-combat deaths is higher, as this number includes only those who both applied for benefits and were still receiving benefits at the time of their death; Aaron Glantz, "New Data Reveals High Death Rates for Iraq, Afghanistan Vets," *The Bay Citizen*, May 28, 2011.

¹⁷ Aaron Glantz, "After Service, Veteran Deaths Surge," *The Bay Citizen*, October 16, 2010.

¹⁸ The international dead in the two wars have come from 34 countries, although the participation of most was mainly symbolic. Only the UK, Canada, France, and Italy incurred more than 50 casualties (Icasualties, *Operation Enduring Freedom*).

¹⁹ Sources: Non-US allied uniformed: Icasualties.org; Iraq security forces: Saban Center for Middle East Policy, "Brookings Iraq Index" (April 26, 2011); Afghan security forces: Wikipedia, "Lists of Afghan security fatality reports in Afghanistan." The latter draws primarily on Afghan Defense and Interior

Ministry data. Other available estimates for Afghan security forces include the figure of 3046 dead cited in Brookings Afghanistan Index, a number which covers 2007 through August 2010. The data are originally from NATO/ISAF. A Congressional Research Service study using SIGAR and other sources gives 4983 for the period from 2007 through 2010 (Susan G. Chesser, "Afghanistan Casualties: Military Forces and Civilians," *Congressional Research Service* (March 10, 2011).

²⁰ For an assessment of what baseline occupational and other morbidity would be for these troops, see Joseph Stiglitz and Linda Bilmes, *The Three Trillion Dollar War: The True Cost of the Iraq Conflict* (New York: WW Norton, 2008), and Matthew Goldberg, "Death and Injury Rates of U.S. Military Personnel in Iraq," *Military Medicine* 175, no.4 (2010): 220-26. Using Stiglitz and Bilmes' conservative calculation, a minimum of 50 percent (for injuries) and 90 percent (for disease) of the non-hostile numbers should be considered war-related.

²¹ Veterans for Common Sense, *DoD: Consequences*, citing FOIA documents and DoD, "Global War on Terrorism—Operation Enduring Freedom, By Casualty Within Service" (October 7, 2001 through April 4, 2011), <http://siadapp.dmdc.osd.mil/personnel/CASUALTY/wotsum.pdf>.

²² DoD, "Global War on Terrorism- Operation Enduring Freedom," DoD, "Global War on Terrorism—Operation Iraqi Freedom, By Casualty Within Service" (March 19, 2003 through May 31, 2011), <http://siadapp.dmdc.osd.mil/personnel/CASUALTY/oif-total.pdf>; see also Hannah Fischer, "United States Military Casualty Statistics: Operation New Dawn, Operation Iraqi Freedom, and Operation Enduring Freedom," *Congressional Research Service* (2010).

²³ A casualty is defined as "Any person who is lost to the organization by having been declared dead, duty status-whereabouts unknown, missing, ill, or injured." *Department of Defense Dictionary of Military and Associated Terms*. 8 November 2010 (As Amended Through 15 May 2011): 47.

http://www.dtic.mil/doctrine/new_pubs/jp1_02.pdf

²⁴ Schooner and Swan, "Contractors and the Ultimate Sacrifice"; Schooner and Swan, "Dead Contractors." Using FOIA requests, Schooner and Swan provide this number, 19,401 of which they categorize as severe.

²⁵ See Debusmann, "In Outsourced U.S. Wars," reporting that of the 990 US contractors killed by the end of April 2007, 224 (which is 23 percent) were US citizens.

²⁶ The patient figure of 654,384 is through end of year 2010, and the disability claims filing number of 552,215 is through September 6, 2010; Veterans for Common Sense, *VA: Consequences of Iraq and Afghanistan Wars, Fact Sheet*, Updated April 6, 2011.

²⁷ Canadian data are through 12/31/10; Canada News Center, "Canadian Forces' Casualty Statistics (Afghanistan)," January 12, 2011. The British data for Iraq hostile wounding are based on incomplete data provided by British Ministry of Defense for the period 1/1/03 to 7/31/09; Ministry of Defence, "Operations in Iraq: British Casualties,"

<http://www.mod.uk/DefenceInternet/FactSheets/OperationsFactsheets/OperationsInIraqBritishCasualties.htm>. The British data for Iraq non-hostile wounding are provided by the British Ministry of Defense and are available for 1/1/06 to 7/31/09 only. The British data for Afghanistan are available for 1/1/06 to 4/15/11 only; Ministry of Defence, "Operations In Afghanistan: British Casualties,"

<http://www.mod.uk/DefenceInternet/FactSheets/OperationsFactsheets/OperationsInAfghanistanBritishCasualties.htm>. Figures for the wounded security forces of Iraq and Afghanistan, and for other allied troops besides those listed have been estimated using the common ratio for other conflicts of three soldiers wounded for every one killed. Other allied troops calculations are based on icasualties.org figures for KIA through May 9, 2011.

²⁸ Aaron Glantz, *Iraq Vets Come Home Physically, Mentally Butchered* (January 4, 2007), Anti-war.com.

²⁹ Cited in Linda Bilmes, "Soldiers Returning from Iraq and Afghanistan: The Long-term Costs of Providing Veterans Medical Care and Disability Benefits," *Faculty Research Working Papers Series-John F. Kennedy School of Government* (January 2007).

³⁰ Military Health System, *Department of Defense Numbers for Traumatic Brain Injury* (September 27, 2010), http://www.health.mil/Research/TBI_Numbers/2000-2010tbi.aspx.

³¹ Armed Forces Health Surveillance Center, "Deployment-related conditions of special surveillance interest, U.S. Armed Forces, by month and service, January 2003 - December 2010," *Medical Surveillance Monthly Report* 18, no.1 (2011):16.

³² Terri Tanielian and Lisa Jaycox, *Invisible Wounds of War: Psychological and Cognitive Injuries, Their Consequences, and Services to Assist Recovery* (Santa Monica: RAND Corporation, 2008).

³³ Heidi Golding, Elizabeth Bass, Allison Percy and Matthew Goldberg, "Understanding recent estimates of PTSD and TBI from Operations Iraqi Freedom and Enduring Freedom," *Journal of Rehabilitation Research and Development* 45, no. 1 (2009): vii-xiii.

³⁴ Institute of Medicine, *Returning Home from Iraq and Afghanistan: Preliminary Assessment of Readjustment Needs of Veterans, Service Members, and Their Families* (Washington, DC: The National Academies Press, 2010).; Military Health System, *Department of Defense Numbers for Traumatic Brain Injury* (September 27, 2010), http://www.health.mil/Research/TBI_Numbers/2000-2010tbi.aspx.

³⁵ Fischer, "United States Military Casualty Statistics."

³⁶ Atul Gawande, "Casualties of War--Military Care for the Wounded from Iraq and Afghanistan," *New England Journal of Medicine* (2004).

³⁷ Department of Veterans Affairs, "Environmental Epidemiology Service. VA Facility Specific Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF) Veterans Coded with Potential PTSD Through 3rd Qtr FY 2010" (October 2010) document cited by Veterans for Common Sense, *VA: Consequences of Iraq and Afghanistan Wars, Fact Sheet*, Updated April 6, 2011.

³⁸ Karen Seal, et al. "Trends and Risk Factors for Mental Health Diagnoses among Iraq and Afghanistan Veterans using Department of Veterans Affairs Health Care, 2002–2008." *American Journal of Public Health* (2009): 1651-58.

³⁹ Fischer, "United States Military Casualty Statistics."

⁴⁰ Tanielian and Jaycox, *Invisible Wounds*.; Department of Veterans Affairs, "Environmental Epidemiology Service."

⁴¹ Golding et. al., "Understanding recent estimates," xi.

⁴² This constitutes 867,003 individuals who have deployed two or more times to the war zones; Department of Defense. "Deployment File for OEF & OIF (as of December 31, 2009)." Defense Manpower Data Center, Contingency Tracking System Deployment File. Obtained by Veterans for Common Sense using the Freedom of Information Act.

⁴³ Tanielian and Jaycox, *Invisible Wounds*.

⁴⁴ Gilbert Burnham, Shannon Doocy, Elizabeth Dzung, Riyadh Lafta, and Les Roberts, "The Human Cost of the War in Iraq: A Mortality Study, 2002-2006," *Bloomberg School of Public Health* (n.d.).

⁴⁵ Randall Williamson, "Preliminary Findings on VA's Provision of Health Care Services to Women Veterans," Washington DC: GAO (2009).

⁴⁶ D. Yaeger, N. Himmelfarb, A. Cammack, A., and J. Mintz, "DSM-IV diagnosed posttraumatic stress disorder in women veterans with and without military sexual trauma," *Journal of General Internal Medicine*, 21, (2006): S65-S69.

⁴⁷ Gawande, "Casualties of War."

⁴⁸ Kelly Kennedy, "Navy Researcher Links Toxins in War-Zone Dust to Ailments," *USA Today*, May 12, 2011.

⁴⁹ Tim Jones and Jason Grotto, "Costs soar for compensating veterans with mental disorders," *Chicago Tribune*, April 12, 2010.

⁵⁰ Jeffrey L. Thomas et al., "Prevalence of Mental Health Problems and Functional Impairment Among Active Component and National Guard Soldiers 3 and 12 Months Following Combat in Iraq," *General Psychiatry* 67, no. 6 (2010): 614-623.

⁵¹ Christian T. Miller, "Contractors in Iraq are Hidden Casualties of War," *Los Angeles Times*, October 6, 2009 (2009b).

⁵² ProPublica, *Civilian Contractors by the Numbers* (April 16, 2009), <http://www.propublica.org/special/civilian-contractors-by-the-numbers-416>.

⁵³ Veterans for Common Sense, *DoD: Consequences*.