### Gulf War Era Veterans Report: Pre-9/11 (August 2, 1990 to September 10, 2001)



February 2011

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### **Executive Summary**

From Operation Desert Shield to 9/11 to the ongoing Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (transitioned to Operation New Dawn in September 2010), these events and many others define the "Gulf War Era." As a term used only for the purposes of this reporting series, it represents a period in time from August 2, 1990 through a date to be prescribed by Presidential proclamation or law.

As the Nation recognizes the 20<sup>th</sup> year of the Gulf War Era, it is important to statistically document the integrated utilization of Department of Veterans Affairs' (VA's) benefits and healthcare services by Gulf War Era Veterans. To that end, VA is producing a recurring two-part report on the Pre-9/11 (August 2, 1990 to September 10, 2001) and Post-9/11 (September 12, 2001 to present) phases of the Gulf War Era. A supporting data system known as the Southwest Asia Veterans System (SWAVETS) will be used to provide data for these reports. Collectively, the Pre-9/11 Report, the Post-9/11 Report, and SWAVETS will form a dynamic reporting mechanism for Gulf War Era Veteran data.

**Historical Background:** On August 2, 1990, the Republic of Iraq invaded, occupied, and annexed the State of Kuwait. This hostile military action prompted international condemnation and the immediate issuance of United Nations Security Council resolutions. Shortly thereafter, the President of the United States ordered the mobilization and deployment of American military forces to Southwest Asia (the Persian Gulf region) as part of Operation Desert Shield. Thus began the Gulf War.

After unsuccessful attempts from the world community to diplomatically resolve the situation, the United States led an international coalition of military forces aimed at liberating Kuwait on January 16, 1991. Concurrently, Iraq ignited or destroyed the first of an estimated 750 oil wells in Kuwait and other areas. Known as Operation Desert Storm, this combination air and ground offensive swiftly ended on February 28, 1991. Just as the ceasefire took effect on April 11, 1991, the United States infused the Southwest Asia theater of operations with fresh military personnel in support of Operation Provide Comfort I, Operation Provide Comfort II, and Operation Southern Watch.

Though a portion of Gulf War Servicemembers returned home by late summer of 1991, many forces remained to ensure regional security and participate in retrograde and redeployment operations. By end-of-month January 1992, the overwhelming majority of all Gulf War-related redeployment activities had ended. Throughout the 1990s, U.S. Servicemembers in the Southwest Asia theater of operations participated in a variety of military activities to include occasional air strikes, joint task forces aimed at regional security, and the enforcement of two no-fly zones within Iraq. When four hijacked commercial jetliners crashed into the World Trade Center in New York City, New York; a field in Shanksville, Pennsylvania; and the Pentagon in Arlington, Virginia on September 11, 2001 (9/11), the military mission in the Southwest Asia theater of operations dramatically changed.

Due to a continued series of events in the Southwest Asia theater of operations since January 1992, Congress has never declared the Gulf War (1990-1992) to be over. For the purposes of this report, the Pre-9/11 Period is defined as the inclusive period of August 2, 1990 to September 10, 2001.

**Military Population:** During the Pre-9/11 Period, the Department of Defense (DoD) identified 6,516,030 military personnel who served on active duty. Of this, 85 percent (5,555,907) were male and 15 percent (959,554) were female. As of Fiscal Year (FY) 09, 41 percent (2,669,784) of the Pre-9/11 cohort were between the ages of 35 and 44 years of age

Additionally, 17 percent or 1.1 million were actually deployed to the Persian Gulf region. However, not all deployed Pre-9/11 Servicemembers participated in the one of the three stages (Operation Desert Shield, Operation Desert Storm, and the Post- Desert Storm Period) of the 1990-1992 Gulf War. According to DoD, 68 percent (763,337) were actual Gulf War participants.

**Utilization of VA Healthcare and Benefits:** Upon discharge from active duty service, a portion of all Pre-9/11 Veterans came to the Department of Veterans Affairs (VA) for healthcare services. Others sought disability compensation benefits or even nonservice-connected (NSC) pension benefits. Some opted for a combination of healthcare and either compensation or pension.

a. *Healthcare:* Not only did the number of unique Veterans seeking inpatient and outpatient healthcare treatment soar from FY00 to FY09, but so did the number of associated encounters. In terms of inpatient treatment, there was a 131 percent increase (17,833 to 41,229) in unique Veterans and a 137 percent increase (24,671 to 58,525) in encounters. For outpatient treatment, the increases were even greater. There was a 209 percent increase (272,803 to 842,789) in unique Veterans and a 318 percent increase (1,791,577 to 7,494,646) in associated encounters.

As of FY09, just over 30 percent (1,972,633) of all Pre-9/11 Veterans were identified in one of VA's healthcare enrollment priority groups. The top three priority groups were Group 3 (20.4 percent), Group 1 (19 percent), and Group 8 (17.3 percent). Additionally, VISN 16 had the greatest number (87,389) of unique Pre-9/11 healthcare enrollees. Conversely, VISN 2 had the fewest unique Pre-9/11 enrollees (20,300). There were 1,005,916 unique Pre-9/11 Veterans using VA healthcare in FY09.

b. Benefits - Compensation: An analysis of the FY09 disability compensation data revealed that 17 percent (1,124,928) of all Pre-9/11 Veterans were service-connected for a minimum of one condition. Compared to FY00 (468,960), this figure represented a 140 percent increase. A total of 24,209 Pre-9/11 Veterans were service-connected for at least one undiagnosed illness. For those Pre-9/11

Veterans receiving compensated payments (1,121,669), the 80 percent and 90 percent combined disability evaluations incurred the highest increases over the FY00 to FY09 timeframe. As of September 30, 2010, there were 82,226 pending compensation claims.

- **c. Benefits NSC Pension:** Less than one percent (8,902) of all estimated living FY09 Pre-9/11 Veterans were drawing NSC pension benefits.
- d. Combined (Healthcare and Compensation Benefits): From FY00 to FY09, the number of service-connected Pre-9/11 Veterans receiving healthcare increased 288 percent (147,225 to 571,656.). During this same timeframe, there was an 87 percent increase in unique Veteran healthcare encounters for diseases of endocrine/nutritional/metabolic system category in the Pre-9/11 cohort. Unique Veteran healthcare encounters in the mental disorders category increased by 85 percent as well. For all categories, there was a 79 percent increase in the overall average of unique Veteran healthcare encounters. In terms of healthcare treatment for service-connected Pre-9/11 Veterans in FY09, 10.2 percent (97,634) were female and 8.5 percent (474,021) were male.

### Section I. Introduction

### Overview

Since early August 1990, American military personnel deployed to the Southwest Asia theater of operations have maintained a continuing presence in the Persian Gulf region. These Servicemembers – many of whom are now Veterans – have and continue to face issues unique to their service in the Southwest Asia theater of operations.

During this time, the American public has come to know the Gulf War's Operation Desert Shield and Operation Desert Storm as household terms. There are also the unforgettable tragedies of September 11, 2001, and the ensuing military response known as Operation Enduring Freedom (OEF) which continues to this day. Both OEF and Operation Iraqi Freedom (transitioned to Operation New Dawn in September 2010) continue to change the American mission in the Southwest Asia Theater and beyond. For the purposes of this report, these events and many others define the "Gulf War Era" – a period in time from August 2, 1990 through a date to be prescribed by Presidential proclamation or law.

Upon discharge, VA provides benefits and services to address the various needs of these Veterans. *Note:* Some VA benefits are available while on active duty. To better understand these needs, VA is producing a two-part report on the Pre-9/11 (August 2, 1990 to September 10, 2001) and Post-9/11 (September 12, 2001 to present) phases of the Gulf War Era. A supporting data system known as the Southwest Asia Veterans System (SWAVETS) will be used to provide data for these statistical reports.

Both the reports and SWAVETS will statistically link select benefits and healthcare data with DoD data. Collectively, the Pre-9/11 Report, the Post-9/11 Report, and SWAVETS will form a dynamic reporting mechanism for Gulf War Era data.

Additional VA data will be added with subsequent report releases. For instance, this initial Pre-9/11 Report includes sections on benefits (disability compensation, pension) and health care. In subsequent reports, VA will add education, insurance, loan guaranty, and vocational rehabilitation and employment information. These integrated and scalable reports will be separately released on recurring bases.

### <u>Purpose</u>

The purpose of report is to provide comprehensive statistics on the utilization of VA benefits and healthcare services by Gulf War Era Veterans from the Pre-9/11 Period (August 2, 1990 to September 10, 2001).

### **Objective**

To put forth meaningful and accurate data (as best possible given existing data limitations) regarding the utilization of VA benefits and services by Pre-9/11 Gulf War Era Veterans into an integrated and scalable report.

### **Methodology**

One outcome of the Secretary's Gulf War Veterans Illnesses Task Force (GWVI-TF) was the formation of an inter-disciplinary team of VA employees charged with developing and producing recurring and integrated statistical reports on the Gulf War Era Veteran population. This effort is called the Gulf War Integrated Project Team (GW-IPT). Led by the Office of Policy and Planning, GW-IPT participants include representatives from the National Center for Veterans Analysis and Statistics (NCVAS), Office of Information and Technology (OI&T), Veterans Benefits Administration (VBA), and the Veterans Health Administration (VHA). Major discussion points included the analysis of VA and DoD data variables, development of a supporting data system, and the preparation of a reporting framework. Historical research was also conducted during this time.

Once the framework was established, concurrent efforts began on the data system design, organizational data extracts, and the draft report itself. All organizational extracts were eventually merged into SWAVETS and soon began the generation of charts, tables and graphs. Thereafter, the final report was assembled and concurred on by the Department.

### **Design Features**

The following section outlines content discussions that formatively shaped the development and design of the Pre-9/11 Report and SWAVETS.

- **1. Operating Premise:** The Pre-9/11 Report integrates data from both DoD and VA data systems and is as accurate as possible. VA seeks to leverage integrated data in order to produce recurring reports that are never static and can be scaled to incorporate new data elements.
- **2. Structure and Definitions:** The Pre-9/11 Report contains information on the overall cohort as well as sub-cohorts, including those that participated in major events and the timelines. The Pre-9/11 cohort is initially bifurcated by deployment status (Persian Gulf region or not). Thereafter, the data is separated into one of two major cohorts: Gulf War or Stabilization Period a term developed for this report. In doing so, in-depth analyses of the Gulf War cohort is now possible by examining major sub-cohorts such as Operation Desert Shield, Operation Desert Storm, Post-Operation Desert Storm and exposure events at Al Jubayl, Saudi Arabia and Khamisiyah, Iraq.

- **3. Framework:** The Pre-9/11 Report provides enhanced analyses by examining not only disability compensation data, but also pension and healthcare information to include enrollment characteristics. Additionally, the use of integrated data permits VA to display the statistical relationships between those service-connected Veterans and their VA health care status (e.g., inpatient, outpatient etc.) in VA medical facilities. As noted earlier, subsequent reports will add greater depth through the inclusion of additional benefit programs.
- **4. Tabulation:** The report's tables contain unique Veteran counts by cohort and subcohort. In doing so, VA can examine the Gulf War (a multi-operational event within a relatively short period of time) and pinpoint issues by operation. Additionally, updated information can be generated in a real-time fashion without relying on extensive coding and arduous data matching. As a result, future reports will require less production hours and have enhanced deliveries.
- **5. Data:** The data structure in SWAVETS the report's supporting data system enables VA to secure the best "point in time" picture for each Veteran in FYs 2000, 2005, and 2009. System designs permit the addition of additional FYs, programs, and databases.
- **6. Key Decisions:** A critical step in the report's development includes a decision by the IPT to bifurcate the Gulf War Era into two cohorts (Pre-9/11 and Post-9/11). Another key decision involves the breakout of the Gulf War into three phases (Operation Desert Shield, Operation Desert Storm, and Post-Desert Storm) as well as by key exposure events.

### Section II. Cohorts

### **Overview**

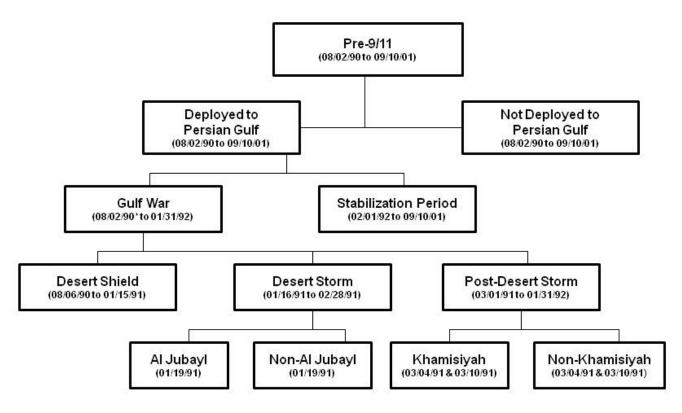
In order to capture the essence of the Pre-9/11 population, the entire cohort is systematically broken down by utilizing the following sorting hierarchy. To provide stability to the cohort and sub-cohorts, each was defined by key historical events and their associated dates. The following page provides a graphical depiction of the cohort and all sub-cohorts.

### **Sorting Hierarchy**

- **1. Gulf War Era**: Served in the Pre-9/11 (August 2, 1990 to September 10, 2001) or Post-9/11 (September 11, 2001 to current) timeframe.
- **2. Deployment Status:** Deployed to Persian Gulf or not deployed to the Persian Gulf (August 2, 1990\* to September 10, 2001).
- **3. Persian Gulf Deployment:** Participated in the Gulf War (August 2, 1990\* to January 31, 1992) or in the Stabilization Period.(February 1, 1992 to September 10, 2001)
- **4. Gulf War Component:** Served in Operation Desert Shield (August 2, 1990\* to January 15, 1991), Operation Desert Storm (January 16, 1991 to February 28, 1991) and/or in the Post-Desert Storm Period (March 1, 1991 to January 31, 1992).
- **5. Exposure Event:** Identified by DoD as potentially exposed during service in Al Jubayl, Iraq (January 19, 1991) and Khamisiyah, Saudi Arabia (March 4 and 19, 1991), or no exposure.

\*The start date for the Gulf War period of service as outlined in 38 CFR §3.2(i).

### **Hierarchical Structure**



<sup>\*</sup>The start date for the Gulf War period of service as outlined in Title 38 Code of Federal Regulations (CFR) §3.2(i).

### **Cohort Definitions**

**Pre-9/11:** Former active duty service personnel or activated Reserve and National Guard personnel who served during the inclusive period of August 2, 1990 to September 10, 2001. *Structure:* This cohort represents the unique total of all Pre-9/11 Veterans. It is composed of all unique deployed and non-deployed Veterans identified in the Deployed to Persian Gulf and Not Deployed to Persian Gulf cohorts.

**Deployed to Persian Gulf:** Former active duty service personnel or activated Reserve and National Guard personnel who deployed to the Southwest Asia theater of operations, as defined by 38 CFR §3.317, as part of the Gulf War (August 2, 1990 to January 31, 1992) and the Stabilization Period (February 1, 1992 to September 10, 2001) at any time during the inclusive period of August 2, 1990 to September 10, 2001. *Structure:* It is composed of all unique deployed Veterans identified in both the Gulf War and Stabilization Period cohorts. Both Deployed to Persian Gulf and Not Deployed to Persian Gulf are immediate subsets of the Pre-9/11 cohort.

**Not Deployed to Persian Gulf:** Former active duty service personnel or activated Reserve and National Guard personnel who did not deploy to the Southwest Asia theater of operations, as defined by 38 CFR §3.317, as part of Gulf War (August 2, 1990 to January 31, 1992) and the Stabilization Period (February 1, 1992 to September 10, 2001) at any time during the inclusive period of August 2, 1990 to September 10, 2001. *Structure:* It is composed of all unique non-deployed Veterans in the Not Deployed to Persian Gulf cohort only. Both Deployed to Persian Gulf and Deployed to Persian Gulf are immediate subsets of the Pre-9/11 cohort.

**Gulf War (1990-1992):** Former active duty service personnel or activated Reserve and National Guard personnel who were deployed to the Southwest Asia theater of operations, as defined by 38 CFR §3.317, from August 2, 1990 to January 31, 1992 and participated in one of the following events: Operation Desert Shield, Operation Desert Storm, or served during the post-Desert Storm timeframe. *Structure:* It is composed of all unique deployed Veterans in the Desert Shield, Desert Storm, and Post-Desert Storm cohorts. Both Gulf War and Stabilization Period are immediate subsets of the Deployed to Persian Gulf cohort. (*This definition applies only for purposes of classifying data in this report. For purposes of laws governing Veterans' benefits, the term "Persian Gulf War" means the period from August 2, 1990, to the date thereafter prescribed by Presidential proclamation or by law, and thus continues to the present. 38 U.S.C. § 101(33)).* 

**Stabilization Period:** Former active duty service personnel or activated Reserve and National Guard personnel who were deployed to the Southwest Asia theater of operations, as defined by 38 CFR §3.317, during the inclusive period of February 1, 1992 to September 10, 2001. During this timeframe, military operations to include Operation Desert Fox and Operation Northern Watch were initiated and completed. *Structure*: It is composed of all unique deployed Veterans in the Stabilization Period cohort only. A portion of deployed Veterans in the Desert Shield (9 percent), Desert

Storm (10 percent) and Post-Desert Storm (26 percent) cohorts also served in the Stabilization Period. Both Gulf War and Stabilization Period are immediate subsets of the Deployed to Persian Gulf cohort. *Note:* Stabilization Period is a designation coined for the purposes of this report to classify a period of time from February 1, 1992 to September 10, 2001.

**Desert Shield:** Former active duty service personnel or activated Reserve and National Guard personnel who were deployed to the Southwest Asia theater of operations, as defined by 38 CFR §3.317, from August 6, 1990 to January 15, 1991 and participated in Operation Desert Shield. *Structure:* It is composed of all unique deployed Veterans in the Desert Shield cohort only. A portion of deployed Veterans in the Desert Shield cohort are also identified in the Desert Storm (84 percent) and Post Desert Storm (67 percent) cohorts. Desert Shield, Desert Storm, and Post-Desert Storm are all immediate subsets of the Gulf War cohort.

**Desert Storm:** Former active duty service personnel or activated Reserve and National Guard personnel who were deployed to the Southwest Asia Theater of Operations, as defined by 38 CFR §3.317, from January 16, 1991 to February 28, 1991 and participated in Operation Desert Storm. *Structure:* It is composed of all unique deployed Veterans in the Desert Storm cohort only. A portion of deployed Veterans in the Desert Storm cohort are also identified in the Post-Desert Storm (80 percent) and Stabilization (10 percent) cohorts. Desert Shield, Desert Storm, and Post-Desert Storm are all immediate subsets of the Gulf War cohort

Post-Desert Storm: Former active duty service personnel or activated Reserve and National Guard personnel who were deployed to the Southwest Asia Theater of Operations as defined by 38 CFR §3.317 from March 1, 1991 to January 31, 1992. During this timeframe, Joint Task Force Provide Comfort I (relief to Kurds) was completed; Operation Desert Farewell was near completion; and Joint Task Force Provide Comfort II and Operation Southern Watch (Southern No Fly Zone) commenced, but were not completed. *Structure:* It is composed of all unique deployed Veterans in the Post-Desert Storm cohort only. A portion of deployed Veterans in the Post-Desert Storm cohort are also identified in the Stabilization (26 percent) cohort. Desert Shield, Desert Storm, and Post-Desert Storm are all immediate subsets of the Gulf War cohort. *Note:* Post-Desert Storm is a designation coined for the purposes of this report to classify a period of time from March 1, 1991 to January 31, 1992.

**Al Jubayl:** On or about January 19, 1991, U.S. Servicemembers reported an incident involving a "loud noise," "bright flash," and possible "Iraqi chemical warfare agent attack" that occurred in and around Al Jubayl, Saudi Arabia. DoD concluded that the chemical attack was "unlikely." This and additional information regarding these events may be accessed by clicking on the following DoD website:

http://www.defense.gov/releases/release.aspx?releaseid=2835. Structure: It is composed of all unique deployed Veterans in the Desert Storm cohort who were identified by DoD as being present at Al Jubayl for the above incident. Both Al Jubayl and Non-AlJubayl are immediate subsets of the Desert Storm cohort.

**Non-Al Jubayl:** *Structure:* It is composed of all unique deployed Veterans in the Desert Storm cohort who were <u>not</u> identified by DoD as being present at Al Jubayl for the incident. Both Al Jubayl and Non-AlJubayl are immediate subsets of the Desert Storm cohort.

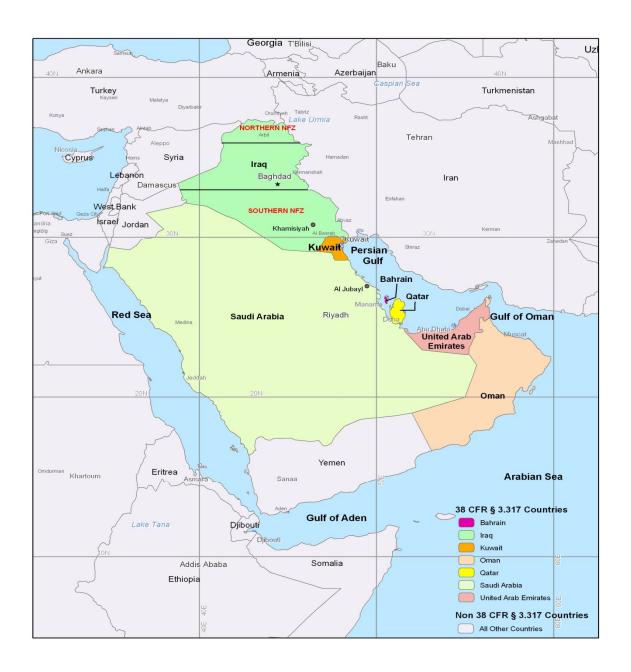
**Khamisiyah:** On March 4, 1991, and on March 10, 1991, U.S. Servicemembers destroyed Iraqi "chemical warfare agent rockets," possibly exposing military personnel to very low levels of chemical warfare agents, at the Khamisiyiah Army Supply Depot, Iraq. This and additional information regarding these events may be accessed by clicking on the following DoD website:

http://www.defense.gov/releases/release.aspx?releaseid=3322. Structure: It is composed of all unique deployed Veterans in the Post-Desert Storm cohort who were identified by DoD as being present at Khamisiyah for the above incidents. Both Khamisiyah and non-Khamisiyah are immediate subsets of the Post-Desert Storm cohort.

**Non-Khamisiyah:** *Structure:* It is composed of all unique deployed Veterans in the Post-Desert Storm cohort who were <u>not</u> identified by DoD as being present at Khamisiyah for the incidents. Both Khamisiyah and non-Khamisiyah are immediate subsets of the Post-Desert Storm cohort.

### Map of the Southwest Theater of Operations (as defined by 38 CFR §3.317)

**38 CFR §3.317**: Iraq, Kuwait, Saudi Arabia, the neutral zone between Iraq and Saudi Arabia, Bahrain, Qatar, the United Arab Emirates, Oman, the Gulf of Aden, the Gulf of Oman, the Persian Gulf, the Arabian Sea, the Red Sea, and the airspace above these locations. Note: The neutral zone between Iraq and Saudi Arabia no longer exists.



### **Gulf War (1990-1992) End Date**

Not as well known as other military actions, Operation Desert Farewell – a major subset of the Post-Desert Storm Period – served as the retrograde and redeployment phase of the Gulf War. It was preceded by both Operation Desert Shield and Operation Desert Storm. Figure 1 provides a timetable and high-level summary for each military operation.

Figure 1. Select Gulf War Military Operations

Cohort	Start Date	End Date	Summary
Desert Shield	August 6, 1990	January 15, 1991	Mobilization and
			deployment
Desert Storm	January 16, 1991	February 28, 1991	Major combat operations
Desert Farewell (a major	March 1, 1991	January 31, 1992	Retrograde and
subset of the Post-Desert			redeployment
Storm Period)			

Once the cessation of hostilities was announced on February 28, 1991, Operation Desert Farewell was activated by the U.S. Army. To coordinate the redeployment and retrograde operations, the 22<sup>nd</sup> Support Command was established. Over the course of the next eleven months, personnel and equipment were systematically removed from the theater. The bulk of the deployed military personnel were transported home during the March - June 1991 timeframe.

As noted in a United States Army Europe (USAREUR) Operation DESERT FAREWELL After Action Report from October 1991, "all USAREUR units and their equipment closed at home stations with the exception of 130 soldiers and some POMCUS (Prepositioning of Material Configured in Unit Sets) and Theater Reserve stocks." Additionally, Air Force research revealed that by December 31, 1991, the "majority of the supplies, with the exception of ammunition, had been withdrawn and redeployed."

While the precise end date remains undetermined by legislation, the Congressional Budget Office reported that the redeployment ended in January 1992. As reported by John Scales in *Certain Victory: The US Army in the Gulf War*, the 22<sup>nd</sup> Support Command departed Saudi Arabia on January 2, 1992. This is the same unit commanded by Lieutenant General William "Gus" Pagonis, U.S. Army (retired), who served as the single theater logistics commander for the entire Gulf War effort. For the purposes of statistically capturing the Gulf War cohort and accounting for residual personnel, January 31, 1992 was selected as the end date.

### **Section III: Section Notes**

The aggregated data for this report is divided into the following four profiles. For each profile, the following notes are provided.

Important Note #1: Using the sorting hierarchy and cohort definitions outlined in Section II of this report, all DoD and VA data was parsed into cohorts and sub-cohorts. Except for the Pre-9/11 data and in places otherwise specified, the presented numbers are unique for each sub-cohort. This is due to the nature of the sub-cohorts which are: 1) all subsets of the Pre-9/11 cohort; 2) in some cases multi-event operations within short periods of time (e.g., Gulf War); and 3) reflect multiple deployments over an extended period. Therefore, one cannot add the various sub-cohorts to arrive at a total. The overall master total is reflected in the Pre-9/11 fields.

Important Note #2: To aid the understanding of each chart, there are two definition sections in this report. For a description of each cohort, please examine Section II's Cohort Definitions (Page 9). For all other terms, please review Appendix A.

<u>Service Member (SM) Profile</u>: Based upon a collaborative relationship with DoD's Defense Manpower Data Center (DMDC), VA secured a listing of all discharged Servicemembers who served at least one day of active duty during the Pre-9/11 period (August 2, 1990 through September 10, 2001). No active duty records were utilized. .

<u>Veteran Profile - Integrated Benefits and Services (IBS):</u> For this section, VA integrated DoD demographic data along with VA benefits and healthcare information (excludes demographic data) to generate numbers that reflect an "overall" utilization of VA benefits and services by cohort and sub-cohort.

<u>Veteran Profile - Health Care (HC):</u> Using the authoritative DoD service member file as a source, data matches were conducted against select VA health care databases generally known as the inpatient file, outpatient file and patient treatment file. Health care cost information was secured from the Veterans Equitable Resource Allocation (VERA) dataset.

<u>Veteran Profile – Benefits (BEN):</u> For this profile, the authoritative DoD data was matched against a variety of benefits-related databases. For the purposes of this report, a maximum 25-VBA diagnostic code cap was utilized for this report. The cap was determined as follows: S/C granted conditions in descending order of disability evaluation, then S/C denied conditions arrayed in ascending order of diagnostic code. This means that not every VBA diagnostic code in each Veteran's benefit record was counted. As a result, the VBA diagnostic code tallies do not reflect all s/c benefits for which disability compensation benefits are being paid. This profile does not include International Classification of Diseases (ICD)-9-CM codes (healthcare codes).

## Section IV: Service Member (SM) Profile

Table SM-1: Vital Status for All Pre-9/11 Veterans by Cohort – FY 2009

Vital Statistics	Pre-9/11	Deployed to Persian Gulf	Not Deployed to Persian Gulf	Gulf War	Stabilization Period	Desert Shield	Desert Storm	Post- Desert Storm	Al Jubayl	Non-Al Jubayl	Khamisiyah	Non- Khamisiyah
Total	6 516 020	1 120 252	F 296 677	762 227	402 611	F20 024	F01 C02	670.244	1 224	F90 240	145 456	F22 700
Total	6,516,030	1,129,353	5,386,677	763,337	492,611	529,034	581,683	679,244	1,334	580,349	145,456	533,788
Living	6,453,695	1,115,192	5,338,503	751,383	489,014	520,521	572,242	668,490	1,299	570,943	142,553	525,937
Deceased	62,335	14,161	48,174	11,954	3,597	8,513	9,441	10,754	35	9,406	2,903	7,851

**Source:** Official DoD military personnel records obtained through a Department of Veterans Affairs/Department of Defense (VA/DoD) information exchange.

**Notes:** The Pre-9/11 column represents the overall unique total. All other categories are sub-cohorts of the Pre-9/11 cohort; 2) All cohort data is as of FY09; and 3) Acronym: FY = Fiscal Year.

Table SM-2: Cohorts by Gender Distribution – FY 2009

Cohort	Female	Male	Unknown*
Pre-9/11	959,554	5,555,907	569
Deployed to Persian Gulf	81,867	1,047,241	245
Not Deployed to Persian Gulf	877,687	4,508,666	324
Gulf War	54,235	708,859	243
Stabilization Period	33,675	458,805	131
Desert Shield	35,881	493,013	140
Desert Storm	41,318	540,181	184
Post-Desert Storm	48,210	630,804	230
Al Jubayl	0	1,333	<10
Non-Al Jubayl	41,318	538,848	183
Khamisiyah	13,207	132,168	81
Non-Khamisiyah	35,003	498,636	149

**Notes:** 1) The Pre-9/11 column represents the overall unique total. All other categories are sub-cohorts of the Pre-9/11 cohort; 2) All cohort data is as of FY09; 3) A "<10" entry represents a cell size of less than 10; and 4) Acronym: FY = Fiscal Year.

Table SM-3: Cohorts by Pay Category – FY 2009

Cohort	Officer	Warrant Officer	Enlisted	Unknown*
Pre-9/11	790,219	75,258	5,613,036	37,517
Deployed to Persian Gulf	130,430	18,519	975,738	4,666
Not Deployed to Persian Gulf	659,789	56,739	4,637,298	32,851
Gulf War	85,102	14,886	659,438	3,911
Stabilization Period	61,153	5,561	424,698	1,199
Desert Shield	56,907	10,735	458,593	2,799
Desert Storm	63,275	12,071	503,252	3,085
Post-Desert Storm	75,245	13,668	586,919	3,412
Al Jubayl	59	<10	1,260	<10
Non- Al Jubayl	63,216	12,062	501,992	3,079
Khamisiyah	15,564	3,905	125,071	916
Non- Khamisiyah	59,681	9,763	461,848	2,496

**Notes:** 1) The above data is sourced from official DoD military personnel information; 2) All cohort data is as of FY09; 3) "<10" entry represents a cell size of less than 10; and 4) Acronym: FY = Fiscal Year.

Table SM-4: Cohorts by Current Age – FY 2009

Age Bracket	Pre-9/11	Deployed to Persian Gulf	Not Deployed to Persian Gulf	Gulf War	Stabilization Period	Desert Shield	Desert Storm	Post- Desert Storm	Al Jubayl	Non-Al Jubayl	Khamisiyah	Non- Khamisiyah
<25	81	<10	72	<10	<10	<10	<10	<10	0	<10	<10	<10
25-34	1,419,020	43,414	1,375,606	49	433,72	29	34	44	0	34	15	29
35-44	2,669,784	584,163	2,085,621	369,679	276,758	254,061	280,252	329,881	603	279,649	67,242	262,639
45-54	1,500,492	360,741	1,139,751	274,096	134,829	192,254	209,873	243,695	330	209,543	53,378	190,317
55-64	724,665	123,613	601,052	103,040	35,541	71,414	78,289	90,926	277	78,012	20,872	70,054
65-74	170,939	14,977	155,962	14,089	1,836	9,656	11,246	12,523	113	11,133	3,284	92,39
75-84	15,620	1,124	14,496	1,106	61	716	904	994	10	894	264	730
85+	15,415	1,301	14,114	1,261	210	893	1,071	1,166	<10	1,070	394	772
Unknown*	14	11	<10	<10	<10	<10	<10	<10	0	<10	<10	<10

**Notes:** 1) The Pre-9/11 column represents the overall unique total. All other categories are sub-cohorts of the Pre-9/11 cohort; 2) All historic data is as of FY09; 3) A "<10" entry represents a cell size of less than 10; and 4) Acronym: FY = Fiscal Year.

<sup>\*</sup>Unknown records indicate blank fields in the DoD record.

Table SM-5: Branches of Service by Cohort – FY 2009

Branch of Service	Pre-9/11	Deployed to Persian Gulf	Not Deployed to Persian Gulf	Gulf War	Stabilization Period	Desert Shield	Desert Storm	Post-Desert Storm	Al Jubayl	Non-Al Jubayl	Khamisiyah	Non- Khamisiyah
Air Force	772,751	192,878	579,873	89,472	135,320	51,882	55,492	76,254	0	55,492	1,039	72,215
Air Force Reserve	383,295	5,579	377,716	5,522	67	3,083	4,983	4,936	0	4,983	172	4,764
Air National Guard	108,066	6,434	101,632	6,434	14	5,208	5,710	5,578	0	5,710	36	5,542
Army	1,220,775	320,709	900,066	279,540	58,097	217,790	246,722	267,637	0	246,722	115,336	152,301
Army National Guard	529,233	36,972	492,261	36,886	384	24,111	34,220	35,610	0	34,220	13,840	21,770
Army Reserve	1,278,397	42,622	1,235,775	42,553	557	25,062	33,604	40,474	0	33,604	14,164	26,310
Coast Guard	62,852	577	62,275	346	343	160	149	239	0	149	<10	238
Coast Guard Reserve	35,389	502	34,887	502	0	293	288	484	0	288	0	484
Marine Corps	384,409	114,542	269,867	91,662	28,215	64,685	71,856	67,693	0	71,856	845	66,848
Marine Corps Reserve	297,278	12,980	284,298	12,847	157	11,318	12,384	11,470	0	12,384	<10	11,468
Navy	982,092	388,230	593,862	190,278	269,383	120,191	109,770	162,100	627	109,143	0	162,100
Navy Reserve	455,911	7,303	448,608	7,270	74	5,251	6,505	6,748	707	5,798	0	6,748
National Oceanographic and Atmospheric Administration Commissioned Officer Corps	223	0	223	0	0	0	0	0	0	0	0	0
Other Service /Unknown Service - Reserve Component	29	0	29	0	0	0	0	0	0	0	0	0
Public Health Service	5,295	0	5,295	0	0	0	0	0	0	0	0	0
Public Health Service Reserve	10	0	10	0	0	0	0	0	0	0	0	0
Unknown Service - Regular Component	25	25	0	25	0	0	0	21	0	0	21	0

**Notes**: 1) The Pre-9/11 column represents the overall unique total. All other categories are sub-cohorts of the Pre-9/11 cohort; 2) All cohort data is as of FY09; 3) A "<10" entry represents a cell size of less than 10; and 4) Acronym: FY = Fiscal Year.

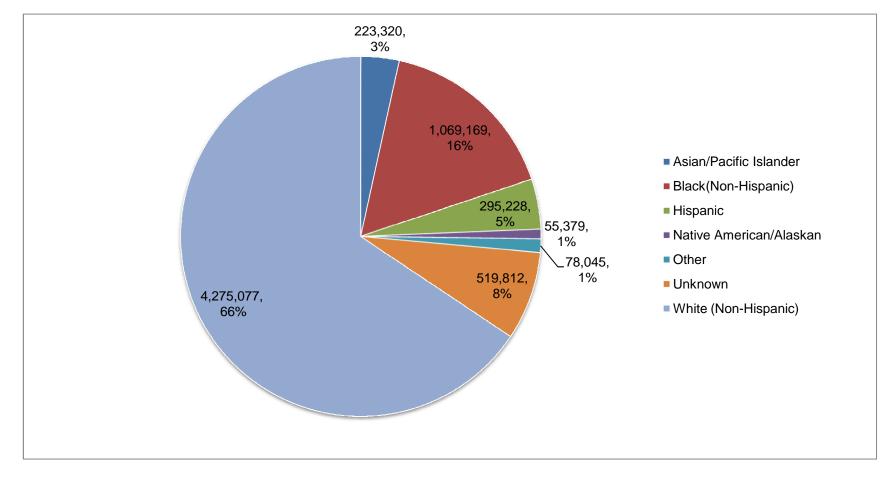
Table SM-6: Race/Ethnicity – FY 2009

		Deployed to Persian	Not Deployed to Persian		Stabilization	Desert	Desert	Post-Desert		Non-Al		Non-
Race	Pre-911	Gulf	Gulf	Gulf War	Period	Shield	Storm	Storm	Al Jubayl	Jubayl	Khamisiyah	Khamisiyah
Asian/Pacific Islander	223,320	40,114	183,206	24,666	21,016	17,390	18,722	22,240	43	18,679	4,462	17,778
Black(Non- Hispanic)	1,069,169	216,861	852,308	158,555	80,309	113,93 1	126,223	144,056	142	126,081	38,330	105,726
Hispanic	295,228	39,745	255,483	19,739	23,441	13,432	14,877	17,552	20	14,857	3,927	13,625
Native American/ Alaskan	55,379	8,332	47,047	5,266	3,928	3,569	4,013	4,632	16	3,997	974	3,658
Other <sup>1</sup>	78,045	14,531	63,514	10,858	4,953	7,954	8,915	9,951	<10	8,911	3,329	6,622
Unknown*	519,812	49,755	470,057	42,395	12,224	29,816	31,985	36,426	93	31,892	7,451	28,975
White (Non- Hispanic	4,275,077	760,015	3,515,062	501,858	346,740	342,94 2	376,948	444,387	1,016	375,932	86,983	357,404

**Notes:** 1) The Pre-9/11 column represents the overall unique total. All other categories are sub-cohorts of the Pre-9/11 cohort; 2) All cohort data is as of FY09; 3) A "<10" entry represents a cell size of less than 10; 4) DoD-provided race/ethnicity data does not reflect the Office of Management and Budget's (OMB's) current race and ethnicity classifications; and 5) Acronym: FY = Fiscal Year.

<sup>\*</sup>Unknown records indicate blank fields in the DoD record.

<sup>&</sup>lt;sup>1</sup> "Other" represents a classification in which the service member's race/ethnicity was not listed or the available options were not accepted.



**Graphic SM-1: Race/Ethnicity for the Pre-9/11 Cohort – FY 2009** 

**Notes:** 1) "Other" represents a classification in which the service member's race/ethnicity was not listed or the available options were not accepted; 2) \*Unknown records indicate blank fields in the DoD record; 3) DoD-provided race/ethnicity data does not reflect OMB's current race and ethnicity classifications; 4) All cohort data is as of FY09; and 5) Acronym: FY = Fiscal Year.

Table SM-7: State of Record at Discharge

State (and other)	Pre-9/11	Deployed to Persian Gulf	Gulf War	Stabilization Period
Alabama	107,096	19,455	14,778	6,475
Alaska	36,045	4,843	2,727	2,644
Arizona	100,049	19,319	11,738	9,768
Arkansas	50,536	8,899	6,230	3,652
California	429,403	93,206	48,644	58,101
Colorado	108,745	19,048	11,400	9,567
Connecticut	35,002	3,906	2,148	2,136
Delaware	17,871	3,019	1,738	1,793
District of Columbia	10,388	1,632	1,038	764
Florida	308,957	67,383	40,002	37,665
Georgia	215,500	43,629	31,481	16,537
Hawaii	62,379	9,974	5,363	5,728
Idaho	26,707	4,628	2,409	2,793
Illinois	128,198	20,292	11,964	10,788
Indiana	71,824	10,962	7,553	4,619
Iowa	37,113	5,293	3,557	2,267
Kansas	60,648	11,462	8,451	3,942
Kentucky	75,812	13,304	10,142	4,320
Louisiana	82,357	12,924	8,846	5,430
Maine	23,989	3,809	2,285	2,037
Maryland	136,463	22,513	13,554	11,602
Massachusetts	57,549	6,200	3,743	3,091
Michigan	85,630	14,795	9,621	6,761

**Note:** The Pre-9/11 column represents the overall unique total. All other categories are sub-cohorts of the Pre-9/11 cohort.

Table SM-7: State of Record at Discharge (continued)

State (and other)	Pre-9/11	Deployed to Persian Gulf	Gulf War	Stabilization Period
Minnesota	54,426	6,814	4,280	3,283
Mississippi	64,089	9,840	6,546	4,424
Missouri	90,543	15,002	10,393	6,022
Montana	20,174	3,038	1,733	1,678
Nebraska	39,789	6,996	3,696	4,182
Nevada	45,817	10,013	5,410	6,079
New Hampshire	18,166	2,505	1,589	1,226
New Jersey	65,688	8,634	5,031	4,673
New Mexico	44,085	8,480	4,522	5,107
New York	140,902	18,680	12,488	7,898
North Carolina	218,014	46,087	35,032	15,106
North Dakota	17,735	2,699	1,409	1,550
Ohio	127,822	20,700	12,938	10,179
Oklahoma	86,037	16,175	10,570	7,807
Oregon	43,951	6,891	3,950	3,774
Pennsylvania	135,694	19,528	13,136	8,384
Puerto Rico	25,783	2,016	1,659	505
Rhode Island	15,423	2,242	1,242	1,249
South Carolina	110,310	21,102	14,443	9,105
South Dakota	18,268	2,828	1,778	1,315
Tennessee	103,665	21,847	16,593	7,401
Texas	423,754	81,237	52,760	37,138
Utah	37,173	6,066	3,625	3,191

**Note:** The Pre-9/11 column represents the overall unique total. All other categories are sub-cohorts of the Pre-9/11 cohort.

Table SM-7: State of Record at Discharge (continued)

State (and other)	Pre-9/11	Deployed to Persian Gulf	Gulf War	Stabilization Period
Vermont	9,095	1,087	761	442
Virgin Islands	1,329	120	88	44
Virginia	347,693	79,954	45,893	45,536
Washington	162,657	33,778	18,824	19,404
West Virginia	26,755	4,521	3,228	1,715
Wisconsin	60,593	9,159	6,397	3,699
Wyoming	12,385	1,908	1,025	1,108
Other <sup>2</sup>	190,542	44,324	24,764	25,182

**Note:** The Pre-9/11 column represents the overall unique total. All other categories are sub-cohorts of the Pre-9/11 cohort.

<sup>&</sup>lt;sup>2</sup> "Other" consists of Army Post Offices (APOs) and Fleet Post Offices (FPOs) in New York and San Francisco, other territories, and undefined geographic jurisdictions.

# Section V: Veteran Profile - Integrated Benefits and Services (IBS)

Table IBS-1: S/C Veterans Receiving VA Healthcare by VISN – FY 2009

VISN	Pre-9/11	Deployed to Persian Gulf	Not Deployed to Persian Gulf	Gulf War	Stabilization Period	Desert Shield	Desert Storm	Post- Desert Storm	Al Jubayl	Non-Al Jubayl	Khamisiyah	Non- Khamisiyah
1	18,025	3,525	14,500	2,633	1,248	1,823	2,021	2,330	<10	2,020	562	1,768
2	10,637	2,204	8,433	1,685	745	1,190	1,341	1,537	<10	1,339	383	1,154
3	9,511	1,842	7,669	1,472	541	1,012	1,182	1,335	<10	1,181	357	978
4	21,071	4,708	16,363	3,642	1,592	2,451	2,838	3,271	<10	2,834	926	2,345
5	18,524	4,160	14,364	3,134	1,468	2,141	2,444	2,865	<10	2,442	772	2,093
6	46,538	14,656	31,882	11,856	4,246	9,015	9,663	10,752	32	9,631	2,782	7,970
7	54,127	14,967	39,160	12,300	4,039	9,326	10,226	11,264	40	10,186	3,691	7,573
8	48,328	11,624	36,704	8,679	4,327	6,090	6,611	7,812	<10	6,604	1,960	5,852
9	30,394	8,419	21,975	7,074	2,016	5,251	5,883	6,526	25	5,858	2,085	4,441
10	14,399	3,282	11,117	2,491	1,133	1,779	1,965	2,241	<10	1,963	585	1,656
11	19,737	4,562	15,175	3,600	1,455	2,608	2,852	3,247	<10	2,849	797	2,450
12	17,146	3,869	13,277	2,924	1,352	2,081	2,298	2,636	<10	2,295	630	2,006
15	20,761	5,261	15,500	4,234	1,514	3,068	3,407	3,813	<10	3,398	1,137	2,676
16	53,896	13,607	40,289	10,539	4,553	7,426	8,332	9,491	20	8,312	2,424	7,067
17	43,083	11,426	31,657	8,933	3,559	6,653	7,354	8,182	<10	7,350	3,069	5,113
18	29,948	7,879	22,069	5,705	3,116	3,931	4,545	5,162	<10	4,539	1,435	3,727
19	22,967	5,142	17,825	3,648	2,049	2,532	2,845	3,235	<10	2,838	865	2,370
20	34,057	7,852	26,205	5,514	3,247	3,857	4,265	4,941	10	4,255	1,131	3,810
21	25,025	6,242	18,783	4,375	2,786	2,972	3,189	3,828	<10	3,184	648	3,180
22	33,306	10,317	22,989	6,527	5,522	4,574	4,660	5,420	18	4,642	497	4,923
23	26,046	5,609	20,437	4,104	2,062	2,942	3,289	3,646	<10	3,282	932	2,714

**Notes:** 1) The Pre-9/11 column represents the overall unique total. All other categories are sub-cohorts of the Pre-9/11 cohort; 2) All cohort data is as of FY09; 3) A "<10" entry represents a cell size of less than 10; 4) For the purposes of this chart, "healthcare" is classified as any provided medical service at a VA-funded healthcare facility; and 5) Acronyms: FY = Fiscal Year, S/C = service-connected.

Table IBS-2: Cohorts by S/C Veterans Receiving VA Healthcare

Cohort	FY 2000	FY 2005	FY 2009
Pre-9/11	147,225	334,398	571,656
Deployed to Persian Gulf	43,894	91,640	145,832
Not Deployed to Persian Gulf	103,331	242,758	425,824
Gulf War	35,166	70,273	110,487
Stabilization Period	13,374	31,156	51,438
Desert Shield	25,283	50,471	79,415
Desert Storm	27,823	55,471	87,612
Post-Desert Storm	31,493	62,992	99,470
Al Jubayl	56	105	198
Non-Al Jubayl	27,767	55,366	87,414
Khamisiyah	8,747	17,261	26,521
Non-Khamisiyah	22,746	45,731	72,949

**Notes:** 1) The Pre-9/11 column represents the overall unique total. All other categories are sub-cohorts of the Pre-9/11 cohort; 2) All cohort data is as of FY00, FY05, and FY09; 3) A "<10" entry represents a cell size of less than 10; 4) For the purposes of this chart, "healthcare" is classified as any provided medical service at a VA-funded healthcare facility; and 5) Acronyms: FY = Fiscal Year, S/C = service-connected.

Table IBS-3: Cohorts by Current Age of S/C Veterans Receiving VA Healthcare - FY 2009

Age Range	Pre- 9/11	Deployed to Persian Gulf	Not Deployed to Persian Gulf	Gulf War	Stabilization Period	Desert Shield	Desert Storm	Post- Desert Storm	Al Jubayl	Non-Al Jubayl	Khamisiyah	Non- Khamisiyah
<25	<10	<10	<10	<10	0	<10	<10	<10	0	<10	0	<10
25-34	95,012	2,548	92,464	<10	2,546	<10	<10	<10	0	<10	<10	<10
35-44	162,226	49,225	113,001	35,166	19,095	25,499	28,281	31,699	56	28,225	8,164	23,535
45-54	179,666	63,189	116,477	48,678	22,353	35,054	38,533	44,000	53	38,480	11,703	32,297
55-64	112,913	27,248	85,665	23,200	7,025	16,401	18,057	20,712	66	17,991	5,716	14,996
65-74	20,473	3,345	17,128	3,166	405	2,258	2,512	2,810	21	2,491	861	1,949
75-84	1,014	174	840	172	10	122	138	151	<10	136	42	109
85+	348	100	248	99	<10	76	86	94	0	86	33	61
Unknown*	<10	<10	0	<10	0	0	<10	<10	0	<10	<10	0

**Notes:** 1) The Pre-9/11 column represents the overall unique total. All other categories are sub-cohorts of the Pre-9/11 cohort; 2) All cohort data is as of FY09; 3) A "<10" entry represents a cell size of less than 10; 4) For the purposes of this chart, "healthcare" is classified as any provided medical service at a VA-funded healthcare facility; and 5) Acronyms: FY = Fiscal Year, S/C = service-connected.

<sup>\*</sup>Unknown records indicate blank fields in the DoD record.

Table IBS-4: Cohorts by Gender of S/C Veterans Receiving VA Healthcare – FY 2009

Gender	Pre-9/11	Deployed to Persian Gulf	Not Deployed to Persian Gulf	Gulf War	Stabilization Period	Desert Shield	Desert Storm	Post- Desert Storm	Al Jubayl	Non-Al Jubayl	Khamisiyah	Non- Khamisiyah
Female	97,634	14,973	82,661	10,650	5,456	7,295	8,228	9,529	<10	8,228	3,034	6,495
Male	474,021	130,859	343,162	99,837	45,982	72,120	79,384	89,941	198	79,186	23,487	66,454
Unknown*	<10	0	<10	0	0	0	0	0	0	0	0	0

**Notes:** 1) The Pre-9/11 column represents the overall unique total. All other categories are sub-cohorts of the Pre-9/11 cohort; 2) All cohort data is as of FY09; 3) A "<10" entry represents a cell size of less than 10; 4) For the purposes of this chart, "healthcare" is classified as any provided medical service at a VA-supported healthcare facility; and 5) Acronyms: FY=Fiscal Year, S/C = service-connected.

<sup>\*</sup>Unknown records indicate blank fields in the DoD record.

Table IBS-5: Cohorts by Race/Ethnicity of S/C Veterans Receiving VA Healthcare – FY 2009

Race/Ethnicity	Pre-9/11	Deployed to Persian Gulf	Not Deployed to Persian Gulf	Gulf War	Stabilization Period	Desert Shield	Desert Storm	Post- Desert Storm	Al Jubayl	Non-Al Jubayl	Khamisiyah	Non- Khamisiyah
Asian/Pacific Islander	25,199	7,104	18,095	4,963	3,257	3,620	3,840	4,498	11	3,829	972	3,526
Black(Non- Hispanic)	138,702	41,020	97,682	32,978	11,976	24,496	27,103	30,216	21	27,082	9,445	20,771
Hispanic	30,773	5,812	24,961	3,943	2,475	2,763	3,094	3,555	< 10	3,092	1,045	2,510
Native American/Alaskan	5,367	1,134	4,233	813	441	552	633	718	<10	630	185	533
Other <sup>1</sup>	8,970	2,733	6,237	2,255	710	1,709	1,912	2,090	<10	1,911	783	1,307
Unknown*	25,431	5,337	20,094	4,785	946	3,487	3,833	4,238	<10	3,825	1,232	3,006
White (Non- Hispanic	337,214	82,692	254,522	60,750	31,633	42,788	47,197	54,155	152	47,045	12,859	41,296

**Notes:** 1) The Pre-9/11 column represents the overall unique total. All other categories are sub-cohorts of the Pre-9/11 cohort; 2) All cohort data is as of FY09; 3) A "<10" entry represents a cell size of less than 10; 4) For the purposes of this chart, "healthcare" is classified as any provided medical service at a VA-supported healthcare facility; 5) DoD-provided race/ethnicity data does not reflect OMB's current race and ethnicity classifications; and 6) Acronyms: FY = Fiscal Year, S/C = service-connected.

<sup>&</sup>lt;sup>1</sup> "Other" represents a classification in which the service member's race/ethnicity was not listed or the available options were not accepted.

<sup>\*</sup>Unknown records indicate blank fields in the DoD record.

Table IBS-6: Broad ICD-9 Categories for S/C Pre-9/11 Veterans Receiving Healthcare

Broad ICD-9 Categories	FY 2000	FY 2005	FY 2009
Infectious and Parasitic Diseases (001-139)	14,639	37,315	60,186
Malignant Neoplasms (140-208)	3,236	8,005	18,400
Benign Neoplasms (210-239)	5,473	16,975	36,557
Diseases of Endocrine/Nutritional/Metabolic Systems(240-279)	37,374	134,978	286,425
Diseases of Blood and Blood Forming Organs (280-289)	3,686	12,270	27,226
Mental Disorders (290-319)	40,541	131,011	263,891
Diseases of Nervous System/ Sense Organs (320-389)	43,851	124,953	240,267
Diseases of Circulatory System (390-459)	37,322	110,841	219,064
Diseases of Respiratory System (460-519)	31,476	80,583	135,955
Diseases of Digestive System (520-579)	34,804	101,117	181,706
Diseases of Genitourinary System (580-629)	19,604	51,931	102,118
Complications of the Pregnancy, Childbirth, and the Puerperium (630-676)	311	654	913
Diseases of Skin (680-709)	19,668	51,315	91,159
Diseases of Musculoskeletal System/Connective System (710-739)	67,972	186,955	335,262
Congenital Anomalies (741-759)	2,075	5,295	9,783
Certain Conditions Originating in the Perinatal Period (760,770,779)	12	35	47
Symptoms, Signs and III Defined Conditions (780-799)	43,676	125,804	252,755
Injury/Poisonings (800-999)	19,173	48,368	86,951
Causes of Injury and Poisoning (E81-E99)	2,736	11,493	24,639
Influencing Health Status and Contact with Health Services (V01-V86)	106,546	265,366	468,555
Other	68	70	152

**Notes:** 1) All cohort data is as of FY00, FY05, and FY09; 2) A "<10" entry represents a cell size of less than 10; 3) For the purposes of this chart, "healthcare" is classified as any provided medical service at a VA-supported or contracted healthcare facility; 4) Veterans can have multiple diagnoses with each encounter. A Veteran is counted only once in any single diagnostic category, but can be counted in multiple categories; 5) ICD-9 data is distinct from VA's Rating Schedule data; and 6) Acronyms: FY = Fiscal Year, S/C = service-connected.

Table IBS-7: Cohorts by Inpatient Healthcare for S/C Veterans

FY	Pre-9/11	Deployed to Persian Gulf	Not Deployed to Persian Gulf	Gulf War	Stabilization Period	Desert Shield	Desert Storm	Post- Desert Storm	Al Jubayl	Non-Al Jubayl	Khamisiyah	Non- Khamisiyah
2000	8,261	2,393	5,868	2,043	584	1,441	1,612	1,804	<10	1,609	508	1,296
2005	14,479	3,822	10,657	3,177	983	2,229	2,533	2,856	<10	2,529	822	2,034
2009	24,578	5,844	18,734	4,796	1,563	3,492	3,874	4,312	11	3,863	1,209	3,103

**Notes:** 1) The Pre-9/11 column represents the overall unique total. All other categories are sub-cohorts of the Pre-9/11 cohort; 2) All cohort data is as of FY00, FY05, and FY09; 3) A "<10" entry represents a cell size of less than 10; and 4) Acronyms: FY = Fiscal Year, S/C = service-connected.

Table IBS-8: Cohorts by Outpatient Healthcare for S/C Veterans

FY	Pre-9/11	Deployed to Persian Gulf	Not Deployed to Persian Gulf	Gulf War	Stabilization Period	Desert Shield	Desert Storm	Post- Desert Storm	Al Jubayl	Non-Al Jubayl	Khamisiyah	Non- Khamisiyah
2000	138,389	41,395	96,994	33,226	12,545	23,883	26,321	29,790	54	26,267	8,279	21,511
2005	331,067	90,784	240,283	69,679	30,801	50,053	55,024	62,464	105	54,919	17,118	45,346
2009	540,802	137,960	402,842	105,334	47,646	75,799	83,617	94,820	191	83,426	25,473	69,347

**Notes:** 1) The Pre-9/11 column represents the overall unique total. All other categories are sub-cohorts of the Pre-9/11 cohort; 2) All cohort data is as of FY00, FY05, and FY09; and 3) Acronyms: FY = Fiscal Year, S/C = service-connected.

Table IBS-9: Cohorts by Fee-Basis Healthcare for S/C Veterans

FY	Pre-9/11	Deployed to Persian Gulf	Not Deployed to Persian Gulf	Gulf War	Stabilization Period	Desert Shield	Desert Storm	Post- Desert Storm	Al Jubayl	Non-Al Jubayl	Khamisiyah	Non-Khamisiyah
2000	19,261	5,384	13,877	4,231	1,774	3,017	3,288	3,775	<10	3,279	1,021	2,754
2005	51,848	13,418	38,430	10,444	4,339	7,441	8,172	9,321	14	8,158	2,580	6,741
2009	122,938	29,338	93,600	22,911	9,385	16,431	18,130	20,567	44	18,086	5,866	14,701

**Notes:** 1) The Pre-9/11 column represents the overall unique total. All other categories are sub-cohorts of the Pre-9/11 cohort; 2) All cohort data is as of FY00, FY05, and FY09; and 3) Acronyms: FY = Fiscal Year, S/C = service-connected.

Table IBS-10: Cohorts by UDX S/C Veterans Receiving Healthcare

Cohort	2000	2005	2009
Pre-9/11	2,980	4,439	18,002
Deployed to Persian Gulf	2,932	4,220	15,380
Not Deployed to Persian Gulf <sup>3</sup>	48	219	2,622
Gulf War	2,859	4,091	14,749
Stabilization Period	208	342	1,550
Desert Shield	2,150	3,080	11,087
Desert Storm	2,561	3,635	13,142
Post-Desert Storm	2,642	3,803	13,787
Al Jubayl	7	17	56
Non-Al Jubayl	2,554	3,618	13,086
Khamisiyah	956	1,416	4,889
Non-Khamisiyah	1,686	2,387	8,898

**Notes:** 1) The Pre-9/11 column represents the overall unique total. All other categories are sub-cohorts of the Pre-9/11 cohort; 2) All cohort data is as of FY00, FY05, and FY09; 3) A "<10" entry represents a cell size of less than 10; 4) For the purposes of this chart, "healthcare" is classified as any provided medical service at a VA-supported or contracted healthcare facility; and 5) Acronyms: FY = Fiscal Year, S/C = service-connected, UDX = Undiagnosed Illnesses.

**Cohort Totals:** Pre-9/11=6,516,030; Deployed to Persian Gulf=1,129,353; Not Deployed to Persian Gulf=5,386,577; Gulf War=763,337; Stabilization Period=492,611; Desert Shield=529,034; Desert Storm=581,683; Post-Desert Storm=679,244; Al Jubayl=1,334; Non-Al Jubayl=580,349; Khamisiyah=145,456; and Non-Khamisiyah=533,788.

<sup>3</sup>For these Not Deployed to Persian Gulf Veterans, service connection for a UDX condition is based upon active duty deployments to the Southwest Asia theater of operations on or after September 11, 2001.

# Section VI: Veteran Profile Health Care (HC)

<u>Table HC-1: Cohorts by Enrollment Priority Group – FY 2009</u>

Priority Group	Pre-9/11	Deployed to Persian Gulf	Gulf War	Stabilization Period
1. S/C 50% +	373,820	104,775	78,493	38,220
2. S/C 30% - 40%	260,877	67,626	48,100	27,797
3. S/C 10%-20%/POW/Special	403,332	96,364	69,237	38,666
4. AA/Housebound or Catastrophic	11,559	2,725	2,269	693
5. NSC Below Income	337,646	72,148	50,528	28,379
6. All Other Not Req to Make Co-Pay	194,796	44,159	37,315	10,131
7. Non-Compensable 0% S/C-Below GMT	1,229	290	219	98
7. NSC Vets-Below GMT	12,125	2,281	1,673	860
8. Noncompensable 0% S/C-Above GMT	31,000	8,492	6,513	2,946
8. Noncompensable 0% S/C-Above GMT > 1_16_03	6,705	1,487	1,080	577
8. Noncompensable 0% S/C-Above GMT > 6_15_09	140	32	24	11
8. NSC Vets-Above GMT	244,172	56,333	42,042	19,802
8. NSC Vets-Above GMT > 1_16_03	56,902	10,745	7,997	3,934
8. NSC Vets-Above GMT > 6_15_09	1,396	253	190	94
90. Vet User Not Enrolled	16,034	2,212	1,240	1,202
91. Non-Vet User Not Enrolled	20,900	3,932	2,289	2,183
Unknown*	4,543,397	655,499	414,128	317,018

**Notes:** 1) The Pre-9/11 column represents the overall unique total. All other categories are sub-cohorts of the Pre-9/11 cohort; 2) All cohort data is as of FY09; and 3) Acronyms: AA = aid and attendance, FY = Fiscal Year, GMT = geographic means test, NSC = Nonservice-connected, POW = prisoner of war, and S/C = service-connected.

<sup>\*</sup>Unknown records indicate no matches.

## <u>Table HC-2: Frequency of Possible Diagnoses and Mental Disorders among Deployed to Persian Gulf Veterans</u> Note: 1) Veterans can have multiple diagnoses with each encounter. A Veteran is counted only once in any single category, but can be in multiple categories.

	Diagnosis (Broad ICD-9 Categories)	FY 2000	FY 2005	FY 2009
	Infectious and Parasitic Diseases (001-139)	8,495	16,754	22,045
	Malignant Neoplasms (140-208)	1,491	3,251	5,887
	Benign Neoplasms (210-239)	2,683	7,088	12,554
	Diseases of Endocrine/Nutritional/Metabolic Systems (240-279)	18,150	60,269	108,050
ses	Diseases of Blood and Blood Forming Organs (280-289)	1,786	5,156	9,820
š	Mental Disorders (290-319)	24,502	60,255	96,881
Possible Diagnoses	Diseases of Nervous System/Sense Organs (320-389)	22,265	50,950	82,577
e [	Diseases of Circulatory System (390-459)	19,428	50,810	84,887
ssib	Diseases of Respiratory System (460-519)	17,776	34,103	47,761
Po	Diseases of Digestive System (520-579)	19,964	43,932	64,568
	Diseases of Genitourinary System (580-629)	9,113	19,337	33,367
	Diseases of Skin (680-709)	11,396	22,240	32,315
	Diseases of Musculoskeletal System/Connective System (710-739)	34,049	73,955	113,392
	Symptoms, Signs and III Defined Conditions (780-799)	25,791	56,525	93,713
	Injury/Poisonings (800-999)	11,018	19,445	28,377
	Disease Category	FY 2000	FY 2005	FY 2009
'n	Persistent Mental Conditions Due to Conditions Classified Elsewhere (294)	524	881	2,117
der de	Affective Psychoses (296)	6,525	13,528	22,996
isor	Neurotic Disorders (300)	7,013	14,622	23,831
<u></u>	Sexual Deviations and Disorders (302)	446	4,997	8,128
ent	Alcohol Dependence Syndrome (303)	3,380	6,412	10,065
ž	Nondependent Abuse of Drugs (305)	3,007	7,012	12,589
ible	Special Symptons of Syndromes, Not Elsewhere Classified (307)	1,504	2,175	3,424
Possible Mental Disorders	Post-Traumatic Stress Disorder (ICD-9CM 309.81)	6,363	17,784	34,785
Δ.	Specific Non-Psychotic Mental Disorders Due to Organic Brain Damage (310)	177	322	1,261
	Depressive Disorders, Not Elsewhere Classified (311)	7,462	18,661	32,658

## <u>Table HC-3: Frequency of Possible Diagnoses and Mental Disorders among Gulf War (1990-1992) Veterans</u> Note: Veterans can have multiple diagnoses with each encounter. A Veteran is counted only once in any single category, but can be in multiple categories.

	Diagnosis (Broad ICD-9 Categories)	FY 2000	FY 2005	FY 2009
	Infectious and Parasitic Diseases (001-139)	6,973	13,458	17,435
	Malignant Neoplasms (140-208)	1,255	2,687	4,896
	Benign Neoplasms (210-239)	2,265	5,876	10,156
	Diseases of Endocrine/Nutritional/Metabolic Systems(240-279)	15,619	49,676	86,651
ses	Diseases of Blood and Blood Forming Organs (280-289)	1,561	4,276	8,035
Possible Diagnoses	Mental Disorders (290-319)	21,173	49,846	78,077
) Jag	Diseases of Nervous System/Sense Organs (320-389)	18,073	40,507	65,049
le [	Diseases of Circulatory System (390-459)	16,767	42,505	69,453
ssik	Diseases of Respiratory System (460-519)	14,619	27,117	37,259
Po	Diseases of Digestive System (520-579)	16,230	35,694	51,626
	Diseases of Genitourinary System (580-629)	7,438	15,699	26,852
	Diseases of Skin (680-709)	9,470	17,918	25,444
	Diseases of Musculoskeletal System/Connective System (710-739)	28,206	59,411	89,191
	Symptoms, Signs and III Defined Conditions (780-799)	21,606	45,741	73,953
	Injury/Poisonings (800-999)	8,732	15,062	21,695
	Disease Category	FY 2000	FY 2005	FY 2009
	Persistent Mental Conditions Due to Conditions Classified Elsewhere (294)	473	772	1,721
de	Affective Psychoses (296)	5,575	11,054	18,294
isor	Neurotic Disorders (300)	6,044	12,033	18,835
<u> </u>	Sexual Deviations and Disorders (302)	386	4,251	6,690
ent	Alcohol Dependence Syndrome (303)	2,968	5,466	8,298
Ž	Nondependent Abuse of Drugs (305)	2,631	5,927	10,359
ig	Special Symptons of Syndromes, Not Elsewhere Classified (307)	1,342	1,823	2,786
Possible Mental Disorders	Post-Traumatic Stress Disorder (ICD-9CM 309.81)	6,006	16,346	30,636
<u> </u>	Specific Non-Psychotic Mental Disorders Due to Organic Brain Damage (310)	149	266	987
	Depressive Disorders, Not Elsewhere Classified (311)	6,495	15,449	26,339

**Table HC-4: Cohorts by Acute Inpatient Care** 

Cohort (FY 2000)	Unique Counts <sup>2</sup>	Encounters	Average Encounters
Pre-9/11	17,833	24,671	1
Deployed to Persian Gulf	4,664	6,320	1
Gulf War	3,981	5,445	1
Stabilization Period	1,107	1,444	1
Desert Shield	2,763	3,738	1
Desert Storm	3,154	4,268	1
Post-Desert Storm	3,553	4,833	1
Al Jubayl	<10	12	2
Non-Al Jubayl	3,147	4,256	1
Khamisiyah	1,004	1,358	1
Non-Khamisiyah	2,549	3,475	1
Cohort (FY 2005)	Unique Counts <sup>2</sup>	Encounters	Average Encounters
Pre-9/11	28,383	39,321	1
Deployed to Persian Gulf	6,852	9,394	1
Gulf War	5,745	7,893	1
Stabilization Period	1,694	2,278	1
Desert Shield	4,034	5,568	1
Desert Storm	4,586	6,283	1
Post-Desert Storm	5,177	7,079	1
Al Jubayl	12	16	1
Non-Al Jubayl	4,574	6,267	1
Khamisiyah	1,471	2,022	1
Non-Khamisiyah	3,706	5,057	1
Cohort (FY 2009)	Unique Counts <sup>2</sup>	Encounters	Average Encounters
Pre-9/11	41,229	58,525	1
Deployed to Persian Gulf	9,474	13,392	1
Gulf War	7,750	11,017	1
Stabilization Period	2,580	3,589	1
Desert Shield	5,573	7,930	1
Desert Storm	6,219	8,787	1
Post-Desert Storm	6,996	9,907	1
Al Jubayl	18	33	2
Non-Al Jubayl	6,201	8,754	1
Khamisiyah	1,922	2,737	1
Non-Khamisiyah	5,074	7,170	1

**Source:** Official DoD military personnel records matched against VA healthcare data. **Notes:** 1) All cohort data is as of FY00, FY05, and FY09; and 2) Acronym: FY = Fiscal Year.

<sup>&</sup>lt;sup>2</sup>Represents one visit regardless of the number of visits.

**Table HC-5: Cohorts by Outpatient Visits** 

Cohort (FY 2000)	Unique Counts <sup>2</sup>	Encounters	Average Encounters
Pre-9/11	272,803	1,791,577	7
Deployed to Persian Gulf	77,472	495,508	6
Gulf War	61,871	421,904	7
Stabilization Persian	23,149	117,001	5
Desert Shield	44,255	302,765	7
Desert Storm	49,578	339,744	7
Post-Desert Storm	55,933	379,231	7
Al Jubayl	142	1,175	8
Non-Al Jubayl	49,436	338,569	7
Khamisiyah	15,562	110,129	7
Non-Khamisiyah	40,371	269,102	7
Cohort (FY 2005)	Unique Counts <sup>2</sup>	Encounters	Average Encounters
Pre-9/11	604,407	4,544,046	8
Deployed to Persian Gulf	146,586	1,119,214	8
Gulf War	114,376	927,819	8
Stabilization Persian	46,676	292,499	6
Desert Shield	81,634	664,482	8
Desert Storm	91,250	746,930	8
Post-Desert Storm	103,176	837,619	8
Al Jubayl	228	1,803	8
Non-Al Jubayl	91,022	745,127	8
Khamisiyah	28,256	238,284	8
Non-Khamisiyah	74,920	599,335	8
Cohort (FY 2009)	Unique Counts <sup>2</sup>	Encounters	Average Encounters
Pre-9/11	842,789	7,494,646	9
Deployed to Persian Gulf	201,953	1,776,894	9
Gulf War	156,058	1,434,907	9
Stabilization Period	66,821	506,155	8
Desert Shield	111,685	1,028,174	9
Desert Storm	124,436	1,154,872	9
Post-Desert Storm	140,963	1,302,699	9
Al Jubayl	308	2,768	9
Non-Al Jubayl	124,128	1,152,104	9
Khamisiyah	37,496	367,274	10
Non-Khamisiyah	103,467	935,425	9

**Source:** Official DoD military personnel records matched against VA healthcare data. **Notes:** 1) All cohort data is as of FY00, FY05, and FY09; and 2) Acronym: FY = Fiscal Year.

<sup>&</sup>lt;sup>2</sup>Represents one visit regardless of the number of visits.

**Table HC-6: Cohorts by Residential Care** 

Cohort (FY 2000)	Unique Counts <sup>2</sup>	Encounters	Average Encounters
Pre-9/11	1314	1406	1
Deployed to Persian Gulf	384	408	1
Gulf War	333	354	1
Stabilization Period	80	83	1
Desert Shield	249	267	1
Desert Storm	279	299	1
Post-Desert Storm	299	318	1
Al Jubayl	<10	<10	1
Non-Al Jubayl	277	297	1
Khamisiyah	97	108	1
Non-Khamisiyah	202	210	1
Cohort (FY 2005)	Unique Counts <sup>2</sup>	Encounters	Average Encounters
Pre-9/11	2020	2209	1
Deployed to Persian Gulf	555	604	1
Gulf War	490	538	1
Stabilization Period	112	116	1
Desert Shield	356	392	1
Desert Storm	405	448	1
Post-Desert Storm	444	486	1
Al Jubayl	<10	<10	1
Non-Al Jubayl	404	447	1
Khamisiyah	156	173	1
Non-Khamisiyah	288	313	1
Cohort (FY 2009)	Unique Counts <sup>2</sup>	Encounters	Average Encounters
Pre-9/11	3000	3312	1
Deployed to Persian Gulf	721	799	1
Gulf War	607	677	1
Stabilization Period	159	171	1
Desert Shield	444	490	1
Desert Storm	505	565	1
Post-Desert Storm	556	620	1
Al Jubayl	<10	<10	1
Non-Al Jubayl	503	563	1
Khamisiyah	173	195	1
Non-Khamisiyah	383	425	1

Notes: 1) All cohort data is as of FY00, FY05, and FY09; and 2) Acronym: FY = Fiscal Year.

<sup>&</sup>lt;sup>2</sup>Represents one visit regardless of the number of visits.

Table HC-7: Cohorts by Fee-Basis Care (Inpatient)

Cohort (FY 2000)	Unique Counts <sup>2</sup>	Encounters	Average Encounters
Pre-9/11	1,455	2,380	2
Deployed to Persian Gulf	365	603	2
Gulf War	308	509	2
Stabilization Period	97	181	2
Desert Shield	204	342	2
Desert Storm	226	349	2
Post-Desert Storm	269	430	2
Al Jubayl	0	0	0
Non-Al Jubayl	226	349	2
Khamisiyah	66	79	1
Non-Khamisiyah	203	351	2
Cohort (FY 2005)	Unique Counts <sup>2</sup>	Encounters	Average Encounters
Pre-9/11	5,652	8,006	1
Deployed to Persian Gulf	1,207	1,687	1
Gulf War	977	1,337	1
Stabilization Period	329	495	2
Desert Shield	690	959	1
Desert Storm	763	1,014	1
Post-Desert Storm	872	1,178	1
Al Jubayl	<10	<10	1
Non-Al Jubayl	762	1,013	1
Khamisiyah	253	334	1
Non-Khamisiyah	619	844	1
Cohort (FY 2009)	Unique Counts <sup>2</sup>	Encounters	Average Encounters
Pre-9/11	11,772	16,767	1
Deployed to Persian Gulf	2,457	3,587	1
Gulf War	1,986	2,908	1
Stabilization Period	690	1,011	1
Desert Shield	1,439	2,138	1
Desert Storm	1,588	2,289	1
Post-Desert Storm	1,788	2,627	1
Al Jubayl	<10	11	2
Non-Al Jubayl	1,582	2,278	1
Khamisiyah	485	685	1
Non-Khamisiyah	1,303	1,942	1

Notes: 1) All cohort data is as of FY00, FY05, and FY09; and 2) Acronym: FY = Fiscal Year.

<sup>&</sup>lt;sup>2</sup>Represents one visit regardless of the number of visits.

Table HC-8: Cohorts by Fee-Basis Care (Outpatient)

Cohort (FY 2000)	Unique Counts <sup>2</sup>	Encounters	Average Encounters
Pre-9/11	26,486	143,277	5
Deployed to Persian Gulf	7,242	35,774	5
Gulf War	5,683	29,280	5
Stabilization Period	2,357	9,922	4
Desert Shield	4,051	21,158	5
Desert Storm	4,419	22,423	5
Post-Desert Storm	5,081	26,352	5
Al Jubayl	18	109	6
Non-Al Jubayl	4,401	22,314	5
Khamisiyah	1,387	7,379	5
Non-Khamisiyah	3,694	18,973	5
Cohort (FY 2005)	Unique Counts <sup>2</sup>	Encounters	Average Encounters
Pre-9/11	75,292	395,839	5
Deployed to Persian Gulf	17,754	94,713	5
Gulf War	14,068	78,483	6
Stabilization Period	5,374	24,730	5
Desert Shield	9,974	57,210	6
Desert Storm	11,110	62,539	6
Post-Desert Storm	12,633	68,893	5
Al Jubayl	26	416	16
Non-Al Jubayl	11,084	62,123	6
Khamisiyah	3,508	18,939	5
Non-Khamisiyah	9,125	49,954	5
Cohort (FY 2009)	Unique Counts <sup>2</sup>	Encounters	Average Encounters
Pre-9/11	164,895	1,036,966	6
Deployed to Persian Gulf	37,615	237,744	6
Gulf War	29,752	190,118	6
Stabilization Period	11,519	66,751	6
Desert Shield	21,206	137,215	6
Desert Storm	23,658	151,901	6
Post-Desert Storm	26,835	169,438	6
Al Jubayl	62	288	5
Non-Al Jubayl	23,596	151,613	6
Khamisiyah	7,561	46,065	6
Non-Khamisiyah	19,274	123,373	6

Notes: 1) All cohort data is as of FY00, FY05, and FY09; and 2) Acronym: FY = Fiscal Year.

<sup>&</sup>lt;sup>2</sup>Represents one visit regardless of the number of visits.

**Table HC-9: Cohorts by Hospice Care (Inpatient)** 

Cohort (FY 2005)	Unique Counts <sup>2</sup>	Encounters	Average Encounters
Pre-9/11	57	62	1
Deployed to Persian Gulf	<10	<10	1
Gulf War	<10	<10	1
Stabilization Period	<10	<10	1
Desert Shield	<10	<10	1
Desert Storm	<10	<10	1
Post-Desert Storm	<10	<10	1
Al Jubayl	<10	<10	0
Non-Al Jubayl	<10	<10	1
Khamisiyah	<10	<10	1
Non-Khamisiyah	<10	<10	1

Cohort (FY 2009)	Unique Counts <sup>2</sup>	Encounters	Average Encounters
Pre-9/11	179	188	1
Deployed to Persian Gulf	38	40	1
Gulf War	33	35	1
Stabilization Period	10	10	1
Desert Shield	21	23	1
Desert Storm	24	26	1
Post-Desert Storm	31	33	1
Al Jubayl	0	0	0
Non-Al Jubayl	24	26	1
Khamisiyah	10	10	1
Non-Khamisiyah	21	23	1

**Notes:** 1) The Pre-9/11 column represents the overall unique total. All other categories are subcohorts of the Pre-9/11 cohort; 2) All cohort data is as of FY05 and FY09; 3) A "<10" entry represents a cell size of less than 10; and 4) Acronym: FY = Fiscal Year.

<sup>&</sup>lt;sup>2</sup>Represents one visit regardless of the number of visits.

**Table HC-10: Cohorts by Hospice Care (Outpatient)** 

Cohort (FY 2005)	Unique Counts <sup>2</sup>	Encounters	Average Encounters
Pre-9/11	11	14	1
Deployed to Persian Gulf	<10	<10	1
Gulf War	<10	<10	1
Stabilization Period	<10	<10	0
Desert Shield	<10	<10	1
Desert Storm	<10	<10	1
Post-Desert Storm	<10	<10	1
Al Jubayl	<10	<10	0
Non-Al Jubayl	<10	<10	1
Khamisiyah	<10	<10	0
Non-Khamisiyah	<10	<10	1

Cohort (FY 2009)	Unique Counts <sup>2</sup>	Encounters	Average Encounters
Pre-9/11	45	53	1
Deployed to Persian Gulf	<10	10	1
Gulf War	<10	<10	1
Stabilization Period	<10	<10	1
Desert Shield	<10	<10	1
Desert Storm	<10	<10	1
Post-Desert Storm	<10	<10	1
Al Jubayl	<10	<10	0
Non-Al Jubayl	<10	<10	1
Khamisiyah	<10	<10	1
Non-Khamisiyah	<10	<10	1

**Notes:** 1) The Pre-9/11 column represents the overall unique total. All other categories are subcohorts of the Pre-9/11 cohort; 2) All cohort data is as of FY05 and FY09; 3) A "<10" entry represents a cell size of less than 10; and 4) Acronym: FY = Fiscal Year.

<sup>&</sup>lt;sup>2</sup>Represents one visit regardless of the number of visits.

<u>Table HC-11: Number of Unique Veterans Seen at Vet Centers</u> <u>by Cohort - FY 2009 Only</u>

Cohort	Unique Count <sup>2</sup>
Pre-911	240,253
Deployed to Persian Gulf	36,237
Gulf War	25,613
Stabilization Period	14,327
Desert Shield	17,974
Desert Storm	20,679
Post-Desert Storm	23,529
Al Jubayl	32
Non-Al Jubayl	20,647
Khamisiyah	6,631
Non-Khamisiyah	16,898

**Notes:** 1) The Pre-9/11 column represents the overall unique total. All other categories are subcohorts of the Pre-9/11 cohort; 2) All cohort data is as of FY09; 3) A "<10" entry represents a cell size of less than 10; and 4) Acronym: FY = Fiscal Year.

<sup>&</sup>lt;sup>2</sup>Represents one visit regardless of the number of visits.

Table HC-12: Cohorts by National Costs Per PRP

Cohort	FY 2000		FY 2	2005	FY 2009		
Conort	<b>Unique Count</b>	ARC Cost per PRP	Unique Count	ARC Cost per PRP	Unique Count	ARC Cost per PRP	
Pre-9/11	448,654	\$2,259	684,332	\$3,385	929,677	\$5,189	
Deployed to Persian Gulf	125,313	\$2,177	163,017	\$3,364	219,515	\$5,126	
Not Deployed to Persian Gulf	323,341	\$2,290	521,315	\$3,391	710,162	\$5,209	
Gulf War	98,880	\$2,309	126,402	\$3,584	168,652	\$5,379	
Stabilization Period	38,678	\$1,790	52,753	\$2,750	73,646	\$4,385	
Desert Shield	70,666	\$2,276	90,048	\$3,582	120,527	\$5,380	
Desert Storm	78,853	\$2,289	100,651	\$3,602	134,300	\$5,397	
Post-Desert Storm	89,183	\$2,280	113,974	\$3,574	152,284	\$5,372	
Al Jubayl	218	\$3,333	243	\$4,841	324	\$6,323	
Non-Al Jubayl	78,635	\$2,286	100,408	\$3,599	133,976	\$5,395	
Khamisiyah	24,569	\$2,373	30,924	\$3,685	40,123	\$5,695	
Non-Khamisiyah	64,614	\$2,244	83,050	\$3,533	112,161	\$5,257	

**Notes:** 1) The Pre-9/11 column represents the overall unique total. All other categories are sub-cohorts of the Pre-9/11 cohort; 2) All cohort data is as of FY00, FY05, and FY09; and 3) Acronyms: FY = Fiscal Year, PRP = Pro-Rated Person.

**Cohort Totals:** Pre-9/11=6,516,030; Deployed to Persian Gulf=1,129,353; Not Deployed to Persian Gulf=5,386,577; Gulf War=763,337; Stabilization Period=492,611; Desert Shield=529,034; Desert Storm=581,683; Post-Desert Storm=679,244; Al Jubayl=1,334; Non-Al Jubayl=580,349; Khamisiyah=145,456; and Non-Khamisiyah=533,788.

The term Pro-Rated Patient (PRP) is designed to account for care across networks or facilities based on a pro-ration of the cost of care provided at each facility. A PRP is a measure of patient workload based on the proportionate distribution of cost.

Table HC-13: VISN Healthcare Costs for All Cohorts – FY 2009

VISN	Pre-9/11	Deployed to Persian Gulf	Not Deployed to Persian Gulf	Gulf War	Stabilization Period	Desert Shield	Desert Storm	Post-Desert Storm	Al Jubayl	Non-Al Jubayl	Khamisiyah	Non- Khamisiyah
1	\$182,282,669	\$35,601,087	\$146,681,582	\$27,951,890	\$11,264,419	\$19,461,660	\$21,898,952	\$25,342,316	\$11,297	\$21,887,655	\$6,648,982	\$18,693,334
2	\$103,486,598	\$19,380,747	\$84,105,851	\$15,480,058	\$5,573,120	\$11,056,974	\$12,455,350	\$14,156,617	\$9,467	\$12,445,883	\$3,601,706	\$10,554,911
3	\$153,450,602	\$32,135,622	\$121,314,980	\$27,039,083	\$7,561,921	\$17,520,737	\$21,911,413	\$24,360,500	\$136,735	\$21,774,678	\$7,008,662	\$17,351,838
4	\$209,104,936	\$43,218,289	\$165,886,647	\$35,366,643	\$12,335,270	\$23,969,787	\$27,640,738	\$31,395,890	\$18,226	\$27,622,512	\$9,285,656	\$22,110,234
5	\$151,645,170	\$32,146,360	\$119,498,810	\$26,699,170	\$8,197,223	\$17,870,490	\$21,400,933	\$24,451,112	\$20,047	\$21,380,886	\$7,125,438	\$17,325,674
6	\$312,447,075	\$86,481,607	\$225,965,468	\$72,515,191	\$21,382,987	\$54,891,537	\$60,059,383	\$66,601,865	\$398,646	\$59,660,737	\$18,037,129	\$48,564,736
7	\$395,309,220	\$105,371,591	\$289,937,629	\$91,022,260	\$22,593,695	\$68,802,781	\$75,359,059	\$82,901,991	\$359,002	\$75,000,057	\$28,432,706	\$54,469,285
8	\$399,915,488	\$87,020,610	\$312,894,878	\$70,765,377	\$23,956,270	\$50,144,860	\$55,521,552	\$64,195,930	\$23,365	\$55,498,187	\$17,956,198	\$46,239,732
9	\$240,773,675	\$61,344,722	\$179,428,953	\$53,021,672	\$12,326,544	\$38,529,758	\$43,194,240	\$48,718,973	\$278,886	\$42,915,354	\$15,943,026	\$32,775,947
10	\$150,208,929	\$34,222,713	\$115,986,216	\$27,888,421	\$9,438,364	\$19,877,842	\$21,675,546	\$24,918,082	\$6,508	\$21,669,038	\$6,205,976	\$18,712,106
11	\$187,681,548	\$40,988,610	\$146,692,938	\$33,799,982	\$11,305,619	\$24,282,314	\$27,090,815	\$30,570,841	\$15,185	\$27,075,630	\$7,348,291	\$23,222,550
12	\$177,623,664	\$38,004,628	\$139,619,036	\$29,765,461	\$11,893,724	\$20,483,378	\$22,649,365	\$26,550,646	\$51,469	\$22,597,896	\$6,759,100	\$19,791,546
15	\$178,956,096	\$42,470,030	\$136,486,066	\$35,719,241	\$11,066,649	\$25,445,170	\$28,866,022	\$32,630,824	\$51,553	\$28,814,469	\$9,094,989	\$23,535,835
16	\$396,587,164	\$95,517,377	\$301,069,787	\$77,890,296	\$26,366,831	\$55,571,647	\$62,917,596	\$71,251,117	\$156,892	\$62,760,704	\$19,802,733	\$51,448,384
17	\$274,330,755	\$68,986,902	\$205,343,853	\$55,621,940	\$18,961,797	\$41,607,381	\$45,940,050	\$50,921,440	\$8,002	\$45,932,048	\$18,903,976	\$32,017,464
18	\$201,340,853	\$51,998,883	\$149,341,970	\$40,382,651	\$17,400,499	\$27,681,379	\$32,503,098	\$36,675,295	\$46,148	\$32,456,950	\$10,547,565	\$26,127,730
19	\$158,638,077	\$34,908,474	\$123,729,603	\$26,612,923	\$11,365,265	\$19,024,495	\$20,973,595	\$22,845,792	\$51,527	\$20,922,068	\$5,895,314	\$16,950,478
20	\$235,921,915	\$49,124,997	\$186,796,918	\$36,756,562	\$17,971,782	\$25,926,567	\$28,645,370	\$32,844,353	\$35,706	\$28,609,664	\$7,859,448	\$24,984,905
21	\$215,699,918	\$47,271,053	\$168,428,865	\$36,055,910	\$16,888,176	\$24,351,618	\$26,727,471	\$31,571,425	\$19,457	\$26,708,014	\$6,643,492	\$24,927,933
22	\$277,199,450	\$71,608,182	\$205,591,268	\$48,797,154	\$32,349,311	\$34,286,698	\$36,058,148	\$41,526,902	\$227,288	\$35,830,860	\$6,432,911	\$35,093,991
23	\$221,950,814	\$47,356,746	\$174,594,068	\$37,958,012	\$12,755,675	\$27,601,335	\$31,343,498	\$33,689,571	\$123,102	\$31,220,396	\$8,969,965	\$24,719,606

**Notes:** 1) The Pre-9/11 column represents the overall unique total. All other categories are sub-cohorts of the Pre-9/11 cohort; 2) Unique Veterans count at a VISN but can be counted in multiple VISNs; 3) All cohort data is as of FY09; and 4) Acronyms: FY = Fiscal Year, VISN = Veterans Integrated Service Network.

Table HC-14: Unique Veterans by VISN for All Cohorts – FY 2009

VISN	Pre-9/11	Deployed to Persian Gulf	Not Deployed to Persian Gulf	Gulf War	Stabilization Period	Desert Shield	Desert Storm	Post-Desert Storm	Al Jubayl	Non-Al Jubayl	Khamisiyah	Non- Khamisiyah
1	30,558	5,389	25,169	4,016	1,885	2,730	3,117	3,596	<10	3,114	898	2,698
2	20,300	3,903	16,397	3,025	1,259	2,106	2,380	2,762	<10	2,378	678	2,084
3	20,994	3,611	17,383	2,827	1,103	1,944	2,244	2,553	<10	2,241	647	1,906
4	38,485	7,883	30,602	6,169	2,521	4,206	4,874	5,553	<10	4,867	1,484	4,069
5	29,717	6,404	23,313	4,907	2,142	3,332	3,855	4,499	<10	3,852	1,220	3,279
6	67,784	19,713	48,071	15,951	5,583	12,116	13,031	14,483	49	12,982	3,727	10,756
7	83,756	22,176	61,580	18,432	5,713	13,941	15,375	16,901	67	15,308	5,431	11,470
8	80,003	17,784	62,219	13,523	6,230	9,416	10,364	12,241	12	10,352	2,984	9,257
9	49,658	12,889	36,769	10,856	3,043	7,862	8,983	10,037	48	8,935	3,149	6,888
10	27,635	6,098	21,537	4,745	1,971	3,390	3,752	4,284	<10	3,748	1,099	3,185
11	36,027	7,881	28,146	6,313	2,360	4,499	5,025	5,716	<10	5,018	1,418	4,298
12	32,068	6,822	25,246	5,174	2,328	3,661	4,092	4,681	<10	4,087	1,061	3,620
15	35,103	8,419	26,684	6,765	2,395	4,852	5,500	6,155	12	5,488	1,807	4,348
16	87,389	21,040	66,349	16,553	6,649	11,595	13,207	15,001	29	13,178	3,848	11,153
17	62,614	15,747	46,867	12,300	4,869	9,120	10,129	11,292	<10	10,123	4,070	7,222
18	48,582	12,139	36,443	8,750	4,821	6,030	6,950	7,918	<10	6,941	2,124	5,794
19	34,678	7,458	27,220	5,357	2,890	3,721	4,197	4,763	10	4,187	1,252	3,511
20	49,025	10,692	38,333	7,606	4,278	5,292	5,885	6,773	13	5,872	1,536	5,237
21	40,230	8,970	31,260	6,321	3,882	4,301	4,703	5,559	<10	4,694	981	4,578
22	54,909	15,014	39,895	9,563	7,823	6,681	6,916	8,011	28	6,888	863	7,148
23	41,845	8,439	33,406	6,354	2,874	4,563	5,139	5,688	16	5,123	1,484	4,204

**Notes:** 1) The Pre-9/11 column represents the overall unique total. All other categories are sub-cohorts of the Pre-9/11 cohort; 2) Unique Veterans count at a VISN but can be counted in multiple VISNs; 3) All cohort data is as FY09; and 4) Acronyms: FY = Fiscal Year, VISN = Veterans Integrated Service Network.

# Section VII: Veteran Profile Benefits (BEN)

<u>Table BEN-1: Select Cohorts by Overall Disability Compensation</u>
<u>Statistics – FY 2009</u>

	Pre-9/11	Deployed to Persian Gulf	Not Deployed to Persian Gulf	Gulf War
Vital Statistics				
Total Servicemembers	6,516,030	1,129,353	5,386,677	763,337
Estimated Living	6,453,695	1,115,192	5,338,503	751,383
Reported Deceased	62,335	14,161	48,174	11,954
VA Disability Compensation				
a. Service Connection Status				
S/C Granted for at Least One Condition	1,124,928	300,132	824,796	214,941
S/C Granted; Receiving Compensation	1,121,669	299,385	822,284	214,343
S/C Granted; Not Receiving Compensation	3,259	747	2,512	598
S/C Disallowed; Not Receiving Compensation	118,471	24,374	94,097	19,268
Total Unique Veterans	1,243,399	324,506	918,893	234,209
b. Combined Disability Evaluation; Receiving Compe	nsation			
Combined Disability Evaluation: 0 percent	1,488	363	1,125	251
Combined Disability Evaluation: 10 percent	278,571	67,816	210,755	48,299
Combined Disability Evaluation: 20-60 percent	645,454	173,893	471,561	121,897
Combined Disability Evaluation: 70-90 percent	150,978	45,544	105,434	34,305
Combined Disability Evaluation: 100 percent	45,178	11,769	33,409	9,591
c. Pending Compensation Claims (as of 09/30/10)				
Pending Original Compensation Claims	1,996	612	1,384	437
Pending Increased Compensation Claims	52,699	14,488	38,211	11,318
Pending Reopened Compensation Claims	27,531	8,038	19,493	6,469
Total Pending Compensation Claims	82,226	23,138	59,088	18,224

Source: Official DoD military personnel records matched against VA disability compensation data.

**Notes:** 1) The Pre-9/11 column represents the overall unique total. All other categories are sub-cohorts of the Pre-9/11 cohort; 2) A "<10" entry represents a cell size of less than 10; 3) Non-pending claims data is as of FY09; 4) Pending claims data is as of September 30, 2010 (not FY09); and 5) Acronym: FY = Fiscal Year.

### <u>Table BEN-1: Select Cohorts by Overall Disability Compensation</u> <u>Statistics – FY 2009 (continued)</u>

	Stabilization Period	Desert Shield	Desert Storm	Post- Desert Storm
Vital Statistics				
Total Servicemembers	492,611	529,034	581,683	679,244
Estimated Living	489,014	520,521	572,242	668,490
Reported Deceased	3,597	8,513	9,441	10,754
VA Disability Compensation				
a. Service Connection Status				
S/C Granted for at Least One Condition	122,271	152,126	165,596	191,711
S/C Granted; Receiving Compensation	122,048	151,701	165,113	191,167
S/C Granted; Not Receiving Compensation	223	425	483	544
S/C Disallowed; Not Receiving Compensation	7,195	13,699	15,707	17,633
Total Unique Veterans	129,466	165,825	181,303	209,344
b. Combined Disability Evaluation; Receiving Compe	nsation			
Combined Disability Evaluation: 0 percent	159	182	189	219
Combined Disability Evaluation: 10 percent	27,870	33,729	36,821	43,006
Combined Disability Evaluation: 20-60 percent	74,216	86,146	93,295	108,535
Combined Disability Evaluation: 70-90 percent	16,558	24,668	27,060	30,799
Combined Disability Evaluation: 100 percent	3,245	6,976	7,748	8,608
c. Pending Compensation Claims (as of 09/30/10)				
Pending Original Compensation Claims	269	300	323	388
Pending Increased Compensation Claims	4,680	8,285	9,139	10,251
Pending Reopened Compensation Claims	2,388	4,707	5,225	5,869
Total Pending Compensation Claims	7,337	13,292	14,687	16,508

Source: Official DoD military personnel records matched against VA disability compensation data.

**Notes:** 1) The Pre-9/11 column represents the overall unique total. All other categories are sub-cohorts of the Pre-9/11 cohort; 2) A "<10" entry represents a cell size of less than 10; 3) Non-pending claims data is as of FY09; 4) Pending claims data is as of September 30, 2010 (not FY09); and 5) Acronym: FY = Fiscal Year.

### <u>Table BEN-1: Select Cohorts by Overall Disability Compensation</u> <u>Statistics – FY 2009 (continued)</u>

	Al Jubayl	Non-Al Jubayl	Khamisiyah	Non-Khamisiyah
Vital Statistics				
Total Servicemembers	1,334	580,349	145,456	533,788
Estimated Living	1,299	570,943	142,553	525,937
Reported Deceased	35	9,406	2,903	7,851
VA Disability Compensation				
a. Service Connection Status				
S/C Granted for at Least One Condition	319	165,277	46,037	145,674
S/C Granted; Receiving Compensation	319	164,794	45,891	145,276
S/C Granted; Not Receiving Compensation	0	483	146	398
S/C Disallowed; Not Receiving Compensation	37	15,670	4,855	12,778
Total Unique Veterans	356	180,947	50,892	158,452
b. Combined Disability Evaluation; Receiving Compe	nsation			
Combined Disability Evaluation: 0 percent	<10	188	55	164
Combined Disability Evaluation: 10 percent	79	36,742	9,727	33,279
Combined Disability Evaluation: 20-60 percent	170	93,125	25,483	83,052
Combined Disability Evaluation: 70-90 percent	42	27,018	8,165	22,634
Combined Disability Evaluation: 100 percent	27	7,721	2,461	6,147
c. Pending Compensation Claims (as of 09/30/10)				
Pending Original Compensation Claims	<10	321	77	311
Pending Increased Compensation Claims	15	9,124	2,853	7,398
Pending Reopened Compensation Claims	17	5,208	1,712	4,157
Total Pending Compensation Claims	34	14,653	4,642	11,866

Source: Official DoD military personnel records matched against VA disability compensation data.

**Notes:** 1) The Pre-9/11 column represents the overall unique total. All other categories are sub-cohorts of the Pre-9/11 cohort; 2) A "<10" entry represents a cell size of less than 10; 3) Non-pending claims data is as of FY09; 4) Pending claims data is as of September 30, 2010 (not FY09); and 5) Acronym: FY = Fiscal Year.

#### <u>Table BEN-2: Select Cohorts by Overall UDX</u> <u>Disability Compensation Statistics – FY 2009</u>

	Pre-9/11	Deployed to Persian Gulf	Not Deployed to Persian Gulf <sup>3</sup>	Gulf War
Vital Statistics				
Total Servicemembers	6,516,030	1,129,353	5,386,677	763,337
Estimated Living	6,453,695	1,115,192	5,338,503	751,383
Reported Deceased	62,335	14,161	48,174	11,954
VA Disability Compensation				
a. Service Connection Status				
UDX S/C Granted for at Least One Condition	24,409	21,072	3,337	20,069
UDX S/C Granted; Receiving Compensation	24,316	20,994	3,322	19,994
UDX S/C Granted; Not Receiving Compensation	93	78	15	75
UDX S/C Disallowed; Not Receiving Compensation	115,269	21,739	93,530	16,725
Total Unique Veterans - UDX	139,678	42,811	96,867	36,794
b. Combined Disability Evaluation with at Least One S/	C UDX Conditio	n; Receiving Comp	ensation	
Combined Disability Evaluation: 0 percent	16	15	<10	14
Combined Disability Evaluation: 10 percent	3,747	3,236	511	3,071
Combined Disability Evaluation: 20-60 percent	12,463	10,578	1,885	10,042
Combined Disability Evaluation: 70-90 percent	6,031	5,322	709	5,080
Combined Disability Evaluation: 100 percent	2,059	1,843	216	1,787

Source: Official DoD military personnel records matched against VA disability compensation data.

**Notes:** 1) The Pre-9/11 column represents the overall unique total. All other categories are sub-cohorts of the Pre-9/11 cohort; 2) A "<10" entry represents a cell size of less than 10; 3) Non-pending claims data is as of FY09; and 4) Acronym: FY = Fiscal Year.

**Cohort Totals:** Pre-9/11=6,516,030; Deployed to Persian Gulf=1,129,353; Not Deployed to Persian Gulf=5,386,577; Gulf War=763,337; Stabilization Period=492,611; Desert Shield=529,034; Desert Storm=581,683; Post-Desert Storm=679,244; Al Jubayl=1,334; Non-Al Jubayl=580,349; Khamisiyah=145,456; and Non-Khamisiyah=533,788.

<sup>3</sup>For these Not Deployed to Persian Gulf Veterans, service connection for a UDX condition is based upon active duty deployments to the Southwest Asia theater of operations on or after September 11, 2001.

#### <u>Table BEN-2: Select Cohorts by Overall UDX</u> <u>Disability Compensation Statistics – FY 2009 continued</u>

	Stabilization Period	Desert Shield	Desert Storm	Post- Desert Storm
Vital Statistics				
Total Servicemembers	492,611	529,034	581,683	1,334
Estimated Living	489,014	520,521	572,242	1,299
Reported Deceased	3,597	8,513	9,441	35
VA Disability Compensation				
a. Service Connection Status				
UDX S/C Granted for at Least One Condition	2,332	15,164	17,886	18,704
UDX S/C Granted; Receiving Compensation	2,326	15,102	17,819	18,634
UDX S/C Granted; Not Receiving Compensation	<10	62	67	70
UDX S/C Disallowed; Not Receiving Compensation	6,963	11,791	13,445	15,226
Total Unique Veterans – UDX	9,295	26,955	31,331	33,930
b. Combined Disability Evaluation with at Least One S/	C UDX Condition	n; Receiving Comp	ensation	
Combined Disability Evaluation: 0 percent	<10	<10	13	14
Combined Disability Evaluation: 10 percent	378	2,283	2,721	2,874
Combined Disability Evaluation: 20-60 percent	1,221	7,649	8,960	9,336
Combined Disability Evaluation: 70-90 percent	575	3,830	4,526	4,735
Combined Disability Evaluation: 100 percent	151	1,331	1,599	1,675

**Source:** Official DoD military personnel records matched against VA disability compensation data.

**Notes:** 1) The Pre-9/11 column represents the overall unique total. All other categories are sub-cohorts of the Pre-9/11 cohort; 2) A "<10" entry represents a cell size of less than 10; 3) All cohort data is as of FY09; and 4) Acronym: FY = Fiscal Year.

#### <u>Table BEN-2: Select Cohorts by Overall UDX</u> <u>Disability Compensation Statistics – FY 2009 (continued)</u>

	Al Jubayl	Non-Al Jubayl	Khamisiyah	Non- Khamisiyah
Vital Statistics				
Total Servicemembers	1,334	580,349	145,456	533,788
Estimated Living	1,299	570,943	142,553	525,937
Reported Deceased	35	9,406	2,903	7,851
Disability Compensation				
a. Service Connection Status				
UDX S/C Granted for at Least One Condition	65	17,821	6,490	12,214
UDX S/C Granted; Receiving Compensation	65	17,754	6,460	12,174
UDX S/C Granted; Not Receiving Compensation	0	67	30	40
UDX S/C Disallowed; Not Receiving Compensation	25	13,420	3,982	11,244
Total Unique Veterans – UDX	90	31,241	10,472	23,458
b. Combined Disability Evaluation with at Least One S	/C UDX Condition	on; Receiving Comp	ensation	
Combined Disability Evaluation: 0 percent	0	13	<10	<10
Combined Disability Evaluation: 10 percent	12	2,709	961	1,913
Combined Disability Evaluation: 20-60 percent	26	8,934	3,153	6,183
Combined Disability Evaluation: 70-90 percent	14	4,512	1,716	3,019
Combined Disability Evaluation: 100 percent	13	1,586	624	1,051

Source: Official DoD military personnel records matched against VA disability compensation data.

**Notes:** 1) The Pre-9/11 column represents the overall unique total. All other categories are sub-cohorts of the Pre-9/11 cohort; 2) A "<10" entry represents a cell size of less than 10; 3) All cohort data is as of FY09; and 4) Acronym: FY = Fiscal Year.

Table BEN-3: Cohorts by a Minimum of One Service-Connected Disability

Cohort	FY 2000	FY 2005	FY 2009
Pre-9/11	468,960	787,932	1,124,928
Deployed to Persian Gulf	132,977	217,746	300,132
Not Deployed to Persian Gulf	335,983	570,186	824,796
Gulf War	105,012	158,490	214,941
Stabilization of Period	43,250	85,401	122,271
Desert Shield	74,688	112,246	152,126
Desert Storm	80,836	121,768	165,596
Post-Desert Storm	93,028	141,012	191,711
Al Jubayl	150	220	319
Non-Al Jubayl	Non-Al Jubayl 80,686		165,277
Khamisiyah	Khamisiyah 24,143		46,037
Non -Khamisiyah	68,885	106,196	145,674

**Notes:** 1) The Pre-9/11 category represents the overall unique total. All other categories are sub-cohorts of the Pre-9/11 cohort; 3) All cohort data is as of FY09; and 3) Acronym: FY = Fiscal Year.

Table BEN-4: Cohorts by a Minimum of One UDX Service-Connected Disability

Cohort	FY2000	FY2005	FY2009
Pre-9/11	6,109	7,322	24,409
Deployed to Persian Gulf	5,998	6,999	21,072
Not Deployed to Persian Gulf <sup>3</sup>	111	323	3,337
Gulf War	5,820	6,756	20,069
Stabilization Period	486	615	2,332
Desert Shield	4,414	5,132	15,164
Desert Storm	5,207	6,040	17,886
Post-Desert Storm	5,384	6,285	18,704
Al Jubayl	19	23	65
Non-Al Jubayl	5,188	6,017	17,821
Khamisiyah	1,908	2,250	6,490
Non-Khamisiyah	3,476	4,035	12,214

**Notes:** 1) The Pre-9/11 column represents the overall unique total. All other categories are sub-cohorts of the Pre-9/11 cohort; 2) All cohort data is as of FY09; and 3) Acronym: FY = Fiscal Year.

**Cohort Totals:** Pre-9/11=6,516,030; Deployed to Persian Gulf=1,129,353; Not Deployed to Persian Gulf=5,386,577; Gulf War=763,337; Stabilization Period=492,611; Desert Shield=529,034; Desert Storm=581,683; Post-Desert Storm=679,244; Al Jubayl=1,334; Non-Al Jubayl=580,349; Khamisiyah=145,456; and Non-Khamisiyah=533,788.

<sup>3</sup>For these Not Deployed to Persian Gulf Veterans, service connection for a UDX condition is based upon active duty deployments to the Southwest Asia theater of operations on or after September 11, 2001.

Table BEN-5: Individual Disability Evaluations for the Pre-9/11 Cohort

	FY 2000			2005	FY 2009		
Percentage	Frequency	Unique Veteran Count	Frequency	Unique Veteran Count	Frequency	Unique Veteran Count	
0	1,018,646	357,803	1,647,513	590,086	2,291,521	798,130	
10	655,162	374,843	1,294,828	637,331	2,341,857	958,514	
20	96,338	84,734	199,292	165,210	346,489	272,196	
30	65,433	59,594	138,406	121,430	257,954	219,693	
40	18,323	17,441	40,232	37,571	69,804	64,278	
50	15,158	14,623	41,593	39,768	110,344	105,046	
60	10,064	9,722	21,676	20,852	35,579	33,974	
70	3,790	3,772	11,631	11,577	28,413	28,201	
80	514	505	961	947	1,669	1,644	
90	102	101	180	178	310	306	
100	10,382	9,330	21,307	19,446	39,685	36,719	

**Notes:** 1) The Pre-9/11 column represents the overall unique total. All other categories are sub-cohorts of the Pre-9/11 cohort; 2) All cohort data is as of FY00, FY05, and FY09; and 3) Acronym: FY = Fiscal Year.

Table BEN-6: Combined Disability Evaluations for the Pre-9/11 Cohort

	FY 2000	FY 2005	FY 2009
Percentage	Unique Veteran Count	Unique Veteran Count	Unique Veteran Count
0	1,458	2,785	1,567
10	182,661	239,211	279,613
20	96,704	146,701	181,138
30	67,713	115,634	156,240
40	47,536	92,240	133,595
50	22,471	50,955	84,248
60	19,763	48,944	91,742
70	10,979	33,141	68,731
80	6,477	22,583	53,726
90	2,716	10,926	28,686
100	10,482	24,762	45,344

**Notes:** 1) The Pre-9/11 column represents the overall unique total. All other categories are sub-cohorts of the Pre-9/11 cohort; 2) All cohort data is as of FY00, FY05, and FY09; and 3) Acronym: FY = Fiscal Year.

Table BEN-7: Disability Category Breakouts for the Pre-9/11 Cohort

FY 2000			FY	2005	FY 2009		
Categories	Frequency	Unique Veteran Count	Frequency	Unique Veteran Count	Frequency	Unique Veteran Count	
Cardiovascular	94,895	86,758	168,060	146,928	439,139	330,292	
Dental and Oral Conditions	7,307	7,210	14,517	14,291	71,325	66,596	
Digestive	123,560	106,613	198,424	172,416	508,299	370,604	
Endocrine	20,067	19,360	40,008	38,076	102,358	95,201	
Genitourinary	38,030	35,640	64,469	60,066	218,447	176,923	
Gynecological Conditions and Disorders of the Breast	27,975 23,308		44,743	37,943	102,415	72,495	
Hemic and Lymphatic	7,495	7,130	11,997	11,427	39,046	36,387	
Infectious Diseases, Immune Disorders and Nutritional Deficiencies	9,306	8,957	14,645	13,975	44,928	41,383	
Mental Disorders and Eating Disorders	54,100	50,284	113,916	107,111	361,249	296,452	
Musculoskeletal	897,892	397,341	1,715,764	682,323	3,581,027	997,987	
Neurological Conditions and Convulsive Disorders	103,579	83,878	195,196	153,126	583,169	368,600	
Organs of Special Sense	202,277	141,124	378,363	259,306	1,035,160	547,775	
Respiratory	119,125	101,697	210,938	178,600	615,578	412,479	
Skin Conditions and Scars	194,014	147,486	318,270	243,296	867,695	498,949	

**Notes:** 1) All numbers are based upon s/c conditions assigned a diagnostic code; and 2) Administrative pension grants and condition not well-grounded are excluded; 3) For purposes of this report, Organs of Special Sense includes auditory acuity; 4) All cohort data is as of FY00, FY05, and FY09; and 5) Acronym: FY = Fiscal Year.

Table BEN-8: Cohorts with Combined Disability Evaluations that Include at Least One S/C UDX Grant

	Pre-9/11	Deployed to Persian Gulf	Not Deployed to Persian Gulf <sup>3</sup>	Gulf War	Stabilization Period	Desert Shield	Desert Storm	Post-Desert Storm	Al Jubayl	Non-Al Jubayl	Khamisiyah	Non- Khamisiyah
0 percent	<10	<10	0	<10	<10	<10	<10	<10	0	<10	<10	<10
10 percent	2,131	2,086	45	2,024	183	1,524	1,809	1,889	10	1,799	664	1,225
20-60 percent	3,331	3,270	61	3,174	264	2,421	2,835	2,935	<10	2,830	1,036	1,899
70-90 percent	423	420	<10	406	28	301	370	368	<10	367	126	242
100 percent	143	143	0	141	<10	110	128	125	<10	127	51	74
					FY 2	2005						
0 percent	<10	<10	0	<10	<10	<10	<10	<10	0	<10	<10	<10
10 percent	2,043	1,962	81	1,891	188	1,415	1,690	1,777	11	1,679	616	1,161
20-60 percent	3,743	3,544	199	3,410	334	2,602	3,033	3,170	<10	3,028	1,117	2,053
70-90 percent	920	892	28	869	54	678	794	799	<10	789	306	493
100 percent	341	334	<10	326	23	231	289	297	<10	287	118	179
					FY 2	2009						
0 percent	16	15	<10	14	<10	<10	13	14	0	13	<10	<10
10 percent	3,747	3,236	511	3,071	378	2,283	2,721	2,874	12	2,709	961	1,913
20-60 percent	12,463	10,578	1,885	10,042	1,221	7,649	8,960	9,336	26	8,934	3,153	6,183
70-90 percent	6,031	5,322	709	5,080	575	3,830	4,526	4,735	14	4,512	1,716	3,019
100 percent	2,059	1,843	216	1,787	151	1,331	1,599	1,675	13	1,586	624	1,051

**Notes:** 1) The Pre-9/11 column represents the overall unique total. All other columns are sub-cohorts of the Pre-9/11 cohort; 2) All cohort data is as of FY00, FY05, and FY09; 3) A "<10" entry represents a cell size of less than 10; and 4) Acronym: FY = Fiscal Year, UDX = Undiagnosed Illnesses.

<sup>&</sup>lt;sup>3</sup>For these Not Deployed to Persian Gulf Veterans, service connection for a UDX condition is based upon active duty deployments to the Southwest Asia theater of operations on or after September 11, 2001.

Table BEN-9: Cohorts in Receipt of NSC Pension Benefits

Cohort	FY 2000	FY 2005	FY 2009
Pre-9/11	2,677	6,843	8,902
Deployed to Persian Gulf	660	1,997	2,629
Not Deployed to Persian Gulf	2,017	4,846	6,273
Gulf War	617	1,794	2,279
Stabilization of Period	94	364	558
Desert Shield	416	1,243	1,558
Desert Storm	493	1,424	1,804
Post-Desert Storm	572	1,641	2,072
Al Jubayl	<10	<10	<10
Non-Al Jubayl	492	1,422	1,800
Khamisiyah	174	447	571
Non-Khamisiyah	398	1,194	1,501

**Notes:** 1) The Pre-9/11 category represents the overall unique total. All other categories are sub-cohorts of the Pre-9/11 cohort; 2) All cohort data is as of FY00, FY05, and FY09; 3) A "<10" entry represents a cell size of less than 10; and 4) Acronyms: FY = Fiscal Year, NSC = Nonservice-connected, UDX = Undiagnosed Illnesses.

#### APPENDIX A: OTHER DEFINITIONS

The following appendix provides high-level information for each major term utilized in the report. Definitions that describe the components of the Pre-9/11 cohort structure are located in Section II.

**38 CFR §3.317**: This title 38 regulation defines the geographical jurisdictions within the Southwest Asia theater of operations for the purposes of rendering a decision on disability compensation claims based upon undiagnosed illnesses. The locations are as follows: Iraq, Kuwait, Saudi Arabia, the neutral zone between Iraq and Saudi Arabia, Bahrain, Qatar, the United Arab Emirates, Oman, the Gulf of Aden, the Gulf of Oman, the Persian Gulf, the Arabian Sea, the Red Sea, and the airspace above these locations. *Note:* The neutral zone between Iraq and Saudi Arabia no longer exists.

**Branch/Unit of Service:** A designated organizational entity or component within the Armed Forces.

**Claim:** An application for a VA benefit or service.

**Categories:** The aggregation of disability compensation, NSC pension, and UDX records (subcomponent of disability compensation records) by status.

#### **Disability Compensation Records:**

#### <u>Disability Compensation Records (includes UDX claims)</u>

*Note:* This section accounts for all disability compensation records to include UDX. A separate section exclusively addresses UDX.

- S/C Granted for at Least One Condition: The total of all unique Veterans who were granted service connection for a minimum of one claimed condition. This category includes all service-connected disabilities, from zero percent to 100 percent, regardless of whether the Veteran receives monetary compensation. Limitations: The number of records in which service connection was granted includes Veterans who have subsequently died. The total number of records in which claims were granted remains constant or increases each quarter. However, subcategories of this category may increase or decrease. An increase occurs as additional Veterans are granted service-connected disability compensation and a decrease occurs when a Veteran with a granted claim reenlists on active duty or is ordered to active duty from the Reserve Forces. Veterans who return to active duty are not permitted to receive both active duty pay and concurrent VA disability compensation.
- S/C Granted; Receiving Compensation: The total of all unique Veterans in the S/C Granted for at Least One Condition category in which compensation benefits are being paid. VA must have rated at least one service-connected condition at

ten percent (10%) or higher, and the Veteran receives compensation payments; or, Veterans where VA rated at least one service-connected condition at zero percent (0%) with a grant of Special Monthly Compensation; or, the Veteran qualifies for compensation based on VA regulations for multiple zero percent service-connected conditions.

- S/C Granted; Not Receiving Compensation: The total of all unique Veterans in which VA granted service-connection for a condition, but compensation is not being paid. This is a subset of the S/C Granted for at Least One Condition category.
- S/C Disallowed; Not Receiving Compensation: The total of all unique Veteran records in which service connection is disallowed and compensation is not being paid. That is, none of the Veteran's conditions meet eligibility requirements for service connection under VA statutes and regulations. This disallowance is called "Nonservice-Connected," or "NSC." Limitation: This includes records where Veterans' conditions were determined to be NSC even if the Veteran was granted pension. The total number of records may decrease as appealed or reopened claims are granted.
- Total Unique Veterans: The total of all unique Veterans in the S/C Granted for at Least One Condition and S/C Disallowed; Not Receiving Compensation categories.
- Pending Compensation Claims: The total of all types of disability compensation claims (e.g., original, increase, and reopened) that are under review and await a final decision.
  - Pending Original Compensation Claims: The initial application for disability compensation benefits.
  - Pending Increased Compensation Claims: Any disability compensation claim subsequent to the initial grant of service connection.
  - Pending Reopened Compensation Claims: Any compensation claim filed subsequent to the disallowance of a disability compensation claim.
  - Total Pending Compensation Claims: The combined total of pending original, increased, and reopened claims.

#### Nonservice-connected (NSC) Pension

 Benefits Granted: The total of all records in which processed NSC pension claims submitted and subsequently VA determined that the Veteran's condition(s) were not related to military service. This disallowance is called "nonservice-connected," or "NSC." However, the Veteran qualifies for a pension due to a NSC disability and other qualifications to include income and wartime service.

#### <u>Undiagnosed Illnesses (UDX)</u>

- UDX S/C Granted for at Least One Condition: The total of all unique Veterans with a grant of service connection for a disability that cannot be attributed to any known clinical diagnosis by history, physical examination, and laboratory tests. For records in which a Veteran filed a claim for more than one UDX condition, this category contains Veterans with a full grant of all UDX conditions as well as Veterans with a combination of grants and denials for UDX conditions. Disabilities are evaluated according to VA regulations, and the extent of the disability is expressed as a percentage from zero percent to 100 percent, in increments of 10 percent. UDX S/C Granted for at Least One Condition includes all service-connected UDX disabilities, from zero percent to 100 percent, regardless if the Veteran receives compensation. *Limitations:* For all UDX categories, UDX disabilities are identified using a specific diagnostic code identifier. Based on limitations of data stored in the select VA benefits-related data systems, some Veterans' records who were rated for UDX claims are not identified. Any analysis or conclusions drawn based on numbers of UDX identifiers would be inaccurate. Note: Once a UDX claim is diagnosed, it is no longer reflected as UDX and may result in decreased numbers.
- UDX S/C Granted; Receiving Compensation: The total of all unique Veterans in the UDX S/C Granted for at Least One Condition category in which compensation is being paid.
- UDX S/C Granted; Not Receiving Compensation: The total of all unique Veterans in which service connection for a UDX condition is granted as 0 percent and no compensation is being paid. This is a subset of the UDX S/C Granted for at Least One Condition category.
- UDX S/C Disallowed; Not Receiving Compensation: The total of all unique Veteran records in which service connection is disallowed for a UDX condition and any other claim condition, and thus no compensation is being paid. That is, none of the Veteran's conditions meet eligibility requirements for service connection under VA statutes and regulations. This disallowance is called "Nonservice-Connected," or "NSC."
- Total Unique Veterans UDX: The total of all unique Veterans in the UDX S/C Granted for at Least One Condition and UDX S/C Disallowed; Not Receiving Compensation.
- Contract-Provided Care: Any hospital, skilled nursing facility, extended care facility, individual, organization, or agency that has a contractual agreement with VA for providing medical services to Veterans.

**Diagnostic Code:** The numeric indicator assigned to each disease or disability outlined in the VA's *Schedule for Rating Disabilities*. For instance, diagnostic code 5257 represents a knee impairment.

**Disability Compensation**: A monetary benefit paid to Veterans who are disabled by an injury or illness that was incurred or aggravated during active military service. These disabilities are considered to be service-connected. Disability compensation varies with the degree of disability and the number of a Veteran's dependents, and is paid monthly. Veterans with certain severe disabilities may be eligible for additional special monthly compensation. The benefits are not subject to federal or state income tax. The payment of military retirement pay, disability severance pay and separation incentive payments known as SSB (Special Separation Benefits) and VSI (Voluntary Separation Incentives), and Combat-Related Special Compensation affect the amount of VA compensation paid to disabled Veterans. To be eligible, the service of the Veteran must have been terminated through separation or discharge under conditions other than dishonorable.

Disability Categories: VA's Schedule for Rating Disabilities (also known as the Rating Schedule) identifies the following categories of disabilities, generally organized according to systems of the human body: Musculoskeletal; Organs of Special Sense, Auditory Acuity, Infectious Diseases, Immune Disorders, and Nutritional Deficiencies; Respiratory; Cardiovascular; Digestive; Genitourinary; Gynecological Disorders and Disorders of the Breast; Hemic and Lymphatic; Skin; Endocrine; Neurological Conditions and Convulsive Disorders; Mental Disorders; and Dental and Oral Conditions. For purposes of this report, disabilities relating to Auditory Acuity have been counted as a subset of disabilities relating to the Organs of Special Sense.

**Disability Evaluation:** Each diagnostic code contains a series of assigned values (percentages) which represent established criteria published in Title 38, CFR. The percentages, though varying for each diagnostic code, range from 0 percent to 100 percent. The formulated total of each individual disability evaluation is called the combined disability evaluation.

**DMDC:** Known as the Defense Management Data Center, this DoD entity is responsible for capturing data on Servicemembers, among other functions.

**DoD:** Department of Defense.

**Fee-Basis:** A program that pays for medically necessary care at non-VA facilities for certain Veterans when VA is not capable of providing the care required, or cannot provide it economically due to geographic inaccessibility.

Gender: Male, female or unknown.

**Gulf War (Persian Gulf War):** A period of war defined by Title 38, CFR, Section 3.2(i) based upon active military service from August 2, 1990, through date to be prescribed by Presidential proclamation or law.

**Gulf War Era:** A term developed for the purposes of this report which represents a period of time synonymous with the Gulf War period of service.

Gulf War Registry: A voluntary health assessment program offered by all VA medical centers for those Veterans who served in the Southwest Asia theater of operations, as defined by 38 CFR §3.317, from August 2, 1990 to the present date. This program involves a complete physical examination and basic laboratory tests. Specialized tests and consultations are available, if needed. Established by P.L. 102-585 (November 4, 1992), VA maintains this health registry in order to identify possible diseases resulting from military service in certain areas of Southwest Asia. The Registry includes the name of each individual who served in the Armed Forces in the Persian Gulf theater of operation during the Gulf War and who (1) applies for health care or services from VA, (2) files a claim for compensation from VA based on disabilities associated with Persian Gulf service; (3) dies and is survived by a spouse, child, or parent who files a claim for dependency and indemnity compensation; (4) requests a health examination; or (5) receives from the DoD a health examination similar to that provided by VA and requests inclusion in the VA Registry.

**ICD-9-CM Code:** A disability and disease classification system known as the International Classification of Diseases. While used by VA health care professionals (and others worldwide), it is distinct from VBA's "Rating Schedule."

**Health Care Enrollment:** The process of establishing eligibility for VA's "Medical Benefits Package." Most Veterans are required to "enroll" into the VA Health Care System to be eligible for VA health care; however some can still receive care without enrolling. Applicants are only required to "enroll" once for VA health care unless they are determined ineligible for care at time of application or they have disenrolled.

**Hospice:** A program which offer pain management, symptom control, and other medical services to terminally ill Veterans or Veterans in the late stages of the chronic disease process.

**Inpatient (acute and residential) Care:** Services furnished during a patient's stay in a hospital or other inpatient facility.

**Long-Term Care:** Patient care for extended periods of time in which is custodial in nature.

**Master Record:** An electronic summary of a Veteran's (or other payee) status within a benefit program. For example, a Type A record represents a living Veteran and a Type E record represents a terminated record.

**Nonservice-Connected (NSC) Pension:** A benefit program for qualifying Veterans with low income who are either permanently and totally disabled or age 65, and have 90 days or more of active military service, at least one day of which was during a period of war. *Note:* Veterans who entered active duty on or after Sept. 8, 1980, or officers who entered active duty on or after Oct. 16, 1981, may have to meet a longer minimum period of active duty. Additionally, the Veteran's discharge must have been under conditions other than dishonorable and the disability must be for reasons other than the Veteran's own willful misconduct. The current pension program is called Improved Disability Pension. Other grandfathered pension programs remain.

**Operation Desert Farewell:** The designated U.S. Army operational name for the retrograde and redeployment phase of the Gulf War (1990-1992). It was preceded by Desert Shield and Desert Storm.

**Operation Desert Fox:** A multi-day series of air and missile strikes (December 16-19 1998) aimed at destroying select Iraqi military and security-related targets suspected of producing weapons of mass destruction.

**Operation Provide Comfort:** An effort to provide relief to the Kurdish refugees from northern Iraq and protection for humanitarian relief efforts. It began on April 6, 1991 and ended July 24, 1991. Operation Provide Comfort II was a show of force to deter new Iraqi attacks on the Kurds and had only limited humanitarian aspects. Provide Comfort II began July 24, 1991 and ended December 31, 1996.<sup>1</sup>

**Operation Southern Watch:** An effort to monitor compliance with United Nations Security Council Resolutions and enforce the no-fly zone south of the 33rd parallel in Iraq. It started on August 26, 1992 and ended on March 19, 2003 – the start of Operation Iraqi Freedom

**Operation Northern Watch:** An effort based out of Incirlik Air Base, Turkey which enforced the no-fly zone north of the 36th parallel in Iraq and monitored the Iraqi compliance with the UN Security Council Resolutions 678, 687 and 688. It began on January 1, 1997 and ended on March 19, 2003 – the start of Operation Iraqi Freedom

**Outpatient Care:** Medical services which do not require hospital admission. Examples include office visits, x-rays, lab tests and some surgical procedures.

**Pension Management Center (PMC):** One of three centralized pension processing centers located in Milwaukee, Wisconsin; Philadelphia, Pennsylvania; and St. Paul, Minnesota.

<sup>&</sup>lt;sup>1</sup> Maxwell Air Force Base, Air University Library, "Operation Provide Comfort: OTS Current Military Topics," http://www.au.af.mil/au/aul/bibs/opproco/oppc.htm, accessed August 31, 2010.

**Priority Group (Healthcare Enrollment Priority Group):** VA health care enrollment groupings which are used to balance demand with resources. Changes in available resources may reduce the number of priority groups VA can enroll. If this occurs, VA will publicize the changes and notify affected enrollees. A description of priority groups follows:

**Group 1**: Veterans with VA-rated service-connected disabilities 50 percent or more disabling; and Veterans determined by VA to be unemployable due to service-connected conditions.

**Group 2:** Veterans with VA-rated service-connected disabilities 30 percent or 40 percent disabling.

**Group 3:** Veterans who are Former Prisoners of War (FPOWs); Veterans awarded a Purple Heart medal; Veterans whose discharge was for a disability that was incurred or aggravated in the line of duty; Veterans with VA-rated service-connected disabilities 10 percent or 20 percent disabling; Veterans awarded special eligibility classification under Title 38, U.S.C., § 1151, "benefits for individuals disabled by treatment or vocational rehabilitation;" and Veterans awarded the Medal Of Honor.

**Group 4:** Veterans who are receiving aid and attendance or housebound benefits from VA; and Veterans who have been determined by VA to be catastrophically disabled.

**Group 5:** NSC Veterans and noncompensable service-connected Veterans rated 0 percent disabled by VA with annual income and/or net worth below the VA national income threshold and geographically-adjusted income threshold for their resident location; Veterans receiving VA pension benefits; and Veterans eligible for Medicaid programs.

**Group 6:** World War I Veterans; Compensable 0 percent service-connected Veterans; Veterans exposed to ionizing radiation during atmospheric testing or during the occupation of Hiroshima and Nagasaki; Project 112/Shipboard Hazard and Defense (SHAD) participants; Veterans exposed to the defoliant Agent Orange while serving in the Republic of Vietnam between 1962 and 1975; Veterans of the Gulf War that served between August 2, 1990 and November 11, 1998; Veterans who served in a theater of combat operations after November 11, 1998 as follows: a) currently enrolled Veterans and new enrollees who were discharged from active duty on or after January 28, 2003, are eligible for the enhanced benefits for five-years post-discharge; b) Veterans discharged from active duty before January 28, 2003, who apply for enrollment on or after January 28, 2008 are eligible for this enhanced enrollment benefit through January 27, 2011. *Note:* At the end of this enhanced enrollment priority group placement time period, Veterans will be assigned to the highest Priority Group their unique eligibility status at that time qualifies for.

**Group 7:** Veterans with gross household income below the geographically-adjusted income threshold (GMT) for their resident location and who agree to pay co-pays.

**Group 8:** Veterans with gross household income above the VA national income threshold and the geographically-adjusted income threshold for their resident location and who agrees to pay co-pays.

- a. Veterans eligible for enrollment: Noncompensable 0 percent service-connected and: Subpriority a: Enrolled as of January 16, 2003, and who have remained enrolled since that date and/or placed in this subpriority due to changed eligibility status; Subpriority b: Enrolled on or after June 15, 2009 whose income exceeds the current VA National Income Thresholds or VA National Geographic Income Thresholds by 10 percent or less.
- **b. Veterans eligible for enrollment**: Nonservice-connected and: *Subpriority c:* Enrolled as of January 16, 2003, and who have remained enrolled since that date and/or placed in this subpriority due to changed eligibility status; *Subpriority d:* Enrolled on or after June 15, 2009 whose income exceeds the current VA National Income Thresholds or VA National Geographic Income Thresholds by 10% or less.
- **c. Veterans not eligible for enrollment**: Veterans not meeting the criteria above: *Subpriority e:* Noncompensable 0% service-connected; and Subpriority *g:* Nonservice-connected.

**Pro-Rated Patient (PRP):** A VA term created by the Allocation Resource Center (ARC) to account for care across networks or facilities based on a pro-ration of the cost of care provided at each facility. A PRP is a measure of patient workload based on the proportionate distribution of cost. PRPs are used in the VERA System to allocate funds to networks. PRPs are computed from patient workload data obtained from the National Patient Care Database (NPCD), Patient Treatment Files (PTF), Census files and Fee files for non-VA care. Costs associated with patient care are obtained from the Decision Support System (DSS) National Data Extract (NDE).

**Race/Ethnicity:** OMB-designated classifications for classifying the American population.

Rank: A designation of position and responsibility within a branch of service.

**Reserve/Guard:** Components within the Armed Forces who may or may not be Federally-activated to military service.

**Service Connection (S/C):** "Service-connected" means, with respect to disability or death, that such disability was incurred or aggravated, or that the death resulted from a disability incurred or aggravated, in line of duty in the active military, naval, or air service. This status is achieved when all eligibility requirements for service connection under VA statutes and regulations have been met. When service connection is attained for a disability or disease, whether compensable or not, that condition is deemed "service-connected." These disabilities and diseases are evaluated according to VA

regulations, and the extent of the disability is expressed as a percentage from zero percent to 100 percent, in increments of 10 percent.

**Servicemembers:** For the purposes of this report, Servicemembers are identified as those individuals with active military service on or between the inclusive dates of August 2, 1990 and September 10, 2001. This includes members of the Army, Navy, Air Force, Marine Corps, Coast Guard as well as qualifying Reservists and Guard members.

**Undiagnosed Illnesses (UDX):** A chronic disability which manifested either during active military, naval, or air service in the Southwest Asia theater of operations during the Gulf War, or to a degree of 10 percent or more not later than December 31, 2011. Additionally, the disability cannot be attributed to any known clinical diagnosis by history, physical examination, and laboratory tests. Reference 38 CFR §3.317.

**VA Medical Facility:** A structure within VA's health care system that provides medical-related services.

VA Regional Office (VARO): A collection of 56 benefits offices that provide benefits information and process claims. At least one VARO is located within every state and as well as the District of Columbia, Puerto Rico, and the Republic of the Philippines. Some VAROs also provide out-based services to Veterans being discharged from active service at various military separation centers around the country as well as in the Federal Republic of Germany and the Republic of Korea.

**VADIR:** As the official VA/DoD data exchange, it is formally known as the (Department of) Veterans Affairs/Department of Defense Identity Repository.

**Vet Center:** A type of VA health care facility designed to provide outreach and readjustment counseling services through 232 community-based Vet Centers located in all 50 states, the District of Columbia, Guam, Puerto Rico, American Samoa, and the U.S. Virgin Islands. Veterans are eligible if they served on active duty in a combat theater during World War II, the Korean War, the Vietnam War, the Gulf War, or the campaigns in Lebanon, Grenada, Panama, Somalia, Bosnia, Kosovo, Afghanistan, Iraq and the Global War on Terror. Veterans, who served in the active military during the Vietnam-era, but not in the Republic of Vietnam, must have requested services at a Vet Center before Jan. 1, 2004. Vet Centers do not require enrollment in the VHA Health Care System.

**VISN:** Veteran Integrated Service Networks are organizational elements within VA's healthcare system. There are a total of 21 VISNs which provide geographic oversight to a collection of healthcare facilities within the established jurisdictions.

# **Appendix B: Timeline**

By reporting events from a variety of disciplines, the following reference timeline provides a high-level picture of some of the activities and actions that defined the Gulf War Era. VA and DoD events were kept to a minimum.

In order to track similar events, headers have been placed at the beginning of each entry.

ADJ: VA Claims Adjudication; EO: Executive Order; HLTH: Health Care; HILLCOM: Hill Committee; IOM: Institute of Medicine: MIL: Military Actions (American, Coalition, or Iraqi); NSD: National Security Directive; OTRCH: Outreach; PRES: President; PRESCOM: Presidential Committee; REG: Regulation; PL: Legislation; RSRCH: Research; and UN: United Nations.

## 1990

August 2 Start date for this report.

**MIL:** The Republic of Iraq (Iraq) invades, occupies and annexes the State of Kuwait (Kuwait).

**UN:** United Nations Security Council Resolution 660 condemns Iraq's invasion of Kuwait and demands the at once and unconditional withdrawal for Iraq's occupying forces.

**EO:** The President signs Executive Order (E.O.) 12722 which blocks Iraqi government property and prohibits transactions with Iraq.

**EO:** Additionally, the President signs E.O. 12723 which blocks all American property transactions with the Kuwaiti government itself, or with Iraqi-occupied Kuwait.

August 6 **UN:** United Nations Security Council Resolution 661 passes which places both select embargoes and sanctions against Iraq and the Iraqi-occupied Kuwait.

**MIL:** Operation Desert Shield begins as the United States mobilizes and deploys military forces to Southwest Asia.

**UN:** United Nations Security Council unanimously approves Resolution 662 which declares Iraq's annexation of Kuwait null and void.

. . . . .

August 9

**EO:** The President signs E.O. 12724 which prohibits transactions with Iraq and blocks the movement of Iraqi government property.

**EO:** Additionally, the President signs E.O. 12725 which prohibits transactions with Kuwait and blocks the movement of Kuwaiti government property. It was revoked on July 15, 1991.

August 20

**NSD:** The President releases National Security Directive 45, *U.S. Policy in Response to the Iraqi Invasion of Kuwait*, which outlines the American response to the Iraqi invasion of Kuwait.

August 22

**EO:** The President signs E.O. 12727 which orders the Selected Reserve to active duty.

November 13

**EO:** The President extends the Select Reserve call-up via E.O. 12733.

November 29

**UN:** United Nations Security Council Resolution 678 authorizes the use of military force to uphold select resolutions (especially Resolution 660) and restore regional peace and security unless Iraq withdraws on or before January 15, 1991.

## <u>1991</u>

January 14

**PL:** Congress passes PL 102-1, Authorization for Use of Military Force Against Iraq Resolution, which authorizes the President to utilize the United States Armed Forces pursuant to United Nations Security Council Resolution 678 in order to achieve implementation of 11 U.N. Security Council Resolutions.

January 15

**NSD:** The President releases National Security Directive 54, Responding to Iraqi Aggression in the Gulf, outlines military actions to liberate Kuwait from the occupying Iraqi forces.

January 16

**MIL:** Iraq ignites and/or destroys the first of an estimated 750 oil wells located in Kuwait and other areas.

January 17

**MIL:** Operation Desert Storm, known as the "air war" begins at 3:00 a.m. Arabia Standard Time (AST) or 7:00 p.m. Eastern Standard Time (EST) on January 16.

January 18

**EO:** The President signs E.O. 12743 which orders the Ready Reserve to active duty.

adjudication guidance to all VA regional offices. Reference: VBA Circular 20-91-2, Operation Desert Storm Procedures. January 19 **MIL:** The first of three "possible Iraqi chemical warfare agent attack" incidents occurs at Al Jubayl, Saudi Arabia. **EO:** The President signs E.O. 12744 which designates the Arabian January 21 Peninsula area to include the airspace above and adjacent waters as a combat zone. February 14 **EO:** The President signs E.O. 12750 designates the Arabian Peninsula area, airspace and adjacent waters as the Persian Gulf Desert Shield area. **EO:** Additionally, the President signs E.O. 12751 which provides health care service for Operation Desert Storm. February 24 **MIL:** Under the auspices of Operation Desert Sabre, Operation Desert Storm's "ground war" commences at 4:00 a.m. AST, or 8:00 p.m. EST on February 23. February 25 **MIL:** An Iraqi SCUD missile kills 28 soldiers at the military barracks in Dhahran, Saudi Arabia. **MIL:** The President declares a cessation of hostilities at 8:00 a.m. February 28 AST or 12:01 a.m. EST as military forces liberate Kuwait. March 1 **MIL:** Operation Desert Farewell – the U.S. Army-led retrograde and redeployment phase of the Gulf War – begins on this date. March 3 MIL: Iraqi representative accept the terms of the cease-fire at Safwan Airfield, Iraq. March 4 & 10 **MIL:** The U.S. military destroys chemical agent warfare-laden weaponry at the Khamisiyah Ammunition Supply Point, Irag. March 12 **EO:** The President signs E.O. 12754 which establishes the Southwest Asia Service Medal. E.O. 12790 amends this order on March 3, 1992. April 3 UN: United Nations Security Council Resolution 687 declares a formal cease-fire and outlines conditions involving chemical, biological and nuclear weaponry and associated inspections. April 6 **MIL:** Iraq officially accepts the cease-fire terms.

**ADJ:** VA releases the first of an extensive set of claims

**PL:** The President signs P.L. 102-25, Persian Gulf Conflict Supplemental Authorization and Personnel Benefits Act of 1991, Persian Gulf War Veterans' Benefits Act of 1991, otherwise known as the Persian Gulf War Veterans' Benefits Act of 1991.

April 11 **MIL:** The Gulf War cease-fire takes effect.

April 16 *MIL:* Operation Provide Comfort I starts and immediately provides relief to Kurdish refugees from Northern Iraq and protection as well as protection for humanitarian relief operations. It ended on July

24, 1991.

July 24 **MIL:** As a show of force to deter new Iraqi attacks on the Kurds,

Operation Provide Comfort II begins on this date. It ends on

December 31, 1996.

October 8 **EO:** The President signs E.O. 12776 which extends the National

Defense Service Medal to members of the Reserve components

who served during the Gulf War.

November 6 *MIL:* The last remaining oil well fire is capped.

November 15 **REG:** Based upon the provisions of P.L. 102-25, VA publishes 38

CFR §3.2(i) which adds the Gulf War as a period of war.

December 5 PL: The President signs P.L. 102-190, National Defense

Authorization Act for Fiscal Years 1992 and 1993, which, among other things, authorizes DoD to establish a medical registry for Servicemembers exposed to the fumes of burning oil wells.

<u>1992</u>

March 3 **EO:** Via E.O. 12970, the President amends E.O. 12754 which

established the Southwest Asia Service Medal.

August 1992 **HLTH:** Ahead of eventual legislation, VA launches a registry

program for Gulf War Veterans.

August 18 **HLTH:** VA established three Persian Gulf Referral Centers to help

Persian Gulf Veterans whose symptoms defy explanation through the usual diagnostic and therapeutic endeavors of a local VA

medical center.

August 27 MIL: In an effort to monitor and control the Iraqi airspace south of

the 33<sup>rd</sup> parallel, Operation Southern Watch starts.

October **HLTH:** The first volume and edition of VA's *Persian Gulf Review* is

released.

November 4

**PL:** The President signs P.L 102-585, *Veterans Health Care Act of 1992*, which in part authorizes VA to establish and maintain a "Persian Gulf War Veterans Health Registry." In doing so, VA must among other things provide a registry health examination to any Veteran described in the law who requests such an examination and issue notifications regarding health consequences from their Gulf War service.

December 7

**ADJ:** VA issues guidance which designates the Louisville, Kentucky VA Regional Office (VARO) as the consolidated processing location for all environmental hazard exposure claims based upon active duty in the Persian Gulf region during the Gulf War. This guidance was revised on October 11, 1994.

#### 1993

March 30

HLTH: Because of continuing concerns about the possible health effects of military service in the Persian Gulf, VA establishes a "blue ribbon" panel of experts to examine these concerns, including multiple chemical sensitivity, chronic fatigue syndrome, and post-traumatic stress disorder. Formally known as the "Persian Gulf Expert Scientific Panel," the composition of the Panel includes experts in environmental and occupational medicine and related fields from both government and the private sector, as well as officials from Veterans Service Organizations.

December 20

PL: The President signs P.L. 103-210, To amend title 38, United States Code, to provide additional authority for the Secretary of Veterans Affairs to provide health care for Veterans of the Persian Gulf War, providing VA with, inter alia, the authority to provide inpatient and outpatient care to Veterans for medical conditions possibly related to exposure to toxic substances or environmental hazards during active duty service in the Southwest Asia theater of operations during the Gulf War. Additionally, co-payments do not apply to their receipt of care for those conditions.

#### 1994

January 21

**PRES:** In an effort to resolve the health concerns of Gulf War Veterans as well as active duty Servicemembers and Guard/Reservists, the President establishes the Persian Gulf Veterans Coordinating Board. Focused on clinical evaluations, research issues, and disability compensation, this Board was chaired by the Secretaries for the Departments of Defense, Health and Human Services, and Veterans Affairs.

June 7 **HLTH:** Jointly-developed by VA and DoD, a DoD-administered

program called the Comprehensive Clinical Evaluation Program (CCEP) provides a comprehensive medical evaluation for Gulf War Veterans with health concerns. The agencies activate a toll-free

number (1-800-796-9699) on June 23, 1994.

June 23 **HLTH:** DoD releases the final report of the Defense Science Board

Task Force on Persian Gulf War Health Effects. The Under Secretary of Defense (Acquisition and Technology) establishes the Task Force to review information regarding the possible exposure of personnel to chemical and biological weapons agents and other

hazardous material during the Gulf War and its aftermath.

July 29 **HLTH:** VA establishes three environmental hazards research

centers designed with an initial focus on the possible health effects of environmental exposures of Gulf War Veterans. The first centers were located at VA medical centers in Boston, Massachusetts; East

Orange, New Jersey; and Portland, Oregon.

October 11 ADJ: VA issues guidance which redistributes environmental hazard

exposure claims to VA regional offices in the following locations:

Louisville, Kentucky; Nashville, Tennessee; Philadelphia,

Pennsylvania; and Phoenix, Arizona. This action revises guidance

issued on December 7, 1992.

November 2 **PL:** Congress enacts P.L. 103-446, Veterans Benefits Improvement

Act of 1994.

1995

January 1 **IOM**: IOM's Medical Follow-up Agency (MFUA) releases *Health* 

Consequences of Service During the Persian Gulf War: Initial

Findings and Recommendations for Immediate Action.

February 1 **ADJ:** In advance of publication of 38 CFR §3.317, VA releases

initial adjudication guidance for claims involving undiagnosed

illnesses.

February 2 OTRCH: VA activates the VA Persian Gulf Information Center and

the toll-free Persian Gulf War Veterans Helpline (1-800-PGW-VETS

or 1-800-749-8387).

February 3 **REG:** VA publishes 38 CFR §3.317 which implements section 103

of P.L. 103-446.

May 26 **EO/PRESCOM:** The President signs E.O. 12961 which establishes

the Presidential Advisory Committee on Gulf War Veterans' Illnesses. It was formally charged to provide advice and

recommendations regarding 1) research; 2) coordination efforts;

3) medical treatment; 4) outreach; 5) external reviews; 6) risk factors (specifically including drugs and vaccines, infectious diseases, environmental chemicals, radiation and toxic substances, smoke from oil well fires, depleted uranium, physical and psychological stress, and other factors applicable to the Gulf War); and 7) chemical and biological weapons. The Committee issues the final report on December 31, 1996.

May 30

**OTRCH:** DoD activates a new toll-free number (1-800-472-6719) which permits Gulf War Veterans an opportunity to report firsthand details of war-related "incidents" they feel may have contributed to their health problems. This supplements the CCEP hotline established in June 1995.

November 13

*MIL:* A car bomb kills five Americans and two Indians in Riyadh, Saudi Arabia.

#### 1996

January 1

**IOM:** IOM's MFUA releases Health Consequences of Service During the Persian Gulf War: Recommendations for Research and Information Systems.

February 13

**PL:** The President signs P.L. 104-110, An Act to amend title 38, United States Code, to extend the authority of the Secretary of Veterans Affairs to carry out certain programs and activities, and for other purposes, which, among other things, extends VA's authority to provide health care services to Gulf War Veterans for any disability possibly related to their exposure to toxic substances and environmental hazards.

June 20

**RSRCH:** DoD and VA announce the award of \$7.3 million for 12 research grants to Federal agencies, academic institutions, and other non-Federal agencies to study possible causes and treatments of Gulf War Veterans' illnesses.

June 21

*MIL:* DoD announces that U.S. troops destroyed an Iraqi ammunition bunker contained chemical agent-laden weaponry.

June 25

*MIL:* A truck bomb kills 19 American military personnel at the Khobar Towers in Dhahran, Saudi Arabia.

August 7

**OTRCH:** DoD commences a series of outreach efforts to contact those Servicemembers involved with munitions demolitions at Khamisiyah Ammunition Storage Depot, Iraq.

December 31

The Presidential Advisory Committee on Gulf War Veterans' Illnesses releases its final report.

#### 1997

January 1 *MIL:* Operation Northern Watch commences with an objective to

enforce the no-fly zone north of the 36th parallel in Iraq and monitoring Iraqi compliance with UN Security Council resolutions 678, 687, and 688. Headquartered at Incirlik Air Base, Turkey, the

operation ends on March 19, 2003.

January 30 **EO/PRESCOM:** The President signs E.O. 13034 which extends the

Presidential Advisory Committee on Gulf War Veterans' Illnesses. The output of this action was the Special Report, of the Presidential Advisory Committee on Gulf War Veterans Illnesses, which was

received by the President on November 8, 1997.

April 29 **REG:** VA publishes the first extension of 38 CFR §3.317 which

extends the presumptive period for illnesses which manifest to a degree of 10 percent. The effective date is November 4, 1994.

May 23 ADJ: VA issues guidance which redistributes environmental hazard

exposure claims to all 57 VAROs. This action revises guidance

issued on October 11, 1994.

September 23 **ADJ:** Using DoD-identified rosters, VA establishes the Gulf War

Veterans Information System (GWVIS) to analyze disability compensation and NSC pension benefit trends for those Veterans with active duty service after August 2, 1990. VA publishes the last

report in November 2008.

October 31 **PRESCOM:** The Presidential Advisory Committee on Gulf War

Veterans' Illnesses submits its *Special Report* to the President. This effort was preceded by submission of a final report in

December 1996.

November 21 **PL:** The President signs P.L. 105-114, Veterans' Benefits Act of

1997. This legislation in part 1) broadens the special treatment authority for Gulf War Veterans to cover any disability possibly related to their service in the Gulf; and 2) requires VA to conduct a

program of demonstration projects to test new treatment

approaches for Gulf War Veterans who suffer from undiagnosed

illnesses.

#### 1998

January 1 *IOM:* IOM's Board on Population Health and Public Health Practice

(BPH) releases Adequacy of the Comprehensive Clinical

Evaluation Program: A Focused Assessment.

*IOM:* Additionally, IOM releases *Adequacy of the VA Persian Gulf Registry and Uniform Case Assessment Protocols.* 

The Board on Population Health and Public Health Practice releases *Measuring the Health of Persian Gulf Veterans: Workshop Summary.* 

February 19

**PRESCOM:** The President establishes the Special Oversight Board for Department of Defense Investigations of Gulf War Chemical and Biological Incidents via E.O. 13075. The Board issues a final report in December 2000.

March 3

**ADJ:** A satellite video teleconference is conducted regarding guidelines for disability compensation examinations for Gulf War Veterans.

**MIL:** DoD announces anthrax vaccinations for Persian-Gulf-deployed military personnel.

March 6

**REG:** VA publishes the second extension of 38 CFR §3.317 which revises the presumptive period for undiagnosed illnesses to include any such disability that becomes manifest through the year 2001. The effective date is March 6, 1998.

July 9

**HLTH:** VA publishes health care guidance regarding depleted uranium exposures. Reference: VHA Directive 98-032, *Evaluation Protocol for Gulf War Veterans with Potential Exposure to Depleted Uranium (DU)*.

September 21

**HILLCOM:** The Senate Committee on Veterans' Affairs released a document entitled *Report of the Special Investigation Unit on Gulf War Illnesses*.

October 21

**PL:** Congress enacts P.L. 105-277, Persian Gulf War Veterans Act of 1998.

November 11

**PL:** The President signs P.L. 105-368, Veterans Programs Enhancement Act of 1998.

December 16

**MIL:** Operation Desert Fox commences which involves a multi-day airstrike and bombing campaign on select targets within Iraq. It ends on December 19.

## **1999**

January 1 IOM: MFUA releases Strategies to Protect the Health of Deployed

U.S. Forces: Medical Surveillance, Record Keeping, and Risk

Reduction.

August 1 *IOM:* BPH releases *Gulf War Veterans: Measuring Health.* 

**2000** 

January 1 IOM: BPH releases Gulf War and Health: Volume 1. Depleted

Uranium, Sarin, Pyridostigmine Bromide, and Vaccines.

**IOM**: MFUA releases An Assessment of the Safety of the Anthrax

Vaccine: A Letter Report.

IOM: MFUA Agency releases Strategies to Protect the Health of

Deployed U.S. Forces: Detecting, Characterizing, and Documenting

Exposures.

October 12 MIL: A bombing attack kills 17 sailors aboard the USS Cole (DDG

67) while moored in the port city of Aden, Yemen.

December 20 MIL: The Special Oversight Board for Department of Defense

Investigations of Gulf War Chemical and Biological Incidents

releases its final report.

<u> 2001</u>

May 10 **HLTH:** VA establishes the first War-Related Illness and Injury Study

Centers (WRIISCs) at VA medical centers in Washington, DC, and

East Orange, NJ.

July 26 IOM: BPH releases Gulf War Veterans: Treating Symptoms and

Syndromes.

September 10 End date for this report.

# Appendix C. Public Laws and Regulations

(August 2, 1990 to September 10, 2001)

The following reference document provides a general description of key VA and non-VA-related laws affecting Gulf War Veterans. This document does not describe every VA program or benefit affected by these laws. For each outlined public law (P.L.), the VA regulation(s) applicable to the program or benefits discussed and associated effective date (s) are noted. Additionally, a brief summation of changes to 38 CFR §3.317 (presumption of service connection based upon undiagnosed illnesses) within the above inclusive date range is provided.

# a. Public Laws

## P.L. 102-1, Authorization for Use of Military Force Against Iraq Resolution

Enacted by Congress on January 14, 1991, this legislation authorizes the President to utilize the United States Armed Forces pursuant to United Nations Security Council Resolution 678 in order to achieve implementation of eleven other enumerated United Nations Security Council Resolutions. Before exercising the authority to use force, the President is required to determine that the United States has used all appropriate diplomatic and other peaceful means to obtain compliance by Iraq with the eleven United National Security Council Resolutions, and that those efforts have not been and would not be successful in obtaining Iraq's compliance.

Implementing VA Regulation: None.

# P.L. 102-25, Persian Gulf Conflict Supplemental Authorization and Personnel Benefits Act of 1991

This legislation adds the Persian Gulf War (Gulf War) to title 38, United States Code, as an official "period of war" for purposes of Veterans' benefits. The Persian Gulf War is defined statutorily to mean the period beginning on August 2, 1990, and ending on the date thereafter prescribed by Presidential proclamation or by law. The law also makes Persian Gulf War Veterans eligible for pension benefits. In doing so, eligibility criteria for VA benefits and health care-related programs were expanded to include the expansion of readjustment counseling services (Vet Centers) to include any veteran who served in a combat-theater during a period of war or period of hostilities, thus including Gulf War combat-theater Veterans.

Implementing VA Regulations: 38 CFR §§3.2(i); 3.3(a)(3); 3.17; and 3.54(a)(3)(viii).

Effective Date: April 6, 1991.

## P.L. 102-585, Veterans Health Care Act of 1992

Enacted on November 4, 1992, Title VII of this public law, the *Persian Gulf War Veterans' Health Status Act*, includes a provision that establishes VA's Persian Gulf War Health Veterans Registry (now known as the Gulf War Registry). Included in the registry, are among others, Gulf war Veterans who apply for health care, file a claim for disability compensation, or receive a similar DoD registry health examination. Additionally, survivors and dependents of Gulf War Veterans who submit a dependency and indemnity compensation claim are also included. Under the Registry, Veterans receive a comprehensive physical examination with appropriate baseline laboratory tests. Additional diagnostic tests and referrals to specialists are made where indicated. Section 706 requires both VA and DoD to enter into an agreement with *the Medical Follow-Up Agency (MFUA)* of the Institute of Medicine of the National Academies to review existing scientific, medical, and other information on the health consequences of military service in the Persian Gulf theater of operations during the Gulf War.

Implementing VA Regulation: None.

P.L. 103-210, To amend title 38, United States Code, to provide additional authority for the Secretary of Veterans Affairs to provide health care for Veterans of the Persian Gulf War

Enacted on December 20, 1993, this legislation amends title 38 to include specific authority to furnish hospital care, outpatient care, and nursing home care to Veterans for medical conditions possibly related to exposure to toxic substances or environmental hazards during active duty service in the Southwest Asia theater of operations during the Gulf War.

Implementing VA Regulations: 38 CFR §§17.47(a)(5) and 17.60.

Effective Date: December 20, 1993.

#### P.L. 103-446, Veterans Benefits Improvement Act of 1994

Signed by the President on November 2, 1994, this public law authorizes the Secretary to compensate Gulf War Veterans with a chronic disability resulting from an undiagnosed illness that manifested either during active duty in the Southwest Asia theater of operations during the Persian Gulf War, or to a 10 percent degree or more during a presumptive period determined by the Secretary.

Also known as the Persian Gulf War Veterans' Benefits Act, P.L. 103-446 directs the Secretary to prescribe a regulation establishing the length of this presumptive period following active duty in the Southwest Asia theater of operations. Additionally, it directed the Secretary to establish the presumptive period only after a review of any

credible medical or scientific evidence and the historical treatment afforded disabilities for which manifestation periods have been established and taking into account other pertinent circumstances regarding the experiences of Veterans of the Persian Gulf War.

To implement this statute, VA issued a regulation providing a non-exclusive list of 13 categories of signs and symptoms that may be manifestations of undiagnosed illnesses.

Additionally, a variety of health care-related provisions included the development and implementation of a medical evaluation tool; a study to evaluate the health of spouses and children of Gulf War Veterans which includes diagnostic testing and medical examinations; and a survey of Gulf War Veterans regarding the incidence and nature of health problems occurring in Gulf War Veterans and their families.

Finally, Section 105 called for the implementation of a comprehensive outreach program to inform Gulf War Veterans and their families of medical care and other benefits provided by VA and DoD based upon service in the Gulf War. The law specified the use of a newsletter and toll-free number as outreach tools.

Implementing VA Regulation: 38 CFR §3.317.

Effective Date: November 2, 1994.

P.L. 104-110, An Act to amend title 38, United States Code, to extend the authority of the Secretary of Veterans Affairs to carry out certain programs and activities, and for other purposes

Enacted on February 13, 1996, the President signed into law legislation which extended through December 31, 1996, VA's specific authority to provide inpatient and outpatient care to Gulf War Veterans exposed to toxic substances and environmental hazards.

Implementing VA Regulation: None

*Note:* Between 1996 and 1998, various statutory provisions extended the special treatment authority for Persian Gulf War Veterans. P.L. 105-368 extended the authority from December 31, 1998 to December 31, 2001. A one-year extension (December 31, 2002) of the authority was then authorized under P.L. 107-135. The authority lapsed thereafter but was reinstated and made permanent by section 513 of P.L. 111-163.

## P.L. 105-114, Veterans' Benefits Act of 1997.

Signed by the president on November 21, 1997, this law broadened the treatment authority (established by P.L. 103-210) for eligible Gulf War Veterans to cover any disability possibly related to their service in the Gulf War. In particular, it removed Additionally, it requires VA to conduct a program of demonstration projects to test new approaches to treatment of Gulf War Veterans who suffer from undiagnosed and ill-defined disabilities.

Implementing VA Regulation: None.

Effective Date: None.

#### P.L. 105-277, Persian Gulf War Veterans Act of 1998

Public Law 105-277, signed into law on October 21, 1998, authorizes the Secretary to establish presumptions of service connection for diagnosed or undiagnosed illness that the Secretary determines are associated with service in the Armed Forces in the Southwest Asia theater of operations during the Persian Gulf War. It also requires among other things, the Secretary of Veterans Affairs to contract with the National Academy of Sciences (NAS) to review and evaluate available scientific evidence regarding associations between illnesses and exposure to agents, hazards, preventive medicines and vaccines related to Gulf War service. The law also requires certain exposures to be addressed in the NAS initial review. Further, it was required of NAS to issue reports, which are produced by the Institute of Medicine's (IOM's) Committee on Gulf War and Health, every two years to review scientific research on Gulf War toxic exposures.

Implementing VA Regulation: None.

#### Public Law 105-368, Veterans Programs Enhancement Act of 1998

Enacted on November 11, 1998, Congress puts forth a series of Gulf War-related program enhancements to include some of the following: a NAS review of scientific and medical literature regarding the health of Gulf War Veterans and the consequences of exposures; special treatment authority for certain combat-theater Veterans; establishment of an public advisory committee on the health consequences of Gulf War Veterans (eventually known as the Research Advisory Committee on Gulf War Veterans' Illnesses); and extension through 1999 of the health examination program for spouses and children of Gulf War Veterans.

Implementing VA Regulation: None.

## b. Regulation

## 38 C.F.R. §3.317

Published on February 3, 1995, 38 C.F.R. §3.317 established compensation for chronic disabilities due to undiagnosed illnesses which became manifest 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 during of two years after the conclusion of such service. This regulation implemented the requirement in P.L. 103-446 that the Secretary determine the period following service during which such disabilities must manifest in order to be compensable. The regulation required objective indications of chronic disability, and provided that disabilities that have persisted for 6 months or more will be considered chronic. A non-exclusive list of 13 categories of signs and symptoms that may be manifestations of undiagnosed illnesses were outlined.

A continuing lack of medical and scientific evidence about the nature and cause of the undiagnosed illnesses led to the conclusion that the two-year manifestation period was inadequate. On March 6, 1998, the period was lengthened to include chronic disabilities due to undiagnosed illness which became manifest to a degree of 10 percent or more not later than December 31, 2001. Later amendments further extended the period through December 31, 2006, and ultimately through December 31, 2011.

## **Appendix D. Data Sources**

## **DoD**

Defense Manpower Data Center (DMDC)

- Active Duty Master File
- Active Duty Loss File
- Reserve Components Common Personnel Data System
- Operation Desert Shield/Storm Files
- Operation Mission/Contingency Files
- Khamisiyah Master File
- Al Jubayl Master File

#### VA

Veterans Benefits Administration (VBA)

- Beneficiary Identification Records Locator Subsystem (BIRLS)
- Benefits Delivery Network Compensation and Pension Master Record (CPMR)
- VETSNET Corporate Records

Veterans Health Administration (VHA)

- Inpatient Treatment File
- Outpatient Treatment File
- Patient Treatment File
- Veterans Equitable Resource Allocation

## **APPENDIX E: DATA USAGE AND LIMITATIONS**

#### **DoD Data**

When defining the Veteran populations for the Pre-9/11 cohort and all sub-cohorts, DoD served as the sole source of service member verification. This included the historic Khamisiyah and Al Jubayl rosters as well. All received DMDC information was matched using the social security number (SSN) and the primary key. Records devoid of SSNs or other critical information were returned to DMDC for analysis.

## **Health Care Data**

To capture the various types of health care, administrative data from inpatient, outpatient and treatment files were utilized.

Inpatient File: A series of administrative databases used to track for both inpatient acute care and inpatient extended care. This dataset captures encounters between a patient and VA health care provider while the Veteran is admitted in a VA facility for acute care or for long term treatment such at a VA Community Living Center. Not all encounters performed by VA health staff are recorded through the use of the VistA Patient Care Encounter package. Although no study exists, it is believed that health care which may be billed to the Veteran for a co-pay tend to be captured during an inpatient stay. VA started collecting national Inpatient encounter data in its National Patient Care Database in March 2005.

**Outpatient File:** Using an array of SAS-based outpatient databases, administrative outpatient care data was utilized. Non-VA care is not included. This dataset captures encounters between patient and VA Health Care provider for all outpatient care administered either in a VA facility or a VA contract facility. VA started collecting this data in 1997 in its VA National Patient Care Database. Data is focused on demographic information about the Veteran and encounter and includes both a procedure code and diagnosis code except for laboratory or radiology tests which only contains a procedure code. Health care provided outside of VA through VA's Purchased Care program is not available in this data source.

Patient Treatment File: A file which contains clinical data relating to hospital stays and procedures. VA collects data for each Veteran admission through its national Patient Treatment File with national data available from today to almost 30 years ago. Data is made available only after the patient is discharged from VA care and then professional health coders read the patient's chart and translate data into specific International Classification of Disease procure and diagnosis codes. For those patients who are admitted to VA's Community Living Centers and even for those in an acute care setting, a quarterly census captures all those currently admitted with limited national data captured as though the patient was discharged. Data users must combine both discharged and currently admitted records for a complete picture of VA inpatient care. For the VA Purchased Care Program, some data is available in the national Patient Treatment File but varies by administrative procedure at VA facilities.

**VERA**: Maintained by the Allocation Resource Center (ARC), the Veterans Equitable Resource Allocation (VERA) data set was vital in generating cost-related data for health care utilization only. It was not utilized for any other component in this report.

## **Benefits Data**

**CPMR:** Built as a payment system, this database within the legacy Benefits Delivery Network (BDN) system housed most Veteran disability data from inception (around 1968) to 2003. It was never designed as a rich data storage and mining system.

As a result, CPMR only held a maximum of six diagnostic codes despite being service-connected or nonservice-connected for a far greater amount of conditions. Additionally, CPMR only stored four digits of the diagnostic codes (which may be either four digits (xxxx) or eight digits (xxxx-xxxx) in length. During award processing, users could select the order of entering the first four or the last four digits of the diagnostic code to justify the payment. Due to these limitations, an unknown number of Veteran disabilities were simply not stored and thus not accounted for in historic and current reports. Based upon the way that the diagnostic code was entered, undiagnosed illnesses may not be identified properly. These codes are always in the format of 88xx-xxxx. If only the last four digits were stored, then that diagnostic code would not be identified as an undiagnosed illness, reducing the actual count of these conditions.

Finally, CPMR cannot differentiate between multiple conditions that have the same stored diagnostic code as there are no bilateral indicators. CPMR is being incrementally phased out in lieu of VETSNET, a more robust data system.

**BIRLS:** Additional Veteran disability data was obtained from BIRLS which has some limitations similar to the CPMR database. For instance, BIRLS only stores nine diagnostic codes regardless of the number of the Veteran's disabilities. It also only stores four digits (xxxx) of the diagnostic code, and these codes either come from the CPMR (when awards were terminated the diagnostic code data was transferred from the CPMR to BIRLS) or were entered in the same fashion (if there was no monetary award).

Due to these limitations, an unknown number of Veteran disabilities were simply not stored and thus not accounted for in historic and current reports. Similar to the CPMR above, based upon the way that the diagnostic code was entered, undiagnosed illnesses may not be identified properly, reducing the actual count of these conditions. In addition, as it was determined in 1989 that BIRLS data was unreliable, a verification indicator was later added to the diagnostic data. If a diagnostic code is not noted as verified, it is not used, even though it may be potentially correct. All of these limitations may reduce the condition count and decrease the accuracy of the reports.

**VETSNET Corporate Records:** The corporate database is the repository from all of the VETSNET Suite of Applications. It can store an unlimited number of conditions for each Veteran. It can store eight-digit diagnostic codes. RBA2000 has built-in edits to ensure that the diagnostic code entered is valid and is entered in the correct order (so undiagnosed illnesses would always be properly identified). It also stores sufficient data to properly identify each condition even if the same diagnostic code is used multiple times. However, the initial RBA 2000 deployment was phased in and then its use was not mandatory for over one year due to initial user difficulties. Due to these factors, data from the initial deployment until mid-2003 is incomplete.

**Ongoing Data Conversion:** CPMR is being phased out as the payment system in favor of VETSNET Awards. As records are moved from the old system to the new system, the diagnostic code data is moved as well. Under this conversion process, if Corporate data from RBA2000 exists, then the CPMR diagnostic code data is not moved and the corporate award is populated with the richer data. If the data is converted, it is converted with the limitations that exist for the CPMR (the missing data cannot be added if it is not available). Due to this situation, some of the data utilized for this report may be inaccurate.

Important Note: As mentioned in Section III, a maximum 25-VBA diagnostic code cap was utilized for this report. The cap was determined as follows: S/C granted conditions in descending order of disability evaluation, then S/C denied conditions arrayed in ascending order of diagnostic code. This means that not every VBA diagnostic code in each Veteran's benefit record was counted. As a result, the VBA diagnostic code tallies do not reflect all s/c benefits for which disability compensation benefits are being paid.

## **APPENDIX F: ACRONYMS**

AA Aid and Allowance

ARC Allocation Resource Center

APO Army Post Office

AST Arabia Standard Time

BIRLS Beneficiary Identification Records Locator Subsystem

BPH Board on Population Health and Public Health Practice

CCEP Comprehensive Clinical Evaluation Program

CFR Code of Federal Regulations

CPMR Compensation and Pension Master Record

DMDC Defense Manpower Data Center

DoD Department of Defense

E.O. Executive Order

EST Eastern Standard Time

FPO Fleet Post Office

FY Fiscal Year

GMT Geographic Means Test

GW-IPT Gulf War Integrated Project Team

GWVI-TF Gulf War Veterans Illness Task Force

GWVIS Gulf War Veterans Information System

HC Profile Healthcare Profile

IBS Profile Integrated Benefits and Services Profile

ICD International Classification of Diseases

IOM Institute of Medicine

IPT Integrated Project Team

MFUA Medical Follow-up Agency

NAS National Academy of Sciences

NCVAS National Center for Veterans Analysis and Statistics

NFZ No Fly Zone

NSC Nonservice-connected

NSD National Security Directive

OEF Operation Enduring Freedom

OMB Office of Management and Budget

OI&T Office of Information and Technology

OPP Office of Policy and Planning

P.L. Public Law

PMC Pension Maintenance Center

POW Prisoner of War

PRP Pro-Rated Persons

S/C Service Connection

SWAVETS Southwest Asia Veterans System

UDX Undiagnosed Illnesses

USAREUR United States Army Europe

VA Department of Veterans Affairs

VA/DoD Department of Veterans Affairs/Department of Defense

VADIR VA Defense Information Repository

VARO VA Regional Office

VBA Veterans Benefits Administration

VERA Veterans Equitable Resource Allocation

VHA Veterans Health Administration

VISN Veterans Integrated Service Network

## **APPENDIX G: REFERENCES**

#### **Books**

Pagonis, William G., *Moving Mountains: Lessons in Leadership and Logistics from the Gulf War.* Boston, MA: Harvard Business School Press, 1992. Scales, Robert H. *Certain Victory*. Washington, D.C.: Office of the Chief of Staff, United States Army, 1993.

## **Independent Publications**

Krause, Michael, D., and Pagonis, William, G., *Operational Logistics and the Gulf War*, The Land Warfare Papers, No. 13, Association of the United States Army, Arlington, VA, October 1992.

#### **Government Publications**

Department of Defense, Conduct of the Southwest Asia theater of operations War: Final Report to Congress. Washington, DC:, 1992.

Congressional Research Service, Report RL32492, *American War and Military Operations Causalities: Lists and Statistics*, Washington, DC., February 2010.

Congressional Research Service, Report RS21405, *U.S. Periods of War*, Washington, DC., January 2010.

Congressional Budget Office, *Withdrawal of U.S. Forces from Iraq: Possible Timelines and Estimated Costs*, Washington, DC., October 2009.

Presidential Advisory Committee on Gulf War Veterans' Illnesses: Final Report. U.S. Government Printing Office, Washington, D.C., December 1996.

The Whirlwind War: The United States Army in Operations Desert Shield and Desert Storm. Center of Military History, U.S. Army, Washington, D.C., 1995.

Special Oversight Board for Department of Defense Investigations of Gulf War Chemical and Biological Incidents: Final Report. Government Printing Office, Washington, DC., December 2000.

# **Unpublished Sources**

Armstead, Michael A., *The Retrograde of United States Military Equipment of Iraq,* U.S. Army War College, Carlisle Barracks, PA, September 2009.

Behne, Todd, E., et al, *Gulf War Logistics: Theory Into Practice*, Air Command and Staff College, Maxwell Air Force Base, Montgomery, AL, April 1995.

King, Kenneth E., "Operation Desert Shield: Thunder Storms of Logistics: Did We Do Any Better During Cold War Interventions?," U.S. Army War College, Carlisle Barracks, PA, March 2007.

USAREUR Operation DESERT FAREWELL Redeployment and Demobilization After Action Report, Memorandum for Director, Desert Storm Special Study Project, United States Army, Europe, and Seventh Army, Department of the Army, APO New York, October 1991.

Wheeler, William, G., and Will, Alan, J., *The Logistics of Waging War 1982-1993*, Air Force Institute of Technology, Wright-Patterson Air Force Base, OH, September 1993.

#### Web

Department of Defense, "Operation Desert Fox: Overview," Washington, DC, http://www.defense.gov/specials/desert\_fox/

Department of Defense, Air University Library, "OPERATION PROVIDE COMFORT: OTS Current Military Topics," Maxwell Air Force Base, Alabama, http://www.au.af.mil/au/aul/bibs/opproco/oppc.htm.

Department of Defense, Deployment Health Clinical Center, "Deployments," Walter Reed Army Medical Center, Washington DC,

http://www.pdhealth.mil/deployments/southern\_watch/background.asp Department of Defense, Office of the Special Assistant for Gulf War Illnesses, Force Health Protection and Readiness, "Environmental Exposure Report – Oil Well Fires," Arlington, VA, http://www.gulflink.osd.mil/owf\_ii/

Department of Defense, Office of the Special Assistant for Gulf War Illnesses, Force Health Protection and Readiness, "Operations Desert Shield/Desert Storm," Arlington, VA, www.gulflink.osd.mil.

Department of Defense, United States Air Force, "Operation Northern Watch History," Incirlik Air Force Base, Turkey,

http://www.incirlik.af.mil/library/factsheets/factsheet.asp?id=5345 (accessed September 2, 2010)

Department of Defense, United States Navy, "Operation Northern Watch Stands Down," Washington, DC, http://www.navy.mil/search/display.asp?story\_id=7207 (accessed September 2, 2010).

George Washington University, "National Security Directive 45," Washington, DC http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB39/document2.pdf

Institute of Medicine, "Gulf War Reports" Washington, DC, http://www.iom.edu/Reports/2000/Gulf-War-and-Health-Vol-1-Depleted-Uranium-Sarin-Pyridostigmine-Bromide-and-Vaccines.aspx.

National Archives and Records Administration, "Executive Orders Disposition Tables Index," Washington, DC, http://www.archives.gov/federal-register/executive-orders/disposition.html

Naval Historical Center, "U.S. Navy in Desert Shield/Desert Storm," Washington Navy Yard, Washington, DC, www.history.navy.mil/wars/dstorm/dsmar.htm.

United Nations, "Security Council," New York City, New York, http://www.un.org/documents/scres.htm

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