Gulf War Syndrome: Addressing Undiagnosed Illnesses from the First War with Iraq

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INTRODUCTION

The signs and symptoms of post-war and post-deployment syndromes,² especially as they relate to the first Gulf War, tend to focus on fatigue, shortness of breath, headache, sleep disturbance, impaired concentration, and forgetfulness.³ War syndromes have been observed to be associated with armed conflicts since at least the Civil War.⁴ These syndromes have involved fundamental and unanswered questions about the importance of chronic somatic and behavioral symptoms.

One interesting aspect of the symptoms commonly associated with war-related medical and psychological illnesses is that they have been observed in each of our country's major conflicts.⁵ During the U.S. Civil War, they were associated with Da Costa Syndrome; in World War I, they

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 ² See J. G. Scadding, Essentialism and Nominalism in Medicine: Logic of Diagnosis in Disease Terminology, 348 LANCET 594, 595 (1996) (suggesting that a "syndrome" is a unique set or cluster of symptoms, signs, and/or laboratory tests without known pathology or etiology).
 ³ See Han K. Kang et al., Illnesses Among United States Veterans of the Gulf War: A Population-Based Survey of 30,000 Veterans, 42 J. OCCUPATIONAL & ENVTL. MED. 491, 491 (2000) (identifying and discussing the most common symptoms reported by Gulf War veterans).
 ⁴ Kenneth C. Hyams et al., War Syndromes and Their Evaluation: From the U.S. Civil War to the Persian Gulf War, 125 ANNALS INTERNAL MED. 398, 398-99 (1996).
 ⁵ See id. at 398-401 (describing studies of war-related syndromes completed from the

Civil War until the Persian Gulf War).

were tied to what was called Effort Syndrome; in World War II, they were thought to be related to a Combat Stress Reaction; and in Vietnam, they were associated with either Agent Orange exposure or post-traumatic stress disorder (PTSD).⁶ In the first Gulf War, they were categorized under the heading Unexplained or Undiagnosed Illnesses.⁷

During the first Gulf War service members reported many health complaints involving these symptoms; such complaints increased dramatically after the conflict. Environmental conditions may have contributed to their acute presentation.⁸ The complaints involving these symptoms have spanned a variety of organ systems and have greatly affected veterans of the first Gulf War.⁹

In an April 2008 directive, Secretary of Veterans Affairs Dr. James B. Peake set up an Advisory Committee to review the full spectrum of issues that confront veterans who served in the Southwest Asia theater of operations during the 1990 to 1991 period of the first Gulf War. The Advisory Committee has been charged with examining the effectiveness of existing initiatives and determining whether there is a need for new policies relating exclusively to these veterans.¹⁰ In anticipation of the results of that study, this article examines prior efforts to assist this cadre of veterans and evaluates the results obtained both in terms of benefits and medical services.

⁶ Id.

⁷ See 4 INST. OF MED., GULF WAR AND HEALTH 17 (2006).

⁸ Veterans' Benefits Improvements Act of 1994, Pub. L. No. 103-446, 108 Stat. 4645, 4647-48 (reporting Congress's findings that Gulf War veterans were exposed to numerous potentially toxic substances, and a significant number of them now suffer from illnesses that cannot be diagnosed or clearly identified).

⁹ 4 INST. OF MED., *supra* note 7, at 3 (noting that the reported illnesses among Gulf War veterans predominantly address multi-symptom conditions to include fibromyalgia, chronic fatigue syndrome (CFS), multiple chemical sensitivity (MCS), post-traumatic stress disorder (PTSD), anxiety, depression and substance abuse).

¹⁰ James B. Peake, Department of Veterans Affairs Charter of the Advisory Committee on Gulf War Veterans (Apr. 19, 2008), *available at* http://www1.va.gov/gulfwaradvisorycommittee/docs/Charter.pdf.

Previously, when medical researchers were unable to find definitive links between undiagnosed illnesses resulting from service in the first Gulf War, Congress had bridged the chasm between the lack of medical certainty respecting causation and the obvious disabilities suffered through legislative presumptions. This review examines the array of symptoms displayed by Gulf War veterans, the medical studies addressing these concerns, and the Congressional initiatives to ensure that presumptions of causation were provided in law to adequately compensate these disabilities. Finally, it offers suggestions concerning the need for a systematic review of current policies, such as reflected in the work of the Advisory Committee, to ensure that the medical condition and requirements of these veterans are addressed.

I. BACKGROUND ON THE FIRST GULF WAR

On August 2, 1990, an Iraqi force of more than 100,000 troops and several hundred tanks invaded Kuwait with great precision.¹¹ The Kuwaiti military, consisting of only 20,000 men, was quickly routed.¹² The Emir and Crown Prince (who also served as Prime Minister) fled to Saudi Arabia.¹³ The invasion occurred less than one day after the collapse of negotiations on financial and territorial claims made by Iraq's Saddam Hussein.¹⁴ Iraq's rationale for invasion was multi-faceted. In July 1990, Iraq was burdened with a huge debt estimated between \$80 to 100 billion, largely as a result of its 1980 to 1988 war with Iran.¹⁵ A portion of this amount was owed to Kuwait's Emir, who claimed and administered the contested islands of Warba and Bubiyan that controlled Iraqi access to the

¹¹ Michael R. Gordon, *Iraq Army Invades Capital of Kuwait in Fierce Fighting*, N.Y. TIMES, Aug. 2, 1990, at A1.

¹² Id.

¹³ U.S. DEP'T OF DEF., FINAL REPORT TO CONGRESS: CONDUCT OF THE PERSIAN GULF WAR, 3 (Apr. 1992) [hereinafter FINAL REPORT]; Youssef M. Ibrahim, *The Iraqi Invasion: A New Gulf Alignment; Iraqis, Bargaining on Anti-U.S. Sentiment, May Profit by Intimidating the Monarchies*, N.Y. TIMES, Aug. 3, 1990, at A1.

¹⁴ FINAL REPORT, supra note 13, at 7-8.

¹⁵ George E. Bisharat, *Facing Tyranny with Justice: Alternatives to War in the Confrontation with Iraq*, 7 J. GENDER RACE & JUST. 1, 15 (2003).

¹⁶ See *id*. (noting that half of Iraq's debt was owed to Kuwait, Saudi Arabia, and the United Arab Emirates); *see* FINAL REPORT, *supra* note 13, at 7-8 (explaining the dispute over Warba and Bubiyan).

Persian Gulf.¹⁶ Kuwait had also shown displeasure in Baghdad in early 1990 by producing more than its Oil Producing and Exporting Countries (OPEC) allocation of crude oil, thus helping to drive down world prices.¹⁷ In Iraq's view, the invasion further served to resolve a long-standing territorial grievance dating to the British demarcation of Arab borders in the 1920s, after the collapse of the Ottoman Empire.¹⁸

More significant for the subsequent health of the U.S. and coalition forces in Iraq pursuant to a United Nations mandate, was the carnage to the natural environment caused by Iragi forces during operation Desert Storm. The damage was unprecedented when compared with other recent conflicts. Iraqi forces pre-wired and then detonated more than 750 oil wells in occupied Kuwait.¹⁹ Additionally, Iraq dumped millions of barrels of Kuwaiti crude oil into Gulf waters.²⁰ The extensive and intentional damage caused by the fires and oil spills represents precisely the kind of vindictive and wanton destruction long prohibited by the laws of war. This basic principle is reflected in many specific rules, such as the prohibition on destruction of property not demanded by the necessities of war.²¹ Even if a case could be made that these acts were accomplished for a military purpose, the magnitude of the destruction was so out of proportion to the military advantage and the health risks to the participants so high that it was clearly excessive under the circumstances.²² Just as significant, Iraq's status as an occupying power placed it under a special obligation with respect to the people and property in Kuwait.²³

¹⁷ FINAL REPORT, *supra* note 13, at 5.

 ¹⁸ Samuel Pyeatt Menefee, Gunboat Diplomacy in the Persian Gulf? An Alternative Evaluation of a Contemporary Naval Conflict, 31 VA. J. INT'L L. 567, 579 (1991).
 ¹⁹ 4 INST. OF MED., supra note 7, at 13.

²⁰ FINAL REPORT, *supra* note 13, at 130.

²¹ See Hague Convention No. IV Respecting the Laws and Customs of War on Land, Regulations Respecting the Laws and Customs of War on Land art. 23(g), Oct. 18, 1907, *available at* http://www.icrc.org/ihl.nsf/FULL/195 [hereinafter Regulations Annexed to Hague Convention IV] (forbidding a country "[t]o destroy or seize the enemy's property, unless such destruction or seizure be imperatively demanded by the necessities of war").

²² See Geneva Convention Relative to the Protection of Civilian Persons in Time of War art. 147, Aug. 12, 1949, *available at* http://www.unhchr.ch/html/menu3/b/92.htm (noting that "grave breaches" of the Convention include "willfully causing. . . extensive destruction and appropriation of property, not justified by military necessity and carried out unlawfully and wantonly").
²³ See Regulations Annexed to Hague Convention IV, *supra* note 21, art. 46 (stating that an occupying power cannot confiscate private property and must honor the rights and lives of the citizens).

The Gulf War reflected many other changes from previous wars. This was particularly evident in the demographics of the force, with 17 percent of the 697,000 member force assembled from Reserve and National Guard units, and 7 percent of the force represented by women.²⁴ The ground war was fought in only five days, from February 24 to February 28, 1991.²⁵ The last of the forces involved in the ground war returned home on June 13, 1991, and the final oil well fire was extinguished by early November 1991.²⁶

II. THE UNIQUE MEDICAL ASPECTS OF THE FIRST GULF WAR

This conflict was unique in ways other than its location, duration, and relatively few casualties among U.S. forces.²⁷ What also made this conflict different were the resulting medical complaints arising from thousands of Gulf War veterans. There is no doubt that the environmental and chemical exposures suffered by U.S. service members played a major role in these medical concerns. When U.S. forces arrived in the Gulf in the fall of 1990, they were unaware of the extent to which Iraq might employ chemical and/or biological weapons.²⁸ They had been briefed that Saddam Hussein had previously used such weapons in fighting Iran and in his conflict with the Kurdish minority in Iraq.²⁹ While the use of these types of weapons was not unique in warfare, the number and combination of agents to which our service members may have been exposed make it hard to assess whether one or several agents working together may have been partly to blame for these veterans' illnesses.³⁰

The Department of Veterans Affairs (VA) and Department of Defense's (DOD) combined registry program, providing for Gulf War

²⁴ 1 INST. OF MED., *supra* note 7, at 27, 33.

²⁵ Id. at 27.

²⁶ *Id.* Red Adair and his team of experts used an innovative technique--the blow-back of a jet engine on a sled--to extinguish the oil well fires. The author was present in the Gulf as SJA of III MEF and witnessed this process which literally blew out the flame.

²⁷ FINAL REPORT, *supra* note 13, app. A, at 313-17 (indicating about 420 U.S. military personnel were lost in the first Gulf War and only 21 U.S. service members were held by the Iraqis as enemy prisoners of war (EPWs)).

²⁸ See 4 INST. OF MED., supra note 7, at 14.

²⁹ Id.

³⁰ 1 INST. OF MED., *supra* note 7, at 29.

veterans to receive diagnostic examinations, has helped to create a list of symptoms experienced by these veterans.³¹ As a result of these registries, "unexplained illness" has been characterized as one or more symptoms that do not conform to a characteristic clinical presentation, or allow for a specific diagnosis, and which appear to be causing a decline in the veteran's functional status or quality of life.³² The most common signs and symptoms reported by Gulf War veterans in these unexplained illness cases include muscle and joint pain, fatigue, headache, memory problems, skin rash, sleep disturbance, diarrhea, shortness of breath, and abdominal pain.³³ The most common diagnostic categories into which these reported ailments were placed in Part IV of Title 38, Code of Federal Regulations were (1) musculoskeletal and connective tissue conditions; (2) mental disorders; (3) respiratory illnesses; (4) skin and subcutaneous conditions; and (5) digestive disorders.³⁴

The conflict was also unique in that the vaccines administered to service members both in number and diversity far exceeded those provided in previous conflicts.³⁵ Prior to and during the Gulf conflict, a number of different immunobiologics, to include cholera, meningitis, rabies, tetanus, and typhoid vaccines, were used to inoculate veterans against exposure to biological weapons.³⁶ The history of Iraq's prior use of biological weapons only three years earlier in its war with Iran led to the determination to vaccinate against this threat during Operation Desert Storm.³⁷ Equally significant, more than 310,000 doses of anthrax vaccine were sent in-theatre during Operation Desert Shield and more than 150,000 U.S. service members were inoculated with at least one anthrax vaccination.³⁸ Additionally, 137,850 doses of botulinum toxoid were sent to the Gulf and approximately 8,000 veterans were inoculated.³⁹ These measures

³¹ Id. at 40.

 ³² See id. app. D, at 350-56 (discussing the identification of an illness as undiagnosed).
 ³³ See id. at 41-42.

³⁴ 38 C.F.R. § 3.317 (2007); *see generally* 1 INST. OF MED., *supra* note 7, at 39-62 (discussing how the diseases reported by Gulf War veterans have been studied and categorized).

³⁵ See S. REP. NO. 105-39, at 121-22 (1998) (explaining that along with vaccines generally provided to service personnel, Gulf War service members also received vaccines for anthrax and botulinum toxoid).

³⁶ 1 INST. OF MED., *supra* note 7, at 267.

³⁷ Id. at 19-20; see also supra notes 29-31 and accompanying text.

³⁸ 1 INST. OF MED., *supra* note 7, at 267.

³⁹ Id. at 268.

were more than warranted in light of preexisting knowledge regarding Saddam Hussein's biological weapons program.⁴⁰ What specific effect these inoculations had on the health of U.S. service members serving in Southwest Asia during this conflict has never been fully determined.

III. THREE IMPORTANT STUDIES INFORMING OUR UNDERSTANDING OF GULF WAR ILLNESSES AND DISABILITIES

In light of the uncertainty over causation of the myriad undiagnosed conditions suffered by Gulf War veterans, a number of informative and detailed studies of these illnesses and their etiology have been published. An excellent analysis conducted by the Centers for Disease Control and Prevention (CDC) was written by Dr. Keiji Fukuda and his associates in 1998.⁴¹ In this study, over 3000 Gulf War veterans from Air Force National Guard units in Pennsylvania were clinically examined and their symptoms surveyed to assess chronic multi-symptom illnesses (CMI).⁴² Of those studied, 39% who had deployed in-theater had

⁴⁰ See Raymond A. Zilinskas, *Iraq's Biological Weapons: The Past as Future*?, 278 J. AM. MED. ASS'N 418, 418 (1997). Investigations after the first Gulf War by the United Nations Special Commission and the International Atomic Energy Agency confirmed the evidence known by U.S. military from the Iran-Iraq War--that Iraq had biologic weapons and was prepared to use them. *Id.* Nevertheless, there was no evidence found of their release in the first Gulf War. Keiji Fukuda et al., *Chronic Multisymptom Illness Affecting Air Force Veterans of the Gulf War*, 280 J. AM. MED. ASS'N 981, 981 (1998). Investigators found that Iraq had produced 200 biological bombs in 1990; 100 were filled with botulinum toxin, 50 with anthrax, and 7 with aflatoxin. *See* Zilinskas, *supra*, at 420. Additionally, 13 Al Hussein SCUD warheads containing botulinum toxin, 10 warheads containing anthrax, and 2 containing aflatoxin were deployed in January 1991 to four different places. U.S. ARMY MEDICAL RESEARCH INSTITUTE OF INFECTIOUS DISEASES, MEDICAL MANAGEMENT OF BIOLOGICAL CASUALTIES: HANDBOOK 4 (6th ed. 2005).

⁴¹ See generally Fukuda, *supra* note 40, at 981-87 (discussing a study of undiagnosed illnesses in Air Force Gulf War veterans).

⁴² *Id.* at 981-82, 987. This study defines chronic multi-symptom illnesses (CMI) as instances where the veteran suffers from one or more chronic symptoms, present for six months or more, from at least two of the following categories: fatigue; mood and cognition (symptoms of feeling depressed, difficulty remembering or concentrating, feeling moody, feeling anxious, trouble finding words, or difficulty sleeping); and musculoskeletal (symptoms of joint pain, joint stiffness, or muscle pain). *Id.* at 982-83. Cases were subclassified as severe if each case-defining symptom was rated as severe; otherwise the case was considered to be mild-to-moderate. *Id.* at 983.

mild-to-moderate multi-symptom illnesses, while about 6% had severe multi-symptom illnesses.⁴³ The group exhibiting chronic conditions (i.e., conditions lasting six months or more) with multi-symptom illnesses had one or more chronic symptoms from two of the following categories: fatigue; mood and cognition (e.g., depression, memory or concentration difficulties, moodiness, anxiety, and sleep difficulties); or musculoskeletal (e.g., joint pain, stiffness, or muscle pain).⁴⁴

The major syndromes identified among those experiencing multisymptom illnesses were categorized as PTSD, depression, sleeplessness, panic disorders, and chronic fatigue syndrome.⁴⁵ Despite the study's limitations reflected by the number of participants, the fact that only one service was represented (Air Force), and the fact that the CMI case prevalence among Gulf War veterans was not explained by this study, the results indicate that a large portion of Air Force Gulf War veterans have CMIs that have significantly affected their well-being and ability to fully function in society.⁴⁶

An important 2000 study sponsored by VA and conducted by Dr. Han Kang and his associates found that veterans deployed to Southwest Asia during the Gulf War experienced at a far higher rate than their non-deploying cohort the following chronic conditions: sinusitis, gastritis, dermatitis other than eczema/psoriasis, arthritis, and frequent diarrhea.⁴⁷ Similarly, deploying veterans reported more frequent signs and symptoms than their non-deploying cohorts.⁴⁸ The most frequent severe symptoms reported and signs observed related to back pain, runny nose, joint pain, headaches, anxiety, difficulty sleeping, skin rash, excessive fatigue, heartburn, and indigestion.⁴⁹

Other important findings of the Kang study were reflected by the percentages of those military personnel reporting symptoms or conditions who had deployed to the Gulf. For example, deployed National Guard and

⁴³ *Id*. at 984.

⁴⁴ Id. at 983.

⁴⁵ *Id.* at 985-86.

⁴⁶ *Id*. at 987.

⁴⁷ Kang, *supra* note 3, at 495.

⁴⁸ *Id*. at 496.

⁴⁹ Id.

Reserve personnel reported higher rates of undiagnosed illnesses percentagewise than non-deployed Guard and Reserve personnel.⁵⁰ Deployed Army personnel reported more symptoms percentage-wise than members of other military services.⁵¹ Similarly, the deploying veterans sought more medical assistance as outpatients at clinics, through visits to doctors, and as inpatients in hospitals than their fellow service members who had not served in theater.⁵² Also, military personnel who had been deployed had a lower perception of the state of their general health than did non-deployed personnel.⁵³ Further, those military personnel who had been deployed reported more functional impairment and a 50 percent higher limitation on employment due to health reasons than their non-deploying counterparts.⁵⁴

In summary, the Kang study found that Gulf War veterans who had deployed reported twice the number of symptoms and undiagnosed medical conditions than did the corresponding cohort that had not deployed to Southwest Asia.⁵⁵ The study clearly shows that Gulf War veterans are simply not as healthy as their peers who served but did not deploy to Southwest Asia, as measured by general health perceptions, health care utilization, functional impairment, symptoms, and self-reported medical conditions.⁵⁶

In a third study completed in 2005, Dr. Melvin Blanchard and his associates reviewed a sample selection of participants in a National Health Survey of Gulf War Veterans.⁵⁷ This study compared Gulf War veterans who had deployed with non-deployed veterans ten years after their deployment.⁵⁸ It examined medical and psychiatric histories and reviewed neurological, pulmonary, and neuropsychological test results of the 2,189 selected participants.⁵⁹ The Blanchard study used the CDC's definition of a CMI.

⁵² Id.

⁵⁰ Id. at 497.

⁵¹ Id. at 495, 497.

⁵³ Id. at 495.

⁵⁴ Id. at 497.

⁵⁵ Id.

⁵⁶ See id. at 499.

⁵⁷ Melvin S. Blanchard et al., *Chronic Multisymptom Illness Complex in Gulf War I Veterans 10 Years Later*, 163 AM. J. EPIDEMIOLOGY 66, 67-68 (2005).

⁵⁸ Id. at 66.

⁵⁹ *Id.* at 67. The data analyzed was taken from 1,061 deployed veterans and 1,128 nondeployed veterans. *Id.* at 66.

That definition requires at least two symptoms from the following three categories: fatigue, mood and cognition, or musculoskeletal.⁶⁰

The Blanchard study found, not surprisingly, that CMI was more prevalent among veterans who had deployed (28.9% compared to 15.8%).⁶¹ An important deployed veteran risk factor was higher combat exposure, while an important non-deployed veteran risk factor was active duty status versus non-deployed reserve or other inactive status.⁶² As would be expected, those veterans, deployed and non-deployed, who suffered from CMI displayed poorer functional health scores, experienced more clinic visits, and required more pharmaceuticals than their non-CMI veteran cohorts.⁶³

The Blanchard study also found that CMI suffered by deployed and non-deployed Gulf War era veterans was associated with fibromyalgia (muscle condition), chronic fatigue syndrome, arthralgia (joint pain), dyspepsia (gastric disorder), or metabolic syndrome (metabolism irregularity).⁶⁴ Finally, the study reported that a significantly higher cadre of those Gulf War veterans who had been assigned to Southwest Asia experienced chronic fatigue syndrome at a higher rate than their cohorts who had not been assigned to the theater.⁶⁵ The question that remains unanswered is the cause of these conditions.

⁶⁰ Id. at 68.
⁶¹ Id. at 70.
⁶² Id.
⁶³ Id. at 71.
⁶⁴ Id.
⁶⁵ Id.

IV. THE LEGAL DILEMMA

For the attorneys and Veterans Law Judges reviewing Gulf War syndrome appeals, the CMI remains medically unexplained.⁶⁶ We do know, however, that these unexplained illnesses are commonly associated with chronic fatigue syndrome, fibromyalgia, and multiple chemical sensitivity.⁶⁷ We also know from looking at these claims that Gulf War veterans experience a measurable decline in health. Repeated studies have shown that specific constellations of signs and symptoms are often evident. These symptom groupings have not been shown, however, to represent a specific new disease entity in the eyes of the medical profession.⁶⁸

From the Board of Veterans' Appeals (Board) perspective, the validity of the Gulf War undiagnosed illnesses is evident in the allowance rate for these claims on appeal compared with claims involving other disabilities. Although this group of appeals totaled only 641 cases in fiscal year 2006, the Board granted 28.5% of them, while allowing only 19.3% of all other appeals during the same time period—i.e., the non-Gulf War undiagnosed illness cases.⁶⁹ This is a very significant disparity and reflects the seriousness with which the Gulf War Syndrome is viewed by the Board.

⁶⁶ See Robert W. Haley et al., *Is There a Gulf War Syndrome? Searching for Syndromes by Factor Analysis of Symptoms*, 277 J. AM. MED. ASS'N 215, 215-22 (1997) (describing a study that attempted to define Gulf War Syndromes through the use of factor analysis of symptoms in ill and healthy Gulf War veterans); *see also* Persian Gulf Veterans Coordinating Board, *Unexplained Illnesses Among Desert Storm Veterans: A Search for Causes, Treatment, and Cooperation*, 155 ARCHIVES INTERNAL MED. 262, 262-68 (1995) (explaining that factors of living conditions, the threat of chemical and biological warfare, nerve agent prophylaxis and immunizations, infectious diseases, and environmental hazards need to be considered when evaluating Gulf War veterans); *see generally* U.S. DEP'T OF DEF., COMPREHENSIVE CLINICAL EVALUATION PROGRAM FOR PERSIAN GULF WAR VETERANS: CCEP REPORT ON 18,598 PARTICIPANTS (1996) (summarizing diagnostic results from DOD's CCEP to help provide insights into the nature of Gulf War veterans' illnesses).

⁶⁷ 1 INST. OF MED., *supra* note 7, app. D, at 350-56.

⁶⁸ See PRESIDENTIAL ADVISORY COMMITTEE ON GULF WAR VETERANS' ILLNESSES, FINAL REPORT ch. 3 (1996), *available at* http://www.gulflink.osd.mil/gwvi/ toc-f.html (noting that multiple chemical sensitivity is not currently a recognized diagnosis in the U.S. medical field).

⁶⁹ Fiscal Year 2006 Statistics, Veterans Appeals Control and Locator System (VACOLS) (May 21, 2008) (on file with author); *see* BD. OF VETERANS' APPEALS, REPORT OF THE CHAIRMAN: FISCAL YEAR 2006 20 (2007), *available at* http://www.va.gov/VetApp/ChairRpt/BVA2006AR.pdf.

Similarly, in fiscal year 2007, of the 683 Gulf War undiagnosed illness appeals considered, the Board granted 26.1%, while it granted all other appeals at a lower rate (21.1%) than the undiagnosed illness claims.⁷⁰ A similar result was witnessed in fiscal year 2008. The Board allowed 29.7% of all Gulf War undiagnosed illness cases, an even higher rate than in 2007.⁷¹ In 2008 by comparison, all other appeals cases were allowed at a rate of 21.7%.⁷² This again reflects a serious recognition of the importance and validity of these Gulf War claims.

V. CONGRESSIONAL ACTION SUPPLANTS THE LACK OF A MEDICAL NEXUS

While the medical profession does not recognize Gulf War Syndrome as a uniquely recognizable disease, Congress has done so through legislative enactment. On November 2, 1994, Congress enacted the Veterans' Benefits Improvements Act, which added a new section 1117 to Title 38, United States Code, authorizing VA to compensate any Gulf War veteran suffering from a chronic disability resulting from an undiagnosed, or combination of undiagnosed illnesses, arising either during active duty in the Southwest Asia theater of operations during the Persian Gulf War, or to a degree of 10 percent or more within a presumptive period following service in that conflict.⁷³ VA implemented these provisions through regulation issued in February 1995.⁷⁴

The implementing regulation carefully defines qualifying Gulf War service, establishes a presumptive period for service connection, and provides a non-exclusive list of symptoms which may indicate an undiagnosed illness for which compensation is authorized.⁷⁵ Of significance is the fact that the General Counsel determined that, based upon the facts of each veteran's

⁷⁰ Fiscal Year 2007 Statistics, VACOLS (May 21, 2008) (on file with author); *see* BD. OF VETERANS' APPEALS, REPORT OF THE CHAIRMAN: FISCAL YEAR 2007 20 (2008), *available at* http://www.va.gov/VetApp/ChairRpt/BVA2007AR.pdf.

⁷¹ Fiscal Year 2008 Statistics, VACOLS (Sept. 30, 2008) (on file with author). ⁷² *Id*.

⁷³ Veterans' Benefits Improvements Act of 1994, Pub. L. No. 103-446, 108 Stat. 4645 (codified as amended in scattered sections of 38 U.S.C.).

⁷⁴ Compensation for Certain Undiagnosed Illnesses, 60 Fed. Reg. 6660 (Feb. 3, 1995) (codified at 38 C.F.R. § 3.317).

⁷⁵ 38 C.F.R. § 3.317 (2007).

case, this regulation allows for the payment of compensation for a disability that is not attributable to any known clinical diagnosis.⁷⁶ That same opinion found that "[t]he fact that the signs or symptoms exhibited by the veteran could conceivably be attributed to a known clinical diagnosis under other circumstances not presented in the particular veteran's case does not preclude compensation under section 3.317."⁷⁷

The U.S. Court of Appeals for Veterans' Claims (Court) has likewise interpreted the 1994 statute and regulation in a manner most favorable to the veteran. In *Gutierrez v. Principi*, the Court determined that a veteran seeking service connection for Gulf War syndrome under these provisions was not required to provide evidence linking his current condition to events he or she experienced during military service and VA could not impose such a nexus requirement.⁷⁸ In 2006, *Gutierrez* was followed by *Stankevich v. Nicholson*, a case involving a Gulf War veteran with chronic muscle and joint pain; the record contained two conflicting medical opinions regarding whether his condition qualified as an undiagnosed illness.⁷⁹ The Court placed the burden on VA to explain why the opinion finding that the condition met the requirements for an undiagnosed illness had not been selected.⁸⁰

The 1994 legislation was followed in 1998 by the enactment of the Persian Gulf War Veterans Act.⁸¹ This Act authorized VA to compensate Gulf War veterans for diagnosed or undiagnosed disabilities determined by VA regulation to warrant a presumption of service connection based upon exposure to one of the following: *a toxic agent; an environmental or wartime hazard; or a preventative medication or vaccine.*⁸² This

⁸² 38 U.S.C. § 1118(b)(1)(B) (2002).

⁷⁶ DVA Op. Gen. Counsel Prec. 8-98 (Aug. 3, 1998).

⁷⁷ Id.

⁷⁸ 19 Vet. App. 1, 8-9 (2004).

⁷⁹ 19 Vet. App. 470, 470-71 (2006).

⁸⁰ Id. at 473.

⁸¹ Persian Gulf War Veterans Act of 1998, Pub. L. No. 105-277, 112 Stat. 2681 (codified as amended in scattered sections of 38 U.S.C.).

legislation added new section 1118 to Title 38, which codified the presumption of service connection for an undiagnosed illness.⁸³

In 2001, Congress passed the Veterans Education and Benefits Expansion Act.⁸⁴ This Act added the language "qualifying chronic disability" within section 1117 so it would include not only a disability resulting from an undiagnosed illness, but also a medically unexplained CMI defined by a cluster of signs and/or symptoms.⁸⁵ Examples of these CMIs include chronic fatigue syndrome, fibromyalgia, and irritable bowel syndrome.⁸⁶ These changes were implemented by VA in March 2002 through a revision to 38 C.F.R. § 3.317, which expanded the definition of a qualifying chronic disability.⁸⁷

REFLECTIONS AND CONCLUSIONS

From the foregoing, it is quite apparent that VA has taken, and continues to take, the illnesses suffered by Gulf War veterans very seriously. While the medical profession and VA have been unable to state with certainty the causes of Gulf War Syndrome, they have certainly recognized the symptoms and signs that must be given credence in fashioning an effective ameliatory regime.

The servicemen and women who served in the Gulf War theater were potentially exposed to a wide range of biological and chemical agents, including smoke from oil well fires, paints, solvents, insecticides, petroleum fuels and their combustion products, nerve agents, and pyridostigmine bromide, as well as anthrax and botulinum toxoid

⁸⁵ 38 U.S.C. § 1117(a)(2).

⁸⁶ Id. § 1117(a)(2)(B).

⁸³ *Id.* § 1118(a)(3) (providing that a veteran who served on active duty in the Southwest Asia theatre of operations during the Persian Gulf War and has an illness described in paragraph (2) of this section shall be presumed to have been exposed by reason of such service to the agent, hazard, medicine, or vaccine associated with the illness unless there is conclusive evidence to establish that the veteran was not so exposed).

⁸⁴ Veterans Education and Benefits Expansion Act of 2001, Pub. L. No. 107-103, 115 Stat. 976 (codified as amended in scattered sections of 38 U.S.C.).

⁸⁷ 38 C.F.R. § 3.317(a)(2) (2007) (stating that the Secretary would determine whether any other illnesses met the criteria for "medically unexplained chronic multi-symptom illnesses" and including as a "qualifying chronic disability" any "diagnosed illness" that the Secretary determines by regulation to warrant a presumption of service connection under 38 U.S.C. § 1117).

vaccinations, and infectious diseases; they also experienced psychological and other physiological stress.⁸⁸ Their symptoms are carefully documented in myriad medical studies and chronicled in legislative and regulatory initiatives.⁸⁹ The constellation of signs and symptoms that have been found to be associated with an undiagnosed illness or a CMI include fatigue, unexplained rashes, headache, muscle pain, joint pain, neurological distress, neuropsychological symptoms, upper or lower respiratory system disorders, sleep disturbances, gastrointestinal irregularities, and cardiovascular symptoms, as well as abnormal weight loss and menstrual disorders.⁹⁰

Where the medical profession has been unable to find specific medical causation for these undiagnosed illnesses, Congress has judiciously bridged the gap and has provided presumptive relationships that ensure equitable disability determinations for these veterans. Major legislation passed in 1994, 1998, and 2001, has ensured that all Gulf War veterans who served in theater during the Gulf War, embrace one or more listed symptoms, and were exposed to one or more of these listed agents, are *presumed* to be service connected.⁹¹

The Court and the Board have likewise done their part to ensure that all Gulf War veterans are given every opportunity to qualify for disability benefits. In the *Gutierrez* case, for example, the Court determined that a Gulf War veteran who sought service connection for Gulf War Syndrome under these provisions was not required to provide evidence linking his current condition to events experienced during military service.⁹² Similarly, the Board has granted a far higher percentage of appeals to undiagnosed illness claimants than to claimants in the general population of appellants.⁹³

This confluence of concern exhibited by VA, Congress, the medical profession, and the legal system has ensured that those suffering from undiagnosed illnesses resulting from the first Gulf War are treated

⁸⁸ 1 INST. OF MED., *supra* note 7, at 27-28.

⁸⁹ See supra notes 41-65, 73-77, 81-87 and accompanying text.

^{90 38} U.S.C. § 1117(g).

⁹¹ See supra notes 87-93 and accompanying text.

⁹² Gutierrez v. Principi, 19 Vet. App. 1, 8-9 (2004).

⁹³ See supra notes 74-77 and accompanying text.

fairly. This is not to suggest, however, that additional medical study of the etiologies of these undiagnosed illnesses would not prove invaluable in preparing to address the victims of the current conflict in Iraq, as well as to assist those with disabilities from the first Gulf War. It is hoped that the newly appointed Advisory Committee on the Gulf War will do just that. Through the process of assessing the effectiveness of existing treatment and benefits for undiagnosed illnesses and the possible need for new initiatives and/or policies that relate exclusively to addressing this multiplicity of symptoms, the medical practitioners and policy professionals on the Advisory Committee will offer recommendations both in terms of benefits and medical services. This systematic review of current policies will ensure the legal concerns, medical conditions, and particular requirements of this group of veterans, as well as prospective concerns for veterans of the current crisis in the Gulf, are addressed.