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## Invisible Wounds

Psychological and Neurological Injuries Confront a New Generation of Veterans

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#### **EXECUTIVE SUMMARY**

As early as 1919, doctors began to track a psychological condition among combat veterans of World War I known as "shell shock." Veterans were suffering from symptoms such as fatigue and anxiety, but science could offer little in the way of effective treatment. Although there remains much more to learn, our understanding of war's invisible wounds has dramatically improved. Thanks to modern screening and treatment, we have an unprecedented opportunity to respond immediately and effectively to the veterans' mental health crisis.

Among Iraq and Afghanistan veterans, rates of psychological and neurological injuries are high and rising. According to a landmark 2008 RAND study, nearly 20 percent of Iraq and Afghanistan veterans screen positive for Post Traumatic Stress Disorder or depression.<sup>2</sup> Troops in Iraq and Afghanistan are also facing neurological damage. Traumatic Brain Injury, or TBI, has become the signature wound of the Iraq War. The Department of Defense is tracking about 5,500 troops who have suffered TBIs,<sup>3</sup> but many veterans with TBIs are not being diagnosed. According to the RAND study, about 19 percent of troops surveyed report a probable TBI during deployment. These milder injuries are difficult to identify and are often not easily distinguished from Post Traumatic Stress Disorder or depression. In fact, tens of thousands of troops are suffering from either two or all three of these conditions.

Although these statistics are troubling, we have yet to see the full extent of troops' psychological and neurological injuries. Servicemembers are still deploying on long and repeated combat tours, which increase the risk of blast injuries and combat stress. Rates of marital stress, substance abuse, and suicide are all increasing. The annual divorce rate among female Marines is 9.2%, almost three times the national average. During the Iraq War, the Army suicide rate has increased every year, and the rate for 2008 is likely to hit a 27-year high. Untreated psychological injuries are also a risk factor for homelessness; almost 2,000 Iraq and Afghanistan veterans have already been seen in the Department of Veterans Affairs' homeless outreach program. Because of these long-term effects, the economic cost of the new veterans' mental health crisis has been estimated in the billions of dollars.<sup>4</sup>

PTSD, TBI and major depression are treatable conditions, particularly when the symptoms are recognized early. Unfortunately, many troops and veterans have not been screened for neurological and psychological injuries and do not have access to high-quality health care. According to RAND, about 57 percent of those reporting a probable TBI had not been evaluated for a brain injury, only about half of troops screening positive for PTSD or major depression had sought help, and only half of those troops received "minimally adequate care."

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The Department of Defense (DOD) has taken significant steps to expand research into psychological and neurological injuries. But inadequate screening and shortages of mental health professionals in the military are still keeping troops from getting the care they need.

Instead of screening troops through a face-to-face interview with a qualified mental health professional, the DOD relies on an ineffective system of paperwork to conduct mental health evaluations. As a result, there are serious concerns about the psychological wellness of many deploying troops. In surveys of troops redeploying to Iraq, 20 to 40 percent

still suffered symptoms of past concussions, and among troops who experience high levels of combat, about 12 percent in Iraq and 17 percent in Afghanistan are taking prescription antidepressants or sleeping medications.

Access to mental health care for these troops is in dangerously short supply. According to the Pentagon's Task Force on Mental Health, the military's "current complement of mental health professionals is woefully inadequate." Only about 1 in 3 soldiers and Marines who screened positive for PTSD once they got home reported receiving mental health care in theatre. Mental health support for troops in Iraq is actually *declining*; the ratio of behavioral health workers deployed to troops deployed dropped from 1 in 387 in 2004 to 1 in 734 in 2007.

Effective treatment is also scarce for those who have left the military. The Department of Veterans Affairs (VA) has given preliminary mental health diagnoses to more than 178,000 Iraq and Afghanistan veterans, almost 45 percent of new veterans who had visited the VA for any reason. In the early years of the war, the veterans' mental health system was simply overwhelmed by the influx, and these problems were exacerbated by disastrous VA mistakes, including a failure to project that veterans returning from the war in Iraq would increase the demand for VA mental health care.

But in recent years, the VA has made major improvements. With the help of a mental health budget that has doubled since 2001, the VA has taken key steps to aid veterans in need of mental health care, including placing mental health professionals in primary care facilities, hiring thousands of new mental health care workers, opening a suicide hotline, and screening all new veterans seeking health care at a VA facility for Traumatic Brain Injury. Many veterans, particularly those in rural areas, still have difficulty accessing VA care, however. Ensuring these veterans have reasonable access to VA facilities, and fully integrating the many new VA staff, programs and centers will be a major challenge for the new Secretary of Veterans Affairs.

No one comes home from war unchanged. But with early screening and adequate access to counseling, the psychological and neurological effects of combat are treatable. In the military and in the veterans' community, however, those suffering from the invisible wounds of war are still falling through the cracks. We must take action now to protect this generation of combat veterans from the struggles faced by those returning from the Vietnam War.

#### **UNDERSTANDING INVISIBLE INJURIES**

Troops returning from combat may experience a wide range of psychological responses. Many veterans experience some level of sleeplessness, anxiety, irritability, intrusive memories, or feelings of isolation; the severity of these symptoms varies widely between individuals, and a single veteran's symptoms usually fluctuate over time. If these symptoms become severe or persistent, they are often diagnosed as either Post Traumatic Stress Disorder or major depression. In addition to these psychological injuries, some troops who have suffered concussions in theatre may be experiencing the effects of Traumatic Brain Injury, including mood changes and cognitive problems. Many veterans are coping with both psychological injuries and TBI, and the effects of these two kinds of injuries can compound each other.

MANY VETERANS ARE COPING WITH BOTH PSYCHOLOGICAL INJURIES AND TBI, AND THE EFFECTS OF THESE TWO KINDS OF INJURIES CAN COMPOUND EACH OTHER.

## **Psychological Injuries**

The most common psychological injuries experienced by new veterans are Post Traumatic Stress Disorder and major depression. Post Traumatic Stress Disorder, or PTSD, is a psychological condition that occurs after an extremely traumatic or life-threatening event, and has symptoms including persistent recollections of the trauma, heightened alertness, nightmares, insomnia, and irritability. Major depression can include persistent sadness or irritability, changes in sleep and appetite, difficulty concentrating, lack of interest, and feelings of guilt or hopelessness.

Both PTSD and depression are treatable.<sup>7</sup> Psychotherapy, in which a therapist helps the patient learn to think about the trauma without experiencing stress, is a proven effective form of treatment. This version of therapy often includes "exposure" to the trauma in a safe way — either by speaking or writing about the trauma, or in some promising new studies, utilizing virtual reality technology. There are also

medications that can be helpful in treating the symptoms of depression or PTSD, although they do not address the root cause, the trauma itself.

### Traumatic Brain Injury

Traumatic Brain Injury can be caused by bullets or shrapnel hitting the head or neck, but also by the blast from mortar attacks or roadside bombs. Closed head wounds from blasts, which can damage the brain without leaving an external mark, are especially prevalent in Iraq. About 68% of the more than 33,000 wounded in action experienced blast-related injuries.<sup>8</sup>

As with psychological injuries, the effects of TBI vary. Symptoms can include emotional problems; vision, hearing, or speech problems; dizziness; sleep disorders; or memory loss. For troops exposed to multiple blasts, TBIs can accumulate, leading to serious neurological problems that are not immediately apparent after the injury. TBI also increases the risk for other brain disorders, such as Alzheimer's and Parkinson's disease. Although the vast majority of TBIs are mild or moderate, the effects of TBI linger in about 15 percent of cases.

Much of the research into Traumatic Brain Injury involves direct head trauma, as is commonly seen in car collisions and sports accidents. The unique brain injuries caused by explosions remain poorly understood. There are three recognized kinds of blast-related TBI: diffuse axonal injury (where changing pressure overstretches brain cells), contusion (bruising of the brain), and subdural hemorrhage (the tearing of veins around the brain). But other elements of the explosions in Iraq, such as the electromagnetic pulse, and the light, heat and sound from the blast "may ravage the brain in ways that haven't fully been documented." In fact, there is not currently a reliable diagnostic test—such as, for instance, an MRI—that reliably identifies mild TBI. Heven with the most advanced equipment, the injury often remains invisible.

Treatment for TBI depends on the severity of the injury. Severe TBIs, which are often accompanied by other life-threatening wounds, can require long-term hospitalization and rehabilitation. For those suffering from mild to moderate Traumatic Brain Injury, rest and avoidance of additional brain injuries are crucial. Rehabilitation, including retraining to regain lost skills and to improve memory, also aids recovery.<sup>16</sup>

#### FIGHTING THE MENTAL HEALTH STIGMA: IAVA TAKES ACTION

The stigma associated with psychological injuries is the most serious hurdle to getting Iraq and Afghanistan veterans the mental health care they need. About 50 percent of soldiers and Marines in Iraq who test positive for a psychological problem are concerned that they will be seen as weak by their fellow servicemembers, and almost one in three of these troops worry about the effect of a mental health diagnosis on their career. Military culture plays a significant role in this stigma; 21 percent of soldiers screening positive for a mental health problem said they avoided treatment because "my leaders discourage the use of mental health services." Because of these fears, those most in need of counseling will rarely seek it out. 19

The Department of Defense has taken some steps to ensure that mental health treatment does not impede career advancement within the military. In May 2008, the Defense Department announced it would remove a well-known question on their security clearance forms, which asked if the applicant had sought mental health care in the past seven years. According to the DOD, "Surveys have shown that troops feel if they answer 'yes' to the question, they could jeopardize their security clearances, required for many occupations in the military." This change is a significant step in the right direction.



To help combat stigma and ease the readjustment for service-members returning home from Iraq and Afghanistan, IAVA has launched a historic national multi-year Public Service Announcement (PSA) Campaign with the Ad Council. Joining such iconic Ad Council PSA campaigns as "Only You Can Prevent Forest Fires" and "Friends Don't Let Friends Drive Drunk," the ground-breaking Veteran Support campaign will feature TV, radio, print,

and online PSAs, both in English and in Spanish. The ads direct troops and veterans to the first and only

online community exclusive to Iraq and Afghanistan veterans, www.CommunityofVeterans.org. This innovative website helps veterans connect with one another and link them with comprehensive services, benefits assistance, and mental health resources. A companion PSA effort launching in 2009 will engage and support the families and loved ones of Iraq and Afghanistan veterans, at www.SupportYourVet.org.



## The Difficulty Distinguishing Mental Health Injuries

A major challenge to treating troops and veterans with TBI and/or PTSD is the fact that these two conditions are hard to distinguish. PTSD is strongly associated with a wide array of physical health problems,<sup>21</sup> and a 2008 study in the New England Journal of Medicine has suggested that infantry soldiers' lasting symptoms like fatigue and even dizziness "could be attributed largely to PTSD and depression, rather than brain injuries themselves."22 As a result, it is often unclear if a servicemember is suffering primarily from biological damage to the brain or a psychological injury.

#### PTSD And TBI Share Key Symptoms

#### Symptoms of PTSD

Repeatedly reliving the trauma in thoughts or nightmares

Strong startle response

Avoidance of reminders of the trauma

Emotional numbness, loss of interest

Difficulty feeling affectionate

Irritability

Increased aggressiveness, or even violence

#### Shared **Symptoms**

Mood Changes Difficulty concentrating

Sleep problems

#### THE SCOPE OF THE PROBLEM

In the aftermath of the Vietnam War, the Congressionallymandated National Vietnam Veterans Readjustment study estimated that as many as 31 percent of male service members suffered from PTSD at some point after their service.27 The prevalence of psychological and neurological injuries among Iraq and Afghanistan veterans is equivalent to that of Vietnam veterans, and may in fact be higher.

## 1 in 3 New Veterans Could **Face Invisible Injuries**

At least two dozen studies have analyzed the mental health issues faced by Iraq and Afghanistan veterans.<sup>28</sup> These studies have shown wide-ranging results, largely because they differ in the populations they included, the screening tool used to define PTSD and depression, and the length of time after service that the studies were conducted.

Symptoms of Mild

Headache

Ringing in the ears

Behavioral or mood changes

tration, attention, or thinking

Restlessness or agitation

or Moderate TBI

Lightheadedness or dizziness

Blurred vision

Bad taste in mouth

sleep patterns

Trouble with memory, concen-

Sources: National Institute of Mental Health, National Center for PTSD

TBI and PTSD may, in fact, compound one another's effects. At least one study suggests that combat stress can have a visible, physical effect on the brain,<sup>23</sup> and veterans with PTSD who were exposed to blasts are "more likely to have lingering attention deficits."24 Soldiers who reported an injury that caused them to lose consciousness are nearly three times as likely to meet criteria for PTSD.<sup>25</sup> Depression is also commonly associated with TBI.26 More research is required to better understand the relationship between brain injury and psychological problems.

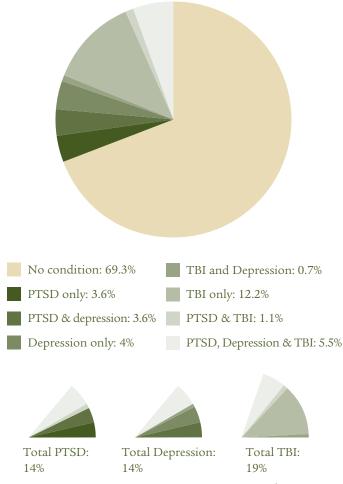
While each of these studies provided some useful data, a more comprehensive study of veterans' psychological health was desperately needed. In early 2008, the RAND Corporation completed a landmark inde-Fatigue or changes in pendent study of Iraq and Afghanistan veterans offered the most thorough information to date about rates of PTSD, TBI, and major depression among new veterans. According to the RAND study, 14 percent of Iraq and Afghanistan veterans screen positive for

PTSD, 14 percent screen positive for major depression, and 19 percent of those surveyed reported a probable TBI. Many screened positive for more than one condition.<sup>29</sup>

Those without an official diagnosis of PTSD or depression are not necessarily free from psychological distress. According to the VA's Special Committee on PTSD, 15-20 percent of Iraq and Afghanistan veterans are "at risk for significant symptoms short of full diagnosis but severe enough to cause significant functional impairment."30 According to the Dole-Shalala Commission, appointed by President Bush to examine the problems facing wounded troops after the scandal at Walter Reed Army Medical

### **Overlapping Invisible Injuries:**

30% of Iraq and Afghanistan Veterans Screen Positive for Probable PTSD, TBI, or Major Depression



Source: Rand Corporation

Center in 2007, "56 percent of the active duty, 60 percent of reserve component, and 76 percent of retired/separated service members say they have reported mental health symptoms to a health care provider." Thus, while most veterans do not have diagnosable PTSD or depression, many are struggling with some of its symptoms, such as sleeplessness or anxiety.

Rates of mental health injuries are still increasing, of course, because the conflicts in Iraq and Afghanistan are ongoing. Moreover, it can take months or years for injuries to reveal themselves.<sup>32</sup> In a study of 80,000 troops' mental health evaluations, 17.2 percent of soldiers screened positive for a mental health problem immediately after returning from combat. Six months after these troops came home, their rate of mental health problems was 30.1 percent.<sup>33</sup>

Rates of mental health injuries are increasing not only because of the time it takes for troops' psychological injuries to manifest, however. Longer tours and multiple deployments are also contributing to higher rates of mental health injuries.

## Long Tours and Multiple Deployments Exacerbate Injuries

Since September 11, 2001, troops have regularly had their tours extended<sup>34</sup> and as of June 2008, more than 638,000 troops have deployed more than once.<sup>35</sup> From spring 2007 to summer 2008, active-duty Army combat tours were officially increased from 12 to 15 months,<sup>36</sup> with a guarantee of a year at home between tours. Combat tours were reduced to 12 months in August 2008,<sup>37</sup> but the deployment schedule still does not allow for the recommended rest between tours, known as "dwell time."

SOLDIERS DEPLOYED TO IRAQ
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According to the Army's Mental Health Advisory Team (MHAT), soldiers deployed to Iraq for more than six months, or deployed more than once, are much more likely to be diagnosed with psychological injuries.<sup>38</sup> Even after getting home, those who had deployed for longer periods are still at higher risk for PTSD.<sup>39</sup>

The MHAT recommended increasing troops' rest time to 18-36 months, or decreasing deployment length. <sup>40</sup> Eventually, the operational tempo in Iraq and Afghanistan may change, given the passage of the U.S.-Iraq Status of Forces Agreement in November 2008, <sup>41</sup> and the potential for war policy change under the Obama Administration. But in the short-term, multiple tours and inadequate dwell time will likely continue to be the norm for many troops deploying to Iraq and Afghanistan.

## Certain Groups at Higher Risk

Some troops are at higher risk for psychological and neurological injuries, including the combat-wounded, younger troops, National Guardsmen and Reservists.

Unsurprisingly, extensive exposure to combat is a leading risk factor for psychological injury.<sup>42</sup> Young troops, who tend to see more combat,<sup>43</sup> have higher rates of psychological injuries.<sup>44</sup> The rates of TBI and PTSD are also higher among hospitalized troops. According to a 2006 study of over 600 hospitalized battle-injured soldiers, "early severity of physical problems was strongly associated with later PTSD or depression."<sup>45</sup> At Landstuhl Medical Center in Germany, the first-stop hospital for warwounded evacuees of Iraq and Afghanistan, 23 percent of patients screened for a TBI tested positive. <sup>46</sup> At Walter Reed Army Medical Center in Washington, D.C., 30 percent of wounded troops have some level of TBI.<sup>47</sup> Overall, one quarter of troops evacuated from Iraq and Afghanistan suffered from head and neck injuries.<sup>48</sup>

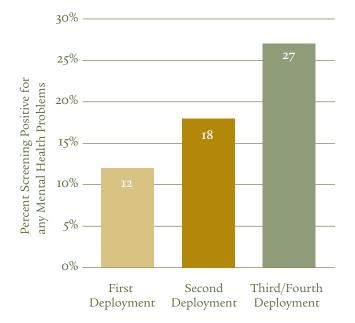
Troops facing financial<sup>49</sup> or family<sup>50</sup> troubles while deployed have higher rates of PTSD. Because these problems are common among troops in the reserve component, and

perhaps because they lack the social safety net of activeduty military life, National Guardsmen and Reservists are reporting higher rates of PTSD.<sup>51</sup> Those who have left the military, and face similar challenges of reintegrating into civilian lives as reserve component troops, also have higher rates of PTSD.<sup>52</sup>

OVERALL, ONE QUARTER OF TROOPS
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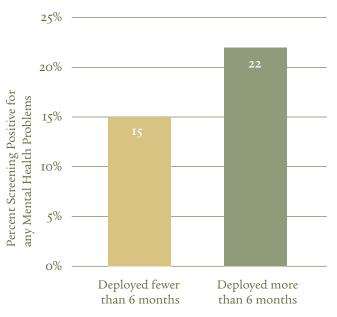
Although women are technically excluded from combat roles, many female troops have seen combat in Iraq and Afghanistan, and are suffering from PTSD or other psychological injuries as a result. Their rates of psychological injury appear to be similar to rates among men.<sup>53</sup> One unique factor in the psychological injuries suffered by female troops is the threat of sexual

## Multiple Deployments Increase Combat Stress



Source: Mental Health Advisory Team V. Adjusted Percents for Male NCOs in Theater 9 Months

## Longer Tours Increase Soldiers' Mental Health Problems



Source: Mental Health Advisory Team IV Final Report



harassment and assault.<sup>54</sup> Military Sexual Trauma leads to a 59 percent higher risk for mental health problems.<sup>55</sup> For more information on issues affecting women in the military, see the forthcoming IAVA Issue Report, "Women Warriors: Unique Challenges Facing Female Troops and Veterans."

## THE RIPPLE EFFECTS OF UNTREATED MENTAL HEALTH INJURIES

"Stress and stress injuries such as PTSD may contribute to misconduct in service members and veterans," according to Captain Bill Nash, an expert in the Marine Corps Combat/Operational Stress Control program. Military studies suggest that troops who test positive for mental health problems are twice as likely to "engage in unethical behavior," such as insulting or injuring non-combatants or destroying property unnecessarily. The rates of mental health problems and substance abuse are high among Marines discharged under less-than-honorable circumstances. Responding to these revelations, the Army and Marines have boosted training in battlefield ethics and the Rules of Engagement.

# Are Psychologically Wounded Troops Getting Discharged Without Benefits?

Between 2001 and 2007, 22,500 troops<sup>60</sup> were discharged from the military with a 'personality disorder'. Personality disorder discharges have also increased by 40 percent in the Army since the invasion of Iraq. Discharges for misconduct have increased more than 20 percent, and discharges for drug abuse doubled.61 In some of these cases, the servicemember may have had PTSD, Traumatic Brain Injury, or another combat-related mental health injury, and felt "pressured by commanders and peers to accept an administrative discharge"62 rather than continue to fight for a medical discharge. According to Congressman Bob Filner, Chairman of the House VA Committee, "My concern is that this country is... ignoring the legitimate claims of PTSD in favor of the time and money saving diagnosis of Personality Disorder."63

The issues resulting from untreated psychological injuries or traumatic brain injuries do not end when a servicemember returns home. PTSD can be crippling for veterans, and can also exact a severe toll on their families and communities. According to the Institute of Medicine, deployment to a war zone increases the risk of marital and family conflict, alcohol abuse, and even suicide. TBIs also can have a long term impact; in about 10 percent of cases, a concussion causes "problems severe enough to interfere with daily life and work."

### Family Problems

The Iraq war has put a tremendous burden not only on servicemembers, but also on military families. More than half of those who have served in Iraq or Afghanistan are married,<sup>66</sup> and marital strain is a significant problem. Troops in Iraq are expressing growing concern about infidelity, and many more are considering divorce.<sup>67</sup>

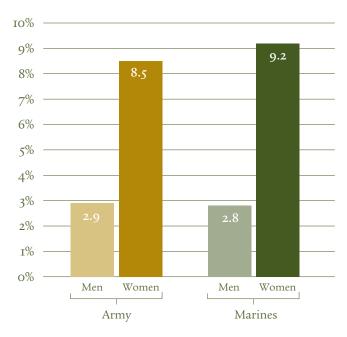
Despite a spike in divorces at the start of the Iraq War,<sup>68</sup> today's divorce rates in the active-duty military are not dramatically higher than either the national divorce rate or the divorce rate the military had previously seen in peacetime. A RAND study entitled "Families Under Stress"<sup>69</sup> concluded that rates of military divorce in 2005 had only risen to the levels observed in 1996. In the past three years, divorce rates have continued to rise, reaching 3.5 percent in the Army in 2008 — approximately the same as the national divorce rate for 2005 (the last year for which national data is available).<sup>70</sup>

When military divorce data is broken down by gender, however, a very troubling pattern emerges. Marriages of female troops are failing at almost three times the rate of male servicemembers.<sup>71</sup>

FEMALE SERVICEMEMBERS ARE BEAR-ING THE BRUNT OF MILITARY DIVORCES.

Female servicemembers are bearing the brunt of military divorces. In fact, the overall rise in divorce rates between 2005 and 2008 primarily reflects a rise in the female servicemembers' divorce rates. Between 2005 and 2008, Army women saw an increase in their divorce rate of 2

## Female Troops Face Much Higher Divorce Rates



Source: Department of Defense data, FY2008, via the Associated Press

percent, compared to .1 percent for men. In the Marines, the divorce rate has jumped 3 percent for women, compared with .5 percent for men.<sup>72</sup>

It is crucial to understand that much of the data on military divorce includes only *troops who are still serving* — not the approximately 945,000 Iraq and Afghanistan veterans who have left the active-duty military.<sup>73</sup> Historically, data show that veterans who suffer from PTSD are likely to experience "difficulties maintaining emotional intimacy," and have a "greatly elevated risk of divorce."<sup>74</sup> A complete understanding of the link between combat deployments and divorce requires further study of marriage patterns among Iraq and Afghanistan veterans who have completed their military service.

Children of deployed troops are also suffering the consequences of long deployments. More than 2 million American children have experienced a parent's deployment to Iraq or Afghanistan,<sup>75</sup> at least 19,000 children have had a parent wounded in action, and 2,200 children have lost a parent in Afghanistan or Iraq.<sup>76</sup> Children of deployed parents, even those as young as three, have been shown to have increased behavioral health problems compared with children without a deployed parent.<sup>77</sup> Deployments

may also lead to an increase in the rates of child abuse in military families.<sup>78</sup>

Family problems can continue long after deployments end, however. In a study of Iraq and Afghanistan veterans referred to VA specialty care for a behavioral health evaluation, two-thirds of married or cohabiting veterans reported some kind of family or adjustment problem.<sup>79</sup> 22 percent of these veterans were concerned that their children "did not act warmly" towards them or "were afraid" of them. Among those veterans with current or recently-separated partners, 56 percent reported conflicts involving "shouting, pushing or shoving."<sup>80</sup> These numbers should *not* be seen as representative of the veterans' population as a whole, but among veterans with severe mental health issues, family violence is a serious concern.<sup>81</sup>

MORE THAN 2 MILLION AMERICAN CHILDREN HAVE EXPERIENCED A PARENT'S DEPLOYMENT TO IRAQ OR AFGHANISTAN.

#### **Substance Abuse**

Another effect of troops' mental health injuries has been an increase in drug and alcohol abuse. 82 Unfortunately, troops misusing alcohol are often not getting the treatment they need. On their post-deployment health assessment forms, soldiers report alcohol problems at a rate of almost 12 percent. Shockingly, only 0.2 percent of these troops were referred to treatment.83 One likely reason that troops are not referred to treatment is that alcohol treatment is not confidential, even if it is sought out by the servicemember. The military's current policy ensures that "accessing alcohol treatment triggers automatic involvement of a soldier's commander," which can have serious "negative career ramifications."84 According to the military's Mental Health Task Force, "Concerns that self-identification will impede career advancement... may lead service members to avoid needed care, even at early stages when problems are most remediable."85 This policy of automatic command notification remains perhaps the most significant barrier to troops' receiving alcohol abuse treatment.

Outside of the military, veterans are also struggling with drug and alcohol dependence. At least 7,400 Iraq and Afghanistan veterans have been treated at a VA hospital for drug addiction, 27,000 new veterans have been diagnosed with "nondependent use of drugs," meaning excessive or improper drug use without a full diagnosis of drug dependence, and 16,200 have been diagnosed with Alcohol Dependence Syndrome. These numbers are only the tip of the iceberg; many veterans do not turn to the VA for help coping with substance abuse, instead relying on private programs or avoiding treatment altogether.

#### Homelessness

Veterans are far more likely to experience homelessness than their civilian peers, and rates of mental illness among the homeless are extremely high. In 2007, about 154,000 veterans were homeless on any given night. The percent of homeless veterans have a psychological illness, and more than 70 percent suffer from substance abuse. Already, thousands of Iraq and Afghanistan veterans are joining veterans of other generations on the streets and in shelters. Preliminary data from the VA suggests that Iraq and Afghanistan veterans already make up 1.8 percent of the homeless veteran population, and 1,819 homeless Iraq and Afghanistan veterans were seen through VA homeless outreach programs between FY2005 and FY2007.

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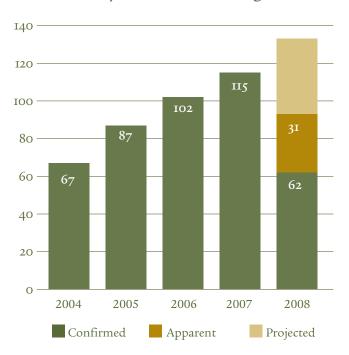
Studies have *not* found, however, that Post Traumatic Stress Disorder *alone* increases veterans' risk of homelessness.<sup>91</sup> Rather, it is the personal and economic consequences of untreated PTSD,<sup>92</sup> including social isolation and violent behavior,<sup>93</sup> that increase the risk of homelessness. If today's veterans continue to lack access to quality mental health care, the consequences of untreated PTSD will surely result in an increase in the number of Iraq and Afghanistan veterans ending up homeless.

#### Suicide

Untreated psychological injuries have also pushed both troops and veterans to take their own lives. Since the start of the war, there have been a total of 196 confirmed military suicides in Iraq and Afghanistan,<sup>94</sup> and far more among the military and veteran population as a whole.

The suicide rate for soldiers on active-duty has risen, feeding concerns about whether troops showing signs of mental health injuries after their first deployment are being sent back to Iraq or Afghanistan without adequate treatment. Rates of suicides in the Army have been increasing every year since 2004, and Army suicides in 2008 are on track to surpass the prior year's record rate, with 62 confirmed suicides and 31 apparent suicides under investigation by the end of August. If current trends continue, the Army suicide rate could surpass the equivalent civilian rate of 19.5 per 100,000. The increase is especially troubling given that military recruits are screened for mental health problems when they join the military.

#### **Army Suicides Increasing**



Army suicides have increased every year since 2004, reaching a 26 year high in 2007. As of August, the 2008 number was likely to be even higher. Source: Associated Press

While the rate of military suicides is closely monitored, there is no agency or registry keeping track of suicide rates among veterans who have completed their service. As a result, although anecdotal evidence suggests it is a growing problem, suicide among Iraq and Afghanistan veterans is very difficult to estimate. According to the VA records from 2002 to 2006, at least 254 Iraq and Afghanistan-era veterans have killed themselves, but this number is far from definitive.<sup>97</sup>

For veterans of all generations, data on suicide are troubling. The VA estimates that each year, 6,500 veterans commit suicide.<sup>98</sup> Veterans make up only 13 percent of the U.S. population, but they account for approximately 20 percent of the suicides.<sup>99</sup> Male veterans are more than twice as likely to die by suicide as men with no military service<sup>100</sup> and veterans with PTSD are more than three times as likely to die by suicide as their civilian peers.<sup>101</sup> Younger veterans<sup>102</sup> and white, college-educated veterans living in rural areas<sup>103</sup> are at the highest risk.

## THE RESPONSE TO THE MENTAL HEALTH CRISIS

The mental health care systems in the Department of Defense and the Department of Veterans Affairs include thousands of dedicated mental health professionals, but the bureaucracies have been inexcusably slow to respond to the growing mental health crisis. Recent initiatives within DOD and VA are beginning to address some of the needs of returning troops and veterans, but far too many troops and veterans are still falling through the cracks.

According to the American Psychological Association, there are "significant barriers to receiving mental health care in the Department of Defense (DOD) and Veterans Affairs (VA) system." First, both the DOD and the VA are passive systems, leaving the burden on the servicemember or veteran to self-diagnose and seek out care. Second, there are gaps in the availability of services, both in the military and the VA system. Mental health professionals are often unavailable to troops, especially those in combat theatre, and to veterans, particularly those in rural areas. Finally, even for troops who have sought out care and have





## IN PERSON: JOSHUA LEE OMVIG (1983-2005)

On December 22, 2005, just a few months after returning from an elevenmonth tour in Iraq, 22-year-old Army Reservist Joshua Omvig took his own life. Omvig, who was suffering from Post Traumatic Stress Disorder, experienced nightmares, depression, mood changes, and other symptoms associated with combat stress. Omvig refused to seek help, however, because he believed that receiving a mental health diagnosis would damage his career in the military and his dream of becoming a police officer.

After his suicide, Joshua's parents, Randy and Ellen Omvig, devoted themselves to the passage of a new piece of suicide prevention legislation. The legislation included a mandate for a new campaign to de-stigmatize mental health treatment, more training for VA workers in suicide prevention, and a 24-hour suicide hotline for troops. In November 2007, through the tireless work of the Omvig family and veterans groups including IAVA, the Joshua Omvig Suicide Prevention Act was signed into law. This legislation is a great first step to ensuring that all veterans of Iraq and Afghanistan can get mental health treatment before it is too late.

reached a mental health professional, the quality of care can be inconsistent. RAND's *Invisible Wounds of War* study highlighted the effects of these gaps in service and support for returning troops and veterans:<sup>105</sup>

- "Of those reporting a probable TBI, 57 percent had *not* been evaluated by a physician for brain injury."
- "About half (53 percent) of those who met the criteria for current PTSD or major depression had sought help from a physician or mental health provider for a mental health problem in the past year."
- "Of those who have a mental disorder and also sought medical care for that problem, just over half received minimally adequate treatment."

Until these systemic problems are resolved, troops and veterans will continue to struggle with untreated psychological and neurological injuries.

## Department of Defense Still Leaves Troops at Risk

The military has made significant efforts to improve mental health treatment, including the launch of the Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury (DCoE), which unified a number of separate DOD mental health and TBI initiatives under one umbrella organization. The nonprofit Intrepid Fallen Heroes Fund is constructing a new \$70 million research and educational center for the DCoE, called the National Intrepid Center of Excellence for psychological health and traumatic brain injury. This facility offers great potential to improve the understanding of and treatment for psychological and neurological injuries.

Nevertheless, many troops and veterans are still struggling to access mental health services. The two primary roadblocks to quality care are the shortages of trained mental health care staff, and the inadequate screening process used to recognize and treat troops at risk for mental health injuries.

## Staffing Shortages and Insufficient Training

According to the Pentagon's Task Force on Mental Health (MHTF), "the current complement of mental health professionals is woefully inadequate" to provide mental health care for today's military. <sup>109</sup> The number of licensed psychologists in the military has dropped by more than 20 percent in recent years. <sup>110</sup> The Army is attempting to

recruit more mental health professionals, but hiring has been slow.<sup>111</sup> Support available to troops in Iraq is also declining; the ratio of behavioral health workers deployed to troops deployed dropped from 1 in 387<sup>112</sup> in 2004 to 1 in 734 in 2007.<sup>113</sup>

Unsurprisingly, almost one in three soldiers in Iraq say it is difficult to get to a mental health specialist. In Afghanistan, access to treatment is also limited; it takes an average of 40 hours for a psychologist to visit a soldier who needs mental health care. 114 Predictably, the problem of access is even more severe for troops stationed at remote outposts. 115 As a result, many troops needing care simply do not receive it. Only about 1 in 3 soldiers and Marines who screened positive for PTSD once they got home reported receiving mental health care in theatre. 116

In addition, quality of mental health care varies dramatically between military bases. <sup>117</sup> Unfortunately, "relatively few high-quality programs exist" anywhere in the DOD system, according to the American Psychological Association. <sup>118</sup> There is also "inexplicable variation" between the military services in terms of what kinds of mental health professionals they employ, according to the MHTF. <sup>119</sup>

ONLY ABOUT I IN 3 SOLDIERS AND MARINES WHO SCREENED POSITIVE FOR PTSD ONCE THEY GOT HOME REPORTED RECEIVING MENTAL HEALTH CARE IN THEATRE.

## Poor Evaluation of Combat Troops

According to a June 2007 Government Accountability Office (GAO) report, the DOD cannot ensure that servicemembers are mentally fit to deploy, nor accurately assess troops' mental health condition when they return. 120 Recently, the DOD has taken steps to expand pre- and post- deployment screening, particularly for TBI, but there are still significant gaps in troops' physical, psychological and neurological evaluations.

Concerns over DOD screening have been stoked by the mounting evidence that some troops who have deployed again are still coping with the effects of an earlier combat tour. In surveys of troops redeploying to Iraq, 20 to 40 percent "still had symptoms of past concussions, including headaches, sleep problems, depression, and memory difficulties." In addition, many troops in the combat zone are reliant on antidepressants. Among troops who experience high levels of combat, about 12 percent in Iraq and 17 percent in Afghanistan are taking prescription antidepressants or sleeping medication, and prescriptions for these medications are increasing, according to the Army's Mental Health Advisory Team report. Current military regulations do not prevent troops using certain antidepressants from deploying to Iraq or Afghanistan.

IN SURVEYS OF TROOPS REDEPLOYING TO IRAQ, 20 TO 40 PERCENT STILL HAD SYMPTOMS OF PAST CONCUSSIONS.

The single biggest shortfall in the DOD screening process is the lack of a mandatory in-person mental health assessment of troops deploying to or returning from combat. Experts agree that a face-to-face interview with a mental health professional is the optimum approach to PTSD diagnosis. <sup>124</sup> But the only mandatory psychological screening troops currently receive is a pile of paperwork, the pre- and post-deployment health forms. <sup>125</sup>

There are a number of problems with the pre-deployment screening process, including inconsistencies in policies governing the review of servicemembers' medical records. Because of contradictory language within DOD regulations, some servicemembers may not have their medical records reviewed before being approved for deployment. 126

There are also significant questions about pre-deployment TBI screening. In July 2008, the DOD initiated a new computer-based pre-deployment TBI screening test, used by 117,000 servicemembers as of December 2008. 127 It is unclear, however, if *every* deploying servicemember is currently receiving the TBI test. Moreover, a poor score on the TBI test, called the Automated Neuropsychological Assessment Metrics or ANAM, does not automatically preclude a servicemember from deploying, 128 and although pre-deployment testing is intended to identify the baseline mental functioning of each deploying servicemember, the

DOD has not mandated that military units keep the results of these tests available for comparison if a servicemember is injured. <sup>129</sup> Although widespread TBI testing is clearly a step in the right direction, it does not currently ensure that troops testing positive for TBI, either before or after deployment, are getting the support they need.

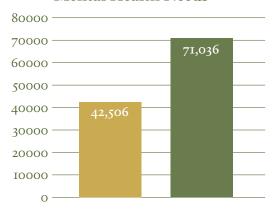
The DOD has also been criticized for "poor documentation of blast exposures" in theatre. According to the Army's Mental Health Advisory Team, "11.2 percent of Soldiers met the screening criteria for mild traumatic brain injuries. Less than half of these (45.9%) reported being evaluated for a concussion."<sup>130</sup> Without adequate evaluation in theatre, there is no way to assure that troops who have experienced a TBI are protected from re-injury.

Even after troops return from combat, the screening they receive is inadequate. Immediately after their tour, troops must fill out the Post Deployment Health Assessment (PDHA). Six months later, servicemembers complete a second form, the Post Deployment Health Re-Assessment (PDHRA). The forms are later reviewed by health care providers who are typically not mental health professionals. These providers contact servicemembers in person or by phone, and are responsible for giving referrals to those troops they deem to be at serious mental health risk.<sup>131</sup>

THE DOD HAS ALSO BEEN CRITICIZED FOR "POOR DOCUMENTATION OF BLAST EXPOSURES" IN THEATRE.

The PDHA/PDHRA system was only universally implemented years after the current wars started — questions on TBI were only added in January 2008<sup>132</sup> — and their effectiveness is questionable. A 2006 study<sup>133</sup> led by Army Col. Charles Hoge, MD, at the Walter Reed Army Institute of Research, looked at the results of Iraq veterans PDHAs. Only 19 percent of troops returning from Iraq self-reported a mental health problem. But 35 percent of those troops actually sought mental health care in the year following deployment.<sup>134</sup> If the PDHA is intended to correctly identify troops who will need mental health care, it simply does not work.

### PDHA Fails to Detects Vets' Mental Health Needs



- Mental Health Issue Reported on PDHA
- Sought Mental Health Services Within One Year

About 42,000 troops self-reported a mental health injury on their PDHA mental health assessment, but more than 71,000 troops actually sought services in the following year. Source: Hoge 2006.

A follow-up study in 2007, also published in the *Journal* of the American Medical Association, concluded: "Surveys taken immediately on return from deployment substantially underestimate the mental health burden." <sup>135</sup>

Although the PDHRA, which troops fill out six months after deployment, is more likely to identify mental health injuries, 136 its overall effectiveness is also dubious, because there are serious disincentives for returning troops to disclose their psychological injuries.

Again, a major obstacle is the stigma attached to mental health care. Admitting a psychological wound can also slow troops' reunification with their family after a combat tour, 137 and many troops are concerned about the effect of a mental health diagnosis on their career. 138 And with good reason. According to the National Alliance on Mental Illness, "One in three individuals with severe mental illness has been turned down for a job for which he or she was qualified because of a psychiatric label." 139 Given such obvious disincentives, it is common knowledge that troops do not fill out their assessments accurately. Even

the VA's own Special Committee on Post Traumatic Stress Disorder admits, "No one seems to expect them to answer truthfully." <sup>140</sup>

Moreover, those who do ask for help may not actually receive it. For years, the referral process for psychological counseling has been rife with inconsistencies. <sup>141</sup> Particularly in the case of National Guardsmen and Reservists, it is unclear whether troops who receive referrals through the PDHA/PDHRA actually get mental health care. <sup>142</sup>

## Hundreds of Thousands of New Veterans Flood VA System

The Veterans Health Administration runs 153 veterans' hospitals nationwide, as well as hundreds of community clinics and Vet Centers, and serves 5.5 million patients a year.143 As of August 2008, 42 percent of eligible Iraq and Afghanistan veterans, or more than 400,000 people, had enrolled in the VA health care system, which is considered by experts to be "equivalent to, or better than, care in any private or public health-care system"144 in the United States. Enrollment should be expected to grow, and not only because troops are continuing to return from Iraq and Afghanistan. With the current downturn in the economy, new veterans coping with unemployment or lower-wage jobs may turn to the VA, rather than a civilian employers' health insurance. While the VA provides excellent care, increasing demand may further limit veterans' access to the system.

The VA has already been flooded by new veterans seeking care for psychological injuries. More than 178,000 Iraq and Afghanistan veterans seen at the VA were given a preliminary diagnosis of a mental health problem, about 45 percent of the new veterans who visited the VA for any reason. After a series of disastrous missteps in their early response to the Iraq war, the VA has made significant progress in responding to the needs of new veterans. According to RAND, the VA "provides a promising model of quality improvement in mental health care for DOD." However, additional action must be taken to prepare the VA for the likely surge in Iraq and Afghanistan veterans seeking care in the coming years.

## VA MISTAKES LEAVE VETERANS WITHOUT ADEQUATE CARE

When veterans began returning home from Iraq and Afghanistan, the VA was caught unprepared, with a serious shortage of staff and an exceedingly inadequate budget.

The workforce shortages at VA clinics and hospitals were apparent early. By October 2006, almost one-third of Vet Centers, the VA's walk-in counseling centers for combat veterans, admitted they needed more staff. As a result of shortages of mental health professionals, veterans seeking mental health care in 2007 got about one-third fewer visits with VA specialists, compared to ten years earlier. Even a VA Deputy Undersecretary admitted that waiting lists rendered mental health and substance abuse care "virtually inaccessible" at some clinics. As

Despite this overwhelming evidence, then-VA Secretary Jim Nicholson testified in 2007 that the VA is "adequately staffed." This kind of massive miscalculation typified the early top-level VA response to the mental health needs of new veterans, and dramatically worsened the mental health crisis. In February 2006, the VA claimed it was expecting only 2,900 new veteran PTSD cases in FY 2006. The actual number was roughly six times that: 17,827. As a result, the VA failed to plan for the incoming veterans and failed to spend the money it was allotted for mental health care. In 2005, the VA failed to allocate \$12 million of a \$100 million earmark for mental health care. The VA also did not ensure that funds spent were actually used for mental health initiatives. The following year, about \$88 million of a \$200 million earmark for mental health initiatives was not spent, and again the VA did not track the use of allocated funds. 151

Recently, the VA also has come under fire for failing to release accurate information on rates of veterans' suicides and downplaying the risk of suicide among veterans. Internal VA emails have shown that, although the VA was publicly admitting only 790 veteran suicide attempts annually, their suicide coordinators were seeing more than 1,000 suicide attempts *a month*. <sup>152</sup>

A primary responsibility of the new VA Secretary must be to ensure that the VA accurately predicts the needs of returning veterans and that the Department prioritizes patient care, not public relations. These grievous mistakes must be prevented in the future.

## Massive Budget Increases Help Fund New VA Initiatives

In the past two years, the VA has become more effective in coping with the needs of Iraq and Afghanistan veterans — in large part because the VA mental health budget has doubled. The mental health budget of the VA was about \$2 billion in 2001. Thanks to the concerted advocacy of veterans' organizations, including IAVA, and dedication of veterans' supporters in Congress, the VA mental health budget reached \$3.5 billion in 2008 and is slated at \$3.9 billion for 2009. The VA mental health budget now makes up ten percent of the entire VA health care budget, and the Department of Veterans Affairs has used the funding to introduce a wide array of measures to help meet the needs of veterans returning from Iraq and Afghanistan.

# SINCE 2001, THE VA MENTAL HEALTH BUDGET HAS DOUBLED.

The VA is devoting \$37.7 million to placing psychiatrists, psychologists, and social workers within primary care clinics, <sup>153</sup> which will allow veterans to seek help in a familiar setting, without the stigma of visiting a mental health clinic. <sup>154</sup> The VA has also hired new staff. Psychologist staff levels were *below 1995 levels* until 2006, <sup>155</sup> but the VA has recruited more than 3,900 new mental health employees, including 800 new psychologists. <sup>156</sup> The total VA mental health staff is now about 17,000 people. <sup>157</sup> The VA is the single largest employer of psychologists in the country. <sup>158</sup>

The VA has also launched a national suicide prevention hotline, 1-800-273-TALK, which took 55,000 calls in its first year, including 22,000 calls directly from veterans and 33,000 calls from concerned family members or friends. <sup>159</sup> The VA claims to have averted 1,221 suicides through the hotline. <sup>160</sup> Other measures currently underway include the addition of 61 new VA-run Vet Centers, which will bring the total to 268 centers nationwide, <sup>161</sup> and the hiring of more suicide-prevention coordinators to allow for expanded mental health emergency services. <sup>162</sup> The VA has increased the budget of the National Center for Post Traumatic Stress Disorder by \$2 million, <sup>163</sup> and has also hired at least 100 Vet Center "Outreach Coordinators,"

Iraq and Afghanistan veterans who help guide their fellow servicemembers into care. 164

TBI is also getting more attention within the VA system. In spring 2007, the VA put in place a TBI evaluation for all Iraq and Afghanistan veterans seen at any VA hospital or clinic, <sup>165</sup> and began development of a Traumatic Brain Injury Veterans Health Registry. <sup>166</sup> Although less than half of eligible Iraq and Afghanistan veterans go to the VA for care, <sup>167</sup> and many veterans are being screened only years after their injuries, this is still a major step towards properly diagnosing and treating TBI. The VA's TBI screening tool is similar to that of the Defense and Veterans Brain Injury Center, but its reliability is not yet certain. <sup>168</sup> In fact, there is not currently a definitive diagnostic test for mild cases of TBI. <sup>169</sup> Further research is needed, and a reliable screening tool must be developed.

The DOD and VA have also collaborated on an expanded national program of Polytrauma Rehabilitation Centers. <sup>170</sup> The Centers, part of the Defense and Veterans Brain Injury Center network, use teams of physicians and specialists that administer individually tailored rehabilitation plans, <sup>171</sup> including full-spectrum TBI care. <sup>172</sup> The Centers are supported by regional network sites across the country, <sup>173</sup> and the VA is also planning to add new Polytrauma Support Clinics to provide follow-up services for those who no longer require inpatient care but still need rehabilitation. <sup>174</sup> A recent report from the VA Inspector General has suggested that, while the polytrauma centers provide excellent care, there are still extensive gaps in the case management and long-term care provided to veterans with Traumatic Brain Injury. <sup>175</sup>

The massive expansion of VA facilities and services presents serious challenges. Integrating the hundreds of new centers and training the thousands of new mental health professionals within the VA must be a top priority of the new Secretary of Veterans Affairs.

MONTANA RANKS FOURTH IN SENDING
TROOPS TO WAR, BUT THE STATE'S
VA FACILITIES PROVIDE THE LOWEST
FREQUENCY OF MENTAL HEALTH VISITS.

#### Access to VA Care Still a Problem

Despite these steps, veterans requiring specialized treatment too often find care is far from home. Only 88 percent of those relying on the VA's Polytrauma network had "reasonable" access to the system, according to a VA study. The median distance from a veteran's home to even the most common, lowest level of polytrauma support was 64 miles.<sup>176</sup> The study identified seven states with counties that lacked reasonable access to rehabilitation: Alabama, Nevada, North Dakota, Texas, Hawaii, Alaska, and Mississippi.

Veterans in rural communities, who make up 38% of veterans enrolled in VA health care, <sup>177</sup> are especially hard-hit. As of 2003, "more than 25 percent of veterans enrolled in VA health care—over 1.7 million—live over 60 minutes driving time from a VA hospital." <sup>178</sup> This problem is likely to worsen because the missions in Iraq and Afghanistan have relied heavily on recruits from rural areas, which are often underserved by VA hospitals and clinics. <sup>179</sup> For instance, Montana ranks fourth in sending troops to war, but the state's VA facilities provide the lowest frequency of mental health visits. <sup>180</sup> IAVA will continue to monitor closely the effect of new VA programs on these gaps in service.

#### CONCLUSION

Of the 1.7 million veterans who have served in Iraq or Afghanistan, about half a million are suffering from Post Traumatic Stress Disorder, depression or Traumatic Brain Injury. Left untreated, the ramifications are clear: increases in family problems, drug abuse, and suicide. Over time, other problems like unemployment and homelessness are likely to increase as well. The RAND Corporation estimates the costs of the psychological and neurological injuries suffered by Iraq and Afghanistan veterans at between \$4 and \$6.2 billion, just in the first two years after combat. Providing proper care for all of these veterans would lower that cost by about 27%.181 The Defense Department and the Department of Veterans Affairs can and must take bold action. Resolving just three of the most pressing needsimproving mandatory mental health and TBI screening, increasing access to trained mental health professionals, and ensuring military families have access to mental health care - would be a tremendous step toward stemming the flood of veterans with untreated mental health injuries, and would save countless lives. In addition, new funding to study the causes, effects, and treatments of Traumatic Brain Injury would benefit hundreds of thousands of combat veterans now struggling with these invisible wounds of war. Our newest generation of heroes deserves nothing less.

For IAVA's recommendations on mental health, see our Legislative Agenda, available at www.iava.org/dc.

#### RECOMMENDED READING AND ONLINE RESOURCES

To learn more about the unemployment and housing issues that new veterans are facing, see the 2009 IAVA Issue Reports, "Careers After Combat: Employment and Education Challenges for Iraq and Afghanistan Veterans" and "Coming Home: The Housing Crisis and Homelessness Threaten New Veterans." For more on troops' and veterans' health care and compensation issues, consult the 2008 IAVA Issue Report: "Battling Red Tape: Veterans Struggle for Care and Benefits."

You can also learn more about PTSD and TBI from the following sources:

- Terri Tanielian and Lisa H. Jaycox, Eds., "Invisible Wounds of War: Psychological and Cognitive Injuries, Their Consequences, and Services to Assist Recovery," RAND, 2008: http://www.rand.org/pubs/monographs/MG720/.
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#### **ENDNOTES**

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