

# **Analysis of VA Health Care Utilization Among US Southwest Asian War Veterans**

***Operation Iraqi Freedom  
Operation Enduring Freedom***

**VHA Office of Public Health and Environmental Hazards**

**November 2006**

# ***Current DoD Roster of Recent War Veterans***

- **Evolving roster development by DoD Defense Manpower Data Center (DMDC)**
  - In September 2003, DMDC developed initial file of “separated” Iraqi and Afghan troops using proxy files: Active Duty and Reserve Pay files, Combat Zone Tax Exclusion, and Imminent Danger Pay data.
  - In September 2004, DMDC revised procedures for creating periodic updates of the roster and now mainly utilizes direct reports from service branches of deployed OIF (Operation Iraqi Freedom) and OEF (Operation Enduring Freedom) troops.
  - DMDC is actively addressing the limitations of the current roster to improve the accuracy and completeness of future rosters

# ***Current DoD Roster of Recent War Veterans***

- **Latest Update of roster**

- Provided to Dr. Kang, Veterans Health Administration (VHA) Environmental Epidemiology Service, on September 29, 2006

- **Qualifications for OIF/OEF deployment roster**

- Contains list of veterans who have left active duty and does not include currently serving active duty personnel
- Does not distinguish OIF from OEF veterans
- Roster only includes separations through August 31, 2006
- 2,693 veterans who died in-theater are not included

# ***Updated Roster of SW Asian War Veterans Who Have Left Active Duty***

- **631,174** OIF and OEF veterans who have left active duty and become eligible for VA health care since FY 2002
  - 46% (292,295) Former Active Duty troops
  - 54% (338,879) Reserve and National Guard

# ***Use of DoD List of War Veterans Who Have Left Active Duty***

- This roster is used to check the VA's electronic inpatient and outpatient health records, in which the standard ICD-9 diagnostic codes are used to classify health problems, to determine which OIF/OEF veterans have accessed VA health care as of September 30, 2006.
- The data available for this analysis are mainly administrative information and are not based on a careful review of each patient record or a confirmation of each diagnosis. However, every clinical evaluation is captured in VHA's computerized patient record.
- These administrative data have to be interpreted with caution because they ***only apply to OIF/OEF veterans who have accessed VHA health care*** due to a current health question. These data therefore do not represent all 631,174 OIF/OEF veterans who have become eligible for VA healthcare since FY 2002 or the approximately 1.4 million troops who have served in the two theaters of operation since the beginning of the conflicts in Iraq and Afghanistan.

# ***Use of DoD List of War Veterans Who Have Left Active Duty (2)***

- Because VA health data are not representative of the veterans who have not accessed VA health care, formal epidemiological studies will be required to answer specific questions about the overall health of recent war veterans.
- Analyses based on this updated roster are not directly comparable to prior reports because the denominator (number of OIF/OEF veterans eligible for VA health care) and numerator (number of veterans enrolling for VA health care) change with each update.
- This report presents data from VHA's health care facilities and does not include Vet Center data or DoD health care data.
- The following data are "cumulative totals" since FY 2002 and do not represent data from any single year.
- The numbers provided in this report should not be added together or subtracted to provide new data without checking on the accuracy of these statistical manipulations with VHA's Office of Public Health and Environmental Hazards.

# ***VA Health Care Utilization from FY 2002 to 2006 (4<sup>th</sup> QT) Among SW Asian War Veterans***

- ***Among all 631,174 separated OIF/OEF Veterans***
  - **32% (205,097)** of total separated veterans have sought VA health care since FY 2002
    - **97%** (198,379) of 205,097 evaluated OIF/OEF patients have been seen as outpatients only by VA and not hospitalized
    - **3%** (6,718) of 205,097 evaluated OIF/OEF patients have been hospitalized at least once in a VA health care facility

# ***VA Health Care Utilization for FY 2002-2006 (4<sup>th</sup> QT) by Service Component***

- **292,295 Former Active Duty Troops**
  - **35%** (101,260) have sought VA health care since FY 2002
- **338,879 Reserve/National Guard Members**
  - **31%** (103,837) have sought VA health care since FY 2002

# ***Comparison of VA Health Care Requirements***

The 205,097 OIF/OEF veterans evaluated by VA over approximately 4 years from FY 2002 to FY 2006 (4th QT) represents about 4% of the 5.3 million individual veterans who received VHA health care in any one year (2005 data)

# Frequency Distribution of SW Asian War Veterans According to the VISN Providing the Treatment

Treatment Site	OIF-OEF Veterans Treated at a VA Facility*	
	Frequency	%
• VISN 1 VA New England Healthcare System	9,790	4.77
• VISN 2 VA Healthcare Network Upstate New York	6,088	2.97
• VISN 3 VA New York/New Jersey Healthcare System	8,351	4.07
• VISN 4 VA Stars & Stripes Healthcare System	9,279	4.52
• VISN 5 VA Capital Health Care System	4,975	2.43
• VISN 6 VA Mid-Atlantic Healthcare System	10,504	5.12
• VISN 7 VA Atlanta Network	14,721	7.18
• VISN 8 VA Sunshine Healthcare Network	17,479	8.52
• VISN 9 VA Mid-South Healthcare Network	12,481	6.09
• VISN 10 VA Healthcare System of Ohio	5,621	2.74
• VISN 11 Veterans in Partnership Healthcare Network	7,246	3.53
• VISN 12 VA Great Lakes Health Care System	13,069	6.37
• VISN 15 VA Heartland Network	6,697	3.27
• VISN 16 South Central VA Health Care Network	17,943	8.75
• VISN 17 VA Heart of Texas Health Care Network	12,337	6.02
• VISN 18 VA Southwest Healthcare Network	10,540	5.14
• VISN 19 VA Rocky Mountain Network	8,304	4.05
• VISN 20 VA Northwest Network	12,164	5.93
• VISN 21 VA Sierra Pacific Network	8,650	4.22
• VISN 22 VA Desert pacific Healthcare Network	16,429	8.01
• VISN 23 VA Midwest Health Care Network	11,483	5.60

\* Veterans can be treated in multiple VISNs. A veteran was counted only once in any single VISN but can be counted in multiple VISN categories. The total number of OIF-OEF veterans who received treatment (n = 205,097) was used to calculate the percentage treated in any one VISN.

# ***Demographic Characteristics of Iraqi and Afghan Veterans Utilizing VA Health Care***

		<b>% SW Asian Veterans (n = 205,097)</b>
<b>Sex</b>		
	<b>Male</b>	<b>87 %</b>
	<b>Female</b>	<b>13</b>
<b>Age Group</b>		
	<b>&lt;20</b>	<b>3</b>
	<b>20-29</b>	<b>53</b>
	<b>30-39</b>	<b>23</b>
	<b>≥40</b>	<b>21</b>
<b>Branch</b>		
	<b>Air Force</b>	<b>12</b>
	<b>Army</b>	<b>67</b>
	<b>Marine</b>	<b>11</b>
	<b>Navy</b>	<b>10</b>
<b>Unit Type</b>		
	<b>Active</b>	<b>49</b>
	<b>Reserve/Guard</b>	<b>51</b>
<b>Rank</b>		
	<b>Enlisted</b>	<b>92</b>
	<b>Officer</b>	<b>8</b>

# *Diagnoses*

- Veterans of recent military conflicts have presented to VHA with a wide range of possible medical and psychological conditions.
- Health problems have encompassed more than 7,700 discrete ICD-9 diagnostic codes.
- The three most common possible health problems of war veterans were musculoskeletal ailments (principally joint and back disorders), mental disorders, and “Symptoms, Signs and Ill-Defined Conditions.”
- As in other outpatient populations, the ICD-9 diagnostic category, “Symptoms, Signs and Ill-Defined Conditions,” was commonly reported. It is important to understand that this is not a diagnosis of a mystery syndrome or unusual illness. This ICD-9 code includes symptoms and clinical finding that are not coded elsewhere in the ICD-9. It is a diverse, catch-all category that is commonly used for the diagnosis of outpatient populations. It encompasses more than 160 sub-categories and primarily consists of common symptoms that do not have an immediately obvious cause during a clinic visit or isolated laboratory abnormalities that do not point to a particular disease process and may be transient.

# ***Frequency of Possible Diagnoses Among Recent Iraq and Afghan Veterans***

<b>Diagnosis (Broad ICD-9 Categories)</b>	<b>(n = 205,097)</b>	
	<b>Frequency *</b>	<b>%</b>
Infectious and Parasitic Diseases (001-139)	21,362	10.4
Malignant Neoplasms (140-208)	1,584	0.8
Benign Neoplasms (210-239)	6,571	3.2
Diseases of Endocrine/Nutritional/ Metabolic Systems (240-279)	36,409	17.8
Diseases of Blood and Blood Forming Organs (280-289)	3,591	1.8
Mental Disorders (290-319)	73,157	35.7
Diseases of Nervous System/ Sense Organs (320-389)	61,524	30.0
Diseases of Circulatory System (390-459)	29,249	14.3
Disease of Respiratory System (460-519)	36,190	17.6
Disease of Digestive System (520-579)	63,002	30.7
Diseases of Genitourinary System (580-629)	18,886	9.2
Diseases of Skin (680-709)	29,010	14.1
Diseases of Musculoskeletal System/Connective System (710-739)	87,590	42.7
Symptoms, Signs and Ill Defined Conditions (780-799)	67,743	33.0
Injury/Poisonings (800-999)	35,765	17.4

\*Hospitalizations and outpatient visits as of 9/30/2006; veterans can have multiple diagnoses with each healthcare encounter. A veteran is counted only once in any single diagnostic category but can be counted in multiple categories, so the above numbers add up to greater than 205,097.

# ***Frequency of Possible Mental Disorders Among OIF/OEF Veterans since 2002\****

<b>Disease Category (ICD 290-319 code)</b>	<b>Number of SW Asian War Veterans**</b>
PTSD (ICD-9CM 309.81)+	33,754
Nondependent Abuse of Drugs (ICD 305)	28,732
Depressive Disorders (311)	23,462
Neurotic Disorders (300)	18,294
Affective Psychoses (296)	12,386
Alcohol Dependence Syndrome (303)	5,413
Sexual Deviations and Disorders (302)	3,239
Special Symptoms, Not Elsewhere Classified (307)	3,178
Drug Dependence (304)	2,387
Acute Reaction to Stress (308)	2,273

• Note – ICD diagnoses used in these analyses are obtained from computerized administrative data. Although diagnoses are made by trained healthcare providers, up to one-third of coded diagnoses may not be confirmed when initially coded because the diagnosis is “rule-out” or provisional, pending further evaluation.

\*\* A total of 73,157 unique patients received a diagnosis of a possible mental disorder. A veteran may have more than one mental disorder diagnosis and each diagnosis is entered separately in this table; therefore, the total number above will be higher than 73,157.

+ This row of data does not include information on PTSD from VA’s Vet Centers and does not include veterans not enrolled for VHA health care. Also, this row of data does not include veterans who did not have a diagnosis of PTSD (ICD 309.81) but had a diagnosis of adjustment reaction (ICD-9 309).

# *Summary*

- Recent Iraq and Afghan veterans are presenting to VA with a wide range of possible medical and psychological conditions.
- Recommendations cannot be provided for particular testing or evaluation – veterans should be assessed individually to identify all outstanding health problems.
- 32% of separated OIF/OEF veterans have enrolled for VA health care since 2002 compared to 31% in the last quarterly report three months ago. As in other cohorts of military veterans, the percentage of OIF/OEF veterans receiving health care from the VA and the percentage with any type of diagnosis will tend to increase over time as these veterans continue to enroll for VA health care and to develop new health problems.

# ***Summary (2)***

- Because the 205,097 Iraqi and Afghan veterans who have accessed VA health care were not randomly selected and represent just 15% of the approximately 1.4 million recent US war veterans, they do not constitute a representative sample of all OIF/OEF veterans.
- Reported diagnostic data are only applicable to the 205,097 VA patients – a population actively seeking health care -- and not to all OIF/OEF veterans.

For example, the fact that 36% of VHA patients' encounters were coded as related to a possible mental disorder does not indicate that 1/3 of all recent war veterans are suffering from a mental health problem. Only well-designed epidemiological studies can evaluate the overall health of Iraqi and Afghan war veterans.

# ***Summary (3)***

- High rates of VA health care utilization by recent Iraqi and Afghan veterans reflect the fact that these veterans have ready access to VA health care, which is free of charge for two years following separation for any health problem possibly related to wartime service.

Also, a massive outreach effort has been developed by VA to inform these veterans of their benefits, including the mailing of a personal letter from the VA Secretary to each war veteran identified by DoD when they separate from active duty and become eligible for VA benefits.

- When a combat veteran's two-year health care eligibility passes, the veteran will be moved to their correct priority group and charged all co-payments as applicable. If their financial circumstances place them in Priority Group 8, their enrollment in VA will be continued, regardless of the date of their original VA application.

# ***Follow-Up***

- VA will continue to monitor the health status of recent Iraq and Afghan veterans using updated deployment lists provided by DoD to ensure that VA tailors its health care and disability programs to meet the needs of this newest generation of war veterans.